Children and Young People Attending Alder Hey A&E in Suicidal Crisis: 2019-2021

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Acknowledgements

This report is the work of members of staff from the School of Psychology, Liverpool John Moores University, in collaboration with Alder Hey Child and Adolescent Mental Health Services (CAMHS). The aim was to examine suicidal crisis data for children and young people attending A&E, as well as those using crisis telephone lines, between 2019 and 2021.

We would like to thank Dr Vivienne Crosbie and Dr Nadia Ranceva for their support with the project, staff at Alder Hey Children's Hospital, and the patients and their families who attended during this time.

Executive Summary

Introduction: Suicide is still the leading cause of death among children and young people (CYP) in the UK (Brahmbhatt et al., 2019; Hawton et al., 2012; Windfuhr et al., 2008), with suicide rates amongst adolescents having increased by 7-9% per year since 2010 (Bould et al., 2019). Rates have increased even further in more recent years; 2018 data on suicide deaths from the Office for National Statistics (ONS) indicate a 22% one-year increase in suicide rates in under 25-year-olds, the largest rise amongst all age groups. The UK suicide rate in adolescent girls is now the highest since records began in 1981 (ONS, 2019; Rodway et al., 2020). Furthermore, there is some emerging evidence of a possible trend of increasing child suicide deaths in England during the COVID-19 pandemic and associated lockdowns, although this is provisional and numbers are too small for any meaningful analysis (Odd et al., 2020).

Aims: This report examined Alder Hey A&E attendances for children and young people in suicidal crisis. Presentations to A&E were explored from March 2019 to March 2021 for children aged 16 and under. Crisis line data was also examined over a one-year period from April 2020 when the line was introduced to March 2021. The study aimed to evaluate:

1. Demographic data at Alder Hey's A&E for children and young people who attend in suicidal crisis;
2. The way in which presentations of suicidal crisis are recorded at this site;
3. The clinical pathways available to young people who attend A&E in suicidal crisis and the patterns of pathway usage;
4. Use of the CAMHS crisis line, including the demographics of the users and the reasons for their calls;
5. Differences in crisis presentations at A&E and through the crisis line before and after the start of the COVID-19 pandemic in March 2020

Results: A total of 240 attendances by children and young people in suicidal crisis, with two-thirds of attendees being female. One in five young people attended with suicidal ideation and self-harm and just over two-thirds of attendees had a history of self-harm. Over a third of attendees had previously diagnosed mental health difficulties and one in four re-attended in the same year. One in five attendees had special educational needs (SEN) with the most common SEN diagnosis of autism spectrum disorder. Of those with a diagnosis of autism spectrum disorder who attended Alder Hey in suicidal crisis, just over one in five were female.

Conclusion: This report provides detailed information about a group that has been the focus of attention due to the increasing numbers of presentations and the public health priority given to a reduction in the national suicide rates. However, this data is entirely hospital based at one A&E and therefore cannot comment about the cases in the community, which can be twice as many compared to hospital referrals.

Recommendations: The main recommendations from this report are as followed:

- Standardised protocol to track children and young people attending A&E in suicidal crisis.
- Further exploration into suicidal crisis A&E attendances for children and young people with autism diagnoses.

1. Introduction

Suicide is defined as a fatal self-injurious act with some evidence of intent to die (Bilsen, 2018). Close to 800,000 people die due to suicide every year, which means about one person every 40 seconds takes their life (World Health Organization, 2019). In 2019, 5,691 people took their life in England and Wales, an age-standardised rate of 11.0 deaths per 100,000 population (Office for National Statistics, 2019). Suicide prevention is therefore a national and international public health priority (Saini et al., 2021). Although rates of suicide are highest among older people (Värnik, 2012), suicide is still the leading cause of death among children and young people (CYP) in the UK (Brahmbhatt et al., 2019; Hawton et al., 2012; Windfuhr et al., 2008), with suicide rates amongst adolescents having increased by 7-9% per year since 2010 (Bould et al., 2019). Rates have increased even further in more recent years; 2018 data on suicide deaths from the Office for National Statistics (ONS) indicate a 22% one-year increase in suicide rates in under 25-year-olds, the largest rise amongst all age groups. The UK suicide rate in adolescent girls is now the highest since records began in 1981 (ONS, 2019; Rodway et al., 2020). Furthermore, there is some emerging evidence of a possible trend of increasing child suicide deaths in England during the COVID-19 pandemic and associated lockdowns, although this is provisional and numbers are too small for any meaningful analysis (Odd et al., 2021).

Several risk factors may contribute to suicide in young people, and indeed suicide is thought to be caused by the interplay of genetic, biological, psychological and social factors (Bilsen, 2018). Research has identified risk factors which are more likely to lead to youth suicide (Bilsen, 2018; Bridge et al., 2006), including previous or recent stresses such as witnessing domestic violence, bullying, self-harm, bereavement (including by suicide) and academic pressures (Rodway et al., 2020). A well-established yet scarcely investigated risk factor is suicide ideation or crisis (Bridge et al., 2006). Suicidal ideation or crisis includes either thoughts of death and passive ideation with no intent or plan or specific suicidal ideation with intent or plan (Bridge et al., 2006). It has been shown that the more pervasive the suicidal crisis, the more likely the individual is to attempt suicide (Bridge et al., 2006; Lewinsohn et al., 1996). Evidence suggests that about 80% of individuals who have died by suicide did seek help for crisis at least once in the year before their death, and most of them had Emergency Department contact (Rhodes et al., 2013).

1.1. Suicidal Crisis in Emergency Departments

Despite evidence that suicidal crisis is a risk factor contributing to suicide among CYP, the number of presentations for suicidal crisis without physical injury at Accident and Emergency departments (A&E) is not consistently registered, nor is there consistent coding used across NHS Trusts for recording patients who presented at A&E in suicidal crisis (McCarthy, Saini, Nathan, & McIntyre, 2021). Therefore, while national data is already available for individuals who attend A&E for self-harm and actual suicidal injury (see Clements et al., 2016), there is a lack of national data for those individuals who attend A&E in suicidal crisis. Given the relationship between suicidal crisis and later suicidal attempts, a consistent code for suicidal crisis presentations and an understanding of the factors that are associated with suicidal crisis are of crucial importance in the prevention of future deaths. This would provide service provision with a better understanding of the number of CYP in suicidal crisis, which in turn would lead to a more effective management of such individuals, as well as

reduced youth suicide rates (Novick, Cibula, & Sutphen, 2003; McCarthy, Saini, Nathan & Mclntyre, 2021).

Another issue concerns the pathways available across NHS Trusts for individuals who present to A&E in suicidal crisis (Saini, Kullu, Mullin, Boland, & Taylor, 2020). It has been demonstrated that prompt referrals to clinical pathways and application of appropriate interventions for individuals presenting with suicidal crisis can empower hospital systems in the management and prevention of suicide (Brahmbhatt et al., 2019; Hazell, 2003). Nonetheless, clinical pathways available for CYP who attend in suicidal crisis tend to be complex and they have not previously been examined systematically. Thus, a rigorous evaluation of the pathways available for CYP who attend A&E in suicidal crisis is needed, to inform better modelling of service provision for these patients (Hazell, 2003).

1.2. Crisis Care Phone Lines

Crisis hotlines have played a central role in suicide prevention strategies since the 1950s (Crosby Budinger et al., 2015), offering free and confidential advice and support for people experiencing suicidal crisis, often available 24/7. Evidence suggests these hotlines are well-used by adults experiencing crisis, and are effective in reducing hopelessness, intent to die, and psychological pain in the immediate and short-term (Gould et al., 2007). Use of these crisis phone lines appears to have increased during the COVID-19 pandemic, with the charity 'Mind' indicating that the number of calls to their service doubled (Mind, 2020). The Samaritans (2020) also noted that the nature of calls had changed, with more callers discussing their mental health, the pandemic, and loneliness. While the evidence for crisis lines amongst adults is strong, the research into the utility and effectiveness of these hotlines for CYP is more limited. One study by Gould et al. (2006) found that almost all CYP were aware of crisis lines but were reluctant to use them due to stigma and negative attitudes towards them. However, other studies in the USA have found that only limited numbers of CYP are aware of crisis lines (approximately one-third), and perceived stigma is a key barrier to their use, although this is reduced if a friend or family member advises them to call (Budinger et al., 2015). Thus, it is currently not clear how often crisis lines are used by CYP in England, or what they are used for. There are also different types of crisis lines available - some are funded by charities while others are run by local NHS Trusts, and only some crisis lines are designed specifically for CYP. However, differences in usage between the various services is unknown.

1.3. Suicidal Crisis in Liverpool

Liverpool and Merseyside's suicide rate falls around the national average of 10.4 deaths per 100,000, although this varies considerably across different areas of the county (ONS, 2019). Suicide rates among CYP are not reported by area, and so self-harm is the closest proxy indicator, given that 52% of CYP who die by suicide have previously self-harmed (Appleby et al., 2017). Hospital admissions for self-harm for 10-24 year olds in 2015-16 were significantly worse in the Liverpool City Region than the England average (Brooks, 2017), and were particularly high for children aged 10-14 (Lewis et al., 2017).

Liverpool has a unique range of hospitals, with eight NHS Trusts serving the city. Specifically, Liverpool has one of only three dedicated children's hospital trusts in the UK, Alder Hey Children's Hospital NHS Trust. Alder Hey has its own children's Emergency Department and Child and Adolescent Mental Health Services (CAMHS), including community

CAMHS, in- and outpatient clinics, and a dedicated CAMHS crisis team. The crisis service includes a multi-disciplinary team who provide support to CYP presenting in crisis regarding self-harm, suicidal ideation, and acute mental health difficulties. The crisis team have a dedicated crisis line for CYP, which increased its provision to 24 hours a day, seven days a week in April 2020. However, until now, no formal analysis of Alder Hey's data has been conducted into the number of CYP presenting at A&E in suicidal crisis, the demographic characteristics of those presenting, the subsequent pathways that they follow, or how A&E presentations are recorded in the hospital's system. Use of the crisis line has also not been analysed. Furthermore, while anecdotal evidence indicates a sharp increase in demand on the crisis team's services since the COVID-19 pandemic began in March 2020, significant differences in A&E attendance and crisis line usage before and after the pandemic have not been explored.

To address this, we aimed to compile data pertaining to the number of CYP presenting at Alder Hey Children's Hospital's A&E in suicidal crisis, how this was coded, and the resultant care pathways they followed. An audit was then conducted of Alder Hey's A&E and crisis line data for all CYP who have presented in suicidal crisis in the years 2019-2021. The study aimed to evaluate:

6. Demographic data at Alder Hey's A&E for children and young people who attend in suicidal crisis;
7. The way in which presentations of suicidal crisis are recorded at this site;
8. The clinical pathways available to young people who attend A&E in suicidal crisis and the patterns of pathway usage;
9. Use of the CAMHS crisis line, including the demographics of the users and the reasons for their calls;
10. Differences in crisis presentations at A&E and through the crisis line before and after the start of the COVID-19 pandemic in March 2020

2. Methods

2.1. Design and Setting

This is a case series study of CYP experiencing suicidal crisis who had attended at A&E at a North-West paediatric hospital between March 2019 and March 2021 (*n* = 240) or who contacted a CYP Crisis Line between April 2020 to March 2021 (*n* = 6,959).

2.2. Participants and Data Extraction

Clinical records at Alder Hey Children's Hospital were reviewed for patients aged 16 years and under between March 2019 and March 2021. For A&E attendance, all patient notes under potentially relevant codes were audited, and those indicating suicidal crisis or ideation were extracted, collated, and anonymised. All data from the crisis lines were also extracted and anonymised. Data were stored in secured Excel spreadsheets and SPSS files in order to conduct the analyses. In total, 240 records were extracted for patients who presented at A&E in suicidal crisis, and 6,959 calls to the crisis line were utilised for the analysis. Further details regarding the demographics of the patients are presented in the results section below.

2.3. Data Analysis

Our sample size was predetermined based on the number of CYP attending A&E or utilising the crisis line. Data were analysed using SPSS 26. Descriptive statistics were carried out to illustrate the socio-demographics of the sample and the factors characteristic of CYP presenting in suicidal crisis. Chi-squared analyses were conducted to establish statistically significant associations in the dataset.

While the researchers had access to all records, the dataset only captured entries made in clinical records; unrecorded clinical activity or missing information from A&E documents was therefore unavailable. For the purposes of this study, only the presence of each factor within each person's clinical records was used for the analysis. It is possible this strategy may have led to underestimation of some factors: for example, sexual orientation.

3. Results: Alder Hey A&E Attendance

3.1. Demographic Characteristics

Table 1 shows the demographic characteristics of the young people attending Alder Hey A&E for suicidal crisis between 2019 and 2021. Sixty-seven percent of attendees were female (160/240) and 33% were male (80/240). The majority of young people were white British (93%; 222/240) and 7% (16/240) were from other ethnicity groups. Of those attending A&E, 60% (142/240) had recorded mental health issues. Most commonly those attending has previous been diagnosed with anxiety (18%; 43/240) and low mood (17%; 40/240). However, a larger proportion of patients were recorded as having no previous formal diagnosis (41%; 98/240). Sixty-four percent of the sample were already known to CAMHS (154/240) and 22.5% (54/240) were under CAMHS when they attended A&E.

Overall, 69% (162) of those attending Alder Hey A&E in suicidal crisis between the years 2019 and 2021 had a history of self-harm. Means of self-harm were overdose (19%; 42/240), cutting (10%; 23/240), and suffocation (3%; 8/240). The majority of presentations, however, did not have a mean identified (65%; 157/240). Risk was deemed high for 21% of the sample (51/240), moderate for 18% (44/240) and low for 15% (37/240). Risk data, however, should be interpreted with caution due to the large proportion (34%; 82/240) of ‘unknown’ recordings. The majority of young people did not have a previous A&E attendance for suicidal crisis (76%; 183/240).

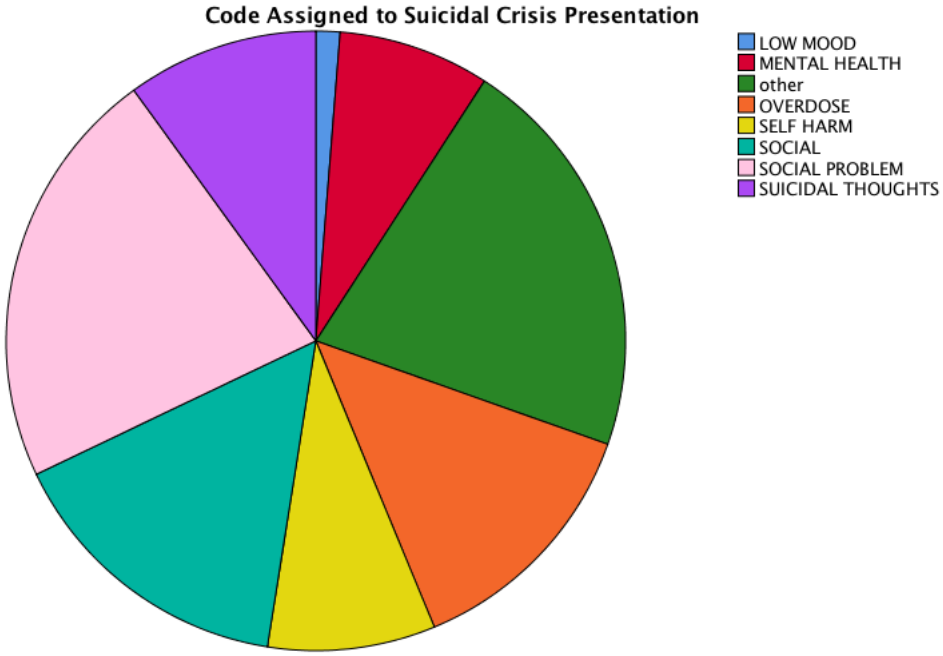
Table 1. Demographic characteristics of young people attending Alder Hey A&E in suicidal crisis.

Demographic	N (%)
Sex:	
Female	160 (67%)
Male	80 (33%)
Ethnicity:	
White British	222 (93%)
Other	16 (7%)
Mental Health Issues:	
Yes	142 (60%)
No	97 (40%)
Mental Health Issues Diagnosis:	
Anxiety	43 (18%)
Anxiety Comorbidities	10 (4%)
Anxiety Low Mood	9 (4%)
Low Mood	40 (17%)
Low Mood Comorbidities	5 (2%)
No formal diagnosis	98 (41%)
Other	35 (15%)
Previously Known to CAMHS:	
Yes	154 (64%)
No	86 (36%)
Currently Open to CAMHS:	
Yes	54 (23%)
No	186 (78%)
History of Self-Harm:	
Yes	162 (68%)
No	78 (33%)
Means of Self-Harm:	
Cutting	23 (10%)
NA	157 (65%)
Other	6 (3%)
Overdose	46 (19%)
Suffocation	8 (3%)
Clinician-Determined Risk:	
Low	37 (15%)
Moderate	44 (18%)
High	51 (21%)
NA	26 (11%)
Unknown	82 (34%)

3.2. A&E Codes

Mental health presentations at Alder Hey A&E are recorded using a list of codes. Figure 1 shows the frequency of codes used across the years 2019-2021. 'Social problems' was the most commonly used code with 22% of all attendances with that code (53/240), followed by 'other' with 21% (51/240). Social (15%; 53/240) and overdose (13%; 32/240) were also commonly used to record suicidal crisis presentations to Alder Hey A&E.

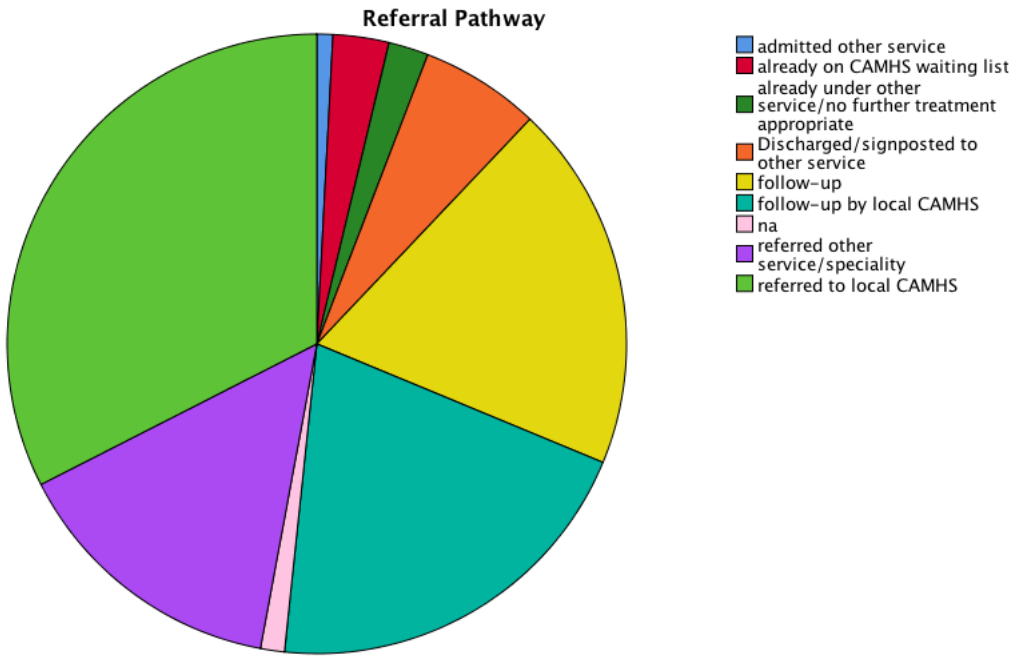
Figure 1. Code Assigned to Suicidal Crisis Presentations at Alder Hey A&E between 2019-2021.



3.3. Referral Pathways

Following the young person's attendance to Alder Hey A&E, eight referral pathways were highlighted. The most frequently used was referral to local CAMHS (33%; 78/240), followed by followed up by local CAMHS (20%; 49/240) and follow-up (19%; 46/240). Admitted to other service was the least used referral pathway (1%, 2/240) as displayed in Figure 2.

Figure 2. Referral Pathways Following Attendance to Alder Hey A&E in Suicidal Crisis.



A chi-squared test of association was used to further analyse the referral pathways for young people attending Alder Hey A&E in suicidal crisis. A significant association was reported between the year of attendance and referral pathway, X(8)=16.13, p=.041. The data suggests that those attending in the year 2019-2020 were more likely to be referred to local CAMHS than those who attended in 2020-2021. Furthermore, a significant association was reported between the type of code recorded and the referral pathway the young person followed *(X(56)=88.46, p=.004)* meaning the code assigned to the A&E presentation significantly influenced where the patient was referred onto. For example, individuals coded as 'social problem' were more likely to be referred to local CAMHS than to have no further treatment. However, no association was reported between gender *(X(8)=14.85, p=.06),* or age *(X(64)=63.19, p=.505)* and the referral pathway of young people attending Alder Hey A&E in suicidal crisis.

Figure 3. Referral pathways following A&E attendance for suicidal crisis by year: 2019-2020 and 2020-2021.

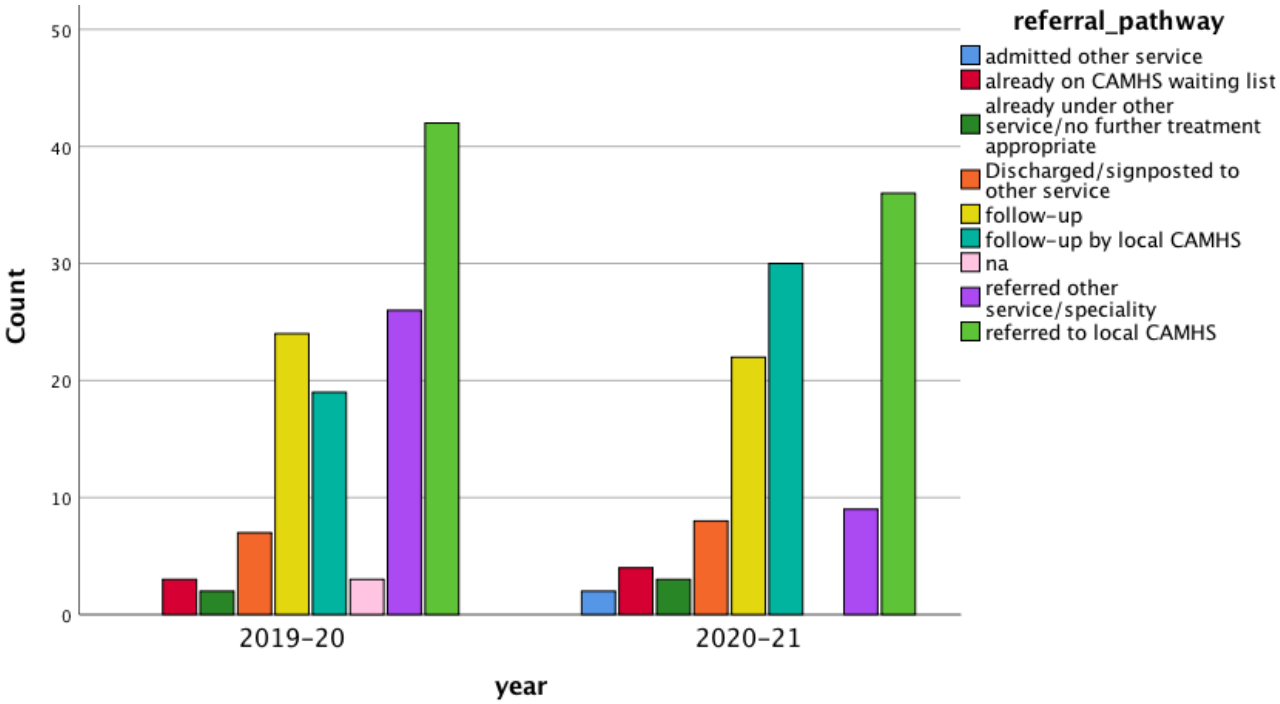
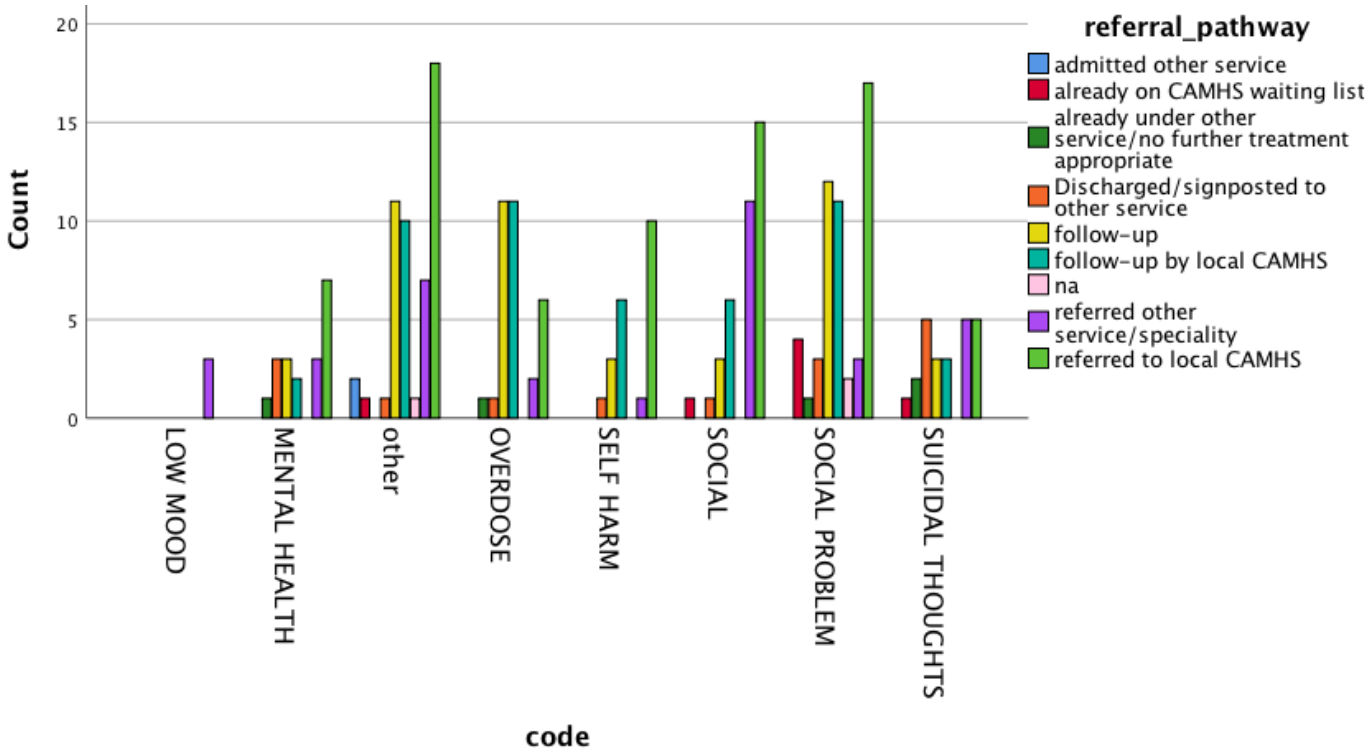


Figure 4. Referral pathway following A&E attendance by clinician assigned code.



3.4. Special Educational Needs and Neurodevelopmental Disorders

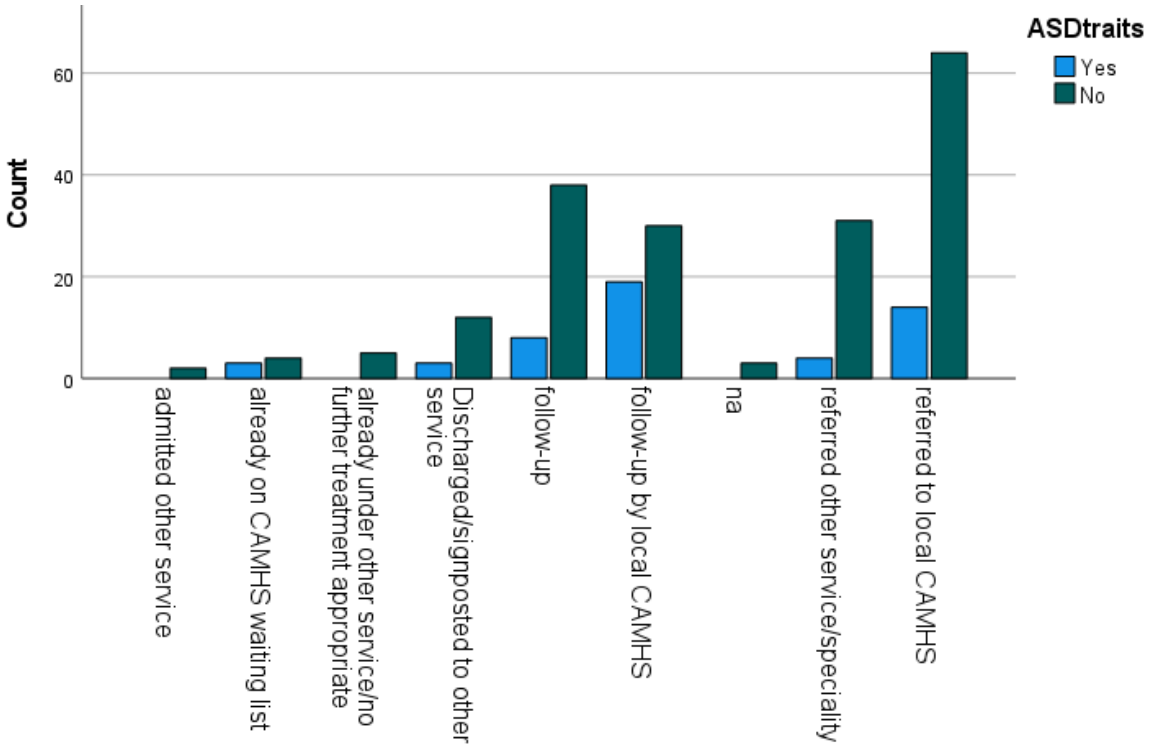
Table 2. Neurodevelopment of the sample of young people attending Alder Hey A&E in suicidal crisis.

Variable	N (%)
Special Educational Needs (SEN):	
Yes	58 (24%)
No	182 (76%)
SEN Diagnosis:	
ADHD	12 (5%)
ADHD Other Learning Disabilities	3 (1%)
ASD	21 (9%)
ASD Other Learning Disabilities	3 (1%)
ASD ADHD	12 (5%)
ASD ADHD Other Learning Disabilities	1 (0.4%)
Learning Disabilities	6 (3%)
NA	182 (76%)
ASD Traits:	
Yes	51 (21%)
No	189 (79%)

Table 2 highlights the neurodevelopment of young people attending Alder Hey A&E in suicidal crisis between the years of 2019-2021. Special Educational Needs (SEN) were reported in 24% of the sample (58/240). The most common SEN diagnosis was autism spectrum disorder (ASD). ASD was reported in 21% (51/240) of the sample, with 27/126 patients in 2019-2020 and 24/114 in 2020-2021. Of those with ASD traits who attendance Alder Hey A&E in suicidal crisis, 36/160 (23%) were female and 15/80 were male (19%).

A chi-square test of association suggested there was a significant association between ASD traits and referral pathway (*X(8)=16.59, p=.035*). The data suggests that those with ASD traits were more likely to be followed-up by local CAMHS, whereas those with no ASD traits were more likely to be referred to local CAMHS. A significant association was also reported between an individual having ASD traits and them being already known to CAMHS (*X(1)=9.32, p=0.002*); as such those presenting to Alder Hey A&E who had ASD traits were more likely to be already known to CAMHS than those presenting with no ASD traits. No association was found between whether an individual had ASD traits and their risk (*X(4)=.78, p=.941*).

Figure 5. Referral pathway following A&E attendance for suicidal crisis and ASD traits.



3.5. Parental Factors

A number of parental factors were identified for the sample of young people attending Alder Hey A&E in suicidal crisis, as displayed in Table 3. Sixty-eight percent of the sample reported separation or loss of a parent (164/240). Parental mental health issues were reported in 44% of the young people (105/240), as well as parental drug misuse (17%; 41/240) and parental criminality (16%; 38/240). Neglect was reported by 57/240 young people attending Alder Hey A&E (24%), as well as domestic violence (24%; 57/240). Abuse, including physical, emotional and/or sexual, was reported by 32% of the sample (77/240); however, whether abuse was present was unknown for 19% of the sample (46/240).

Table 3. Parental factors for sample of young people attending Alder Hey A&E in suicidal crisis.

Variable	N (%)
Separation/Loss of Parent:	
Yes	164 (68%)
No	70 (29%)
Unknown	6 (3%)
Parental Mental Health Issues:	
Yes	105 (44%)
No	93 (39%)
Unknown	42 (18%)
Parental Drug Misuse:	
Yes	41 (17%)
No	150 (63%)
Unknown	49 (17%)
Parental Criminality:	
Yes	38 (16%)
No	154 (64%)
Unknown	48 (20%)
Neglect:	
Yes	57 (24%)
No	136 (57%)
Unknown	47 (20%)
Domestic Violence:	
Yes	57 (24%)
No	135 (57%)
Unknown	48 (20%)
Abuse:	
Yes	77 (32%)
No	117 (49%)
Unknown	46 (19%)

Further examination of parental factors revealed a number of significant associations with young people's mental health, as displayed in Table 4. A statistically significant association was found between parental mental health and young people's mental health diagnoses (*X(4)=15.30, p=.004*); as such a young person was significantly more likely to report mental health difficulties if their parent also had mental health difficulties. A significant association was also found between parental drug misuse (*X(4)=13.92, p=.008*), parental criminality (*X(4)=13.62, p=.009*) and young person's mental health. Results suggested those young people whose parents had misused drugs or reported criminality were more likely to have mental health difficulties. Furthermore, those young people with mental health difficulties reported were also more likely to have experienced neglect (*X(4)=16.87, p=.002*), have witnessed domestic violence (*X(4)=12.68, p=.013*), abuse (*X(4)=14.84, p=.005*), and parental separation or loss (*X(4)=12.23, p=.016*).

Table 4. Chi-square analysis of the association between young people's mental health and parental risk factors.

Young Peoples Mental Health			
Variable	X	df	p
Parental Mental Health	15.30	4	.004**
Parental Drug Misuse	13.92	2	.008**
Parental Criminality	13.62	4	.009**
Neglect	16.87	4	.002**
Domestic Violence	12.68	4	.013*
Abuse	14.84	4	.005**
Parental Separation or Loss of a Parent	12.23	4	.016*

*p<.05 **p<.01 ***p<.001

3.6. Pre and Post COVID-19

Table 5. Demographic characteristics by year of attendance.

Variable	**2019-2020**	**2020-2021**
	N (%)	**N(%)**
Age: Mean (SD)	13.48 (1.57)	13.56 (1.24)
Gender:		
Female	81 (64.3)	79 (69.3)
Male	45 (35.7)	35 (30.7)
Ethnicity:		
White	119 (94.4)	103 (90.4)
Other	7 (5.6)	9 (7.9)
Mental Health Issues:		
Yes	72 (57.1)	70 (61.4)
No	53 (42.1)	44 (38.6)
Unknown	1 (0.8)	0 (0.0)
Diagnosis:		
Anxiety	21 (16.7)	22 (19.3)
Anxiety Comorbidities	5 (4)	5 (4.4)
Anxiety Low Mood	3 (2.4)	6 (5.3)
Low Mood	22 (17.5)	18 (15.8)
Low Mood Comorbidities	2 (1.6)	3 (2.6)
NA	54 (42.9)	44 (38.6)
Other	19 (15.1)	16 (14.0)
Social Worker:		
Yes	23 (18.3)	32 (28.1)
No	94 (74.6)	70 (61.4)
Unknown	9 (7.1)	12 (10.5)
Known CAMHS:		
Yes	75 (59.5)	79 (69.3)
No	51 (40.5)	35 (30.7)
Open CAMHS:		
Yes	21 (16.7)	33 (28.9)
No	105 (83.3)	81 (71.1)
Previous A&E Attendance:		
Yes	26 (20.6)	31 (27.2)
No	100 (79.4)	83 (72.8)

As displayed in Table 5 a number of differences were reported between 2019-2020 and 2020 and 2021. The mean age of the sample in the 2019-2020 year was 13, whilst for 2020-2021 the mean age of those attending was 14 years old. The number of females attending slightly increased from 64% in 2019-2020 to 69% in 2020-2021. The number of males attending Alder Hey A&E for suicidal crisis, however, slightly reduced from 36% in 2019-2020 to 31% in 2020-2021. In the later year 2020-2021 more young people attending Alder Hey A&E were known

to CAMHS (69%) compared to 60% in the earlier year. Similarly, 29% of the sample had an open CAMHS in the year 2020-2021 compared to 17% in the earlier year. Previous A&E attendance also increased from 21% in 2019-2020 to 27% in 2020-2021.

Chi square tests were conducted to examine if there were any significant difference in patients by year of attendance. A significant association was reported between year of attendance and code used (*X(7)=38.59, p<.001*), with the code 'social problem' being used more in 2019-2020 than 2020-2021. Similarly, a significant association was found between year of attendance and referral pathway *(X(8)=16.13, p=.041)*. The data showed a higher number of young people being referred to other services or specialities in 2019-2020 than 2020-2021 and a higher number of young people were followed up by CAMHS in 2020-2021.

However, no association was reported between year of attendance and history of self-harm (*X(1)=1.94, p=.163*), i.e., those who attended between 2019-2020 did not differ from the young people attending in 2020-2021 in terms of self-harm history. There was also no significant association found between year and clinician-determined risk (*X(4)=5.02, p=.286*); as such risk levels of the young people attending Alder Hey A&E for suicidal crisis did not differ between 2019-2020 and 2020-2021.

Figure 6. Code assigned to A&E attendance for suicidal crisis by year: 2019-2020 and 2020-2021.

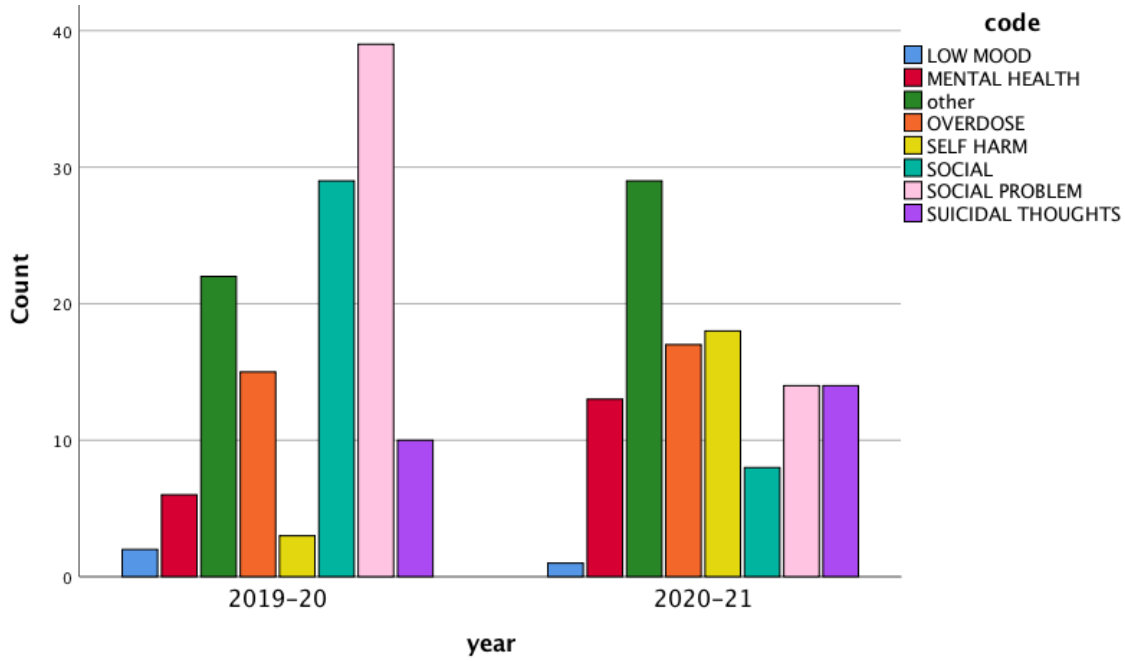
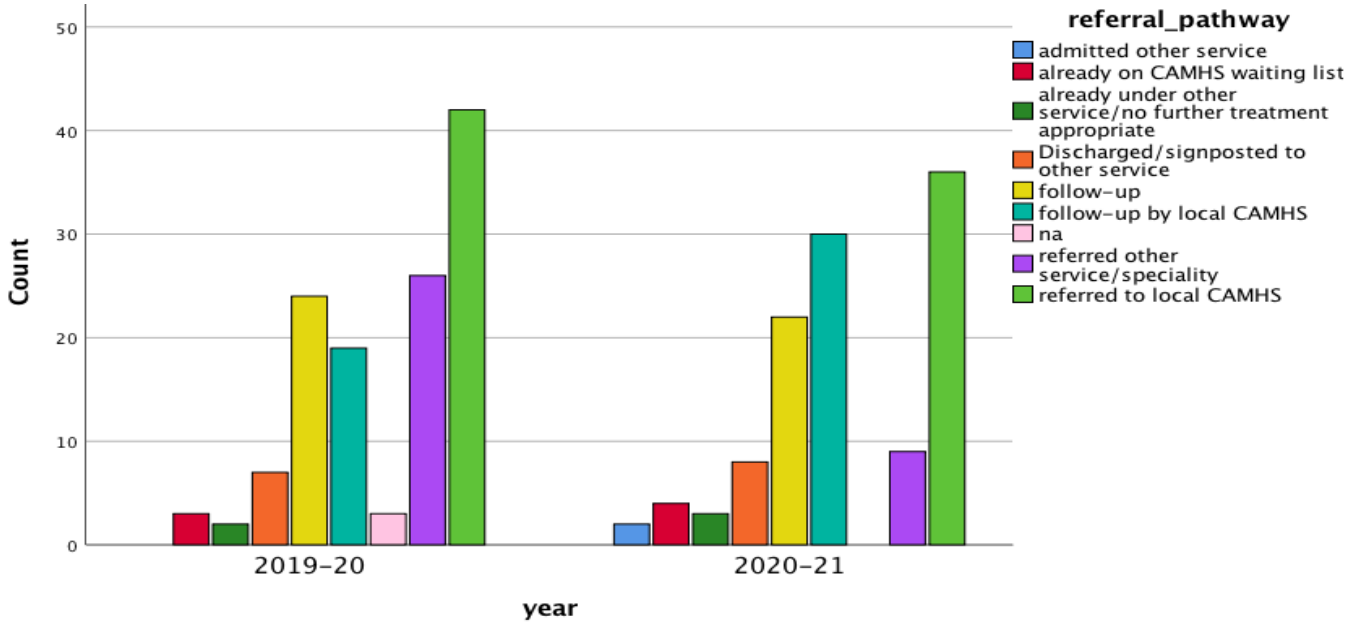


Figure 7. Referral pathways following A&E attendance for suicidal crisis by year: 2019-2020 and 2020-2021.



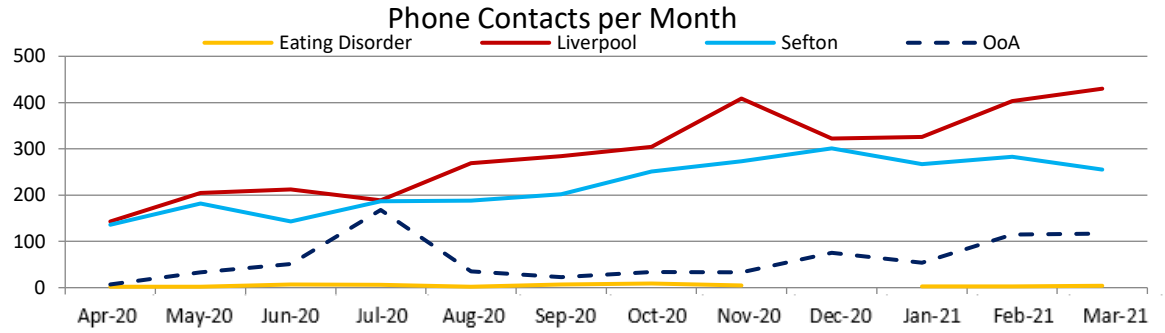
4. Results: Crisis Line

4.1. Total Crisis/Duty Calls per Locality

Table 6 highlights the total crisis and duty calls per locality between April 2020 and March 2021. n total, 6959 calls were made from April 2020 to March 2021. Liverpool area had the most calls with a total of 3496 calls. March 2021 received the most calls from Liverpool with 430 calls, followed by November 2020 (409) and February 2021 (403) all from the Liverpool area. Eating disorder duty calls had the least number of calls with a grand total of 50 from April 2020 to March 2020.

Table 6. Total Crisis/Duty Calls per Locality.

	Month												
Locality	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Grand Total
Eating Disorder	2	2	7	6	2	7	9	5		3	3	4	50
Liverpool	143	205	212	189	269	284	304	409	322	326	403	430	3496
Sefton	136	182	143	187	188	202	251	273	301	267	283	255	2668
Out of Area	7	33	51	168	35	23	34	33	75	54	115	117	745
Grand Total	288	422	413	550	494	516	598	720	698	650	804	806	6959



4.2. Total Crisis/Duty Calls per Locality and Age Group

Table 7 below presents the total number of crisis and duty calls per locality and age group. The 0-16 age group called the crisis line across all localities in comparison to the 17+ age group. Liverpool area has the highest number of calls from the 0-16 age group with 3171 calls and 325 calls for 17+.

Table 7. Total Crisis/Duty Calls per Locality and Age Group.

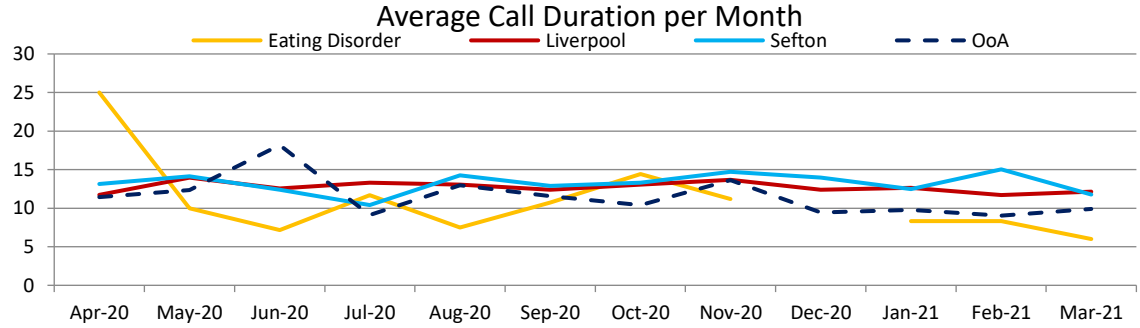
		Month												
Locality	Age	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Grand Total
Eating Disorder	0-16	2	2	7	5	2	7	8	4		1	2	4	44
	17+				1			1	1		2	1		6
Liverpool Total		2	2	7	6	2	7	9	5		3	3	4	50
Liverpool	0-16	134	184	184	173	243	262	268	356	302	290	369	406	3171
	17+	9	21	28	16	26	22	36	53	20	36	34	24	325
Liverpool Total		143	205	212	189	269	284	304	409	322	326	403	430	3496
Sefton	0-16	126	138	127	163	168	183	228	239	266	241	254	236	2369
	17+	10	44	16	24	20	19	23	34	35	26	29	19	299
Sefton Total		136	182	143	187	188	202	251	273	301	267	283	255	2668
Out of Area	0-16	7	32	49	160	35	22	30	30	73	53	98	112	701
	17+		1	2	8		1	4	3	2	1	17	5	44
Out of Area Total		7	33	51	168	35	23	34	33	75	54	115	117	745
Grand Total		288	422	413	550	494	516	598	720	698	650	804	806	6959

4.3. Average Call Duration

The table below highlights the average call duration per locality from April 2020 to March 2021. Average call duration was highest for the Liverpool and Sefton area (13 minutes). Sefton reported the highest call duration of 15 minutes in November 2020 and February 2021.

Table 8. Average Call Duration from April 2020 to March 2021.

	Month												
Locality	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Grand Total
Eating Disorder	25	10	7	12	8	11	14	11		8	8	6	11
Liverpool	12	14	13	13	13	12	13	14	12	13	12	12	13
Sefton	13	14	12	10	14	13	13	15	14	12	15	12	13
Out of Area	11	12	18	9	13	12	10	14	9	10	9	10	11
Grand Total	12	14	13	11	13	13	13	14	13	12	12	12	13



4.4. Time of Crisis/Duty Call Analysis

Table 8 demonstrates the time of crisis/duty call. 11am-12pm had the highest number of calls in total with 617 from April 2020 to March 2021. The time period of 9am to 6pm reported the most calls ranging from 419 calls to 617. The least number of calls were made during the hours of 5am-6am with 30 recorded calls from April 2020 to March 2021.

Table 9. Time of Crisis/Duty Call.

	Month												
Call Time Bracket	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Grand Total
12am-1am		4	3	6	3	6	11	12	12	7	17	16	97
1am-2am	1	4	8	5	8	5	6	4	9	10	16	7	83
2am-3am	2	5	5	4	6	7	8	4	6	6	7	7	67
3am-4am	1	2	4	6	5	2	6	5	7	3	7	3	51
4am-5am		3	1	1	3	5	10	11	3	4	5	2	48
5am-6am		1	3	3	2	2	2	2	2	4	4	5	30
6am-7am	2	1	2	4	1	3	3	5	4	5	4	5	39
7am-8am		1	2	3	3	6	6	9	2	5	5	1	43
8am-9am	6	11	12	25	11	21	19	29	23	16	23	26	222
9am-10am	17	25	39	53	37	52	50	53	56	46	70	65	563
10am-11am	17	39	34	50	40	42	49	45	71	56	60	65	568
11am-12pm	28	38	26	55	40	51	49	76	60	50	61	83	617
12pm-1pm	32	32	33	49	44	46	41	65	41	44	58	68	553
1pm-2pm	32	37	24	38	40	25	46	45	31	51	63	51	483
2pm-3pm	31	33	27	27	40	34	63	47	57	57	77	60	553
3pm-4pm	22	30	26	36	42	38	33	66	52	48	63	68	524
4pm-5pm	20	29	35	31	35	42	48	60	60	51	50	66	527
5pm-6pm	17	33	33	35	30	31	34	43	39	36	41	47	419
6pm-7pm	20	32	23	28	22	24	24	42	42	25	36	44	362
7pm-8pm	20	15	22	19	24	25	22	18	33	28	45	30	301
8pm-9pm	10	12	12	24	13	15	26	22	26	30	28	27	245
9pm-10pm	5	14	14	18	21	12	14	20	22	29	28	20	217
10pm-11pm	2	12	12	16	13	14	17	23	20	25	21	22	197
11pm-12pm	3	9	13	14	11	8	11	14	20	14	15	18	150
Grand Total	288	422	413	550	494	516	598	720	698	650	804	806	6959

4.5. Number of Phone Contacts by Reason for Contact

Duty calls made up the largest proportion of calls with 2801 between April 2020 and March 2021, followed by crisis care calls (1901). Other reasons for contact were discussion/information/liaison, which had 1480 calls in total and consultation/advice (777).

Table 10. Number of phone contacts by reason for contact.

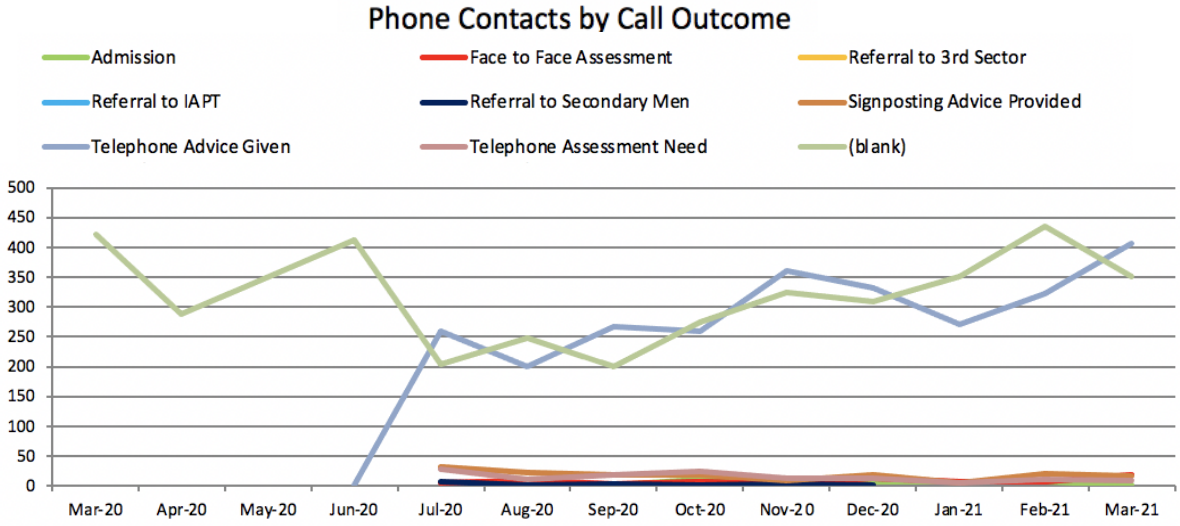
Reason for Contact	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Grand Total
Crisis Care	112	167	132	146	121	191	172	198	173	115	165	209	1901
Duty Call	83	146	175	127	209	186	227	336	315	317	326	354	2801
Discussion / Information / Liaison	46	57	62	140	81	106	139	127	156	160	239	167	1480
Consultation/Advice	47	52	44	137	83	33	60	59	54	58	74	76	777
Grand Total	288	422	413	550	494	516	598	720	698	650	804	806	6959

4.6. Number of Phone Contacts by Call Outcome

Table 11 highlights the number of phone contacts by call outcome between April 2020 and March 2021. The most common call outcome was telephone advice given (2680). Signposting advice was the outcome for 164 calls and telephone assessment needs for 137. The least reported outcomes were referral to third sector (2) and referral to IAPT (2).

Table 11. Number of Phone Contacts by Call Outcome.

Outcome	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Grand Total
Admission				14		2	11	4	8	7	7	1	54
Face to Face Assessment N				5	9	4	8	4	14	7	7	19	77
Referral to 3rd Sector					1					1			2
Referral to IAPT				1			1						2
Referral to Secondary Men				7	1	4	1	4	2			2	21
Signposting Advice				32	23	19	19	10	18	6	21	16	164
Telephone Advice Given			1	259	200	268	259	360	332	271	323	407	2680
Telephone Assessment Need				28	12	18	25	14	14	6	11	9	137
(blank)	288	422	412	204	248	201	274	324	310	352	435	352	3822
Grand Total	288	422	413	550	494	516	598	720	698	650	804	806	6959



5. Conclusion

This report examined Alder Hey A&E attendances for children and young people in suicidal crisis. Presentations to A&E were explored from March 2019 to March 2021 for children aged 16 and under. Crisis line data was also examined over a one-year period from April 2020 when the line was introduced to March 2021. Results indicated a total of 240 attendances by children and young people in suicidal crisis, with two thirds of attendees being female. One in five young people attended with suicidal ideation and self-harm and just over two thirds of attendees had a history of self-harm. Over a third of attendees had mental health issues and one in four re-attended in the same year. One in five attendees had special educational needs with the most common SEN diagnosis of autism spectrum disorder. Of those with a diagnosis of autism spectrum disorder who attended Alder Hey in suicidal crisis just over one in five were female.

This report provides detailed information about a group that has been the focus of attention due to the increasing numbers of presentations and the public health priority given to a reduction in the national suicide rates. However, this data is entirely hospital based at one A&E and therefore cannot comment about the cases in the community, which can be twice as many compared to hospital referrals.

6. Recommendations

The recommendations from this report are as followed:

1. Standardised protocol to track children and young people attending A&E in suicidal crisis.
2. Further exploration into suicidal crisis A&E attendances for children and young people with autism diagnoses.

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