Supplementary Material

An International Multi-Stakeholder Delphi Survey Study on the Design of Disease Modifying Parkinson's Disease Trials

Supplementary Material 1: Delphi Survey

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Piloting procedure of questionnaire

Semi-structured interviews were carried out via the videoconferencing software zoom with 8 PwP to determine whether they interpreted questions as intended, were able to answer them and probing into how to improve those that posed difficulties.

The questionnaire was iteratively adjusted until participant scores ranged between easy to moderate for all questionnaire questions twice in a row and the overall difficulty of the questionnaire was rated as easy.

Delphi Survey - Final question text and accompanying information

The following section lists questions in the same sequence as they appeared in the survey and includes all accompanying text. Asterix (*) denotes where information or question text was changed in response to Survey 1.

The purpose of this study

We would like to design a new type of clinical trial to test treatments that may slow, halt or reverse the progression of Parkinson's.

Clinical trials of protective treatments for Parkinson's can be carried out in many ways, and we want to know what is important to you.

Here is what we would like you to do

We will show you your scores from the previous round, a summary of scores given by each participant group as well as a summary of statements chosen by each participant group in support of their score.

Please note: Where the number of respondents were three or less, percentages will not be provided.

Answers provided by regulators do not represent their official view, but the personal opinion of the contributor.

Due to rounding, % votes per participant group may deviate by \pm 1% from the total of 100%

1) Consider this information carefully before re-scoring each question.

If you are unsure how to answer a question, please do not give a score. Tick the appropriate box and provide information on why the question was difficult to answer.

You will be presented with the same list of agree, neutral and disagree statements as well as clearly indicated additional considerations provided by participants in survey 3. You will have the option to let us know which of these are important to you.

2) Please select up to 5 statements from the list that most reflect your opinion.

If none of the statements reflect your opinion, please select "other".

Finding out about the motivations of different participant groups continues to be key for this study. Your engagement in this is optional. It will, however, be incredibly helpful to our analysis and future design as well as providing insights for others taking part in the survey.

Domain 1. The overall goals and structure of the trial

The following set of questions will ask you what the overall goals and structure of your ideal trial should be and why.

On a scale of 1 to 9 (where 1 is strongly disagree and 9 is strongly agree), how much do you agree with the following statements:

Q1 The trial should try to find out if the drug is working to slow disease progression rather than treating the symptoms of Parkinson's*

Q2 The trial should try to find out for which types of Parkinson's the drug might work best

Parkinson's is not the same for everyone. Symptom differences or genetic differences might allow researchers to divide people with Parkinson's into groups with more similar features.

Please select up to 5 reasons for your score.

Q3 The trial should collect the best information possible even if this takes up to 5 years.

Please select up to 5 reasons for your score.

Q4 The trial should be as short as possible, (perhaps up to 1 year) even if there is a risk of providing partial information.

Please select up to 5 reasons for your score.

Q5 The trial should compare participants receiving the new treatment against those that receive a placebo (pretend/inactive drug).*

Additional information: Placebo controlled drug trials for Parkinson's normally allow participants to take their normal medication as well as the study drug or placebo.

The ritual of receiving a treatment can make people feel better. This is called the placeboeffect. Researchers use a placebo to try and find out whether people are feeling better because of the new drug or because of the placebo effect.

Please select up to 5 reasons for your score.

Q6 The trial should compare participants receiving the new treatment against those that receive nothing*

Additional information: In this type of trial participants would receive the study drug in addition to their normal Parkinson's medication and would be compared to those receiving their normal Parkinson's medication. (Therefore, this is an open-label study with a standard of care control.)

Please select up to 5 reasons for your score.

Q7 The trial should test more than one treatment at the same time (for example participants will receive either treatment A, or treatment B, or placebo)

Clinical trials are very complicated to organise, one way of speeding up the discovery of new treatments is to test more than one medicine in the same trial.

Please select up to 5 reasons for your score.

Q8 As well as the treatment, the trial should test new apps and devices to see whether they can improve the way Parkinson's is measured.*

Additional information: Apps and devices would only be used as additional exploratory measures in order to evaluate their future usefulness for measuring Parkinson's.

Please select up to 5 reasons for your score.

Domain 2. Who should be involved in the trial*

Researchers often restrict who can take part in a trial. The following set of statements will present you with restrictions that are common for Parkinson's trials and ask you whether you agree that these should be in place.

Additional information: The aim of the proposed trial is to investigate potential disease modifying therapies in a multi-arm multi-stage (phase 2/3) trial.

Treatments entered into the trial are likely to target different mechanisms. Normally participants are selected for a trial of a single therapy. However, in a platform trial that investigates many potential therapies, a more general decision on who can take part needs to be made.

On a scale of 1 to 9 (where 1 is strongly disagree and 9 is strongly agree), how much do you agree with the following statements:

Q1 The trial should be as inclusive as possible

Please select up to 5 reasons for your score.

Q2 The trial should have an upper age limit.

Please select up to 5 reasons for your score.

Q3 The trial should have a lower age limit (adults)

Please select up to 5 reasons for your score.

Q4 The trial should only include people who have had Parkinson's for less than 5 years

Please select up to 5 reasons for your score.

Q5 The trial should only include people who are not yet on any medications for their Parkinson's*

Additional information: Those who have been diagnosed with Parkinson's but have not yet required Parkinson's medication.

Please select up to 5 reasons for your score.

Q6 The trial should also include people who experience their medication wearing off

**Wearing off is when the Parkinson's medication is no longer working well and Parkinson's symptoms are starting to return.

Please select up to 5 reasons for your score.

Q7 The trial should not include people with thinking and memory problems related to their Parkinson's.*

Please select up to 5 reasons for your score.

Q8 The trial should not include people who have had brain surgery for their Parkinson's (eg Deep Brain Stimulation)*

Please select up to 5 reasons for your score.

Domain 3. Measuring the effect of the new treatment

The effectiveness of treatments can be measured in many ways. The following set of statements will present you with ways in which Parkinson's can be measured and ask you whether you agree that these should be used to show the overall success of the trial.

Additional information: The proposed trial will be multi-stage (phase 2-3 trial) aimed at finding a disease modifying therapy. Participants were asked to consider appropriate measures of **overall success** at the end of the final stage of the trial (phase 3).

On a scale of 1 to 9 (where 1 is strongly disagree and 9 is strongly agree), how much do you agree with the following statements:

Q1 It is important that the overall success of the trial is shown by an effect on Parkinson's when participants are not taking their normal medication*

In this type of trial participants are asked not to take their normal Parkinson's medication **temporarily** whenever a measurement of their symptoms takes place.

Q2 It is important that the overall success of the trial is shown by an effect on Parkinson's when participants are taking their normal medication*

In this type of trial participants are allowed to take their Parkinson's medication as usual whenever a measurement of their symptoms takes place.

Q3 It is important that the overall success of the trial is shown by an effect on movement (motor) symptoms*

Q4 It is important that the overall success of the trial is shown by an effect on non-movement related (non-motor) Parkinson's symptoms (such as thinking and memory, sleep, mood, and constipation)*

Q5 It is important that the overall success of the trial is shown by an effect on quality of life*

Q6 It is important that the overall success of the trial is shown by an effect on activities of daily living (such as eating or getting dressed)*

Q7 It is important that the overall success of the trial is shown by delaying the development of new symptoms (such as falls, or thinking and memory problems)

Q8 It is important that the overall success of the trial is shown by an effect on the duration of good quality ON time*

ON time is when the medications are working well.

Q9 It is important that the overall success of the trial is assessed by an effect on more than one type of measurement*

**such as those described in questions 1-8

Q10 Parkinson's should be monitored passively at home (without the participant needing to do anything) by for example using smart phones or watches*

Q11 Parkinson's should be measured at home by the participant completing regular tasks on smart phones or tablets

Q12 Parkinson's should be measured by asking people with Parkinson's to complete questionnaires.

Q13 Parkinson's should be measured by questionnaire scales that are administered by the research team

Domain 4. Delivering the trial

Q1 Trial visits should only take place in the research or study clinic

Q2 The trial should provide the option of home-based or video trial visits whenever possible

Example of participant feedback

Participants were also able to view the regulator participant's scores which were supplied to inform Delphi participants only.

Q1 The trial should try to find out if the drug is working to slow disease progression rather than treating the symptoms of Parkinson's*

	Disagree	Neutral	Agree	I'm not
	(Score 1-3)	(Score 4-6)	(Score 7-9)	sure
People with Parkinson's	4	24	70	2
Care partners	13	13	69	6
Clinical leads	0	25	75	0
Industry representatives	0	25	75	0
Funder	0	40	40	20

% Votes per Participant Group				
Low	Medium	High		

	Statements	PWP	Carer	Clinical leads	Industry	Funder
	It is important to make this distinction	11	10	14	12	17
	Slowing disease progression is more important	19	18	11	9	11
Agree	Slowing disease progression will also benefit symptoms	21	20	25	21	11
₹	Symptom treatment is temporary	14	8	11	18	6
	Symptomatic treatments are already available	7	8	16	15	6
	Other	1	2	3	0	0
	It depends on the goal of the trial	6	6	3	9	22
Neutral	It is important to measure symptoms, even if looking for a protective effect	5	10	8	12	11
e	Both are equally important	7	8	3	0	11
	Other	1	2	2	3	0
ee.	It is impossible to prove whether a treatment truly protects nerve cells	3	4	0	0	0
Disagree	This distinction is irrelevant as long as it improves Parkinson's long term	4	2	3	0	6
	Treating symptoms is more important	1	0	0	0	0
	Other	1	2	0	0	0
	Participant group total	100	100	100	100	100

% Votes per Participant Group				
Low	Medium	High		

Supplementary Material 2. Analysis of attrition bias

Attrition bias was investigated to determine whether there were differences in median item scores between participants who did or did not complete subsequent surveys. As attrition between groups was unequal and we hypothesized divergent opinions between stakeholder groups, attrition bias was investigated by participant group. Statistical investigation of attrition bias was only feasible for survey 1 due to low attrition in subsequent surveys. Only one item (D1Q6: 'The trial should have a standard of care control arm') had a statistically significantly different distribution in scores between those who withdrew and those who remained in the study (S2 table 1), however median scores of both groups fell within the same score region (7-9) and overall score distributions for people with Parkinson's remained similar across all surveys (S2 table 2). It is therefore unlikely that attrition would have biased results for this item.

Reasons for attrition

To further explore reasons for withdrawal a comparison of the frequency of participants selecting "I don't know how to answer this question" in the preceding survey between participants who withdrew and those who remained was carried out. The median frequency of choosing this option in survey 1 was significantly higher for individuals that withdrew (Median 3, IQR 6) compared to those who remained (median 0, IQR 2) in survey 2 (p=0.015 Mann-Whitney U test). No significant differences were detected for survey 3 or 4, although withdrawal numbers were low (10 and 3 respectively) (S2 Figure 1). Therefore, some participants may have withdrawn prior to survey 2 because they did not know how to answer questions in survey 1.

S2 Table 1. Analysis of attrition bias. Attrition bias was investigated to determine whether there were differences in median item scores between participants who did or did not complete subsequent surveys.

Item	Question Text			Pec	ple with Parl	kinson's			
number		Withdrew from Study			Remained in Study		p*	Significantly different Distribution	
		Number of participants giving scores	Median	Range	Number of participants giving scores	Media n	Rang e		
D1Q1	Try to find out if the drug is working to slow disease progression rather than treating the symptoms of Parkinson's	13	7.00	8.00	63	7.00	8.00	0.395	No
D1Q2	Try to find out for which types of Parkinson's the drug might work best	13	8.00	7.00	66	9.00	8.00	0.355	No
D1Q3	Collect the best information possible even if this takes up to 5 years	14	7.00	7.00	66	7.00	8.00	0.581	No
D1Q4	Be as short as possible, (perhaps up to 1 year) even if there is a risk of providing partial information	12	7.00	8.00	64	5.00	8.00	0.15	No
D1Q5	Be placebo controlled	13	9.00	4.00	65	8.50	8.00	0.133	No
D1Q6	Have a standard of care control arm	13	9.00	8.00	64	7.00	8.00	0.049	Yes
D1Q7	Have multiple treatment arms	12	8.50	7.00	66	9.00	8.00	0.625	No
D1Q8	Test new apps and devices to see whether they can improve the way Parkinson's is measured	13	8.00	7.00	67	9.00	8.00	0.46	No
D2Q1	Be as inclusive as possible	13	9.00	6.00	63	9.00	8.00	0.517	No
D2Q2	Have an upper age limit	12	2.00	5.00	63	2.00	8.00	0.715	No
D2Q3	Have a lower age limit	12	3.00	8.00	64	2.00	8.00	0.489	No
D2Q4	Only include people who have had Parkinson's for less than 5 years	10	2.00	7.00	60	2.00	8.00	0.64	No
D2Q5	Only include people who are not yet on any medications for their Parkinson's	10	1.00	5.00	58	2.00	8.00	0.271	No
D2Q6	Also include people who experience their medication wearing off	12	8.50	7.00	65	8.00	8.00	0.836	No
D2Q7	Not include people with thinking and memory problems related to their Parkinson's	12	4.50	8.00	64	3.00	8.00	0.232	No
D2Q8	Not include people who have had brain surgery for their Parkinson's (e.g., Deep Brain Stimulation)	9	5.00	8.00	55	3.00	8.00	0.321	No
	It is important that phase 3 success is shown by an effect on								
D3Q1	OFF-state motor assessments	11	7.00	8.00	61	7.00	8.00	0.977	No
D3Q2	ON-state motor assessments	11	6.00	8.00	60	6.00	8.00	0.985	No
D3Q3	Motor symptoms	12	7.50	8.00	66	7.00	8.00	0.38	No
D3Q4	Non-motor symptoms	11	8.00	8.00	64	7.00	8.00	0.599	No
D3Q5	Quality of life	13	9.00	2.00	65	8.50	8.00	0.122	No

D3Q6	Activities of daily living	13	9.00	8.00	64	7.00	8.00	0.276	No
D3Q7	Delaying the development of new symptoms	12	8.50	5.00	65	8.00	8.00	0.303	No
D3Q8	Duration of good quality ON time.*	13	9.00	5.00	63	8.00	8.00	0.517	No
D3Q9	More than one measure	12	7.50	8.00	60	6.00	8.00	0.293	No
D3Q10	Passive digital monitoring	13	8.00	6.00	65	5.00	8.00	0.062	No
D3Q11	Parkinson's as measured at home by the participant completing regular tasks on smart phones or tablets	10	7.00	4.00	62	7.00	8.00	0.242	No
D3Q12	Parkinson's as measured by patient completed questionnaires	12	6.50	8.00	63	7.00	8.00	0.979	No
D3Q13	Parkinson's as measured by questionnaire scales that are administered by the research team	10	6.00	8.00	58	6.00	8.00	0.81	No
D4Q1	Trial visits should only take place in the research or study clinic	10	4.00	8.00	59	3.00	8.00	0.846	No
D4Q2	The trial should provide the option of home-based or video trial visits whenever possible	14	8.00	3.00	67	8.00	8.00	0.898	No
	* significance for Mann-Whitney U test								

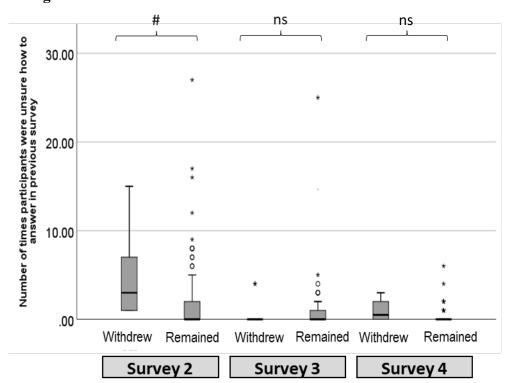
S2 Table 2. Distribution of votes by People with Parkinson's for questions D1Q6 across all 4 surveys.

D1Q6 Percentage votes

People with Parkinson's

	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure
Survey 1	25	13	57	6
Survey 2	24	22	50	4
Survey 3	20	24	51	4
Survey 4	24	26	50	0

S2 Figure 1



p<0.05; ns, not significant

Supplementary Material 3. Detailed Delphi Results

This supplement contains for each Delphi question:

- 1) a frequency chart of final **scores** given by participants per participant group
- 2) a frequency chart of **reasons** given by participants for their scores by participant group.

Result Summary

Goals and Structure						
The trial should	Consensus	Link				
Find out if the drug is working to slow disease progression	Round 1	D1Q1 Scores				
rather than treating the symptoms of Parkinson's		<u>D1Q1 Reasons</u>				
Find out for which types of Parkinson's the drug might	Round 1	D1Q2 Scores				
work best						
Collect the best information possible even if this takes up	None	D1Q3 Scores				
to 5 years		D1Q3 Reasons				
Be as short as possible, (perhaps up to 1 year) even if there	None	<u>D1Q4 Scores</u>				
is a risk of providing partial information		<u>D1Q4 Reasons</u>				
Be placebo controlled	Round 1	D1Q5 Scores				
		<u>D1Q5 Reasons</u>				
Compare participants receiving the new treatment against	None	<u>D1Q6 Scores</u>				
those that receive standard care		<u>D1Q6 Reasons</u>				
Have multiple treatment arms	Round 2	D1Q7 Scores				
		<u>D1Q7 Reasons</u>				
Test new apps and devices to see whether they can improve	Round 1	D1Q8 Scores				
the way Parkinson's is measured		D1Q8 Reasons				

Inclusion Criteria					
The trial should	Consensus	Link			
Be as inclusive as possible	None	D2Q1 Scores			
		<u>D2Q1 Reasons</u>			
Have an upper age limit	None	D2Q2 Scores			
		<u>D2Q2 Reasons</u>			
Have a lower age limit	None	<u>D2Q3 Scores</u>			
		<u>D2Q3 Reasons</u>			
Only include people who have had Parkinson's for less	None	D2Q4 Scores			
than 5 years		<u>D2Q4 Reasons</u>			
Not be targeted at drug naïve patients	Round 2	<u>D2Q5 Scores</u>			
		D2Q5 Reasons			
Also include people who experience their medication	None	<u>D2Q6 Scores</u>			
wearing off		<u>D2Q6 Reasons</u>			
Not include people with thinking and memory problems	None	<u>D2Q7 Scores</u>			
related to their Parkinson's		D2Q7 Reasons			
Not include people who have had brain surgery for their	None	<u>D2Q8 Scores</u>			
Parkinson's (eg Deep Brain Stimulation)		D2Q8 Reasons			

Outcome Measures					
It is important that overall (phase 3) success is shown	Consensus	Link			
by an effect on					
OFF-state motor assessments*	Round 3	D3Q1 Scores			
		<u>D3Q1 Reasons</u>			
ON –state motor assessments**	None	D3Q2 Scores			
		<u>D3Q2 Reasons</u>			
Motor symptoms	None	D3Q3 Scores			
		<u>D3Q3 Reasons</u>			
Non-motor symptoms	None	<u>D3Q4 Scores</u>			
		<u>D3Q4 Reasons</u>			
Quality of life	Round 1	D3Q5 Scores			
		<u>D3Q5 Reasons</u>			
Activities of daily living	Round 1	<u>D3Q6 Scores</u>			
		<u>D3Q6 Reasons</u>			
Delaying the development of new symptoms	Round 1	<u>D3Q7 Scores</u>			
		D3Q7 Reasons			
Duration of good quality ON time	None	<u>D3Q8 Scores</u>			
		D3Q8 Reasons			
More than one measure	Round 1	<u>D3Q9 Scores</u>			
		D3Q9 Reasons			
Passive digital monitoring	Round 2	<u>D3Q10 Scores</u>			
		D3Q10 Reasons			
Parkinson's as measured at home by the participant	None	<u>D3Q11 Scores</u>			
completing regular tasks on smart phones or tablets		D3Q11 Reasons			
Patient completed questionnaires	Round 2	<u>D3Q12 Scores</u>			
		D3Q12 Reasons			
Parkinson's as measured by questionnaire scales that are	None	<u>D3Q13 Scores</u>			
administered by the research team		D3Q13 Reasons			

^{*} In this type of trial participants are asked not to take their normal Parkinson's medication temporarily whenever a measurement of their symptoms takes place

^{**} In this type of trial participants are allowed to take their Parkinson's medication as usual whenever a measurement of their symptoms takes place

Trial Delivery					
The trial should	Consensus	Link			
Trial visits should only take place in the research or study	None	D4Q1 Scores			
clinic		D4Q1 Reasons			
Provide the option of home-based or video trial visits	Round 1	D4Q2 Scores			
whenever possible					

Domain 1. Goals and Structure

In the following set of questions participants were asked what the overall goals and structure of their ideal trial should be and why.

D1Q1 The trial should try to find out if the drug is working to slow disease progression rather than treating the symptoms of Parkinson's.

Consensus reached in round 1 (Survey 2)

Figure 2. D1Q1 Scores

	% Votes per Participant Group					
	Disagree (Score 1-3)	I'm not sure				
People with Parkinson's	4	24	70	2		
Care partners	13	13	69	6		
Clinical Scientists	0	25	75	0		
Industry representatives	0	25	75	0		
Funder	0	40	40	20		

Figure 3. D1Q1 Reasons

		% Votes per participant group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	It is important to make this distinction	11	10	14	12	17
	Slowing disease progression is more important	19	18	11	9	11
Agree	Slowing disease progression will also benefit symptoms	21	20	25	21	11
¥	Symptom treatment is temporary	14	8	11	18	6
,	Symptomatic treatments are already available	7	8	16	15	6
	Other	1	2	3	0	0
1	It depends on the goal of the trial	6	6	3	9	22
Neutral	It is important to measure symptoms, even if looking for a protective effect	5	10	8	12	11
e	Both are equally important	7	8	3	0	11
	Other	1	2	2	3	0
ee.	It is impossible to prove whether a treatment truly protects nerve cells	3	4	0	0	0
Disagree	This distinction is irrelevant as long as it improves Parkinson's long term	4	2	3	0	6
	Treating symptoms is more important	1	0	0	0	0
	Other	1	2	0	0	0
	Participant group total % (Votes)	100 (183)	100 (50)	100 (63)	100 (33)	100 (18)

D1Q2 The trial should try to find out for which types of Parkinson's the drug might work best

Parkinson's is not the same for everyone. Symptom differences or genetic differences might allow researchers to divide people with Parkinson's into groups with more similar features.

Consensus reached in Round 1 (Survey 1)

Figure 1. D1Q2 Scores

_	%	% Votes per Participant Group						
	Disagree (Score 1-3)	I'm not sure						
People with Parkinson's	6	9	83	3				
Care partners	6	11	78	6				
Clinical Scientists	15	10	75	0				
Industry representatives	0	0	88	13				
Funder	0	0	80	20				

^{*}This item reached consensus in survey 1 before reasons could be formally collected.

D1Q3 The trial should collect the best information possible even if this takes up to 5 years.

No Consensus

Figure 14. D1Q3 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	I'm not sure					
People with Parkinson's	12	16	71	0			
Care partners	8	31	54	8			
Clinical Scientists	0	20	80	0			
Industry representatives	38	25	38	0			
Funder	0	25	50	25			

Figure 16. D1Q3 Reasons

8	10. DIQ3 Reasons	% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
	Data quality may suffer	0	1	0	3	0	
0	It is better to conduct short trials first to provide a rationale for a longer trial	2	3	1	7	0	
Disagree	Logistically challenging	2	3	0	3	0	
20 20 20	Makes recruitment difficult	3	3	0	3	0	
is	Patents for drugs might run out	0	1	0	3	0	
	Short trials do not necessarily reduce data quality	3	3	0	3	0	
	Too expensive	0	0	1	13	7	
	Other	1	0	0	3	7	
	A 3-year trial would be better	3	4	0	0	7	
	Early, interim results should be reported	5	7	4	10	13	
Neutral	Ineffective treatments should be removed from the trial as early as possible	5	6	6	0	13	
Ne	It depends on the aim and stage of the trial	4	4	5	13	7	
	Trial duration is irrelevant as long as the data collected are useful	2	6	0	0	0	
	Other	0	0	0	0	0	
	Less likely to give false hope	4	4	4	0	0	
	Long trials that measure real, long term, impact on patients (including side effects) are important	15	10	15	13	7	
ها	Needed to discover whether a treatment slows disease progression (there are no biomarkers)	12	6	16	7	7	
Agree	Potential benefits may be missed in a short trial	13	13	20	7	13	
V	Parkinson's progresses slowly	10	7	16	7	7	
	The best/most reliable information possible should be collected	11	7	8	3	7	
	Will provide valuable information, even in the absence of a therapeutic effect	4	7	4	0	7	
	Other	0	0	0	0	0	
	Participant group total % (Votes)	100 (216)	100 (67)	100 (85)	100 (30)	100 (15)	

D1Q4 The trial should be as short as possible, (perhaps up to 1 year) even if there is a risk of providing partial information.

No consensus

Figure 17. D1Q4 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	I'm not sure					
People with Parkinson's	41	39	20	0			
Care partners	54	23	23	0			
Clinical Scientists	90	10	0	0			
Industry representatives	50	38	13	0			
Funder	75	25	0	0			

Figure 19. D1Q4 Reasons

	e 19. DIQ4 Reasons	% Votes per Participant Group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
e	Long trials are necessary to collect the best/most reliable information	9	7	5	8	10
	Long trials are needed to discover whether a treatment slows disease progression (there are no biomarkers)	11	13	23	11	20
Disagree	Parkinson's is variable. Longer trials allow for more variation in rate of progression between participants	15	15	23	8	15
Ω	Short trials cannot measure real impact on patients adequately (including side effects)	8	9	8	6	10
	The results of a short trial could be inconclusive	8	5	12	11	15
	Other	0	0	3	0	0
	Collecting the best/most reliable data needs to be carefully balanced with trial length	12	2	8	17	10
tral	It depends on the aim and stage of the trial	6	5	9	8	5
Neutra	Managing communication and expectations is important	2	0	3	0	0
	Trial duration is irrelevant as long as the data collected are useful	3	4	0	3	5
	Other	0	0	0	0	0
	Higher throughput of treatments	2	5	2	0	5
	It is better to conduct short trials first to provide a rationale for a longer trial	3	5	2	6	0
بو	It is demoralizing to take part in a long, ultimately unsuccessful trial	2	5	2	6	0
Agree	Less expensive and encourages investment	4	4	2	6	0
V	Fewer participants drop- out/withdraw	2	7	2	6	0
	Logistically easier	2	2	0	3	0
	Makes recruitment easier	3	4	0	0	0
	New treatments are needed urgently	5	7	0	3	5
	Other	0	0	0	0	0
	Participant group total % (Votes)	100 (203)	100 (55)	100 (66)	100 (36)	100 (20)

D1Q5 The trial should compare participants receiving the new treatment against those that receive a placebo (pretend/inactive drug).

Additional information: Placebo controlled drug trials for Parkinson's normally allow participants to take their normal medication as well as the study drug or placebo. The ritual of receiving a treatment can make people feel better. This is called the placebo-effect. Researchers use a placebo to try and find out whether people are feeling better because of the new drug or because of the placebo effect.

Consensus reached in round 1 (Survey 2)

Figure 4. D1Q5 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	I'm not sure					
People with Parkinson's	6	20	74	0			
Care partners	13	19	69	0			
Clinical Scientists	0	10	90	0			
Industry representatives	0	13	88	0			
Funder	40	0	60	0			

Figure 5. D1Q5 Reasons

8*	e 5. DIQ5 Reasons	% Votes per participant group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	A placebo does not help the participant	3	2	0	0	0
	Participants on placebo might feel disappointed at the end of a trial and need additional support.	4	2	0	0	0
	Placebo is not needed to test tolerability and biochemical outcomes	2	7	0	3	5
Disagree	Placebo may be difficult or expensive to obtain; the use of placebo may be unethical in some trials	3	4	0	0	0
	Makes recruitment difficult	3	0	0	0	0
	Not giving a promising new treatment to participants seems unethical	4	4	0	0	0
	The trial should investigate more than one treatment to find out which one works best (no need for a placebo)	4	5	0	3	5
	Other	0	4	0	0	5
tral	All participants should receive the trial drug at some point in the trial (even if they start on placebo)	8	5	1	7	0
Neutral	It depends on the aim, stage and duration of the trial	6	11	4	7	10
	Other	1	2	1	0	0
	Placebos are best practice/important for trial quality and scientific rigor	17	14	20	23	20
	Placebos are necessary to ensure that an improvement is not due to a placebo effect	18	18	20	20	20
Agree	Placebos are necessary to ensure that new treatments don't cause harm	6	5	8	3	5
A	The placebo effect in Parkinson's is very strong and cannot be ignored	11	9	21	17	25
	There is no good alternative to a placebo control	7	7	11	10	0
	This may be preferred by regulators	5	4	12	7	5
	Other	0	0	1	0	0
	Participant group total % (Votes)	100 (198)	100 (57)	100 (75)	100 (30)	100 (20)

D1Q6 The trial should compare participants receiving the new treatment against those that receive nothing

Additional information: In this type of trial participants would receive the study drug in addition to their normal Parkinson's medication and would be compared to those receiving their normal Parkinson's medication. (Therefore, this is an open-label study with a standard of care control)

No Consensus

Figure 11. D1Q6 Scores

	% Votes per Participant Group						
	Disagree Neutral Agree I'm no (Score 1-3) (Score 4-6) (Score 7-9) sure						
People with Parkinson's	24	26	50	0			
Care partners	46	15	38	0			
Clinical Scientists	95	0	0	5			
Industry representatives	88	13	0	0			
Funder	50	0	25	25			

Figure 13. D1Q6 Reasons

5	e 13. DIQO Reasons	% Votes per Participant Group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	It would be impossible to know whether the treatment benefits or harms participants	4	2	10	3	9
	Placebo controlled trials are able to draw conclusions quicker and with fewer participants	3	7	9	17	9
	Placebo effects are strong in Parkinson's	7	7	24	14	18
ده	Placebo (+usual care) represents the best way to reduce bias in the results	5	10	21	21	0
J.	Only if absolutely necessary	1	7	6	0	0
Disagree	Other trial designs should be considered – e.g., where all participants will receive the study drug at some point or where treatments are compared against each other without the need for placebo	9	7	13	3	9
	Rigorous comparisons will be more difficult	4	10	7	14	9
	Those in the control arm will receive no benefits and be less motivated to take part	6	5	3	7	9
	Trials would need to be long	3	2	3	0	0
	Other	0	0	1	0	0
	It depends on the purpose and stage of the trial	6	2	1	3	9
 IB.	It is important to meet expectations of regulators	3	0	1	7	0
eutral	Objective measurements would be required (e.g., biomarkers)	7	5	0	0	0
	Control arms should include both, those on placebo and those on standard of care	4	5	0	7	0
	Other	0	0	0	0	0
	Does not involve deception	5	5	0	0	9
	I don't mind this option as long as it helps finding a better treatment	11	10	0	0	9
ee ee	More closely resembles real life	13	7	0	0	9
Agree	Preferable to placebo	5	2	0	0	0
A	The use of placebo or delayed treatment might not be ethically or scientifically acceptable in all cases	3	7	0	3	0
	Other	1	0	0	0	0
	Participant group total % (Votes)	100 (151)	100 (42)	100 (68)	100 (29)	100 (11)

D1Q7 The trial should test more than one treatment at the same time (for example participants will receive either treatment A, or treatment B, or placebo)

Clinical trials are very complicated to organize, one way of speeding up the discovery of new treatments is to test more than one medicine in the same trial.

Consensus reached in round 2 (Survey 2)

Figure 6. D1Q7 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	Neutral (Score 4-6)	I'm not sure				
People with Parkinson's	7	4	85	4			
Care partners	13	6	75	6			
Clinical Scientists	0	35	65	0			
Industry representatives	0	38	63	0			
Funder	0	0	80	20			

Figure 8. D1Q7 Reasons

gu-	e o. DIQ/ Reasons	0	√ Votes p	er Participa	ınt Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	Complicates analysis	2	5	1	6	0
	Initial costs will be higher	1	0	1	3	0
	Logistically challenging	2	0	2	6	0
ده	Not necessarily more time efficient	1	2	1	6	0
j.	Not suitable for all treatments	2	2	4	6	0
50	Recruitment might be more difficult	1	0	0	0	0
Disagree	Testing drugs separately in order of best potential might be better	1	3	1	0	0
	Testing subtypes for targeted therapies could be difficult in this type of trial	0	2	2	3	0
	Other	0	2	0	0	0
al	As long as data quality is not compromised	6	7	5	6	6
tr	It depends on the aim of the trial	5	2	5	8	6
Neutral	If adaptive, this could be useful to optimize clinical development	3	7	6	17	13
	Other	0	0	1	0	0
	Less participants would have to be allocated a placebo than if all treatments were tested individually	12	11	16	6	19
Agree	There are many potential treatments for Parkinson's available which should be investigated	15	18	12	6	13
500	This is more time/cost efficient	17	16	18	14	19
\forall	This type of trial will make it easier to test treatment combinations	14	15	6	6	13
	Would allow direct comparison of treatments entered into the trial	16	10	15	11	13
	Other	0	0	2	0	0
	Participant group total % (Votes)	100 (213)	100 (61)	100 (82)	100 (36)	100 (16)

D1Q8 As well as the treatment, the trial should test new apps and devices to see whether they can improve the way Parkinson's is measured.

Additional information: Apps and devices would only be used as additional exploratory measures in order to evaluate their future usefulness for measuring Parkinson's.

Consensus reached in round 1 (survey 2)

Figure 9. D1Q8 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure			
People with Parkinson's	6	17	78	0			
Care partners	6	0	81	13			
Clinical Scientists	5	35	60	0			
Industry representatives	0	25	75	0			
Funder	0	40	60	0			

Figure 10. D1Q8 Reasons

5	e 10. D1Q8 Reasons		% Votes per Participant Group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
Disagree	Unnecessary. They should be trialed separately	1	3	1	0	0	
	Could increase the overall burden on participants	2	3	4	3	6	
Sa	Could lead to recruitment bias	0	6	4	5	6	
Di	Not everyone is able to use apps and devices	4	4	3	0	0	
	Other	0	1	0	3	0	
Neutral	Apps and devices should not interfere with the main purpose of the trial, be user friendly, patient relevant and add valuable information	7	4	6	11	18	
Z	Measures would have to be carefully validated	3	1	7	3	12	
	Other	0	0	0	0	0	
	Anything that helps people with Parkinson's should be explored	14	13	4	5	6	
	Could improve the way Parkinson's is measured by capturing more objective, continuous and accurate data	17	15	21	21	24	
	Could provide easier/quicker solutions	9	12	8	8	6	
Agree	Exploring new technologies has become even more important with COVID-19	10	7	6	13	6	
₩	Maximizes the value of the trial	9	4	8	11	6	
	Technology should be used where possible	8	7	4	8	0	
	The development of apps and devices could decrease future cost of trials	9	9	15	5	12	
	This could provide insights into user-friendliness of apps and devices	5	7	7	5	0	
	Other	0	0	1	0	0	
	Participant group total % (Votes)	100 (223)	100 (67)	100 (72)	100 (38)	100 (17)	

Domain 2. Inclusion Criteria

Researchers often restrict who can take part in a trial. The following set of statements will present restrictions that are common for Parkinson's trials. Participants were asked whether they agree that these should be in place.

The aim of the proposed trial is to investigate potential disease modifying therapies in a multi-arm multi-stage (phase 2/3) trial. Treatments entered into the trial are likely to target different mechanisms. Normally participants are selected for a trial of a single therapy. However, in a platform trial that investigates many potential therapies, a more general decision on who can take part needs to be made.

D2Q1 The trial should be as inclusive as possible

No Consensus

Figure 23. D2Q1 Scores

	% Votes per Participant Group					
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure		
People with Parkinson's	10	20	69	0		
Care partners	0	23	62	15		
Clinical Scientists	10	65	25	0		
Industry representatives	25	50	25	0		
Funder	25	0	75	0		

Figure 25. D2Q1 Reasons

rigui	e 25. D2Q1 Reasons	0,	% Votes per Participant Group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
	An inclusive trial needs to be longer	2	2	6	6	0	
Disagree	Data is less variable in targeted trials, making it easier to show treatment effects and increasing reliability of results	2	0	9	11	11	
	More participants may be needed to show an effect	2	2	6	8	5	
D	The trial should include only those most likely to benefit from the treatment	3	4	4	3	5	
	Other	0	0	0	0	0	
la.	Participants should be selected depending on the aim of the trial	8	9	16	8	11	
Neutral	Participants should be selected depending on how the treatment is thought to work	7	4	14	14	11	
	Other	1	2	0	0	0	
	Allows for better understanding of treatment response (benefits and side-effects) in different patient groups	16	16	12	8	11	
	A trial should involve everyone so that responders can be identified	9	7	1	0	5	
	Better reflects 'real-life' making results more widely applicable	11	13	6	8	0	
٥	Conducting separate trials to test treatments in many different, narrowly defined types of Parkinson's is inefficient	6	2	0	3	0	
gree	Inclusive trials are easier to recruit to	7	5	6	3	0	
Ag	Inclusivity in its broadest sense (e.g., gender and ethnicity) is important	10	16	7	6	16	
	Multiple arms investigating treatments targeted to different subtypes may allow for inclusivity	6	4	3	3	11	
	Reliable targeting of likely responders may not be possible for most treatments	4	7	3	11	0	
	There should only be limits on participation if there is a clear rationale (such as making the result more reliable or for safety reasons)	9	9	7	8	11	
	Other	0	0	0	0	5	
	Participant group total % (Votes)	100 (195)	100 (56)	100 (69)	100 (36)	100 (19)	

D2Q2 The trial should have an upper age limit.

No consensus

Figure 26. D2Q2 Scores

	%	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure					
People with Parkinson's	65	16	18	0					
Care partners	54	38	8	0					
Clinical Scientists	50	30	20	0					
Industry representatives	25	25	50	0					
Funder	75	25	0	0					

Figure 28. D2Q2 Reasons

ı ışuı v	e 28. D2Q2 Reasons		% Votes per Participant Group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
	An inclusive trial better reflects 'real-life' making results more widely applicable	8	14	13	3	7	
47	Inclusion should depend on someone's level of function rather than their age	20	14	10	7	14	
Disagree	It is important to find out how the treatment affects people of different ages (including benefits and sideeffects)	14	16	17	7	14	
Ι	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	13	11	8	7	21	
	This limits recruitment	6	5	7	0	0	
	Other	0	0	0	3	7	
Neutral	It depends on how the treatment is thought to work	2	5	6	14	7	
en1	It depends on the aim of the trial	10	11	7	10	0	
Ž	Other	0	0	1	0	0	
	Comorbidities might affect trial outcomes in older participants	6	7	11	14	7	
	Comorbidities might make trials less safe for older participants	3	0	4	7	7	
ee	Some procedures may be inappropriate for older participants and trial visits too burdensome	7	5	4	0	0	
Agree	Reduced life expectancy could influence trial outcomes	4	5	7	14	7	
	This group should be stratified or trialed separately	2	0	4	7	7	
	Young participants are more likely to benefit from a disease modifying therapy	4	7	0	7	0	
	Other	0	2	1	0	0	
	Participant group total % (Votes)	100 (181)	100 (44)	100 (72)	100 (29)	100 (14)	

D2Q3 The trial should have a lower age limit

No consensus

Figure 29. D2Q3 Scores

0	% Votes per Participant Group						
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure			
People with Parkinson's	76	18	6	0			
Care partners	69	31	0	0			
Clinical Scientists	20	45	35	0			
Industry representatives	13	38	50	0			
Funder	25	50	25	0			

Figure 21. D2Q3 Reasons

0	e 21. D2Qo Reasons		% Votes	per Particip	ant Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	An inclusive trial better reflects 'real-life' making results more widely applicable	9	9	5	6	0
	Genetic background of participants should be factored into analysis	8	7	18	22	13
ree	It is important to find out how the treatment affects people of different ages (including benefits and sideeffects)	19	19	5	6	0
Disagree	The investigation of young onset Parkinson's is important	15	19	6	0	0
Q	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	13	14	2	13	0
	Younger participants have more to gain from a disease modifying therapy	13	12	2	3	0
	Other	0	0	0	0	0
Neutral	It depends on how the treatment is thought to work	4	9	18	9	25
e n 1	It depends on the aim of the trial	10	7	6	6	0
Ž	Other	0	0	0	0	0
e	Low age may indicate genetic forms of Parkinson's which could confound the results of the trial	3	2	20	19	25
Agree	This groups should be stratified or trialed separately	3	0	11	6	25
V	Young-onset Parkinson's is a different condition	3	0	9	9	0
	Other	0	2	0	0	13
	Participant group total % (Votes)	100 (194)	100 (43)	100 (66)	100 (32)	100 (8)

D2Q4 The trial should only include people who have had Parkinson's for less than 5 years

No Consensus

Figure 32. D2Q4 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure			
People with Parkinson's	78	14	8	0			
Care partners	85	15	0	0			
Clinical Scientists	30	55	15	0			
Industry representatives	13	50	38	0			
Funder	25	75	0	0			

Figure 34.D2Q4 Reasons

8	e 34.D2Q4 Reasons	•	% Votes p	er Participa	ant Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	An inclusive trial better reflects 'real- life' making results more widely applicable	9	14	9	0	0
	It is difficult to define disease onset; people get diagnosed at different stages of the disease	17	20	7	9	15
ree	It is important to find out how the new treatment affects people with long disease duration (including benefits and side-effects)	13	14	10	0	0
Disagree	Other factors such as age / severity / medication are more important to consider	13	8	7	9	0
	People with mild/early disease may not recognize all the symptoms	10	12	3	0	0
	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	11	12	3	9	8
	This limits recruitment	6	2	7	0	8
	Other	0	0	0	0	0
Neutral	It depends on how the treatment is thought to work	4	4	16	13	23
en1	It depends on the aim of the trial	8	8	13	9	23
Z	Other	0	0	0	0	8
	Trials of longer duration Parkinson's may be more challenging	1	2	1	4	0
	Delaying the onset of more advanced Parkinson's is an important trial outcome	3	2	7	13	8
Agree	This group is less variable making it easier to detect a disease modifying effect	2	0	3	4	8
A	This group is most likely to benefit from a disease modifying therapy	4	2	10	26	0
	This group progresses more rapidly making it easier to detect a disease modifying effect	1	0	3	4	0
	Other	0	0	0	0	0
	Participant group total % (Votes)	100 (196)	100 (50)	100 (69)	100 (23)	100 (13)

D2Q5 The trial should only include people who are not yet on any medications for their Parkinson's

Additional information: Those who have been diagnosed with Parkinson's but have not yet required Parkinson's medication.

Consensus reached in round 2 (survey 3)

Figure 20. D2Q5 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure			
People with Parkinson's	78	14	8	0			
Care partners	69	31	0	0			
Clinical Scientists	80	20	0	0			
Industry representatives	50	38	13	0			
Funder	75	0	25	0			

Figure 22. D2Q5 Reasons

i igui	e 22. D2Q5 Reasons	% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
	An inclusive trial better reflects 'real- life' making results more widely applicable	10	8	9	3	4	
	If participants are not allowed to start medication during the course of the trial, this may affect their quality of life and lead to high drop-out rates	15	16	15	3	8	
	It is important to find out how the new therapy impacts on existing treatments (including benefits and side-effects)	15	14	10	13	8	
e	It will be hard to detect a treatment benefit in mildly affected patients	7	4	4	6	8	
Disagree	New treatments should improve on existing therapies	9	14	8	3	8	
Dis	Recruiting untreated patients may bias the trial towards patients with less severe and slower progressing Parkinson's	11	10	14	3	4	
	Some participants starting medication during the trial could make measures less reliable	4	10	6	6	4	
	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	7	8	1	10	4	
	This limits recruitment	3	2	3	3	8	
	Other	0	0	0	0	0	
ral	Investigating Parkinson's drug naïve patients and those on symptomatic therapy is equally important	6	4	8	10	13	
Neut	It depends on how the treatment is thought to work	4	4	8	10	8	
	It depends on the aim of the trial	5	6	8	6	8	
	Other	0	0	1	0	0	
ree	Parkinson's medication might influence the ability to measure the effect of the treatment	2	2	4	13	8	
Agree	This group is most likely to benefit from a disease modifying therapy	1	0	4	10	4	
	Other	0	0	0	0	0	
	Participant group total % (Votes)	100 (220)	100 (51)	100 (80)	100 (31)	100 (24)	

${\bf D2Q6}$ The trial should also include people who experience their medication wearing off

Figure 35. D2Q6 Scores

	9/0	% Votes per Participant Group								
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure						
People with Parkinson's	4	20	76	0						
Care partners	0	15	69	15						
Clinical Scientists	10	75	15	0						
Industry representatives	38	50	13	0						
Funder	0	100	0	0						

Figure 37. D2Q6 Reasons

rigui	e 57. D2Q6 Reasons		% Votes r	er Particip	ant Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	More advanced stages of Parkinson's are less likely to benefit from a disease modifying treatment	1	2	8	17	6
ee.	Measuring advanced Parkinson's is difficult	2	0	3	3	0
Disagree	Symptomatic therapy may affect results	2	0	7	3	6
Di	This group is too variable; benefits will be hard to detect	0	2	7	7	0
	This group should be stratified or trialed separately	1	0	3	10	6
	Other	0	0	0	0	0
11	It depends on how the treatment is thought to work	4	7	18	14	19
rs	It depends on the aim of the trial	8	12	21	10	25
Neutral	Wearing-off must be clearly defined to develop a shared understanding with the participant	5	9	13	17	19
	Other	0	0	0	0	0
	An inclusive trial better reflects 'real- life' making results more widely applicable	15	16	7	0	0
	Development or worsening of wearing off could be one of the aspects being assessed	19	21	5	3	6
Agree	It is important to find out how the new treatment affects this group (including benefits and side-effects)	19	21	2	7	6
	Excluding this group may limit recruitment	11	5	5	3	0
	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	13	5	2	3	6
	Other	1	0	0	0	0
	Participant group total % (Votes)	100 (188)	100 (43)	100 (61)	100 (29)	100 (16)

D2Q7 The trial should not include people with thinking and memory problems related to their Parkinson's.

Figure 38. D2Q7 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	65	24	11	0				
Care partners	38	54	8	0				
Clinical Scientists	60	30	10	0				
Industry representatives	13	13	75	0				
Funder	50	25	25	0				

Figure 40. D2Q7 Reasons

8	e 40. D2Q/ Reasons		% Votes p	per Particip	ant Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	An inclusive trial better reflects 'real-life' making results more widely applicable	9	6	12	0	5
	It is important to find out how the new treatment affects people with thinking and memory problems (including benefits and side-effects).	11	4	12	0	10
	It is reasonable to include people with mild thinking and memory problems	8	10	5	7	10
e e	Patients with thinking and memory problems should participate in trials with appropriate support	12	13	9	0	5
Disagree	People with mild memory and thinking problems should be included as development of dementia is an important measure of Parkinson's progression	11	10	12	0	5
	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	9	8	4	0	0
	This group should be stratified or trialed separately	2	2	2	3	10
	This limits recruitment	1	0	0	0	0
	Those with early cognitive deficits may have more rapid progression, making benefits easier to detect	4	10	2	0	5
	Other	0	0	0	0	0
	It depends on the aim of the trial	5	10	9	7	10
al	It depends on the extent of cognitive impairment	5	8	11	13	0
eutral	It depends on how the treatment is thought to work	3	8	5	3	10
Z	Outcome measures would need to be carefully chosen	2	4	6	3	5
	Other	0	0	0	0	0
	Consent and safety could be a concern	1	4	1	0	5
	Dementia may affect peoples' ability to fully participate	2	0	2	13	5
ee	Dementia may interfere with measurements of Parkinson's	4	0	2	13	5
Agree	It is difficult to support people with cognitive impairment throughout a trial	2	0	0	0	0
	Patients with dementia are likely to be too advanced to benefit from a disease modifying therapy	1	0	4	17	5
	This group is too variable	1	0	0	0	0

Those with dementia represent a different stage of Parkinson's and should be stratified or trialed separately	2	2	0	13	5
Worsening of thinking and memory may be related to factors other than Parkinson's	3	4	0	7	0
Other	0	0	0	0	0
Participant group total % (Votes)	100 (206)	100 (52)	100 (81)	100 (30)	100 (20)

D2Q8 The trial should not include people who have had brain surgery for their Parkinson's (e.g., Deep Brain Stimulation)

Figure 41. D2Q8 Scores

_	9/0	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure					
People with Parkinson's	46	22	30	2					
Care partners	38	54	8	0					
Clinical Scientists	10	10	80	0					
Industry representatives	13	0	88	0					
Funder	0	50	50	0					

Figure 43. D2Q8 Reasons

rigui	e 43. D2Q8 Reasons	(% Votes per Participant Group						
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder			
	An inclusive trial better reflects 'real- life' making results more widely applicable	9	12	3	0	0			
	Deep brain stimulation should be treated the same as any other symptomatic therapy for Parkinson's	11	14	5	4	0			
gree	It is important to find out how the treatment affects this group (including benefits and side-effects)	11	12	3	4	0			
Disagree	There should only be limits on participation if they are likely to make the result less reliable or for safety reasons	9	7	3	4	15			
	The neuromodulatory effects of deep brain stimulation treatment are relatively well understood and therefore this group should be included	7	9	0	0	0			
	Other	1	0	2	0	0			
11	It depends on how the treatment is thought to work	6	9	5	4	8			
L2	It depends on the aim of the trial	10	14	10	7	0			
Neutral	People for whom deep brain stimulation was unsuccessful should be included	4	7	2	0	15			
	Other	0	0	0	0	0			
	Deep brain stimulation could interfere with the treatment	6	2	6	7	23			
	Deep brain stimulation may interfere with measures of Parkinson's	6	2	21	21	15			
Agree	Deep brain stimulation treated individuals are difficult to compare to others with Parkinson's	8	2	19	14	15			
A	This group is advanced and unlikely to benefit from a disease modifying treatment	3	2	11	18	0			
	This group should be stratified or trialed separately	8	7	8	18	8			
	Other	0	0	2	0	0			
	Participant group total % (Votes)	100 (157)	100 (43)	100 (62)	100 (28)	100 (13)			

Domain 3 Outcome Measures

The effectiveness of treatments can be measured in many ways. The following set of statements will present ways in which Parkinson's can be measured. Participants were asked whether they agree that these should be used to show the **overall success** of the trial.

Additional information: The proposed trial will be multi-stage (phase 2-3 trial) aimed at finding a disease modifying therapy. Participants were asked to consider appropriate measures of **overall success** at the end of the final stage of the trial (phase 3).

D3Q1 It is important that the overall success of the trial is shown by an effect on Parkinson's when participants are not taking their normal medication

In this type of trial participants are asked not to take their normal Parkinson's medication **temporarily** whenever a measurement of their symptoms takes place.

Consensus reached round 3 (survey 4)

Figure 58. D3Q1 Scores

	% Votes per Participant Group							
	Disagree	Disagree Neutral Agree I'm not						
	(Score 1-3)	(Score 4-6)	(Score 7-9)	sure				
People with Parkinson's	7	20	70	4				
Care partners	8	38	46	8				
Clinical Scientists	10	5	85	0				
Industry representatives	0	25	75	0				
Funder	0	50	50	0				

Figure 60. D3Q1 Reasons

rigur	we 60. D3Q1 Reasons % Votes per Participant Group					
			% Votes p	<u> </u>	int Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	A drug should only be considered successful if it adds a benefit to existing treatments	5	10	5	0	0
	It is important to measure an effect on a symptom that is not affected by Parkinson's medication	3	0	0	4	8
	Long lasting effects of medications will not be turned off	1	0	2	4	0
a)	Not taking Parkinson's medication may be harmful/unsafe	3	10	2	0	0
Disagree	Not taking Parkinson's medication may be worrisome to trial participants	3	8	2	0	0
Di	Measuring Parkinson's when participants are on existing medication more closely resembles "real-life"	5	10	5	4	0
	Participants will require more support	0	0	2	0	0
	There are other ways to measure disease modification that are not affected by symptomatic treatment	1	8	2	0	0
	This may affect recruitment	1	3	2	0	0
	Other	1	3	0	0	0
	It depends on the aim of the trial	10	10	14	8	8
al	It depends on how the treatment is thought to work	8	10	10	15	15
Neutra]	Measurements with and without medication are equally important	11	5	3	12	15
Z	Other aspects of Parkinson's are equally important	5	5	0	4	0
	Other	0	0	2	0	0
	An improvement in any aspect of Parkinson's is of value	16	10	3	12	23
Agree	Parkinson's medications may mask the effect of the trial treatment	20	8	29	27	23
Ą	This is the most standard measure of Parkinson's severity	9	3	17	8	8
	Other	0	0	2	4	0
	Participant group total % (Votes)	100 (151)	100 (40)	100 (59)	100 (26)	100 (13)

D3Q2 It is important that the overall success of the trial is shown by an effect on Parkinson's when participants are taking their normal medication

In this type of trial participants are allowed to take their Parkinson's medication as usual whenever a measurement of their symptoms takes place.

Figure 61. D3Q2 Scores

	% Votes per Participant Group							
	Disagree Neutral Agree I'm no (Score 1-3) (Score 4-6) (Score 7-9) sure							
People with Parkinson's	9	33	57	2				
Care partners	8	38	54	0				
Clinical Scientists	5	75	20	0				
Industry representatives	13	63	25	0				
Funder	0	100	0	0				

Figure 63. D3Q2 Reasons

9	e 63. D3Q2 Reasons		% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder		
	It is important to measure an effect on a symptom that is not affected by Parkinson's medication	2	2	5	3	7		
ee.	Medication may vary during the course of the trial	4	4	7	7	0		
Disagree	Parkinson's medications may mask the effect of the new treatment (including benefits and side-effects)	8	4	7	7	13		
	There are other ways to measure disease modification that are not affected by symptomatic treatment	2	2	2	3	0		
	Other	0	0	0	0	0		
	It depends on how the treatment is proposed to work	8	9	15	13	27		
	It depends on the aim of the trial	6	5	22	7	20		
Neutral	It depends on which aspects of Parkinson's are being measured	8	11	18	7	7		
Nen	Measurements with and without medication are equally important	6	11	10	7	7		
	Other aspects of Parkinson's are equally important	4	5	0	7	13		
	Other	0	0	2	0	0		
	An improvement in any aspect of Parkinson's is of value	10	15	2	10	7		
	Anxiety affects measures of Parkinson's, therefore participants should be measured when taking normal medication	8	7	0	7	0		
Agree	It is important to assess effects of the trial drug combined with normal medication (including benefits and side-effects)	14	15	3	10	0		
	Not taking Parkinson's medication may be harmful/unsafe	9	5	2	3	0		
	This is easier for participants, aids recruitment and reduces drop-outs	4	2	2	7	0		
	This reflects the real world situation better	6	4	5	3	0		
	Other	1	0	0	0	0		
	Participant group total % (Votes)	100 (181)	100 (55)	100 (60)	100 (30)	100 (15)		

D3Q3 It is important that the overall success of the trial is shown by an effect on movement (motor) symptoms

Figure 64. D3Q3 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	2	43	52	2				
Care partners	0	38	62	0				
Clinical Scientists	10	60	30	0				
Industry representatives	13	13	75	0				
Funder	25	50	25	0				

Figure 66. D3Q3 Reasons

	e oo. D5Q5 Reasons		% Votes p	er Participa	ant Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
Disagree	A more holistic assessment would be better	6	4	0	0	12
	It is important to measure an effect on a symptom that is not affected by Parkinson's medication	1	0	0	0	6
	Other aspects of Parkinson's are more important	0	0	0	0	6
	Useful as an addition to other measures	1	4	2	3	6
	Other	1	0	3	0	0
	It depends on how the treatment is thought to work	8	13	18	9	12
al	It depends on the aim of the trial	10	11	20	9	12
Neutral	It depends on the disease stage of the trial participants	5	4	13	6	6
Z	Other aspects of Parkinson's are equally important	9	9	8	9	12
	Other	1	0	2	0	0
	A key symptom that needs improvement	14	13	11	21	0
	An improvement in any aspect of Parkinson's is of value	16	11	0	9	6
ee	A standard measure that enables comparison with previous trials	6	13	10	15	12
Agree	Motor symptoms correlate with brain dopamine	8	13	3	3	6
7	Particularly important for measuring early Parkinson's	8	2	7	12	0
	The best/easiest way to show an overall success	5	4	2	3	6
	Other	1	0	2	0	0
	Participant group total % (Votes)	100 (167)	100 (47)	100 (61)	100 (33)	100 (17)

D3Q4It is important that the overall success of the trial is shown by an effect on non-movement related (non-motor) Parkinson's symptoms (such as thinking and memory, sleep, mood, and constipation).

Figure 67. D3Q4 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	2	46	50	2				
Care partners	0	54	46	0				
Clinical Scientists	0	75	25	0				
Industry representatives	25	38	38	0				
Funder	0	100	0	0				

Figure 69. D3Q4 Reasons

5	e 69. D3Q4 Reasons	9,	6 Votes pe	er Participa	nt Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
Disagree	A more holistic assessment would be better	4	5	0	0	0
	Non-motor symptom measurements require longer trials	3	3	0	3	0
	Not as important as motor symptoms	1	0	0	0	0
	Not enough is known about why they occur and some could be related to comorbidities	0	0	1	3	0
Di	Other aspects of Parkinson's are more important	0	0	0	0	0
	They are hard to measure and vary greatly	3	3	1	3	0
	Useful as an addition to other measures	1	0	3	3	0
	Other	1	0	0	0	0
	It depends on how the treatment is thought to work	9	13	22	14	25
	It depends on the aim of the trial	15	13	24	14	25
ral	It depends on the disease stage of the trial participants	5	5	16	7	6
Neutra]	Some non-motor symptoms might be more suitable to measure than others	14	13	16	17	19
	Other aspects of Parkinson's are equally important	8	10	6	7	6
	Other	1	0	0	0	0
ee	An improvement in any aspect of Parkinson's is of value	20	23	4	10	13
Agree	Key symptoms that need improvement	16	13	6	17	6
	Other	1	0	0	0	0
	Participant group total % (Votes)	100 (152)	100 (39)	100 (68)	100 (29)	100 (16)

D3Q5 It is important that the overall success of the trial is shown by an effect on quality of life

Consensus reached round 1 (Survey 2)

Figure 44. D3Q5 Scores

	% Votes per Participant Group							
	Disagree	Neutral	Agree	I'm not				
	(Score 1-3)	(Score 4-6)	(Score 7-9)	sure				
People with Parkinson's	4	9	87	0				
Care partners	0	0	94	6				
Clinical Scientists	5	30	65	0				
Industry representatives	0	13	88	0				
Funder	0	0	100	0				

Figure 45. D3Q5 Reasons

J	e io. De Qo itensons		% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder		
	A more holistic assessment would be better	1	2	0	0	5		
	Other aspects of Parkinson's are more important	0	2	0	0	0		
ee.	Quality of life measures are not objective	2	2	2	0	0		
Disagree	Quality of life can be affected by factors unrelated to Parkinson's	4	4	10	11	5		
Di	Quality of life measures require longer trials	1	0	0	0	0		
	The scale should measure wellbeing not Parkinson's related deficits	2	0	2	0	0		
	Useful as an addition to other measures Other	1 1	0	0	0	5		
П	It depends on the aim of the trial	8	5	8	4	5		
Neutral	It depends on the disease stage of the trial participants	3	4	3	4	0		
Z	Other	1	0	0	0	0		
	An improvement in any aspect of Parkinson's is of value	16	21	8	22	14		
e	Improvement (or maintenance) of quality of life is essential to show success	19	23	15	19	24		
Agree	Quality of life improves if symptoms improve	20	21	13	7	14		
A	Quality of life measures are more patient relevant	17	16	19	22	19		
	Quality of life measures are valued by regulators	3	2	15	11	10		
	Other	2	0	3	0	0		
	Participant group total % (Votes)	100 (196)	100 (57)	100 (62)	100 (27)	100 (21)		

D3Q6 It is important that the overall success of the trial is shown by an effect on activities of daily living (such as eating or getting dressed)

Consensus reached round 1 (survey 2)

Figure 46. D3Q6 Scores

	% Votes per Participant Group							
	Disagree	Neutral	Agree	I'm not				
	(Score 1-3)	(Score 4-6)	(Score 7-9)	sure				
People with Parkinson's	7	26	67	0				
Care partners	0	13	81	6				
Clinical Scientists	5	40	55	0				
Industry representatives	25	0	75	0				
Funder	0	20	80	0				

Figure 47. D3Q6 Reasons

8	17. Do go Reasons		% Votes p	er Participa	int Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	A more holistic assessment would be better	2	2	0	0	0
ee	Other aspects of Parkinson's are more important	2	0	0	0	0
	These scales need improvement and better validation	2	2	5	11	0
g	This is not an objective measure	3	4	2	4	0
Disagree	This measure is not relevant to everyone with Parkinson's (especially early stage)	5	4	6	11	5
	This measure requires a longer trial	1	0	0	0	0
	Useful as an addition to other measures	2	2	3	0	5
	Other	1	2	3	0	0
al	It depends on the aim of the trial	10	7	5	7	14
Neutral	It depends on the disease stage of the trial participants	6	7	12	7	10
Z	Other	1	0	0	0	0
	An improvement in any aspect of Parkinson's is of value	15	18	5	18	14
e	Being able to do things independently is important	22	20	20	14	14
Agree	These problems can be very distressing/burdensome	16	21	12	14	14
▼	This measure is effective even in early disease	11	11	11	7	5
	This measure is valued by regulators	3	2	14	7	14
	Other	1	0	3	0	5
	Participant group total % (Votes)	100 (181)	100 (56)	100 (65)	100 (28)	100 (21)

D3Q7 It is important that the overall success of the trial is shown by delaying the development of new symptoms (such as falls, or thinking and memory problems)

Consensus reached round 1 (survey 2)

Figure 48. D3Q7 Scores

	% Votes per Participant Group						
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure			
People with Parkinson's	7	19	74	0			
Care partners	6	13	75	6			
Clinical Scientists	10	20	70	0			
Industry representatives	0	13	88	0			
Funder	0	0	100	0			

Figure 49. D3Q7 Reasons

I Igui	e 49. D3Q/ Reasons		% Votes p	er Participa	nt Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	A more holistic assessment would be better	1	4	0	0	0
	Assessing the delay of symptoms that may never occur is intangible	7	4	3	0	0
	Other aspects of the disease are more important	1	0	0	4	0
Disagree	Some of these events are rare; trials would need to be longer and require more participants	2	0	4	7	0
	The reaching of disease milestones (e.g., falls, dementia) might be influenced by factors other than Parkinson's progression	3	2	4	4	6
	These events are variable and difficult to measure	3	12	1	7	6
	These measures do not give enough insights into how the new treatment works	1	2	3	0	0
	This is not an objective measure	1	2	1	4	0
	Useful as an addition to other measures	1	2	4	0	0
	Other	0	2	1	4	0
Neutral	It depends on the aim of the trial	14	6	7	7	13
Nen	Other	1	0	1	0	0
	Disease milestones may be less affected by Parkinson's medication	7	10	16	7	6
ree	This reflects maintained quality of life	22	24	13	18	25
Agre	This is a major concern of people with Parkinson's	25	22	19	21	25
	This is an objective measure	11	8	18	18	13
	Other	1	0	1	0	6
	Participant group total % (Votes)	100 (161)	100 (50)	100 (68)	100 (28)	100 (16)

$D3Q8\ It$ is important that the overall success of the trial is shown by an effect on the duration of good quality ON time

ON time is when the medications are working well.

Figure 70. D3Q8 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	2	26	70	2				
Care partners	0	23	69	8				
Clinical Scientists	15	60	25	0				
Industry representatives	25	50	25	0				
Funder	0	75	25	0				

Figure 72. D3Q8 Reasons

rigui	e /2. D3Q8 Reasons	% Votes per Participant Group						
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder		
	A more holistic assessment would be better	2	0	0	4	7		
	It is difficult to define and measure this	2	2	3	0	0		
Disagree	Other aspects of Parkinson's are more important	1	0	0	0	0		
	Not everyone with Parkinson's fluctuates between ON and OFF	4	0	9	4	7		
Dis	This is not a relevant measure for early stage Parkinson's	2	0	6	14	7		
	This is only a good measure for symptomatic treatments	1	0	3	4	0		
	Useful as an addition to other measures	2	0	2	0	0		
	Other	0	0	2	0	0		
	It depends on how the treatment is thought to work	6	11	17	11	21		
اع	It depends on the aim of the trial	10	14	23	11	21		
Neutra]	It depends on the disease stage of the trial participants	5	11	14	11	7		
Z	Other aspects of Parkinson's are equally important	7	7	5	11	7		
	Other	1	0	2	0	0		
	A drug should only be considered successful if it adds a benefit to existing treatments	10	18	3	4	0		
Agree	An improvement in any aspect of Parkinson's is of value	16	11	3	7	7		
Ag	Good quality ON time is a key determinant of quality of life	18	18	6	11	7		
	This is an important aspect of Parkinson's and needs addressing	16	7	3	7	7		
	Other	0	0	0	4	0		
	Participant group total % (Votes)	100 (173)	100 (44)	100 (65)	100 (28)	100 (14)		

D3Q9 It is important that the overall success of the trial is assessed by an effect on more than one type of measurement

Consensus reached round 1 (Survey 2)

Figure 50. D3Q9 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	11	20	65	4				
Care partners	0	13	88	0				
Clinical Scientists	0	20	80	0				
Industry representatives	0	13	88	0				
Funder	0	40	60	0				

Figure 51. D3Q9 Reasons

8	C 31. D3Q7 Reasons	% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
.ee	A composite measure (combining different outcomes) would be best	3	3	0	3	0	
	Showing improvement in one measure should be enough	4	0	0	3	0	
Disagree	Statistical analysis would be more complicated	1	1	0	3	0	
Dis	This approach may not be useful for evaluating response to targeted therapies	3	3	2	0	0	
	Other	1	0	0	0	0	
l	It depends on the aim of the trial	10	3	6	5	10	
Neutral	Such an approach would need to be validated	2	0	0	0	5	
Neu	The selection of measures needs to be carefully considered	6	3	11	3	14	
	Other	0	0	0	0	0	
	All aspects of the disease are important	10	12	5	8	5	
	An effect in more than one aspect of Parkinson's is more convincing	14	18	18	16	14	
	An effect is more likely to be detected if more than one measure is considered	11	13	12	11	14	
Agree	A therapy that is truly disease modifying should have impact on more than one type of measure	11	13	18	19	14	
,	No outcome measure is sufficient when used in isolation	4	3	9	8	10	
	This gives a better understanding of the net effect of the new treatment	10	10	12	14	10	
	This takes the variability of Parkinson's into account	13	16	6	8	0	
	Other	0	0	0	0	5	
	Participant group total % (Votes)	100 (199)	100 (67)	100 (65)	100 (37)	100 (21)	

D3Q10 Parkinson's should be monitored passively at home (without the participant needing to do anything) by for example using smart phones or watches

Consensus reached round 2 (Survey 3)

Figure 52. D3Q10 Scores

5	%	% Votes per Participant Group								
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure						
People with Parkinson's	12	29	57	2						
Care partners	15	23	54	8						
Clinical Scientists	0	25	75	0						
Industry representatives	0	0	100	0						
Funder	0	0	100	0						

Figure 54. D3Q10 Reasons

	2 34. D3Q10 Reasons	% Votes per Participant Group				
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	Adds to trial cost	2	2	0	3	0
	Devices are an invasion of privacy	1	2	0	0	0
	Devices cannot measure all aspects of Parkinson's	6	6	3	0	0
) se	Emotional support from in-person visits is important	4	4	0	0	0
	In-clinic assessments are better	2	0	0	0	0
Disagree	It is important to use more than 1 approach to measure Parkinson's	3	4	3	6	0
Dis	Large datasets can be challenging to analyze meaningfully	1	0	0	3	0
	Technological and logistical problems might limit data quality	2	4	0	6	0
	These measures need to be validated	2	6	5	3	0
	This might limit/bias recruitment to those able to use technology	1	2	1	0	0
	Other	1	0	0	0	6
	It depends on the needs of the trial	9	4	10	9	6
tral	Collection of data should be non-intrusive	7	2	5	6	0
Neutra]	Results should be meaningful/relevant to patients	5	8	5	3	0
	Other	0	0	4	0	0
	Device measurements might remove some of the placebo effect	7	9	11	3	11
Agree	Might capture aspects of Parkinson's more accurately/objectively	16	11	16	17	22
	This is an important area to develop	12	11	15	14	17
Ā	This is easier for participants and saves time	12	15	10	9	17
	This might better reflect normal life	13	11	11	20	22
	Other	0	0	0	0	0
	Participant group total % (Votes)	100 (197)	100 (53)	100 (79)	100 (35)	100 (18)

D3Q11 Parkinson's should be measured at home by the participant completing regular tasks on smart phones or tablets

Figure 73. D3Q11 Scores

	% Votes per Participant Group								
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure					
People with Parkinson's	7	41	50	2					
Care partners	0	54	38	8					
Clinical Scientists	0	50	50	0					
Industry representatives	0	25	75	0					
Funder	0	50	50	0					

Figure 75. D3Q11 Reasons

9	75. D5Q11 Reasons	0	% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder		
	Compliance can become an issue	3	7	1	3	0		
	Emotional support from in-person contact is important	1	4	0	0	0		
	In-clinic assessments are better	2	2	0	0	0		
	It is hard to ensure participants are performing tasks unaided	3	0	0	3	0		
	Needs to form part of a holistic assessment	2	2	0	0	0		
ee.	Participants may not be able to perform tasks or use technology	3	4	1	6	0		
Disagree	Participants may require more technical support	1	0	3	3	0		
D.	Passive monitoring would be easier	1	0	0	3	6		
	Regular tasks might become burdensome	2	0	3	0	0		
	These measures need to be validated	1	0	4	3	11		
	This might limit/bias recruitment to those able to perform the tasks	0	0	0	0	0		
	Useful as an addition to other measures	1	0	1	3	0		
	Other	0	0	0	0	0		
	Depends on the aims/needs of the trial	7	9	11	8	6		
al	Results should be meaningful/relevant to patients	3	9	4	8	6		
Neutral	Technology must be user-friendly and engaging for people with Parkinson's	13	13	16	11	0		
	These measures need to be approved by regulators	2	7	4	6	11		
	Other	0	0	1	0	0		
	Allows for more frequent data collection	13	13	20	19	17		
Agree	Easier for participants and saves time	14	9	8	6	11		
500	May be more objective	11	11	11	8	17		
V	May increase participant engagement	12	9	9	11	17		
	Other	0	0	3	0	0		
	Participant group total % (Votes)	100 (202)	100 (45)	100 (75)	100 (36)	100 (18)		

D3Q12 Parkinson's should be measured by asking people with Parkinson's to complete questionnaires.

Consensus reached round 2 (survey 3)

Figure 55. D3Q12 Scores

	% Votes per Participant Group							
	Disagree	Disagree Neutral Agree						
	(Score 1-3)	(Score 4-6)	(Score 7-9)	sure				
People with Parkinson's	14	47	39	0				
Care partners	0	46	46	8				
Clinical Scientists	0	25	75	0				
Industry representatives	13	13	75	0				
Funder	0	25	75	0				

Figure 57. D3Q12 Reasons

	e 57. D5Q12 Reasons	% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scietists	Industry	Funder	
	Questions are not always easy to answer	4	0	3	5	0	
	Questionnaires can be difficult to complete due to writing/visual difficulties	3	4	1	5	8	
	Questionnaire completion can be repetitive and burdensome	6	2	3	7	0	
	Questionnaires need to be better validated	1	2	0	0	8	
Disagree	Patients may lack insight in how their Parkinson's is affecting them	5	2	1	5	0	
Sa	Responses may not be reliable	0	2	1	2	0	
Di	Responses are limited to available options, which may not capture the lived experience of the patient	4	2	0	2	8	
	Responses may reflect what patients think researchers want to hear	2	0	0	0	0	
	Should not be the main measure of success	2	0	0	0	8	
	Useful as an addition to other measures	2	0	1	5	0	
	Other	0	0	0	0	0	
	It depends on the aim of the trial	8	2	11	5	0	
tral	It depends on what the questionnaire measures	13	12	13	5	8	
Neutral	It is important to also seek input from the caregiver	6	10	7	2	0	
	Other	1	0	0	0	0	
	Are convenient	7	6	7	0	0	
	Better for those who are not able to use technology	8	18	4	12	8	
	Can reduce clinic time/visits	9	4	8	10	8	
ee	Can provide useful information to measure Parkinson's progression	8	12	18	12	15	
Agree	Have become more important with COVID-19	4	4	3	10	15	
·	Represent the only way to assess some aspects of Parkinson's (such as quality of life)	5	10	14	10	15	
	Useful to raise awareness of problems	2	8	1	5	0	
	Other	0	0	1	0	0	
-	Participant group total % (Votes)	100 (212)	100 (50)	100 (71)	100 (42)	100 (13)	

D3Q13 Parkinson's should be measured by questionnaire scales that are administered by the research team

Figure 76. D3Q13 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	11	37	52	0				
Care partners	0	31	62	8				
Clinical Scientists	0	40	60	0				
Industry representatives	0	13	88	0				
Funder	0	50	50	0				

Figure 78. D3Q13 Reasons

•	70. Dogra Reasons	% Votes per Participant Group					
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder	
	A mixture of approaches would be better (involving self- and researcher- reported questionnaires)	7	4	8	9	6	
	It is better if participants fill in the questionnaires	1	2	0	0	0	
	Questionnaires are subjective	2	0	2	3	0	
Disagree	Questionnaire completion can be repetitive and burdensome for participants	5	4	0	6	0	
Dis	Questionnaires need to be better validated	1	0	2	3	0	
	Responses are limited to the available options, which may not capture the lived experience of the patient	7	2	0	3	6	
	This requires too much researcher time	1	4	2	3	0	
	Useful as an addition to other measures	3	0	2	0	13	
	Other	1	0	0	0	0	
	It depends on the purpose of the trial	5	4	8	9	0	
न्न	It depends on the questionnaire	6	12	8	6	13	
Neutra]	Only if the research team is well trained in questionnaire administration	11	10	8	6	0	
Z	Rater consistency needs to be assured	7	6	11	6	6	
	Other	0	0	0	0	0	
	Allows for more complete data collection	8	10	6	6	13	
	Easier for those who have difficulty writing	11	14	3	6	13	
Agree	Questionnaires can provide useful information to measure Parkinson's progression	12	12	16	18	19	
	Questionnaires that are administered by the research team may be more standardized/objective	13	14	22	18	13	
	Other	0	0	3	0	0	
	Participant group total % (Votes)	100 (196)	100 (49)	100 (63)	100 (34)	100 (16)	

Domain 4 Trial Delivery

D4Q1 Trial visits should only take place in the research or study clinic

Figure 80. D4Q1 Scores

	% Votes per Participant Group							
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure				
People with Parkinson's	53	20	27	0				
Care partners	62	31	0	8				
Clinical Scientists	85	5	10	0				
Industry representatives	100	0	0	0				
Funder	50	50	0	0				

Figure 82. D4Q1 Reasons

2	e oz. D TQT reasons		% Votes	per Particip	ant Group	
	Statements	PWP	Carer	Clinical Scientists	Industry	Funder
	A mixture of home, remote and clinic visits would be better	13	14	23	23	25
	Clinic-based measurements do not accurately represent real life	7	6	14	10	8
ده	Clinics might be hard to access	9	12	6	10	0
Lee	Clinic visits are too burdensome	4	4	10	6	0
Disagree	Clinic visit expose vulnerable people to infection risk	6	8	6	3	8
	This would limit recruitment	4	0	5	0	8
	Travelling can bias results due to stress and anxiety	11	6	5	13	0
	Should be home based/remote where possible	4	10	6	0	25
	Other	1	0	1	0	0
al	It depends on the purpose and design of the trial	8	6	8	10	0
Neutral	The protocol needs to be consistent and robust regardless of where the clinic takes place	8	12	4	10	17
	Other	0	0	0	0	0
	A controlled environment improves data quality	6	6	3	0	8
ee	Regular clinic visits are an advantage of taking part in a trial	5	4	1	3	0
Agree	Some assessments cannot be carried out remotely/at home	6	10	5	13	0
,	This makes participants feel more involved	7	4	0	0	0
	Other	1	0	0	0	0
	Participant group total % (Votes)	100 (190)	100 (51)	100 (77)	100 (31)	100 (12)

D4Q2 The trial should provide the option of home-based or video trial visits whenever possible

Consensus reached round 1 (survey 1)

Figure 79. D4Q2 Scores

	% Votes per Participant Group			
	Disagree (Score 1-3)	Neutral (Score 4-6)	Agree (Score 7-9)	I'm not sure
People with Parkinson's	6	17	75	1
Care partners	0	11	89	0
Clinical Scientists	5	25	70	0
Industry representatives	0	13	75	13
Funder	0	0	80	20

^{*} This item reached consensus in survey 1 before reasons could be formally quantified