Impact of the coronavirus (COVID-19) lockdown measures on access to the Perinatal Mental Health Service within Cambridgeshire and Peterborough Foundation Trust

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Background and aims of the project

In "The Five Year Forward View for Mental Health" [1,2] published in 2016, NHS England highlighted the need for greater availability and better access to specialist mental health services for women in the perinatal period and set out the ambition and funding to support at least 30,000 more women to access specialised care by 2020/21.

When the coronavirus (COVID-19) lockdown was announced on 23rd March 2020, wide-ranging changes in service provision were implemented across the NHS. Specialist community mental health services reduced or, in most cases, suspended face-to-face appointments, with patients being assessed via telephone or video. While dedicated staff continued working throughout the lockdown, to ensure that women who experienced mental health problems in the perinatal period continued to be supported, it was impossible to predict how these measures would affect the provision of care.

At the same time, pregnant and postpartum women were affected by changes in primary care, maternity services and health visiting. In addition, these women were potentially at greater risk of mental health problems due to environmental stressors such as: social isolation, lack of support from family and friends, financial insecurity, increased health anxiety and uncertainty about the future. Women with complex needs, such as those suffering from pre-existing mental illness, domestic violence, housing insecurity or addiction, were most vulnerable.

The recently published MBRRACE-UK report[3] revealed that four women died by suicide in the postpartum period over the three months between March and May 2020, highlighting the critical need for continued and timely provision of specialist perinatal mental health services at this time.

This study aims to examine the impact of COVID-19 lockdown measures on access to specialist community perinatal mental health services in Cambridgeshire and Peterborough.

This report analyses the number and source of referrals, as well as response rates to referrals received by the Cambridge and Peterborough Foundation Trust Perinatal Mental Health Team (CPFT PMHT) between 1st April and 31st May 2020 (Apr-May 20), and compares these to the equivalent period six months prior, 1st October to 30th November 2019 (Oct-Nov 19). We chose not to compare Apr-May 20 data with Apr-May 19 because the PMHT was still in the early developmental stage in Apr-19 with the service having only opened two months previously. Hence, Oct-Nov 19 was felt to be more representative.

In addition, we also looked at data on patient age, ethnicity, and proportion of antenatal vs. postnatal referrals to better understand how different groups accessed the service during the two time periods examined.

CPFT PMHT referral pathway

The PMHT provides advice, pre-conception counselling, and specialist assessment and treatment for women with new onset or recurrence of complex and severe mental health problems in the perinatal period. Referrals are received from primary care, other secondary services, maternity, health visitors

and social services. PMHT also receives advice & guidance (A&G) enquiries, the majority of which are for medication advice.

Urgent referrals are triaged by the duty practitioner on the same day. Routine referrals are discussed in weekly multi-disciplinary (MDT) meetings, which determine whether the referral meets the threshold for secondary care. If a referral is accepted, the patient is offered an assessment with a member of the relevant team (North or South team, depending on the client's address).

Prior to the lockdown, assessments were largely carried out in clinic or as home visits. Since the start of the lockdown, patients are usually offered a telephone or video assessment (via Attend Anywhere or Microsoft Teams). Face-to-face assessments may be offered, following CPFT guidelines, if deemed to be "urgent and essential".

Following assessment, there are three possible outcomes, which are discussed and agreed by the MDT:

1. Allocate care-coordinator – patients with complex needs or in acute distress and who will require intensive input by several members of the MDT or other agencies
2. Manage as outpatient – patients who meet the threshold for secondary care, but whose mental state is relatively stable and do not require care-coordination, are offered regular reviews with the Perinatal Consultant Psychiatrist, with input from other team members (e.g. Clinical Psychologist/ Nursery Nurse), as required.
3. Discharge – patients who do not meet the threshold for secondary care. These patients may be signposted to other services, such as the Psychological Wellbeing Service (PWS).

An assessment may not be carried out if the client fails to attend (DNA) or cancels. If this occurs, a second assessment date is normally offered. In the event of multiple DNAs, an opt-in letter is sent, giving the client time to respond before closing the referral. Rarely, if the service is unable to contact a client, an opt-in letter is sent encouraging her to contact the team directly for an assessment.

Methods

Source data

The PMHT maintain a spreadsheet of all referrals and A&G-queries, which was used as the basis for data collection. The Referrals spreadsheet maintained by the PMHT administrators contains:

- Patient information, including name, age, ethnicity, stage of pregnancy/age of baby and postcode (for team allocation)
- The outcome of the MDT discussion – whether the referral was accepted or not, or, in the case of A&G-queries, whether advice was provided
- Date and outcome of any assessment

Patient records are maintained on Rio, an electronic patient records system, which is widely used by mental health teams. Individual patient notes were accessed via Rio to check the information included in the Referrals spreadsheet and collect additional information.

Data collection and analysis

For this analysis, I included all entries in the PMHT Referrals spreadsheet between 1st April 2019 and 31st May 2020. There were 957 entries in total. 9 duplicated entries were removed, leaving 948 entries for review.

The data collection process was carried out in two stages.

Stage 1 – For all 948 entries, I collected information on whether the entry was a referral or A&G-query, whether the referral was accepted, whether an assessment took place and what the outcome was.

This data was collected from the Referrals spreadsheet. For missing or inconsistent data, I checked the patient's notes on Rio and confirmed changes with the team's Senior Administrator.

Stage 2 – For entries during the periods 1st Oct – 30th Nov 2019 (163 entries) and 1st Apr – 31st May 2020 (113 entries), I collected additional information related to age, ethnicity, whether the referral was pre-conception/antenatal/postnatal, number of weeks gestation/postpartum, referral source, referral type (urgent/routine), date of first assessment offered, date of actual assessment and assessment modality. All the information was verified by accessing patient records on Rio. If any discrepancies were identified, changes to data in the Referrals spreadsheet were confirmed with the Senior Administrator.

Data collection and analysis were performed using Microsoft Excel with files stored on a CPFT-owned laptop and backed-up in the team's secure OneDrive. To protect patient confidentiality, names were not included in the analysis files and audit data cannot be accessed by anyone outside CPFT PMHT.

For the purposes of this analysis, I looked at numbers of referrals and A&G-queries rather than number of patients referred. Several patients were re-referred during the 14-month period surveyed. After checking that entries were not duplicated, I regarded each new referral or A&G-query as a separate entry. Reasons for re-referral might include a deterioration in the patient's mental state, a new pregnancy or a new referral following the patient previously not engaging with the service. A detailed examination of the frequency and reasons for re-referral is beyond the scope of this analysis but may be a future direction of research to support quality improvements in terms of access to the service.

Results

Numbers of referrals and percentage referrals accepted

Compared to six months prior, there were fewer referrals in Apr-May 20 – 52 referrals in April, 46 in May compared to 85 and 54 in Oct-Nov 19 (Figure 1). This was also lower than the average number of 63 referrals per month over the preceding 12-months (Apr-19 to Mar-20).

However, as a proportion of referrals received, more referrals were accepted and offered assessment – 88% accepted in Apr-May vs. 70% in Oct-Nov. The average referral acceptance rate over the preceding 12-months was 71%.

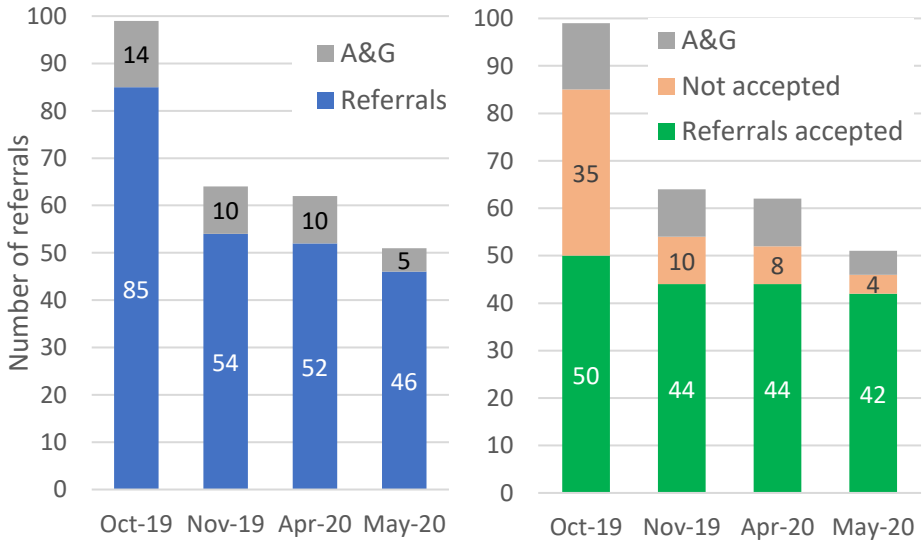

Figure 1 – Referrals and A&G enquiries received by CPFT PMHT during April and May 2020 ('lockdown period') as compared to 6-months prior (October and November 2019). The chart on the right shows the number of referrals accepted.

Looking at assessment outcomes, a greater proportion of patients were discharged following the initial assessment in Apr-May 20 compared to six months prior – 33% in Apr-May vs. 25% in Oct-Nov (Figure 2). The average rate of discharge following assessment over the preceding 12-months was 27%.

This change could be a consequence of more assessments being offered as a percentage of referrals, with the telephone/video assessment serving as a way of triaging patients.

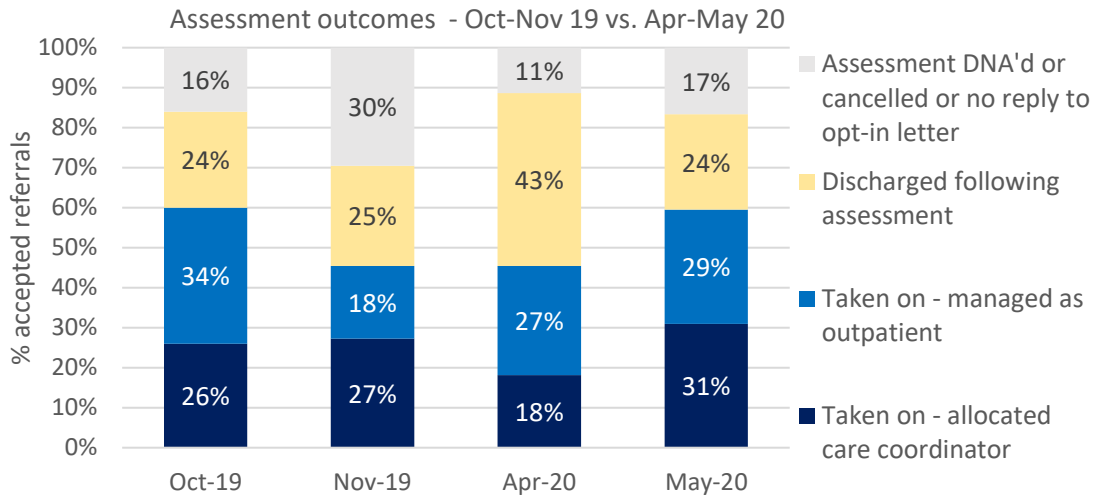

Figure 2 – Assessment outcomes as a proportion of accepted referrals. Note that in a limited number of cases, patients were allocated for co-working with other services and were taken on and allocated a care-coordinator without the need for a formal assessment by PMHT.

It is worth highlighting that DNA and cancellation rates were also lower in Apr-May 20. Only 14% DNA'd or cancelled in Apr-May compared to 21% in Oct-Nov, and 18% in the 12-months from Apr-19 to Mar-20. This may be due to assessments being conducted remotely, meaning that patients did not have to travel to clinic and the clinician could make multiple attempts to contact a patient who did not join a video call or answer the telephone on the first attempt.

Figure 2 also shows that a lower proportion of patients were allocated a care-coordinator in Apr-20, compared to other months (the average proportion of patients requiring care-coordination over the preceding 12-months was 30%). Together with the greater percentage of discharges during Apr-20, this may suggest a reduction in referrals for patients with more complex needs. An alternative explanation is that, in the absence of a face-to-face assessment, it was more difficult to identify those patients with greater needs and more severe or complex presentations.

Source of referral

For both time periods examined, the greatest number of referrals came from maternity services – 48% in Apr-May 20 and 55% in Oct-Nov 19 (Figure 3).

Compared to Oct-Nov, a greater percentage of referrals in Apr-May came from health visitors, with a drop in the proportion from primary care and maternity services.

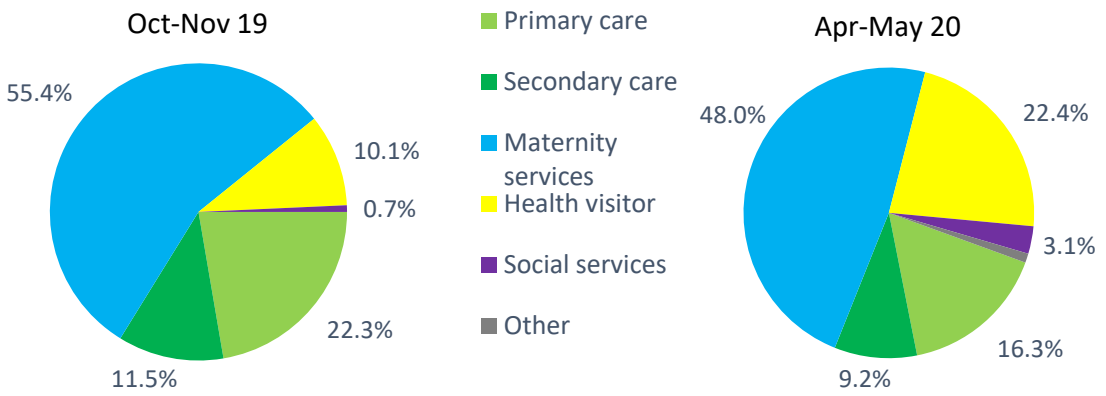

Figure 3 – Referrals by source. Primary care was defined to include GP, PRISM (Primary Care Mental Health Service), PWS (Psychological Wellbeing Service) and the Family Nurse Partnership. Secondary care includes: Liaison Psychiatry, Locality teams, Early Intervention Service, Forensic Psychiatry, PDCS (Personality Disorders Community Team), CRHTT (Crisis Team), FRS (First Response Service), other Perinatal Mental Health services (including Mother and Baby Units) and Hospital (excluding Maternity services). In Apr-May 20 there was one referral from a voluntary sector organisation, which was classified as 'Other'.

When looking at absolute numbers, despite the lower total number of referrals in Apr-May 20, the number from health visiting increased, while referrals from primary care were halved (Table 1).

	Oct-Nov 19				**Apr-May 20**			
	Referrals	Accepted	Not accepted	A&G	Referrals	Accepted	Not accepted	A&G
Primary care	31	19	12	15	16	16	-	7
Secondary care	16	15	2	1	9	8	1	2
Maternity	77	51	26	5	47	40	7	1
Health visitor	14	8	6	2	22	18	4	3
Social services	1	1	-	1	3	3	-	2
Other	-	-	-	-	1	1	-	-

Table 1 – Numbers of referrals by source.

The increase in referals from health visitors could reflect the fact that, while home visiting was greatly reduced, some local services prioritised new birth visits and vulnerable families.[4] Alternatively, it may be that the lack of face-to-face contact meant that health visitors lowered their threshold for referral when there were mental health concerns. Since health visitors had more contact with new mothers during this period than other services, the increase in referrals from health visiting could be an indication of the immense impact of the lockdown on perinatal women, both in terms of their birth experience and lack of support from family, peers and other services.

In terms of secondary care referrals, 55% of referrals in Apr-May 20 came from crisis and acute mental health services with fewer referrals from adult locality teams and other community services, compared to Oct-Nov 19 (Figure 4). This may be attributed to changes in service provision, as while some specialist services, such as PDCS, reduced face-to-face contact, capacity was increased for emergency, crisis and inpatient services.

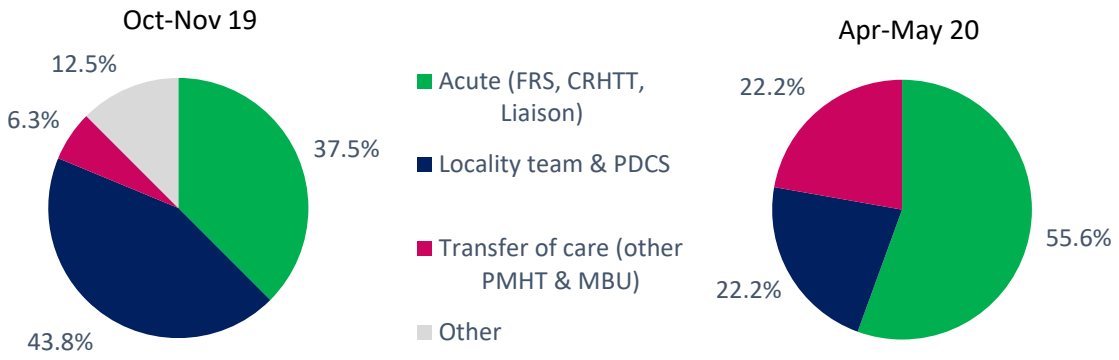

Figure 4 – Secondary care referrals – Apr-May 20 compared to Oct-Nov 19. In Oct-Nov 19 there was one referral from a paediatric nurse in hospital and one from Safeguading, which were classified as 'Other'. Transfer of care includes referrals from other perinatal mental health services (other PMHT) and the Mother and Baby Unit (MBU).

Demographic characteristics

The distribution of referrals by age group remained broadly similar, although there were comparatively fewer entries for women aged 20-24 and more for women aged 25-34 during Apr-May 20 relative to Oct-Nov 19. Median age at referral was 27 in Oct-Nov and 29 in Apr-May.

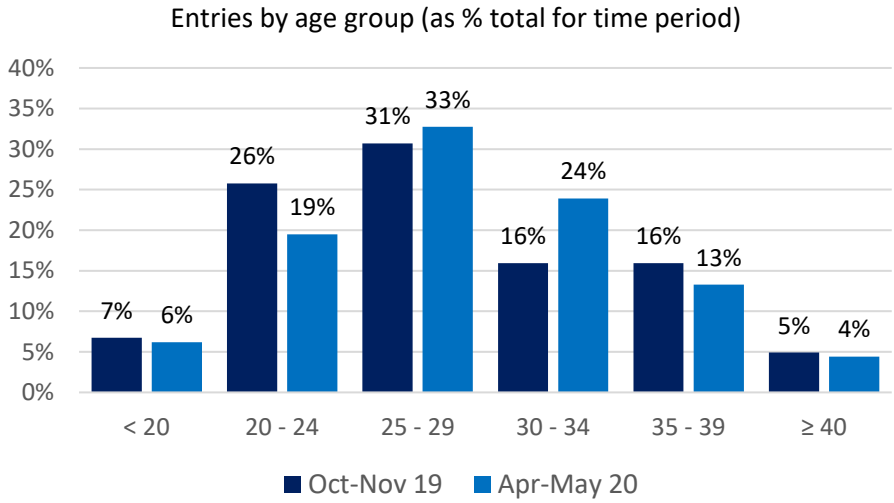

Figure 5 – Age of patient – both referrals and A&G enquires are included in this chart. Percentages of total entries for the time period are shown.

Ethnicity data was also examined (Figure 6). As expected, given the demographic characteristics of Cambridgeshire and Peterborough, the majority of referrals were for patients who identified as White. It is worth noting that the proportion of referrals for Black, Asian and Minority Ethnic (BAME) women went down during Apr-May 20 and that the proportion of referrals for this group in both time periods was very low, given that approximately 10% of the Cambridgeshire and Peterborough population is BAME.[5]

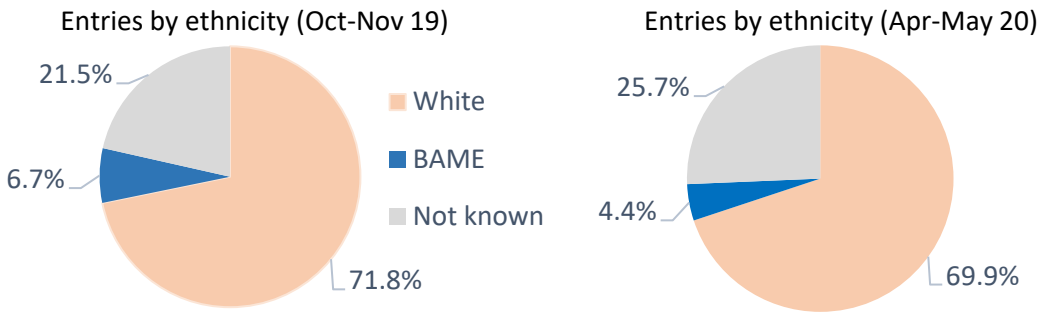

Figure 6 – Entries by ethinicity for both referrals and A&G enquires are included in this chart. Percentages of total entries for the time period are shown. 'White' includes White British, Irish, Welsh and White Other. 'BAME' includes Asian British, Asian Other, Black British, Black Other and Mixed. 'Not known' means no information on the patient's ethnicity was recorded.

While it may be that for some BAME patients referred to PMHT ethnicity data is not captured, it would be useful to explore whether there any barriers to access for this group.

Referral acceptance rates were higher for BAME patients than the other two groups, suggesting that this patient group have higher complexity and severity presentations when referred (Figure 7).

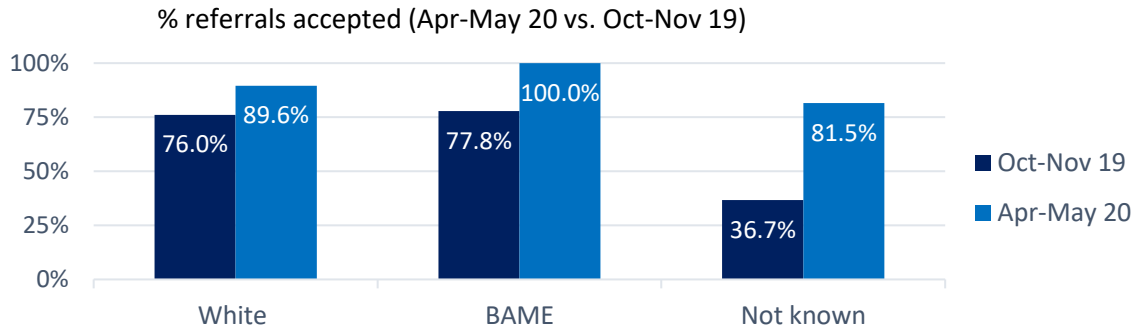

Figure 7 – Referral acceptance rates by ethnicity.

Antenatal and Postnatal referrals

In Oct-Nov 19, the majority of referrals were in the antenatal period (Figure 8), which is unsurprising given that more referrals overall came from maternity services. PMHT works closely with consultant obstetricians and specialist mental health midwives to identify and support women with complex mental health needs throughout pregnancy, at delivery and during the postnatal period.

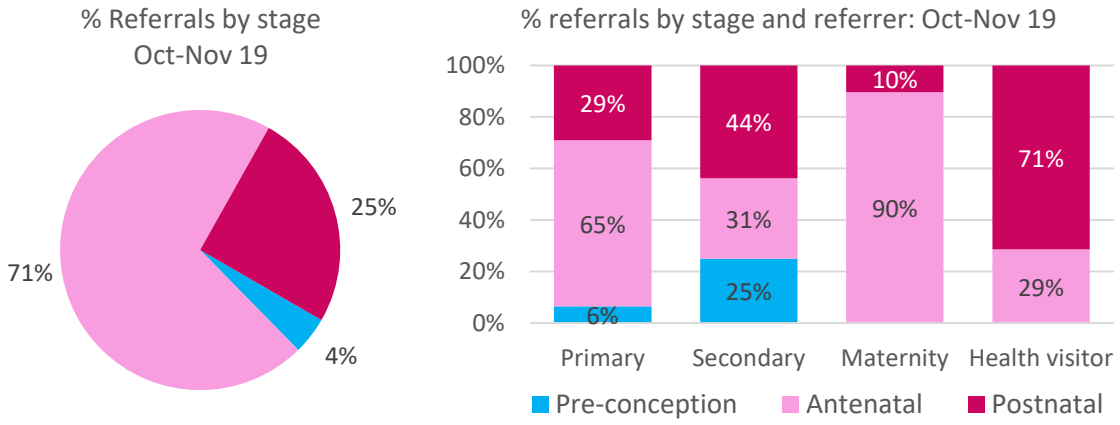

Figure 8 – Pre-conception, antenatal and postnatal referrals for Oct-Nov 19 and how these are divided across different referral sources. There was 1 antenatal referral from social services which is not shown in the chart on the right.

During the lockdown there was a significant increase in postnatal referrals, from 35 (25%) in Oct-Nov to 43 (44%) in Apr-May. In part, this can be attributed to the increased number of referrals from health visitors, although there was also an increase in postnatal referrals from primary care (Figure 9).

Acceptance rates were similar for antental and postnatal referrals (66% of antenatal and 69% of postnatal referrals accepted in Oct-Nov, and 87% of antenatal and 88% of postnatal referrals in Apr-May).

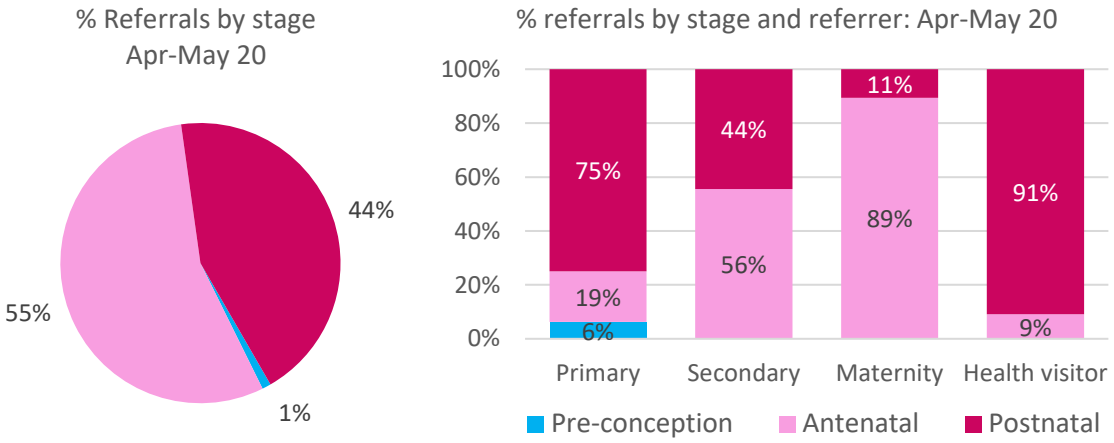

Figure 9 – Pre-conception, antenatal and postnatal referrals for Apr-May 20 and how these are divided across different referral sources. There were 3 referrals from social services (1 antenatal, 2 postnatal) and 1 antenal referral from a voluntary sector organisation which are not shown in the chart on the right.

For women referred antenatally, slightly more referrals were during the second trimester. For postnatal referrals, the greatest number were more than 3 months postpartum, although acceptance rates were highest for women in the first 6 weeks postpartum (Table 2).

Antenatal referrals	**Oct-Nov 19**		**Apr-May 20**	
	% antenatal referrals	% accepted	% antenatal referrals	% accepted
1st trimester	32.7%	62.5%	33.3%	83.3%
2nd trimester	36.7%	66.7%	38.9%	95.2%
3rd trimester	30.6%	70.0%	27.8%	80.0%

Postnatal referrals	**Oct-Nov 19**		**Apr-May 20**	
	% postnatal referrals	% accepted	% postnatal referrals	% accepted
0 – 6 weeks	34.3%	75.0%	25.6%	100%
7 – 13 weeks	28.6%	70.0%	27.9%	91.7%
> 3 months	37.1%	61.5%	46.5%	80.0%

Table 2 – Antenatal referrals by trimester (1st trimester defined as 0-12 weeks, 2nd trimester 13-27 weeks, 3rd trimester 28-40 weeks). Postnatal referrals by number of weeks postpartum.

Time from referral to assessment

The most significant change during the lockdown was the time between referral and assessment.

How quickly an assessment is offered depends on the urgency of the referral. Urgent referrals are triaged by duty staff to establish the presence of any immediate risks. This is done by contacting the referrer and, if possible, the patient herself. Thus, while about a third of referrals are marked as urgent

by the referrer, a significant number are downgraded to routine assessments following triage (53% urgent referrals were downgraded in Oct-Nov; 62% in Apr-May).

For this analysis, I categorised referrals as urgent and routine based on the MDT decision on whether an urgent or routine assessment was required. I looked at both time between referral and first assessment date offered and time between referral and actual assessment. Delays in offering an assessment were often due to delays in obtaining further information from the referrer or difficulties contacting the patient.

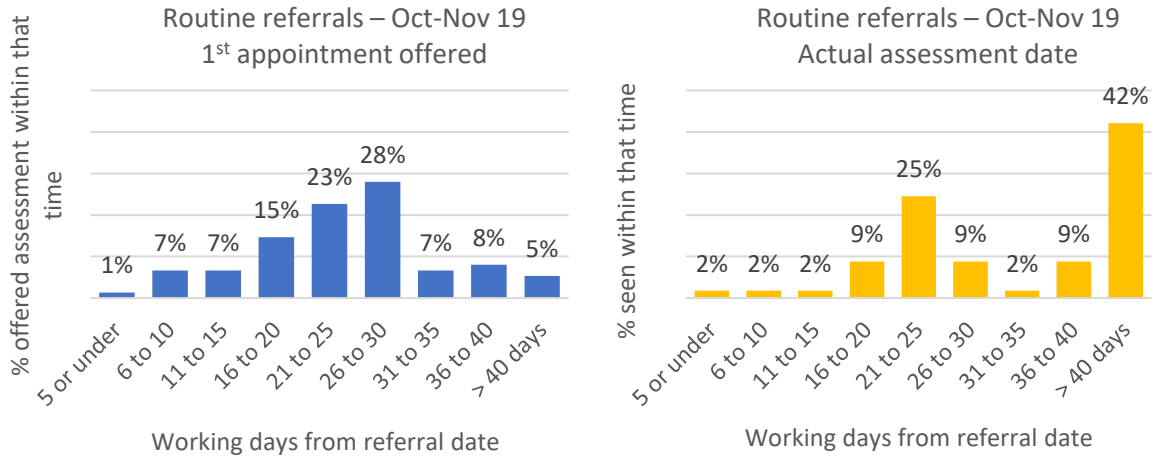

Figure 10 – Routine assessments Oct-Nov 19. This includes referrals marked urgent that were downgraded to routine by duty staff.

For routine referrals received in Oct-Nov 19, the average time between referral and first appointment offered was 25.4 working days, although only 37% were seen on the first assessment date. If a patient DNA'd or cancelled, it took on average another 28.5 working days until the assessment. This may be skewed by instances where there were multiple DNAs or cancellations. It is also worth considering that for patients referred in Nov-19, routine assessments may have been delayed by the holiday period. Overall, 24% of routine assessments offered did not take place, 90% of which were DNA.

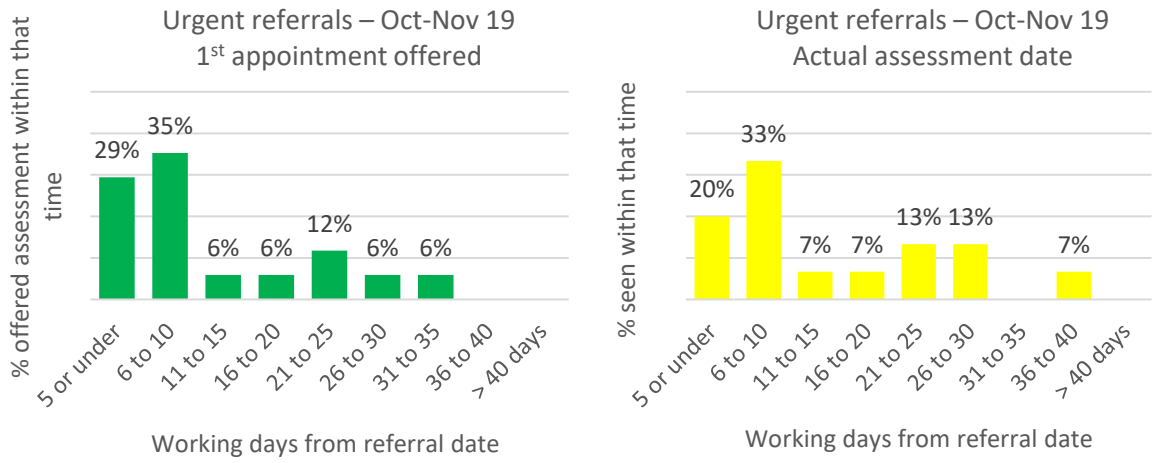

Figure 11 – Urgent assessments Oct-Nov 19.

For urgent assessments in Oct-Nov 19, an appointment was offered on average within 12 working days (although in many cases contact was made prior to this) and 71% were seen on the first assessment date. Time between first appointment offered and actual assessment was 10 working days on average and only 2 patients DNA'd.

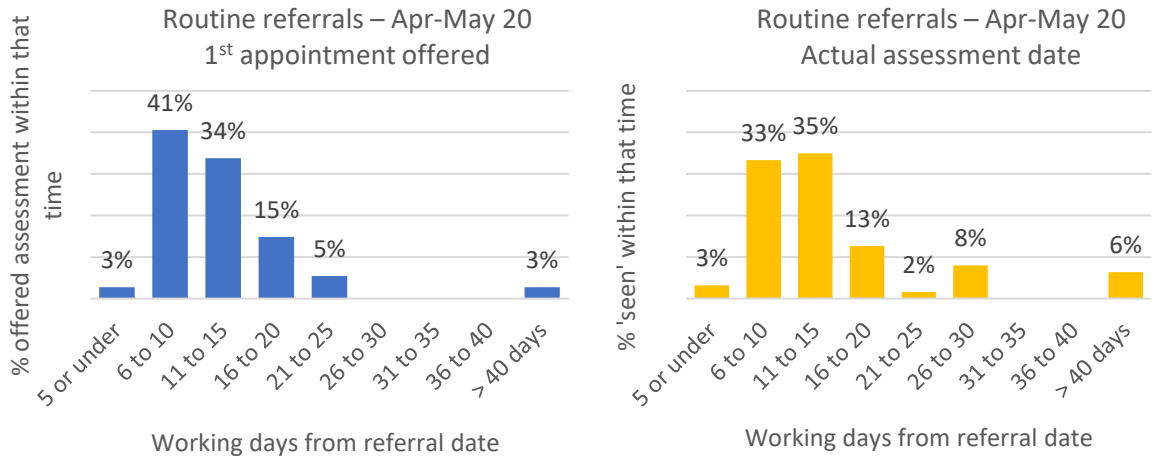

Figure 12 – Routine assessments Apr-May 20.

In contrast, in Apr-May 20 the first routine assessment offered was on average 13 working days from referral and 61% of routine assessments took place on the initial date offered. If the patient DNA'd or cancelled, the average time to actual assessment was 11 working days from first appointment offered. Only 15% of routine assessments did not go ahead.

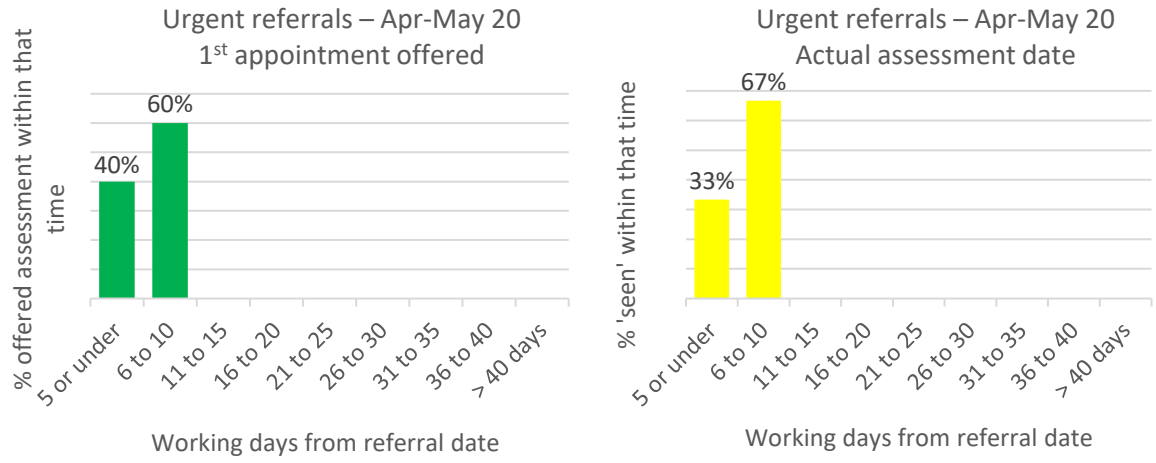

Figure 13 – Urgent assessments Apr-May 20.

For urgent assessments in Apr-May 20, average time between referral and first assessment offered was 6 working days and 80% of assessment took place on that date. If the first assessment was DNA'd or cancelled, the actual assessment took place within 5 working days. Only 1 urgent referral DNA'd.

The quicker response time in Apr-May 20 might have been due to better capacity within the team to offer assessment slots, partly because there were fewer referrals and partly because practitioners spent less time commuting between the team base and patients' homes.

64% of assessments during this period were via the telephone and 32% via video. There were 2 home visits and 1 assessment in clinic (at the patient's request).

Conclusion

While the data presented here is only a snapshot of how the lockdown affected access to specialist perinatal mental health services in a single trust, some patterns do emerge.

The reduction in referral numbers in Apr-May 20 raises concern that some patients in need of specialist care were not referred due to changes in service provision across primary, secondary and maternity services. The concern is always that the most vulnerable patients were missed and this may be why there were comparatively fewer referrals for women in their early twenties and perhaps also why fewer patients who met the threshold for care-coordination were seen in Apr-20, at the height of the pandemic.

The rise in number of postnatal referrals needs to be examined further. One explanation could be that an increasing number of women in the postnatal period were experiencing mental health difficulties due to the pandemic and impact of the lockdown. It would be useful to better understand whether there was any change in reasons for referral, and how patients engaged with the service after assessment, as most appointments continued to be via telephone or video.

The dramatic improvement in response rates during the lockdown is encouraging, suggesting that for those women who were referred to PMHT, support was made available in an efficient and timely manner. This could also point to new ways of working in the future, where an initial telephone or video assessment could be offered initially as a way of triaging patients with more detailed face-to-face assessments for those who require secondary care support, provided that this meets with the patient's expectations and needs.

References

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