Additional File 4: Figure: Supporting resources for each concept

Understanding implementability in clinical trials: a pragmatic review and concept map

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	Design	Resources*	Conduct	Resources*	Reporting	Resources*
Validity	Trial protocol complete	14 12-3	All randomised participants included in ITT analysis	63,67 40	Reporting complete	14,26 28,62 5,56-7
	Team has methodology training & includes a statistician	34			*Sufficient information to assess risk of bias*	14,26,34,46 48 3,18,21,28,53 29,36
	Protocol uses standardised statistical/analytical procedures	34			No selective reporting	14,26 22,30,35,37,54,66
					Declaration of interests	34,46 48
Relevance	*Design informed by stakeholdes & end users*	4,9,16,17,20,33,45,46,63,65 23,24,59 48 50	Analysis & conclusions meaningful to stakeholders	17	*Sufficient information to assess applicability*	1,14,25,26,39,45,52,61 28,41 2,7-8,27,36,43,55,60
	Pragmatic design	34			Information relevant to different stakeholders	45
	Population				Rationale for selection/exclusion of harm outcomes	15
	Realistic (inclusive of diverse populations & risks)	46,49,61,63,67 40,64				
	Feasible diagnostic/eligibility criteria.	40				
	Actively seeking diversity (for applicability, risk stratification)	49				
	Sites comparable to where implementation occurs	61,65 40,64				
	Interventions & comparators					
	Feasible & acceptable in current practice & systems	16,46,51,52 8,36				
	Intervention as it would be delivered in practice	49,61,67 20,64				
	Comparators based in current practice	9,67 7-8,64				
	Evidence of current clinical practice is available	46,67				
	Outcomes					
	Important to end users	9,15,16,17,25,34,38,45,61,63 7-8,19,40				
	Routine collection	63,65 40				
	Pragmatic collection	63				
Usability	Registered	32,34,47	Procedures, training & other materials retained	25	Published, regardless of outcome	14,32,47 22,48,68
	Protocol published	34,47		31,42,60	Accessible to end users	14,32 48
	Specify theory/logic model of how intervention will work	45			Clearly reported	48
	Outcomes				*Sufficient information to replicate*	25,26,34,45,46 44 10,11,27,31,36,42,43
	Consent obtained for data re-use	58				
	Fidelity measures included	6,45,51,52 11,31,42			Authors responsive to requests for data	14,34,47
	Process information/evaluation/feasibility included	25,45 11,42,43,60				
	Economic information/evaluation included	9,25,38,45,46,52 7-8,42,60				

*Resources refer to the number listed in the Characteristics of Included Resources table (Additional File 3). Resource types: Guidance, Descriptive data (benefit), Descriptive data (problem), Tool.

Concepts in *italics* have ≥10 supporting resources.