



# Impact of initial COVID-19 restrictions on psychiatry presentations to the Emergency Department of a large academic teaching hospital.

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## Objectives

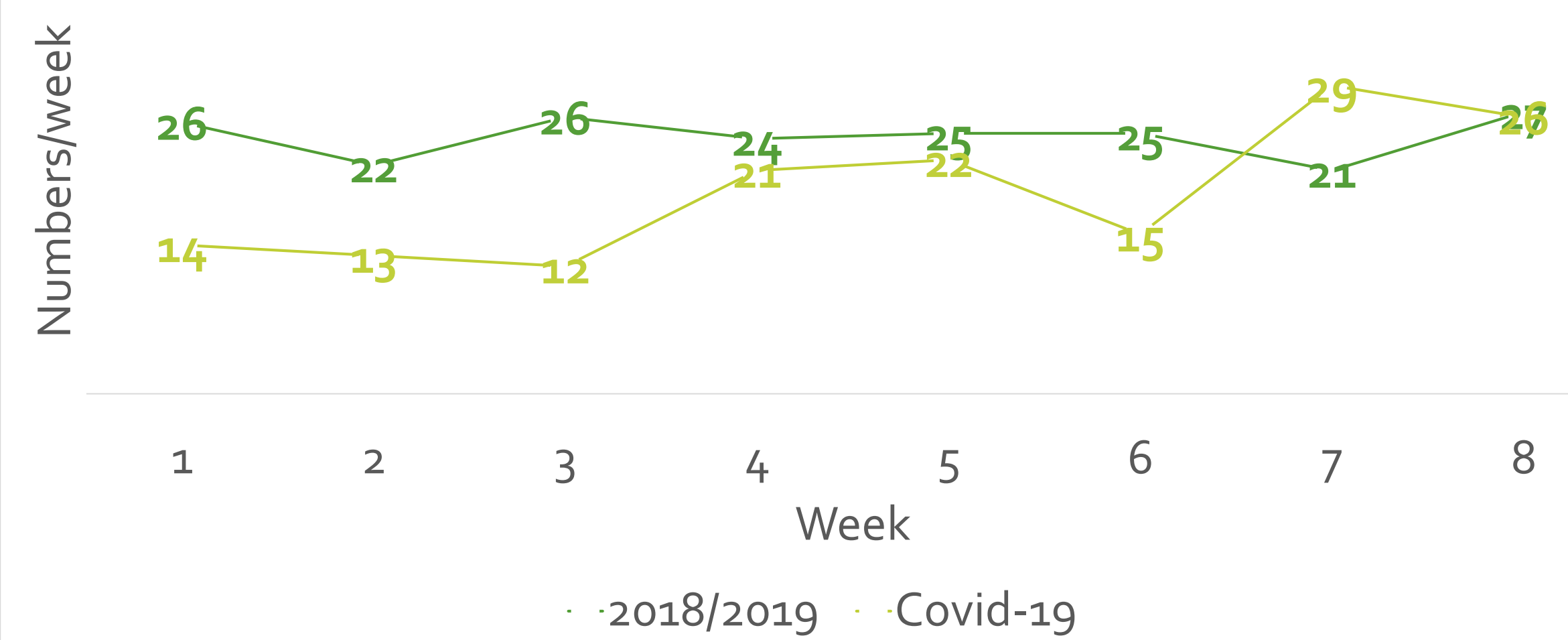
To determine if the initial COVID-19 societal restrictions, introduced in Ireland in March 2020, impacted on the number and nature of psychiatry presentations to the emergency department (ED) of a large academic teaching hospital.

## Methods

We examined anonymised clinical data of psychiatry presentations to the ED during the initial 8-week period of COVID-19 restrictions. Data from corresponding 8-week periods in 2018 and 2019 were also extracted for comparison.

## Results

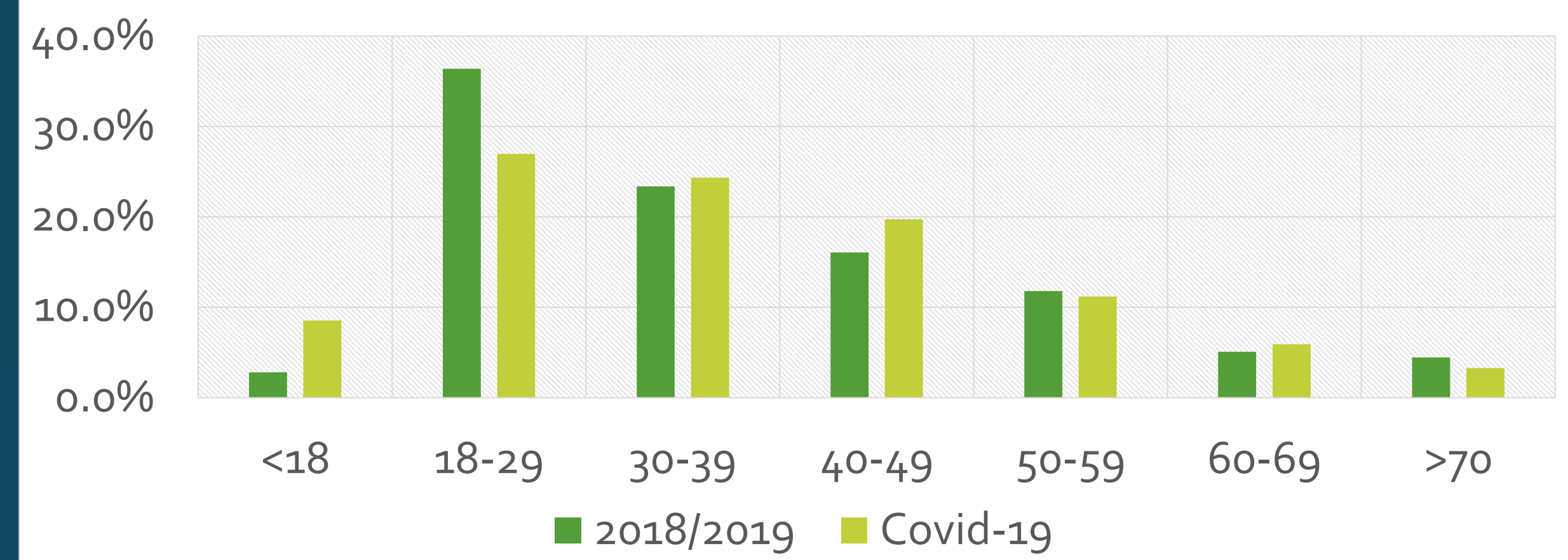
Weekly ED Psychiatry Presentations, Covid-19 vs Corresponding Periods 2018 & 2019



Results Table 1

Distribution of Psychiatry Presentations by Age 2018/19 vs 2020			
Age Group	2018/19 (mean)	2020	
<18	2	13 (↑)	χ <sup>2</sup> = 20.363 DF = 6 p-value = 0.002 (<18 group represented largest deviation from independence)
18-29	62	41	
30-39	54	37	
40-49	28	30	
50-59	26	17	
60-69	13	9	
>70	10	5	

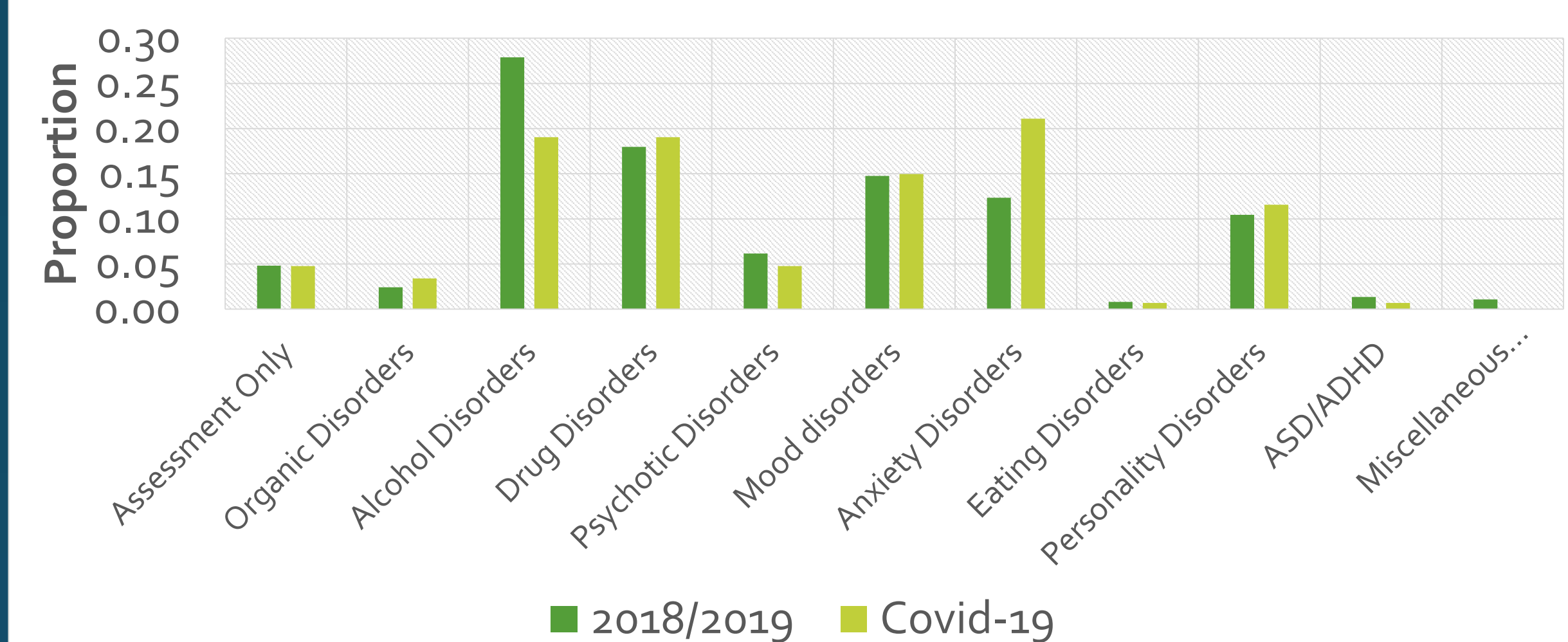
Age distribution of psychiatry presentations to ED during COVID-19 vs 2018/2019



Time of Psychiatry Presentations 2018/19 vs 2020

Time	2018/19	2020	Statistical Test
Normal hours	114	71 (↓)	2-sample Proportion Test Test estimated difference = 0.12 (95% CI 0.03 - 0.22) p-value = 0.012
On call hours	80	81	

Distribution of presentations by ICD-10 category COVID-19 vs 2018/2019



Results Table 2

Distribution of Psychiatry Presentations by ICD-10 category 2018/19 vs 2020						
	2018/19 (mean)	2018/19 proportion	2020	2020 proportion	Estimated difference (2-sample Proportion Test)	p-value
Assessment only (Z00.4)	9	0.05	7	0.05	0.00	0.975
Organic Disorders (F00)	5	0.02	5	0.03	0.01	0.559
<b>Alcohol Disorders</b>	<b>52</b>	<b>0.28</b>	<b>28</b>	<b>0.19</b>	<b>0.09</b>	<b>0.027</b>
Drug Disorders	34	0.18	28	0.19	-0.01	0.775
Psychotic Disorders (F20)	12	0.06	7	0.05	0.01	0.514
Mood Disorders (F30)	28	0.15	22	0.15	-0.00	0.949
<b>Anxiety Disorders (F40)</b>	<b>23</b>	<b>0.12</b>	<b>31</b>	<b>0.21</b>	<b>-0.09</b>	<b>0.020</b>
Eating Disorders	2	0.01	1	0.01	0.00	0.880
Personality Disorders	20	0.10	17	0.12	-0.01	0.719
ASD/ADHD	3	0.01	1	0.01	0.01	0.464
Miscellaneous	2	0.01	0	0.00	0.01	0.044

## Conclusion

Our study shows that despite an overall reduction of 30% in the weekly rate of all ED presentations during the initial 8 weeks of COVID-19 restrictions, weekly psychiatry presentations to the ED only fell by approximately 21% during the same period, with the observed reduction largely due to reduced attendances during "normal hours". Whilst this may be a reflection of reduced psychiatric morbidity, we feel it is more likely a consequence of people avoiding ED due to fear of contracting COVID-19, and as such may represent an unmet burden of mental ill-health in the population. Despite the overall reduction, more people from the <18 age group sought assistance with their mental health via the ED. We observed an increase in anxiety related presentations, but a reduction was seen in alcohol-related psychiatric presentations. The latter may be reflective of decreased total sales of alcohol during the initial COVID-19 restrictions or may represent a shift towards greater levels of alcohol consumption at home, with decreased incidents of intoxication in public, and reduced numbers of people being brought to the ED intoxicated, by ambulance or by the Gardai.

Subsequent presentation data observed from May 2020 until the time of writing show indications of a reversal in the above patterns, with interim increases in psychiatry presentations to the ED. As the pandemic continues, further studies examining these patterns of presentation may be helpful to plan for the ongoing delivery of mental health care to the population.