

Supplementary material

1. Definition of the “overall severity” variable

The measure of ‘overall severity’ used in our regression analyses was defined from the screening questionnaires as the highest severity grade received across the questionnaires using the categorisation system illustrated in the Table below. If the scores across all available measure were consistent with the mildest severity classification for each measure, a person was categorised as presenting a “low” severity profile. If the person’s highest severity grade was consistent with those listed in the moderate column, a ‘moderate’ severity category was applied. If the person scored in the higher tiers of severity in at least one measure, a “high” severity classification was applied. Missing data was allowed on any measure, with overall severity being calculated from the available measures. Overall severity was set as missing if all measures had missing data for that individual.

Supplementary Table 1: Overall severity table

Overall severity	PHQ9	GAD7	PCL-5	ITQ	AUDIT	WSAS
LOW	None; Mind	None; Mild	No PTSD	No PTSD/CPTSD	Low risk	Subclinical
MODERATE	Moderate; Moderately severe	Moderate	n/a	n/a	Hazardous	Significant
HIGH	Severe	Severe	PTSD present	PTSD / CPTSD present	Harmful; Possible dependence	Moderately severe or worse

2. Occupational characteristics of the sample

Supplementary Table 2: N (%) for the occupational data of the sample.

	Site A (n=475)	Site B (n=367)	Site C (n=400)	Site D (n=731)	Total (n=1973)
NHS	289 (60.2)	315 (87.0)	222 (57.8)	312 (44.0)	1138 (58.9)
Primary care	31 (6.5)	15 (4.1)	20 (5.2)	66 (9.3)	132 (6.8)
Social care	18 (3.8)	13 (3.6)	26 (6.5)	59 (8.3)	116 (6.0)
Emergency services	20 (4.2)	3 (0.8)	45 (11.7)	30 (4.2)	98 (5.0)
Education	14 (2.9)	0 (0)	1 (0.2)	9 (1.3)	24 (1.2)

	Site A (n=475)	Site B (n=367)	Site C (n=400)	Site D (n=731)	Total (n=1973)
VCSE	2 (0.4)	0 (0)	13 (3.4)	36 (5.1)	51 (2.6)
Local authority	17 (3.5)	0 (0)	4 (1)	15 (2.1)	36 (1.9)
Other*	84 (17.5)	16 (4.4)	54 (14.1)	182 (25.7)	336 (17.4)
Missing	0% missing	1.4% missing	4% missing	3% missing	2.1% missing

*Note:* All percentages calculated excluding missing values

\*In all sites other than Site D, free text information about job role were available, therefore it was often possible to re-categorise clients from ‘Other’ to one of the main reported categories included in the table, most commonly to the NHS category. However, this open text response option was not available for Site D, hence a high proportion of ‘Other’ job roles.

3. Regression tables for the caseness and overall severity analyses

Supplementary Table 3: Summary of logistic regression analyses of PHQ-9 caseness

Predictor	OR	95% CI		p	Interaction p-value
<u>Demographics</u>					
Age	1	0.99	1.01	0.416	0.525
Gender (man vs woman)	1.02	0.77	1.36	0.879	0.744
Gender (identified in another way vs woman)	0.75	0.36	1.62	0.507	-
Ethnicity (ethnic minority vs white)	0.66	0.43	1.03	0.063	0.044
ICU/critical care	1.14	0.81	1.64	0.458	0.466
Clinical vs non-clinical	0.67	0.44	1.01	0.062	0.024
Sexual orientation (identified in another way vs heterosexual)	1.89	0.123	2.94	0.004	0.969
Disability					0.264
	1.71	1.19	2.53	0.005	

Predictor	OR	95% CI		p	Interaction p-value
<i>Impacts of COVID</i>					
COVID illness (home)	1.21	0.97	1.5	0.094	0.266
COVID illness (hospital)	1.32	0.74	2.48	0.364	0.483
COVID family member (home)	1.21	0.96	1.52	0.11	0.228
COVID family member (hospital)	1.06	0.74	1.54	0.763	0.995
Financial loss	1.48	1.14	1.95	0.004	0.489
Undertaking new tasks	1.23	1.01	1.51	0.038	<0.001
Seconded or re-deployed	0.93	0.71	1.23	0.616	0.661
Moved work location	1.22	0.98	1.53	0.076	0.211
Bereavement	1.26	0.97	1.64	0.089	0.242
<i>Pre-pandemic MH concerns</i>					
Yes (vs no)	2.03	1.62	2.53	<0.001	0.085
Unsure (vs no)	1.81	1.37	2.42	0.001	-

Supplementary Table 4: Summary of logistic regression analyses of GAD-7 caseness

Predictor	OR	95% CI		p	Interaction p-value
<i>Demographics</i>					
Age	0.98	0.97	0.99	<0.001	0.576
Gender (man vs woman)	0.95	0.73	1.25	0.725	0.726

Predictor	OR	95% CI		p	Interaction p-value
Gender (identified in another way vs woman)	0.78	0.37	1.64	0.507	-
Ethnicity (ethnic minority vs white)	1.14	0.74	1.79	0.547	0.432
ICU/critical care	1.15	0.83	1.6	0.406	0.843
Clinical vs non-clinical	0.98	0.67	1.41	0.899	0.689
Sexual orientation (identified in another way vs heterosexual)	1.32	0.92	1.92	0.13	0.477
Disability	1.17	0.85	1.63	0.33	0.230
<u>Impacts of COVID</u>					
COVID illness (home)	0.9	0.74	1.1	0.311	0.003
COVID illness (hospital)	0.82	0.49	1.38	0.445	0.68
COVID family member (home)	1.13	0.91	1.4	0.272	0.001
COVID family member (hospital)	1.39	0.97	2.01	0.074	0.715
Financial loss	1.28	1	1.64	0.049	0.649
Undertaking new tasks	1.13	0.94	1.37	0.194	0.583
Seconded or re-deployed	0.92	0.71	1.19	0.521	0.494
Moved work location	1.21	0.98	1.49	0.074	0.192
Bereavement	1.38	1.07	1.77	0.012	0.613
<u>Pre-pandemic MH concerns</u>					
Yes (vs no)	2.05	1.66	2.53	<0.001	0.399
Unsure (vs no)	1.66	1.28	2.17	0.001	-

*Supplementary Table 5: Summary of logistic regression analyses of PTSD caseness based on the PCL-5*

Predictor	OR	95% CI		p	Interaction p-value
<u>Demographics</u>					
Age	1	0.99	1.01	0.927	0.73
Gender (man vs woman)	1.09	0.73	1.65	0.681	0.633
Gender (identified in another way vs woman) *	-	-	-	-	-
Ethnicity (ethnic minority vs white)	1.89	0.93	4.15	0.093	0.296
ICU/critical care	2.23	1.45	3.52	<0.001	0.536
Clinical vs non-clinical	0.92	0.49	1.67	0.781	NA**
Sexual orientation (identified in another way vs heterosexual)	1.59	0.99	2.63	0.062	0.627
Disability	1.79	1.12	2.94	0.018	0.384
<u>Impacts of COVID</u>					
COVID illness (home)	1.00	0.73	1.37	0.998	0.821
COVID illness (hospital)	2.56	1.09	7.02	0.044	0.436
COVID family member (home)	0.98	0.7	1.37	0.898	0.273
COVID family member (hospital)	1.27	0.7	2.38	0.445	0.227
Financial loss	1.72	1.12	2.69	0.015	0.019
Undertaking new tasks	0.97	0.73	1.29	0.826	0.004
Seconded or re-deployed	1.05	0.73	1.52	0.797	0.390

Predictor	OR	95% CI		p	Interaction p-value
Moved work location	0.98	0.71	1.37	0.928	0.762
Bereavement	1.48	0.97	2.29	0.072	0.030
<i><u>Pre-pandemic MH concerns</u></i>					
Yes (vs no)	1.95	1.42	2.7	<0.001	0.623
Unsure (vs no)	1.29	0.87	1.91	0.205	-

**Note:** \* This model was not computable due to small numbers \*\* No interaction was computable as PCL-5 data were available for one site only

*Supplementary Table 6: Summary of logistic regression analyses of PTSD caseness based on the ITQ*

Predictor	OR	95% CI		p	Interaction p-value
<u>Demographics</u>					
Age	0.99	0.98	1	0.191	0.923
Gender (man vs woman)	1.17	0.82	1.67	0.381	0.818
Gender (identified in another way vs woman)	1.13	0.46	2.55	0.783	-
Ethnicity (ethnic minority vs white)	1.32	0.74	2.3	0.333	0.263
ICU/critical care	1.44	0.83	2.45	0.184	0.844
Clinical vs non-clinical	1.1	0.69	1.8	0.686	0.239
Sexual orientation (identified in another way vs heterosexual)	1.20	0.70	2.00	0.501	0.211
Disability	1.32	0.84	2.03	0.22	0.522

Predictor	OR	95% CI		p	Interaction p-value
<i><u>Impacts of COVID</u></i>					
COVID illness (home)	0.83	0.62	1.09	0.187	0.504
COVID illness (hospital)	1.25	0.6	2.49	0.539	0.121
COVID family member (home)	1.27	0.96	1.67	0.097	0.639
COVID family member (hospital)	1.62	1.06	2.48	0.025	0.596
Financial loss	1.57	1.16	2.13	0.003	0.382
Undertaking new tasks	1.71	1.31	2.25	<0.001	0.713
Seconded or re-deployed	1.39	0.97	1.99	0.07	0.406
Moved work location	1.49	1.13	1.95	0.004	0.043
Bereavement	1.91	1.41	2.58	<0.001	0.314
<i><u>Pre-pandemic MH concerns</u></i>					
Yes (vs no)	1.59	1.20	2.11	0.001	0.34
Unsure (vs no)	1.07	0.73	1.55	0.72	-

*Supplementary Table 7: - Summary of logistic regression analyses of AUDIT caseness*

Predictor	OR	95% CI		p	Interaction p-value
<u>Demographics</u>					
Age	1	0.99	1.01	0.909	0.553

Predictor	OR	95% CI		p	Interaction p-value
Gender (man vs woman)	2.35	1.74	3.16	<0.001	0.291
Gender (identified in another way vs woman)	1.40	0.54	3.21	0.455	-
Ethnicity (ethnic minority vs white)	0.24	0.09	0.51	0.001	0.151
ICU/critical care	1.43	0.98	2.08	0.061	0.009
Clinical vs non-clinical	1.35	0.87	2.16	0.19	0.004
Sexual orientation (identified in another way vs heterosexual)	1.47	0.95	2.22	0.072	0.167
Disability	0.65	0.41	0.98	0.049	0.214
<i><u>Impacts of COVID</u></i>					
COVID illness (home)	1.07	0.83	1.37	0.622	0.77
COVID illness (hospital)	0.2	0.05	0.54	0.006	0.329
COVID family member (home)	1.1	0.84	1.42	0.488	0.476
COVID family member (hospital)	0.74	0.46	1.15	0.2	0.568
Financial loss	1.17	0.87	1.55	0.291	0.807
Undertaking new tasks	1.38	1.09	1.76	0.008	0.627
Seconded or re-deployed	0.93	0.67	1.27	0.648	0.651
Moved work location	0.71	0.55	0.93	0.012	0.943
Bereavement	1.3	0.97	1.73	0.07	0.136
<i><u>Pre-pandemic MH concerns</u></i>					
Yes (vs no)	1.18	0.90	1.53	0.226	0.018



Predictor	OR	95% CI		p	Interaction p-value
Unsure (vs no)	1.53	1.12	2.09	0.008	-

Supplementary Table 8: Part 2- Summary of logistic regression analyses of WSAS caseness

Predictor	OR	95% CI		p	Interaction p-value
<i>Demographics</i>					
Age	0.99	0.98	1	0.198	0.061
Gender (man vs woman)	1.12	0.81	1.56	0.498	0.498
Gender (identified in another way vs woman)	1.42	0.6	3.88	0.456	-
Ethnicity (ethnic minority vs white)	0.87	0.54	1.45	0.568	0.481
ICU/critical care	0.85	0.59	1.26	0.409	0.674
Clinical vs non-clinical	0.66	0.41	1.03	0.078	0.2
Sexual orientation (identified in another way vs heterosexual)	2.44	1.45	4.35	0.002	0.189
Disability	1.93	1.23	3.15	0.006	0.190
<i>Impacts of COVID</i>					
COVID illness (home)	1.23	0.96	1.59	0.1	0.576
COVID illness (hospital)	1.26	0.66	2.67	0.513	0.882
COVID family member (home)	1.62	1.24	2.14	0.001	0.473
COVID family member (hospital)	1.06	0.71	1.64	0.772	0.628

Predictor	OR	95% CI		p	Interaction p-value
Financial loss	1.59	1.17	2.19	0.004	0.912
Undertaking new tasks	1.13	0.9	1.41	0.295	0.129
Seconded or re-deployed	0.83	0.62	1.13	0.237	0.195
Moved work location	1.06	0.83	1.36	0.643	0.839
Bereavement	1.08	0.81	1.45	0.595	0.173
<i><u>Pre-pandemic MH concerns</u></i>					
Yes (vs no)	2.29	1.77	2.97	<0.001	0.018
Unsure (vs no)	1.71	1.25	2.37	0.001	-

*Supplementary Table 9: Part 2 - Summary of proportional odds logistic regression analyses of overall severity across the Hub screening measures*

Predictor	OR	95% CI		p	Interaction p-value
<u>Demographics</u>					
Age	0.99	0.98	1.00	0.05	0.91
Gender (man vs woman)	1.07	0.82	1.40	0.62	0.83
Gender (identified in another way vs woman)	1.07	0.52	2.25	0.86	-
Ethnicity (ethnic minority vs white)	0.85	0.56	1.32	0.47	0.19
ICU/critical care	1.28	0.92	1.81	0.15	0.60
Clinical vs non-clinical*	0.81	0.56	1.16	0.26	Not computable

Predictor	OR	95% CI		p	Interaction p-value
Sexual orientation (identified in another way vs heterosexual)	1.75	1.22	2.63	0.004	0.28
Disability	1.70	1.21	2.41	0.003	0.58
<i><u>Impacts of COVID</u></i>					
COVID illness (home)	1.18	0.97	1.45	0.11	0.19
COVID illness (hospital)	1.44	0.83	2.61	0.21	0.93
COVID family member (home)	1.31	1.06	1.63	0.01	0.13
COVID family member (hospital)	1.18	0.83	2.61	0.21	0.82
Financial loss	1.84	1.43	2.39	<0.001	0.92
Undertaking new tasks	1.19	0.99	1.44	0.06	0.04
Seconded or re-deployed	1.04	0.81	1.35	0.76	0.42
Moved work location	1.15	0.94	1.41	0.19	0.22
Bereavement	1.25	0.98	1.60	0.07	0.30
<i><u>Pre-pandemic MH concerns</u></i>					
Yes vs no	2.11	1.72	2.59	<0.001	0.15
Yes vs unsure	1.43	1.08	1.90	0.01	-

\* It was not possible to adjust this analysis for site due to the distribution of the outcome across sites in the subgroup of NHS workers. Attempting to do so resulted in non-convergence of the model.