

# THE LANCET

## Digital Health

### **Supplementary appendix**

This appendix formed part of the original submission and has been peer reviewed.  
We post it as supplied by the authors.

Supplement to: Titov N, Dear BF, Nielsen O, et al. User characteristics and outcomes from a national digital mental health service: an observational study of registrants of the Australian MindSpot Clinic. *Lancet Digit Health* 2020; **2**: e582–93.

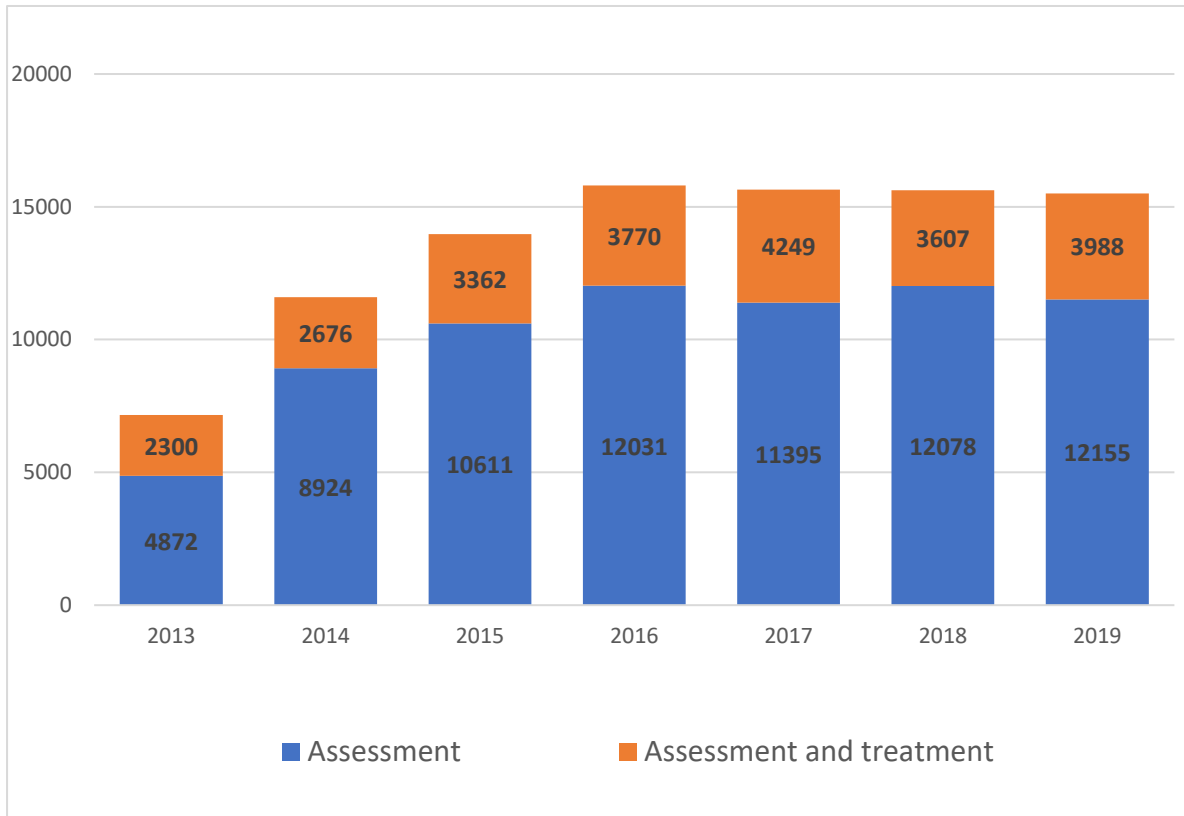
## **Appendix**

### **Therapists**

Most MindSpot therapists are nationally registered psychologists with a post-graduate or master's degree in clinical psychology, with the remainder being provisional psychologists in training, social workers, general and mental health nurses, and counsellors with other qualifications and experience. MindSpot therapists receive training in the principles of online psychological assessment and treatment, including detailed instruction in course delivery. Psychiatrists and cultural consultants are available for supervision and training. All therapists receive regular supervision and attend external and internal training workshops.

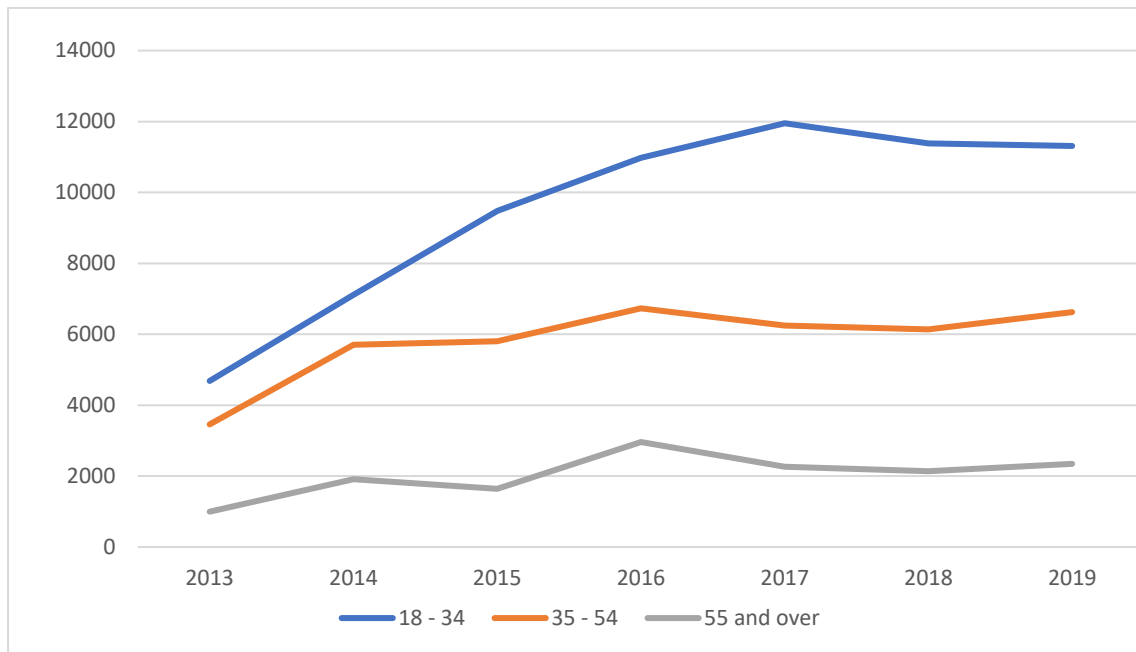
## Appendix

Figure S1. Number of completed assessments by year



## Appendix

Figure S2. Trends in number of assessments started by age group



## Appendix

**Table S1. Breakdown of number of assessments started: by year and state**

	2013		2014		2015		2016		2017		2018		2019		TOTAL		National proportions*
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	
Australian Capital Territory	223	2.5%	355	2.4%	440	2.6%	439	2.1%	486	2.4%	515	2.6%	547	2.7%	<b>3005</b>	<b>2.5%</b>	<b>1.7%</b>
New South Wales	2794	31.3%	4614	31.3%	5351	31.6%	6654	32.2%	6680	32.6%	6447	32.8%	6639	32.7%	<b>39181</b>	<b>32.2%</b>	<b>31.8%</b>
Northern Territory	106	1.2%	163	1.1%	206	1.2%	219	1.1%	261	1.3%	222	1.1%	210	1.0%	<b>1387</b>	<b>1.1%</b>	<b>1.0%</b>
Queensland	1819	20.4%	2957	20.1%	3147	18.6%	4168	20.2%	3867	18.9%	3843	19.5%	4103	20.2%	<b>23904</b>	<b>19.6%</b>	<b>20.1%</b>
South Australia	600	6.7%	1080	7.3%	1241	7.3%	1414	6.8%	1365	6.7%	1398	7.1%	1388	6.8%	<b>8486</b>	<b>7.0%</b>	<b>6.9%</b>
Tasmania	202	2.3%	365	2.5%	386	2.3%	572	2.8%	571	2.8%	563	2.9%	569	2.8%	<b>3228</b>	<b>2.7%</b>	<b>2.1%</b>
Victoria	2214	24.8%	3481	23.6%	4226	25.0%	4947	23.9%	4855	23.7%	4618	23.5%	4791	23.6%	<b>29132</b>	<b>23.9%</b>	<b>26.1%</b>
Western Australia	971	10.9%	1712	11.6%	1920	11.3%	2259	10.9%	2376	11.6%	2054	10.4%	2037	10.0%	<b>13329</b>	<b>11.0%</b>	<b>10.4%</b>

\* National proportions from Australian Bureau of Statistics, released 24/09/2020

<https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release#states-and-territories>.

## Appendix

**Table S2. Treatment outcomes by year**

	2013	2014	2015	2016	2017	2018	2019
Enrolled in treatment	<b>n = 2300</b>	<b>n = 2676</b>	<b>n = 3362</b>	<b>n = 3770</b>	<b>n = 4249</b>	<b>n = 3607</b>	<b>n = 3988</b>
Started treatment	92.6% (2117/2300)	92.6% (2479/2676)	92.3% (3102/3362)	90.8% (3423/3770)	90.5% (3847/4249)	90.0% (3245/3607)	88.6% (3532/3988)
Completed treatment	70.4% (1490/2117)	71.8% (1781/2479)	67.4% (2091/3102)	65.1% (2227/3423)	62.7% (2411/3847)	66.1% (2145/3245)	66.5% (2358/3532)
Would recommend	98.0% (1177/1201)	97.7% (1610/1648)	96.2% (1865/1939)	96.6% (1932/2001)	96.4% (2111/2190)	95.9% (1810/1887)	96.0% (1947/2029)
Was worth time	97.7% (1169/1196)	97.9% (1606/1641)	95.6% (1847/1919)	97.1% (1941/1998)	96.6% (2115/2190)	95.5% (1803/1887)	96.2% (1952/2029)
<b>PHQ-9</b>							
Assessment	14.1 (6.1)	13.8 (5.7)	13.5 (5.8)	13.5 (5.9)	13.7 (5.9)	13.5 (6.0)	13.4 (5.9)
Post-treatment	6.5 (4.4)	6.1 (4.1)	6.2 (4.0)	6.4 (4.0)	6.9 (4.1)	6.5 (4.2)	6.7 (4.4)
Effect size	1.4 [1.36 – 1.50]	1.6 [1.49 – 1.61]	1.5 [1.41 – 1.52]	1.4 [1.36 – 1.46]	1.3 [1.29 – 1.39]	1.4 [1.30 – 1.41]	1.3 [1.24 – 1.34]
% change	53.9% [52.8% – 55.5%]	55.1% [54.4% - 56.7%]	53.3% [52.6% - 54.7%]	52.6% [51.7% - 53.7%]	49.6% [48.7% - 50.6%]	51.9% [50.9% - 53.0%]	50.0% [49.2% - 51.3%]
Reliable deterioration	1.2% (15/1234)	0.7% (11/1602)	1.9% (36/1906)	1.5% (29/1962)	1.5% (34/2228)	1.4% (27/1952)	1.5% (32/2174)
Reliable recovery	62.9% (612/973)	66.4% (762/1148)	62.6% (826/1320)	61.0% (827/1356)	53.1% (749/1411)	57.5% (780/1356)	56.0% (863/1541)

## Appendix

<b>GAD-7</b>							
Assessment	12.3 (5.0)	11.7 (4.9)	12.1 (4.9)	12.0 (5.0)	12.0 (5.0)	12.0 (5.1)	11.8 (5.1)
Post-treatment	5.8 (3.8)	5.5 (3.6)	5.7 (3.5)	5.7 (3.5)	6.0 (3.5)	5.8 (3.7)	5.9 (3.7)
Effect size	1.5 [1.40 – 1.53]	1.4 [1.38 – 1.50]	1.5 [1.45 – 1.56]	1.5 [1.41 – 1.51]	1.4 [1.34 – 1.44]	1.4 [1.34 – 1.45]	1.3 [1.27 – 1.38]
% change	52.0% [51.3% - 53.9%]	53.0% [51.9% - 54.4%]	52.9% [52.2% - 54.3%]	52.5% [51.4% - 53.4%]	50.0% [49.4% - 51.2%]	51.7% [50.7% - 52.9%]	50.8% [49.5% - 51.5%]
Reliable deterioration	2.4% (29/1234)	1.4% (23/1602)	1.9% (37/1906)	2.5% (49/1962)	2.3% (51/2228)	1.9% (37/1952)	2.6% (56/2174)
Reliable recovery	59.5% (624/1049)	63.8% (768/1203)	62.7% (920/1468)	61.7% (902/1463)	55.7% (846/1519)	57.6% (843/1463)	58.3% (959/1645)
<b>K-10</b>							
Assessment	30.8 (7.2)	30.1 (6.8)	30.0 (6.8)	30.0 (6.7)	30.4 (6.8)	30.0 (7.2)	29.8 (7.1)
Post-treatment	21.4 (6.4)	20.6 (6.2)	20.7 (6.1)	20.8 (6.0)	20.7 (5.7)	20.7 (6.4)	20.9 (6.4)
Effect size	1.4 [1.31 – 1.45]	1.5 [1.40 – 1.52]	1.4 [1.38 – 1.50]	1.5 [1.39 – 1.50]	1.6 [1.49 – 1.60]	1.4 [1.31 – 1.42]	1.3 [1.27 – 1.37]
% change	45.2% [44.0% - 46.6%]	47.3% [45.8% - 48.3%]	46.5% [45.3% - 47.4%]	46.0% [45.2% - 47.2%]	47.5% [46.7% - 48.5%]	46.5% [45.1% - 47.4%]	45.0% [43.9% - 46.1%]

## Appendix

Whole days out of role							
Assessment	-	-	-	-	5.6 (7.4)	5.3 (7.4)	5.5 (7.6)
Post-treatment	-	-	-	-	3.5 (5.3)	3.5 (6.2)	3.6 (6.5)
Effect size	-	-	-	-	.3 [.26 - .39]	.3 [.22 - .31]	.3 [.22 - .31]
% change	-	-	-	-	32.7% [28.7% - 39.3%]	34.0% [32.0% - 39.6%]	34.5% [31.0% - 38.2%]
Part days out of role							
Assessment	-	-	-	-	9.3 (8.1)	9.3 (8.5)	9.2 (8.5)
Post-treatment	-	-	-	-	6.1 (6.5)	6.1 (7.4)	6.0 (7.4)
Effect size	-	-	-	-	.4 [.37 - .50]	.4 [.35 - .45]	.4 [.36 - .45]
% change	-	-	-	-	34.4% [32.3% - 40.9%]	34.4% [33.3% - 39.8%]	34.8% [33.7% - 40.2%]

**Notes:** PHQ-9: Patient Health Questionnaire 9-Item; GAD-7: Generalized Anxiety Disorder 7-Item; Standard deviations (SDs) are shown in round parentheses for means; 95% confidence intervals are shown in square parentheses for effect sizes and percentage changes.



## Appendix

**Table S3. Comparison of demographic and symptom characteristics for patients across three mutually exclusive groups:**

- Started treatment but did not complete post-treatment or follow-up
- Started treatment and completed post-treatment, but not follow-up
- Started treatment and completed post-treatment and follow-up

	<b>Started treatment</b>	<b>Completed post-treatment</b>	<b>Completed post-treatment and follow-up</b>
N = 21,067	8,090	5,070	n = 8,585
Age (Mean and SD)	36.6 (12.8)	39.4 (13.2)	43.4 (14.1)
Female	73.4% (5935)	69.3% (3511)	70.9% (6087)
PHQ-9 at assessment (Mean and SD)	14.6 (5.8)	13.4 (5.9)	12.8 (5.9)
GAD-7 at assessment (Mean and SD)	12.6 (4.9)	11.9 (5.0)	11.4 (5.0)
K-10 at assessment (Mean and SD)	31.4 (6.8)	30.0 (6.9)	29.1 (6.9)