

Evaluating Sickness Absence Duration by Musculoskeletal and Mental Health Issues. A retrospective cohort study of Scottish Healthcare Workers

[Supplementary material]

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Running title Sickness Absence Duration in Healthcare Workers

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Figure S1a. Mean duration (in days) of absence by cause of sickness

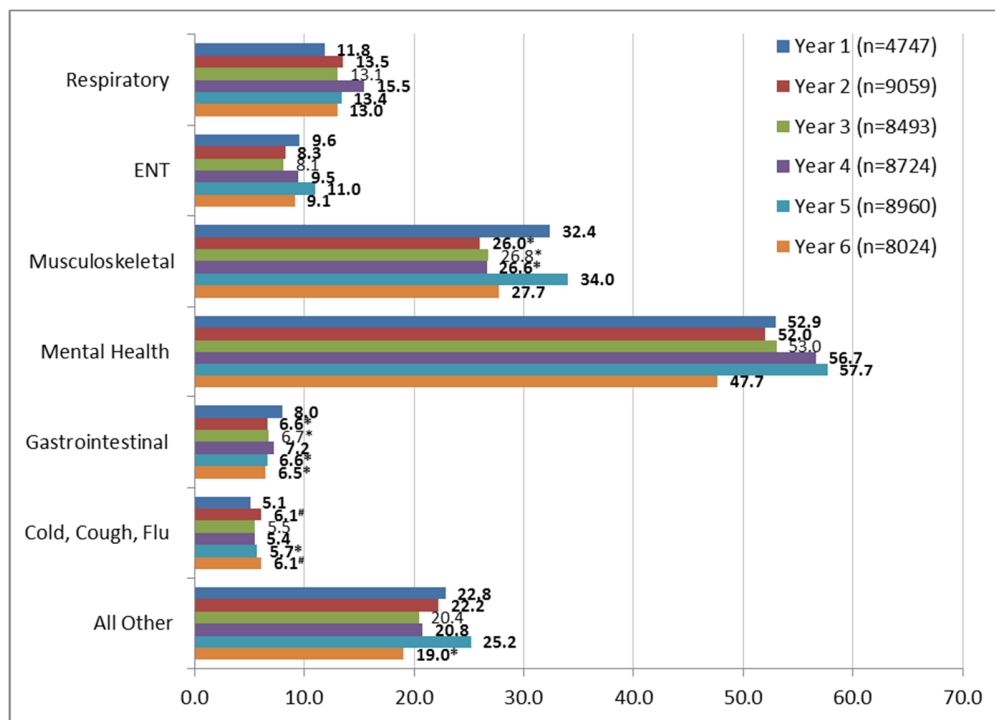


Figure S1b. Mean duration (in days) of absence by MSK cause of sickness

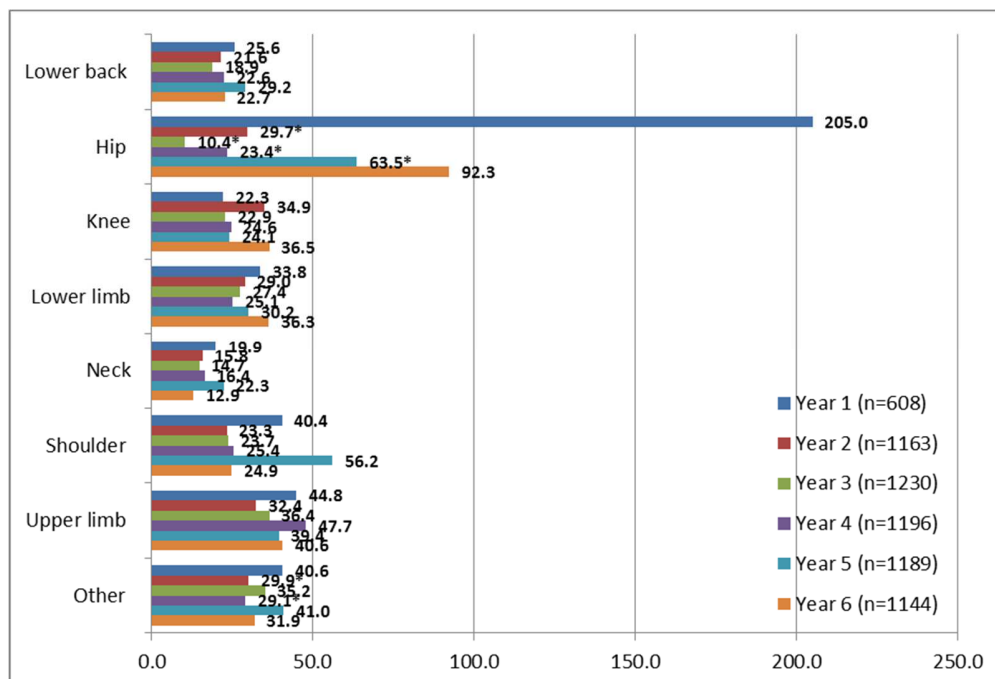


Figure S1c. Mean duration (in days) of absence by MH cause of sickness

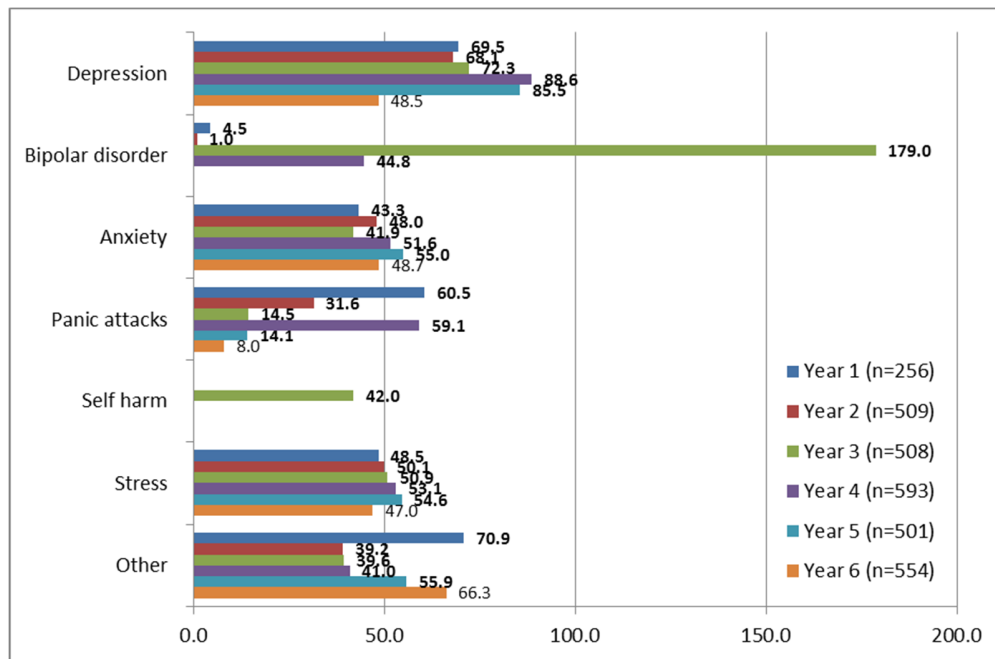


Table S1. Multivariate cox regression RTW hazard ratios for all (minus MSK and MH), MSK and MH conditions* with results from the Proportional Hazards test.

	All Conditions (minus MSK & MH)				Musculoskeletal Conditions				Mental Health Conditions			
	HR	95% CI	P	PH Test	HR	95% CI	P	PH Test	HR	95% CI	P	PH Test
Population												
All EASY except MSK & MH	1				-	-	-		-	-	-	
MSK	0.54	(0.53, 0.56)	0.000	0.0000	-	-	-		-	-	-	
MH	0.54	(0.33, 0.35)	0.000	0.0000	-	-	-		-	-	-	
MSK condition												
Lower back	-	-	-		1				-	-	-	
Knee	-	-	-		0.85	(0.75, 0.96)	0.008	0.0142	-	-	-	
Lower limb	-	-	-		0.80	(0.73, 0.88)	0.000	0.0005	-	-	-	
Neck	-	-	-		1.20	(1.08, 1.34)	0.001	0.5913	-	-	-	
Shoulder	-	-	-		0.80	(0.71, 0.91)	0.000	0.0013	-	-	-	
Upper limb	-	-	-		0.63	(0.59, 0.69)	0.000	0.0000	-	-	-	
Other	-	-	-		0.77	(0.72, 0.83)	0.000	0.0061	-	-	-	
MH condition												
Depression	-	-	-		-	-	-		1			
Anxiety	-	-	-		-	-	-		1.53	(1.33, 1.76)	0.000	0.2158
Stress	-	-	-		-	-	-		1.46	(1.30, 1.64)	0.000	0.0857
Other	-	-	-		-	-	-		1.51	(1.24, 1.85)	0.000	0.0004
Gender												
Male	1				1		1		1			
Female	0.91	(0.87, 0.95)	0.000	0.0000	0.81	(0.74, 0.88)	0.81	0.0004	1.06	(0.92, 1.23)	0.388	0.0702
Age	0.99	(0.99, 0.99)	0.000	0.0000	0.99	(0.99, 0.99)	0.99	0.8371	0.99	(0.99, 1.00)	0.000	0.4740
Job category												
Nursing/Midwifery	1				1				1			
Administrative services	1.19	(1.15, 1.23)	0.000	0.0059	1.18	(1.08, 1.28)	0.000	0.0025	0.97	(0.88, 1.08)	0.595	0.5969
Allied Health Profession	1.31	(1.26, 1.37)	0.000	0.0128	1.16	(1.05, 1.29)	0.004	0.3794	1.16	(1.00, 1.34)	0.043	0.7472
Healthcare Sciences	1.21	(1.14, 1.28)	0.000	0.3422	1.28	(1.09, 1.50)	0.003	0.0769	1.10	(0.87, 1.38)	0.437	0.3889

Manager	1.31	(1.04, 1.64)	0.020	0.0000	1.80	(1.04, 3.11)	0.036	0.7607	1.46	(0.79, 2.71)	0.229	0.7521
Medical & Dental	1.44	(1.33, 1.57)	0.000	0.0000	1.24	(0.97, 1.57)	0.080	0.0001	1.46	(0.90, 2.39)	0.127	0.0011
Medical and Dental Support	1.16	(1.06, 1.27)	0.001	0.4761	1.39	(1.06, 1.82)	0.018	0.9529	0.91	(0.62, 1.35)	0.644	0.7918
Other Therapeutic	1.17	(1.04, 1.31)	0.010	0.0017	1.44	(1.20, 1.75)	0.000	0.9414	1.22	(0.89, 1.67)	0.214	0.0001
Personal and Social Care	1.02	(0.97, 1.06)	0.458	0.7318	1.71	(1.28, 2.28)	0.000	0.8777	0.79	(0.51, 1.24)	0.308	0.7339
Support Services	1				1.10	(1.01, 1.19)	0.026	0.1622	1.21	(1.05, 1.40)	0.009	0.7192
Job type												
Part time	1				1				1			
Full time	1.12	(1.09, 1.14)	0.000	0.0003	1.04	(0.99, 1.11)	0.143	0.5504	1.09	(1.00, 1.18)	0.042	0.4597
Year												
May 08-Apr 09	1				1				1			
May 09-Apr 10	0.98	(0.95, 1.02)	0.417	0.0540	1.13	(1.02, 1.25)	0.020	0.9628	0.99	(0.85, 1.16)	0.91	0.9568
May 10-Apr 11	0.95	(0.92, 0.99)	0.013	0.0025	1.13	(1.03, 1.25)	0.014	0.7210	0.98	(0.84, 1.15)	0.822	0.2428
May 11-Apr 12	0.94	(0.90, 0.97)	0.001	0.0012	1.11	(1.00, 1.22)	0.045	0.6067	0.92	(0.79, 1.07)	0.279	0.5608
May 12-Apr 13	0.92	(0.88, 0.95)	0.000	0.0133	0.97	(0.87, 1.08)	0.560	0.3715	0.89	(0.77, 1.04)	0.154	0.3844
May 13-Apr 14	0.96	(0.92, 1.00)	0.029	0.0000	1.07	(0.96, 1.18)	0.217	0.3519	1.03	(0.88, 1.21)	0.687	0.9330

*results by Day of Absence and Season presented in Supplementary Material Tables S1a-f

Table S2a. Multivariate cox regression hazard ratios for full population, adjusted for sex, age, job category, job type, day of first absence, season of absence and year of absence.

All	HR	95% CI	P	PH Assumption
Day of absence				
Mon	1			
Tues	1.07	(1.04, 1.10)	0.000	0.5252
Wed	1.01	(0.98, 1.04)	0.384	0.3434
Thurs	1.01	(0.98, 1.04)	0.402	0.5309
Fri	0.96	(0.93, 0.99)	0.017	0.0021
Season				
Spring	1			
Summer	1.00	(0.97, 1.03)	0.931	0.0228
Autumn	1.00	(0.98, 1.03)	0.784	0.2458
Winter	1.02	(0.99, 1.05)	0.133	0.0905

Table S2b. Multivariate cox regression hazard ratios for full population, adjusted for sex, age, job category, job type, day of first absence, season of absence, year of absence and time varying coefficients.

All	HR	95% CI	P
Day of absence			
Mon	1		
Tues	1.06	(1.04, 1.09)	0.000
Wed	1.01	(0.98, 1.04)	0.612
Thurs	1.00	(0.97, 1.03)	0.976
Fri	0.94	(0.91, 0.98)	0.001
Season			
Spring	1		
Summer	1.00	(0.97, 1.03)	0.992
Autumn	1.01	(0.98, 1.03)	0.598
Winter	1.02	(0.99, 1.04)	0.163

Table S2c. Multivariate cox regression hazard ratios for staff with musculoskeletal conditions, adjusted for sex, age, job category, job type, day of first absence, season of absence and year of absence.

Musculoskeletal	HR	95% CI	P	PH Assumption
Day of absence				
Mon	1			
Tues	1.06	(0.99, 1.14)	0.105	0.2140
Wed	1.06	(0.99, 1.14)	0.1	0.5936
Thurs	1.08	(1.00, 1.17)	0.064	0.1939
Fri	1.00	(0.92, 1.09)	0.978	0.9834
Season				
Spring	1			
Summer	1.01	(0.94, 1.09)	0.694	0.7564
Autumn	1.01	(0.94, 1.08)	0.793	0.3528
Winter	1.02	(0.95, 1.09)	0.641	0.4783

Table S2d. Multivariate cox regression hazard ratios for staff with musculoskeletal conditions, adjusted for sex, age, job category, job type, day of first absence, season of absence, year of absence and time varying coefficients.

Musculoskeletal	HR	95% CI	P
Day of absence			
Mon	1		
Tues	1.06	(0.99, 1.14)	0.116
Wed	1.06	(0.99, 1.15)	0.090
Thurs	1.08	(1.00, 1.17)	0.050
Fri	1.00	(0.92, 1.09)	0.996
Season			
Spring	1		
Summer	1.01	(0.94, 1.08)	0.824
Autumn	1.01	(0.94, 1.08)	0.798
Winter	1.01	(0.95, 1.08)	0.679

Table S2e. Multivariate cox regression hazard ratios for staff with mental health conditions, adjusted for sex, age, job category, job type, day of first absence, season of absence and year of absence.

Mental health	HR	95% CI	P	PH Assumption
Job type				
Part time	1			
Full time	1.030726	(0.93, 1.15)	0.579	0.3336
Day of absence	1.015467	(0.92, 1.13)	0.772	0.027
Mon	0.987987	(0.88, 1.11)	0.839	0.5043
Tues	0.915464	(0.81, 1.03)	0.139	0.0068
Wed				
Thurs	1			
Fri	1.039512	(0.93, 1.16)	0.496	0.3026
Season	1.056732	(0.96, 1.17)	0.275	0.4850
Spring	1.019983	(0.92, 1.13)	0.712	0.5526
Summer	1			
Autumn	1.030726	(0.93, 1.15)	0.579	0.3336
Winter	1.015467	(0.92, 1.13)	0.772	0.027

Table S2f. Multivariate cox regression hazard ratios for staff with mental health conditions, adjusted for sex, age, job category, job type, day of first absence, season of absence, year of absence and time varying coefficients.

Mental health	HR	95% CI	P
Job type			
Part time	1		
Full time	1.00	(0.90, 1.12)	0.956
Day of absence	0.96	(0.86, 1.08)	0.519
Mon	0.91	(0.79, 1.05)	0.188
Tues	0.82	(0.70, 0.96)	0.011
Wed			
Thurs	1		
Fri	1.04	(0.93, 1.17)	0.448
Season	1.06	(0.96, .17)	0.235
Spring	1.03	(0.92, 1.14)	0.638
Summer	1		
Autumn	1.00	(0.90, 1.12)	0.956
Winter	0.96	(0.86, 1.08)	0.519

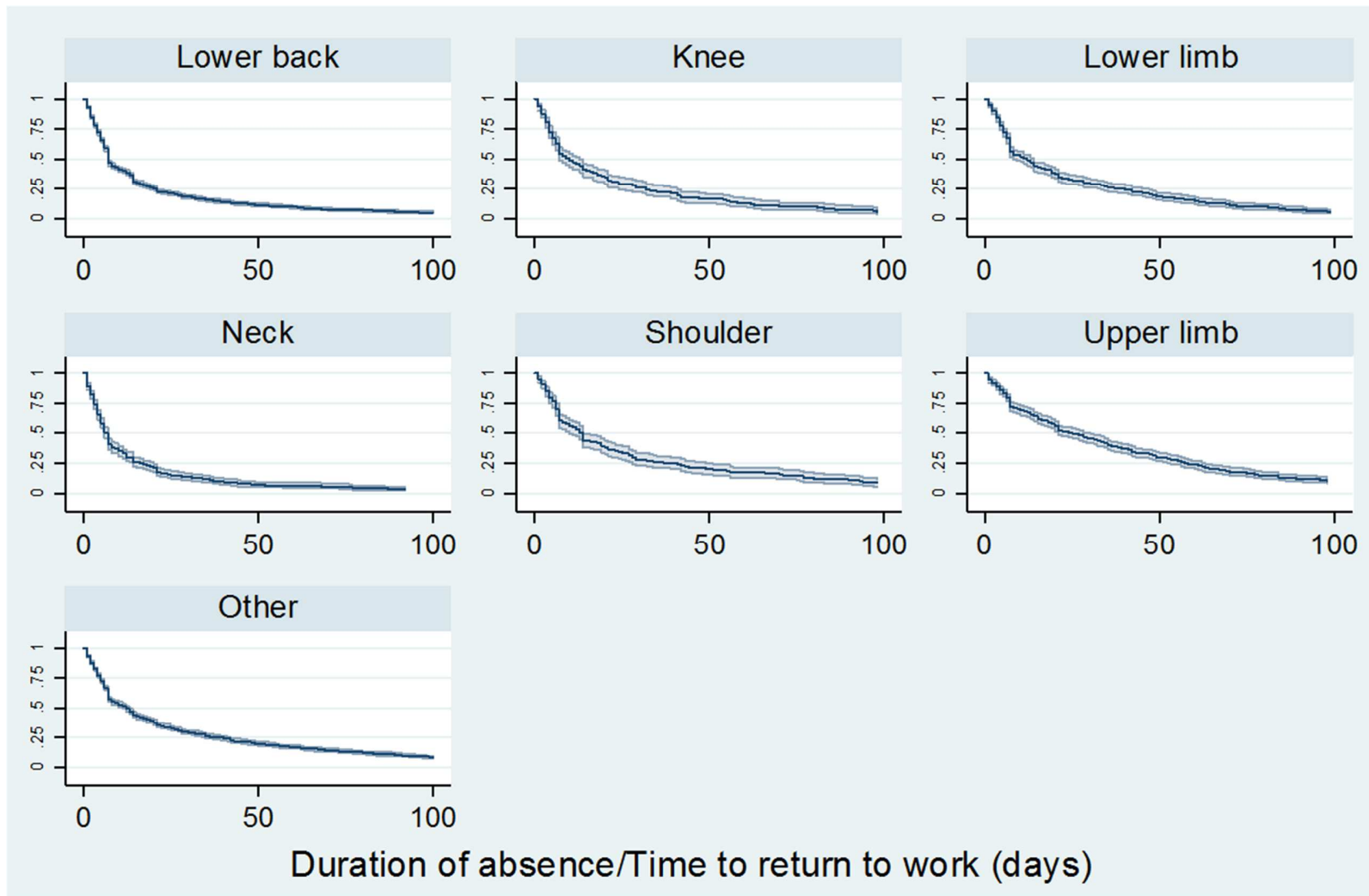


Figure S2. Return to Work curves for all MSK-related absences by MSK condition with 95%CI

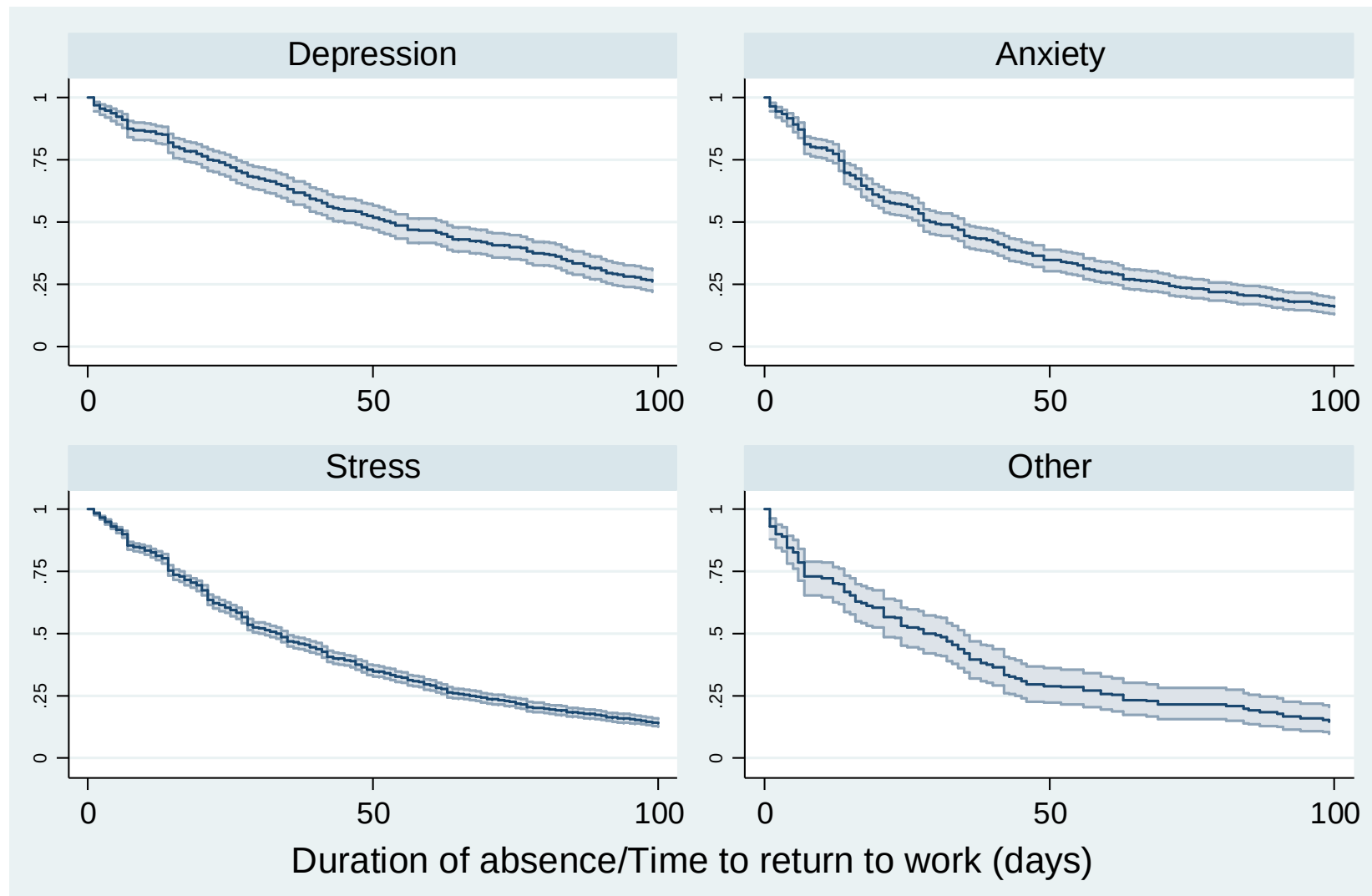


Figure S3. Return to Work curves for all MH-related absences by MH condition with 95%CI