# **Summary Report SPIRIT-PRO Extension**

## Stakeholder Survey and Delphi Round 2 Survey Results

Version 25th April 2017

Professor M. Calvert
Dr A. Slade
Dr D. Kyte
R. Mercieca-Bebber
Professor M. King















# **Contents Page**

## **Contents**

Contents Page	2
Section 1 Delphi panellist contact details	4
Section 2 Recruitment Information	5
Table 2.1 Stakeholder Recruitment Groups	5
Section 3 Respondents Clinical Trial and PRO Research Experience	7
Table 3.1 Stakeholder group experience in clinical trials and PRO evaluation and development	7
Table 3.2 Delphi panel experience in clinical trials and PRO evaluation and development	7
Table 3.3 Stakeholder group experience in clinical trials and PRO evaluation and development	8
Table 3.4 Delphi panel experience in clinical trials and PRO evaluation and development	8
Figure 3.1 Stakeholder group number of clinical trials protocols developed or evaluated	9
Figure 3.2 Delphi panel number of clinical trials protocols developed or evaluated	9
Figure 3.3 Stakeholder Group Primary Roles and Research Experience	10
Figure 3.4 Delphi Panel Primary Roles and Research Experience	11
Figure 3.5 Stakeholder Additional Areas of Research Experience	12
Figure 3.6 Delphi Panel Additional Areas of Research Experience	13
Figure 3.7 Clinical Areas Represented by Stakeholder Group	14
Figure 3.8 Clinical Areas Represented by Delphi Panel	15
Section 4 Stakeholder Participants Group Memberships	16
Figure 4.1 Stakeholder Group Memberships	16
Figure 4.2 Delphi Panel Group Memberships	18
Section 5 SPIRIT-PRO-Extension Candidate Checklist Items	20
Section 5 Delphi R2 Panel Survey – Part 1	21
Context and Background to PRO	21
Table 5.1 Responses to item 1 to item 5 including overall, summated and individual scores	21
Section 6 Methods	24
Table 6.1 Responses to item 6 to item 11 including overall, summated and individual scores	24
Section 7 Methods: Timing of PRO Assessments/Sample Size	27
Table 7.1 Responses to item 12 to item 17 including overall, summated and individual scores	27
Section 8 Methods: PRO Instrument Description/Justification	31
Table 8.1 Responses to item 18 to item 22 including overall, summated and individual scores	31
Section 9 Methods: PRO Data Collection	34
Table 9.1 Responses to item 23 to item 30 including overall, summated and individual scores	34
Section 10 Methods: Plans to Avoid/Minimise Missing Data	39

Table 10.1 Responses to items 31 to items 34 including overall, summated and individual scores	.39
Section 11 PRO-Specific Quality Assurance	.42
Table 11.1 Responses to item 35 to item 38 including overall, summated and individual scores	.42
Section 12 PRO Statistical Analysis	.44
Table 12.1 Responses to item 39 to item 51 including overall, summated and individual scores	.44
Section 13 PRO Data Monitoring/PRO Alerts	.51
Table 13.1 Responses to item 52 to item 53 including overall, summated and individual scores	.51
Section 14 PRO-Specific Consent Information/Confidentiality/Dissemination	.53
Table 14.1 Responses to item 54 to item 56 including overall, summated and individual scores	.53
Section 15 Other Trial Documentation	.56
Table 15.1 Stakeholder Suggestions for items to be include in other trial guidance, training or information materials outside of the trial protocol	.56
Table 15.2 Delphi R2 Panel Suggestions for items to be include in other trial guidance, training or information materials outside of the trial protocol	.59
Appendix 1 Stakeholder and Delphi R1/R2 Panel Additional Comments	.62

## **Section 1 Delphi panellist contact details**

Name:		
Delphi Panel ID:		

Attendance: Attending

Attached is a copy of the information collected from the Stakeholder and Delphi Panel Survey Round 2 The information from the stakeholder survey and the Delphi Rounds along with comments have been used to propose elaborations or extensions for individual items. In some cases we have merged items where there appears to be an overlap or repetition with other items. Proposed amendments will be presented at the SPIRIT-PRO Extension Consensus Meeting taking part at the University of Birmingham on the 11<sup>th</sup> and 12<sup>th</sup> May 2017. Panel members will be able to discuss and vote on the options presented at the consensus meeting and these will form the SPIRIT-PRO Extensions.

## **Section 2 Recruitment Information**

Stakeholders were contacted by gatekeepers from different organisations, these organisations were given a unique ID and responders to the stakeholder survey were asked to use that ID so that referring stakeholder groups could be identified. The largest recruiting group included ISOQOL and ISPOR.

**Table 2.1 Stakeholder Recruitment Groups** 

		Response Percent	Response Total
1	ABPI (The Association of the British Pharmaceutical Industry)	0.72%	1
2	ChRN_PRO (Cochrane PROs Methods Group)	5.07%	7
3	COMET (Core Outcome Measures in Effectiveness Trials)	0.00%	0
4	CERTN (Comparative Effectiveness Research Translation Network)	0.72%	1
5	COSMIN (Consensus-based Standards for the selection of health	7.97%	11
6	Measurement Instruments)  ECRIN (European Clinical Research Infrastructure Network)	0.72%	1
7	EMA (European Medicines Agency)	1.45%	2
8	EORTC (European Organisation for Research and Treatment of Cancer)	1.45%	2
9	ESC (European Society of Cardiology)	0.00%	0
10	HRA (Health Research Authority)	0.00%	0
11	INTDbF (International Diabetes Federation)	0.00%	0
	, , , , , , , , , , , , , , , , , , ,		
12	ISPOR (International Society for Pharmoeconomics and Outcomes Research)	25.36%	35
13	ISOQoL (International Society for Quality of Life Research)	18.84%	26
14	MHRA (Medicines & Healthcare Products Reg Agency)	2.90%	4
15	MRCTMO (MRC Hubs for Trials Methodology Research Outcomes Working Group)	3.62%	5
16	NICE (National Institute for Health and Care Excellence)	0.72%	1
17	NIH (National Institute of Health)	2.90%	4
18	NIHR_PPI (National Institute for Health Research PPI initiative)	5.07%	7
19	SCT (Society for Clinical Trials)	9.42%	13
20	UKCRC (UKCRC Registered CTU Network)	5.07%	7
21	(AFNet) German Competence Network on Atrial Fibrillation	0.72%	1
22	ASCOT (American Surgical Collaborative and Trialist Group)	0.00%	0
23	BMJ (British Medical Journal)	0.00%	0
24	CCT (Canadian Cancer Trial)	0.72%	1
25	CRN (Clinical Research Network)	0.72%	1
26	DDR (Drug Development & Regulation Group)	0.00%	0
20	DDIT (Drug Development & Negulation Group)	0.0076	U

28	EQ_N (Equator Network)	0.00%	0
29	GCanAPRE (Gov of Canada Interagency Advisory Panel on Research Ethics)	0.72%	1
30	INVOLVE	0.00%	0
31	AusCTN (Australian Cancer Trials Network)	0.00%	0
32	Lancet	0.00%	0
33	Macmilln (Macmillan)	0.00%	0
34	NCRI_Can (National Cancer Research Institute Canada)	0.00%	0
35	NCRI_CF (NCRI Consumer Forum)	1.45%	2
36	NHMRCAus (National Health & Med Research Council Australia)	0.00%	0
37	Rasch Experts Group (RaschEG)	1.45%	2
		answered	138

#### Other groups represented:

NIHR Central Commissioning Faculty Patient and Public Involvement Team; Clinical Trials Unit; NorCrin.

# **Section 3 Respondents Clinical Trial and PRO Research Experience**

Table 3.1 Stakeholder group experience in clinical trials and PRO evaluation and development

			Response Percent	Response Total
Q4.1	I have experience in developing, implementing or reviewing PRO and clinical trials		82.73%	114
Q4.2	I have experience in developing or reviewing PRO through patient and public involvement		12.95%	18
Q4.3	Other (please specify):		4.32%	6
Other	Systematic Reviews; Developing and Reviewing P of Core Outcome Sets; Linguistic Validation of PRO	RO i O.	in a consultancy setting; Multinational Clinical trials; De	evelopment 138

Table 3.2 Delphi panel experience in clinical trials and PRO evaluation and development

		Response Percent	Response Total
Q4.1	I have experience in developing, implementing or reviewing PRO and clinical trial protocols	87.88%	87
Q4.2	I have experience in developing or reviewing PRO through patient and public involvement	4.04%	4
Q4.3	Other (please specify):	8.08%	8
Other	Ethics; Analysing Clinical trials and study protocols; Using PRO data to inform and Scientific advice regarding PRO; Taking part in trials.	QoL after cancer and treatmen	t; Regulator
		Total	99

#### Table 3.3 Stakeholder group experience in clinical trials and PRO evaluation and development

Q5 Stakeholder time spent in Clinical Trials and PRO Evaluation and Development									
	Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years	Response Total				
	n(%)	n(%)	n(%)	n(%)	N				
Q5.1 Experience in clinical trials	15(11.0)	30(22.1)	30(22.1)	61(44.9)	136				
<b>Q5.2</b> Experience in PRO protocol development or evaluation	9(6.8)	45(33.8)	34(25.6)	45(33.8)	133				

Table 3.4 Delphi panel experience in clinical trials and PRO evaluation and development

Q5 Delphi time spent in Clinical Trials and PRO Evaluation and Development.								
	Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years	Response Total			
	n(%)	n(%)	n(%)	n(%)	N			
<b>Q5.1</b> How many years experience do you have in clinical trials or health related research?	2(2.1)	9(9.3)	12(12.4)	74(76.3)	97			
<b>Q5.2</b> How many years experience do you have in PRO protocol development or evaluation?	9(9.5)	20(21.1)	14(14.7)	52(54.7)	95			

The majority of the responders in both the Delphi and Stakeholders groups have more than 10 years' experience in clinical trials evaluation and development. Experience of specific protocol development or evaluation of PRO varied with experience more evenly distributed across the range in the stakeholder group in comparison with the Delphi panel where more than 50% of the panel had more than 10 years' experience.

Figure 3.1 Stakeholder group number of clinical trials protocols developed or evaluated

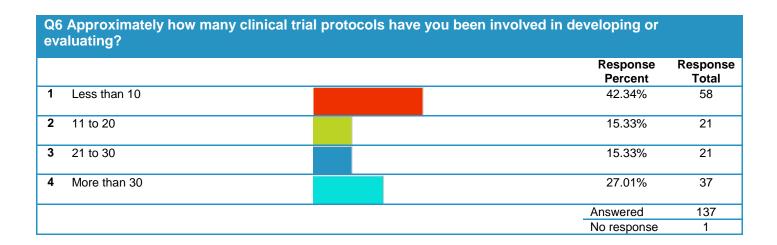
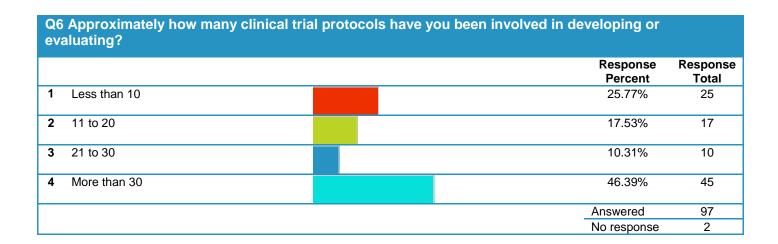


Figure 3.2 Delphi panel number of clinical trials protocols developed or evaluated



The majority of Stakeholder responders had developed or evaluated less than 10 clinical trial protocols in comparison to the Delphi Panel where over 46% had developed or evaluated more than 30 clinical trial protocols.

Figure 3.3 Stakeholder Group Primary Roles and Research Experience

		Response Percent	Response Total
1	Clinician	7.97%	11
2	Clinical trial/health related academic/researcher	31.16%	43
3	Health Economist	5.80%	8
4	Statistician	9.42%	13
5	Trials methodologist	6.52%	9
6	Trial manager/coordinator	0.72%	1
7	Data manager/coordinator	0.72%	1
8	Research nurse/therapist	2.17%	3
9	Patient advocate	4.35%	6
10	Expert advisor on PROs in trials	7.97%	11
11	Psychometrician	5.80%	8
12	Funder	0.72%	1
13	Industry representative	2.17%	3
14	Journal editor	0.00%	0
15	Policy maker	0.72%	1
16	Ethicist/member of an ethical review panel	2.17%	3
17	Evidence synthesis researcher	3.62%	5
18	Other (please specify):	7.97%	11
		Answered	138
		No response	0

Mental Health User Consultant; Regulator; Health Psychologist; Set strategy, develop and validate measures, implement protocols, file market authorization documents, and publish results for a large pharma company: PRO Researcher in consultancy; PhD student: Linguistic validation of PRO; Reviewer; Regulator; Clinical Professor.

The majority of the stakeholder responders came from the Research group this consisted of health related academics, clinical trial and health related researchers. Clinicians, Statisticians and Expert advisor on PRO were the second largest groups.

Figure 3.4 Delphi Panel Primary Roles and Research Experience

		Response Percent	Response Total
1	Clinician	9.09%	9
2	Clinical trial/health related academic/researcher	24.24%	24
3	Health Economist	2.02%	2
4	Statistician	10.10%	10
5	Trials methodologist	5.05%	5
6	Trial manager/coordinator	2.02%	2
7	Data manager/coordinator	0.00%	0
8	Research nurse/therapist	2.02%	2
9	Patient advocate	10.10%	10
10	Expert advisor on PROs in trials	8.08%	8
11	Psychometrician	6.06%	6
12	Funder	1.01%	1
13	Industry representative	0.00%	0
14	Journal editor	3.03%	3
15	Policy maker	3.03%	3
16	Ethicist/member of an ethical review panel	5.05%	5
17	Evidence synthesis researcher	1.01%	1
18	Other (please specify):	8.08%	8
	<mark>-</mark>	Answered	99
		No response	0

Figure 3.5 Stakeholder Additional Areas of Research Experience

	takeholder group additional area(s) of category	resear	ch exp	erie	nce re	espond	ers co	ould c	hoose	mor	e than
									espons Percent		Respons Total
1	Clinician								29.46%		33
2	Clinical trial/health related academic/researcher								41.96%		47
3	Health Economist								12.50%		14
4	Statistician								13.39%		15
5	Trials methodologist								22.32%		25
6	Trial manager/coordinator								15.18%		17
7	Data manager/coordinator								13.39%		15
8	Research nurse/therapist								4.46%		5
9	Patient advocate								8.04%		9
10	Expert advisor on PROs in trials								16.96%		19
11	Psychometrician								11.61%		13
12	Funder								0.00%		0
13	Industry representative								8.93%		10
14	Journal editor								6.25%		7
15	Policy maker								1.79%		2
16	Ethicist/member of an ethical review panel								9.82%		11
17	Evidence synthesis researcher								15.18%		17
18	Other (please specify):								7.14%		8
									wered		112
								No	response	е	26

Director of a CTU; Epidemiologist; Cross Cultural Validation; Linguistic Validation of PRO; Lay reviewer for clinical trials funding; Health Policy Consultant; Translational Science Public Disclosure Lead.

Figure 3.6 Delphi Panel Additional Areas of Research Experience

								F	Respo Perce		ponse otal
1	Clinician								24.14	%	21
2	Clinical trial/health related academic/researcher								37.93	%	33
3	Health Economist								4.60	%	4
4	Statistician								12.64	%	11
5	Trials methodologist								22.99	%	20
6	Trial manager/coordinator								3.45	%	3
7	Data manager/coordinator								2.30	%	2
8	Research nurse/therapist								3.45	%	3
9	Patient advocate								6.90	%	6
10	Expert advisor on PROs in trials								29.89	%	26
11	Psychometrician								19.54	%	17
12	Funder								5.75	%	5
13	Industry representative	Ī							3.45	%	3
14	Journal editor								17.24	%	15
15	Policy maker								9.20	%	8
16	Ethicist/member of an ethical review panel								11.49	%	10
17	Evidence synthesis researcher								12.64	%	11
18	Other (please specify):								12.64	%	11
									wered		87
								No	respor	ise	12

Funder multiple charities; Collective response from statistics and operations office; Research Policy and developing ethical guidelines; Qualitative methods; Ethics Research; Medical Scientist; Research Engagement Activities; Director of R&D in a teaching hospital; Communicating and disseminating the value, need for & funding of PRO research; Expert Advisor on Health State Utilities and Preference Based Measures; Medical products regulator.

Figure 3.7 Clinical Areas Represented by Stakeholder Group

<b>3</b> 9	Clinical Areas	Responses	Response %	Response Total
1	Burns and plastics		0.00	0
2	Cardiology		7.25	10
3	Care of the Elderly		10.14	14
4	Dementia		8.70	12
5	Dermatology	_	2.17	3
6	Emergency Medicine/Trauma		1.45	2
7	Endocrinology		5.07	7
8	Gastroenterology		7.25	10
9	General Practice		8.70	12
10	Haematology		7.97	11
11	Neonatal Care	_	2.17	3
12	Neurology		14.49	20
13	Neurosurgery		1.45	2
14	Obstetrics and Gynaecology		4.35	6
15	Oncology		44.20	61
16	Orthopaedics		12.32	17
17	Paediatrics		12.32	17
18	Palliative Care		7.97	11
19	Public Health		18.12	25
20	Rehabilitation		11.59	16
21	Renal Medicine		5.07	7
22	Respiratory Medicine		7.25	10
23	Rheumatology		10.14	14
24	Sports and Exercise Medicine		3.62	5
25	Surgery		8.70	12
26	Other (please specify):		22.46	31
			Answered	138
			No response	0

Literacy; Equity Mental health; Mental Health; Disability; Long term conditions; Aphasia; Psychology; Autism; Service Delivery Innovation; Adverse drug events; Ophthalmology; Critical Care; Holistic Care; HIV; Neurodevelopmental disorders; Stem Cell Transplantation; Cancer Genetics; Spiritual wellbeing in Palliative Care; Generic Quality of Life; Urology; Psychiatry; Neurological movement disorders; Paediatric Otolaryngology; Family caregivers.

Figure 3.8 Clinical Areas Represented by Delphi Panel

Cardiology Care of the Elderly Dementia Dermatology Emergency Medicine/Trauma Endocrinology Gastroenterology General Practice		1.01 9.09 9.09 4.04 5.05 1.01 5.05	1 9 9 4 5 1 5
Care of the Elderly Dementia Dermatology Emergency Medicine/Trauma Endocrinology Gastroenterology General Practice		9.09 4.04 5.05 1.01 5.05	9 4 5 1
Dementia Dermatology Emergency Medicine/Trauma Endocrinology Gastroenterology General Practice		4.04 5.05 1.01 5.05	4 5 1 5
Emergency Medicine/Trauma Endocrinology Gastroenterology General Practice		5.05 1.01 5.05	5 1 5
Emergency Medicine/Trauma Endocrinology  Bastroenterology  General Practice		1.01 5.05	1
Endocrinology  Gastroenterology  General Practice		5.05	5
Gastroenterology General Practice			
Seneral Practice		10.10	10
			-
la a manta la mu		6.06	6
naematology		12.12	12
leonatal Care		2.02	2
leurology		10.10	10
leurosurgery	T	3.03	3
Obstetrics and Gynaecology		3.03	3
Oncology		56.57	56
Orthopaedics		4.04	4
Paediatrics		8.08	8
Palliative Care		16.16	16
Public Health		7.07	7
Rehabilitation		11.11	11
Renal Medicine		1.01	1
Respiratory Medicine		7.07	7
Rheumatology		17.17	17
Sports and Exercise Medicine		2.02	2
Surgery		15.15	15
Other (please specify):		17.17	17
		Answered No response	99 0
	leurology  leurosurgery  Distetrics and Gynaecology  Diste	leurology leurosurgery Distetrics and Gynaecology Dirthopaedics Paediatrics Palliative Care Public Health Rehabilitation Renal Medicine Respiratory Medicine Rehautology Reports and Exercise Medicine Rurgery	leonatal Care 2.02 leurology 10.10 leurosurgery 3.03 leurosurgery

Psychiatry; Cachexia; Frailty & Sarcopenia; Musculoskeletal conditions; Editor of two general journals I've seen a wide range of trials and protocols; Pain management; Stem cell transplantation; Chronic disease; Evaluating perceptions of researchers using PROs; Urology; Sexual Health; Cover most of these as a funder; Orphan disease; Infectious diseases (HIV, Hepatitis); Rare diseases; Infectious diseases; All my experience with PROs and PROMs has been from the patient perspective; Additionally, I have few/limited experience with infectious diseases, multiple sclerosis and cardiovascular diseases; I am a patient I have read and edited PhD papers together with patient participation groups; Clinical trials study section; Pain in Children.

# **Section 4 Stakeholder Participants Group Memberships**

Figure 4.1 Stakeholder Group Memberships

Q10	Stakeholder Group Memberships	Responses	Response %	Response Total
1	UKCRC Reg CTU Network		7.56	9
2	ISOQOL		31.09	37
3	ISPOR		35.29	42
4	EMA		4.20	5
5	ECRIN		0.84	1
6	SCT		11.76	14
7	NIH		5.04	6
8	COMET		8.40	10
9	COSMIN		5.04	6
10	COCHRANE PRO GROUP		6.72	8
11	CERTAIN		0.84	1
12	International Diabetes Federation		0.84	1
13	EORTC		5.04	6
14	NICE		0.84	1
15	MRC Outcomes Working Group		1.68	2
16	ABPI		2.52	3
17	NIHR PPI CCF		5.04	6
18	NIHR		8.40	10
19	MHRA		4.20	5
20	HRA		2.52	3
21	Clinical Research Network		5.88	7
22 23	DDR (Drug Development & Regulation Group) EFGCP (European Forum for Good Clin' Practice)		0.00 0.84	0 1
24	GCIAPRE (Government of Canada Interagency Advisory Panel on Research Ethics)		0.84	1
25 26	NHMRC (Nat' Health & Medical Research Council Australia) INVOLVE	1	0.00 2.52	3
20	INVOLVE		2.32	3
27	Macmillan Cancer Support		0.00	0
28	NCRI		0.84	1
29	NCRI Consumer forum		1.68	2
30	Australian Cancer Trials Network		0.84	1

31	Canadian Cancer Trials Group	0.00	0
32	EQUATOR Network	3.36	4
33	AFNet	0.00	0
34	ASCoT (American Surgical Collaborative and Trialist Group)	0.00	0
35	Other (please specify):	18.49	22
		Answered	119
		No response	19

OMERACT; ACC; ESC; FIMS; GCIG; SMDM; ISCTM; SCDM; CDISC; PHO; DIA; ACRP; ASNG; ASHE; British Psychological Society; MRC Conduct Hub; Medical Decision Making; Social Marketing; Drug Information Association; Iacrn; SoCRA; ONS; PCORI Reviewer; ASCO; International Union; International Union Against TB & Lung Disease; KT-Canada; Psychometric Society.

Figure 4.2 Delphi Panel Group Memberships

2 ISOCO 3 ISPCO 4 EMA 5 ECR 6 SCT 7 NIH 8 COM 9 COS 10 COCO 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHR 20 HRA 21 Clinic 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM		Response Percent  3.41%  52.27%	Response Total
2 ISOCO 3 ISPCO 4 EMA 5 ECR 6 SCT 7 NIH 8 COM 9 COS 10 COCO 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHR 20 HRA 21 Clinic 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	OQOL OR		3
3 ISPO 4 EMA 5 ECR 6 SCT 7 NIH 8 COM 9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHR 20 HRA 21 Clinic 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	OR	52.27%	
4 EMA 5 ECR 6 SCT 7 NIH 8 COM 9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM			46
5 ECR 6 SCT 7 NIH 8 COM 9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clinic 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	A	18.18%	16
6 SCT 7 NIH 8 COM 9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCM Inter Ethic 25 NHM		4.55%	4
7 NIH 8 COM 9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	RIN	2.27%	2
8 COM 9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHR 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	Т	9.09%	8
9 COS 10 COC 11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHR 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	I	9.09%	8
10 COC  11 CER  12 Inter  13 EOR  14 NICE  15 MRC  16 ABP  17 NIHF  18 NIHF  19 MHR  20 HRA  21 Clini  22 DDR  Grou  23 EFG  Prac  24 GCI/ Inter  Ethic  25 NHM	MET	9.09%	8
11 CER 12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	SMIN	4.55%	4
12 Inter 13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	CHRANE PRO GROUP	9.09%	8
13 EOR 14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	RTAIN	2.27%	2
14 NICE 15 MRC 16 ABP 17 NIHF 18 NIHF 19 MHF 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	rnational Diabetes Federation	1.14%	1
15 MRC 16 ABP  17 NIHF 18 NIHF 19 MHF  20 HRA  21 Clini  22 DDR Grou  23 EFG Prac  24 GCI/ Inter Ethic  25 NHM	RTC	10.23%	9
<ol> <li>ABP</li> <li>NIHF</li> <li>NIHF</li> <li>NIHF</li> <li>MHF</li> <li>HRA</li> <li>Clinic</li> <li>DDR Grou</li> <li>EFG Pract</li> <li>GCI/InterEthic</li> <li>NHM</li> </ol>	E	1.14%	1
<ol> <li>ABP</li> <li>NIHF</li> <li>NIHF</li> <li>NIHF</li> <li>MHF</li> <li>HRA</li> <li>Clinic</li> <li>DDR Grou</li> <li>EFG Pract</li> <li>GCI/InterEthic</li> <li>NHM</li> </ol>	C Outcomes Working Group	0.00%	0
<ol> <li>NIHF</li> <li>MHF</li> <li>HRA</li> <li>Clini</li> <li>DDR Grou</li> <li>EFG Prac</li> <li>GCI/ Inter Ethic</li> <li>NHM</li> </ol>		1.14%	1
<ol> <li>NIHF</li> <li>MHF</li> <li>HRA</li> <li>Clini</li> <li>DDR Grou</li> <li>EFG Prac</li> <li>GCI/ Inter Ethic</li> <li>NHM</li> </ol>	IR PPI CCF	0.00%	0
19 MHR 20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM		9.09%	8
20 HRA 21 Clini 22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM		2.27%	2
21 Clini  22 DDR Grou  23 EFG Prace  24 GCI/ Inter Ethic  25 NHM		2.21 //	_
22 DDR Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	A	2.27%	2
Grou 23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	ical Research Network	4.55%	4
23 EFG Prac 24 GCI/ Inter Ethic 25 NHM	R (Drug Development & Regulation	1.14%	1
24 GCI/ Inter Ethic	GCP (European Forum for Good Clin' ctice)	5.68%	5
<b>25</b> NHM	IAPRE (Government of Canada gragency Advisory Panel on Research	0.00%	0
Cour	MRC (Nat' Health & Medical Research uncil Australia)	1.14%	1
	OLVE	1.14%	1
<b>27</b> Mac	cmillan Cancer Support	3.41%	3
<b>28</b> NCR		0.00%	0
29 NCR	RI	2.27%	2

30	Australian Cancer Trials Network	3.41%	3
31	Canadian Cancer Trials Group	3.41%	3
32	EQUATOR Network	6.82%	6
33	AFNet	1.14%	1
34	ASCoT (American Surgical Collaborative and Trialist Group)	0.00%	0
35	FDA	4.55%	4
36	Other (please specify):	27.27%	24
		Answered	88
		No Response	11

IPOS International Psycho-Oncology Society; None; CIHR / OMERACT/ was an ISOQOL PRP BRS / NRAS; ONS, IACRN, SoCRA, ACRP; Health & Medical Research Fund, Govt. of Hong Kong; ASA; Other ethics which I doubt are relevant - BPA, SAP, ESOT; EHA SWG; ECOG; PCRC (Palliative Care Research Consortium); International Biometric Society; AGITG (Australasian Gastro-Intestinal Trial Group); Patient Participation Group; UKONS (UK Oncology Nursing Society); iHEA - international health economics association, and HDCA - Human Development and Capability Association; SISAQOL; HRA; OMERACT; ICHOM; ASCO; EASL.

#### Section 5 SPIRIT-PRO-Extension Candidate Checklist Items

The following section identifies the frequency that Stakeholder and Delphi panel survey respondents rated the relative importance of each of the SPIRIT- PRO extension checklist items. The responses were broken down into key stakeholder groups categorised from their identified primary roles.

- Patient Rep: includes patient representatives, patients/public involved in research and patient advocates.
- **Researchers:** includes clinical trial, health related academics and researchers, trial co-ordinators and data managers, participants working in PRO including linguistic translations.
- Clinicians: includes clinicians, research nurse/therapists, health psychologists.
- Methodologists: includes clinical trial and PRO methodologists and expert advisors.
- Analysists: includes psychometricians, statisticians, health economists.
- **Reviewers:** includes journal editors, reviewers, funders, ethicists, regulators, policy makers, evidence synthesis researchers.

Included at the end column of each table is your score based on your responses to the Delphi Panel Round 2 survey using your unique ID.

# Those items scored as ≥70% (7-9) and ≤15% (1-3) will automatically be taken forward for consideration at the SPIRIT-PRO consensus meeting in May 2017.

Following the consensus meeting you will have opportunity to provide feedback on the draft SPIRIT-PRO manuscript prior to publication.

## **Section 5 Delphi R2 Panel Survey – Part 1**

### **Context and Background to PRO**

These sections relate directly to the SPIRIT-PRO Extension checklist items. Each section includes a description of the item and stakeholders responses overall and by summated professional groups. At the end of each table you can find your individual score for comparison.

Table 5.1 Responses to item 1 to item 5 including overall, summated and individual scores

				INDIV		KEHOLDER GRO	UP		OVERALL MEDIAN (IQR)	CURRENT Rule for Inc ≥ 70% rated	DELPHI R2			
	PRO as									Rating by	% of stakeho	olders		
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your Score
	Primary	Stakeholder	8(5 to 8)	8(4 to 9)	8(6 to 9)	7(6 to 9)	7(6 to 9)	8(5 to 9)	7(5 to 9)	13.8	22.5	63.8	INCONCLUSIVE	
Item 1 List personnel	Timary	Delphi R2	6(4 to 9)	8(5 to 9)	9(7 to 9)	8(5 to 9)	8(6 to 8)	7(4 to 9)	8(5 to 9)	8.1	26.3	65.7	INCONCLUSIVE	
responsible for PRO components of trial protocol		Stakeholder	6(4 to 8)	6(4 to 8)	8(6 to 8)	6(5 to 7)	5(3 to 7)	6(5 to 8 )	6(4 to 8)	16.7	40.6	42.8	INCONCLUSIVE	
that protocol	Secondary	Delphi R2	6(4 to 7)	6(4 to 9)	7(6 to 9)	6(3 to 7)	6(5 to 7)	5(3 to 7)	6(4 to 7)	15.2	46.5	38.4	INCONCLUSIVE	
Item 2  Describe what is		Stakeholder	7(5 to 8)	8(6 to 9)	8(6 to 9)	8(6 to 8)	7(6 to 8)	8(7 to 9)	8(6 to 9)	8.0	23.2	68.8	INCONCLUSIVE	
currently known about PROs in this area and	own in	Delphi R2	7(6 to 8)	9(8 to 9)	8(6 to 9)	9(8 to 9)	8(7 to 8)	8(7 to 9)	8(7 to 9)	3.0	12.1	84.9	INCLUDE	
explain the gaps in literature.	Secondary Sta	Stakeholder	6(4 to 8)	6(4 to 7)	7(5 to 8)	7(5 to 8)	6(4 to 7)	7(5 to 8)	6(4 to 7)	13.8	44.2	42.0	INCONCLUSIVE	

				INDIV		JAL STAKEHOLDER GROUP IEDIAN SCORES (IQR)				Rule for Inc	INCLUSION BASED ON S Jusion of Iter Jas 'Critical' Impo	DELPHI R2		
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Olders  Critical [7-9]	Current Item Level Decision	Your Score
		Delphi R2	6(4 to 8)	6(5 to 8)	6(5 to 7)	7(4 to 9)	6(5 to 7)	6(3 to 7)	6(5 to 7)	11.1	43.4	45.5	INCONCLUSIVE	
Item 3 Provide a		Stakeholder	7(6 to 8)	9(7 to 9)	9(8 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9 )	9(7 to 9)	2.2	10.1	87.7	INCLUDE	
rationale for the inclusion of PROs as	e for the n of	Delphi R2	7(6 to 9)	9(8 to 9)	9(7 to 9)	9(9 to 9)	9(8 to 9)	8(6 to 9)	9(8 to 9)	2.0	10.2	87.8	INCLUDE	
appropriate to the study population, intervention,		Stakeholder	7(5 to 8)	7(5 to 9)	7(7 to 9)	8(7 to 9)	7(6 to 9)	7(6 to 9)	7(6 to 9)	2.2	34.1	63.8	INCONCLUSIVE	
context, objectives and setting.	Secondary	Delphi R2	6(5 to 7)	7(6 to 9)	8(7 to 9)	8(5 to 9)	7(7 to 9)	7(4 to 8)	7(6 to 9)	8.2	29.6	62.2	INCONCLUSIVE	
Item 4	Deimon	Stakeholder	7(6 to 9)	8(8 to 9)	9(7 to 9)	9(8 to 9)	8(7 to 9)	9(7 to 9)	8(7 to 9)	1.5	10.2	88.3	INCLUDE	
State the PRO study objective	Primary	Delphi R2	7(6 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	1.0	6.2	92.8	INCLUDE	
in relation to PRO domain/s, patient population and	Sacandary	Stakeholder	6(6 to 8)	7(5 to 9)	7(6 to 8)	8(6 to 9)	7(6 to 8)	7(6 to 9)	7(6 to 9)	2.9	35.3	61.8	INCONCLUSIVE	
timeframe.	Secondary	Delphi R2	5(5 to 7)	7(5 to 8)	9(7 to 9)	8(7 to 9)	8(7 to 9)	8(5 to 8)	7(6 to 9)	1.0	33.3	65.6	INCONCLUSIVE	
Item 5	Duiman	Stakeholder	7(4 to 8)	9(7 to 9)	8(8 to 9)	9(8 to 9 )	9(8 to 9)	9(7 to 9)	9(7 to 9)	1.5	10.2	88.3	INCLUDE	
State the PRO hypothesis and corresponding	Primary	Delphi R2	8(5 to 8)	9(7 to 9)	9(9 to 9)	9(8 to 9)	9(8 to 9)	8(5 to 9)	9(7 to 9)	4.0	13.1	82.8	INCLUDE	

				INDIV		KEHOLDER GRO	UP		OVERALL MEDIAN (IQR)	CURRENT  Rule for Inc. ≥ 70% rated	DELPHI R2				
	PRO as primary or	Survey	Patient			Cliniciana Mathadalagista		Reviewers	All	Rating by % of stakeholders			Current Item	Your	
candidate item second	secondary outcome	lary Group			Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
null hypothesis and to which outcome(s) the		Stakeholder	6(5 to 7)	6(4 to 8)	7(6 to 8)	7(6 to 8)	7(5 to 9)	6(5 to 9)	7(5 to 8)	6.5	40.6	52.9	INCONCLUSIVE		
hypothesis relates.	Secondary Delphi R2	5(3 to 8)	6(4 to 7)	7(7 to 8)	7(6 to 9)	7(6 to 8)	6(4 to 7)	7(5 to 8)	12.2	37.8	50.0	INCONCLUSIVE			

## **Section 6 Methods**

Table 6.1 Responses to item 6 to item 11 including overall, summated and individual scores

			INDIVIDUAL STAKEHOLDER GROUP  MEDIAN SCORES (IQR)							CURRENT INCLUSION OF CANDIDATE ITE BASED ON STAKEHOLDER DATA  Rule for Inclusion of Items in Consensus Meeting: ≥ 70% rated as 'Critical' AND ≤ 15% rated as Important'					
	PRO as									Rating by	y % of stakel	nolders			
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your Score	
Item 6 If PROs will be	Primary	Stakeholder	7(4 to 9)	8(7 to 9)	8(7 to 9)	8(7 to 9)	9(7 to 9)	8(7 to 9)	8(7 to 9)	2.9	13.2	83.8	INCLUDE		
collected in a subset of the study population or in	Filliary	Delphi R2	7(5 to 9)	9(8 to 9)	9(7 to 9)	9(7 to 9)	9(8 to 9)	7(7 to 9)	9(7 to 9)	2.1	11.5	86.5	INCLUDE		
specific centres, include a description/rationale	Canan dam.	Stakeholder	6(3 to 9)	7(5 to 8)	7(6 to 8)	7(6 to 9)	7(5 to 9)	6(4 to 9)	7(5 to 9)	5.8	36.5	57.7	INCONCLUSIVE		
for the sampling method.	Secondary	Delphi R2	6(4 to 9)	7(5 to 9)	7(6 to 7)	8(6 to 9)	7(7 to 8)	7(5 to 7)	7(6 to 8)	4.1	29.6	66.3	INCONCLUSIVE		
Item 7 State the	Deimoni	Stakeholder	9(7 to 9)	8(7 to 9)	9(7 to 9)	8(8 to 9)	9(8 to 9)	8(6 to 9)	8(7 to 9)	2.2	15.6	82.2	INCLUDE		
inclusion/exclusion criteria for PRO	Primary	Delphi R2	9(5 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	9(7 to 9)	8(7 to 9)	9(7 to 9)	2.0	13.1	84.8	INCLUDE		
endpoint(s) (e.g., language/reading requirements).		Stakeholder	8(7 to 9)	7(5 to 8)	8(7 to 9)	8(5 to 9)	7(6 to 9)	6(5 to 8)	7(5 to 9)	7.4	32.6	60.0	INCONCLUSIVE		
	Secondary	Delphi R2	7(4 to 9)	8(7 to 9)	7(6 to 7)	8(7 to 9)	8(7 to 9)	7(5 to 8)	8(6 to 9)	3.0	27.3	69.7	INCONCLUSIVE		

				INDI		AKEHOLDER GRO SCORES (IQR)	DUP		OVERALL MEDIAN (IQR)	BA Rule fo	SED ON STA or Inclusion Me ed as 'Critica	AKEHOLD of Items in eeting:	IDIDATE ITEMS ER DATA In Consensus 5% rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or	Survey	Patient	Receptables	Cliniciana	Methodologists	Analysts	Reviewers	All		y % of stakel	nolders	Current Item	Your
Candidate item	secondary outcome	Group	Reps	Researchers	Cimicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 8 Specify if PRO	Deimon	Stakeholder	8(6 to 9)	8(7 to 9)	9(7 to 9)	8(6 to 9)	8(7 to 9)	9(7 to 9)	8(7 to 9)	4.4	15.6	80.0	INCLUDE	
completion is a pre- randomisation	Primary	Delphi R2	7(5 to 8)	9(7 to 9)	9(7 to 9)	9(7 to 9)	9(8 to 9)	7(5 to 9)	9(7 to 9)	4.0	15.2	80.8	INCLUDE	
eligibility requirement.	Secondary	Stakeholder	8(6 to 8)	7(5 to 8)	7(7 to 9)	7(5 to 9)	7(5 to 9)	7(5 to 8)	7(5 to 8)	9.6	29.6	60.7	INCONCLUSIVE	
	Secondary	Delphi R2	5(5 to 7)	8(5 to 9)	8(4 to 9)	6(6 to 9)	8(6 to 9)	6(4 to 7)	7(5 to 9)	7.1	40.4	52.5	INCONCLUSIVE	
Item 9 Identify the PRO	Primary	Stakeholder	8(7 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	9(9 to 9)	9(8 to 9)	1.4	5.1	92.0	INCLUDE	
endpoint as the primary, secondary (and if so - whether a	Primary	Delphi R2	7(7 to 9)	9(9 to 9)	9(9 to 9)	9(9 to 9)	9(9 to 9)	9(7 to 9)	9(9 to 9)	1.0	2.0	97.0	INCLUDE	
key/important secondary), or an exploratory endpoint.	Secondary	Stakeholder	7(6 to 8)	8(7 to 9)	9(7 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	8(7 to 9)	2.9	14.7	82.4	INCLUDE	
CAPIDIALOTY CHUPOHIL.	Jecondary	Delphi R2	7(6 to 9)	9(8 to 9)	9(7 to 9)	9(9 to 9)	9(8 to 9)	8(7 to 9)	9(7 to 9)	0.0	15.2	84.8	INCLUDE	
Item 10  Describe the PRO	Primary	Stakeholder	8(6 to 9)	9(7 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	8(7 to 9)	9(7 to 9)	2.2	11.8	86.0	INCLUDE	
Describe the PRO constructs used to evaluate the entervention e.g.	i illiai y	Delphi R2	7(6 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	9(8 to 9)	7(7 to 9)	9(7 to 9)	2.0	10.1	87.9	INCLUDE	
overall QOL, specific domain, specific symptom.	Secondary	Stakeholder	7(6 to 9)	8(6 to 9)	8(6 to 9)	7(6 to 9)	8(6 to 9)	7(6 to 9)	8(6 to 9)	4.4	30.1	65.4	INCONCLUSIVE	
ojinptoin.	Josephia y	Delphi R2	6(5 to 7)	7(5 to 9)	7(6 to 8)	9(7 to 9)	7(6 to 9)	7(5 to 7)	7(6 to 9)	3.0	32.3	64.6	INCONCLUSIVE	

				INDI		AKEHOLDER GRO SCORES (IQR)	DUP		OVERALL MEDIAN (IQR)	BAS Rule fo	SED ON STA or Inclusion Me od as 'Critica	KEHOLD of Items in eeting:	DIDATE ITEMS ER DATA In Consensus 5% rated as 'Not	DELPHI R2
One distante Mana	PRO as primary or	Survey	Patient	Bararakan	Oliveiatana	Made adalasia	Aughoria	Bardanasa	All	Rating by	/ % of stakel	nolders	Current Item	Your
Candidate Item	secondary outcome	Group	Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 11		Stakeholder	7(6 to 8)	9(8 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	1.5	8.0	90.5	INCLUDE	
Specify the time point(s) for PRO analysis (including the	Primary	Delphi R2	8(6 to 9)	9(9 to 9)	9(7 to 9)	9(9 to 9)	9(8 to 9)	8(7 to 9)	9(8 to 9)	0.0	8.3	91.7	INCLUDE	
interest) and provide the rationale for these.		Stakeholder	7(6 to 7)	8(6 to 9)	8(7 to 9)	8(7 to 9)	8(6 to 9)	7(6 to 9)	8(6 to 9)	1.5	24.8	73.7	INCLUDE	
	ple time point of st) and provide Stakehold			8(5 to 9)	8(5 to 9)	9(7 to 9)	9(8 to 9)	8(5 to 9)	8(6 to 9)	1.0	27.1	71.9	INCLUDE	

# **Section 7 Methods: Timing of PRO Assessments/Sample Size**

Table 7.1 Responses to item 12 to item 17 including overall, summated and individual scores

				INDIV		KEHOLDER GRO CORES (IQR)	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Inc	SED ON STA lusion of Iter d as 'Critical	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
	PRO as									Rating by	% of stakeh	olders		
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your score
Item 12 Include PRO		Stakeholder	9(7 to 9)	9(8 to 9)	6(7 to 9)	9(8 to 9)	9(8 to 9)	9(7 to 9)	9(8 to 9)	2.2	4.4	93.4	INCLUDE	
assessments in he main protocol schedule of assessments,	Primary	Delphi R2	8(7 to 9)	9(9 to 9)	9(9 to 9)	9(9 to 9)	9(9 to 9)	8(7 to 9)	9(8 to 9)	1.0	2.0	97.0	INCLUDE	
schedule of assessments, specifying which PRO measures	Secondary	Stakeholder	8(6 to 8)	9(7 to 9)	8(7 to 9)	9(7 to 9)	9(7 to 9)	7(6 to 9)	9(7 to 9)	2.9	12.5	84.6	INCLUDE	
used at each assessment.	Secondary	Delphi R2	6(5 to 8)	9(7 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	7(4 to 8)	9(7 to 9)	1.0	15.2	83.8	INCLUDE	
Item 13 Specify if	Primary	Stakeholder	8(7 to 9)	9(7 to 9)	9 (7 to 9)	9(7 to 9)	9(8 to 9)	8(7 to 9)	9(7 to 9)	5.8	1.2	83.9	INCLUDE	
baseline PRO assessment should be	Filliary	Delphi R2	8(7 to 9)	9(7 to 9)	9(9 to 9)	9(8 to 9)	9(8 to 9)	8(6 to 9)	9(8 to 9)	4.1	7.1	88.8	INCLUDE	
completed before randomisation.	Secondary	Stakeholder	8(6 to 8)	8(6 to 9)	8(7 to 9)	8(6 to 9)	8(6 to 9)	7(6 to 9)	8(6 to 9)	7.3	22.6	70.1	INCLUDE	

				INDIV		KEHOLDER GRO CORES (IQR)	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Inc	ED ON STA lusion of Itel l as 'Critical	KEHOLDE ms in Con	DIDATE ITEMS ER DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
										Rating by	% of stakeh	olders		
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your score
		Delphi R2	7(5 to 9)	8(6 to 9)	8(5 to 9)	9(6 to 9)	9(8 to 9)	8(5 to 9)	8(6 to 9)	5.1	21.4	73.5	INCLUDE	
Item 14 Specify the	Primary	Stakeholder	8(6 to 9)	8(7 to 9)	9(7 to 9)	8(7 to 9)	8(7 to 9)	8(7 to 9)	8(7 to 9)	1.5	9.6	89.0	INCLUDE	
targeted time and acceptable time windows for each	Primary	Delphi R2	8(7 to 9)	9(8 to 9)	9(7 to 9)	9(7 to 9)	7(7 to 9)	7(6 to 9)	8(7 to 9)	2.0	14.1	83.8	INCLUDE	
PRO assessment.	ne ach	Stakeholder	8(6 to 8)	8(6 to 9)	8(7 to 9)	8(6 to 9)	8(6 to 9)	7(6 to 9)	8(6 to 9)	2.9	23.5	73.5	INCLUDE	
	occondary	Delphi R2	7(6 to 9)	8(6 to 9)	8(5 to 9)	8(6 to 9)	7(6 to 7)	7(5 to 9)	7(6 to 9)	3.0	30.3	66.7	INCONCLUSIVE	
Item 15  If PROs are to be completed in the		Stakeholder	8(8 to 9)	9(7 to 9)	7(6 to 9)	8(7 to 9)	8(7 to 9)	8(6 to 9)	8(7 to 9)	4.4	15.3	80.3	INCLUDE	
clinic: specify timing of PROM delivery in	d in the ecify PROM	Delphi R2	8(7 to 9)	8(6 to 9)	9(7 to 9)	9(7 to 9)	8(6 to 9)	7(6 to 9)	8(7 to 9)	3.1	21.4	75.5	INCLUDE	
relation to clinical assessments (e.g. before/whilst/after		Stakeholder	7(6 to 8)	8(6 to 9)	7(5 to 8)	8(5 to 9)	8(6 to 9)	7(5 to 9)	7(6 to 9)	6.6	27.0	66.4	INCONCLUSIVE	
seeing clinician and/or clinical assessments).	Secondary	Delphi R2	7(6 to 9)	8(5 to 9)	7(7 to 8)	8(7 to 9)	7(6 to 9)	6(4 to 7)	7(6 to 9)	4.1	32.7	63.3	INCONCLUSIVE	

				INDIV		KEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Inc	SED ON STA lusion of Itel d as 'Critical	KEHOLDE	DIDATE ITEMS ER DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
	PRO as									Rating by	% of stakeh	olders		
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your score
Justify the timing of PRO		Stakeholder	8(7 to 9)	8(7 to 9)	9(6 to 9)	8(6 to 9)	8(6 to 9)	8(7 to 9)	8(6 to 9)	3.7	22.8	73.5	INCLUDE	
assessments. Scheduled PRO assessments should link to research questions,	Primary	Delphi R2	7(6 to 9)	8(7 to 9)	9(7 to 9)	9(7 to 9)	7(6 to 9)	7(7 to 9)	8(7 to 9)	4.1	15.5	80.4	INCLUDE	
hypotheses, length of recall, disease/treatment natural history, planned analysis		Stakeholder	8(6 to 8)	7(5 to 9)	6(4 to 8)	7(5 to 8)	7(5 to 9)	7(6 to 9)	7(6 to 8)	7.4	33.3	59.3	INCONCLUSIVE	
and time of comparison must be comparable for both arms.	Secondary	Delphi R2	7(5 to 9)	8(5 to 9)	8(5 to 9)	7(6 to 8)	7(6 to 7)	7(4 to 8)	7(5 to 9)	8.3	35.4	56.3	INCONCLUSIVE	
Item 17  If PRO is the primary endpoint, state the required PRO sample size	Primary	Stakeholder	8(7 to 9)	9(8 to 9)	9(7 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	9(8 to 9)	0.7	6.6	92.7	INCLUDE	
PRO sample size, otherwise discuss the power of the	Primary	Delphi R2	8(7 to 9)	9(9 to 9)	9(9 to 9)	9(8 to 9)	9(9 to 9)	9(8 to 9)	9(8 to 9)	0.0	6.1	93.9	INCLUDE	

				INDIV		KEHOLDER GRO CORES (IQR)	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STA lusion of Iter I as 'Critical'	KEHOLDE	DIDATE ITEMS :R DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeh Important [4-6]	olders Critical [7-9]	Current Item Level Decision	Your score
PRO analyses.		Stakeholder	7(6 to 8)	6(4 to 8)	7(6 to 8)	8(5 to 9)	8(5 to 9)	7(4 to 9)	7(5 to 8)	11.4	33.3	55.3	INCONCLUSIVE	
	Secondary	Delphi R2	7(5 to 8)	5(4 to 8)	4(2 to 9)	7(6 to 9)	6(5 to 8)	6(3 to 7)	6(4 to 8)	16.7	38.9	44.4	INCONCLUSIVE	

## **Section 8 Methods: PRO Instrument Description/Justification**

Table 8.1 Responses to item 18 to item 22 including overall, summated and individual scores

				INDI		AKEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR usion of Iten as 'Critical'	KEHOLDE	DIDATE ITEMS ER DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Critical [7-9]	Current Item Level Decision	Your Score
Item 18  Describe the PROMs including,		Stakeholder	8(7 to 9)	8(6 to 9)	9(6 to 9)	8(6 to 9)	8(6 to 9)	7(5 to 9)	8(6 to 9)	3.7	25.7	70.6	INCLUDE	
number of items/domains, instrument scaling/scoring, reliability, content and	cluding, umber of ems/domains, strument ealing/scoring, liability, ontent and onstruct	Delphi R2	7(6 to 9)	9(7 to 9)	9(6 to 9)	9(6 to 9)	9(7 to 9)	8(7 to 8)	8(7 to 9)	2.0	20.2	77.8	INCLUDE	
validity, responsiveness, sensitivity, acceptability,		Stakeholder	7(6 to 8)	6(5 to 8)	7(5 to 8)	6(5 to 8)	6(5 to 9)	6(4 to 8)	6(5 to 8)	8.1	47.1	44.9	INCONCLUSIVE	
recall period. Provide references as appropriate.	vity, ability, period. e nces as  Secondary	Delphi R2	6(5 to 7)	7(4 to 9)	7(4 to 8)	7(5 to 9)	7(5 to 9)	6(5 to 7)	6(5 to 8)	6.2	44.3	49.5	INCONCLUSIVE	

				INDI		AKEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI usion of Iten as 'Critical'	KEHOLDE	DIDATE ITEMS ER DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
	PRO as									Rating by	% of stakeh	olders		
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your Score
Justify choice of PROM(s) by	Primary	Stakeholder	7(6 to 8)	8(7 to 9)	8(6 to 9)	8(6 to 9)	8(6 to 9)	7(6 to 8)	8(6 to 9)	1.5	25.5	73.0	INCLUDE	
linking specific domains/items to clinical	king specific omains/items clinical stifications and	Delphi R2	7(6 to 9)	9(7 to 9)	8(4 to 9)	9(7 to 9)	8(7 to 9)	7(6 to 8)	8(7 to 9)	2.0	17.2	80.8	INCLUDE	
justifications and hypotheses.	Secondary	Stakeholder	7(6 to 7)	6(5 to 8)	6(5 to 7)	7(5 to 9)	6(5 to 8)	7(6 to 7)	6(5 to 8)	5.1	46.7	48.2	INCONCLUSIVE	
		Delphi R2	6(5 to 9)	7(4 to 9)	6(4 to 8)	9(6 to 9)	7(5 to 7)	5(5 to 7)	7(5 to 8)	8.1	38.4	53.5	INCONCLUSIVE	
Item 20 Provide evidence of	rem 20	Stakeholder	8(7 to 9)	8(7 to 9)	7(6 to 8)	8(6 to 9)	7(5 to 8)	7(5 to 8)	7(6 to 9)	7.3	24.1	68.6	INCONCLUSIVE	
measurement equivalence across modes (i.e., when	Filliary	Delphi R2	8(7 to 9)	8(5 to 9)	5(3 to 7)	7(6 to 9)	7(5 to 9)	6(5 to 6)	7(5 to 8)	14.4	27.8	57.7	INCONCLUSIVE	
mixing modes of PRO data collection) and/or of cross		Stakeholder	7(6 to 8)	7(5 to 7)	6(5 to 7)	6(4 to 8)	6(4 to 8)	6(5 to 8)	6(5 to 8)	14.0	42.6	43.4	INCONCLUSIVE	
collection) and/or of cross cultural validity where different language versions of questionnaires are used).	Secondary	Delphi R2	7(6 to 8)	6(4 to 9)	5(3 to 5)	6(4 to 7)	6(4 to 7)	5(3 to 6)	6(4 to 7)	19.6	46.4	34.0	INCONCLUSIVE	

				INDI		AKEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI usion of Iten as 'Critical'	KEHOLDE	DIDATE ITEMS :R DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
	PRO as primary or		Patient						All	Rating by	% of stakeh	olders	Current Item	Your
Candidate Item	secondary	Survey Group	Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 21 Outline plans for evaluation of	Drimon	Stakeholder	7(6 to 8)	7(6 to 9)	7(5 to 9)	8(6 to 9)	8(5 to 9)	7(6 to 8)	7(6 to 9)	6.7	27.6	65.7	INCONCLUSIVE	
measurement properties, if appropriate (e.g. if not	surement erties, if oppriate if not ously ated in the	Delphi R2	7(5 to 8)	8(6 to 9)	7(3 to 8)	7(4 to 9)	8(6 to 9)	7(6 to 8)	7(6 to 9)	10.5	28.4	61.1	INCONCLUSIVE	
previously validated in the population of interest).	Sacandani	Stakeholder	7(6 to 7)	6(5 to 7)	6(3 to 8)	6(5 to 8)	6(3 to 8)	6(5 to 7)	6(5 to 8)	16.2	43.4	40.4	INCONCLUSIVE	
,	Secondary	Delphi R2	6(5 to 8)	5(4 to 9)	6(4 to 7)	6(4 to 7)	6(5 to 7)	5(4 to 6)	5(4 to 7)	16.1	49.5	34.4	INCONCLUSIVE	
Specify the estimated time	ecify the	Stakeholder	7(5 to 8)	7(6 to 9)	7(5 to 9)	6(5 to 8)	6(5 to 8)	6(5 to 8)	7(5 to 8)	8.8	37.2	54.0	INCONCLUSIVE	
estimated time to complete each assessment, and discuss	Primary	Delphi R2	8(6 to 9)	7(5 to 9)	6(5 to 6)	7(6 to 8)	7(6 to 8)	6(5 to 7)	7(6 to 8)	5.1	42.4	52.5	INCONCLUSIVE	
and discuss feasibility of assessment for the population.	Socondon	Stakeholder	7(5 to 7)	6(4 to 8)	6(5 to 9)	6(4 to 7)	6(4 to 7)	5(5 to 6)	6(4 to 7)	15.6	50.4	34.1	INCONCLUSIVE	
	Secondary	Delphi R2	6(4 to 8)	6(4 to 8)	5(4 to 6)	6(5 to 8)	5(4 to 6)	5(4 to 7)	5(4 to 7)	13.1	54.5	32.3	INCONCLUSIVE	

## **Section 9 Methods: PRO Data Collection**

Table 9.1 Responses to item 23 to item 30 including overall, summated and individual scores

					OUAL STAKE	EHOLDER GR DRES (IQR)	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	(EHOLDE)	DIDATE ITEMS R DATA Sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodolo gists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Critical [7-9]	- Current Item Level Decision	Your Score
		Stakeholder	7(6 to 8)	8(7 to 9)	8(7 to 9)	8(7 to 9)	8(6 to 9)	8(7 to 9)	8(7 to 9)	4.4	19.9	74.6	INCLUDE	
Item 23 Include a pre-	clude a pre- ecified data	Delphi R2	7(6 to 9)	9(8 to 9)	8(6 to 9)	9(7 to 9)	8(6 to 9)	8(7 to 9)	9(7 to 9)	3.1	15.6	81.3	INCLUDE	
collection plan.	ecified data llection	Stakeholder	6(5 to 7)	7(6 to 9)	7(6 to 9)	7(5 to 9)	7(5 to 9)	7(6 to 9)	7(6 to 9)	5.2	35.1	59.7	INCONCLUSIVE	
	Secondary	Delphi R2	7(5 to 8)	9(6 to 9)	7(5 to 9)	8(7 to 9)	6(5 to 9)	7(4 to 8)	8(5 to 9)	8.4	27.4	64.2	INCONCLUSIVE	
Item 24	Primary	Stakeholder	8(6 to 9)	8(6 to 9)	9(7 to 9)	8(6 to 9)	7(6 to 9)	7(5 to 8)	8(6 to 9)	2.9	26.5	70.6	INCLUDE	
Specify how PROM will be completed	Filliary	Delphi R2	8(7 to 9)	8(6 to 9)	9(8 to 9)	9(7 to 9)	8(6 to 9)	7(6 to 9)	8(7 to 9)	3.0	21.2	75.8	INCLUDE	
(e.g. pencil and paper, online, etc).	Soonda	Stakeholder	7(6 to 8)	7(6 to 9)	8(7 to 9)	7(5 to 9)	6(4 to 9)	6(4 to 8)	7(6 to 9)	5.9	35.6	58.5	INCONCLUSIVE	
	Secondary	Delphi R2	8(5 to 9)	8(5 to 9)	8(6 to 9)	9(7 to 9)	7(5 to 9)	7(4 to 7)	7(5 to 9)	7.1	28.6	64.3	INCONCLUSIVE	

					DUAL STAKE	EHOLDER GR DRES (IQR)	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	KEHOLDE	IDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate	PRO as primary or	Survey Group	Patient Reps	Researchers	Clinicians	Methodolo	Analysts	Reviewers	All		% of stakeho	olders	Current Item	Your
Item	secondary outcome	ourvey Group	r attent reps	Researchers	Omnerans	gists	Anarysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
		Stakeholder	8(6 to 8)	7(7 to 9)	8(6 to 9)	8(6 to 9)	8(6 to 9)	7(4 to 8)	8(6 to 9)	2.9	27.2	69.9	INCONCLUSIVE	
Item 25  Specify where PROM will be		Delphi R2	8(6 to 9)	8(6 to 9)	8(5 to 9)	9(8 to 9)	8(6 to 9)	7(6 to 9)	8(6 to 9)	4.0	24.2	71.7	INCLUDE	
completed (e.g. clinic, home, etc).	M will be bleted clinic,	Stakeholder	6(6 to 7)	7(6 to 9)	7(6 to 9)	8(5 to 9)	6(5 to 9)	6(4 to 8)	7(6 to 9)	5.2	39.3	55.6	INCONCLUSIVE	
	ne, etc).	Delphi R2	8(5 to 9)	7(5 to 9)	5(4 to 7)	8(6 to 9)	7(5 to 9)	7(4 to 8)	7(5 to 9)	7.1	36.7	56.1	INCONCLUSIVE	
Item 26		Stakeholder	7(6 to 9)	8(7 to 9)	9(7 to 9)	7(6 to 9)	8(7 to 9)	7(6 to 9)	8(7 to 9)	2.2	19.3	78.5	INCLUDE	
Where applicable, justify use of proxies	Primary	Delphi R2	8(5 to 9)	8(7 to 9)	9(6 to 9)	9(7 to 9)	8(7 to 9)	7(6 to 9)	8(7 to 9)	4.1	19.6	76.3	INCLUDE	
(define conditions under which proxy		Stakeholder	6 (6 to 8)	7(5 to 9)	8(7 to 9)	7(5 to 8)	8(5 to 9)	7(6 to 9)	7(5 to 9)	4.5	33.1	62.4	INCONCLUSIVE	
assessment is permissible).	Secondary	Delphi R2	5(5 to 9)	8(5 to 9)	7(5 to 9)	9(6 to 9)	7(5 to 9)	6(4 to 9)	7(5 to 9)	6.2	35.1	58.8	INCONCLUSIVE	

					DUAL STAKE	EHOLDER GR ORES (IQR)	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	EHOLDE	IDATE ITEMS R DATA eensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodolo gists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Critical [7-9]	Current Item Level Decision	Your Score
		Stakeholder	8(7 to 9)	8(7 to 9)	7(5 to 9)	6(3 to 8)	7(6 to 9)	7(5 to 9)	7(6 to 9)	11.7	25.5	62.8	INCONCLUSIVE	
Specify who will administer	Primary	Delphi R2	8(6 to 9)	7(5 to 9)	6(3 to 9)	9(6 to 9)	7(6 to 8)	7(6 to 8)	7(6 to 9)	8.2	33.7	58.2	INCONCLUSIVE	
the PROM (e.g. a physician, nurse, etc).	OM an,	Stakeholder	7(6 to 8)	7(5 to 9)	7(5 to 9)	5(3 to 7)	7(5 to 8)	5(4 to 7)	7(5 to 8)	14.7	34.6	50.7	INCONCLUSIVE	
	etc).	Delphi R2	6(5 to 9)	6(4 to 9)	5(3 to 7)	7(5 to 9)	6(4 to 7)	6(4 to 7)	6(4 to 9)	11.3	47.4	41.2	INCONCLUSIVE	
Item 28 If it is		Stakeholder	7(7 to 9)	8(7 to 9)	9(7 to 9)	7(6 to 9)	7(6 to 9)	8(6 to 9)	7(6 to 9)	5.2	20.0	74.8	INCLUDE	
permissible for another person to help the study	ther to help	Delphi R2	8(5 to 9)	8(6 to 9)	7(4 to 9)	9(7 to 9)	8(4 to 9)	7(5 to 9)	8(6 to 9)	9.1	27.3	63.6	INCONCLUSIVE	
participant complete the PROM, describe what	cipant plete the bM, cribe what	Stakeholder	6(6 to 8)	7(6 to 9)	9(7 to 9)	7(5 to 7)	7(4 to 8)	6(5 to 9)	7(6 to 9)	6.7	32.1	61.2	INCONCLUSIVE	
type and level of assistance is acceptable.	Secondary	Delphi R2	5(5 to 9)	7(5 to 9)	5(4 to 7)	8(6 to 9)	7(4 to 7)	6(4 to 7)	7(5 to 9)	11.1	38.4	50.5	INCONCLUSIVE	

						EHOLDER GR ORES (IQR)	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR usion of Iten as 'Critical'	EHOLDEI	DIDATE ITEMS R DATA Sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodolo gists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Critical [7-9]	- Current Item Level Decision	Your Score
		Stakeholder	7(6 to 8)	7(6 to 9)	7(4 to 9)	8(6 to 9)	7(6 to 9)	7(4 to 8)	7(6 to 9)	7.4	30.4	62.2	INCONCLUSIVE	
Item 29  If more than one PROM will be used, specify whether the	Primary	Delphi R2	7(6 to 9)	6(5 to 9)	5(3 to 8)	8(4 to 9)	7(4 to 9)	7(7 to 9)	7(5 to 9)	12.1	33.3	54.5	INCONCLUSIVE	
order of administration will be standardised or randomised.	S dans	Stakeholder	7(6 to 7)	7(5 to 8)	6(4 to 9)	7(6 to 9)	6(4 to 8)	6(4 to 7)	7(5 to 8)	10.2	39.4	50.4	INCONCLUSIVE	
	Secondary	Delphi R2	5(4 to 7)	6(4 to 7)	4(3 to 8)	7(4 to 9)	5(4 to 7)	7(4 to 7)	6(4 to 7)	17.3	48.0	34.7	INCONCLUSIVE	

						EHOLDER GR ORES (IQR)	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR usion of Iten as 'Critical'	KEHOLDEI	IDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodolo gists	Analysts	Reviewers	All Stakeholders	Not Important	% of stakeho	Critical	Current Item Level Decision	Your Score
Item 30 Include a plan for systematically training and contacting		Stakeholder	8(6 to 9)	7(6 to 9)	8(5 to 9)	7(5 to 9)	7(5 to 8)	7(5 to 9)	7(5 to 9)	[ <b>1-3</b> ]	33.1	60.3	INCONCLUSIVE	
local site personnel to ensure that they understand the content and importance of	Primary	Delphi R2	8(7 to 9)	7(5 to 9)	7(4 to 8)	6(4 to 9)	7(4 to 8)	8(7 to 9)	7(5 to 9)	12.2	23.5	64.3	INCONCLUSIVE	
collecting PRO data. Ideally coordinated by a lead data manager who monitors PRO completion	Socondary	Stakeholder	7(6 to 8)	6(4 to 7)	7(5 to 9)	7(4 to 7)	6(4 to 8)	6(5 to 8)	6(5 to 7)	12.5	41.9	45.6	INCONCLUSIVE	
rates in real time and communicates with sites if completion rates are suboptimal.	Secondary	Delphi R2	7(6 to 9)	6(4 to 8)	5(4 to 8)	5(3 to 8)	5(3 to 7)	7(4 to 9)	6(4 to 8)	16.3	35.7	48.0	INCONCLUSIVE	

# **Section 10 Methods: Plans to Avoid/Minimise Missing Data**

Table 10.1 Responses to items 31 to items 34 including overall, summated and individual scores

				INDIV		KEHOLDER GROU CORES (IQR)	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI usion of Iten as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate	PRO as primary or	0	Detient Dene	Danasakan	Olivialana		A	B	All	Rating by	% of stakeh	olders	Current Item	Your
Item	secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 31 Specify procedures for	Primary	Stakeholder	8(6 to 8)	8(6 to 9)	9(7 to 9)	8(7 to 9)	8(7 to 9)	8(7 to 9)	8(7 to 9)	3.0	20.9	76.1	INCLUDE	
data collection and management methods to minimise missing data. E.g. checking		Delphi R2	8(7 to 9)	8(6 to 9)	7(6 to 8)	7(6 to 9)	8(7 to 9)	8(6 to 9)	8(6 to 9)	6.1	21.2	72.7	INCLUDE	
completed PROMs (including who will check forms and how will they deal	Secondary	Stakeholder	6(6 to 7)	7(6 to 9)	8(7 to 9)	7(5 to 8)	7(5 to 9)	7(6 to 9)	7(6 to 9)	5.3	35.3	59.4	INCONCLUSIVE	
with missing PROMs or missing items).		Delphi R2	8(6 to 9)	8(5 to 9)	6(4 to 8)	7(4 to 8)	7(5 to 8)	7(4 to 8)	7(5 to 9)	8.1	34.3	57.6	INCONCLUSIVE	

				INDIV		KEHOLDER GRO	UP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI lusion of Iter I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important	% of stakeh	olders Critical [7-9]	Current Item Level Decision	Your Score
	Primary	Stakeholder	9(7 to 9)	6(4 to 8)	6(4 to 9)	6(4 to 8)	6(4 to 8)	6(5 to 7)	6(4 to 8)	[ <b>1-3</b> ]	40.3	44.8	INCONCLUSIVE	
Include guidance on	Timaly	Delphi R2	9(8 to 9)	6(4 to 8)	6(3 to 8)	6(3 to 8)	7(3 to 8)	7(5 to 9)	7(4 to 8)	21.2	26.3	52.5	INCONCLUSIVE	
discussing importance of PROs with patient.	Secondary	Stakeholder	8(6 to 8)	5(3 to 7)	4(4 to 6)	6(3 to 7)	5(4 to 7)	5(4 to 7)	5(4 to 7)	23.0	48.1	28.9	INCONCLUSIVE	
		Delphi R2	8(6 to 9)	5(3 to 7)	5(2 to 6)	5(2 to 7)	5(3 to 7)	6(3 to 9)	5(3 to 7)	30.3	33.3	36.4	INCONCLUSIVE	
Item 33 Establish process for	Primary	Stakeholder	8(6 to 9)	7(6 to 9)	6(5 to 9)	8(6 to 9)	8(6 to 9)	9(6 to 9)	7(6 to 9)	7.4	27.9	64.7	INCONCLUSIVE	
PRO assessment at (and beyond) withdrawal for	Primary	Delphi R2	8(7 to 9)	7(6 to 9)	8(7 to 9)	9(7 to 9)	8(6 to 9)	7(6 to 9)	8(7 to 9)	5.1	19.2	75.8	<u>INCLUDE</u>	
patients who withdraw early from a study or who go 'off-	S Secondary	Stakeholder	7(6 to 8)	6(5 to 8)	5(4 to 9)	6(5 to 8)	7(4 to 8)	7(6 to 9)	6(5 to 8)	12.5	39.7	47.8	INCONCLUSIVE	
study'/off treatment'.	Coordary	Delphi R2	6(5 to 8)	7(5 to 8)	7(4 to 9)	8(6 to 9)	7(5 to 8)	6(4 to 9)	7(5 to 8)	8.1	37.4	54.5	INCONCLUSIVE	

				INDIV		KEHOLDER GRO	UP		OVERALL MEDIAN (IQR)	BAS	SED ON STAI lusion of Iter d as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
	PRO as									Rating by	% of stakeh	olders	2	v
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your Score
Specify that a named person/position	Primary	Stakeholder	7(5 to 9)	7(5 to 8)	7(4 to 9)	6(3 to 7)	6(5 to 8)	6(4 to 8)	6(5 to 8)	17.2	35.1	47.8	INCONCLUSIVE	
at each centre (and/or centrally) be nominated to take responsibility	Primary	Delphi R2	7(7 to 9)	7(4 to 9)	5(3 to 7)	6(5 to 7)	6(4 to 8)	6(5 to 7)	6(5 to 8)	15.2	35.4	49.5	INCONCLUSIVE	
for administration, collection and checking of PROM - specify	Secondary	Stakeholder	7(5 to 7)	6(3 to 7)	6(4 to 9)	5(3 to 7)	6(4 to 7)	6(4 to 8)	6(4 to 7)	22.4	40.3	37.3	INCONCLUSIVE	
whether this is or is not the treating clinician.	Secondary	Delphi R2	7(6 to 9)	6(4 to 9)	5(3 to 7)	6(2 to 7)	5(4 to 6)	4(3 to 6)	6(4 to 7)	24.2	41.4	34.3	INCONCLUSIVE	

# **Section 11 PRO-Specific Quality Assurance**

Table 11.1 Responses to item 35 to item 38 including overall, summated and individual scores

				INDI		AKEHOLDER GRO	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI Jusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS ER DATA sensus Meeting: 5% rated as 'Not	DELPHI R2
	PRO as primary or	Survey	Patient						All	Rating by	% of stakeho	olders	Current Item	Your
Candidate Item	secondary outcome	Group	Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 35	Primary	Stakeholder	7(4 to 8)	7(6 to 9)	6(4 to 9)	8(6 to 9)	7(6 to 9)	7(7 to 9)	7(6 to 9)	8.3	29.3	62.4	INCONCLUSIVE	
Specify how an electronic PRO system/database will be maintained and		Delphi R2	9(7 to 9)	7(4 to 9)	5(1 to 7)	8(5 to 9)	7(6 to 8)	7(6 to 9)	7(5 to 9)	13.1	24.2	62.6	INCONCLUSIVE	
how investigator will meet regulatory requirements and ensure data integrity	Secondary	Stakeholder	6(4 to 7)	7(5 to 8)	6(4 to 7)	7(6 to 9)	6(4 to 7)	7(6 to 9)	7(5 to 8)	12.9	36.4	50.8	INCONCLUSIVE	
and security.		Delphi R2	8(7 to 9)	7(4 to 9)	5(1 to 7)	7(4 to 8)	6(5 to 7)	7(5 to 9)	7(5 to 8)	15.5	30.9	53.6	INCONCLUSIVE	-
	Primary	Stakeholder	7(5 to 9)	7(5 to 9)	6(4 to 8)	7(5 to 9)	7(5 to 8)	7(6 to 9)	7(5 to 9)	7.5	38.1	54.5	INCONCLUSIVE	
Specify plan to monitor PRO		Delphi R2	8(6 to 9)	7(6 to 9)	7(6 to 8)	7(6 to 9)	7(6 to 8)	7(5 to 9)	7(6 to 8)	7.1	27.3	65.7	INCONCLUSIVE	
compliance, including adherence to time windows.	nitor PRO pliance, including erence to time	Stakeholder	6(5 to 8)	6(4 to 8)	6( 4 to 7)	6(4 to 8)	6(4 to 7)	6(5 to 8)	6(4 to 8)	15.0	44.4	40.6	INCONCLUSIVE	
		Delphi R2	6(6 to 9)	7(5 to 9)	6(5 to 7)	7(4 to 8)	6(5 to 7)	6(5 to 7)	6(5 to 7)	12.1	41.4	46.5	INCONCLUSIVE	

				INDI		AKEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI lusion of Iter I as 'Critical'	KEHOLDE	DIDATE ITEMS :R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or	Survey	Patient	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All		% of stakeh	olders	Current Item	Your
Canadate Rem	secondary outcome	Group	Reps	Researchers	Omnerans	Methodologists	Analysis	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 37		Stakeholder	7(4 to 8)	7(5 to 9)	7(5 to 9)	7(6 to 9)	5(4 to 8)	6(5 to 8)	7(5 to 9)	9.3	38.8	51.9	INCONCLUSIVE	
Include an overview of PRO administration (data	an overview cration (data n), and data t/transmission	Delphi R2	8(6 to 9)	6(5 to 9)	5(5 to 7)	7(6 to 9)	7(5 to 8)	6(3 to 7)	7(5 to 8)	14.1	34.3	51.5	INCONCLUSIVE	
collection), and data handling/transmission and storage procedures.	PRO ninistration (data ection), and data dling/transmission I storage cedures.	Stakeholder	6(4 to 7)	6(4 to 8)	7(5 to 8)	7(5 to 9)	5(3 to 7)	6(5 to 8)	6(4 to 8)	16.0	42.7	41.2	INCONCLUSIVE	
	ndling/transmission I storage	Delphi R2	7(5 to 9)	6(5 to 8)	5(5 to 6)	7(4 to 8)	6(5 to 7)	4(3 to 6)	6(4 to 7)	21.2	44.4	34.3	INCONCLUSIVE	
Item 38	Primary	Stakeholder	8(5 to 9)	7(6 to 9)	8(5 to 9)	7(6 to 9)	6(4 to 9)	6(5 to 9)	7(5 to 9)	10.4	32.8	56.7	INCONCLUSIVE	
Ensure plans for administration of PROM(s) are	Filliary	Delphi R2	8(6 to 9)	6(5 to 9)	6(5 to 7)	5(2 to 9)	7(5 to 9)	6(5 to 9)	6(5 to 9)	14.3	37.8	48.0	INCONCLUSIVE	
consistent with each PROM's user manual.	Secondary	Stakeholder	7(5 to 8)	7(5 to 8)	7(5 to 9)	7(3 to 9)	6(3 to 8)	6(5 to 9)	7(5 to 9)	15.3	35.1	49.6	INCONCLUSIVE	
	Secondary	Delphi R2	7(6 to 9)	6(5 to 9)	6(5 to 7)	5(2 to 9)	6(4 to 9)	6(4 to 7)	6(4 to 8)	15.3	44.9	39.8	INCONCLUSIVE	

# **Section 12 PRO Statistical Analysis**

Table 12.1 Responses to item 39 to item 51 including overall, summated and individual scores

						KEHOLDER GROU CORES (IQR)	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Item Jas 'Critical'	KEHOLDE	DIDATE ITEMS R DATA Sensus Meeting: % rated as 'Not	DELPHI R2
	PRO as									Rating by	% of stakeho	olders		
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your Score
Item 39	Primary	Stakeholder	7(4 to 8)	8(7 to 9)	8(6 to 9)	8(7 to 9)	9(7 to 9)	8(6 to 9)	8(7 to 9)	3.0	18.8	78.2	INCLUDE	
Include an a priori description of all planned PRO		Delphi R2	6(5 to 9)	9(8 to 9)	9(5 to 9)	9(8 to 9)	9(8 to 9)	8(7 to 9)	9(7 to 9)	5.2	11.3	83.5	INCLUDE	
analyses pertaining to the study hypotheses.		Stakeholder	6(4 to 6)	6(5 to 8)	7(4 to 9)	7(5 to 9)	7(5 to 8)	6(6 to 8)	6(5 to 8)	6.8	44.4	48.9	INCONCLUSIVE	
		Delphi R2	6(4 to 6)	7(5 to 9)	6(4 to 7)	7(6 to 9)	8(6 to 9)	7(4 to 9)	7(5 to 9)	10.2	35.7	54.1	INCONCLUSIVE	
	Primary	Stakeholder	7(7 to 9)	7(6 to 8)	7(6 to 9)	7(5 to 9)	8(6 to 9)	8(7 to 9)	7(6 to 9)	7.6	26.1	66.2	INCONCLUSIVE	
Item 40 State the	Primary	Delphi R2	7(6 to 9)	7(5 to 9)	5(3 to 7)	9(6 to 9)	7(5 to 9)	7(5 to 9)	7(5 to 9)	10.4	29.2	60.4	INCONCLUSIVE	
assumptions of PRO analyses.	Secondary	Stakeholder	6(6 to 7)	6(4 to 7)	7(5 to 9)	6(5 to 8)	6(4 to 8)	7(6 to 8)	6(5 to7)	12.3	46.2	41.5	INCONCLUSIVE	
		Delphi R2	7(5 to 8)	5(4 to 9)	5(2 to 7)	7(6 to 9)	6(5 to 7)	6(4 to 7)	6(4 to 7)	14.6	46.9	38.5	INCONCLUSIVE	

				INDIV		KEHOLDER GROU CORES (IQR)	JP		OVERALL MEDIAN (IQR)	BAS	ED ON STAP Susion of Iten Sus as 'Critical'	KEHOLDE	DIDATE ITEMS IR DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important	% of stakeho	Olders  Critical [7-9]	Current Item Level Decision	Your Score
		Stakeholder	6(5 to 8)	8(6 to 9)	8(6 to 9)	8(6 to 9)	8(7 to 9)	8(7 to 9)	8(6 to 9)	3.0	26.3	70.7	INCLUDE	
Item 41 State the anticipated	Primary	Delphi R2	7(6 to 8)	8(7 to 9)	9(7 to 9)	9(7 to 9)	8(8 to 9)	7(7 to 9)	8(7 to 9)	3.1	16.5	80.4	INCLUDE	
response rate and implications for the sample size.	Secondary	Stakeholder	6(5 to 7)	6(4 to 7)	6(5 to 7)	6(3 to 6)	5(4 to 8)	6(6 to 8)	6(4 to 7)	15.9	49.7	34.6	INCONCLUSIVE	
	Secondary	Delphi R2	6(4 to 8)	6(4 to 8)	6(5 to 7)	6(4 to 9)	6(4 to 8)	6(4 to 7)	6(4 to 8)	18.8	47.9	33.3	INCONCLUSIVE	
	Primary	Stakeholder	7(5 to 8)	8 (7 to 9)	7(6 to 9)	8(6 to 9)	9(7 to 9)	8(7 to 9)	8(7 to 9)	4.5	18.9	76.5	<u>INCLUDE</u>	
Item 42 Include an a priori	Timaly	Delphi R2	7(5 to 8)	9(8 to 9)	9(5 to 9)	9(6 to 9)	8(7 to 9)	7(6 to 9)	8(6 to 9)	3.1	22.9	74.0	<u>INCLUDE</u>	
estimation of PRO effect size.	Secondary	Stakeholder	6(5 to 7)	6 (4 to 7)	6(4 to 7)	5(3 to 6)	5(3 to 7)	7(4 to 8)	6(4 to 7)	17.7	48.5	33.8	INCONCLUSIVE	
	Gecondary	Delphi R2	6(4 to 7)	5(3 to 8)	5(3 to 6)	6(4 to 7)	5(4 to 8)	5(3 to 6)	5(3 to 7)	25.0	47.9	27.1	INCONCLUSIVE	

						(EHOLDER GROU	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	% of stakeho	Critical	Current Item Level Decision	Your Score
		Stakeholder	7(5 to 9)	9(7 to 9)	9(6 to 9)	9(7 to 9)	9(8 to 9)	7(7 to 9)	9(7 to 9)	4.5	11.9	83.6	INCLUDE	
Item 43 Specify intention-to-	Primary	Delphi R2	6(5 to 7)	9(7 to 9)	9(7 to 9)	9(7 to 9)	8(7 to 9)	8(7 to 9)	9(7 to 9)	4.2	15.8	80.0	INCLUDE	-
treat or per-protocol PRO analyses.		Stakeholder	6(5 to 8)	7 (5 to 9)	7(5 to 9)	7(5 to 9)	7(5 to 9)	7(6 to 8)	7(5 to 9)	7.5	36.1	56.4	INCONCLUSIVE	
	Secondary	Delphi R2	6(4 to 7)	6(4 to 9)	9(4 to 9)	9(6 to 9)	7(7 to 9)	7(5 to 9)	7(5 to 9)	10.4	34.4	55.2	INCONCLUSIVE	
		Stakeholder	7(5 to 9)	7(6 to 8)	8(6 to 8)	6(4 to 7)	8(4 to 9)	7(7 to 9)	7(6 to 9)	15.6	23.4	60.9	INCONCLUSIVE	
Item 44 Include a priori	Primary	Delphi R2	6(3 to 7)	7(5 to 9)	7(4 to 8)	7(5 to 9)	8(7 to 9)	7(5 to 8)	7(5 to 9)	10.9	29.3	59.8	INCONCLUSIVE	
identified summary statistics (as appropriate).		Stakeholder	6(5 to 8)	6(4 to 7)	6(4 to 8)	5(4 to 6)	5(3 to 8)	7(6 to 8)	6(4 to 7)	21.7	41.1	37.2	INCONCLUSIVE	
	Secondary	Delphi R2	5(3 to 6)	5(3 to 8)	6(4 to 7)	6(3 to 9)	7(5 to 8)	5(3 to 7)	5(4 to 7)	23.7	44.1	32.3	INCONCLUSIVE	

				INDIV		KEHOLDER GROU	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Item I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
	PRO as									Rating by	% of stakeho	olders		
Candidate Item	primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Current Item Level Decision	Your Score
Item 45 Specify the minimum	Deimonu	Stakeholder	7(7 to 9)	7(7 to 9)	7(6 to 9)	7(7 to 8)	8(6 to 9)	7(6 to 9)	7(6 to 9)	3.8	21.6	74.6	INCLUDE	
PRO response rate and acceptable degree of timing deviation (i.e	Primary D	Delphi R2	7(6 to 8)	7(4 to 8)	7(5 to 8)	7(4 to 9)	7(5 to 8)	7(5 to 8)	7(5 to 8)	10.6	34.0	55.3	INCONCLUSIVE	
acceptable time windows for each PRO assessment timepoint) before the	ation (i.e eptable time lows for each o assessment point) before the o objective is	Stakeholder	6(6 to 8)	6(4 to 7)	6(4 to 9)	6(4 to 7)	5(4 to 8)	7(5 to 7)	6(4 to 7)	14.0	45.7	40.3	INCONCLUSIVE	
PRO objective is compromised.	s for each seessment nt) before the ojective is	Delphi R2	6(4 to 8)	5(4 to 7)	5(3 to 6)	5(3 to 6)	5(3 to 7)	6(3 to 7)	5(4 to 7)	20.2	48.9	30.9	INCONCLUSIVE	
ltem 46  Describe methods for scoring	Primary	Stakeholder	7(5 to 8)	8(7 to 9)	8(7 to 9)	8(7 to 9)	9(6 to 9)	7(7 to 9)	8(7 to 9)	6.1	18.0	75.9	INCLUDE	
endpoints. Where possible, reference scoring manuals for summated scales from PROM	Filliary	Delphi R2	6(5 to 7)	9(8 to 9)	9(6 to 9)	9(6 to 9)	8(7 to 9)	7(6 to 9)	8(7 to 9)	4.2	17.9	77.9	INCLUDE	
(domain-specific and/or total) and methods for handling missing items, and	mated scales PROM nain-specific or total) and nods for handling ing items, and nodological  Secondary	Stakeholder	6(5 to 7)	7(5 to 9)	7(5 to 9)	7(5 to 8)	6(4 to 9)	7(6 to 9)	7(5 to 9)	10.6	38.6	50.8	INCONCLUSIVE	
papers for composite endpoints (e.g. QTWiST).	Secondary	Delphi R2	6(4 to 7)	8(5 to 9)	6(5 to 8)	6(5 to 9)	7(5 to 9)	7(5 to 9)	7(5 to 9)	10.4	39.6	50.0	INCONCLUSIVE	

						KEHOLDER GROU CORES (IQR)	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Olders  Critical [7-9]	Current Item Level Decision	Your Score
	Primary	Stakeholder	7(5 to 8)	9(7 to 9)	8(7 to 9)	7(6 to 9)	9(8 to 9)	9(7 to 9)	9(7 to 9)	3.9	14.7	81.4	INCLUDE	
Item 47 State statistical	for Str	Delphi R2	7(5 to 8)	9(8 to 9)	9(7 to 9)	9(8 to 9)	9(8 to 9)	8(7 to 9)	9(7 to 9)	4.1	11.3	84.5	INCLUDE	
significance levels and include plans for multiplicity/controlling type 1 error.	statistical cance levels clude plans for icity/controlling error.  Secondary	Stakeholder	6(5 to 7)	6(5 to 8)	7(6 to 8)	6(5 to 9)	6(4 to 9)	6(6 to 7)	6(5 to 8)	10.7	43.5	45.8	INCONCLUSIVE	
		Delphi R2	6(5 to 8)	7(5 to 9)	7(5 to 9)	7(6 to 9)	8(5 to 9)	6(4 to 8)	7(5 to 9)	12.5	33.3	54.2	INCONCLUSIVE	
Item 48		Stakeholder	7(3 to 8)	7(6 to 9)	8(6 to 9)	7(6 to 9)	7(6 to 9)	8(6 to 9)	7 (6 to 9)	5.3	28.2	66.4	INCONCLUSIVE	
Pre-specify sequence of testing/exploratory	Primary	Delphi R2	6(5 to 7)	8(6 to 9)	7(4 to 9)	9(6 to 9)	8(5 to 9)	7(4 to 9)	7(5 to 9)	12.6	22.1	65.3	INCONCLUSIVE	
for multiplicity or pre- specify domains (e.g. in a regulatory	ng/exploratory yses to control nultiplicity or pre- ify domains (e.g.	Stakeholder	6(3 to 7)	6(4 to 7)	6(4 to 8)	5(5 to 9)	5(4 to 7)	6(6 to 8)	6(4 to 7)	15.4	50.8	33.8	INCONCLUSIVE	
triai/iabeiling ciaim).	Secondary	Delphi R2	5(4 to 7)	6(3 to 7)	5(3 to 7)	6(4 to 9)	7(4 to 9)	5(4 to 8)	6(4 to 8)	22.6	40.9	36.6	INCONCLUSIVE	

				INDIV		KEHOLDER GROU CORES (IQR)	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAI lusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
	PRO as primary or	Survey	Patient						All	Rating by	% of stakeho	olders	Current Item	Your
Candidate Item	secondary outcome	Group	Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 49		Stakeholder	7(2 to 9)	8(7 to 9)	9(7 to 9)	8(7 to 9)	9(7 to 9)	8(8 to 9)	8(7 to 9)	4.5	12.1	83.3	INCLUDE	
Specify the criteria for clinical significance (e.g. state minimal	Primary	Delphi R2	7(5 to 8)	9(8 to 9)	9(7 to 9)	9(7 to 9)	9(7 to 9)	8(7 to 9)	9(7 to 9)	3.1	10.3	86.6	INCLUDE	
[clinical] important difference and/or responder definition (size and duration of		Stakeholder	7(2 to 7)	7(5 to 9)	7(6 to 9)	7(5 to 8)	6(4 to 8)	7(6 to 9)	7(5 to 8)	9.2	35.9	55.0	INCONCLUSIVE	
benefit).	Secondary	Delphi R2	6(4 to 8)	8(5 to 8)	5(4 to 9)	7(6 to 9)	7(4 to 8)	7(4 to 8)	7(5 to 9)	14.4	34.0	51.5	INCONCLUSIVE	
		Stakeholder	8(7 to 9)	8(7 to 9)	8(6 to 9)	7(5 to 9)	9(7 to 9)	8(6 to 9)	8(7 to 9)	3.0	20.3	76.7	INCLUDE	
Item 50 State how missing	Primary	Delphi R2	7(4 to 9)	9(7 to 9)	9(6 to 9)	7(4 to 9)	8(8 to 9)	8(7 to 9)	8(6 to 9)	5.2	21.9	72.9	INCLUDE	
data will be described.		Stakeholder	7(6 to 8)	7(5 to 8)	7(5 to 9)	5(5 to 8)	7(5 to 8)	7(6 to 9)	7(5 to 8)	7.6	39.7	52.7	INCONCLUSIVE	
	Secondary	Delphi R2	7(4 to 9)	8(4 to 9)	7(4 to 9)	6(4 to 8)	7(5 to 9)	6(5 to 8)	7(5 to 9)	11.3	38.1	50.5	INCONCLUSIVE	

				INDIVI		CEHOLDER GROU	JP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten Jas 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or	Survey	Patient	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All		% of stakeho	olders	Current Item	Your
Candidate item	secondary outcome	Group	Reps	Researchers	Cimicians	Methodologists	Allalysis	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
	2	Stakeholder	6(6 to 8)	8(7 to 9)	8(6 to 9)	7(6 to 9)	9(7 to 9)	8(6 to 9)	8(7 to 9)	3.0	21.8	75.2	INCLUDE	
Item 51  Describe method for handling missing assessments (e.g.	Primary	Delphi R2	7(5 to 9)	9(7 to 9)	9(8 to 9)	9(6 to 9)	9(8 to 9)	8(6 to 9)	9(7 to 9)	5.1	16.3	78.6	INCLUDE	
approach to imputation and sensitivity analyses).		Stakeholder	6(5 to 6)	7(5 to 8)	6(5 to 9)	6(5 to 8)	7(5 to 8)	6(5 to 8)	6(5 to 8)	7.5	45.1	47.4	INCONCLUSIVE	
	Secondary	Delphi R2	6(4 to 8)	7(4 to 9)	7(4 to 9)	7(5 to 9)	8(5 to 9)	6(4 to 7)	7(5 to 9)	11.2	34.7	54.1	INCONCLUSIVE	

# **Section 13 PRO Data Monitoring/PRO Alerts**

Table 13.1 Responses to item 52 to item 53 including overall, summated and individual scores

				INDI		AKEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Inc	SED ON STA lusion of Ite d as 'Critical	KEHOLDI ms in Con	DIDATE ITEMS ER DATA asensus Meeting: 5% rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or	Survey	Patient	Dagazakana	Cliniaiana	Methodologists	Amaluata	Daviswans	All	Rating by	% of stakeh	olders	Current Item	Your
Candidate item	secondary outcome	Group	Reps	Researchers	Cimicians	Metriodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
Item 52  Describe the role of the	Primary	Stakeholder	7(6 to 9)	7(5 to 8)	6(5 to 9)	7(6 to 9)	7(5 to 9)	7(5 to 9)	7(5 to 9)	8.3	32.6	59.1	INCONCLUSIVE	
Data Monitoring Committee and Quality Assurance for PROs.		Delphi R2	8(6 to 9)	8(5 to 8)	6(4 to 8)	7(4 to 9)	7(5 to 8)	7(6 to 9)	7(6 to 8)	11.6	26.3	62.1	INCONCLUSIVE	
	Secondary	Stakeholder	6(6 to 8)	5(4 to 7)	5(4 to 9)	5(4 to 7)	6(5 to 7)	6(5 to 8)	5(4 to 7)	14.8	53.9	31.3	INCONCLUSIVE	
		Delphi R2	7(6 to 9)	5(3 to 6)	4(3 to 6)	4(3 to 5)	6(3 to 7)	6(4 to 7)	5(4 to 7)	22.1	48.4	29.5	INCONCLUSIVE	
Item 53 Include an a priori plan	Primary	Stakeholder	8(8 to 9)	7(5 to 9)	7(4 to 9)	7(5 to 9)	7(5 to 8)	7(5 to 9)	7(5 to 9)	9.1	28.8	62.1	INCONCLUSIVE	
consistent/standardised management of PRO alerts (symptoms		Delphi R2	8(7 to 9)	8(5 to 9)	7(4 to 8)	7(7 to 9)	8(5 to 8)	8(7 to 9)	8(6 to 9)	8.6	22.6	68.8	INCONCLUSIVE	

				INDI		AKEHOLDER GRO	DUP		OVERALL MEDIAN (IQR)	BAS Rule for Inc	SED ON STA lusion of Ite d as 'Critical	KEHOLDI ms in Cor	DIDATE ITEMS ER DATA asensus Meeting: 5% rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important	% of stakeho	Critical	Current Item Level Decision	Your Score
reported by patients that exceed a pre-		Stakeholder	8(7 to 8)	6(5 to 7)	7(4 to 8)	6(4 to 9)	6(4 to 7)	7(5 to 9)	6(5 to 8)	[1-3] 13.7	38.9	[ <b>7-9</b> ]	INCONCLUSIVE	
defined level of severity) to be clearly communicated to all appropriate trial staff.	Secondary	Delphi R2	8(6 to 9)	6(3 to 9)	5(4 to 7)	7(6 to 7)	6(4 to 7)	7(5 to 9)	7(4 to 8)	15.1	31.2	53.8.	INCONCLUSIVE	

# Section 14 PRO-Specific Consent Information/Confidentiality/Dissemination

Table 14.1 Responses to item 54 to item 56 including overall, summated and individual scores

				INDI		AKEHOLDER GRO	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAP Jusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
	PRO as		Patient						AII	Rating by	% of stakeho	olders	Current Item	Your
Candidate Item	primary or secondary outcome	Survey Group	Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	Stakeholders	Not Important [1-3]	Important [4-6]	Critical [7-9]	Level Decision	Score
		Stakeholder	8(7 to 9)	7(6 to 9)	8(5 to 9)	8(5 to 9)	8(4 to 9)	8(6 to 9)	8(5 to 9)	12.8	18.0	69.4	INCONCLUSIVE	
Item 54 Describe	Primary	Delphi R2	8(7 to 9)	8(7 to 9)	7(4 to 9)	7(6 to 9)	8(5 to 9)	6(4 to 9)	8(5 to 9)	13.7	15.8	70.5	INCLUDE	
informed consent procedure for PRO assessment.		Stakeholder	8(7 to 8)	7(4 to 9)	7(3 to 9)	8(4 to 9)	8(4 to 9)	8(5 to 9)	7(5 to 9)	17.3	25.6	57.1	INCONCLUSIVE	
	Secondary	Delphi R2	8(7 to 9)	8(5 to 9)	6(4 to 9)	7(6 to 9)	7(5 to 9)	5(4 to 7)	7(5 to 9)	14.7	26.3	58.9	INCONCLUSIVE	

				IND		AKEHOLDER GRO	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA Sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	% of stakeho	Critical [7-9]	Current Item Level Decision	Your Score
Item 55  Specify whether PRO forms will	Primary	Stakeholder	9(7 to 9)	8(7 to 9)	8(7 to 9)	8(6 to 9)	8(5 to 9)	9(7 to 9)	8(6 to9)	7.6	19.1	73.3	INCLUDE	
be used to influence therapy or patient management (i.e. will the clinician		Delphi R2	9(8 to 9)	9(7 to 9)	7(6 to 8)	7(6 to 9)	8(5 to 9)	9(7 to 9)	8(7 to 9)	6.2	15.5	78.4	INCLUDE	
use PRO responses to inform the patient's care?).	Secondary	Stakeholder	8(7 to 8)	7(5 to 8)	7(5 to 9)	7(4 to 9)	7(4 to 9)	9(6 to 9)	7(5 to 9)	12.0	31.6	56.4	INCONCLUSIVE	
State the assumptions of PRO analyses.		Delphi R2	8(7 to 9)	8(6 to 9)	6(5 to 7)	6(3 to 9)	7(5 to 8)	9(7 to 9)	7(5 to 9)	9.4	25.0	65.6	INCONCLUSIVE	
Item 56 Include detailed	Primary	Stakeholder	9(7 to 9)	6(3 to 7)	5(3 to 6)	5(3 to 6)	5(4 to 6)	5(4 to 7)	5(4 to 7)	24.6	46.9	28.5	INCONCLUSIVE	
plans for regular feedback to participants via letter/newsletter		Delphi R2	8(7 to 9)	6(4 to 7)	5(1 to 6)	5(2 to 8)	6(4 to 7)	6(4 to 7)	6(4 to 7)	21.6	38.1	40.2	INCONCLUSIVE	
on PRO aspect of study.	Secondary	Stakeholder	8(7 to 8)	5(2 to 6)	5(3 to 6)	4(2 to 6)	4(3 to 6)	5(4 to 6)	5(3 to 6)	36.6	42.0	21.4	INCONCLUSIVE	

				INDI		AKEHOLDER GRO	OUP		OVERALL MEDIAN (IQR)	BAS Rule for Incl	ED ON STAR Jusion of Iten I as 'Critical'	KEHOLDE	DIDATE ITEMS R DATA sensus Meeting: % rated as 'Not	DELPHI R2
Candidate Item	PRO as primary or secondary outcome	Survey Group	Patient Reps	Researchers	Clinicians	Methodologists	Analysts	Reviewers	All Stakeholders	Rating by  Not Important [1-3]	Important   Critical   Coordinate   Critical   Critical			Your Score
		Delphi R2	8(7 to 9)	4(2 to 6)	4(1 to 5)	4(1 to 8)	4(3 to 6)	5(3 to 7)	5(3 to 7)	34.0	36.1	29.9	INCONCLUSIVE	

# **Section 15 Other Trial Documentation**

Table 15.1 Stakeholder Suggestions for items to be include in other trial guidance, training or information materials outside of the trial protocol

Item	Item Description	Guidance/training for trial staff	Information/guidance for study participants	Statistical Analysis	Other trial documentation
		% (n)	(n)	Plan % (n)	% (n)
Item 1	List personnel responsible for PRO components of trial protocol.	62.3% (86)	20.3% (28)	10.1% (14)	5.1% (7)
Item 2	Describe what is currently known about PROs in this area and explain the gaps in literature.	30.4% (42)	26.1% (36)	18.8% (26)	6.5% (9)
Item 3	Provide a rationale for the inclusion of PROs as appropriate to the study population, intervention, context, objectives and setting.	41.3% (57)	28.3% (39)	25.4% (35)	5.1% (7)
Item 4	State the PRO study objective in relation to PRO domain/s, patient population and timeframe.	39.9% (55)	26.1% (36)	37.0% (51)	5.1% (7)
Item 5	State the PRO hypothesis and corresponding null hypothesis and to which outcome(s) the hypothesis relates.	21.7% (30)	8.7% (12)	53.6% (74)	3.6% (5)
Item 6	If PROs will be collected in a subset of the study population or in specific centres, include a description/rationale for the sampling method.	37.7% (52)	10.1% (14)	46.4% (64)	3.6% (5)
Item 7	State the inclusion/exclusion criteria for PRO endpoint(s) (e.g., language/reading requirements).	54.3% (75)	29.0% (40)	25.4% (35)	2.2% (3)
Item 8	Specify if PRO completion is pre- randomisation eligibility requirement.	51.4% (71)	28.3% (39)	30.4% (42)	2.9% (4)
Item 9	Identify the PRO endpoint as the primary, secondary (and if so - whether a key/important secondary), or an exploratory endpoint.	38.4% (53)	15.2% (21)	55.8% (77)	3.6% (5)
Item 10	Describe the PRO constructs used to evaluate the intervention e.g. overall QOL, specific domain, specific symptom.	29.0% (40)	13.0% (18)	43.5% (60)	5.1% (7)
Item 11	Specify the timepoint(s) for PRO analysis (including the principle timepoint of interest) and provide the rationale for these.	50.0% (69)	23.2% (32)	47.1% (65)	5.1% (7)
Item 12	Include PRO assessments in the main protocol schedule of assessments, specifying which PRO measures (PROMs) will be used at each assessment.	53.6% (74)	23.2% (32)	25.4% (35)	2.2% (3)
Item 13	Specify if baseline PRO assessment should be completed before randomisation.	60.1% (83)	22.5% (31)	26.8% (37)	2.9% (4)
Item 14	Specify the targeted time and acceptable time windows for each PRO assessment.	60.9% (84)	23.9% (33)	30.4% (42)	4.3% (6)
Item 15	If PROs are to be completed in the clinic: specify timing of PROM delivery in relation to clinical assessments (e.g. before/whilst/after seeing clinician and/or clinical assessments).	65.2% (90)	28.3% (39)	9.4% (13)	4.3% (6)
tem 16	Justify the timing of PRO assessments. Scheduled PRO assessments should link to research questions, hypotheses, length of recall, disease/treatment natural history, planned analysis and time of comparison must be comparable for both arms.	32.6% (45)	9.4% (13)	23.2% (32)	5.1% (7)
Item 17	If PRO is the primary endpoint, state the required PRO sample size, otherwise discuss the power of the	22.5% (31)	8.0% (11)	60.9% (84)	0.7% (1)

Describe the PROMs including, number of commissions of the members of the property of the pr		PRO analyses.				
Second   S	Item 18	of items/domains, instrument scaling/scoring, reliability, content and construct validity, responsiveness, sensitivity, acceptability, recall period.				
Elem 2   Specify the estimated time to complete access (a)   Specify to estimate the PCM (a)   Specify to	Item 19	Justify choice of PROM(s) by linking specific domains/items to clinical				
Item 2	Item 20	equivalence across modes (i.e., when mixing modes of PRO data collection) and/or of cross cultural validity where different language versions of				
each assessment, and discuss   (75)   (52)   (16)   (4)	Item 21	Outline plans for evaluation of measurement properties, if appropriate (e.g. if not previously validated in the				
plan.   (53)	Item 22	each assessment, and discuss feasibility of assessment for the				
(e.g. pencil and paper, online, etc).   (86)   (66)   (13)   (7)		plan.	(53)	(14)	(33)	(7)
Item 25   Specify where PROM will be completed   62.3%   60.9%   60.9%   61.11   (4)	Item 24					
(e.g. clinic, home, etc.)	Item 25				<u> </u>	
Item 27   Spacify who will administer the PROM   65.2%   40.6%   8.7%   3.8%   (e.g. a physician, nurse, etc)   (90)   (56)   (12)   (5)   (5)   (12)   (5)   (12)   (6)   (12)   (13)   (14)   (15)	•	(e.g. clinic, home, etc).	(86)	(69)	(11)	(4)
Item 28	Item 26	(define conditions under which proxy				
It it is permissible for another person to help the study participant complete the PROM, describe what type and level of assistance is acceptable.    Item 29	Item 27					
Item 30   Include a plan for systematically training and contacting local site personnel to ensure that they understand the content and importance of collecting PRO data. Ideally coordinated by a lead data manager who monitors PRO completion rates in real time and communicates with sites if completion rates are suboptimal.    Item 31   Specify procedures for data collection and monoranger monitors PRO completion rates in real time and communicates with sites if completion rates are suboptimal.    Item 31   Specify procedures for data collection and manager ent methods to minimise missing data. E.g. checking completed PROMs (including who will check forms and how will they deal with missing PROMs or missing items).    Item 32   Include guidance on discussing importance of PROs with patient (82) (32) (4) (6) (32) (4) (6) (32) (4) (6) (32) (4) (6) (32) (4) (6) (32) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	Item 28	If it is permissible for another person to help the study participant complete the PROM, describe what type and level of	63.8%	48.6%	8.0%	5.1%
and contacting local site personnel to ensure that they understand the content and importance of collecting PRO data. Ideally coordinated by a lead data manager who monitors PRO completion rates in real time and communicates with sites if completion rates are suboptimal.  Item 31 Specify procedures for data collection 59.4% 4.3% 15.2% 3.6% and management methods to minimise missing data. E.g. checking completed PROMs (including who will check forms and how will they deal with missing PROMs or missing items).  Item 32 Include guidance on discussing process for PRO assessment at (and beyond) withdrawal for patients who withdraw early from a study or who go 'off-study/'off treatment'.  Item 34 Specify that a named person/position at each centre (and/or centrally) be (81) (24) (11) (3) nominated to take responsibility for administration, collection and checking of PROM - specify whether this is or is not the treating clinician.  Item 35 Specify how an electronic PRO system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity and security.  Item 36 Specify plan to monitor PRO 52.2% 8.0% 8.0% 13.8% 5.0%	Item 29	specify whether the order of administration will be standardised or				
and management methods to minimise missing data. E.g. checking completed PROMs (including who will check forms and how will they deal with missing PROMs or missing items).  Item 32 Include guidance on discussing importance of PROs with patient. (82) (32) (4) (6)  Item 33 Establish process for PRO assessment at (and beyond) withdrawal for patients who withdraw early from a study or who go 'off-study/'off treatment'.  Item 34 Specify that a named person/position at each centre (and/or centrally) be (81) (24) (11) (3) (3) (24) (11) (3) (3) (4) (6) (25) (26) (8) (8) (8) (25) (26) (8) (8) (8) (25) (26) (8) (8) (8) (25) (26) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	Item 30	and contacting local site personnel to ensure that they understand the content and importance of collecting PRO data. Ideally coordinated by a lead data manager who monitors PRO completion rates in real time and communicates with sites if completion rates are				
Include guidance on discussing importance of PROs with patient. (82) (32) (4) (6) (6)     Item 33	Item 31	and management methods to minimise missing data. E.g. checking completed PROMs (including who will check forms and how will they deal with missing				
Item 33   Establish process for PRO assessment at (and beyond) withdrawal for patients who withdraw early from a study or who go 'off-study!'/off treatment'.   Specify that a named person/position at each centre (and/or centrally) be nominated to take responsibility for administration, collection and checking of PROM - specify whether this is or is not the treating clinician.   Specify how an electronic PRO   45.7%   13.8%   11.6%   9.4% system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity and security.   Item 36   Specify plan to monitor PRO   52.2%   8.0%   13.8%   8.0%   8.0%   13.8%   8.0%   13.8%   13	Item 32	Include guidance on discussing				
Specify that a named person/position at each centre (and/or centrally) be nominated to take responsibility for administration, collection and checking of PROM - specify whether this is or is not the treating clinician.   Specify how an electronic PRO system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity and security.   Item 36   Specify plan to monitor PRO   52.2%   8.0%   13.8%   13.8%   8.0%   8.0%   13.8%   13.8%	Item 33	Establish process for PRO assessment at (and beyond) withdrawal for patients who withdraw early from a study or who	55.1%	18.1%	18.8%	5.8%
Item35Specify how an electronic PRO system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity and security.45.7% (63) (19) 	Item 34	Specify that a named person/position at each centre (and/or centrally) be nominated to take responsibility for administration, collection and checking of PROM - specify whether this is or is				
Item 36         Specify plan to monitor PRO         52.2%         8.0%         13.8%         8.0%	Item 35	Specify how an electronic PRO system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity				
	Item 36	Specify plan to monitor PRO				

	time windows.				
em 37	Include an overview of PRO	52.9%	11.6%	17.4%	9.4%
	administration (data collection), and data handling/transmission and storage	(73)	(16)	(24)	(13)
	procedures.	44.007	E 40/	10.00	0 ==:/
Item 38	Ensure plans for administration of	44.9%	5.1%	12.3%	6.5%
	PROM(s) are consistent with each PROM's user manual.	(62)	(7)	(17)	(9)
tem 39	Include an a priori description of all	18.1%	5.1%	62.3%	2.2%
	planned PRO analyses pertaining to the study hypotheses.	(25)	(7)	(86)	(3)
tem 40	State the assumptions of PRO analyses.	18.8% (26)	8.0% (11)	60.9% (84)	0.7% (1)
Item 41	State the anticipated response rate and	17.4%	7.2%	59.4%	1.4%
item 41	implications for the sample size.	(24)	(10)	(82)	(2)
Item 42	Include an a priori estimation of PRO	12.3%	5.8%	57.2%	1.4%
	effect size.	(17)	(8)	(79)	(2)
Item 43	Specify intention-to-treat or per-protocol	16.7%	7.2%	64.5%	0.7%
	PRO analyses.	(23)	(10)	(89)	(1)
Item 44	Include a priori identified summary	12.3%	3.6%	58.0%	2.2%
	statistics (as appropriate).	(17)	(5)	(80)	(3)
Item 45	Specify the minimum PRO response	24.6%	8.0%	51.4%	2.2%
	rate and acceptable degree of timing	(34)	(11)	(71)	(3)
	deviation (i.e acceptable time windows				
	for each PRO assessment timepoint) before the PRO objective is				
	compromised.				
Item 46	Describe methods for scoring	15.9%	4.3%	63.0%	2.9%
	endpoints. Where possible, reference	(22)	(6)	(87)	(4)
	scoring manuals for summated scales	\ <del></del> /	(-/	(/	( · /
	from PROM (domain-specific and/or				
	total) and methods for handling missing				
	items,and methodological papers for				
Itom 47	composite endpoints (e.g. QTWiST).	42.00/	0.00/	00.40/	4 407
Item 47	State statistical significance levels and include plans for multiplicity/controlling	13.8%	3.6%	68.1% (94)	1.4%
	include plans for multiplicity/controlling type 1 error.	(19)	(5)	(94)	(2)
Item 48	Pre-specify sequence of	12.3%	5.1%	60.1%	0.7%
<del>4</del> 0	testing/exploratory analyses to control	(17)	(7)	(83)	(1)
	for multiplicity or pre-specify domains	(,	(' /	(30)	( · /
	(e.g. in a regulatory trial/labelling claim).				
Item 49	Specify the criteria for clinical	17.4%	8.7%	60.9%	2.2%
	significance (e.g. state minimal [clinical]	(24)	(12)	(84)	(3)
	important difference and/or responder				
	definition (size and duration of benefit)).	10.007	F 22/	05.007	·
Item 50	State how missing data will be described.	13.8% (19)	5.8% (8)	65.2% (90)	0.7%
Item 51	Describe method for handling missing	13.8%	5.8%	65.2%	(1) 2.9%
n <del>e</del> m 31	assessments (e.g. approach to	(19)	5.8% (8)	(90)	2.9% (4)
	imputation and sensitivity analyses).	(10)	(0)	(30)	(4)
Item 52	Describe the role of the Data Monitoring	35.5%	10.1%	21.7%	9.4%
02	Committee and Quality Assurance for	(49)	(14)	(30)	(13)
	PROs.				
Item 53	Include an a priori plan for	50.7%	14.5%	13.8%	8.0%
	consistent/standardised management of	(70)	(20)	(19)	(11)
	PRO alerts (symptoms reported by				
	patients that exceed a pre-defined level				
	of severity) to be clearly communicated				
Item 54	to all appropriate trial staff.  Describe informed consent procedure	62.3%	41.3%	8.0%	2.9%
1.CIII 34	for PRO assessment.	62.3% (86)	41.3% (57)	8.0% (11)	2.9% (4)
Item 55	Specify whether PRO forms will be	57.2%	42.0%	10.9%	2.9%
00	used to influence therapy or patient	(79)	(58)	(15)	(4)
	management (i.e. will the clinician use	(. 0)	(00)	(10)	(¬)
	PRO responses to inform the patient's				
	care?).				
Item 56	Include detailed plans for regular	44.2%	48.6%	8.0%	6.5%
	feedback to participants via letter/newsletter on PRO aspect of	(61)	(67)	(11)	(9)

Percentages based on total number of participants (n=138) who completed Stakeholder survey

Table 15.2 Delphi R2 Panel Suggestions for items to be include in other trial guidance, training or information materials outside of the trial protocol

ltem	Item Description	Guidance/training for trial staff	Information/guidance for study participants	Statistical Analysis Plan (SAP)	Other trial documentation (please elaborate in the comment box below)
Item 1	List personnel responsible for PRO components of trial protocol.	72.7% (72)	22.2% (22)	8.1% (8)	3.0% (3)
Item 2	Describe what is currently known about PROs in this area and explain the gaps in literature.	42.4% (42)	26.3% (26)	16.2% (16)	4.0% (4)
Item 3	Provide a rationale for the inclusion of PROs as appropriate to the study population, intervention, context, objectives and setting.	55.6% (55)	32.3% (32)	15.2% (15)	2.0% (2)
Item 4	State the PRO study objective in relation to PRO domain/s, patient population and timeframe.	44.4% (44)	24.2% (24)	34.3% (34)	2.0% (2)
Item 5	State the PRO hypothesis and corresponding null hypothesis and to which outcome(s) the hypothesis relates.	36.4% (36)	6.1% (6)	55.6% (55)	0.0% (0)
Item 6	If PROs will be collected in a subset of the study population or in specific centres, include a description/rationale for the sampling method.	46.5% (46)	5.1% (5)	50.5% (50)	2.0% (2)
Item 7	State the inclusion/exclusion criteria for PRO endpoint(s) (e.g., language/reading requirements).	60.6% (60)	23.2% (23)	26.3% (26)	2.0% (2)
Item 8	Specify if PRO completion is pre- randomisation eligibility requirement.	63.6% (63)	17.2% (17)	33.3% (33)	1.0% (1)
Item 9	Identify the PRO endpoint as the primary, secondary (and if so - whether a key/important secondary), or an exploratory endpoint.	45.5% (45)	16.2% (16)	53.5% (53)	0.0% (0)
Item 10	Describe the PRO constructs used to evaluate the intervention e.g. overall QOL, specific domain, specific symptom.	39.4% (39)	10.1% (10)	38.4% (38)	0.0% (0)
Item 11	Specify the timepoint(s) for PRO analysis (including the principle timepoint of interest) and provide the rationale for these.	51.5% (51)	18.2% (18)	50.5% (50)	0.0% (0)
Item 12	Include PRO assessments in the main protocol schedule of assessments, specifying which PRO measures (PROMs) will be used at each assessment.	53.5% (53)	14.1% (14)	34.3% (34)	2.0% (2)
Item 13	Specify if baseline PRO assessment should be completed before randomisation.	61.6% (61)	15.2% (15)	34.3% (34)	1.0% (1)
Item 14	Specify the targeted time and acceptable time windows for each PRO assessment.	64.6% (64)	18.2% (18)	41.4% (41)	1.0% (1)
Item 15	If PROs are to be completed in the clinic: specify timing of PROM delivery in relation to clinical assessments (e.g. before/whilst/after seeing clinician and/or clinical assessments).	69.7% (69)	34.3% (34)	14.1% (14)	2.0% (2)
Item 16	Justify the timing of PRO assessments. Scheduled PRO assessments should link to research questions, hypotheses, length of recall, disease/treatment natural history, planned analysis and time of comparison must be comparable for both arms.	44.4% (44)	10.1% (10)	27.3% (27)	0.0% (0)
Item 17	If PRO is the primary endpoint, state the required PRO sample size, otherwise discuss the power of the PRO analyses.	26.3% (26)	3.0% (3)	62.6% (62)	0.0% (0)
Item 18	Describe the PROMs including, number of items/domains, instrument scaling/scoring, reliability, content and construct validity, responsiveness, sensitivity, acceptability, recall period. Provide references as	37.4% (37)	6.1% (6)	43.4% (43)	1.0% (1)

	appropriate.				
Item 19	Justify choice of PROM(s) by linking	33.3%	5.1%	27.3%	3.0%
	specific domains/items to clinical justifications and hypotheses.	(33)	(5)	(27)	(3)
Item 20	Provide evidence of measurement equivalence across modes (i.e., when mixing modes of PRO data collection) and/or of cross cultural validity where different language versions of	27.3% (27)	2.0% (2)	34.3% (34)	1.0% (1)
	questionnaires are used.				
Item 21	Outline plans for evaluation of measurement properties, if appropriate (e.g. if not previously validated in the population of interest).	23.2% (23)	3.0% (3)	47.5% (47)	2.0% (2)
Item 22	Specify the estimated time to complete each assessment, and discuss feasibility of assessment for the population.	62.6% (62)	40.4% (40)	7.1% (7)	2.0% (2)
Item 23	Include a pre-specified data collection plan.	47.5% (47)	6.1% (6)	35.4% (35)	3.0% (3)
Item 24	Specify how PROM will be completed (e.g. pencil and paper, online, etc).	71.7% (71)	56.6% (56)	14.1% (14)	2.0% (2)
Item 25	Specify where PROM will be completed (e.g. clinic, home, etc).	72.7% (72)	59.6% (59)	9.1% (9)	3.0% (3)
Item 26	Where applicable, justify use of proxies (define conditions under which proxy assessment is permissible).	58.6% (58)	38.4% (38)	17.2% (17)	2.0% (2)
Item 27	Specify who will administer the PROM (e.g. a physician, nurse, etc).	74.7% (74)	39.4% (39)	8.1% (8)	2.0% (2)
Item 28	If it is permissible for another person to help the study participant complete the PROM, describe what type and level of assistance is acceptable.	70.7% (70)	52.5% (52)	10.1% (10)	4.0% (4)
Item 29	If more than one PROM will be used, specify whether the order of administration will be standardised or randomised.	58.6% (58)	12.1% (12)	32.3% (32)	1.0% (1)
Item 30	Include a plan for systematically training and contacting local site personnel to ensure that they understand the content and importance of collecting PRO data. Ideally coordinated by a lead data manager who monitors PRO completion rates in real time and communicates with sites if completion rates are suboptimal.	71.7% (71)	4.07% (4)	7.1% (7)	4.0% (4)
Item 31	Specify procedures for data collection and management methods to minimise missing data. E.g. checking completed PROMs (including who will check forms and how will they deal with missing PROMs or missing items).	70.7% (70)	2.0% (2)	25.3% (25)	4.0% (4)
Item 32	Include guidance on discussing importance of PROs with patient.	71.7% (71)	25.3% (25)	4.0% (4)	2.0% (2)
Item 33	Establish process for PRO assessment at (and beyond) withdrawal for patients who withdraw early from a study or who go 'offstudy'/'off treatment'.	65.7% (65)	24.2% (24)	23.2% (23)	3.0%
Item 34	Specify that a named person/position at each centre (and/or centrally) be nominated to take responsibility for administration, collection and checking of PROM - specify whether this is or is not the treating clinician.	68.7% (68)	15.2% (15)	7.1% (7)	3.0% (3)
Item 35	Specify how an electronic PRO system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity and security.	49.5% (49)	14.1% (14)	17.2% (17)	5.1% (5)
Item 36	Specify plan to monitor PRO compliance, including adherence to time windows.	54.5% (54)	10.1% (10)	20.2% (20)	4.0% (4)
Item 37	Include an overview of PRO administration (data collection), and data handling/transmission and storage procedures.	54.5% (54)	10.1% (10)	17.2% (17)	4.0% (4)
Item 38	Ensure plans for administration of PROM(s) are consistent with each PROM's user manual.	45.5% (45)	2.0% (2)	9.1% (9)	1.0% (1)
Item 39	Include an a priori description of all planned PRO analyses pertaining to the study hypotheses.	21.2% (21)	2.0% (2)	65.7% (65)	0.0% (0)

Item 40	State the assumptions of PRO analyses.	18.2% (18)	3.0% (3)	66.7% (66)	0.0% (0)
Item 41	State the anticipated response rate and	17.2%	3.0%	63.6%	0.0%
Item 42	implications for the sample size.  Include an a priori estimation of PRO effect	(17) 13.1%	(3) 3.0%	(63) 64.6%	(0) 0.0%
Item 43	size.  Specify intention-to-treat or per-protocol PRO analyses.	(13) 18.2% (18)	(3) 3.0% (3)	(64) 65.7% (65)	(0) 0.0% (0)
Item 44	Include a priori identified summary statistics (as appropriate).	17.2% (17)	3.0%	65.7% (65)	0.0% (0)
Item 45	Specify the minimum PRO response rate and acceptable degree of timing deviation (i.e acceptable time windows for each PRO assessment timepoint) before the PRO objective is compromised.	24.2% (24)	4.0% (4)	58.6% (58)	0.0%
Item 46	Describe methods for scoring endpoints. Where possible, reference scoring manuals for summated scales from PROM (domain-specific and/or total) and methods for handling missing items,and methodological papers for composite endpoints (e.g. QTWiST).	22.2% (22)	2.0% (2)	67.7% (67)	0.0% (0)
Item 47	State statistical significance levels and include plans for multiplicity/controlling type 1 error.	12.1% (12)	2.0% (2)	71.7% (71)	0.0% (0)
Item 48	Pre-specify sequence of testing/exploratory analyses to control for multiplicity or prespecify domains (e.g. in a regulatory trial/labelling claim).	15.2% (15)	3.0% (3)	64.6% (64)	0.0% (0)
Item 49	Specify the criteria for clinical significance (e.g. state minimal [clinical] important difference and/or responder definition (size and duration of benefit)).	16.2% (16)	2.0% (2)	67.7% (67)	1.0% (1)
Item 50	State how missing data will be described.	16.2% (16)	2.0% (2)	66.7% (66)	0.0% (0)
Item 51	Describe method for handling missing assessments (e.g. approach to imputation and sensitivity analyses).	17.2% (17)	2.0% (2)	68.7% (68)	0.0% (0)
Item 52	Describe the role of the Data Monitoring Committee and Quality Assurance for PROs.	36.4% (36)	5.1% (5)	27.3% (27)	4.0% (4)
Item 53	Include an a priori plan for consistent/standardised management of PRO alerts (symptoms reported by patients that exceed a pre-defined level of severity) to be clearly communicated to all appropriate trial staff.	60.6% (60)	17.2% (17)	18.2% (18)	3.0% (3)
Item 54	Describe informed consent procedure for PRO assessment.	67.7% (67)	46.5% (46)	2.0% (2)	0.0% (0)
Item 55	Specify whether PRO forms will be used to influence therapy or patient management (i.e. will the clinician use PRO responses to inform the patient's care?).	64.6% (64)	51.5% (51)	8.1% (8)	4.0% (4)
Item 56	Include detailed plans for regular feedback to participants via letter/newsletter on PRO aspect of study.	55.6% (55)	54.5% (54)	3.0% (3)	6.1% (6)

Percentages based on total number of participants (n=99) who completed the Delphi Round 2 Survey

## Appendix 1 Stakeholder and Delphi R1/R2 Panel Additional Comments

Candidate item
Item 1
List personnel
responsible for PRO
components of trial
protocol.

### Stakeholder comments

- If a very large and complex collaboration a QoL lead for a QoL subgroup of the TMG is helpful
- "... responsible for ..." is not clear to me. Is the item about people doing data collection? I would want to know about arrangements for blinding, whether primary or secondary, since a systematic review cannot assess RoB otherwise. But I don't care about who the statistician is ...
- For most studies, even if a PRO is a secondary outcome I would rate it as critical. There are, though, a few highly focussed studies which will not directly affect patient factors and we need to recognise these to avoid PROs becoming a barrier to otherwise good research.
- I answered this question assuming you meant triallists. If you meant who should complete the PRO, then I would have marked it 9
- Usually, the PRO person is in an advisory function to the clinical team who write the protocol not really necessary to be specifically listed in the protocol.
- Providing a checklist and a list of personnel responsible for PRO components of a trial protocol should enable sites to realize the importance of PRO data just like any other data collected in clinical trials. Ideally these personnel should attend the Investigator Meeting to discuss the rational and importance of the inclusion of PRO in the trial.
- I'm not sure what you mean by the responsibilities and by PRO component (choice of outcome? providing instruction?). But if it is about number of people administering the interviews in case of an interview version of a PROM, I would like to have more information.
- PRO is important. It could be the secondary outcomes, but it must be included in a trial protocol.
- Please rephrase the question been asked here to clarify the criterion being judged.
- Where a patient reported outcome is the primary outcome of a trial it is critical to plan who will instruct the patient on the impact as part of the informed consent process and the value of the data being
- This is a common source of confusion and needs to be clear to the clinical trial team. With a clear indicator of who is accountable, the trial is far more likely to run smoothly. Without this, various team members can feel as if this "isn't my job" because it is a PRO.
- This is critical when a PRO is a secondary outcome because it may not be as intuitive to the study team who often have limited experience with PRO measures. Using the example of how consenting investigator have to be identified in the protocol may be a nice model to consider for PRO measure collection. Accountability is critical to avoid missed time points.
- Does this mean who collects the PRO? I think it would be different if administered as an interview, but so often the personnel responsible is just handing over the forms or an iPad or something like that
- If you have qualified people on your team, people that understand measurement, I think the checklist isn't needed or useful. If you have people not trained in assessment, then it could help maybe.

### **Delphi Panel Comments**

- Reuse of trial data for meta analyses is a major argument
- to me it is more important that PROs included than who included them
- Definition of Primary and Secondary would have been useful. Secondary would include input from clinician
- For USFDA, primary and secondary outcomes that are part of the testing hierarchy can be in labelling, so our views of evidence information are similar.
- As potential REC reviewer the WHO is perhaps less important than reassurance that SOMEONE is committed to following through and knows what they are doing. If included in the protocol changes of staff would require amendments
- I find it important that someone responsible is listed, but I consider the listing of a Company or Organisation sufficient
- Correct recording of PRO requires training/competence.
- The role of personnel must be clarified (e.g. blinded or not?).
- In general, I don't see any difference related to the primary vs. secondary "status" of the PRO. An outcome is an outcome and it influences the trial design and statistics. If irrelevant, don't include it in the protocol.
- Somewhat vague is this asking who is responsible for writing the PRO section in the protocol, or who will be administering/collecting PRO data?
- Need to know who to refer questions to.
   Particularly if trial is a primary outcome.
- I think they are both important to publish so people can read and make their own judgements on a personal level
- Not sure if you mean "name names," which I think would result in many unnecessary protocol amendments, or "name roles" such as "trials nurse" or "clinic nurse." The latter would be a 6 for me, the former a 1. It is important that the people who complete this survey know how protocol review is done and what triggers amendments that need to be approved by IRB.
- Skill re PRO data collection and analysis is different to other clinical/research skills for cancer trials. Personnel should include patient rep.
- I don't think it's important to name the personnel as part of the protocol checklist.
- Not sure if this means one person (e.g. PRO trial lead) or all the key personnel administratively responsible. My response assumes the former.
- The primary question "how important do you feel it is for .... To be included in a PRO protocol checklist" implies these items are to be considered for the team/personnel implementing the PRO. There are other parties (e.g., funders, academic centres, IRBs, study population, etc.) that have an interest in such design protocol checklists. Thus your assumption should be more clearly stated "for whom" and" to what". I will

		<ul> <li>implementers.</li> <li>If primary outcome, then the protocol writers are responsible; if secondary there may be shared responsibility.</li> <li>I think it is important to identify an individual who takes responsibility for the scientific and methodological PRO details in the protocol the PRO go to person if there are any queries about the protocol (e.g. ethics boards) or during conduct (e.g. queries/clarifications from trial sites). In my experience, typically this would be a trial investigator and member of the trial management committee. Holds whether PRO primary or secondary.</li> <li>Not 100% clear what is meant by "responsible for".</li> <li>I haven't previously given much thought (well none) to whether it matters if the PRO is primary or secondary outcome. I can see a case that it should be same for both but my answers will may a bit.</li> <li>To have a PRO as a secondary outcome is very important as well, I believe it should be in the checklist even if it's an exploratory endpoint which might often be the case.</li> <li>Listing the personnel is very important to highlight that you need people with PRO skill to be responsible.</li> </ul>
Item 2 Describe what is currently known about PROs in this area and explain the gaps in literature.	<ul> <li>Can reference development work for a trial, would be needed if the study is developing a new PRO</li> <li>I would expect a protocol to cite the relevant literature about this information and to summarise it but not to provide details.</li> <li>you need to be able to justify use of the particular instrument that is used, knowing gaps is part of that</li> <li>I do think that providing what is known and explaining gaps in the literature would be helpful, however this has to be pragmatic. The checklist should be a checklist and not a massive document that will only put people off from reading it.</li> <li>This is important to do this work to develop the strategy and for basic background, but not necessarily in a protocol.</li> <li>Very important information when assessing a protocol.</li> <li>Same</li> </ul>	<ul> <li>Has to be critical as why bother with the project unless there is a known baseline</li> <li>Justifies time taken by participants to complete the questionnaires. Cogent reason needs to be provided</li> <li>The discussion of the patient perspective is critical. But the jargon/specialists discussion is not needed here.</li> <li>This is interesting (I mean: what it is known about the specific PROs adopted), but as a comment of both introduction and discussion. Not critical for the research results.</li> <li>If it is primary outcome needs to some background explanations.</li> <li>Brief description same as for other endpoints</li> <li>This will help build understanding across all research teams of the overall position/shortcomings re PROs and the need to measure PRO in consistent fashion so that everyone is on the same page.</li> <li>In primary outcome I think this information is useful to patients and researchers as it provides context. Not so important in secondary outcome.</li> <li>Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome, at least for Marketing Authorization or gaining a claim in SPC</li> <li>This seems like a very general listing. It's not always necessary to conduct an exhaustive review of all work in PROs in a particular area. You want to be sure that you have the best tool for the job but an extensive review adds costs and time and may not actually help. Especially for a therapy area where measurement is well established and the field extensive. It may be sufficient to review recently published data on PRO instruments to ensure that your selection of instrument is based on the most up-to-date information.</li> </ul>

**Delphi Panel Comments** 

assume you mean POR research implementers.

Candidate Item

Stakeholder comments

Candidate Item	Stakeholder comments	Delphi Panel Comments
Item 3	Should be a given     You need to be able to instifu use of the portioner.	This is a fundamental step in making a sound scientific case for collecting PRC data, as this will consume considerable trial resources and patient effort. Holds whether PRO primary or secondary. This would go into the PRO evidence dossier for submission to my agency for review. Not necessarily in the clinical triprotocol. It is always valuable to have this information, but it is critical to ensure all information needed to properly implement the protocol and protect the wellbeing of study participants is clearly described and that the effort of be comprehensive in describing backgrour information does not interfere with ensuring the protocol procedures are properly implemented.  because many people in the medical community still have mixed or even
Provide a rationale for the inclusion of PROs as appropriate to the study population, intervention, context, objectives and setting.	<ul> <li>You need to be able to justify use of the particular instrument that is used</li> <li>As above, I do believe this is important; however it should be concise and not overly long. Providing the rational is very important.</li> <li>It is difficult to score the secondary outcome question as this is dependent on the phase of the trial. In the phase 2 setting it would be a 4 or 5. In a phase 3 setting the score would be 5 or 6.</li> <li>Even as a secondary outcome, PROs may be critical part of benefit risk evaluation of an application for marketing authorization of a medicine.</li> <li>These questions are horrible.</li> </ul>	community still have mixed or even indifferent feelings re PROs I think this would be helpful  Surely this is another way of asking the previous question a robust justification required  Justification absolutely needed from bot a scientific and an ethical perspectives  I would consider it more important to include a rationale if no PROs are included in the study  The outcome is a determinant of the tria design and statistics. The very reason f the study (the research question) must be clear a priori.  as above  Same point as above, if you have to provide rationale then it makes you look at the other literature and show how you approach compares  Helpful for primary outcome but not necessary for secondary  Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome at least for Marketing Authorization or gaining a claim in SPC  PROs as secondary endpoints consuminust as much trial resources and patient efforts as if PROs primary endpoint, so justification is just as important, perhaps slightly less critical.  This would go into the PRO evidence dossier for submission to the regulatory agency for review. Not necessarily in the clinical trial protocol.  A difficult statement to unpick.  Is it the rationale for PROs in general or for the specific PROs chosen, or both?  Don't know how to answer this!  This is very important to not just use what have been used before off the shelves and could e.g. be supported by conceptual model.  Study participants should not be expected to complete PRO assessment that are not well considered, justified for their condition and the study.  This is key, without a scientifically robus and relevant objective(s) with clearly defined rationale of the key parameters to be studied, the subsequent methodology and interpretation will be potentially flawed and it will become challenging to draw conclusions
Item 4 State the PRO study objective in relation to	Overlaps with previous item 3 need to be careful not to overload protocol with too much information	When QOL is a secondary outcome (or even primary) it may be exploratory with regard to domains whilst I think a QOL

# Candidate Item PRO domain/s, patient population and timeframe.

### Stakeholder comments

- In context
- Not clear what this statement means multiple interpretations possible.
- I am assuming this is to do with defining the "O" if the PICO research question. This is critical because a reader can't assess selective reporting the reported results otherwise.
- The endpoint model and conceptual framework are essential components of any clinical trial development program.
- Again, this is critically important in the formulation of hypotheses to be tested. Having these clear objectives will enable sponsors, ethics committees and anyone involved in the development of protocols to have a greater understanding of the value of PRO data.
- Is this your conceptual model (target population, construct of interest)? Unclear wording!
- Too much detail may not be applicable for all study designs, especially when PROs are measured as a secondary outcome.

### **Delphi Panel Comments**

objective is essential, it may be difficult to satisfy the criterion as currently worded in some cases.

- As above
- Consistently with 3
- Importance is equivalent to importance of stating the objective in relation to domains/populations/timeframes for any outcome in the study.
- See above. The outcome is a determinant of the trial design and statistics. The very reason for the study (the research question) must be clear a priori.
- Already captured in main SPIRIT checklist
- as above
- If PRO study objective not explained fully then it appears to be less important/of lower status to other outcome e.g. survival. When there should be parity.
- I think this is critical to primary outcome and important and helpful for secondary outcome
- Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome, at least for Marketing Authorization or gaining a claim in SPC
- Also rather complex. I see timeframe as part of the definition of outcome.
- Study objectives should be stated always of course. If PRO is a primary outcome then I presume the objective will relate to possible influence of intervention on that PRO. Is a PRO study objective different from a study objective therefore?
- Sorry I'm not sure how to answer this one either.
- I don't understand this item my experience is that the PROs in RCTs in Pharma are part of the main study so I'm not sure what is meant by the PRO study objective.
- Clear hypotheses for primary or secondary PRO endpoints should specify domains, population and time point for assessment of the endpoint.

Item 5
State the PRO
hypothesis and
corresponding null
hypothesis and to which
outcome(s) the
hypothesis relates.

- I'm not clear why a specific null hypothesis is needed, if the general research question and study objectives contain an adequate formulation of the primary and secondary outcomes and how they will be used to assess effectiveness or efficacy. I think his is too rigid and will contribute to the ever longer protocols we see, of which readers and reviewers are able to absorb less and less.
- Stating the Null Hypothesis is not important.
- as above
- If the PRO is the primary endpoint then there must be both a clinically meaningful hypothesis as well as an expected difference to either a standard of care or a comparator being measured. Only in the development of a PRO or if a PRO is part of an exploratory outcome would this answer be not critical. If it is not important then the investigator team should question whether the inclusion of the PRO in a trial is not superfluous and a waste of the patient's time.
- Null hypothesis is not necessary if the hypothesis is mentioned.
  - With secondary outcomes, there are not always hypotheses possible.
- There is often more than one secondary outcome in a biomedical study and each does not have a specific study objective or hypothesis. If the PRO is a secondary outcome that is identified as a secondary endpoint, then more context is required (important but not critical 6). But if a PRO is a

- As opposed to objectives (which I think are essential), hypotheses are important but not critical
- PROMs might be used to gather exploratory data, in which case there may not be a hypothesis attached to them.
- I'm likely not being too helpful here but often the 2ndary outcomes are more patient related and therefore of strong interest to patients
- Cannot see why this is necessary at the moment
- Not sure there will always be a specific relevant null hypothesis
- If adequate background information is provided and research objectives stated it is not necessary to explicitly formulate the hypotheses.
- This is likely to preoccupy statisticians I am not convinced
- Same
- For all of these questions, rather than primary and secondary outcomes, I think the real discrimination here is between statistically tested and exploratory outcomes
- I would rather see the alternative hypothesis than the null hypothesis as it is more informative.

### This is a general requisite for endpoints, the depth of detail in the protocol may experimental research. PRO based not as critical (not important). This applies to many research does not represent an of the questions in this survey. Might there be value exception. (and more clarity) if "when a PRO is a secondary Already captured in main SPIRIT outcome" is divided into "when it's a key secondary checklist endpoint" opposed to "when it's an exploratory Seems more relevant for primary endpoint"? outcomes However, often it is also relevant to allow for analysis of secondary PRO endpoints and more broad descriptive or exploratory analysis of PRO items or scales that are par tot a standard instrument but in the specific trial are not selected to be a primary endpoint. Certainly stating the hypothesis is critical (particularly for primary endpoints) but stating the null hypothesis? That's what we do as students in stats 101; don't see that for other endpoints in the protocols I read. The null hypothesis is (usually) implied by the motivated hypothesis. if there is a hypothesis it is crucial to state it but the PRO might be purely descriptive in which case there may not be a hypothesis Ensures that the data is analysed correctly and, if hypothesis is proved, adds weight to the conclusions Critical for primary outcome... useful for secondary... I am not sure about the distinction between issues 345. Do 345 go from general objectives to more specific hypothesis? Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome, at least for Marketing Authorization or gaining a claim in SPC In CONSORT group we have often debated the difference between objectives, aims, and hypotheses, without a satisfactory resolution. So I'm unsure how this question differs from the preceding one. I wouldn't refer to null hypothesis. Indeed I don't see an obvious need to request different information for PROs than for outcomes in general, as in main CONSORT. Yes very important and great to link with potential responder definitions. The primary endpoints require prespecification of associated hypotheses and study objectives whether PRO or otherwise. If a PRO is measuring a key secondary outcome, thus should also be linked to hypotheses and considered in determining sample size required to reject the null hypotheses Item 6 Not appropriate for primary outcome not recommended If PROs will be collected Should always be included to me just makes sense to explain why in a subset of the study you would do this Again, stating it like this increases the likely length population or in specific of the protocol; it ought to be possible to incorporate Sampling must be robust centres, include a a clear idea of the subgroup for whom pros will be This is not realistic when it is the primary description/rationale for collected in the objectives, without a formal extra end point of the trial the sampling method. I don't see how this applies to Primary Necessary to interpret the applicability of the result Outcome? for the PRO/subset to the wider trial cohort. This information is critical for Unlikely then that the PRO will be a primary interpretation of findings. endpoint if only collected in specific centres/subset See above. This is a general requisite for of study population research. PRO cannot be a second-class It's essential to make sure the sample matches the research PRO methods needs to be clear in both cases PRO subgroup analyses are currently flawed Also important to be clear that this

because it is rarely mentioned in protocols and

considered after subgroups should be defined at the

**Delphi Panel Comments** 

**Candidate Item** 

Stakeholder comments

secondary outcomes that is 'in a list' of exploratory

approach does not introduce bias.

Why PRO should ever only be done on a

### **Candidate Item** Stakeholder comments **Delphi Panel Comments** earliest stage of protocol development and included subset? To maximise PRO response and in the statistical analyses plan. robustness, need whole study population. PROs should be PROMs? Sampling method includes sample size calculation (for entire study Clear description is absolutely necessary, but rationale is often obvious population), inclusion criteria, selection method etc. from the context (e.g., due to sample size This is critical in order to evaluate the risk of bias. or power considerations) so doesn't need If a primary outcome is not collected on the full to be explicitly stated. study population, then that definitely needs to be Very important to include this in primary explained also true, but to a lesser extent for outcome... not sure about secondary but significant secondary outcomes. feel it would be useful... A clear and unambiguous description likely more important than a clear rationale When a PRO is a primary outcome: Not applicable Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome, at least for Marketing Authorization or gaining a claim in SPC Possibility of selection bias can be a critical flaw, so this item is critical, regardless of whether PRO primary or secondary Method might imply something like a 20% random sample, but one might also decide to do this in only some centres, which is still a subset. The latter isn't really what I think of as a "method". Yes, need description of course. Rationale is something else would be nice to know why, also linked to whether the subsample is large enough to provide useful results. This situation is not logical for a primary endpoint. I cannot envision a study where the primary outcome does not apply to all participants. Item 7 Should be included when considering the overall This may be a general requirement. State the trial inclusion and exclusion criteria cannot really be this is important as I assume it will then inclusion/exclusion separate unless for a specific (non representative) let the researchers assess from an equity criteria for PRO sub study. standpoint endpoint(s) (e.g., I think it is unwise to have different Patients are not always white middle language/reading inclusions/exclusions for the patients on whom class especially but not exclusively in the requirements). outcomes will be measured, in contrast to the Midlands patients who will be excluded from the trial itself. only if they differ from general eligibility If the primary outcome, then I would expect this to requirements be described in when defining the trial populations. This is important to state overtly to Depends on the availability of an interviewer ensure confidence in results. This administered version requirement should be equivalent in I remember having a discussion with an oncologist importance to any language/reading level sensitive information presented to the about this. A PRO was the secondary endpoint in a breast cancer study and I was asked at an patient, including informed consent Investigator meeting if a participant was unable to materials. Alternate methods for data read/write would that exclude them from the study? I collection, e.g., staff presenting think we have to be sensible about these things and information or items orally to in exceptional cases allow patients to participate if accommodate literacy challenges, must they cannot complete a PRO by themselves. I also be stated. suggested that as long as it was noted that the PRO See above. These are general was completed in an interview format that would be

I would expect these to be the same as for the overall trial, if they are \*not\* for some reason, than

the rationale and special criterial need to be clear.

This is critical in order to evaluate the risk of bias.

- See above. These are general requirement for research endpoints, no matter whether biomedical or psycho/behavioural
   as above
  - Robustness of conclusions could be undermined if study excludes disadvantaged groups
  - Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome, at least for Marketing Authorization or gaining a claim in SPC
  - Surely inclusion is defined implicitly by eligibility for the trial plus the info in previous item.
  - In the stated example, one would then exclude those with inadequate skills.

Candidate Item	Stakeholder comments	Delphi Panel Comments
		<ul> <li>These terms also caused problems so we adopted eligibility rather than inclusion and exclusion in main checklist.</li> </ul>
Item 8 Specify if PRO completion is a prerandomisation eligibility requirement.	<ul> <li>As above</li> <li>Is captured in eligibility criteria (SPIRIT) anyways</li> <li>I feel I am answering the question of whether preRx PRO completion should be a requirement, rather than whether this should be SPECIFIED.</li> <li>Depends on the SoA and frequency of completion, e.g., daily diary vs. monthly assessment</li> <li>a must because it may mean a larger sample size and you need to account for more missing data if you don't address this issue</li> <li>As above we need to be sensible about PRO data completion if it is not captured then the risk to reliability and robustness of results is a definite worry.</li> <li>? unclear question</li> <li>I believe that the PRO completion (irrespective of whether the PRO is a primary or secondary outcome) should be used in prerandomization as a gatekeeper with respect to assess whether the patient adequately comprehends the PRO. The investigator team should be concerned with respect to having chosen a PRO with a concept of interest if a patient at the early stages of the trial cannot complete the PRO.</li> <li>In order to evaluate the external validity of the study.</li> <li>Rating would be higher if a specific score were an eligibility requirement, not just whether it was completed.</li> </ul>	<ul> <li>I would think it would have to be if you didn't want bias and again, this would clarify re equity (or help to)</li> <li>Not sure I completely understand the point. Are you saying patients have to be willing to complete PROs to be randomized or that patients cannot be randomized until they have completed the PRO? I could support the former, not the latter.</li> <li>I would be concerned here that people are not excluded from participation because they are unable or unwilling to complete PRO questionnaires. I realise that this is not quite what you are asking but it may be an implication of how such a requirement becomes interpreted. This is potentially coercive</li> <li>This should hold true whether the assessment is via patientreport or via other information capture.</li> <li>Eligibility requirements must be always specified. PRO are not an exception</li> <li>All aspects of adherence to followup are an eligibility requirement</li> <li>as above</li> <li>I think that PRO completion prerandomisation should be an eligibility requirement for all such studies and this should not be an "if" but rather trial designers should be told: "List PRO completion pre-randomisation as an eligibility criterion."</li> <li>Not sure I understand the question.</li> <li>If a patient has to do a PRO to be eligible for a study would this be ethical?</li> <li>Rather baseline (pre-treatment) than prerandomisation.</li> <li>This is a good strategy to reduce missing data at baseline critical when PRO is primary outcome and good practice wher PRO is secondary.</li> <li>In principle this info is covered by existing item.</li> </ul>
Item 9 Identify the PRO endpoint as the primary, secondary (and if so whether a key/important secondary), or an exploratory endpoint.	<ul> <li>Only use a PRO if it meets the objectives of the study, PRO outcomes may be collected and then not analysed which is potentially unethical and a waste of resources. Also need to avoid multiple testing/fishing exercises.</li> <li>I don't agree that there should be grades of secondary outcomes! This imposes a lot of extra information demands on PRO protocols that, to my knowledge are not part of non PRO trials.</li> <li>This is part of any guidance on protocol writing. The question is more about the distinction btw secondary and exploratory endpoints based on allocation of alpha (type I error control)</li> <li>Question does not make sense if we are asked to rate PRO as a primary or secondary outcome</li> <li>this is SOP for a protocol</li> <li>From a regulatory perspective this is crucial. If this is not mentioned in the protocol then it will not be likely to even consider a label claim. Also for the analyses it will be critically important.</li> <li>This is a confusing question. Primary outcome = primary endpoint!?</li> <li>This is often omitted and causes confusion for study</li> </ul>	<ul> <li>For secondary outcomes I think this is particularly important. It should be stated up front the role the PRO plays as a secondary outcome. Based on this, I might alter my responses to Q18 as if exploratory, I may not feel that indicating the details of the PRO as a secondary endpoint as critical (although I would still find them very important)</li> <li>Assumes that secondary is after primary in time frame</li> <li>speaks to justification</li> <li>Again, I don't see any difference with respect to general requirements of endpoint definitions in clinical trials.</li> <li>Already captured in main SPIRIT checklist</li> <li>as above</li> <li>Might need further clarifying language for this one about whether we are talking about within the PRO endpoints only, or within the larger hierarchy including other clinical trial endpoints. When PROs are a</li> </ul>

objectives and the proposed sample size, as well as inform the statistical analysis plan.

managers when trying to determine the level of linguistic validation required for the study. This is critical, in order understand the study

clinical trial endpoints. When PROs are a

separate sub study, I often specify primary, secondary, and exploratory endpoints within the PROs only. Also,

this is only ONE way to handle multiplicity. It is possible to include an alternate methodology which would not require specification of a hierarchy of

Candidate Item	Stakeholder comments	Delphi Panel Comments
		endpoints.
		Really important in both to identify this info
		Not clear how to deal with this when
		some protocols include 2 or 3 "primary"
		outcomes This is linked to 245
		<ul><li>This is linked to 345.</li><li>no-brainer</li></ul>
		This is important for industry/product
Item 10		development trials, but probably less important for other trials, e.g., CER.
Describe the PRO constructs used to evaluate the intervention	<ul> <li>See comments for 9</li> <li>If you are demanding reporting of underlying constructs, you re also demanding that a theory and full validation of the PRO exists and is described.</li> </ul>	<ul> <li>just so everyone is on the same page</li> <li>Yes but don't close eyes to unexpected findings</li> <li>This question is ambiguous does it mean</li> </ul>
e.g. overall QOL, specific domain, specific symptom.	Would it not be simpler to reference the published work which supports validity of the PRO, rather than include a lengthy description?	
	Would advocate that the domains be described (Alcohol use) but not the specific questionnaire	use? IF the first for primary (score = 5), for secondary (score = 3). If the second, then for primary (score = 9) and
	(AUDIT vs. CAGE). This would allow the protocol team to explore which specific questionnaires to use	secondary (score = 9) because these are required for hypotheses and objective
	without having to modify the protocol if different questionnaires are selected than originally envisioned.	<ul> <li>statements.</li> <li>Measurement is meaningless if the construct being measured is not clearly</li> </ul>
	<ul> <li>most clinical teams won't know what that means but it also explains why so many PRO analyses are</li> </ul>	identified in advance. Constructs assessed via patient report are
	done poorly/wrong and results are ambiguous therefore important in an effort to fix the underlying problem	particularly vulnerable to messiness of conceptualization, but this requirement should apply to all measures in a trial.
	<ul> <li>Although describing constructs in the protocol is important I do think that there is a risk of the</li> </ul>	<ul> <li>Important but not critical. The "meaning" of the PRO (i.e. which is the latent</li> </ul>
	<ul> <li>checklist being too long and folk will not read it!</li> <li>Always!!!</li> </ul>	variable they are supposed to represent/reflect) may be a matter of interpretation (it is an inference). The
	<ul> <li>From own experience in the field I know that the constructs to be measured are most times insufficiently described. E.g. if the construct QoL is</li> </ul>	reader is free to disagree with the Author. Also, from the reader's perspective, the
	measured, authors often only state the used the SF36 and cite the inaugoratory article. However,	PRO may be self-explaining.  • Already captured in main SPIRIT
	critical reflection on the definition used in the inaugoratory article is lacking but is maybe not fitting the PRO constructs as defined by the authors which	
	use the SF36 for their research question. We have highlighted this issue in a paper which has	<ul> <li>Readers of any published paper with PRO data need to be able to look further</li> </ul>
	been recently published: Lange, T., Rataj, E., Kopkow, C., Lützner, J., Günther, K.P., & Schmitt, J. Outcome Assessment in Total Knee Arthroplasty: A	<ul> <li>into the data so need to understand the constructs</li> <li>not clear how this differs from a clear</li> </ul>
	Systematic Review and Critical Appraisal. The Journal of Arthroplasty.	hypothesis specifying domains  A description does not seem necessary.
	<ul> <li>doi:http://dx.doi.org/10.1016/j.arth.2016.09.014</li> <li>I believe this is not important if the PRO is validated at the item/symptom level and being used in the</li> </ul>	Identification and justification of specific domains should already be covered by 345.
	appropriate population. If only a part is being used for hypothesis testing of an instrument modification	Process of PRO implementation as secondary outcome should have about
	<ul> <li>in a phase 2 setting this is more important.</li> <li>If exploratory, this could be done in the SAP instead of the protocol.</li> </ul>	the same rigor as for a primary outcome, at least for Marketing Authorization or
	of the protocol.	<ul> <li>gaining a claim in SPC</li> <li>If a PRO is a secondary outcome, the specific domains of interest for inclusion</li> </ul>
		as secondary outcomes should be listed. Depending upon the hypothesis, some
		domains may be included as exploratory endpoints only. It may also be desirable to list specific domains higher in the
		hierarchy than others,  This is a major trap if 'HRQoL' only is
		specified, as it is so vague, rarely explicitly defined, and multidimensional.  If secondary, only 'not important' if
		<ul><li>exploratory.</li><li>Need enough info for same method to be</li></ul>
		<ul><li>implemented by others.</li><li>very important good to do e.g. using a conceptual framework</li></ul>
		Assumes PRO secondary is a key outcome
Item 11 Specify the time point(s)	<ul> <li>The PICOT statement usually represents the T as timing. Isn't this already assumed? Or is this PRO</li> </ul>	I think it's critical to state the time point, and important but not critical to state the

### Stakeholder comments **Delphi Panel Comments Candidate Item** for PRO analysis SPIRIT guideline incorporating the existing general rationale for the time point. (including the principle SPIRIT guideline? Speaks to justification and ensures time point of interest) Am confused. These questions are just separating consistency across sites assuming that components that have already been asked about. and provide the rationale the administration matches the time point for these. These points are all really intuitive and should be in question essential for any outcome measures used in a Again: mandatory specifications for any outcome/endpoints variable. No clinical trial typically in the protocol and specifics in the SAP exception for PRO Please spell principal right (not principle!) Already captured in main SPIRIT checklist The timing should coincide with the maximum anticipated effect of the intervention on PRO. You mean "principal," not "principle." PRO time points must relate to known likely trajectory of illness/recovery. No point in measuring QoL re continence (for example) only up to 1 year, if it is known that continence peaks at 34 years (for example). Time points should be clearly specified. I do not often include rational for the time points because they are often based on a complex combination of reasons and discussions by multiple committees. with a secondary endpoint there may or may not be enough previous literature to be clear on precise time point This is unclear. Rationale is covered by 345 and timing covered by 14. This seems to imply that there will be time points where PRO is collected but not analysed? Process of PRO implementation as secondary outcome should have about the same rigor as for a primary outcome, at least for Marketing Authorization or gaining a claim in SPC Another trap the 'right' PROs (clinically relevant) assessed at the 'wrong' (missing all the key 'action') times can lead to misleading conclusions which is a waste of all the PRO data collection and analysis effort. In general I'm not too keen on expecting to know rationale for all choices. What is the principle time point? Do you mean interim analysis here before database lock? Very important to include time points for both data collection and analysis of course. For secondary this could be deferred until SAP but should be pre-specified Item 12 List clearly on Schedule of Events table with This item seems to also answer 13 and Include PRO footnotes as needed. 14. So, practically this may be sufficient assessments in the main It will facilitate the assessment of the protocol, but if on a checklist. protocol schedule of it is not in the table it can be retrieved from the Essential part of the methodology assessments, specifying see above comment which PRO measures I would specify the time points at which PRO is done A separate PRO checklist is not (PROMs) will be used at and the broad domains (e.g. Alcohol use), but not necessary for this and many of the points each assessment. necessarily the specific questionnaire (e.g., AUDIT) here. These are principles of good in case the protocol team decides a different measurement and good trial practice that measure is a better fit for the population while are no more or less applicable to patient operationalizing the study (e.g., CAGE) reported measures than to other trial If the PRO assessment schedule is not included measures then there will be much confusion and ultimately the See above. data will suffer. Very important to have the correct Already captured in main SPIRIT data at the right time! checklist Patient burden could be significant depending on For my studies, the test schedule often the number of measures being used in the study. includes "PRO Booklet" time points but For secondary outcomes, an appendix could be details about which PROs are in each acceptable. booklet are described elsewhere in the protocol. This is a key trial map for all concerned, regardless of whether PRO 1ry or 2ry. Item 13 This item seems very similar to item 12 Specify if baseline PRO I do not understand the question; this is not specific I think you have this one previously assessment should be to PROs and needs to be described for all See above. completed before assessments whether PRO or not. Already captured in main SPIRIT randomisation.

Candidate Item	Stakeholder comments	Delphi Panel Comments
Candidate item	<ul> <li>For me, "baseline" means preRx so I don't think this needs to be specified. Rather, I would want to examine carefully any departures from this assumption, i.e. when might data collected after Rx is valid/allowable.</li> <li>This would be applicable only for open label study. The practicality of requesting a PRO assessment prior to randomization is unknown; the value of comparing data (change from baseline) btw an assessment where pts don't know on which tx they are and an assessment where pts know on which tx they are is introducing variability.</li> <li>I think by default any baseline assessments would be completed before randomization. Perhaps it should be stated "specify if baseline PRO assessment should be completed after randomization, with rationale for this timing"</li> <li>In the context of a clinical trial, a baseline assessment is not an "outcome" of the treatment under study, so I wouldn't use the PRO term for a baseline assessment.</li> <li>This is critical if you really want to know a 'true' change!</li> <li>they should specify that the baseline assessment should be done after randomisation</li> <li>Consider combining with or putting adjacent to item 8</li> <li>This is critical for open label studies, as knowledge of intervention could affect baseline PRO.</li> </ul>	<ul> <li>checklist</li> <li>Per my previous comment, this should be required, not an "if" question.</li> <li>This is dependent on the setup of the trial – the trial may have multiple randomizations or a split registration randomization enrolment procedure. This is also included in 14.</li> <li>Relevant if completed before treatment, rather than before randomisation</li> <li>I suspect it might be hard operationally to assess PROs pre-randomisation in many contexts. I guess the concern here is whether in an unblinded trial a patient's reporting might be influenced by which treatment they have been assigned to. As I think postR is the likely default, I don't see it as all that important generally. Of course there may be notable exceptions.</li> <li>Is it a baseline if this isn't true?</li> <li>or is this getting at the fact that not all PROs can be assessed at baseline e.g. how much better do you feel</li> </ul>
Item 14 Specify the targeted time and acceptable time windows for each PRO assessment.	<ul> <li>similar to previous question</li> <li>Should apply to all outcomes/visits not specifically PROs.</li> <li>I think this was already captured around item 12.</li> <li>I think that this is carrying he protocol to a level of detail that might be excessive for some trials.</li> <li>This is better wording than just the "time point" as in a previous Item question.</li> <li>Target time is definitely important; the time window can go in a Study Manual and need not go in the protocol to allow for change after the protocol is final.</li> <li>Not necessarily required in protocol maybe more appropriate in associated trial guidance.</li> <li>maybe not in a protocol but it needs to be predetermined somewhere in writing</li> <li>and how deviations with be reported to the IRB</li> </ul>	controlled

### **Candidate Item**

### Stakeholder comments

### **Delphi Panel Comments**

- Item 15 If PROs are to be completed in the clinic: specify timing of PROM delivery in relation to clinical assessments (e.g. before/whilst/after seeing clinician and/or clinical assessments).
- May not be feasible to enforce an order must be after consent for GCP reasons.
- Not necessarily required in protocol maybe more appropriate in associated trial guidance.
- reduce bias
- ALL of these are very important. If this is not specified we will not get over the 'car park' effect!
- In trials where interventions are planned that may introduce discomfort or potentially even pain this potentially has a major impact on PRO responses.
- Timing should be standardized in relation to clinical assessments, and rationale provided for actual
- I feel like this depends on the context of data collection. For example, if it is expected that clinical assessments will be influenced by PRO completion than this is pertinent if the data is collected for the purposes of research and does not serve as an intervention I might feel less strongly about this point. I would recommend clarifying this point as it would change my response!
- important or fear things could be lost/forgotten
- as in 14
- However the completion of PRO questionnaires should not interfere in the clinical interaction or overburden patients so this is difficult to answer in the abstract. However if it is not stated such an assessment could not be made by a RFC.
- The necessity for this varies by study.
- I find it more important that the study maintain their PRO completion procedure throughout the study. In the case of open Trials (no blinding of patients), equal ways of PRO completion in the Treatment arms are essential, the concrete order of completion/individual assessment is of minor importance to me.
- This depends on how related are PRO and other clinical assessments.
- This should be evaluated on a case by case basis. In some studies this is critical, in others in may not matter.
- Are we now shifting to "PROMs"? This is often a matter of specific clinical situations, clinic organization, etc. I think it should be noted but this is relatively
- where timing in relation to a clinical assessment is relevant
- As well as options if a primary approach is indicated.
- This will be dependent on the trial objective.
- How is this different from Item 11?
- see above
- While the schedule of PRO assessments should be linked to all of these things, it will be very laborious to write out all this rational in the protocol.
- General requirements for clinical trials, whatever the outcomes/endpoints
- Awkward wording. 2nd sentence: Isn't the timing always the same for all arms? It says 'both' but trials can have >2 arms
- Isn't this the same as the previous checklist item 11? I have a hard time including this info in protocols, because the process to select time points is often quite complex taking into account all the things listed in this items plus others (like planned clinical tests and visits and feedback from multiple committees/reviewers).
- Seems redundant with item 12. Also, in some particular circumstances, asynchronous assessments may be an appropriate design.
- Aside: This item is complicated! Tone may be too prescriptive.
- Not keen on asking for justification. Already asked for rationale.
- Very important which takes a lot of cross team discussions to achieve.
- This is a confusing question multiple concepts are included, would split off

**PRO** assessments should link to research questions, hypotheses, length of recall,

Item 16

- Justify the timing of PRO assessments. Scheduled disease/treatment natural history, planned analysis and time of comparison must be comparable for both arms.
- Desirable but protocol also has to be practicable, not weighted down with details that aren't relevant to the collection of high quality data.
- important but probably in the body of the protocol rather than a check list
- Might be difficult to schedule if there are many other secondary outcomes. But if PRO is primary outcome it is extremely critical
- The question in the survey is asking for a single answer to too many aspects. Critical are research question, hypothesis, planned analysis and time of comparison.
  - Less critical especially for secondary is length of recall and disease/treatment but this is dependent on the disease under investigation and assuming that it is not a longitudinal trial design over many decades
- This item contains too many issues. It is therefore maybe not so helpful for a checklist.
- These points should be "as relevant" and not all inclusive.
- Depends on the hypothesis and motivation. There are many reasons why you may only ask a single

Candidate Item	Stakeholder comments	Delphi Panel Comments
		<ul> <li>This issue is confusing and overlaps other items already covered.</li> </ul>
Item 17 If PRO is the primary endpoint, state the required PRO sample size, otherwise discuss the power of the PRO analyses.	<ul> <li>Uncertain meaning of second question given the main item starts 'If PRO is the primary endpoint'</li> <li>All trials are powered, usually, on their primary outcome. I don't understand why you would have anything different for a PRO trial?</li> <li>If primary, then I would regard this as essential. If secondary, then I would expect the trial to have more power for the PRO than the primary outcome, so not essential (unless the PRO is only being collected for a subgroup, when the power should be described).</li> <li>Secondary outcome question not relevant</li> <li>Although question specifies primary endpoint, I think this is equally important for secondary endpoints as well.</li> <li>When PRO is a Secondary Outcome this is not applicable</li> </ul>	<ul> <li>Second question is not relevant if the PROM is the primary outcome (as stated in the item)</li> <li>Not sure I understand the reason for the question on secondary outcome given the main question.</li> <li>If used for an exploratory objective, perhaps this falls in the important but not critical category for Secondary Outcomes.</li> <li>I think this is better answered by a methodologist or statistician than a patient</li> <li>I am not a statistician but sampling must be robust and adequate</li> <li>Since this was specific to PRO as a primary endpoint, I did not answer the second part</li> <li>For this and other points, need the same methodological rigour for PROs as other endpoints.</li> <li>It's confusing to answer this item separately for Primary and Secondary Outcome because that's already embedded. I think if the PRO is primary, a sample size justification is required. If the PRO is not primary, discussion of PRO power is important but not critical.</li> <li>should do power and sample size</li> <li>As Item 17 specifies "If PRO is the primary endpoint" I have intentionally provided no response to "When a PRO is a Secondary Outcome.</li> <li>no comment if PRO is secondary outcome as that is not the question</li> <li>See above</li> <li>Already captured in main SPIRIT checklist</li> <li>I checked 1 for Secondary Outcome because the item pertains only to primary endpoint.</li> <li>Sample size should be checked even if PRO is a (key) secondary endpoint</li> <li>This question only relates to PRO as primary outcome?</li> <li>This question does not apply to the</li> </ul>

# Item 18 Describe the PROMs including, number of items/domains, instrument scaling/scoring, reliability, content and construct validity, responsiveness, sensitivity, acceptability, recall period. Provide references as appropriate.

- Brief description, Provide refs to avoid information overload.
- Lots of detail! Long protocol!
- Item not clear to me. Apart from defining the outcome really carefully (which will involve items/domains and time points), I don't think these details need to be in the protocol, just references cited.
- This is important information for the publication, not necessarily the protocol.
- This is an odd question as we often refer to a core or methods paper around the development and validation of a PRO. Given word limits, this is the preferred option. The info must be available but not constantly duplicated.
- Could just include reference to article which does
  this.
- All this information is too much for a protocol. A short synopsis is needed.
- For the sample of interest only. Many just report ICC etc. for a variety of conditions very rarely the condition being assessed so the stats are meaningless
- that may be too much for a protocol but it should be

applicable is really the answer, with respect to PRO as a secondary endpoint Would provide references rather than

The way this question is worded, not

This question does not apply to the second row as the question is only for

- describe all the detail on responsiveness, sensitivity, acceptability and recall

  again, think this is best answered by
- again, think this is best answered by methodologist but thinking you need this for publication
- Essential

prim endpoints

- The description seems overly detailed for a checklist suggest requiring the same amount of detail as for other outcomes.
- Also provide a copy of the PROMs in protocol appendices
- This interests me more in terms of assessing burden re completion
- Links or appropriate references might be more appropriate for this as I can imagine this could get pretty lengthy and unwieldy
- General requirement of any measures adopted in clinical trials.
- PRO must not be conceived as low level measurements: they must be the best possible given the research questions.
- There are too many items in this list

### Stakeholder comments

### **Delphi Panel Comments**

- some are important some are not.
- written down/evaluated somewhere
- There should be a description including number of items/domains, instrument scaling/scoring and recall period, and references if available. The other aspects are important background but this information may not be easy to compile for a protocol, and most often is included in a PRO dossier where the properties of the instrument are presented in more detail. I think all of this is too much detail for a protocol.
- important to know if the PRO is 'fit for purpose'
- Again only scored this on the basis this is checklist info all this detail needs to be documented in the full protocol
- Answer made that secondary outcome where PRO will not be used as a label claim in the SmPC.
- can be referred to other sources
- This is frequently best done as an appendix rather than in the body of the protocol because it can be extensive, particularly if it is a new PRO that is not published yet so a simple citation isn't possible.
- This information is critical but could be provided as an appendix or hyperlink.
- This type of information could be included in an appendix both from the primary and secondary outcomes.
- when available
- Should be able to just provide the manual.

- If PRO is a secondary outcome, this is still important, but the details can be included as an appendix to the protocol
- Some justification is needed but this list is overkill. Do we provide this level of justification for blood pressure?
- Not sure how to answer this for secondary. Some of the elements I would rate highly (scoring, validity) whereas others not so (sensitivity, recall period)
- If established instruments, description may be covered by references.
- Aside: A lot of detail in this item, tone is perhaps too prescriptive.
- This would be described in the PRO evidence dossier for submission to regulatory agency. It does not need to be described. It's unclear to what degree it would need to be in the clinical trial protocol.
- PRO has become PROM. Not sure id score all elements as 9 however.
- I do not believe it is essential to provide detailed measurement development and validation history for every PRO assessment used in a trial, any more than similar details are required for other instruments used in trials. A basic description of the PRO instrument (should include number of items, simple description of scaling scoring, and an example of the questionnaire should be included, development history and psychometric evidence of appropriateness of the PRO endpoint should be referenced. An appendix to the protocol containing trample PRO with scoring should be included for any PRO in a protocol and if changed during the study, should be provided in revised form in amendments.

### Item 19 Justify choice of PROM(s) by linking specific domains/items to clinical justifications and hypotheses.

- Should have been dealt with in objectives above.
- You have asked a very similar question before.
- Yes, we often see PROs almost pulled 'off the shelf' simply to show one has been used without much thought as to the most appropriate one. The choice should be as robust as the rest of the methodology.
- I think this is important in development of the PRO questionnaires, but don't think it needs to be in the protocol
- Helps to clarify the rational for choice of PRO instrument!
- If the PRO is used as a primary outcome then it must be assumed that the regulators have approved/recommended this tool for labelling and that the PROM will follow the accepted standard procedure.

Where the PROM(s) are secondary and not part of a label claim the justification for testing to avoid a false positive result should be higher.

- As above, but a measure like this might be necessary until PROs accepted as normal practice.
- To me this duplicates items above if the use of PROs is properly justified up front (see earlier questions) this would form part of that justification or should
- Important but not critical.
- Again, the PRO/domain link is an inference. The reader is free to accept it or not, but this does not prevent the PRO from being a relevant outcome measure.
- But also allow for exploratory/descriptive analysis of the remaining domains, scales or items. This descriptive data provides an overview of patient experiences and is valuable.
- This would be described in the PRO evidence dossier for submission to regulatory agency. It does not need to be described. It's unclear to what degree it would need to be in the clinical trial protocol.
- Some overlap with previous, seems to come too late
- I prefer explain to justify.
- Yes very important
- Suggest omit clinical justification and focus on Linking PRO to hypotheses. Protocols generally require hypotheses that are clinically justified. Additional justification of the instrument used to test hypotheses in terms of the clinical justification is adding bulk without adding insight. Would this be expected of creatinine assays?

versions of

### Item 20 Provide evidence of measurement equivalence across modes (i.e., when mixing modes of PRO data collection) and/or of cross cultural validity where different language

questionnaires are used.

### Stakeholder comments

- Should be included in relation to inclusion & exclusion criteria, methods of data collection. Again references added as needed.
  - Be careful not to set the standard so high (in theory) that no one is brave enough to do these trials. Many of these theoretical problems will not turn out to be problems in practice, and we should carefully weigh up the burden of demanding a standard for which we don't yet have evidence of benefit.
  - This information might not always be available, but should be mentioned, regardless.
  - But only citing references.
- This is part of a TMF not the protocol
- Essential if used in another language
- Important in development of the questionnaire, but does not need to go in the protocol
- too much for a protocol, maybe an ops manual
- This is also a level of detail that will be difficult to include in a protocol, but does belong in a PRO dossier for submission. Especially the information on cross cultural validity will be difficult to compile for large trials that may be done in many countries. In many cases the linguistic validation work is not available at the time the protocol is written, but is done in parallel. I think this is too impractical to require.
- This is critically important for large international trials and especially when more than one mode of data collection is being used. From an operations perspective sometimes more than one mode of data collection might be used so having this information would be helpful.
- Where the PROM(s) are secondary and not part of a label claim the measurement is important to address but from a practical point of view should not be addressed at a level where it impacts the power calculation and a decision on the size of the trial population to be studied.
- Or a justification this doesn't mean extensive testing is always required, but this needs to be addressed sufficiently for the study.
- Evidence of cross cultural validity more important than evidence of equivalence across modes, an assessment of likely equivalence could be sufficient for the latter.
- It's important but people rely on qualitative equivalence which is sort of useless when comparing scores. So it's important, but not as it's

### **Delphi Panel Comments**

- If the role of the PRO as a secondary measure is to provide evidence of measure equivalence, this should be stated and details included accordingly.
- Provide the state and quality of the evidence, but if evidence doesn't exist this limitation could be noted instead.
- These seem like important details but only applicable if trials include diverse populations or will be mixing modes of administration.
- 9 for the cross cultural validity and different language versions. 57 for the different data collection modes. Much more is known about different modes' stability.
- don't feel qualified to comment on this so discount my answer
- Posthoc evidence could be accepted.
- Again, some of this more detailed information may be referenced or placed in an appendix
- Important issue. Yet, not necessarily this evidence is available. Plausible justifications can substitute for the missing evidence.
- I am mindful that this information is not always available for example for different languages. So it should not be a stringent criterion.
- Some mention needed but holding protocols to this level of evidence could stop research in its tracks.
- This would be described in the PRO evidence dossier for submission to regulatory agency. It does not need to be described. It's unclear to what degree it would need to be in the clinical trial protocol.
- · don't know enough to answer this
- Yes. I think it is important to highlight here that ePRO validation is from a scientific perspective. ePRO developers sometimes claimed that they have data showing validation but that's from a technical perspective.
- Also important to include feasibility in different populations. Some scare away and think older people can't use ePROs for example.
- Not important. This is an overblown issue; Meta analyses demonstrate that equivalence is generally present across modes.
- This is not information required in the protocol. It is important in evaluating the results, but not for ensuring proper implementation of study assessments.
- Measure must be validated prior to use in trial
- If the role of the PRO as a secondary measure includes plans for eval/measurement etc. this should be stated and details included accordingly.
- irrelevant to most protocols
- This is not part of the trial but a side study, unless a new PRO is used that is validated alongside the trial. That is not realistic when the PRO is the primary endpoint
- Really if it hasn't been validated in that population I would say do not have as the primary outcome!
- if PRO primary endpoint, measurement properties should have been determined before the trial
- · speaks to justification
- Ensuring that measures are appropriate

### Item 21 Outline plans for evaluation of measurement properties, if appropriate (e.g. if not previously validated in the population of interest).

- Should be validated before using in a definitive trial maybe in a pilot study
- If it hasn't been validated in the population, probably shouldn't be using it.
- Complicated, multipart question with weasel words "if appropriate"! I don't think evaluation of measurement properties should ever be a primary objective of a substantive RCT. So this would be appropriate for a feasibility RCT.
- This will be defined in the SAP not in the protocol
- This information can be briefly mentioned in the protocol, but the full details should be in the Statistical Analysis Plan rather than the protocol.
- Should be a separate SAP.
- See comment above, without evaluation in population of interest these results are virtually meaningless
- we conduct a full psychometric analysis of trial data outside of the clinical trial CSR
- This is a serious omission in many protocols for

### **Candidate Item** Stakeholder comments **Delphi Panel Comments** instruments that do require validation data to be and credible is a necessity. If those data generated from the trial and including this would cannot be cited from prior work the help to ensure that the appropriate variables are evidence must be evaluated within the included to enable evaluation of measurement properties with trial data. Either the measure is validated or not. Key thing here is the "if" clause if measures have Application of PRO should not be mixed, already been studied in terms of psychometric in the same study, with validation of the properties, this is not usually important. same PRO. In this sense, my score =1 In fact, if the PRO is not validated, it should not be refers to the "already validated" case: but please consider my comment in used in a RCT. It should be piloted and validated evaluating it (better: "non applicable"? before!! This is additional research (which I highly Need clarification on this item If the measurement properties of the PRO is support) but not part of the primary protocol. unknown, why specific this as a primary endpoint in an intervention study This would be described in the PRO The change from baseline in PRO that is clinically evidence dossier for submission to regulatory agency. It does not need to be important must be prespecified. If the primary endpoint is related to the psychometric described. It's unclear to what degree it would need to be in the clinical trial properties of the measure, this is relevant. protocol. Basic measurement properties in that sample Is a PRO endpoint does not have proper should be reported EVEN IF they have previously evaluation of measurement properties, it been validated in that sample. would not be included to support a primary endpoints Is "if planned" better? important to highlight WHEN this is planned i.e. before pivotal studies this is outside the scope of a trial protocol Only for studies where validation of PRO is an objective. Otherwise this is information more appropriate to an SAP Item 22 Very briefly, for practical purposes, but will only be I would include (for the primary outcome) Specify the estimated an estimate as participants will vary. if length is a barrier to potential time to complete each Not in the protocol. Belongs in the PIS and IRAS completeness of data, how it might be assessment, and discuss handled. feasibility of assessment I feel this is important to increase usage It can be part of the general rationale. for the population. This will be important to avoid dropouts due to and convince the folks who aren't sure or aren't using burden of administration. Needs a significant time allocation but These are typically details for the REC/IRB to important consider. Realistically, I don't think investigators can know in advance how feasible it will be to collect speaks to burden REC needs to know one or more PROs as specified unless a feasibility this trial has been done. This is good practice but the bar for The problem is that those are only estimates not PROs is different from that for other types of measures, and it should not be. necessarily applicable across the study population In my experience, an important consideration, but This requirement would support the time to complete and feasibility in the population of legacy of inappropriate differential treatment of PROs. interest is not often known while the protocol is Not critical, especially if previous being written. Time to complete each assessment not necessarily literature is available. Very brief statement only. required in protocol would be more appropriate in application for ethics and local governance review. I agree with specifying the time to This is typically included in the ICD and the protocol complete each assessment. I have never discussed feasibility of assessment in a This is nice to have but not a must have. protocol, unless the assessment is very Helps to understand the burden on the participant. lengthy. As researchers we can get carried away by wanting 2 rather different issues to collect lots of PRO data but when we really think Also important to include feasibility for about the burden of spending an hour completing different modes in different populations. PROs it can help but things in perspective and encourage us to prioritize. Some scare away and think older people can't use ePROs for example. in protocol, not in a checklist This is a double barrelled question This question is difficult to answer. In my opinion, time to complete is less important than the feasibility This information should be detailed in site training and manuals. The protocol of assessment for the population. need only address what in brief. If the PRO is validated in a study population it would be used to establish the primary outcome and then If measures are extremely brief and/or the feasibility would have ideally been part of the there or only a few PRO measures, the discussion of feasibility of assessment validation this should then not play such a large role. This should then also hold true for the secondary can be omitted outcome as long as the secondary outcome is not an exploratory outcome (where this should then be

### Item 23 Include a prespecified data collection plan.

specifying the estimated time to complete.Repeats previous items.

rated higher).

Not sure what this means, and/or how it differs from other points.

Feasibility of assessment more important than

- Not entirely sure what a data collection plan entails.
- · Vague wording unclear exactly what this

Candidate Item	Stakeholder comments	Dolphi Panal Comments
Candidate Item	<ul> <li>Stakeholder comments</li> <li>Do not understand what is meant here</li> <li>What is this item? How does it differ from a "schedule" (cf previous question)?</li> <li>Not sure what this means e.g. whether proxy completion is allowed, etc.? But this is asked in Q2 below</li> <li>Standard in any trial</li> <li>Would not put in protocol, this is usually a docume developed by the Data Management Centre.</li> <li>Unclear to what this point refers given earlier questions re data collection time points, methods etc.</li> <li>required by our Protocol SOPs</li> <li>Not sure what this means, beyond questions that have already been asked about choice of measure timing of administration, and modes of administration. What other parts of the plan are yothinking about?</li> <li>Not completely clear how this is different from question 16 scheduled PRO if the research questic is addressed with the PRO and the time frame question 4 then the response here must be the same.</li> <li>Schedule of assessments, mode of administration and the like must all be prespecified. A separate Data Management Plan can be used for ensuring data quality, data transfers, etc. If you mean mode of administration that is covered in 24.</li> <li>This could be included in the statistical analysis plan.</li> <li>I am a little unclear what is meant by a data collection plan</li> <li>Remember to include qualitative measures e.g.</li> </ul>	The planned timing of assessments? I thought we had earlier?  see above 11 & 12 to me this is a related issue  Not sure what this means.  General research design requirement  Since this is a protocol checklist, the plan is already 'prespecified' by definition  I don't know what this checklist item means. Too broad and vague.  not sure what this means  What is meant with data collection plan?  Not sure what a prespecified data collection plan is  Many of the criteria already rated reflect a prespecified data collection plan (e.g. timing of PRO collection in relation to clinic visits)
Item 24 Specify how PROM will be completed (e.g. pencil and paper, online, etc.).	<ul> <li>Remember to include qualitative measures e.g. focus groups</li> <li>State broadly (online, interviewer administered, se administered, etc.) but not too specifically, such as stating the software to be used for an online questionnaire.</li> <li>This is definitely critical, a must have.</li> <li>Answered based on the assumption that the PRO validated.</li> <li>These don't need to be in the protocol, could be in supplementary document addressing details of tria conduct</li> <li>And what backup approaches are put in place if th approach doesn't work. If plan to administer online but system not available. goal: avoid protocol deviations</li> </ul>	<ul> <li>more important that HOW is ensuring equality of access would be looking for this to be included in the justification</li> <li>Necessary "Methods" description, whatever the measurement type</li> <li>Very brief mention only</li> <li>Can be part of appendix for secondary endpoint; not necessarily part of protocol.</li> </ul>
Item 25 Specify where PROM will be completed (e.g. clinic, home, etc.).	<ul> <li>If settings are relevant to the study question or PROs themselves</li> <li>Score based on practical issues if the PRO can be performed at home and is lay language friendly and/or patient is trained in completion not as important.</li> <li>And what backup approaches will be put in place. Plan to administer during appointment but the subject doesn't get to the survey, is home completion with mail return an option? goal: avoid protocol deviations</li> </ul>	potential processes might be across the design and time points.  Downgraded. It will be a mixture weighted I expect to the clinic this seems similar to item 15  This is covered by previous related to
Item 26 Where applicable, justify use of proxies (define conditions under which proxy assessment is permissible).	<ul> <li>Proxy assessment (e.g. of QoL) doesn't correlate well with patient assessment so it should really be treated as a separate outcome variable.</li> <li>If there is a use of proxies, then it is not a PRO</li> <li>Perhaps would go into a study manual, and not the protocol. An example of this would have helped munderstand the issue.</li> <li>Generally we use the term Observer Reported and restrict those observations to countable observations</li> </ul>	<ul> <li>irrelevant to most protocols</li> <li>this item relates to item 15 and 7</li> <li>Typically need to clarify if an observer report or self-report. US FDA does not recognize that someone can be a "proxy"; typically a different instrument is needed.</li> </ul>

### **Candidate Item** Stakeholder comments **Delphi Panel Comments** whatever the measurement type Highly relevant to paediatric studies. It would be helpful to distinguish the type FDA discourages the use of proxies for these of proxy is it a family member (as in brain assessments so I hesitate to rate this highly as it tumours PROMs may be commonly should not be encouraged. down by carers) or clinicians/research if a proxy completes the questionnaire, it is no personnel. If aperient in clinic asks for longer a prom, but an observer reported outcome help is the researcher allowed to help? measurement instrument This will be applicable only in well in protocol defined special circumstances. This If it is relevant to the study question or PROs should not be considered a standard themselves practice or something that should be Proxies should never be used. If a patient cannot advocated across the board. I'm report for themselves (e.g., paediatric or cognitive concerned that putting it as part of a impairment), then observers or clinicians can be the checklist might imply this is a good reporter on an assessment but they should not be option. asked to assess symptoms or things they cannot We typically do this outside of the know. They can only report on observable things protocol (in training materials or forms (e.g., Observer reported outcome or Clinician instructions). reported outcome, NOT proxy reported outcome). In Can be part of appendix for secondary; some cases, a caretaker may have to read the PRO not necessarily part of protocol. items to a patient (e.g., if patient cannot read). In Our organization discourages use of those cases it is critical to provide training to those caretakers that the information/ratings should come proxy report, so this would not be only from the patient and the caretaker should do no relevant. Not sure proxy completion should be allowed more than simply read the questions. This belongs in the protocol AND training materials Item 27 Should be the patient!! This also seems to align with how the PROM is Specify who will This will be in REC application anyhow. administered? If interview administered this should administer the PROM be covered. As long as it is in compliance with current legislation (e.g. a physician, nurse, we do not need to know the specific person who will think this is very important because patients often give different responses to different health etc.). administer the PROM professionals Remember role of experts by experience in as per 25 above collecting data Study staff may change; this item is better suited Specify in protocol only if who administers it is truly for the manual of procedures and not required for important to the PROM, otherwise allow sites some the checklist for protocol inclusion. A PRO is by definition self-administered. I assume Unclear question. Do you mean in an interview that this question relate to the case where there is version. Or do you mean that should be specified no other option and proxy assessment is who is the proxy? Now it seems who is actually permissible completing the prom, which is by definition the Surely this will depend on e.g. whether or not completed on line and whether proxies are If it is relevant to the study question or PROs involved. themselves, i.e., if the investigators or previous I suggest clarifying the term "administer." The knowledge indicated that this might make a extent to which it is permissible for the respondent difference in respondent participation or answers to have support or assistance in PRO completion, I don't understand this question. Are you asking who and the nature of that support, must be should hand the questionnaire or device to the documented. patient? In the case of PRO measures, the patient Necessary "Methods" description, whatever the self-reports, i.e., self administration. Or, devices are measurement type sent home with patients so they do the assessments That really depends on the PROM and how it has been used or validated. This is a very important point I am not aware of Do we mean giving the questionnaire to the evidence, but assume this will impact on the results participant or act as a proxy? If it is about giving the Reply based on the assumption that the patient questionnaire this may be difficult to specify as it reported outcome measure is not in response to a may vary by centre and depends on local physician administering a specific test. If the PROM organisation of work. is dependent on a task given then this is critical. Getting into micromanagement here Could be ePRO or VRS so not specifically We allow sites the flexibility to select the administered by anyone. appropriate clinical staff. These folks have a variety Not by discipline but instead by role as a study of titles, so specifying this in the protocol could lead investigator. to inadvertent protocol violations when a site uses different terminology. Item 28 It depends a lot on the client group specific Difference to item 26 too subtle i.e. revision of If it is permissible for conditions may require more support than others so wording required another person to help help by reading questions and ticking I think this will need to be consider depending on the study participant the clinical group forms/completing on line form with respondents PROM must be self completed complete the PROM, describe what type and I believe that addressing assistance broadly is And, most importantly, whether the "helper" will be level of assistance is important recognizing that different blinded to treatment allocation. levels/approaches to assisting completion of PROs acceptable. Same comment as above might exist. This may also be contextual for patient Again difficult and situation specific, don't want to be populations. too proscriptive and find a section e.g. blind or this would be covered in trial induction training partially sighted people who need questions reading instead to them and their answers recording are suddenly if you don't you are going to be downgraded by excluded because this has not been explicitly GRADE or whatever Demographic differences would make this Could be specific important Not required in protocol could be in associated This item overlaps with item 26

### Stakeholder comments

### guidance.

- more for ops manual
- This is different from proxy, and it is essential that procedures for any kind of assistance are clearly spelled out.
- This is best done in training materials for the sites.
- Specific to translation can an interpreter read and help complete the PROM?

### **Delphi Panel Comments**

part of proxies above yes include but don't over complicate

Necessary "Methods" description, whatever the measurement type

I think we have to accept that PROMs as often reported by patients will to a certain extent capture the illness perception of the social milieu of the patient (independent of whether there is formal help or not). This is the nature of the measure with advantages and disadvantages.

See above. This will be useful in a SOP, not sure it belongs to the protocol.

Getting into micromanagement here. Do you want to call out blind people? Those with Parkinson's who can't hold a pen? You do what is appropriate for individual needs and there are many "special circumstances."

We typically do this outside of the protocol (in training materials or forms instructions).

It would not be appropriate to deviate from the user manual for the instrument. Therefore, it is difficult to see how this would be relevant in most cases. This is often termed 'scribing', and clarification of whether a scribe may help the patient complete is important. Also important would be identifying who that scribe can be (i.e. may it be a family member who could potentially shift the patient's responses)?

### Item 29

If more than one PROM will be used, specify whether the order of administration will be standardised or randomised.

- Depends a bit on what the PROMs are and whether they are likely to influence each other significantly
- I fear that introducing all these items on details will make researchers think about it and brings new/stupid ideas that go in the opposite direction of pragmatic trials! However, if a trial really, really wants to mandate the order this needs to specify!
- maybe helpful for methodological insight, but not critical and only if there are hypotheses for why order of administration might be important
- ...specify the order of administration."
- Can be specified in other documents, not important for protocol.
- The order should be standardized unless the purpose of the study is to test for order effects.
- good point
- Standardization is preferred.

- Important as the order may influence responses
- Would aid analysis, and meta-analyses
- same reason as above
- The specific order of administration is not necessary for inclusion of in the protocol but is a key detail for study staff administering measures and would be important to include in the manual of procedures for the study.
- I can see that this matters to the analysis but would need to be convinced that it makes a difference to burden on participants
- Importance of this varies by study and measure. If order effects could affect data and their interpretation then they should be called out.
- Important. Yet, this depends on the time intervals between administrations
- ..or not specified....
- Order is important and should be standardised.
- Small point
- Often not stated because this is obvious if using pre-printed booklets or an electronic system.
- Logistically challenging to randomise for paper based PRO collection.
- and also the order of the PROMs in relation to other tests e.g. lab test

### Item 30

Include a plan for systematically training and contacting local site personnel to ensure that they understand the content and importance of collecting PRO data. Ideally coordinated by a lead data manager who monitors PRO completion rates in real time and communicates with sites if completion rates are suboptimal.

- This item is too complex (multicomponent) to properly respond to.
- depends on experience of using that PROM
- Doesn't belong in the protocol. Belongs in Ops manual and associated SOPs / WIs
- Important, but belongs in site manuals and trial SOP, not the trial protocol, I think.
- No need to put in protocol. Can be covered in a SOP
- Too much detail.
- This only pertains if the PRO is being administered locally (not by telephone via a central CRO, etc.)
- agree important, as impossible to collect these data retrospectively from clinical notes for example
- Site initiation issue, as far as I am concerned. Not for the protocol.
- Not part of the protocol, part of the IM
- This should be done as a general rule for all of the data in the protocol (in accordance with ICHGCP), not just the PRO data. So no need to specify this for

- I think this is important for data quality but it seems there are 3 concepts listed here training of sites; who conducts training; and monitoring PRO completion rates across sites. For a checklist it might be worth separating these topics out?
- the induction training is important but doesn't need to be detailed in the protocol
- Totally essential
- This item dos not apply to self administered PRO, which is very often the case
- not necessarily in protocol
- people should understand what they are doing and why
- The protocol should state there is a plan, but the plan should not be in the protocol. It should be part of the monitoring procedures, guides etc.

### Stakeholder comments

### PRO data alone.

- Training is needed but is not included in detail in the protocol. This information goes in the investigator manual
- All essential for transparency and duplication in future trials
- Not required in protocol should be included in trial operating procedures conducted by trials unit.
- This is part of the Investigator meeting and site initiation process SOPs
- ops manual
- This is critically important to be conducted, but can be in the study manual/procedural binder, rather than the protocol.
- The training and monitoring aspects are important. I am not sure that the lead data manager is the right person for this role however as they are usually not interacting with sites directly. I think the role responsible should be reconsidered.
- The training and coordination need to plan at the start of the trial. Sites that have difficulties with PRO completion should be contacted after the first couple of subjects and closed if the issue persists. The rational being that the data collected by later subjects is biased with respect to the subjects included at the start of the trial, essentially creating two different populations within a trial.
- I would put this in data management plans. It is critical for the study to be successful but not necessarily in the protocol. The checklist needs to be created in sections that indicate which documents need these items
- As with item 24 above this information could be in a supplementary document

### **Delphi Panel Comments**

- Critically important
- I don't traditionally think of this being part of the study protocol, but it is SO important, perhaps it should be in every protocol.
- I recognize a plan for training and contacting personnel is important, but feel this does not need to be included in the protocol, hence the low rating
- Critical, like for any other measurement in clinical trial. It is atypical task delegated to a Contract Research Organisation. The key point is: PRO make no exception
- This goes outside a specific protocol and could serve as an educational note to accompany the checklist. But as part of the protocol? No.
- This is handled outside of the protocol document for cooperative group trials.
- Really important that data managers are properly trained to highlight to local staff the importance of data completion.
- This is important but typically not in protocol in my experience. Usually a separate document
- Depends on the complexity of the protocol.
- Belongs in trial conduct documentation, not protocol. Brief mention of value of such training may be useful in the protocol.
- This is important but not for the protocol but maybe a site manual
- And kick-off; make sure to get the PRO person in on the kick. Off and not just the other RCT data collection team
- This is operational and does not necessarily belong in a protocol. Also, the plan may need to be adapted over time, and ideally it will not be locked in to a protocol, which restricts necessary flexibility.
- This detail is more than would be done for other assessments. Suggest it us more important for training and monitoring, so should be part of study procedures and FAQ manual.
- Mechanisms and strategies to reduce the amount of missing data are important, and high completion rates improve the overall integrity of the data and the robustness of the conclusions drawn

- Again, ops manual, not protocol
- No need to include in protocol. Can be covered in separate document.
- If using computer assisted interviewing techniques, methods to minimize missingness can be automated.
- an issue that we had when we tried to ask research nurses to screen for noncompleted questions and ask respondents if they had been deliberately missed, is that often it is stated that responses will be confidential
- Just general good practice re validating and checking completeness of data. Not a protocol issue.
- Part of the IM
- Important, but does not belong in protocol document
- Not required in protocol should be included in trial operating procedures conducted by trials unit.
- As with item above, these are critical data collection & management SOPs that should exist outside of the study protocol.
- I'm not sure if this comes later as I did not receive the list attached to my invitation email. However along with this, if electronic mode of data collection is used, then a plan for dealing with device issues

- usually specify how many times will chase and who will chase
- as per 30
- in a similar way to other data collection points in the trial
- While important I'm not sure how feasible, will add to cost of implementing PROs in a study and may be prohibitive?
- Same as above: procedure should exist and be referenced in the protocol, but does not need to be described in the protocol itself.
- Like 30 this is very important, but it usually goes in the site training materials.
- General requirement in clinical research protocols.
- Already captured in main SPIRIT checklist
- In the era of electronic data collection to specify if an item completion is mandatory or if participants are allowed to skip items.
- The majority of data in most settings these days are collected online where this is not an issue. It will only become

# Item 31 Specify procedures for data collection and management methods to minimise missing data. E.g. checking completed PROMs (including who will check forms and how will they deal with missing PROMs or missing items).

Stakeholder comments	Delphi Panel Comments
needs to be included in the protocol so that sites know how to deal with it up front and they do not default to paper which is not acceptable in most cases. The question is worded for paper PROMs completed at sites but many trials have data collected using diary devices by patients outside the clinic and those situations require a specific approach.  I wish this happened more often there is nothing worse that analysing longitudinal PRO datasets and having lots of missing data! I worry about protocols which do not say how missing data will be dealt with can create undesirable bias and impact the validity of the results.  also when would this check be performed and if patients would be contacted should the  Secondary score based on assumption that PRO will not be a label outcome.  Belongs in a Data Management Plan  Likely to be addressed with error messages for ePRO or VRS	<ul> <li>more so in the future. This item is an anachronism.</li> <li>This is handled outside of the protocol occoperative group trials.</li> <li>This is an important and generic protocol for both primary and sec PRO outcome</li> <li>Sometimes in training manual rather the in protocol</li> <li>Isn't this covered by 23? Should also include collection of reasons for missing data.</li> <li>Belongs in trial conduct documentation not protocol. Brief mention of value of such procedures would be useful in the protocol.</li> <li>Again, important but for a site manual</li> </ul>
<ul> <li>Important, and reasonable to include in the participant information, but doesn't belong in the trial protocol, I think.</li> <li>No need to include in protocol. Can be covered in separate document.</li> <li>Other than general encouragement, I don't see what basis there is for such a discussion.</li> <li>Part of IM</li> <li>Not sure this is relevant. Wouldn't the PRO instrument have standardized instructions (written or verbal)? It would not be valid to include additional, protocol specific guidance.</li> <li>This information has to be consistent to manage bias</li> <li>Important, but does not belong in protocol. Include in training materials.</li> <li>Not required in protocol should be included in guidance notes provided to site.</li> <li>This is an ICD issue, and is part of the inclusion criteria</li> <li>We need to get out of the habit of thinking PROs are just questionnaires they are powerful tools and we should convey that importance to patients.</li> <li>This can be helpful to minimize missing data if patients feel engaged and understand the importance they are more likely to report.</li> <li>Why? this will not influence the data collection PRO's are already included and thus there is no need to discuss this with the patient</li> <li>Training materials</li> <li>Patients generally willing to complete PROs. More important to focus on staff training 30</li> <li>This is an important aspect for the study team but does it need to be in the protocol? Can some actions go on the checklist but NOT be for protocol inclusion but instead study implementation Manual of procedures?</li> </ul>	<ul> <li>This could be included in a separate document/SOP</li> <li>I feel like this is an important aspect to include but temper my rating here as th should link to why the PRO is designate as the Primary/Secondary outcome. Th would be part of study consent or recruitment?</li> <li>Not important in terms of approving a clinical trial.</li> <li>This could be in the participant info she is important to cover in trial induction training</li> <li>to gain cooperation and complete answers</li> <li>Communication in simple terms vital</li> <li>I gave a low rating unless the item has specific clinical relevance</li> <li>If they are walking away with the PRO, e.g. a daily diary, this is more important than when they are completing them in office.</li> <li>Non-standardized procedures such as communication is to be avoided in a CT Protocol. Rather, we need to give clear instructions to patients regarding when and how PRO will be collected.</li> <li>Like 30 this is very important, but it usually goes in the site training materia</li> <li>This heavily depends on the nature of the PRO.</li> <li>SO: my intermediate scores reflect a mean of my possible responses. "It depends" would have been a more appropriate answer.</li> <li>But also include information to the patie of what happens to the PROMs after the complete it where it goes, who sees it, whether their doctor/nurse will see or not of clinical care.</li> <li>Extremely important</li> <li>This is handled outside of the protocol of the prot</li></ul>
	know how to deal with it up front and they do not default to paper which is not acceptable in most cases. The question is worded for paper PROMs completed at sites but many trials have data collected using diary devices by patients outside the clinic and those situations require a specific approach.  I wish this happened more often there is nothing worse that analysing longitudinal PRO datasets and having lots of missing data! I worry about protocols which do not say how missing data will be dealt with can create undesirable bias and impact the validity of the results.  also when would this check be performed and if patients would be contacted should the Secondary score based on assumption that PRO will not be a label outcome. Belongs in a Data Management Plan Likely to be addressed with error messages for ePRO or VRS  Important, and reasonable to include in the participant information, but doesn't belong in the trial protocol, I think. No need to include in protocol. Can be covered in separate document. Other than general encouragement, I don't see what basis there is for such a discussion. Part of IM Not sure this is relevant. Wouldn't the PRO instrument have standardized instructions (written or verbal)? It would not be valid to include additional, protocol specific guidance. This information has to be consistent to manage bias Important, but does not belong in protocol. Include in training materials. Not required in protocol should be included in guidance notes provided to site. This is an ICD issue, and is part of the inclusion criteria We need to get out of the habit of thinking PROs are just questionnaires they are powerful tools and we should convey that importance to patients. This can be helpful to minimize missing data if patients feel engaged and understand the importance they are more likely to report. Why? this will not influence the data collection PRO's are already included and thus there is no need to discuss this with the patient Training materials Patients generally willing to complete PROs.

Again, important but for a site manual I think this should be done with the staff

In fact, the guidance on portable of PRO is most needed for investigators and

as well Optional

Candidate Item	Stakeholder comments	Delphi Panel Comments
		study personnel involving monitors.
		Study participants generally appreciate
		PRO and are willing to comply with
		protocols. Providing guidance on the
		I,portable of completing PRO important
		for studies where PRO are completed
		outside of the study visit.

### Item 33

Establish process for PRO assessment at (and beyond) withdrawal for patients who withdraw early from a study or who go 'off study'/'off treatment'.

- Should be patient led and standard practice that patients willing to continue completing any study outcome measure (after withdrawing from some visits) are encouraged to do so. Permission for routine mortality and morbidity data should also be sought if possible. Clearly withdrawal of patients who lose capacity is a different issue and is dealt with in the REC application.
- PRO assessment will follow the same rules as the other trial procedures: in case of withdrawal every effort will be made to complete the safety follow up procedures including PRO if they are included in the protocol procedures to be completed after study drug discontinuation
- Only really applies to patients who stop study treatment, but remain in the trial, I think. Low likelihood of getting useful data from patients who withdraw or go 'off study', whatever the latter
- Not different to other outcomes. How can an outcome assessed beyond withdrawal?
- But I regard this a general issue about the management of outcome data collection for such patients nothing special for PROs.
- This should also be addressed for all the data in the protocol, not just the PRO data.
- It is part of the end of study, early DC schedule of events
- ops manual
- this is critically important in oncology
- it should be part of analysis plan
- If the patient with draws then the PRO assessment stops, do not believe that it is beneficial to force a patient. Patients withdrawing early did not reach the intended time point planned and the data should not be collected for the sake of collection, a final early discontinuation should focus on the patient's needs and not the study needs.

- is a standard section for all data items
- Importance of this item may depend on Trial Duration and expected number of patients lost to follow up. I don't consider the item critical if one can reasonably expect only a small Portion of patients (let's say < 10%) withdrawing before end of study. If lots of missing data are to be expected (like in an oncology Setting) it is very important to define in advance how to cope with that.
- General requirement for clinical protocols (e.g. Intentiototret or "per protol assessment, management of missing data etc.).
- Already captured in main SPIRIT checklist
- Important but very challenging and often impossible.
- I don't know what this would entail. We specify time points in the protocol. Other issues regarding capturing data at these more difficult time points is handled outside of the protocol document for cooperative groups trials.
- Critical in PRO as primary outcome. Important in PRO as secondary outcome
- Part of 14
- if they have withdrawn, there is no further assessment unless ethics explicitly give for dropout follow up
- Important to avoid missing data that is needed and collecting data that is not needed. Brief mention in protocol, more detail in trial conduct / staff training
- This missing data can provide valuable information and efforts to collect data from such patients should be carried out where possible

### I do not feel strongly that this needs to be a centre specific activity it could equally be a centralized process. A champion at each site should have a number of monitoring points on study activity that they are paying attention to PROs should be included in this (same as a recruitment table).

- Someone needs to take ownership of this; responsibility
- Would rate this as 9 if this includes checking for potential 'alerts' about patient suffering
- This item needs to be split in two. Specification regarding treating clinician is critical. Identification of who is responsible is more a question of monitoring procedure.
- Like 30 this is very important, but it usually goes in the site training materials or start-up procedures.
- Critical information to be specified in the "Methods" section
- it will not be wise to make the treating clinician responsible, as this is a data management task
- Management is highly variable across institutions. We don't need to tell them how to do their work.
- This is completely infeasible for cooperative group trials where 100s of

### Item 34

Specify that a named person/position at each centre (and/or centrally) be nominated to take responsibility for administration, collection and checking of PROM specify whether this is or is not the treating clinician.

- As long as it is in compliance with the current legislation it will be acceptable from a regulatory
- No need for clinician involvement in this?
- No need to include in protocol. Can be covered in separate document.
- I think this is too much detail for some protocols, but would be acceptable for others.
- Discussion btw Site monitor and clinical site
- Important, but not for protocol
- Not required in protocol should be included in guidance notes provided to site.
- depends on the instrument

management

- This seems similar to other questions along these lines. I don't think this is feasible and in most cases the treating clinician should not be the one doing this because of social desirability bias.
- Not in study protocol. it should be included in the ethical approval request
- Under ideal circumstances and where the population under study is not inconvenienced yes. Practical issues would probably result in multiple
- A specific role may be more important than a named person. Only when required should it be the treating clinician, other site staff are typically more successful with this. This should be part of training and data
- if ePRO/VRS this may need to be someone at a data centre, following up with site staff and patients

Condidate Itam	Ctalcalcalcan as were suite	Dalubi Banal Cammanta
Item 35 Specify how an	overlaps with other questions     overlaps with other questions      Should be covered by Standard Operating Procedures (as should many previous items).	sites are participating and site staff is constantly changing.  This may be difficult in practice due to availability of staff and consistency in continuity of care. If there is a named person (like a cardiac liaison nurse) it may be possible. Ideally it would be great to have a named clinician/ researcher undertaking this work.  This is generally operationally generic and not protocol specific  Can be part of appendix for secondary outcome; not necessarily part of protocol.  people change  Brief mention in protocol, more detail in trial conduct / staff training documents.  Again, important but for a site manual very important for data completion  is essential particularly in ctimp trials but doesn't need to be specified in protocol
electronic PRO system/database will be maintained and how investigator will meet regulatory requirements and ensure data integrity and security.	<ul> <li>No more or less important than any other outcome collection. Again, a lot of this needs to be in SOPs and in the Ops manual, not in the protocol</li> <li>Standard procedure</li> <li>This is only relevant for regulatory trials which are still a small proportion of all trials. DO not confuse these two kinds of trials the bureaucratic load for regulatory trials is too high for researcher initiated non regulatory trials, and this PRO question will result in imposition of criteria for the regulatory trials being imposed on all trials. This will reduce the number of people doing non regulatory trials.</li> <li>I don't think necessary to detail this specifically for PRO if a secondary outcome measure, as data management and compliance with regulatory requirements will be covered in the description of the entire database</li> <li>General data quality issue, nothing special for PROs. Details not for protocol but risk management document.</li> <li>Part of TMF</li> <li>Again, this should be part of the protocol in the context of ALL the data, not just the PRO data.</li> <li>Important, but this is a Data Management Centre issue more than a protocol issue. To be specified in site and DMC SOPs.</li> <li>Again, we treat these data like any other data collected and its codified in the CT SOPs</li> <li>ops manual</li> <li>Quite a few of these questions are elements already incorporated into GCP there is no reason PROMs should be treated differently from any other trial measure</li> </ul>	<ul> <li>Shouldn't need to specify this as distinct from the overall responsibility to maintain study data securely and confidentially.</li> <li>Applies to all projects</li> <li>CDISC is working on data standards in this regard as well. Marian Strazzeri at FDA can discuss more completely.</li> <li>important to demonstrate how legal (and ethical) requirements will be met</li> <li>Probably not needed in the protocol.</li> <li>Item as worded is confusing as statement contains three components, and it is not clear if 'investigator' is clinician at centre or principal investigator responsible for entire study.</li> <li>This question, also, belongs to the domain "do PRO measurements make an exception?</li> <li>this is important in general, not specifically for PROMs, and part of GCP.</li> <li>May belong to an appendix</li> <li>Part of overall clinical trials unit management not the domain of a particular protocol</li> <li>This is handled outside of the protocol for cooperative group trials.</li> <li>Important for all researchers to fully understand and follow due process in governance of patient data</li> </ul>
Item 36 Specify plan to monitor PRO compliance, including adherence to time windows.	<ul> <li>Could be detailed in monitoring plan rather than protocol.</li> <li>'Monitor' has a very specific meaning in clinical trials. I do not think it is sensible to require source document verification of completion of PRO. Again, this probably belongs in the trial SOP and central study manual, rather than in the protocol.</li> <li>No need to include in protocol. Can be covered in separate document.</li> <li>This depends on whether the trial is more pragmatic or more explanatory. If the former, little monitoring, if the latter, lots.</li> <li>General data quality issue, nothing special for PROs. Details not for protocol.</li> <li>TMF</li> <li>This info is traditionally in the Study Monitoring Plan, not the protocol.</li> <li>Important, but no more important than adherence to</li> </ul>	<ul> <li>This seems duplicative of an earlier item about time windows. Perhaps combine the two together?</li> <li>should be covered in statistical monitoring plan</li> <li>This may depend on the degree to which this matters for the analysis of the particular PRO.</li> <li>If other items are in the protocol (see above) failure to adhere breaks protocol so shouldn't happen. Would hope that plans in place to monitor adherence to protocol throughout and not just in relation to PROs</li> <li>Existence of plan should be mentioned in</li> </ul>

### **Candidate Item** Stakeholder comments **Delphi Panel Comments** data collection of other protocol objective. Need not is a possible system of real time be documented in protocol. reporting of severe PRO symptomatic Not in protocol would include in trial operating adverse events that could trigger interaction with the healthcare team to procedures evaluate for possible supportive care too much for a protocol op manual or data Like 30 this is very important, but it management plan instead Is a monitoring plan part of a study protocol? usually goes in the site training materials. I interpret the Item within the context of a Important especially if several PRO are used (paper central office responsibility, rather than & pencil version) Noncompliance should be viewed more in terms of something personnel at participating centres are expected to do over planning or a measure of a trial PRO not taking Typical CRO activity: However, such into account practical study population aspects. monitoring can be implicit in small Monitoring is different in that it is critical and protocol size/one Centre studies or, when the (study planning) adoption should be flagged if PRO schedule is forced (e.g. measurement ad compliance is experienced in more than 10% of participating patients. admission/discharge) This is handled outside of the protocol for Data Management Plan cooperative group trials. Seems to be a bit of overlap with other items Helpful to outline this process in both primary and secondary outcomes. Important issue, but is really quality assurance. Brief mention in protocol, more detail in trial conduct / staff training documents. Again, important but for a site manual Item 37 Should be covered by Standard Operating If done thoroughly, this item will require Include an overview of Procedures (or within previous items). what is asked of some of the other items. PRO administration (data Try not to be redundant in the final No different to standard process collection), and data Wasn't this covered already in a previous item??? version of the checklist. handling/transmission Not sure this is PRO specific, wouldn't it not specific for PRO and storage procedures. General data management issue, nothing special for be covered more generally? how does this differ from item 35 PROs. Details not for protocol. duplicates previous (or so it seems to me) SOP Important, but goes in site and Data Management Monitoring guide. Centre SOPs, not protocol. Mandatory for multicentre trials; optional data management/ops manual if not implicit in smal/one Centre trials part of ethical procedures Too detailed in my view. Important for protocol to inform external research This is generally a standard part of IRB governance reviews. applications. I'm not sure if it is generally part of the protocol document or not. I am assuming not with my answer of 1 but if this is part of every protocol, then it should be true for protocols that include PRO data no less than for others and I change to a 9. This is handled outside of the protocol for cooperative group trials. I think this info is critical for primary outcome and helpful for secondary outcome. This can be part of an extra summary document but not necessarily part of the formal protocol. Brief mention in protocol, more detail in trial conduct / staff training documents. Again, important but for a site manual Item 38 This should be done but not sure it has to or document any variations Ensure plans for Specification and consistency across sites more be specified in the protocol. administration of important than adherence to user manual. I think this depends on the context of the PROM(s) are consistent Too detailed. with each PROM's user Don't see how a protocol can "ensure" anything this More of GCP (Good Clinical Practice) manual. This seems very wise. It should be for sounds like the role of someone appraising a the researcher to do, not the REB or protocol. other reviewers. IM Or if not consistent, also discuss why not. This may be unintentionally strict if the administration differs, the investigators need to The User Manual should be in an SOP or appendix to the protocol. explain why / provide the rationale. This should be done centrally by the CI and any should have SOP for this tensions/clashes resolved. A clear plan for this item should be related to item 2329? administration within the context of the specific Or if not, a rationale for why it deviates study should go to the sites. from the user manual Not a protocol issue more of an implementation This is the protocol developer's responsibility. But I don't' think it belongs issue. Not in protocol should be done when selecting in the protocol itself. Very important!! Implicit in item 37, therefore redundant First, user's manuals will not always be of good Micromanagement

### quality, so issue is not consistency, but While this is a good idea scientifically. I administration of proms should be explained don't think that this should be part of the Or, if not consistent with something in the user checklist. Many PROMs don't have user manual, provide a rationale for why not. manuals. Also, this doesn't require text in a protocol (so nothing to check off). All details related to administration of PROM(s) should be in one place only, ideally the user manual. Important that info is aligned with These details should be omitted from the PRO guidelines in both primary and secondary. protocol. In the protocol, this item should be more explicit, assuming the user manual includes this e.g. how this will be ensured. information Where user manuals exist don't think the This needs to be checked but not necessarily do for all PROMs necessarily stated in the protocol. Important for protocol implementation but not sure Brief mention in protocol, more detail in this needs to be in the protocol trial conduct / staff training documents. Again, important but for a site manual and that permissions to use these PROMs have been given It is conceivable that a study may collect a PRO in a manner not consistent with the PRO user manual. The checklist item should focus on cases when this is required and encourage protocols to state rationale for deviation from user Item 39 if secondary this is often mainly in the SAP This could be described in the SAP. Include an a priori n.b. where more detail of primary PRO analysis is The protocol should signpost the location description of all also expanded on of PRO analysis details i.e. in the SAP planned PRO analyses Standard procedure will be fully covered in a statistical pertaining to the study Why should these be described any differently from analysis plan which has to be written hypotheses. trials with no PRO? within 3 months of study start Details for the SAP, not the protocol. don't feel qualified to comment on this so While a high level description should be in the please discard my answer protocol, the details are usually provided in the Statistical Analysis Plan. Why an " a priori"? PRO ae "method" and should be be placed in the Methods Clearly essential to have a plan and avoid 'data dredging' but should not be so inflexible that an section like any other measurement emerging and valid new question is not explored procedure. after all research is about exploring and learning. Already captured in main SPIRIT Essential for evaluation of overall results checklist For primary outcome, the primary The stats plan is separate from the protocol though generally a high level overview is provided in the analysis needs to be defined in the protocol itself protocol. All else should be described in a statistical analysis plan, not in the Statistical Analysis Plan document. Could be in the protocol. protocol, typically in SAP only Could be part of statistical analysis plan. At a high level. More detailed The word "all" is too restrictive. Include an a priori descriptions would be expected in the statistical analysis plan post completion description of the primary PRO analyses..... Yes, but let the possibility to complete the PRO statistical plan during the study (before the "freeze" of the database and before revealing the double-blind). Some a posteriori analyses (e.g. other definitions of responders to make sensitivitiy analyses) may be also accepted if clearly disclosed as adhoc non pre specified analyses The detail should be included in the statistical analysis plan (SAP) determining this detail (esp. "all" planned analyses) may hold up protocol completion. An overview of key aspects of the plan are required in the in protocol is needed when PRO is primary. Aside: revised wording to this effect may change panels voting. Is this the same as a Statistical Analysis Plan (SAP)? Item 40 Could be described in the SAP. in SAP for secondary State the assumptions of Briefly in protocol, should be covered in Statistical It will be interesting to have a statisticians PRO analyses. and Health Economic analysis plans. A bit vague for implementation. Needs clarification probably better covered in statistical of what is meant by 'assumptions'. analysis plan Must be made clear Too detailed. Details for the SAP, not the protocol. ditto Q39 These details are usually provided in the Statistical 40 could be combined with 39 when Analysis Plan. expressing best practice. I'm not sure what this means exactly too vague This item is not really clear to me. I

**Delphi Panel Comments** 

**Candidate Item** 

Stakeholder comments

Candidate Item	With references if possible     this is an SAP issue     Unclear question. What kind of assumptions?     I don't understand this. Do you mean hypotheses?     Not sure I understand the intent of this statement	assume that "statistical" assumptions are meant, here.  Redundant. Issue already dealt with in previous items Vague At some point, we have to trust that RCT biostatisticians are competent and understand how to do statistics. If not, that is a different document to be developed and not part of a protocol checklist. These are often obvious (e.g., standard assumptions for statistical testing). including the nature of the data This detail is for the SAP. Not sure what is meant here.
Item 41 State the anticipated response rate and implications for the sample size.	Anticipated response rate doesn't seem relevant but a statement that addresses the plan for addressing attrition e.g. replace subject or intention to treat approach; incomplete cases AND how the data will be handled.       Anticipated response rate doesn't seem relevant but a statement that addresses the plan for addressing attrition e.g. replace subject or intention to treat approach; incomplete cases AND how the data will be handled.	
Item 42 Include an a priori estimation of PRO effect size.	<ul> <li>This need to be clearer: do you mean estimation by a comparison of treatment groups, or do you mean a guess based on prior (indirect) information?</li> <li>Not needed for secondary if no power calculation is being made for secondary.</li> <li>Essential for primary. See previous comment about describing power for secondary outcomes.</li> <li>Again need to have this but centrally. Sites need to be encouraged to achieve maximal completion.</li> <li>Clinical meaningfulness should be a given if a validated PRO is used and should be easy. If it is being used as a primary outcome for the first time then the effect size must be estimated as it is part of the hypothesis to be tested.</li> <li>Only needed it the PRO is being used to calculate sample size as a primary outcome; maybe a key secondary outcome.</li> </ul>	<ul> <li>It will be interesting to have a statisticians views</li> <li>Goes hand in hand with sample size calculation; however irrelevant to trials wishing to simply canvass the trajectory of key PROs</li> <li>Again, think this is already embedded in power/sample size calculations.</li> <li>Effect size won't be applicable for every analysis, e.g. delaying time to deterioration may be the aim</li> <li>Prefer to see mean and SD or other</li> </ul>

Bitter 44   Fig. 2	Candidate Item	Stakeholder comments	Delphi Panel Comments
Emm 41			•
Item 43   Specify intention to treat   Spec			
Specify intention to treat or per protocol PRO analyses.  **Pit should be for the efficacy analyses in general, not separately for each PRO analyse separately. This should be the ery different for PRO trais? Cot am not understanding the point of this survey! I regular entirely in the existing spill is remaining the same, and this spire PRO is for extra requirements?  **Details for the SAP, not the protocol.**  **Doord Clinical graction**  **Details for the SAP, not the protocol.**  **Doord Clinical graction**  **Details for the SAP, not the protocol.**  **Details for the SAP, not the protocol and before looking appropriately.**  **These should all be in the SAP. In reality SAP is usually written after the protocol and before looking appropriately.**  **These should all be in the SAP. In reality SAP is usually written after the protocol.**  **Details for the SAP, not the protocol and before looking appropriately.**  **These should all be in the SAP. In reality SAP is usually written after the protocol and before looking appropriately.**  **The same should be defined in a statistical analysis glants.**  **Details for the SAP, not the protocol and before looking appropriately.**  **The same should be defined in a statistical satisfaction and the protocol and before looking appropriately.**  **The same should be defined in a statistical analysis glants.**  **Details for the SAP, not the protocol and before looking appropriately.**  **Details for the SAP, not the protocol and before looking appropriately.**  **Details for the SAP, not the protocol and before looking appropriately.**  **Does not fully understand this team left blank intendisting appropriately.**  **Does not fully understand this team left blank intendisting appropriately.**  **Does not fully understand this team left blank intendisting appropriately.**  **Does not fully understand this team left blank intendisting appropriately.**  **Does not fully understand this team left blank intendisting appropriately.**  **Does not fully understand this team le			
Specify intention to treat or per protocol PRO analyses.  **Piths should be for the efficacy analyses in general, not separately for each PRO analyse separately. With should this be any different for PRO thate? On any control of the survey in impairs anything in the oxiding going gover time unless using the analysis population for the PROs. See for other endough it is network of the analysis population for the PROs. The should be done for PROs and the protocol.  **Generally it is network ITT not Per Protocol is to be seld to timing issue.**  **Generally it is network ITT not Per Protocol is to the population of the analysis population for the PROs. The analysis population for the PROs. The should be defined in a statistical analysis population for the PROs. The should be defined in a statistical analysis population for the pROs.  **The should all be in the SAP. In reality SAP is summary statistics (as appropriate).  **The should all be in the SAP. In reality SAP is usually suppossible.**  **Detail for the SAP, not the protocol.**  **Details for the SAP, not the protocol and before looking a three statistics (as appropriate).  **This is an SAP deliverable, not a protocol issue.**  **Summary and share.**  **Details for the SAP, not the protocol.**  **Details for the SAP, not the protocol save.**  **Summary statistics (as appropriate).**  **Details for the SAP, not the analysis.**  **Details for the SAP, not the protocol.**  **De	Item 43	Briefly in protocol, should be covered in Statistical	It will be interesting to have a statisticians
analyses.  **No separately for each PRO analysis separately.**  **Why should this be any different for PRO final? Of course this is needed, but if makes me think that I may be a separately to the protocol integration of the protocol.**  **Details for the SAP, not the protocol.**  **General requirement for clinical trials.**  **This is a many suddistates (as appropriately.**  **This is an analysing over integration of these should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.**  **This is an analysing over integration of the substitution of the analysis population of integration of the analysis plan, not in a collection of items).**  **This is an analysing over integration of the substitution of the analysis plan, not in a collection of items.**  **This is an analysing over integration of items of the protocol and before looking at the data.**  **This is an analysing over integration of the analysis plan, not in a collection of the analysis plan, not in a collection of items).**  **This is an analysing over integration of the analysis plan, not in a collection of the sample plan in a collection of the sample plan in the analysis plan including described by the protocol of the sample plan in the same analysis plan including described by the protocol of the sample plan in the same analysis plan including described by the protocol o	Specify intention to treat		
Why should this be any different for PRO intel® Of course this in peods, but it makes me think that I am not understanding the point of this survey! I magne anything in the sessing pair is remaining requirements?      Details for the SAP, not the protocol.     Good clinical practise      Details for the SAP, not the protocol.     Good clinical practise      These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.     This is an SAP deliverable, not a protocol is substitution of the PRO and the analysis population?      These should all be in the SAP. In reality SAP is usually written after the protocol.     This is a SAP deliverable, not a protocol issue summary statistics (as appropriate).      This is a SAP deliverable, not a protocol issue summary statistics (as appropriate).      This is an SAP deliverable, not a protocol issue summary statistics (as appropriate).      This is an SAP deliverable, not a protocol issue summary statistics (as appropriate).      This is an SAP deliverable, not a protocol issue summary statistics (as appropriate).      This is an SAP deliverable, not a protocol issue summary statistics (as appropriate).      This is an SAP and the protocol.     This is an SAP and the protocol.     This is an SAP and the protocol and before looking at the data.     Details for the SAP not the protocol.     This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).      This is an SAP and the protocol issue summary statistics (as appropriate).	or per protocol PRO	<ul> <li>This should be for the efficacy analyses in general,</li> </ul>	<ul> <li>presume the same should be done for</li> </ul>
Why should this be any different for PRO make? Of course this is needed, but if makes me think that I am not understanding the point of this survey? I the same, and this sprint PRO is for extra requirements?      Details for the SAP, not the protocol.      Good clinical practise      Details for the SAP, not the protocol.      This item seams redundant (see prior item). Already captured in main SPIRIT checkits and protocol analysis plan, not in a checkites. This item seams redundant (see prior item). The same should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP, not the protocol and before looking at the data.      Details for the SAP protocol issue.      Summary of what?      Do not fully understand this item lief blank intentionally.      Invited the definition of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the analysis plan in looking descriptions.      This is an SAP collection of the sapportance of the same statisticiti	analyses.		
course this is needed, but it makes me think that a man of understanding the point of this survey! imagine anything in the existing spirit is remaining the some, and this spirit PPC is of certar.  • Details for the SAP, not the protocol. • Good clinical practise  • Details for the SAP, not the protocol. • Good clinical practise  • Details for the SAP, not the protocol. • Good clinical practise  • This is man shape to the same and spirit series and post because it impulation. I would reword this to state the analysis population for the PRCs this needs to be tend to timing issue in the same and spirit series and post because it impulation. I would reword this to state the same analysis population for the PRCs this needs to be tend to timing issue it is not because it is not subscience in the same analysis population of the PRCs this needs to be tend to timing issue it is not subscience in the same analysis population of the PRCs this needs to be tend to timing issue it is not subscience in the same analysis population of the PRCs this needs to be tend to timing issue it is not subscience in the same analysis population of the PRCs this needs to be tend to timing issue it is not subscience in the same analysis population of the PRCs this needs to be tend to timing issue it is not subscience in the same analysis population in a statistical analysis plan to in a checkled.  • This is an SAP deliverable, not a protocol and before solving at the data.  • This is an SAP deliverable, not a protocol issue is summary statistics (as appropriate).  • This is an SAP deliverable, not a protocol issue is the data.  • Summary of what?  • this is more suitable for the SAP than protocol understand this tem left blank important to identify which of the SAP.  • This is an SAP deliverable, not a protocol issue is the data.  • This is an SAP deliverable, not a protocol issue is the data.  • This is not the statistical to mean.  • This is not be statistical to mean.  • Is an offer the analysis plan including descriptive?  • It will be			
imagine anything in the existing spirit is remaining the same, and this spirit PRO Is for extra requirements?  Details for the SAP, not the protocol.  Good clinical practise  Protocol fix the population with a lease line assessment when analysing over time unless used in analysing over time unless used in the same the analysis population of the PROs.  General requirement for clinical trials. This item seems redundant (see prior items)  Alterady captured in main SPIEIL checkles  This should be defined in a straistical analysis plan, not in a checklest.  This item seems redundant (see prior items)  Alterady captured in main SPIEIL checklest  This item seems redundant (see prior items)  Alterady captured in main SPIEIL checklest  This should be defined in a straistical analysis plan, not in a checklest.  Dependent in study, it spossible, yes. Not always possible.  This should be defined in a straistical analysis plan, not in a checklest.  Dependent in study, it spossible, yes. Not always possible.  This should be defined in a straistical analysis plan, not in a checklest of the PRO as priors in study. It spossible, yes. Not always possible.  Depending on specific circumstances. One of these should be used for PRO as primary outcome and the summary statistics (as appropriate).  The could be defined in a straistical analysis, lite in the SAP.  This could be defined in the SAP.  This would be addressed within the thin in the same in the sam		·	<ul> <li>similar to item 49</li> </ul>
Imagine anything in the existing spirit is remaining the same, and this spirit PKO to retarn requirements?		am not understanding the point of this survey I	<ul> <li>Generally it is neither ITT nor Per</li> </ul>
the same, and this spirit PRO is for extra requirements?  Details for the SAP, not the protocol.  This is more suitable on the SAP in reality SAP is usually written after the protocol and before looking at statistical analysis plan, not in a foot of the SAP in reality SAP is usually written after the protocol and before looking at the details.  This is more suitable for the SAP in reality SAP is usually written after the protocol and before looking at the details.  This is more suitable for the SAP in reality SAP is usually written after the protocol.  This is more suitable for the SAP in reality SAP is usually written after the protocol.  This is more suitable for the SAP in reality SAP is usually written after the protocol.  This is more suitable for the SAP in reality SAP is usually written after the protocol.  This is more suitable for the SAP in reality SAP is usually written after the protocol.  This is more suitable for the SAP in reality SAP is usually written after the protocol and before looking at the dota.  This could be addressed within the analysis plan in the same involves.  Details for the SAP, not the protocol and before looking at the dota.  This is more suitable for the SAP in reality SAP is usually written after the protocol and before looking at the dota.  This would be addressed within the analysis plan in the same involves.  Details for the SAP is not the protocol and before looking at the dota.  This true of the SAP is the same involves.  The same statistical is the same involves.  The same statistical written and the same plant is the same involves.  The same statistical is the same involves.  It may be interesting to have a statistician view.  The same statistic is the same involves.  The same statistic is the same is the detail of the same involves.  The same statistic is the sa		imagine anything in the existing spirit is remaining	
Details for the SAP, not the protocol.			
tiem 44  These should all be in the SAP. In reality SAP is usually written after the protocol and before locking at the data.  Details for the SAP has protocol.  This is not should be defined in a statistical analysis population for the PROs this needs to be the through the protocol issue appropriate).  These should all be in the SAP. In reality SAP is usually written after the protocol and before locking at the data.  Details for the SAP has protocol.  This is an abplicance the many size population.  For SAP.  These should all be in the SAP. In reality SAP is usually written after the protocol and before locking at the data.  Details for the SAP has protocol.  This is an SAP deliverable, not a protocol issue appropriate).  This is an SAP deliverable, not a protocol issue appropriate).  The search of the sale should be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It important to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify which of the protocol and it men (to identify			
tem 44 Include a priori identified summary statistics (a sappropriate).  Item 44 Include a priori identified summary statistics (a sappropriate).  Item 45 Include a priori identified summary statistics (a sappropriate).  Item 55 In Do not fully understand this item left blank Include a priori identified summary statistics (a sappropriate).  Item 46 Include a priori identified summary statistics (a sappropriate).  Item 47 Include a priori identified summary statistics (a sappropriate).  Item 48 Include a priori identified summary statistics (a sappropriate).  Item 49 Include a priori identified summary statistics (a sappropriate).  Item 40 Include a priori identified summary statistics (a sappropriate).  Item 41 Include a priori identified summary statistics (a sappropriate).  Item 42 In this is an SAP deliverable, not a protocol suse Summary of what?  It this is more suitable for the SAP than protocol.  In this is more suitable for the SAP than protocol.  In this is more suitable for the SAP than protocol.  In proparato to identify which of the PROM scores (total or subscale) will be used in the analysis.  In proparato to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item 45 Item 45 Specify the minimum PRO response rate and  Item 45 Specify the minimum PRO response rate and		<ul> <li>Details for the SAP, not the protocol.</li> </ul>	
General requirement for clinical trails. This item seams requirement for clinical trails. This item seams regular to apy the statistical analysis plan, not operations?		<ul> <li>Good clinical practise</li> </ul>	
This tensems redundant (see prior tiems)  Altready captured in main SPIRIT checklist  ITI is an ambiguous term better to say as randomized or perprotocol as statistical and analysis.  Item 44  Item 44  * These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.  Details for the SAP, not the protocol and before looking at the data.  Details for the SAP, not the protocol and before looking at the data.  Details for the SAP, not the protocol and before looking at the data.  Details for the SAP, not the protocol.  This is an SAP deliverable, not a protocol issue summary statistics (as appropriate).  This is an SAP deliverable, not a protocol issue summary statistics for the SAP, and the protocol.  This is more suitable for the SAP than protocol understand this item left blank intentionally intended the second of the s			•
A mady captured in main SPIRIT checklist			
Already captured in main SPIRIT checklist			` '
These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data. Details for the SAP, not the protocol. This is an ord some organization of the sample site of the sampl			,
ITT is an ambiguous term befer to say as randomized or perportocol			
**This should be defined in a statistical analysis plan, not in a checklist. Depends in study. If possible, yes. Not always possible.  **Depends in study. If possible, yes. Not always possible of these should be used for POS aprimary outcome appropriate of the surface of these should be used for POS appropriate of the surface. Or of these should be used for POS appropriate of the surface of th			
This should be defined in a statistical analysis plan in not in a checklist.  Depends in study. If possible, yes. Not always possible.  Or both, depending on specific circumstance. One of these should be used for PRO as primary outcome. Rephrase a smore general include definition of the analysis population. For SAP. For most efficacy analyses, it is the ITT that is preferred.  Item 44 Include a priori identified surmary statistics (as appropriate).  Details for the SAP, not the protocol. This is an SAP deliverable, not a protocol issue. Surmary of what? It his is more suitable for the SAP than protocol issue. Unclear question. Do you mean that you should specify whether you will go to report means or nediars? Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  If it is a sappropriate in the same intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  If it is a sappropriate in the analysis plan including descriptives.  As appropriate in the analysis plan including descriptives and the checklist liters and the continual to the protocol.  In the continual protocol is the same including descriptive in the analysis plan including the protocol and the part of the primary analysis, then yes.  For SAP When PRO data will be used e.g. trajectory of means over time versus			
analysis plan, not in a checklist.  Depends rope spossible.  These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.  This could be detailed in the SAP. This would b			
Polymer in study. If possible, yes. Not always possible.			
Item 44			
tem 44 Include a priori identified summary statistics (as appropriate).  **These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.  **Details for the SAP, not the protocol.**  **This is an SAP deliverable, not a protocol susually written after the protocol and before looking at the data.  **Details for the SAP, not the protocol.**  **This is an SAP deliverable, not a protocol susually septiments of the SAP in the protocol.**  **This is an SAP deliverable, not a protocol susually specify whether you will go to report means or medicar?**  **Do not fully understand this item left blank intentionally.**  **Important to identify which of the PROM scores (total or subscale) will be used in the analysis.**  **Important to identify which of the PROM scores (total or subscale) will be used in the analysis.**  **Important to identify which of the PROM scores (total or subscale) will be used in the analysis.**  **Important to identify which of the PROM scores (total or subscale) will be used in the analysis.**  **Important to identify which of the PROM scores (total or subscale) will be used in the analysis.**  **In the importance of the subscale of the SAP.**  **In the interesting to have a statistician view.**  **In the interesting to the view a statistician view.**  **In the interesting to have a statistician view.**  **In the interesting to the way a statistician view.**  **In the interesting to the way a statistician view.**  **In the interesting to have a statistician view.**  **In the interesting to the way a statistician view.**  **In the interesting to the way a statistician view.**  **In the interesting to the way a statistician view.**  **In the interesting to the view should be clearly spec			<ul> <li>Depends in study. If possible, yes. Not</li> </ul>
tem 44 Include a priori identified summary statistics (as appropriate).  **Provided a priori identified summary statistics (as a transport of the sAP.  **Provided a priori identified summary statistics (as appropriate).  **Provided a priori identified statistics (as a transport of the sAP.  **Provided statistics (as a transport of the sAP.  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistics (as an SAP deliverable, not a protocol issue statistics).  **Provided statistic			
used for PRO as primary outcome Rephrase as more general "include definition of the analysis population" For SAP. For most efficacy analyses, it is the ITT the M4 Include a priori identified summary statistics (as appropriate).  Details for the SAP, not the protocol This is an SAP deliverable, not a protocol issue Summary of what? Unclear question. Do you mean that you should specify whether you will go to report means or medians? Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item 45 Specify the minimum PRO response rate and  Details with above.  These should all be in the SAP, In reality SAP is usually written after the protocol and before looking at the data.  This could be detailed in the SAP. It bis would be addressed within the analysis plan; i.e. some overlap with item analysis plan; i.e.			
Rephrase as more general "include definition of the analysis population"   For SAP			
Item 44 Include a priori identified summary statistics (as appropriate).  Item 45 Include a priori identified summary statistics (as appropriate).  Item 46 Include a priori identified summary statistics (as appropriate).  Item 47 In item 48 Include a priori identified summary statistics (as appropriate).  Item 48 Include a priori identified summary statistics (as appropriate).  Item 49 In item 40 In item 40 In item 41 In item 41 In item 41 In item 42 In item 42 In item 43 In item 44 In item 45 In item 45 Item 46 In item 46 In item 46 In item 46 In item 47 In item 47 In item 47 In item 48 In item 47 In item 48 In item 49 In item 4			• •
Item 44 Include a priori identified summary statistics (as appropriate).  * These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.  * Details for the SAP, not the protocol. This is an SAP deliverable, not a protocol issue Summary statistics (as Summary of what? This is more suitable for the SAP protocol. Unclear question. Do you mean that you should specify whether you will go to report means or medians?  * Do not fully understand this item left blank intentionally in			
These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.   Details for the SAP, not the protocol and before looking at the data.   Details for the SAP, not the protocol and before looking at the data.   Details for the SAP, not the protocol issue Summary statistics (as appropriate).   This is an SAP deliverable, not a protocol issue Summary of what?   This is more suitable for the SAP than protocol Unclear question. Do you mean that you should specify whether you will go to report means or medians?   Do not fully understand this Item left blank intentionally   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   In the Important to identify which of the PROM scores (total or subscale) will be used as the total analysis plan including descriptives?   Item 10 claration to the score over the very the total total trials. Vague   The (as appropriate) which we should be part of the SAP.   It will be an adequate sample size calculation?   The (as appropriate) white the sample size of the total analysis plan including descriptives?   Item			
Item 44 Include a priori identified summary statistics (as appropriate).  • These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.  • Details for the SAP, not the protocol. Susue Summary statistics (as appropriate).  • This is an SAP deliverable, not a protocol issue Summary statistics (as appropriate).  • Details for the SAP, not the protocol. Unclear question. Do you mean that you should specify whether you will go to report means or medians?  • Do not fully understand this item left blank intentionally.  • Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  • Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • It will be interesting to have a statisticians views  • Not clear what is meant. Is this to enable an adequate sample size calculation?  • redundant with item 39  • It don't grasp what this item involves.  • It will be interesting to have a statistician and views  • Not clear what is meant. Is this to enable and element of the analysis plan including descriptives?  • It will be interesting to have a statistician and views  • Not clear what is meant. Is this to enable and element of the analysis plan including descriptives?  • It will b			
Include a priori identified summary statistics (as appropriate).  **These should all be in the SAP. In reality SAP is usually written after the protocol and before looking at the data.  **Details for the SAP, not the protocol.**  **This is an SAP deliverable, not a protocol issue Summary of what?**  **Unclear question. Do, you mean that you should specify whether you will go to report means or medians?**  **Do not fully understand this item left blank intentionally intentio			
usually written after the protocol and before looking at the data.  Details for the SAP, not the protocol.  This is an SAP deliverable, not a protocol issue Summary statistics (as Summary of what?  It will be interesting to have a statisticians views of Summary of what?  It will be interesting to have a statisticians views of Summary of what?  It will be interesting to have a statisticians views of Summary of Ward of Saphan protocol issue Summary of Ward of Saphan protocol of Unclear question. Do you mean that you should specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  It will be interesting to have a statisticians views of This would be addressed within the analysis plan; i.e. some overlap with item 39  I don't grasp what this item involves. defer to methods here  Not clear what is meant. Is this to enable an adequate sample size calculation?  redundant with item 39  Again not entirely clear what you mean, outline the analysis plan including descriptives?  Item not clear  ditto C39  **As appropriate!* how can we respond to question, then? This should be part of the SAP.  I can't tell what this means  General requirement for clinical trials.  Vague  The "fas appropriate" makes this item non understandable for me.  Combine with checklist item 39? If a summary measure is used, if should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocoal as it flags how the PRO data will be used e.g. trajectory of means over time to deterioration in PRO are very different uses of PRO data.  This is not the statistical analysis plan.  Will be interesting to have a statisticians views  This would be addressed within the analysis plan including defer to methods here  Not clear what is meant. Is this to enable an along the part of the part of the part of the part of the part o			<u> </u>
at the data.  Details for the SAP, not the protocol. This is an SAP deliverable, not a protocol issue Summary of what?  Unclear question. Do you mean that you should specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the protocos.  Item 45 Specify the minimum PRO response rate and  Tibis can SAP deliverable, not a protocol issue Summary of what?  Initia san SAP deliverable, not a protocol issue Summary of what?  Initia san SAP deliverable, not a protocol issue Initia san SAP deliverable, not a protocol Initia san SAP deliverable, not a protocol Item 45 Specify the minimum PRO response rate and  This is an SAP deliverable, not a protocol issue  I den't grasp what this item involves.  I den't grasp what this item analysis plan, i.e. some overlap with item 39  I den't grasp what this item involves.  I den't grasp what this item left blank in the a	1.5		
Details for the SAP, not the protocol.  This is an SAP deliverable, not a protocol issue  Summary of what?  It his is more suitable for the SAP than protocol  Unclear question. Do you mean that you should specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Protocolor item and to descriptives?  This would be addressed within the analysis plan is time involves. defer to methods here  Not clear what is meant. Is this to enable an adequate sample size calculation?  redundant with item 39  Again not entirely clear what you mean, outline the analysis plan including descriptives?  Item 10 (as appropriate): how can we respond to question, then? This should be part of the SAP.  I can't tell what this means General requirement for clinical trials.  Vague  The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes. For SAP, When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  Will be implicit for primary in the same size calculation Not sure what's included here?  Item 45  Specify the minimum PRO response rate and		,	
This is an SAP deliverable, not a protocol issue Summary of what?  this is more suitable for the SAP than protocol Unclear question. Do you mean that you should specify whether you will go to report means or medians? Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the analysis plan including descriptives?  Item 15  Specify the minimum  PRO response rate and  Important to identify which of the PROM scores (total or subscale) with heap analysis.  Item 45  Specify the minimum  PRO response rate and  Important to identify which of the PROM scores (total or subscale) with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  Item 45  Specify the minimum  PRO response rate and			
Summary of what?  this is more suitable for the SAP than protocol Unclear question. Do you mean that you should specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item 10	appropriate).		
this is more suitable for the SAP than protocol Unclear question. Do you mean that you should specify whether you will go to report means or medians? Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.    Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify which of the PROM scores (total or subscale) will be used in the analysis.   Important to identify the identification of the SAP.			
Unclear question. Do you mean that you should specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item 16 Lear (titl what this means General requirement for clinical trials.  Vague  The "(as appropriate)" makes this item non understandable for me.  Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  Will be implicit for primary in the same size calculation.  Not sure what's included here?  It will be interesting to have a statisticians views  overlaps with item 14			
specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item 45  Specify the minimum  PRO response rate and  Specify whether you will go to report means or medians?  Do not fully understand this item left blank intentionally an adequate sample size calculation?  Tedundant with item 39 Again not entirely clear what you mean, outline the analysis plan including descriptives?  Item 45 Specify the minimum  PRO response rate and  Specify whether you will go to report means or medians?  Pon the primary analysis, and the part of the SAP.  In can't tell what this means General requirement for clinical trials.  Vague  The '(as appropriate)' makes this item non understandable for me.  Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  Will be implicit for primary in the same size calculation  Not sure what's included here?  It will be interesting to have a statisticians views  overlaps with item 14		· ·	<u> </u>
medians?  Do not fully understand this item left blank intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Pagain not entirely clear what you mean, outline the analysis plan including descriptives?  item not clear ditto Q39  **As appropriate*: how can we respond to question, then? This should be part of the SAP.  I can't tell what this means General requirement for clinical trials.  Vague  The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  It will be interesting to have a statisticians views overlaps with item 14			
Do not fully understand this item left blank intentionally  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item not clear ditto Q39  "As appropriate": how can we respond to question, then? This should be part of the SAP.  I can't tell what this means General requirement for clinical trials.  Vague  The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39?  The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39?  If part of the primary mayes, it is should be clearly specified in the analyses.  If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation Not sure what's included here?  Item 45  Specify the minimum PRO response rate and  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  The part of the primary is used, it should be clearly specified in the analyses.  It will be implicit for primary in the same size calculation Not sure what's included here?  It will be interesting to have a statisticians views overlaps with item 14		, , , , , , , , , , , , , , , , , , , ,	
intentionally Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Item 45 Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (total or subscale) will be used in the analysis.  Important to identify which of the PROM scores (ditto Q39  Item 45 Item 45 Important to identify which of the PROM scores (total or subscale) will be used and used in the analyses.  In the PRO department for clinical trials.  Again not entirely clear what you mean, outline the analysis plan including descriptives?  Item 45 Item 45 Item 45 Item 45 Item 45 Item 45 Item 46 I			·
Important to identify which of the PROM scores (total or subscale) will be used in the analysis.    Important to identify which of the PROM scores (total or subscale) will be used in the analysis.    Important to identify which of the PROM scores (total or subscale) will be used in the analysis.    Important to identify which of the PROM scores (total or subscale) will be used in the analysis plan including descriptives?   Item 45			
(total or subscale) will be used in the analysis.    Item 45			
item not clear ditto Q39  "As appropriate": how can we respond to question, then? This should be part of the SAP.  I can't tell what this means General requirement for clinical trials. Vague  The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses. If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan. will be implicit for primary in the same size calculation Not sure what's included here?  Item 45 Specify the minimum PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut response rates for inclusion yes, but not a hard cut views overlaps with item 14			
<ul> <li>ditto Q39</li> <li>"As appropriate": how can we respond to question, then? This should be part of the SAP.</li> <li>I can't tell what this means</li> <li>General requirement for clinical trials.</li> <li>Vague</li> <li>The "(as appropriate)" makes this item non understandable for me.</li> <li>Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.</li> <li>If part of the primary analysis, then yes.</li> <li>For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.</li> <li>This is for the statistical analysis plan.</li> <li>will be implicit for primary in the same size calculation</li> <li>Not sure what's included here?</li> <li>It will be interesting to have a statisticians views</li> <li>overlaps with item 14</li> </ul>		(total or subscale) will be used in the analysis.	
• "As appropriate": how can we respond to question, then? This should be part of the SAP.  • I can't tell what this means • General requirement for clinical trials. • Vague • The "(as appropriate)" makes this item non understandable for me. • Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses. • If part of the primary analysis, then yes. • For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data. • This is for the statistical analysis plan. • will be implicit for primary in the same size calculation • Not sure what's included here?  It will be interesting to have a statisticians views • overlaps with item 14			
question, then? This should be part of the SAP.  I can't tell what this means General requirement for clinical trials. Vague The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses. If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data. This is for the statistical analysis plan. will be implicit for primary in the same size calculation Not sure what's included here?  It will be interesting to have a statisticians views overlaps with item 14			
the SAP.  I can't tell what this means General requirement for clinical trials.  Vague The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses. If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data. This is for the statistical analysis plan. will be implicit for primary in the same size calculation will be implicit for primary in the same size calculation Not sure what's included here?  It will be interesting to have a statisticians views overlaps with item 14			"As appropriate": how can we respond to
I can't tell what this means General requirement for clinical trials. Vague The "(as appropriate)" makes this item non understandable for me. Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses. If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data. This is for the statistical analysis plan. will be implicit for primary in the same size calculation will be implicit for primary in the same size calculation Not sure what's included here?  Item 45 Specify the minimum PRO response rate and  PRO response rate and  PRO response rate and  I will be interesting to have a statisticians views overlaps with item 14			question, then? I his should be part of
General requirement for clinical trials.     Vague     The "(as appropriate)" makes this item non understandable for me.     Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.     If part of the primary analysis, then yes.     For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.     This is for the statistical analysis plan.     will be implicit for primary in the same size calculation     Not sure what's included here?  Item 45 Specify the minimum PRO response rate and      Dealt with above.     Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut     Vague     The "(as appropriate)" makes this item non understandable for me.     Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.     If part of the primary analysis, then yes.     For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.      This is for the statistical analysis plan.     will be implicit for primary in the same size calculation     Not sure what's included here?  It will be interesting to have a statisticians views     overlaps with item 14			
<ul> <li>Vague</li> <li>The "(as appropriate)" makes this item non understandable for me.</li> <li>Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.</li> <li>If part of the primary analysis, then yes.</li> <li>For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.</li> <li>This is for the statistical analysis plan.</li> <li>will be implicit for primary in the same size calculation</li> <li>Not sure what's included here?</li> <li>It will be interesting to have a statisticians views</li> <li>overlaps with item 14</li> </ul>			
The "(as appropriate)" makes this item non understandable for me.  Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  views  overlaps with item 14			•
non understandable for me.  Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  non understandable for me.  Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO data will be useful to specify in protocol as it flags how the PRO are very different uses of PRO data.  This is for the statistical analysis plan.  Not sure what's included here?  It will be interesting to have a statisticians views  overlaps with item 14			
Combine with checklist item 39? If a summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes.  For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  overlaps with item 14			
summary measure is used, it should be clearly specified in the analyses.  If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data. This is for the statistical analysis plan. will be implicit for primary in the same size calculation Not sure what's included here?  Item 45 Specify the minimum PRO response rate and  Dealt with above. Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  summary measure is used, it should be clearly specified in the analyses. If part of the primary analysis, then yes.  It part of the primary analysis, then yes.  It part of the primary analysis, then yes.  It will be interesting to have a statisticians views overlaps with item 14			
clearly specified in the analyses.  If part of the primary analysis, then yes. For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data. This is for the statistical analysis plan. will be implicit for primary in the same size calculation Not sure what's included here?  Item 45 Specify the minimum PRO response rate and  Dealt with above. Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  clearly specified in the analyses. If part of the primary analysis, then yes. It will be interesting in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  It will be interesting to have a statisticians views overlaps with item 14			
<ul> <li>If part of the primary analysis, then yes.</li> <li>For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.</li> <li>This is for the statistical analysis plan.</li> <li>will be implicit for primary in the same size calculation</li> <li>Not sure what's included here?</li> <li>Acceptable windows for data collection and item response rate and</li> <li>Dealt with above.</li> <li>Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut</li> <li>overlaps with item 14</li> </ul>			
• For SAP. When PRO primary, may be useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  • This is for the statistical analysis plan.  • will be implicit for primary in the same size calculation  • Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  • Dealt with above.  • Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  • overlaps with item 14			
useful to specify in protocol as it flags how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  overlaps with item 14			
how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan. will be implicit for primary in the same size calculation Not sure what's included here?  Item 45  Specify the minimum PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  how the PRO data will be used e.g. trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  Nill be implicit for primary in the same size calculation Not sure what's included here?  It will be interesting to have a statisticians views overlaps with item 14			
trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  trajectory of means over time versus time to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  Will be implicit for primary in the same size calculation  Not sure what's included here?  It will be interesting to have a statisticians views  overlaps with item 14			
to deterioration in PRO are very different uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  to deterioration in PRO are very different uses of PRO data.  Nill be implicit for primary in the same size calculation  Not sure what's included here?  It will be interesting to have a statisticians views  overlaps with item 14			trajectory of manna over time versus time
uses of PRO data.  This is for the statistical analysis plan.  will be implicit for primary in the same size calculation  Not sure what's included here?  Item 45  Specify the minimum  PRO response rate and  Dealt with above.  Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut  uses of PRO data.  It will be implicit for primary in the same size calculation  Not sure what's included here?  It will be interesting to have a statisticians views  overlaps with item 14			
<ul> <li>This is for the statistical analysis plan.</li> <li>will be implicit for primary in the same size calculation</li> <li>Not sure what's included here?</li> <li>Item 45</li> <li>Dealt with above.</li> <li>Acceptable windows for data collection and item response rate and</li> <li>Acceptable windows for inclusion yes, but not a hard cut</li> <li>overlaps with item 14</li> </ul>			
will be implicit for primary in the same size calculation   Not sure what's included here?			
size calculation Not sure what's included here?  Item 45 Specify the minimum PRO response rate and  • Dealt with above. • Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut • overlaps with item 14			
Not sure what's included here?   Item 45			
<ul> <li>Dealt with above.</li> <li>Specify the minimum</li> <li>Acceptable windows for data collection and item</li> <li>PRO response rate and</li> <li>It will be interesting to have a statisticians views</li> <li>overlaps with item 14</li> </ul>			
Specify the minimum PRO response rate and  • Acceptable windows for data collection and item response rates for inclusion yes, but not a hard cut • overlaps with item 14	Home 45	D 10 20 1	
PRO response rate and response rates for inclusion yes, but not a hard cut • overlaps with item 14			
,			
point for PRO objective is compromised. • better covered in stats analysis plan			•
07	acceptable degree of	point for PRO objective is compromised.	· · · · · · · · · · · · · · · · · · ·

### **Delphi Panel Comments Candidate Item** Stakeholder comments timing deviation (i.e. No need to include in protocol. Can be covered in The team that controls this should not acceptable time windows separate document e.g. Statistical Analysis Plan at have to initiate this if the job is done in a for each PRO planned, controlled and efficient way least for a secondary outcome. assessment time point) SAP not protocol Timing is redundant with 14. before the PRO objective Again more for SAP I don't think this is needed up front, at no is compromised. point do we really want to shelve the Should be the same as with NonPROMs. data, we just need to adapt the analyses appropriately and adequately look into the possible biases and highlight limitations important but should be included as part of answers to previous questions Should be mandatory in the SAP. Not in Before the PRO objective is compromised' would benefit from clearer specification General requirement for clinical trials. I would split this item. The "Minimum response rate" should not be defined a priori. The number and type of responders represent information in themselves. How much the response rate biases the results is another issue timing deviation important but sensitivity analyses can be performed so not critical If you have this great, but this kind of information is very difficult to come by, especially when you are dealing with new treatments or new patient populations. I would never lock myself in with a hard cut off on response rate. Also, I only specify windows for studies involving FDA label claims. Otherwise, I think some flexibility on the backend is optimal. not sure how you would do this in many circumstances This seems more an issue for a data monitoring committee guideline than for the protocol. I find this item confusing. Doublebarrelled too. Might be more relevant for SAP or site manual Do you mean per item or overall in the study population? Item 46 Briefly in protocol, should be covered in Statistical Could be detailed in the SAP. and Health Economic analysis plans. Describe methods for scoring endpoints. Not in the protocol Where possible, Cite references describing methods, no need to reference scoring include details. manuals for summated This information would probably be more scales from PROM appropriate in a DAP. should go in the SAP (domain specific and/or While a high level description should be in the SOPs total) and methods for protocol, the details are usually provided in the handling missing items, Statistical Analysis Plan. protocol. and methodological if not there results may be meaningless Or the SAP??? papers for composite typically the PRO and the scoring manual are endpoints (e.g. QTWiST). protocol appendices This information could be in an appendix or via manuals exist). hyperlink Could both be in a separate document SAP. not sure what is meant by an endpoint in

### Item 47

State statistical significance levels and include plans for multiplicity/controlling type 1 error.

- A lot of this is needed for SAP perhaps not a protocol checklist. In an ideal world you may like but your trial set up times will be really long.
- Briefly in protocol, should be covered in Statistical and Health Economic analysis plans.
- As in all trial protocols....?.
- For primary, should be described for sample size justification (significance level, no multiplicity). For secondary outcomes, details are for the SAP, not the protocol.
  - This element should be included in the protocol for

- It will be interesting to have a statisticians
- better covered in detail in analysis plan
- I don't fully grasp what this item involves.
- For statistical analysis plan not protocol
- Should be mandatory in the SAP. Not in
- Just a reminder is necessary, if PRO are validated in the literature (so that
- Could be included as reference.
- Brief mention in protocol, more detail in
- this context
- Could be detailed in the SAP.
- It will be interesting to have a statisticians
- for secondary analysis might be better in analysis plan
- I don't understand this item. Perhaps it would be fine to include either 47 or 48, or include a more general item about any plans to address the multiplicity of PRO data?
- This is linked to a lot of the statements as

### ALL the data, not just the PROMs. statistical sampling is one of the cores of High level in the protocol, detail in the SAP the project not a PRO question but CGP Confidence interval more important than pvalue Might be 48 ditto Q39 Both error types (I and II) should be controlled by a Again, nothing new in clinical trials. presented a priori sample size calculation. First type At some point, we have to trust that RCT 1 error has to be estimated according to amount of biostatisticians are competent and hypothesis/tests, than a sample size calculation understand how to do statistics. If not, considering type 2 errors should follow including that is a different document to be type 1 error estimate. developed and not part of a protocol checklist. For secondary endpoint, depends on type of objective. Brief mention in protocol, more detail in SAP One of many questions that overlap with SPIRIT. Is the intention that this guideline will complement SPIRIT or replace it for trials with PROs. I'd assume the former. This need to be related to the overall study as well. IN the regulatory context, this must be done for FDA. However, personally, I do not think it should be required for secondary endpoints. For secondary endpoints, these should be stated in either protocol or prespecified SAP Item 48 Could be detailed in the SAP. Should be covered in Statistical and Health Prespecify sequence of Economic analysis plans. It will be interesting to have a statisticians testing/exploratory Difficult to see how a primary outcome could be views analyses to control for exploratory? I think the wording of this item requires multiplicity or prespecify Details for the SAP, not the protocol. clarification; although having said that I domains (e.g. in a This element should be included in the protocol for think this item is redundant if item 47 is regulatory trial/labelling ALL the data, not just the PROMs. included claim). SAP though hierarchy of endpoints is listed in the Question unclear protocol This is just one way to address item 47. This should be in the detailed analysis plan, not not a PRO question but CGP necessarily the protocol. ditto a39 Not really sure what this means when does one My preferred answer would be: "it assume "testing/exploratory analyses" in a clinical depends on the type of trial and research auestion". depending on whether a claim is pursued or not These seem like 2 different questions. But to me "exploratory" means "exploratory" and not "prespecification." If using an alternative strategy for handling multiplicity, then this checklist item is irrelevant. Consider deleting, because it is redundant with 47. Could be part of SAP instead of protocol Aside: not sure how this applies when PRO is primary. This need to be related to the overall study as well. My experience is that PROMs (compared to other endpoints) sometimes were excluded since it was stated there would have been problems with multiplicity otherwise. Item 49 To me this is more important that Usually more hypothesis generating as a secondary Specify the criteria for statistical significance from an so not relevant in so situations and/or include clinical significance (e.g. outside of protocol i.e. in SAP applicability of findings standpoint. state minimal [clinical] Briefly in protocol, should be covered in Statistical It will be interesting to have a statisticians important difference and Health Economic analysis plans. views and/or responder ditto Q39 This is patient reported after all definition (size and When available. To be mentioned in the protocoled, and duration of benefit). detailed in the SAP. Should be in the sample size justification for a primary outcome PRO. Not particularly relevant for a Exception: if trial is contributing to secondary outcome. evidence base on MCID. Depending on the PROM and the specific research A much neglected issue. My score question, it may be difficult to do this. should be "10" if available! This is important but not always available Already captured in main SPIRIT particularly for newer measures, if not available checklist should not mean the measure cannot be used One of the most important parts of the we power primaries for the MCIDs protocol. Not always possible Very important MCID and responder definition more likely to be only if calculated on the metric available for size of benefit, less common for When PRO is secondary, still required,

**Delphi Panel Comments** 

**Candidate Item** 

Stakeholder comments

Candidate Item	Stakeholder comments	Delphi Panel Comments
Item 50	duration of benefit (although that would seem important too) so may be hard to make that second element critical.  This should always be prespecified. When relevant to the hypothesis otherwise, not required.  Again you don't seem to be linking protocol and its	but brief mention in protocol, more detail in SAP. Critical when PRO is primary to defining the endpoint and sample size.  not sure why this is wanted beyond info in sample size calculation  very important and to link these to potential claims  Either SAP or protocol for secondary endpoints  Could be detailed in the SAP.
State how missing data will be described.	<ul> <li>checklist with the SAP</li> <li>Briefly in protocol, should be covered in Statistical and Health Economic analysis plans.</li> <li>Details for the SAP, not the protocol.</li> <li>I would expect this in the analysis plan not necessarily in the protocol itself.</li> </ul>	<ul> <li>This also ties closely with item 46 for example when a score cannot be calculated when not all items are responded to based on criteria.</li> <li>It will be interesting to have a statisticians views</li> <li>Item wording needs clarification. Wondering whether the protocol checklist should specify that reasons for missing data should be collected, and description of missing data applies to the publication or trial report?</li> <li>cover in analysis plan</li> <li>If include item 51, then this item could be left off.</li> <li>Specified in statistical Analysis plan</li> <li>ditto Q39</li> <li>To be outlined in the protocol, and detailed in the SAP</li> <li>Nothing new</li> <li>There is already (earlier somewhere) discussion of missing data. Don't understand what you are calling for here is a "description." A lot of times, you don't know ahead of time how much missing data there will be, whether they are informative or random, etc. until the data are collected. Not sure how a checklist item is helpful.</li> <li>Could be part of SAP instead of protocol Belongs in SAP.</li> <li>This is for the statistical analysis plan.</li> <li>Important but maybe for the SAP</li> <li>Not specific to PRO. Unsure what is expected here beyond frequency.</li> <li>Either SAP or protocol</li> </ul>
Item 51 Describe method for handling missing assessments (e.g. approach to imputation and sensitivity analyses).	<ul> <li>Briefly in protocol, should be covered in Statistical and Health Economic analysis plans.</li> <li>Details for the SAP, not the protocol.</li> <li>SAP</li> <li>This information would probably be more appropriate in a DAP.</li> <li>While a high level description should be in the protocol, the details are usually provided in the Statistical Analysis Plan.</li> <li>SAP</li> <li>Important but should be brief in the protocol and more detailed in the SAP.</li> <li>Could be stated in statistical analysis plan.</li> <li>As for item 50</li> </ul>	<ul> <li>Could be detailed in the SAP.</li> <li>It will be interesting to have a statisticians views</li> <li>cover n analysis plan</li> <li>Specified in statistical Analysis plan</li> <li>Also need to describe how to handle missing items.</li> <li>ditto Q39</li> <li>Nothing new. This items seems redundant (See prior "statistical" items). In other words, some of these items seem to test the general competence of the authors in trial design, not their specific competence in PROs.</li> <li>Already captured in main SPIRIT checklist</li> <li>But this should be in an analysis plan.</li> <li>A lot of times, you don't know ahead of time how much missing data there will be and how you're going to handle them. Unrealistic to ask someone to specific this a priori.</li> <li>Could be part of SAP instead of protocol</li> <li>Brief mention in protocol, more detail in SAP.</li> <li>This is for the statistical analysis plan.</li> <li>Important but maybe for the SAP</li> <li>Either SAP or protocol for secondary endpoints</li> </ul>
Item 52 Describe the role of the	<ul> <li>This needs to be clearer: do you mean estimation by a comparison of treatment groups, or do you mean</li> </ul>	Could be included in the DMC Charter/plan.

### Candidate Item Stakeholder comments **Delphi Panel Comments** Data Monitoring a guess based on prior (indirect) information? Not for protocol but can be in terms of Committee and Quality Not needed for secondary if no power calculation is reference for dmec. Assurance for PROs. being made for secondary. Unless there is some specific role related Essential for primary. See previous comment about to PROs, I don't think specific DSMB language related to PROs is needed. describing power for secondary outcomes. Again need to have this but centrally. Sites need to Should be in monitoring documents. be encouraged to achieve maximal completion. Nothing new. However, the DMC role is Clinical meaningfulness should be a given if a well defined in the literature. validated PRO is used and should be easy. If it is If a PRO is a primary outcome, it should being used as a primary outcome for the first time be treated as any other primary outcome, then the effect size must be estimated as it is part of with the DSMB invoking stopping rules, the hypothesis to be tested. etc., as appropriate. For PRO secondary Only needed if the PRO is being used to calculate outcomes, part of the evaluation for the primary (nonPRO) outcome may involve sample size as a primary outcome; maybe a key secondary outcome. reviewing the secondary outcomes, and my understanding is that DSMB could call for further analysis, termination of assessing that endpoint b/o poor data quality, etc. In short, PRO endpoints should be handled by DSMBs the same way as are other endpoints. This is handled outside of the protocol for cooperative group trials. Overlaps with 45, 23, 30 and 31. Warrants mention in protocol, and more detail in other trial documents, as appropriate. Important but for site manual or monitoring plan Sounds like 2 separate questions. unsure why DMC has any specific role re PROs beyond general responsibilities Is there always such a Committee? Item 53 Where appropriate not required for all PRO only if this is applicable Include an a priori plan assessments Cannot assume that clinical trial PRO data will be available clinically. Ops manual, not protocol consistent/standardised If applicable for that instrument? management of PRO Clearly critical but does the field currently alerts (symptoms have a sound approach towards this? reported by patients that Should be in monitoring documents. exceed a predefined If this a PV question, it should be explicit. level of severity) to be Depends on the trial. I think it's clearly communicated to preferable for there to be other clinical all appropriate trial staff. systems in place that don't depend on the study conduct. Nothing new ...this relates to SAE reporting when PROs are secondary outcomes. This should include a statement even if no alerts are to be done. With rare exceptions (e.g., some depression scores that indicate the patient is at risk of harm to self or others, which have been used in psychiatry as alerts for many years), I don't believe the field is at a point where we have reliable and valid PRO data and cut points that can be used for alerts on an individual patient basis. At the present time, doing this would go well beyond the data. Very important that PRO tools are also clinically useful in real time to help patients who have difficult symptoms This seems like a very specific requirement which is not applicable to most protocols. Also, this can be very specific to local IRBs. Not certain is this is for protocol or for training documents Dependent on trial setting. Brief mention in protocol, more detail in staff training documentation. Important but for site manual or monitoring plan Make sure to if possible relate to previous studies and literature when setting these cut offs. Can these be

Candidate Item	Stakeholder comments	Delphi Panel Comments
Item 54 Describe informed consent procedure for PRO assessment.	Should be covered by overall trial consent process, patient information sheet should include details of PRO assessment Part of participant information, not an item for the protocol itself. Do not understand the question. There is informed consent for the trial which covers all outcomes. Nothing specific for PROs. Don't understand why this is a special issue for PROs. The informed consent process is not specific for PRO assessment The ICD is a separate document and managed under a separate SOP from the protocol too much for a protocol in detail but make sure it is covered in the consent document and ops manual Not sure would generally assume that one overall consent form would include a description of the PRO assessment part of the study. If the PRO is not linked to a specific therapy decision it is important. If linked to therapy decisions primarily then it is critical. This should not be separate from the study informed consent Should be within the overall informed consent as a section. Not specifically different/separate to informed consent for use of other clinical data. Should just be covered in standard trial info and consent for PRO assessment in the informed consent form/process?	established for an instrument and population like MIDs or should it be done on a case by case basis in the specific study?  Trial staff need guidance on this matter, and management should be standardised  Should be included in the PIS as a protocol appendix.  This is an Ethical point and it would be interesting to hear the HRA's views.  only if differs from main consent procedure  Included in consent document  This is not specific for PRO assessment should just be integrated with all the other issues covered in the consent. PROs should require specific, separate consent.  To me this is part of the overall consent procedure and not necessary to pull out separately  Informed consent for the general study suffices.  should be included as part of general description of consent I do not think that this should be over burdensome, however, Need to think carefully about how much information is included in PIS Should be incorporated in standard trial information, not as an 'add on'.  Nothing new  Already captured in main SPIRIT checklist  Not sure that a specific PRO consent is always needed this seems to be implied by the question.  This is a standard part of clinical trials.  They have consented to be in the trial that includes consent to complete PROs. Completion of PRO is itself an act of consent.  It his is a local IRB issue and not standardized at the protocol level.  Is this procedure or content of the informed consent?  For secondary endpoints, the informed consent procedure will cover all data collection, not just be specific to the PRO data.  Important but belongs elsewhere.  Perhaps just note that PRO assessment should be included in consent procedure in protocol?  Why would you need informed consent for PRO assessment?
Item 55 Specify whether PRO		<ul> <li>Important but belongs elsewhere. Perhaps just note that PRO assessment should be included in consent procedure in protocol?</li> <li>Why would you need informed consent for PRO assessment?</li> <li>Wouldn't this be included in the overall ICF for the study?</li> <li>Do you seek consent for each PRO or fo participation in trial?</li> <li>Isn't it usually included I the overall consent or assent for the study? The</li> </ul>
	<ul> <li>although unusual</li> <li>If yes, then the PROM is part of the intervention, not</li> </ul>	Assent procedure needs to be described as well.  • Assent is the agreement of someone not able to give legal consent to participate in the activity. Work with children or adults not capable of giving consent requires the consent of the parent or legal guardian and the assent of the subject.  • Part of the study design (noted in a prior comment as well)
forms will be used to influence therapy or patient management (i.e. will the clinician use PRO responses to inform	<ul> <li>(just) an outcome measure, and needs to be carefully specified.</li> <li>What is the difference to other outcomes here?</li> <li>But issues the same as when any other "investigation" influences treatment?</li> </ul>	<ul> <li>Insufficient guidance/guidelines to support this activity and dialogue with physician</li> <li>I assumed you are referring to post study patient care</li> </ul>
		92

**Delphi Panel Comments** 

Stakeholder comments

Candidate Item

### Not usually possible or done in oncology trials State the assumptions of This relates to the question re: if the site has access relates to previous question on alerts PRO analyses. to and reviews the PRO results. Generally, we make When this is the case, the adaptive an effort to avoid this whenever possible. design must be detailed and explicit, and If this occurs, it would be mentioned in protocol. impact on evidence generation need to However my rating is not meant to say that this be discussed. should be done. If an efficacy clinical trial, there is I understand the question is if the not supposed to be sharing of data with the clinician influence on therapy or Patient as it could lead to unblinding. I think this is a risky Management is that during the study thing to include. (and not afterwards after having Important if applicable generally presumed to be not analysed the results) applicable in most trials if there are standard It depends on the aim of the PRO elements of blinding involved. measure. Implicitly, if therapeutic use is no, measurement error is likely to be too high not specified, you need not to write it! If a PRO has a primary objective ves. If the PRO is Any data measurement could influence being used as a secondary outcome and for a care in a trial (e.g. harms) secondary objective only if it should not influence If this were to happen, it has to be therapy or patient management as a main driver. communicated as part of informed if PRO is primary outcome, it should not influence consent. This should not be a separate the management/care "item" it is covered by the standard Bit tricky this one, not sure how to rate. Use of PRO consent procedures. forms to inform patients care may compromise their Not sure how to answer this, so didn't. validity as trial endpoints. Will the patient answer This is particularly going to be an issue differently if they think PRO info is going to their when PROCTCAE is used, compared to treating clinician e.g. play down symptoms so as not other instruments used for database to be taken off trial treatment, misreport adherence purposes. This would be essential for inclusion in the protocol Depends upon nature of study if this was the case. Not common to use PRO responses to inform a patient's care. If that is the case, then certainly it should be mentioned in the protocol. But if not the case not needed in protocol, but important in patient information sheet. Do you mean during the study or when implementing the results? As this can introduce treatment variation and bias findings, it is important to note for any assessment whether the study personnel are allowed to review, expected to review, and altering treatment based on PRO. Item 56 Should be included in overall study communication I think this is good research practice in Include detailed plans for general. I think more importantly is regular feedback to Good practice, but not for inclusion in the protocol. participants via Regular feedback about PRO during the course of letter/newsletter on PRO the trial is unnecessary and inappropriate for most as part of the study. aspect of study. Not important in terms of approving a trials. Feedback on the trial is appropriate, but not the PRO specifically. clinical trial. Important to indicate whether regular ??? What is the difference to other outcomes here? feedback is justified, and if it is to describe the plan for that. This is not specific to pros, should apply equally to Question unclear: Is this for the study

- I don't agree with "regular feedback" during the study unless this is simply about levels of completion / quality as a method of encouragement to adhere.
- Not part of a protocol,

Candidate Item

the patient's care?).

Stakeholder comments

- Ideally treat the PRO as an integral and equally important part of the overall results within a newsletter reporting on the study as a whole. We need to see PROs as part of the whole avoid separating out this aspect.
- Should be for whole study
- often this is a process implemented to motivate compliance with PRO completion, particularly in the context of APP based daily diaries
- This could cause unblinding in an efficacy trial, so it should be done with caution and only at the end of
- I do think this is a great idea and perhaps would make patients more likely to complete PROs on a regular basis if they are given feedback at intervals
- Critical at the end of trial. Critical not to give feedback during a running trial to avoid influencing individual patient behaviour
- Participants as in site staff responsible for PRO completion or patients? Wasn't sure how to answer, value in regular feedback on PRO completion rates

addressing how participants will interface with their personal data and governance

**Delphi Panel Comments** 

redundant with 53

- centres or actual study subject? If latter, not important. If former, important. Also not an essential component of protocol document but is an essential tool for study conduct.
- There may not be feedback, also. Must consider trial blinding.
- I wonder if we may introduce Hawthorne
- Participants should get results but not clear that 'regular' is achievable surely this depends on how analysis is being done?
- Critical in the era of patient cantered care. But details don't need to be in the protocol, rather in the monitoring documents.
- Could help compliance
- Feedback on the trial is reasonable, but I don't think it makes sense to focus separately on PRO specific feedback, even if PRO is the primary outcome.
- Totally optional.
- Of benefit, but does not need to be included in protocol
- It depends, again. If the patient must

Candidate Item Stakeholder comments	Delphi Panel Comments
and data quality to site staff responsible for PRO completion but unsure of value/appropriateness otherwise.  Not necessarily in the protocol but good to have considered rather than leaving to arbitrary decision	remain blind, feedback should not be provided. I think this item is redundant  Too prescriptive  I favour this but it's not part of the protocol.  Will help completion of PROs at future time points if patients can see that their data is being used.  While this is a great thing to do, it cannot be detailed in the protocol prospectively. Any communication to patients need local IRB approval of actual text, which would not be available at time of study activation, nor would it be efficient to amend the protocol each time. Much easier to release a protocol communication.  not generally specified by protocol  A summary at the conclusion is desirable versus "regular feedback to participants"  Trial dependent but need not be part of protocol.  Problematic ethically and logistically. Trial coordinators of multisite trials often do not have access to patient contact info (to protect patient privacy).  Do you mean during the study or after study end?  Important for informed consent regarding promise to patients and if part of intervention to ensure study personnel recognise and adhere to protocol requirements to provide feedback to patients, Whether detailed description is required depends on the role of feedback in the intervention.