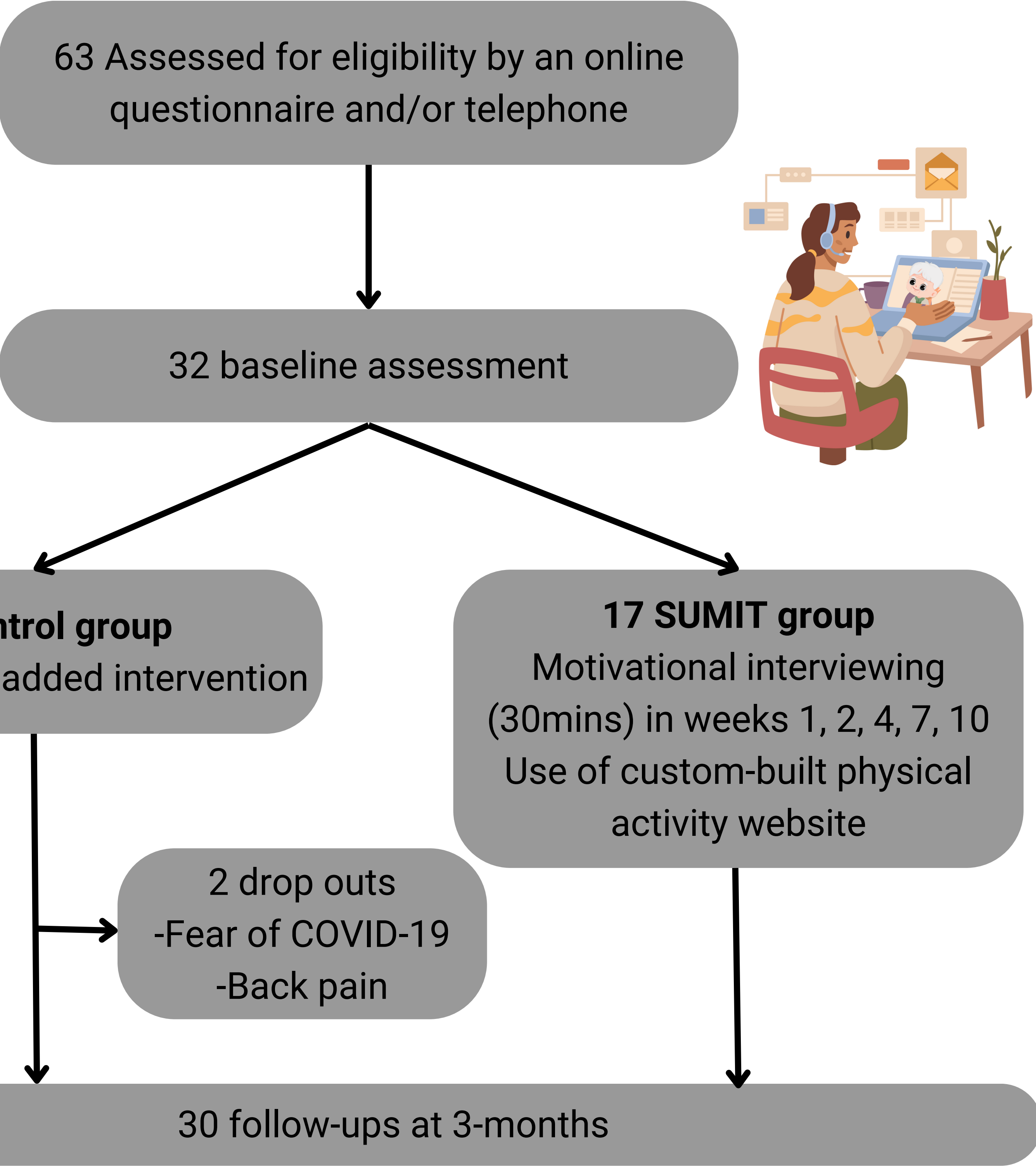


# SUPPORTED MOTIVATIONAL INTERVIEWING (SUMIT) TO IMPROVE PHYSICAL ACTIVITY FOR PEOPLE WITH KNEE OSTEOARTHRITIS.

## A PILOT, FEASIBILITY RANDOMISED CONTROLLED TRIAL.

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People with knee osteoarthritis were recruited within 2 years of completing Good Life with osteoArthritis Denmark (GLA:D®).



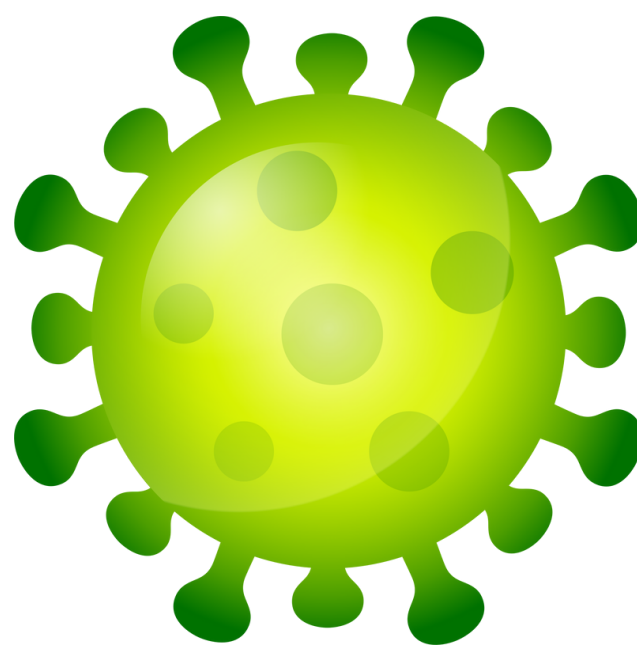
### Feasibility outcomes:

#### 1. Eligibility

63 participants were screened over 13 months

#### 2. Recruitment

32 participants were recruited over 13 months



Eligibility screening and recruitment took place over 7 months when accounting for COVID-19 lockdowns in Melbourne

#### 3. Adherence to Motivational Interviewing sessions

100%

#### 4. ActivPAL wear time

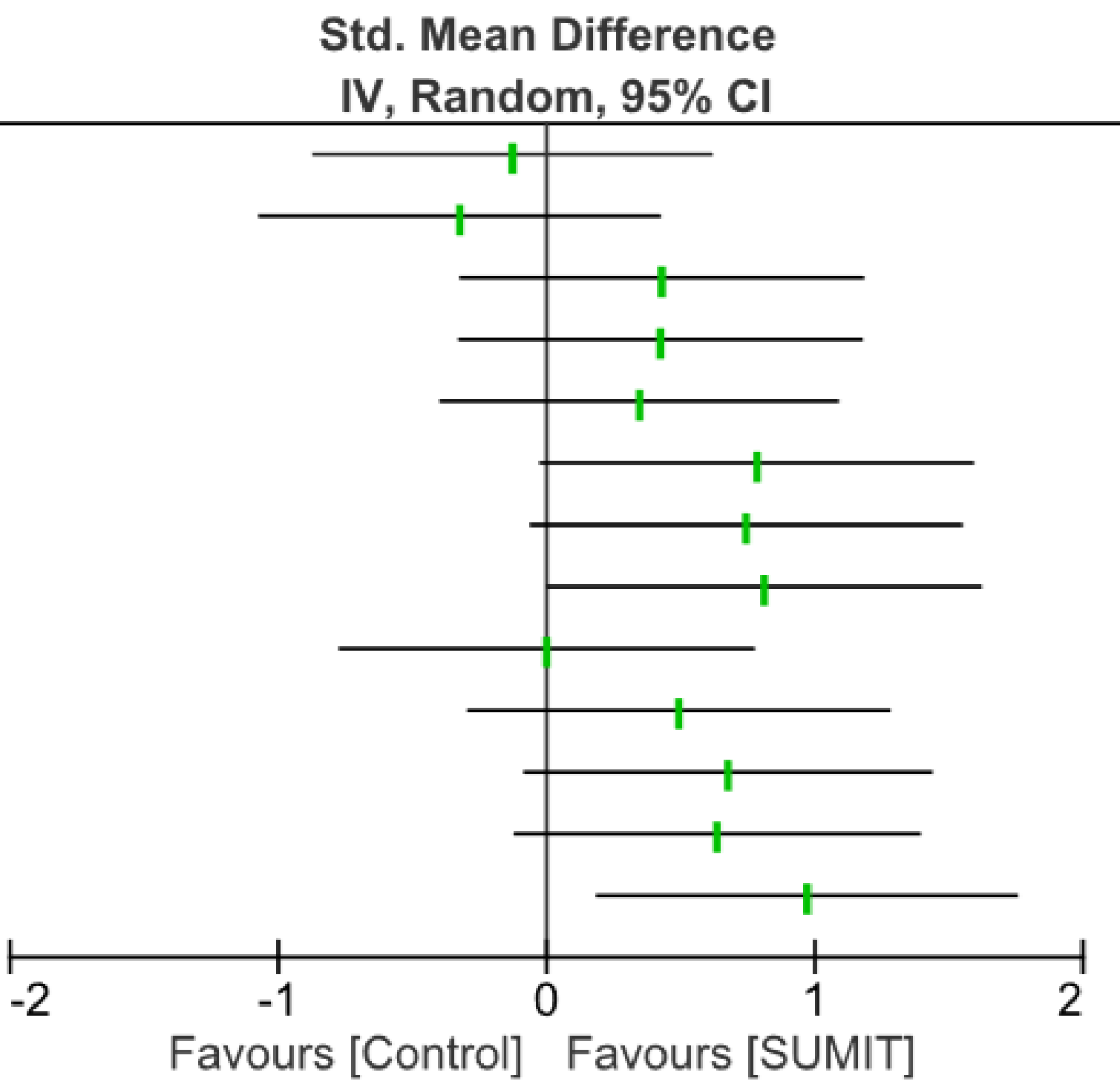
100%

#### 5. Drop-outs

6%

Study or Subgroup	SUMIT			Control			Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total	
Steps per day	4	1,308	17	192	1,627	12	-0.13 [-0.87, 0.61]
Daily stepping time	-0.6	16	17	5	18	12	-0.32 [-1.07, 0.42]
Daily time with cadence 100spm	8	9	17	3	14	12	0.43 [-0.32, 1.18]
Daily time with bouts 1min	29	13	17	21	24	12	0.42 [-0.32, 1.17]
6 minute walk distance	19	53	16	2	40	13	0.35 [-0.39, 1.08]
KOOS function	14	15	13	3	12	13	0.78 [-0.02, 1.59]
KOOS pain	12	13	13	2	13	13	0.74 [-0.05, 1.54]
KOOS quality of life	13	11	13	1	17	13	0.81 [0.01, 1.62]
KOOS sport and recreation	14	21	13	14	28	13	0.00 [-0.77, 0.77]
KOOS symptoms	9	11	13	2	16	13	0.49 [-0.29, 1.28]
EQ5D5L	0.104	0.231	16	-0.029	0.125	13	0.68 [-0.08, 1.43]
30 second chair stand	1	1	16	0	2	13	0.64 [-0.12, 1.39]
Walking speed	0.1	0.2	16	-0.1	0.2	13	0.97 [0.19, 1.75]

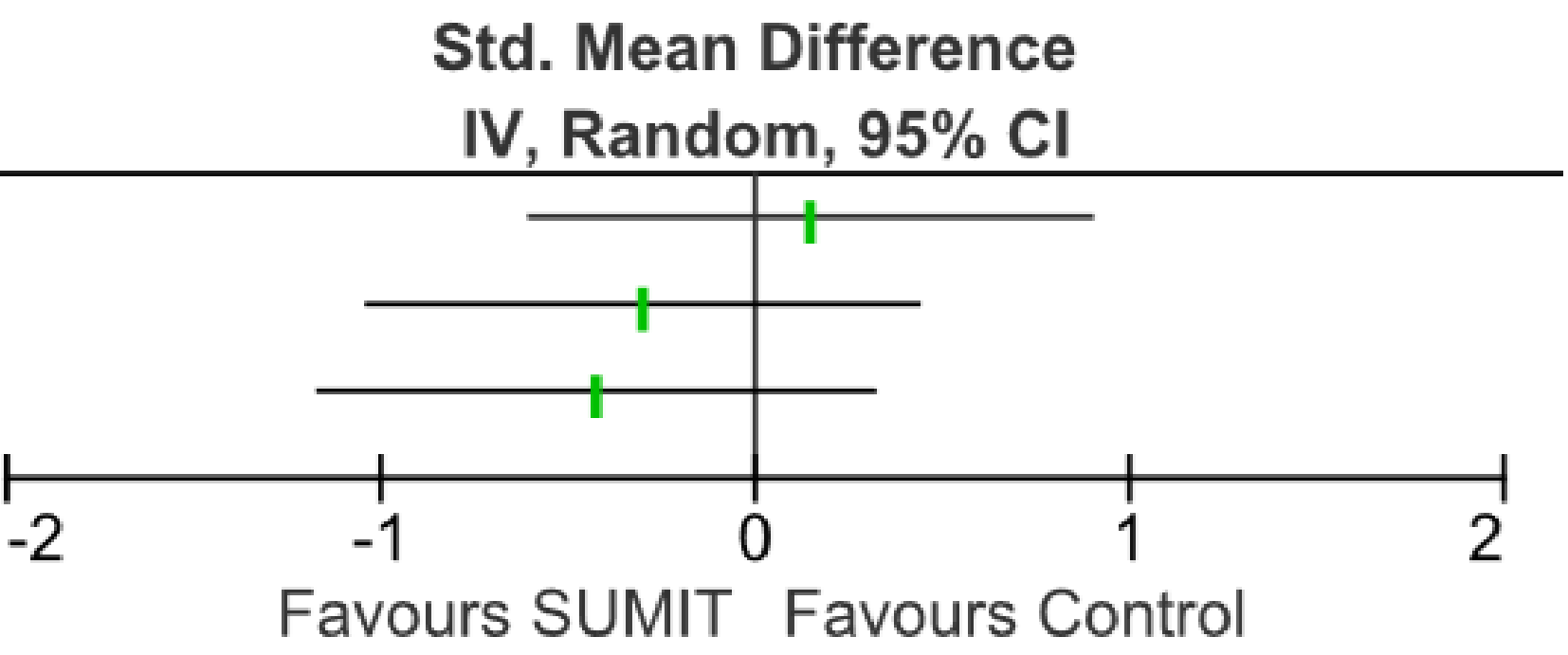
Legend: spm= steps per minute, min= minute, KOOS= Knee Osteoarthritis Outcome Score, EQ5D5L= Euroqual 5-dimension 5-long



- 8/13 outcomes showed a **small-moderate effect** (effect size 0.2-0.5) favouring the SUMIT group.
- 2/13 outcomes (walking speed and KOOS quality of life) showing a **large effect** (effect size >0.8).

Study or Subgroup	SUMIT			Control			Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total	
Body mass index	0	0.8	16	-0.1	0.4	12	0.15 [-0.60, 0.90]
Systolic blood pressure	-7	12	16	-3	14	13	-0.30 [-1.04, 0.44]
Waist circumference	0.3	5.2	16	2.5	4.8	13	-0.43 [-1.17, 0.32]

Forest plots of SUMIT vs. control: SMD[95%CI] based on change scores



- 2/3 health outcomes showed at least a **small effect** favouring the SUMIT group.



Motivational interviewing and a web-based multimedia platform were able to be implemented as intended to target physical activity in people with knee osteoarthritis.



Modifications would be required to make future trials successful, including methods to identify more eligible participants, and increase recruitment (e.g. partnering with high volume clinics and advertising).



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 @LaTrobeSEM



This study was not powered to find significant differences between groups. SUMIT was conducted during COVID-19 lockdowns in Melbourne, Australia, where lockdowns impacted community access and subsequently everyday activities. Use of the web-based program was not measured quantitatively.



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