

Extended Data File 2: Results of the Reference Panel Survey

The candidate theories were reviewed by an expert panel of general practitioners (GP) in Ireland who responded to an online survey in relation to how well the theories were understood, how relevant they considered them and how feasible they would be to implement in an Irish setting (Appendix 1). The survey was emailed to GP colleagues, posted on Twitter with tags to GP organisations in Ireland and emailed to members of the Clinical Trials Network Ireland group.

Table 1: Understanding, Relevance and Practicality of the Candidate Theories

Understood	1	2	3	4	5	Average	
1 Providing Information SDM			2	1	4	4.29	
2 Engage in interventions			1	2	4	4.43	
3 SDM				3	4	4.57	
4 Continuity				1	6	4.86	
5 Home visits	1			2	4	4.14	
6 Collaboration			1	3	3	4.29	
7 Policy				2	5	4.71	
8 HIT		1			6	4.57	
Total						4.48	

Relevance							
1 Providing Information SDM			2	4	1	3.86	
2 Engage in interventions				2	5	4.71	
3 SDM			1	3	3	4.29	
4 Continuity				2	5	4.71	
5 Home visits	2	1	2	1	1	2.71	
6 Collaboration			3	3	1	3.71	
7 Policy				2	5	4.71	
8 HIT		1			6	4.57	
Total						4.15	

Practicality							
1 Providing Information SDM	1	2	2	1	1	2.86	
2 Engage in interventions				3	4	4.57	
3 SDM			3	3	1	3.71	
4 Continuity			1	3	3	4.29	
5 Home visits	4	2			1	1.57	
6 Collaboration		2	1	3	1	3.43	
7 Policy			2	1	4	4.29	
8 HIT		1		2	4	4.29	
Total						3.62	

The seven respondents completed all questions in the survey and added feedback in the free text comment boxes for the theories. Overall, the eight candidate theories were well understood with weighted averages (WA) ranging from 4.14-4.86/5. Comments in relation to understanding related to the length of the sentences, a common issue when attempting to include examples of contexts and mechanisms in candidate theories.

The WA rating for Relevance for some of the theories was low; the lowest rating was for the theory relating to home visits (2.71/5), with experts giving diverse ratings from 1 – 5 for this theory. Theories relating to collaboration and providing information were rated mid-range (WA 3.70 and 3.86 respectively), with ratings ranging from 3 – 5. All other theories were rated between 4.19 – 4.71 for Relevance.

The ratings for the feasibility of applying the theories in practice in Ireland was also varied. The lowest WA score was 1.57 for the theory relating to home visits. Two other theories with a WA rating below 4, were those relating to providing information, share decision making and collaboration.

The respondents indicated that although home visits could be helpful, they were completely impractical in practice. They valued collaboration with pharmacists, but felt there were few public health nurses (PHN) available for collaboration. The barriers identified to providing information to CDOA and shared decision-making included available time, the prevalence of cognitive impairment, deprivation and educational levels, but when possible, it was felt to be beneficial in reducing ADE.