UTOPIAN Primary Care Trials Group – Session 12 *Minutes*

Thursday, February 25th, 2021 from 4:00 p.m. to 5:00 p.m., Zoom teleconference

Item	Topic	Minutes	Action	Responsible
1	Introductions (Andrew Pinto)	• Andrew Pinto introduced those present on the phone		
2	Review and approval of Jan 27, 2021 draft meeting minutes (All)	• Minutes of the previous meeting were approved by those present	Approved	All

3	Presentation: Pilot RCTs: Why they are necessary and how to plan them (Braden O'Neill)	**Pilot Studies – the who, what and how:**
		• Reference: Thabane, L., Ma, J., Chu, R. et al. A tutorial on pilot studies: the what, why and how. BMC Med Res Methodol 10, 1 (2010). https://doi.org/10.1186/1471-2288-10-1
		• Refer below to Table 1- Definitions of pilot studies on the web
		  ○ Takeaway – people's understanding and use of the term pilot study differs considerably.
		• Refer below to Table 2 – Reasons for conducting a pilot study
		  ○ Process - this assesses the feasibility of the processes that are key to the success of the main study
		  ○ Resources - This deals with assessing time and resource problems that can occur during the main study
		  ○ Management - This covers potential human and data management problems
		  ○ Scientific - This deals with the assessment of treatment safety, dose, response, effect and variance of the effect
		• Refer below to Table 3 – CONSORT 2010 checklist of information to include when reporting a pilot or feasibility trial
		  ○ Reference: Elridge SM, Chan CL, Campbell MJ, Bond CM, Hopewell S, Thabane L, et al. CONSORT 2010 statement: extension to randomized pilot and feasibility trials/ BMJ. 2016; 355.		

		• Refer below to Table 4 – CONSORT Presentation of the Flow of participants for RCTs
		
		• Am I going to get published in the big journals?
		  ○ Short answer is no – e.g. CMAJ will not publish a pilot RCT. However, there are lots of other journals that would publish pilot RCTs – e.g.. CMAJ Open.
		
		Ethics of pilot studies:
		
		• We want to "fly the concord and not crash", we want to recruit individuals into a study which is not the main study, hence the information we collect is not necessarily going to tell us about the effectiveness of intervention. Is it ethical to publish such a study?
		• Questions to ponder…
		  ○ Is it ethical to publish an underpowered study?
		  ○ Should you disclose to participants that they are enrolled in a pilot?
		  ▪ GCP, TCPS2 do not provide guidance about what to do!
		  ○ Is it ethical to conduct a study where feasibility cannot be guaranteed?
		  ▪ May be! If you can do something beforehand to increase the guarantee of feasibility, that enhances the justification for the pilot study.		

Meeting adjourned at 5:00 p.m.				
Next meeting: March 31, 2021; 4:00 p.m.-5:00 p.m. (virtual)				

Table 1:

Table 1 Some Adapted Definitions of Pilot Studies on the Web (Date of last access: December 22, 2009)

Definition*	Source
A trial study carried out before a research design is finalised **to assist in defining the research question** or **to test the feasibility, reliability and validity of the proposed study design**	http://www.cirem.org.uk/definitions.html
A smaller version of a study is carried out before the actual investigation is done. Researchers use information gathered in pilot studies **to refine or modify the research methodology for a study and to develop large-scale studies**	http://www.mh.state.oh.us/what-we-do/promote/research-and-evaluation/learning-lab/research-glossary.shtml
A small scale study conducted to test the plan and method of a research study.	http://www.umm.edu/nursing/docs/glossary_research_terms.pdf
A small study **carried out before a large-scale study to try out a procedure or to test a principle**	http://www.psych-sci.manchester.ac.uk/actnow/glossary/
An experimental use of a treatment in a small group of patients **to learn if it will be effective and safe on a broad scale**	http://www.lungcanceralliance.org/news/glossary.html
The **initial study examining a new method** or treatment	http://www.cdc.gov/des/consumers/resources/glossary.html#P
A small study often done **to assist the preparation of a larger, more comprehensive investigation.**	http://www.informedesign.umn.edu/Glossary.aspx?id=1952#
Small, preliminary test or trial run of an intervention, or of an evaluation activity such as an instrument or sampling procedure. The results of the pilot are **used to improve the program or evaluation procedure being piloted before it is used on a larger scale.**	http://www.nsf.gov/pubs/2005/nsf0531/nsf0531_6.pdf

*Emphasis is ours

Table 2:

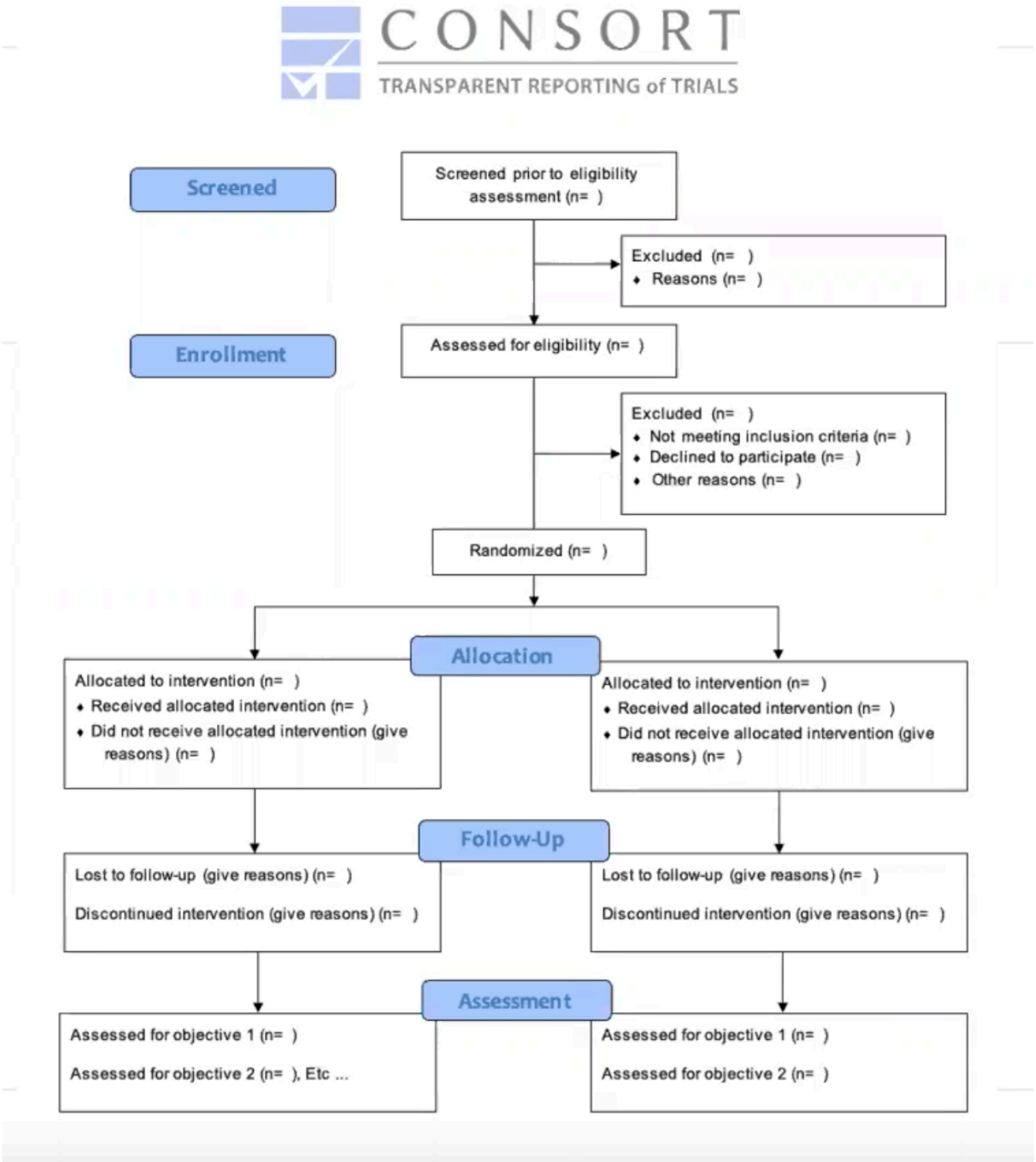
Table 2 Reasons for conducting pilot studies

Main Reason	Examples
Process: This assesses the feasibility of the processes that are key to the success of the main study	• Recruitment rates
	• Retention rates
	• Refusal rates
	• Failure/success rates
	• (Non)compliance or adherence rates
	• eligibility criteria
	- Is it obvious who meets and who does not meet the eligibility requirements?
	- Are the eligibility criteria sufficient or too restrictive?
	• Understanding of study questionnaires or data collection tools:
	- Do subjects provide no answer, multiple answers, qualified answers, or unanticipated answers to study questions?
Resources: This deals with assessing time and resource problems that can occur during the main study	• Length of time to fill out all the study forms
	• Determining capacity:
	- Will the study participants overload your phone lines or overflow your waiting room?
	• Determining process time
	- How much time does it take to mail out a thousand surveys?
	• Is the equipment readily available when and where it is needed?
	• What happens when it breaks down or gets stolen?
	• Can the software used for capturing data read and understand the data?
	• Determining centre willingness and capacity
	- Do the centres do what they committed to doing?
	- Do investigators have the time to Perform the tasks they committed to doing?
	- Are there any capacity issues at each participating centre?
Management: This covers potential human and data management problems	• What are the challenges that participating centres have with managing the study?
	• What challenges do study personnel have?
	• Is there enough room on the data collection form for all of the data you receive?
	• Are there any problems entering data into the computer?
	• Can data coming from different sources be matched?
	• Were any important data values forgotten about?
	• Do data show too much or too little variability?
Scientific: This deals with the assessment of treatment safety, dose, response, effect and variance of the effect	• Is it safe to use the study drug/intervention?
	• What is the safe dose level?
	• Do patients respond to the drug?
	• What is the estimate of the treatment effect?
	• What is the estimate of the variance of the treatment effect?

Table 3:

Section/Topic	Item No	Checklist item	Reported on page No
Title and abstract			
	1a	Identification as a pilot or feasibility randomised trial in the title	
	1b	Structured summary of pilot trial design, methods, results, and conclusions (for specific guidance see CONSORT abstract extension for pilot trials)	
Introduction			
Background and objectives	2a	Scientific background and explanation of rationale for future definitive trial, and reasons for randomised pilot trial	
	2b	Specific objectives or research questions for pilot trial	
Methods			
Trial design	3a	Description of pilot trial design (such as parallel, factorial) including allocation ratio	
	3b	Important changes to methods after pilot trial commencement (such as eligibility criteria), with reasons	
Participants	4a	Eligibility criteria for participants	
	4b	Settings and locations where the data were collected	
	4c	How participants were identified and consented	
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	
Outcomes	6a	Completely defined prespecified assessments or measurements to address each pilot trial objective specified in 2b, including how and when they were assessed	
	6b	Any changes to pilot trial assessments or measurements after the pilot trial commenced, with reasons	
	6c	If applicable, prespecified criteria used to judge whether, or how, to proceed with future definitive trial	
Sample size	7a	Rationale for numbers in the pilot trial	
	7b	When applicable, explanation of any interim analyses and stopping guidelines	
Randomisation:			
Sequence generation	8a	Method used to generate the random allocation sequence	
	8b	Type of randomisation(s); details of any restriction (such as blocking and block size)	
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	

Table 4:


CONSORT
TRANSPARENT REPORTING of TRIALS
Screened
Screened prior to eligibility assessment (n=)
Excluded (n=)
Reasons (n=)
Enrollment
Assessed for eligibility (n=)
Excluded (n=)
Not meeting inclusion criteria (n=)
Declined to participate (n=)
Other reasons (n=)
Randomized (n=)
Allocation
Allocated to intervention (n=)
Received allocated intervention (n=)
Did not receive allocated intervention (give reasons) (n=)
Allocated to intervention (n=)
Received allocated intervention (n=)
Did not receive allocated intervention (give reasons) (n=)
Follow-Up
Lost to follow-up (give reasons) (n=)
Discontinued intervention (give reasons) (n=)
Lost to follow-up (give reasons) (n=)
Discontinued intervention (give reasons) (n=)
Assessment
Assessed for objective 1 (n=)
Assessed for objective 2 (n=), Etc ...
Assessed for objective 1 (n=)
Assessed for objective 2 (n=)