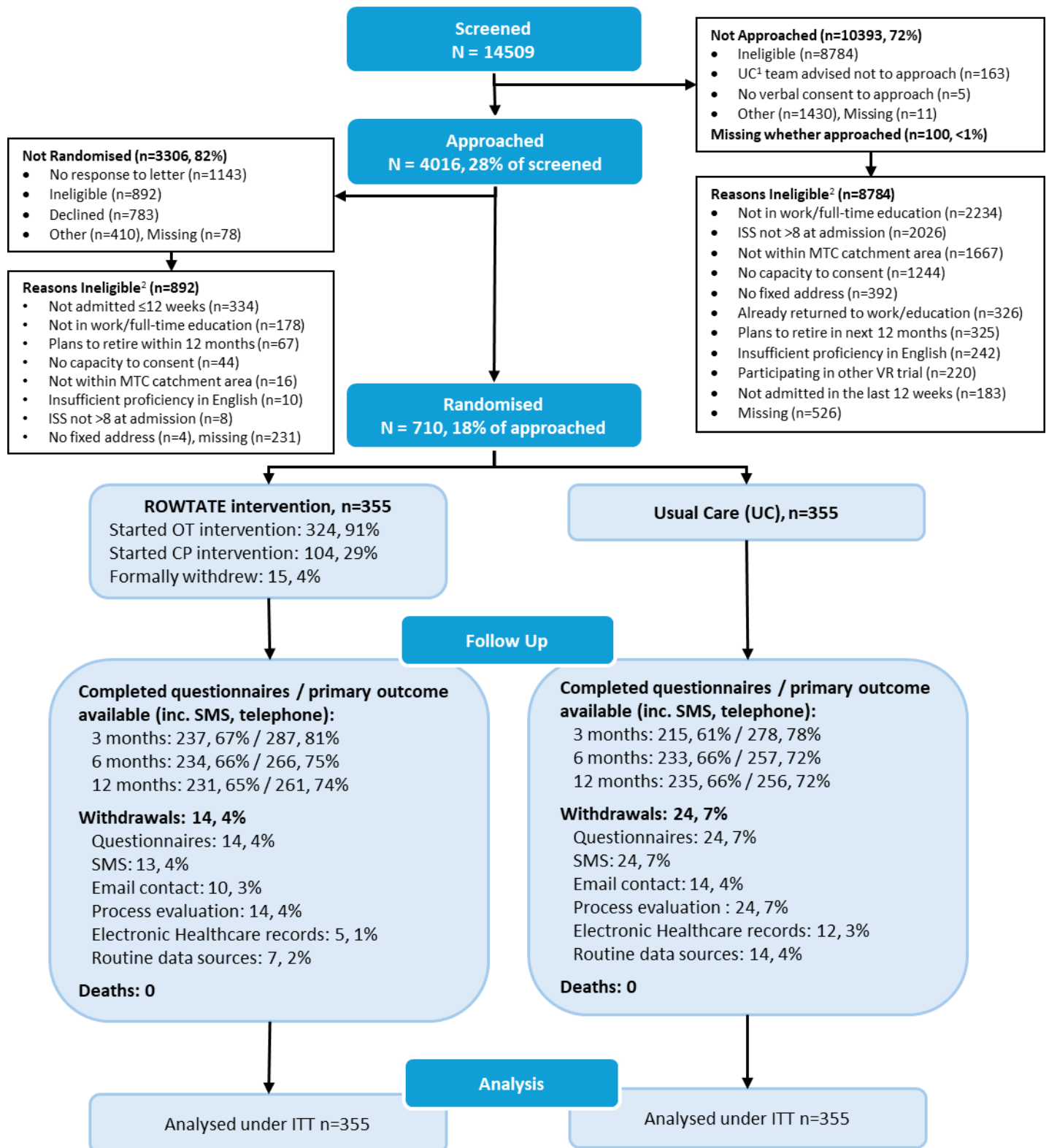


Figure 1: CONSORT Diagram



¹ UC = Usual Care

² Non mutually exclusive categories

Table 1: Participant baseline characteristics¹

	Intervention (n=355)	Usual care (n=355)	Total (n=710)
DEMOGRAPHICS			
Age, mean (SD)	44.8 (13.33)	45.3 (13.82)	45.1 (13.57)
Male	232 (65.4%)	232 (65.4%)	464 (65.4%)
Ethnicity			
White	285/321 (88.8%)	284/322 (88.2%)	569/643 (88.5%)
Black	10/321 (3.1%)	7/322 (2.2%)	17/643 (2.6%)
Asian	4/321 (1.2%)	12/322 (3.7%)	16/643 (2.5%)
Mixed	1/321 (0.3%)	5/322 (1.6%)	6/643 (0.9%)
Other	21/321 (6.5%)	14/322 (4.3%)	35/643 (5.4%)
Married/Civil partnership/Living with partner	181/354 (51.1%)	209 (58.9%)	390/709 (55.0%)
IMD Quintile			
1 (most deprived 20% of areas)	49 (13.9%)	38 (10.7%)	87/708 (12.3%)
2	59/353 (16.7%)	57 (16.1%)	116/708 (16.4%)
3	96/353 (27.2%)	82 (23.1%)	178/708 (25.1%)
4	72/353 (20.4%)	85 (23.9%)	157/708 (22.2%)
5 (least deprived 20% of areas)	77/353 (21.8%)	93 (26.2%)	170/708 (24.0%)
Rurality: Rural (vs urban)	70 (19.7%)	82 (23.1%)	152 (21.4%)
Recruitment Setting: At home (vs hospital)	198/350 (56.6%)	192/348 (55.2%)	390/698 (55.9%)
INJURY DETAILS			
Weeks from injury to randomisation			
0-4 weeks	252/350 (71.0%)	251/348 (70.7%)	503/698 (70.8%)
5-8 weeks	75/350 (21.1%)	74/348 (20.8%)	149/698 (21.0%)
9-12 weeks	27/350 (7.6%)	27/348 (7.6%)	54/698 (7.6%)
Over 12 weeks	1/350 (0.3%)	3/348 (0.8%)	4/698 (0.6%)
Admission duration (days), median (IQR)	8 (4, 16), n=350	10 (5, 18), n=348	9 (5, 17), n=698
How Injury occurred			
Accidental injury	340 (95.8%)	336 (94.6%)	676 (95.2%)
Intentional injury	11 (3.1%)	16 (4.5%)	27 (3.8%)
Event of undetermined intent	4 (1.1%)	3 (0.8%)	7 (1.0%)
Injury Severity Score (ISS) at discharge²			
<9 (Minor injury)	27/351 (7.7%)	35/346 (10.1%)	62/697 (8.9%)
9-15 (Moderate injury)	181/351 (51.6%)	161/346 (46.5%)	342/697 (49.1%)
>15 (Severe – very severe injury)	143/351 (40.7%)	150/346 (43.4%)	293/697 (42.0%)
Number of injuries (contributing to ISS)			
Single injury	129/351 (36.8%)	128/346 (37.0%)	257/697 (36.9%)
Multiple injuries	222/351 (63.2%)	218/346 (63.0%)	440/697 (63.1%)
PRE-INJURY WORK STATUS			
Work and education (not mutually exclusive)			
Paid employment	287 (80.8%)	286 (80.6%)	573 (80.7%)
Self-employed	71 (20.0%)	85 (23.9%)	156 (22.0%)
Government programme aimed at finding a job	1 (0.3%)	0	1 (0.1%)
Voluntary work	18 (5.1%)	18 (5.1%)	36 (5.1%)
Full time education (>12 hours a week)	16 (4.5%)	23 (6.5%)	39 (5.5%)
Average working hours per week, median (IQR)	38.5 (37, 43), n=322	37.5 (32, 40), n=334	37.5 (35, 40), n=656
Main job Standard Occupational Classification (SOC)			
Skill Level			
1: General labour, basic administrative jobs	34 (9.6%)	27 (7.6%)	61 (8.6%)
2: Skilled trades, mid-level technical assistants	87 (24.5%)	103 (29.0%)	190 (26.8%)
3: Technicians, associate professionals	120 (33.3%)	104 (29.3%)	224 (31.5%)
4: Engineers, managers, professionals	101 (28.5%)	107 (30.1%)	208 (29.3%)
NA/Missing	13 (3.7%)	14 (3.9%)	27 (3.8%)

¹Percentages and summary statistics are calculated out of non-missing data unless otherwise indicated, with denominators and number of participants provided where there are missing data.

²ISS at admission was used to determine eligibility (ISS>8) and was collected as a stratification factor at 2-levels (9-15, >15). ISS at discharge is presented and included in analysis as a covariate on a continuous scale.

Table 2: Primary return to work (RTW) outcome

	3 months			6 months			12 months (primary outcome timepoint)		
	Intervention (n=355)	Usual care (n=355)	Total (n=710)	Intervention (n=355)	Usual care (n=355)	Total (n=710)	Intervention (n=355)	Usual care (n=355)	Total (n=710)
Primary outcome: Return to work, (RTW for ≥80% re-injury hours), n (%)									
Yes	96 (33.4%)	119 (42.8%)	215 (38.1%)	134 (50.4%)	137 (53.3%)	271 (51.8%)	151 (57.9%)	164 (64.1%)	315 (60.9%)
No	191 (66.6%)	159 (57.2%)	350 (61.9%)	132 (49.6%)	120 (46.7%)	252 (48.2%)	110 (42.1%)	92 (35.9%)	202 (39.1%)
Missing	68	77	145	89	98	187	94	99	193
Odds Ratio (95% CI), p-value	0.60 (0.42, 0.86), p=0.0059			0.85 (0.58, 1.24), p=0.4042			0.72 (0.50, 1.05), p=0.0882		
Sensitivity outcome: Return to work: any hours, n (%)									
Yes	180 (59.2%)	183 (62.0%)	363 (60.6%)	222 (76.3%)	212 (76.5%)	434 (76.4%)	237 (81.7%)	226 (81.3%)	463 (81.5%)
No	124 (40.8%)	112 (38.0%)	236 (39.4%)	69 (23.7%)	65 (23.5%)	134 (23.6%)	53 (18.3%)	52 (18.7%)	105 (18.5%)
Missing	51	60	111	64	78	142	65	77	142
Odds Ratio (95% CI), p-value	0.85 (0.60, 1.22), p=0.3785			0.93 (0.63, 1.39), p=0.7323			1.00 (0.65, 1.55), p=0.9847		

Table 3: Further return to work (RTW) related secondary outcomes

	3 months			6 months			12 months		
	Intervention (n=355)	Usual care (n=355)	Effect ¹ , 95% CI	Intervention (n=355)	Usual care (n=355)	Effect ¹ , 95% CI	Intervention (n=355)	Usual care (n=355)	Effect ¹ , 95% CI
Time to RTW², median (95% CI)							4.8 (3.2, 7.2)	3.6 (2.9, 5.2)	HR: 0.86 (0.70, 1.05), p=0.1331
Work retention (sustained RTW ≥80% pre injury hours) up to 12 months, n/N (%)³									OR: 0.78 (0.57, 1.07), p=0.117
Sustained RTW from 3 or 6 months up to 12 months							99/223 (44.4%)	99/207 (47.8%)	
RTW only at 12 months							29/223 (13.0%)	27/207 (13.0%)	
RTW but not sustained							19/223 (8.5%)	21/207 (10.1%)	
Not RTW (any timepoint)							76/223 (34.1%)	60/207 (29.0%)	
In participants RTW (any hours)	n=180	n=183	363	n=222	n=212	n=434	n=237	n=226	n=463
Number of hours RTW, mean (SD)	32.0 (14.76), n=174	33.0 (14.21), n=176	MD: -2.8 (-5.7, 0.2), p=0.0695	33.8 (12.90), n=215	33.4 (13.67), n=204	MD: -1.0 (-3.2, 1.3), p=0.3978	34.8 (12.07), n=228	35.9 (11.48), n=218	MD: -2.1 (-4.1, -0.1), p=0.0427
Percentage of pre-injury hours, mean (SD)	79.7 (32.74), n=163	93.5 (50.95), n=166	MD: -10.2 (-16.4, -4.1), p=0.0011	85.0 (30.03), n=197	91.1 (52.93), n=192	MD: -3.4 (-9.2, 2.4), p=0.2466	87.1 (28.53), n=208	102.3 (108.97), n=204	MD: -7.0 (-11.4, -2.7), p=0.0017
Returning to work in the same role, n/N (%)	156/176 (88.6%)	155/183 (84.7%)	OR: 1.43 (0.71, 2.89), p=0.3195	190/218 (87.2%)	181/212 (85.4%)	OR: 1.23 (0.68, 2.22), p=0.4956	195/234 (83.3%)	187/225 (83.1%)	OR: 1.02 (0.57, 1.85), p=0.9352
In participants RTW ≥80% pre injury hours	n=96	n=119	n=215	n=134	n=137	n=271	n=151	n=164	n=315
Days off sick, mean (SD)	31.6 (35.59), n=73	41.9 (36.06), n=87	GM: 0.35 (0.17, 0.73), p=0.0052	11.3 (24.88), n=106	9.9 (24.86), n=109	GM: 1.00 (0.61, 1.64), p=0.9966	3.2 (12.76), n=127	3.1 (11.05), n=132	GM: 0.97 (0.68, 1.39), p=0.8812
In participants not RTW (any hours)	n=124	n=112	n=236	n=69	n=65	n=134	n=53	n=52	n=105
Intends to RTW, n/N (%)	70/78 (89.7%)	60/62 (96.8%)	OR: 0.74 (0.16, 3.31), p=0.6871	36/43 (83.7%)	41/49 (83.7%)	OR: 0.83 (0.28, 2.43), p=0.7276	21/35 (60.0%)	19/38 (50.0%)	OR: 1.16 (0.42, 3.19), p=0.7727

¹ Data are n/N (%) or mean (SD), unless otherwise indicated. The table presents raw data by group alongside the treatment effect estimate, representing the adjusted mean difference (MD) for continuous outcomes where model normality assumptions were valid (number of hours, percentage of pre-injury hour), geometric mean for continuous outcomes where residuals were not normally distributed and a log transformation was performed on the outcome (days off sick), odds ratio (OR) for binary and ordinal outcomes (returning to same role, in sustained work), hazard ratio (HR) for time to return to work.

² Time (months) to RTW any hours, with censoring of participants not RTW to ≥80% pre injury hours. Median time to RTW and 95% CI estimated using the Kaplan–Meier method.

³ Data are ordinal, full list of categories for work retention include: Sustained RTW from 3 or 6 months = RTW at 3, 6 & 12 months, or RTW at 6 & 12 months; RTW from 12 months = RTW at 12 months only; RTW but not sustained = RTW at 3 or 6 months but not at a later timepoint; Not RTW at any timepoint.

Table 4: Secondary patient reported outcomes: Psychological wellbeing, financial stress, work self-efficacy, and purpose in life

	Baseline			3 months			6 months			12 months		
	Intervention (n=355)	Usual care (n=355)	Total (n=710)	Intervention (n=355)	Usual care (n=355)	Mean Difference, 95% CI	Intervention (n=355)	Usual care (n=355)	Mean Difference, 95% CI	Intervention (n=355)	Usual care (n=355)	Mean Difference, 95% CI
Anxiety (GAD-7), mean (SD)¹	8.4 (6.36), n=355	8.0 (5.74), n=355	8.2 (6.06), n=710	6.0 (5.64), n=226	6.4 (5.36), n=203	-0.3 (-1.2, 0.6), p=0.5170	5.5 (5.48), n=220	6.2 (5.44), n=203	-0.7 (-1.6, 0.3), p=0.1543	5.7 (5.66), n=222	5.4 (5.34), n=224	0.2 (-0.7, 1.1), p=0.6324
Minimal (0-4)	121 (34.1%)	111 (31.3%)	232 (32.7%)	113 (50.0%)	87 (42.9%)	200 (46.6%)	122 (55.5%)	95 (45.2%)	217 (50.5%)	113 (50.9%)	124 (55.4%)	237 (53.1%)
Mild (5-9)	94 (26.5%)	113 (31.8%)	207 (29.2%)	52 (23.0%)	65 (32.0%)	117 (27.3%)	51 (23.2%)	63 (30.0%)	114 (26.5%)	59 (26.6%)	54 (24.1%)	113 (25.3%)
Moderate (10-14)	69 (19.4%)	82 (23.1%)	151 (21.3%)	38 (16.8%)	30 (14.8%)	68 (15.9%)	28 (12.7%)	31 (14.8%)	59 (13.7%)	25 (11.3%)	29 (12.9%)	54 (12.1%)
Severe (15-21)	71 (20.0%)	49 (13.8%)	120 (16.9%)	23 (10.2%)	21 (10.3%)	44 (10.3%)	19 (8.6%)	21 (10.0%)	40 (9.3%)	25 (11.3%)	17 (7.6%)	42 (9.4%)
Depression (PHQ-9), mean (SD)²	10.0 (6.73), n=355	10.1 (6.30), n=355	10.0 (6.51), n=710	7.0 (6.43), n=226	7.7 (6.41), n=203	-0.7 (-1.8, 0.5), p=0.2668	6.5 (6.13), n=222	7.3 (6.22), n=209	-0.6 (-1.6, 0.4), p=0.2704	6.6 (6.73), n=223	6.2 (6.30), n=224	0.4 (-0.7, 1.5), p=0.4518
Minimal (0-5)	96 (27.0%)	76 (21.4%)	172 (24.2%)	105 (46.5%)	80 (39.4%)	185 (43.1%)	115 (51.8%)	93 (44.5%)	208 (48.3%)	118 (52.9%)	114 (50.9%)	232 (51.9%)
Mild (6-10)	85 (23.9%)	110 (31.0%)	195 (27.5%)	56 (24.8%)	65 (32.0%)	121 (28.2%)	47 (21.2%)	52 (24.9%)	99 (23.0%)	42 (18.8%)	54 (24.1%)	96 (21.5%)
Moderate (11-15)	89 (25.1%)	86 (24.2%)	175 (24.6%)	32 (14.2%)	21 (10.3%)	53 (12.4%)	31 (14.0%)	30 (14.4%)	61 (14.2%)	27 (12.1%)	29 (12.9%)	56 (12.5%)
Moderately Severe (16-20)	47 (13.2%)	47 (13.2%)	94 (13.2%)	20 (8.8%)	23 (11.3%)	43 (10.0%)	22 (9.9%)	23 (11.0%)	45 (10.4%)	19 (8.5%)	14 (6.3%)	33 (7.4%)
Severe (21-27)	38 (10.7%)	36 (10.1%)	74 (10.4%)	13 (5.8%)	14 (6.9%)	27 (6.3%)	7 (3.2%)	11 (5.3%)	18 (4.2%)	17 (7.6%)	13 (5.8%)	30 (6.7%)
Distress (IES-15/IES-6), mean (SD)³	29.9 (25.17), n=354	31.2 (25.50), n=355	30.5 (25.33), n=709	24.1 (24.93), n=223	28.8 (22.66), n=203	-4.0 (-7.7, -0.2), p=0.0386	22.7 (24.07), n=221	26.2 (23.97), n=209	-0.9 (-5.5, 3.6), p=0.6815	24.8 (25.81), n=222	24.4 (24.30), n=221	2.4 (-2.2, 7.0), p=0.3100
Financial impact of injury (FCSS), mean (SD)⁴	6.3 (2.76), n=350	6.2 (2.56), n=354	6.3 (2.66), n=704	6.1 (2.57), n=221	6.4 (2.80), n=200	-0.3 (-0.6, 0.1), p=0.2120	6.3 (2.62), n=223	6.5 (2.89), n=209	-0.2 (-0.6, 0.2), p=0.3644	6.2 (2.70), n=221	6.3 (2.71), n=219	0.1 (-0.3, 0.5), p=0.5862
Current work ability (WAI), mean (SD)⁵										6.8 (2.86), n=220	6.6 (2.87), n=223	0.0 (-0.6, 0.6), p=0.9858
Mental and physical demands (WAI), mean (SD)⁵										7.1 (2.18), n=218	7.1 (2.24), n=219	-0.1 (-0.5, 0.3), p=0.5223
Purpose in Life, mean (SD)⁶										71.1 (19.33), n=220	72.7 (18.56), n=221	-1.9 (-5.4, 1.5), p=0.2738

¹ GAD-7=Generalised Anxiety Disorder Assessment. Scores range from 0 to 21 with higher scores indicating more severe anxiety.

² PHQ-9=Patient Health Questionnaire. Scores range from 0 to 27 with higher scores indicating more severe depression.

³ IES=Impact of Event Scale. Post-traumatic distress was measured using the IES-15 at baseline, and the IES-15 and IES-6 at follow up after a reduction in the size of the questionnaire to increase follow-up rates. Scores from each scale were re-scaled to provide a consistent score ranging from 0 to 100 with higher scores indicating greater distress.

⁴ FCSS=Financial Chronic Stress Scale. Scores range from 3 to 13 with higher scores indicating greater financial stress.

⁵ WAI=Work ability index. Current work ability scores range 0–10. Mental and physical demand score range 2–10. Higher values indicate better ability.

⁶ Purpose in Life was initially measured using the Purpose in Life scale (9-item) and then the Purpose in Life Test - Short Form (4-item) after a reduction in questionnaire size to increase follow-up rates. Scores were rescaled to provide a consistent score ranging from 0 to 100 with higher scores indicating greater well-being and sense of purpose. Note analysis of this endpoint omitted random OT effect due to model convergence.

Table 5 Safety events

	3 months			6 months			12 months		
	Intervention (n=355)	Usual care (n=355)	Total (n=710)	Intervention (n=355)	Usual care (n=355)	Total (n=710)	Intervention (n=355)	Usual care (n=355)	Total (n=710)
Participant died	0	0	0	0	0	0	0	0	0
Participant had accident whilst working requiring medical attention	2/136 (1.5%)	0	2/267 (0.7%)	3/174 (1.7%)	4/161 (2.5%)	7/335 (2.1%)	5/182 (2.7%)	2/174 (1.1%)	7/356 (2.0%)
Of which:									
Type of medical attention (not mutually exclusive)									
Required hospital admission	0	0	0	0	2	2	0	0	0
A&E department	1	0	1	1	2	3	1	1	2
GP Surgery	0	0	0	2	1	3	1	0	1
Walk in centre	0	0	0	0	0	0	1	1	2
Minor injury unit	0	0	0	1	1	2	0	0	0
Other	1	0	1	0	1	1	2	0	2
Accident whilst using equipment or adaptations to work environment	0	0	0	2	1	3	2	1	3
Identified as an RUSAE	0	0	0	0	0	0	0	0	0