RESULTS

Baseline data collection began on 18th December 2024 and concluded on 13th February 2026. 61 patients were screened for trial eligibility. 30 participants were recruited, consented and randomised (mean age 60.2, SD 10.2years; 23% from ethnic minorities; 11 males (37%); 16 right knees (53%). The median VAS_{NA} pain severity was 5cm (IQR 3.8 – 6). The KOOS-PF mean score was 31.5 (SD 16.5). Median pain duration was 24 months (IQR 12-42). There were two adverse events reported; neither was related to the taping intervention, and both patients continued in the trial.

CONSORT Flow Diagram of the screening, recruitment and consent data.

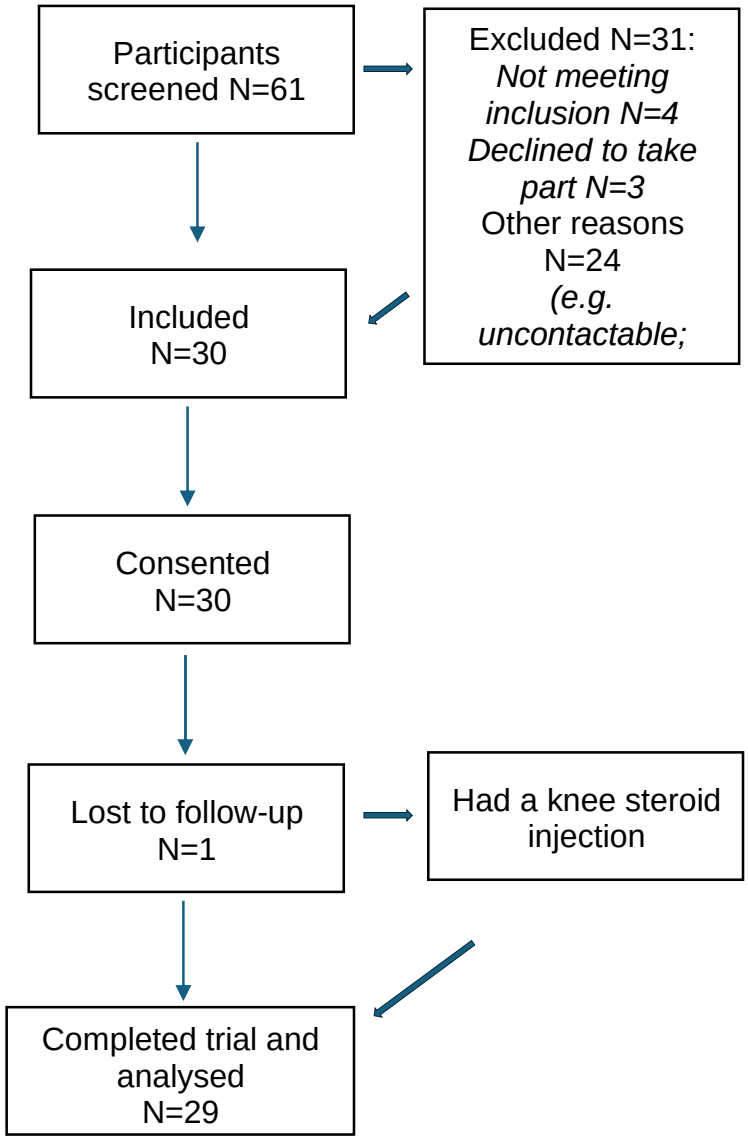


Table 1 *A priori* feasibility and adherence outcomes.

Measure	Stop	Edit/Amend	Go
Number recruited	1 per month	2-3 per month	4 per month
Percentage recruited (uptake)	< 25%	≥25% and < 75%	≥ 75%
% of recruited participants with complete data	< 20%	≥20% and < 70%	≥ 70%
% of recruited participants lost to follow-up at 12 weeks	> 20%	≤20% and ≥10%	< 10%
% of recruited participants with pain improved at 12 weeks	<20%	≥20 and <65%	≥65%
% of recruited participants who would use the tape again	<20%	≤20 and ≥65%	≥65%

Table 2 Those screened, excluded, declined, consented and included & analysed

Screening variable	**Participant numbers**
Participants screened	61
Excluded	31 (50.8%)
Not meeting inclusion	4
Declined to participate	3
Other reasons	24
Included	30 (49.2%)
Consented	30 (100%)
Lost to follow-up (reason)	1 (3.3%)
Analysed	29 (96.7%)

Table 3 Participant descriptive statistics

Participant variable at baseline	N=30
Male gender, n (%)	11 (36.7%)
National identity, n (%)	
British	18 (60%)
English	6 (20%)
Welsh	1 (3.3%)
Other	4 (13.3%)
Missing	1 (3.3%)
Work, n (%)	
Full-time	11 (36.7%)
Part-time	6 (20%)
Unemployed	2 (6.7%)
Sick-leave	1 (3.3%)
Retired	8 (26.7%)
Volunteer	2 (6.7%)
Right knee, n (%)	16 (53.3%)
Living status, n (%)	
Cohabiting or living with a partner	6 (20%)
Divorced or civil partnership	3 (10%)
Married or in civil partnership	16 (53.3%)
Separated	0
Single	5 (16.7%)
Widowed or a surviving partner	0
Prefer not to say	0
Other	0
Ethnic group, n (%)	
Bangladeshi	1 (3.3%)
Chinese	0
Indian	0
Pakistani	0
Any other Asian background	0
African	3 (10%)
Caribbean	1 (3.3%)
Any Black, Black British or Caribbean background	1 (3.3%)
White and Black Caribbean	0
White and Asian	0
White and Black African	0
Any other mixed	1 (3.3%)
White	23 (76.7%)
Gypsy or Irish Traveller	0
Roma	0
Arab	0
Prefer not to say	0
Other	0

Table 4 Feasibility Outcomes

Outcome	**Full Cohort**
Number recruited	30
Percentage recruited (uptake from n=61)	49.2%
% of recruited participants with complete data overall	15 (50%)
Baseline CRF	[13 (43.3%) including missing KOOS-PF]
Week 2 CRF	30 (100%)
Week 6 CRF	29 (96.7%)*
Week 12 CRF	29 (96.7%)*
Baseline patient CRF	21 (70%)[$]
	20 (66.7%)[¥]
Patient CRF week 2	(73.3% with KOOS-PS score)
Patient CRF week 6	28 (93.3%)[Ω] (96.7% with KOOS-PF)
Patient CRF week 12	27 (90.0%)[∞] (96.7% with KOOS-PF)
	29 (96.7%)*
% of recruited participants lost to follow-up at 12 weeks	1 (3.3%)
% of recruited participants whose pain had improved at 12 weeks	22 (73.3%)
% of recruited participants who would use the tape again	12/13 (92.3%)

* #16 withdrew

[$] Week 12 CRF: #6, 7, 8, 9, 10, 11, 12, 14 are missing on strips used; #16 withdrew; #11 is missing on hours per day and days per week

[¥] Baseline patient CRF: #30 is missing on national identify; #10 missing on retirement age; #4, 10, 18, 28, 29, 30 are missing on if retired early was it due to arthritis; #19 missing on pain frequency (KOOS-PF2); #9 and 19 are missing on pain limit (KOOS-PF3; # 8 and 24 are missing on second VAS scale

[Ω] Week 2 patient CRF: #13 is missing on heavy household activities (KOOS-PF7)

[∞] Week 6 patient CRF: #8 and 10 are missing on hopping/jumping (KOOS-PS8)

Overall patients 4, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 24,28, 29 and 30 are missing on one or more variables.

Additionally, patients 13 and 19 have missing data on KOOS-PF

Table 5 Adherence Outcomes

Variable	Timepoint	Median (IQR)
Number of strips used	*2 weeks*	*28 (20 – 31)*
Number of strips used since week 6	*12 weeks*	*134 (128 – 140)*
Average number of days that participants report wearing the tape	2 weeks	7 (7 – 7)
Average number of days that participants report wearing the tape	6 weeks	7 (7 -7)
Average number of days that participants report wearing the tape	12 weeks	7 (7 -7)
Average number of hours the participants report wearing the tape daily since the previous timepoint	2 weeks	14 (12 – 16)
Average number of hours the participants report wearing the tape daily since the previous timepoint	6 weeks	12 (12 – 14)
Average number of hours the participants report wearing the tape daily since the previous timepoint	12 weeks	12.5 (12 – 15)

Table 6. The feasibility and adherence outcome results.

Measure	Results
Number recruited per month, median (IQR)	3 (2-3)
Percentage recruited (uptake)	100% of target sample size recruited 49.2% (30/61) of those approached recruited 52.6% (30/57) of those eligible recruited
% of recruited participants with complete data	50%
% of recruited participants lost to follow-up at 12 weeks	3.3% (n=1)
% of recruited participants whose pain had improved at 12 weeks	73.3%
% of recruited participants who would use the tape again	92.3%

Table 7 Secondary Outcomes: Knee Pain and Function

Outcome measure	Timepoint	Median (IQR)
Knee pain (VAS_{NA})	baseline	5cm (3.8 – 6)
Knee pain (VAS_{NA})	2 weeks	5cm (2 - 6)
Knee pain (VAS_{NA})	6 weeks	4cm (3 - 5)
Knee pain (VAS_{NA})	12 weeks	4cm (3 – 5)
		Mean (SD)
Knee pain and function (KOOS-PF)	baseline	31.5 (16.5)
Knee pain and function (KOOS-PF)	2 weeks	43.1 (19.5)
Knee pain and function (KOOS-PF)	6 weeks	44.2 (20.7)
Knee pain and function (KOOS-PF)	12 weeks	44 (21.7)

QUALITATIVE RESULTS

Results

Fifteen patients were approached. None declined participation; however, two participants were not interviewed due to challenges with the consent process. Therefore, thirteen semi-structured qualitative interviews were undertaken. Despite this, data saturation was reached. Patient demographics can be found in table 1.

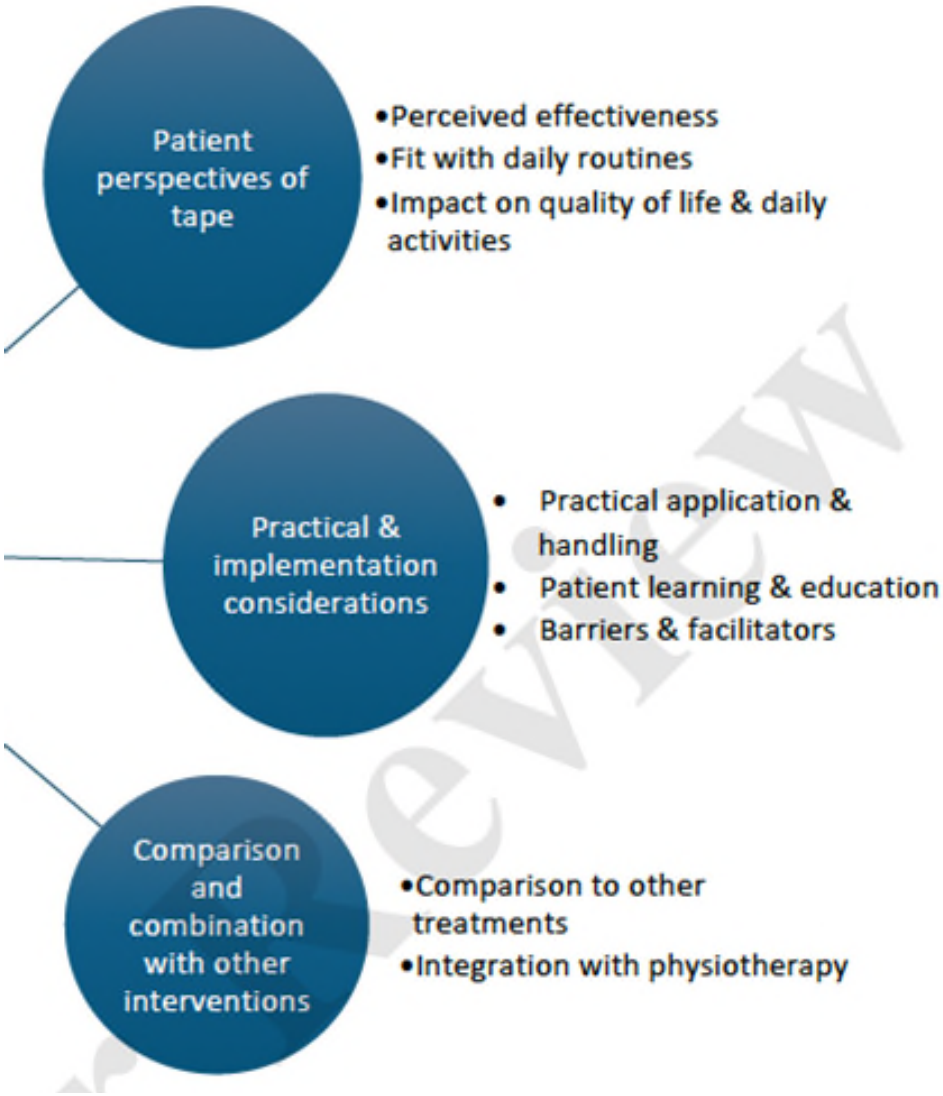
Table 1. Demographic data of interviewed participants

Characteristic	***Number of participants (n=13)***	
Sex	*F =7* *M =6*	
Ethnicity	*White =10* *Black African/ African-Caribbean = 2* *Asian = 1*	
Age range	*40-49*	*4*
	50-59	*2*

	60-69	*4*
	70 and over	*3*
Occupation / employment (paid or unpaid)	*Office or IT based / often sedentary*	*5*
	Often active, physical or manual (e.g. builder, teacher, etc)	*4*
	Retired	*4*

Three themes were identified from analysis of the data: ‘patient perspectives of tape’, ‘practical and implementation considerations’, and ‘comparison and combination with other interventions’, each comprising several sub-themes (figure 4). Findings are presented under each theme, with sub-themes used to structure the results. Anonymised verbatim quotations are used to illustrate the findings.

Figure – Organisation of themes and sub-themes



Review