



Institute for  
**Public Safety  
Crime and Justice**

**Community Sentence Treatment  
Requirement Multisite Report  
July 2020 – January 2023**

**Authors:**

**Professor Matthew Callender**

**Greta Sanna**

**Kathryn Cahalin**

**March 2023**

# About the Institute for Public Safety, Crime and Justice

Established in 2014, the Institute for Public Safety, Crime and Justice (IPSCJ) at the University of Northampton delivers high quality research and evaluation, insight, and innovation in the fields of public safety, crime and justice. The IPSCJ is situated at the interface between practice, policy, and academia, adopting an evidence-based approach to enhance public service delivery models, organisational strategy, and outcomes for service users. The IPSCJ collaborates with partner organisations at local, regional, national, and international scales to address key global challenges of the 21<sup>st</sup> century. The core mission of the IPSCJ is to support positive evidence-based policy and practice change for the benefit of society.

The IPSCJ has five research and evaluation portfolios:

**Health and Justice:** We explore intersections between health and justice, working with a wide range of partners and agencies in community and prison settings. Example projects include:

- Evaluating Community Sentence Treatment Requirements in England, funded by NHS England and NHS Improvement and local CSTR Programme Boards
- Assessing the Effectiveness of Mental Health Street Triage in the East Midlands, funded by Northamptonshire Office of Police, Fire and Crime Commissioner

**Children and Young People:** We work with children and young people taking a child-centred and participatory approach to research and evaluation. Example projects include:

- National evaluations of the Mini Police and Volunteer Police Cadets, funded by the Home Office Police Transformation Fund
- Fast-tracking vulnerable young people into the police cadets in Nottinghamshire, funded by the Volunteer Police Cadets
- Evaluating early intervention pilots in Northamptonshire with young people at risk of exclusion, funded by Northamptonshire Office of Police, Fire and Crime Commissioner

**Citizens in Policing:** We investigate the roles, functions, and contributions of volunteers within public safety and policing. Example projects include:

- Exploring synergies within volunteering in law enforcement and public safety in the UK and Japan, funded by the Economic and Social Research Council
- National programme of research in partnership with the NPCC portfolio for Citizens in Policing, funded by the Home Office Police Transformation Fund

**Organisational Development:** We support organisations to understand practices, structures, and cultures to improve efficiency and lead change. Example projects include:

- Organisational development programme with the East Midlands Specialist Operations Unit (EMSOU), funded by EMSOU
- Place-based leadership development in Kenya and Uganda, funded by the Danish Institute Against Torture
- Workforce engagement in Leicestershire Police and Northamptonshire Police, funded by Leicestershire Police and Northamptonshire Police

**Equality, Vulnerability and Inclusion:** We empower individuals and communities whose voices are not often heard to take part in research and evaluation. Example projects include:

- Understanding serious violence in Nottingham City and Nottinghamshire, funded by Nottinghamshire Office of Police and Crime Commissioner
- Evaluation of Women's Health Services for Perinatal Female Offenders in HMP Peterborough, funded by NHS England and NHS Improvement – East of England

## Executive Summary

This report presents analysis from the Community Sentence Treatment Requirement Multisite Evaluation, completed by the Institute for Public Safety, Crime and Justice. Data were provided from Avon, Bedfordshire, Birmingham, Black Country, Cambridgeshire, Cornwall, Derbyshire, Essex, Gloucestershire, Hertfordshire, Merseyside, Northamptonshire, Plymouth, Oxford, South Yorkshire, Staffordshire, Swansea and Swindon & Wiltshire, Telford and West Berkshire. This report relates to the period of July 2020 to January 2023, with data being provided for 4,609 cases. Overall, there were:

- 4,609 cases submitted
  - 4,067 assessments for MHTR
    - 3,103 individuals found suitable for MHTR following assessment
      - 2,482 sentenced to MHTR (or dual diagnosis)
        - 1,854 with intervention start date
          - 1,525 with pre-intervention scores
            - 807 with post-intervention scores

It must be noted that the files submitted include live cases and as such would not yet have progressed beyond initial assessment.

The aim of the report is to provide a high-level overview across the participating sites, to complement local reports provided to each local CSTR programme Board to support local programme development, evidence and understanding of identified patterns across the wider dataset.

Indicator	Jan – Jun 22		Jul – Dec 22
Number of Assessments per 6 Month block per Site	9.9		11.6
Suitability following Assessment	79%		73%
Number of Sentences per 6 Month block per Site	8.2		9.2
Sentenced to an MHTR (excluding missing cases)	88%		85%
Number of intervention starts per 6 month block per Site	8.2		9.4
Number of intervention end per 6 month block per Site	3.2		4
Percentage of individuals with positive reliable change CORE-34 (Six month blocks from end of intervention)	73%		73%
Percentage of individuals with positive reliable change GAD-7 (Six month blocks from end of intervention)	55%		58%
Percentage of individuals with positive reliable change PHQ-9 (Six month blocks from end of intervention)	53%		48%

## Overview:

**Assessment & Demographics:** Overall, assessments for MHTR had increased over time across the sites. Most assessments (82%) were for MHTR only, with 9% for MHTR&ATR and 4% for MHTR&DRR. Assessment scores, regardless of psychometric used, show most individuals were identified as being in severe psychological distress. Overall, 76% of individuals assessed were found suitable for MHTR by the Clinical Lead. In terms of demographics at point of assessment, there was an uneven split between Females (33%) and Males (66%), with most assessments being completed with individuals aged 25-34 years. Most assessments (77%) were completed with individuals whose ethnicity was White. The most frequent primary offence type was violence against the person followed by motoring offences.

**Sentencing:** Overall, the number of sentences passed each month has increased over time, with 81% being passed within one month of assessment. The length of time between assessment and sentence was reducing over time. Where sentences had been passed, 88% were sentenced to MHTR (inc. Dual Diagnosis) and 12% were declined.

**Start of Intervention:** Overall, there were 2,482 sentenced to an MHTR (or Dual Diagnosis) and there were 1,854 cases with an intervention start date. The number of intervention starts per month had increased over time, though was unevenly distributed across the sites. At the start of the intervention, the following psychometric scores were recorded:

- **CORE34:** 22% severe psychological distress, 23% moderate-to-severe psychological distress, 23% moderate psychological distress, and 25% mild and below mild psychological distress.
- **GAD7:** 48% severe anxiety, 26% moderate anxiety, and 26% mild and below mild anxiety.
- **PHQ9:** 32% severe depression, 27% moderately severe depression, 22% moderate depression, and 19% mild or below mild depression.

**Outcomes and Change:** There were 1,212 individuals with a recorded end date. Outcomes and change were:

- **CORE-34:** In the sample of 537, 75% (404) saw a 5 or more point reduction in their pre to post CORE-34 score. 11% (61) saw no reliable change (i.e. between -4 and +4) and the remaining 13% (72) saw a reliable worsening (5+).
- **GAD-7:** In the sample of 756, 59% (442) saw a 4 or more point reduction in their pre to post GAD-7 score. 37% (276) saw no reliable change (i.e. between -3 and +3) and the remaining 5% (38) saw a reliable worsening (4+); and
- **PHQ-9:** In the sample of 756, 52% (397) saw a 6 or more point reduction in the PHQ-9 score. The remaining 48% (362) saw no reliable change (i.e. between -5 and +5) or a reliable worsening (i.e. 6+). Those that saw a worsening in the PHQ-9 were a minority (3.6%, 27).

## Observations:

Overall, the analysis and results presented in this report from 22 sites remains very positive. The analysis of 30 months data continues to demonstrate **how MHTR interventions are having a statistically significant benefit in terms of mental distress, anxiety and depression.** The analysis shows that:

- 75% experienced a positive reliable change in terms of global distress (CORE-34);
- 59% experienced positive reliable change in terms of anxiety (GAD-7); and
- 52% experienced a positive reliable change in terms of depression (PHQ-9).

Of those who completed the intervention and completed all psychometrics (CORE-34, GAD-7 and PHQ-9) (n=466), 39% (180) experienced change across all 3 of the psychometrics measured at the start and end of the intervention, 19% (90) experienced positive reliable change across 2 of the measures and a further 22% (104) experienced positive change in one of the measures. Therefore, for those who

completed the intervention, **80% experienced a positive reliable change in at least one of the psychometrics measured.**

The analysis presents, however, significant variation between the sites which is investigated further and detailed in local reports.

The report details how the number of assessments per site has steadily increased over time. It is noted however, that the proportion of individuals found suitable following assessment in the last 6 months has decreased. The report reveals wide variation in terms of the tools used to determine suitability for MHTR in the assessment process.

**R. It is recommended that this variation is considered initially at the clinical leads national network to inform the national MHTR operational guidance.**

The number of sentences to MHTR or combined order per site has increased over time, but there was a significant dip in January 2023. This dip may be a data entry issue but warrants further attention to investigate the reasons for this drop. The proportion of individuals being sentenced to an MHTR following an assessment of being suitable for the MHTR has increased over time. When investigating this trend, it was identified that the sites where declines at court was most prevalent were more established or long-standing sites.

**R. Where this pattern is identified at a local level, it is recommended that the local programme board explore why individuals would not be sentenced at Court and explore options to improve conversion.**

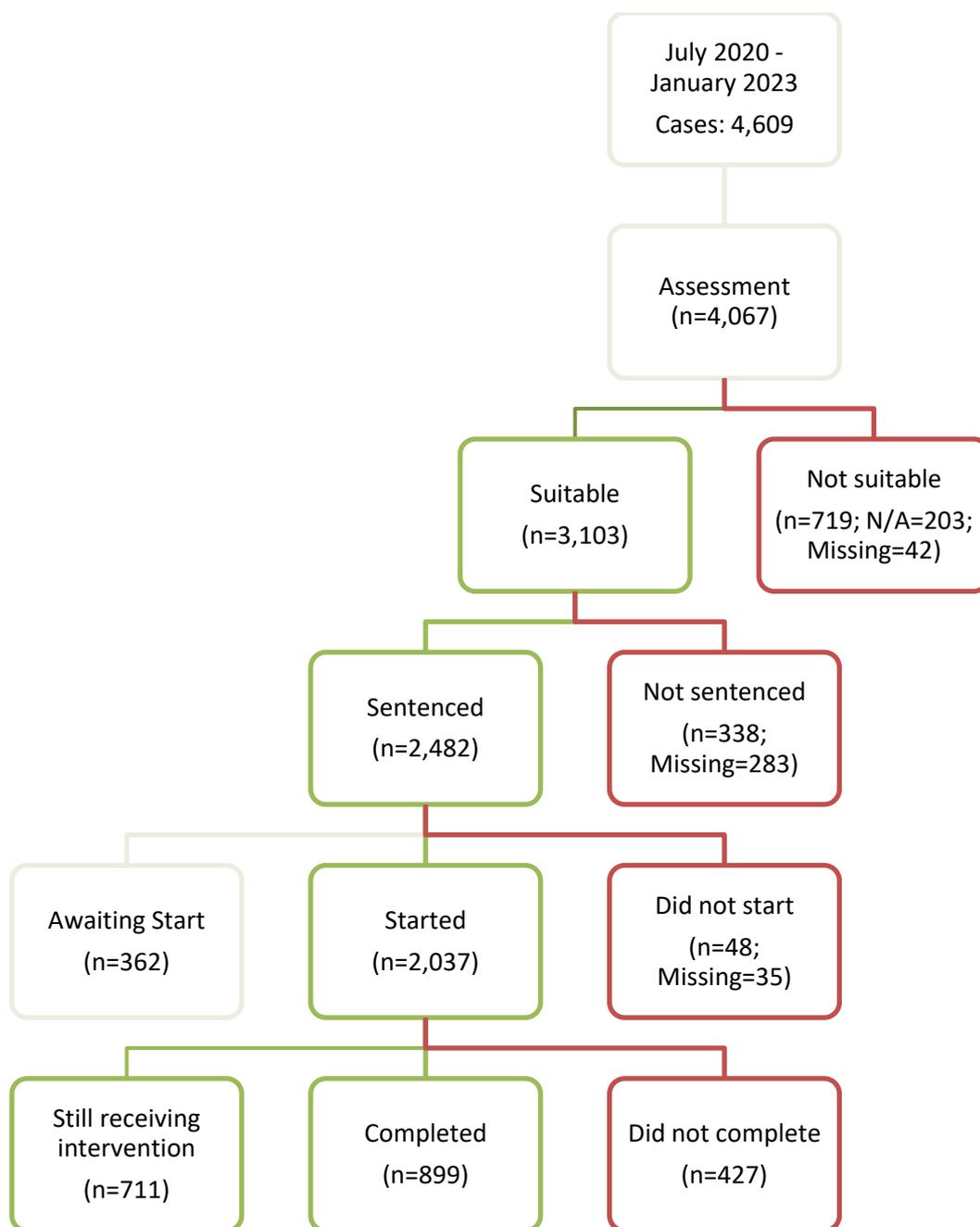
Finally, data seems to suggest that females go through the pathway more effectively, with higher proportions of women being found suitable after assessment (79% compared to 75% for males) and higher proportion of females getting sentenced after being found suitable (85% compared to 78% for males). This will be explored further in an IPSCJ Briefing Paper focused on gender.

# Contents

Executive Summary .....	3
1. Introduction .....	7
2. Assessment and Demographic Overview.....	11
3. Sentencing.....	19
4. Start of Intervention .....	23
5. Engagement .....	27
6. Outcomes and Change.....	31
7. Observations .....	41

# 1. Introduction

This report presents analysis from the Community Sentence Treatment Requirement Multisite Evaluation, completed by the Institute for Public Safety, Crime and Justice. Data were provided from Avon, Bedfordshire, Birmingham, Black Country, Cambridgeshire, Cornwall, Derbyshire, Essex, Gloucestershire, Hertfordshire, Merseyside, Northamptonshire, Plymouth, Oxford, South Yorkshire, Staffordshire, Swansea and Swindon & Wiltshire, Telford and West Berkshire. This report relates to the period of July 2020 to January 2023, with data being provided for 4,609 cases.



The diagrams below illustrate the difference in volumes of males and females going through the pathway. Data seems to suggest that females go through the pathway more effectively, with higher proportions of women being found suitable after assessment (79% compared to 75% for males) and higher proportion of females getting sentenced after being found suitable (85% compared to 78% for males).

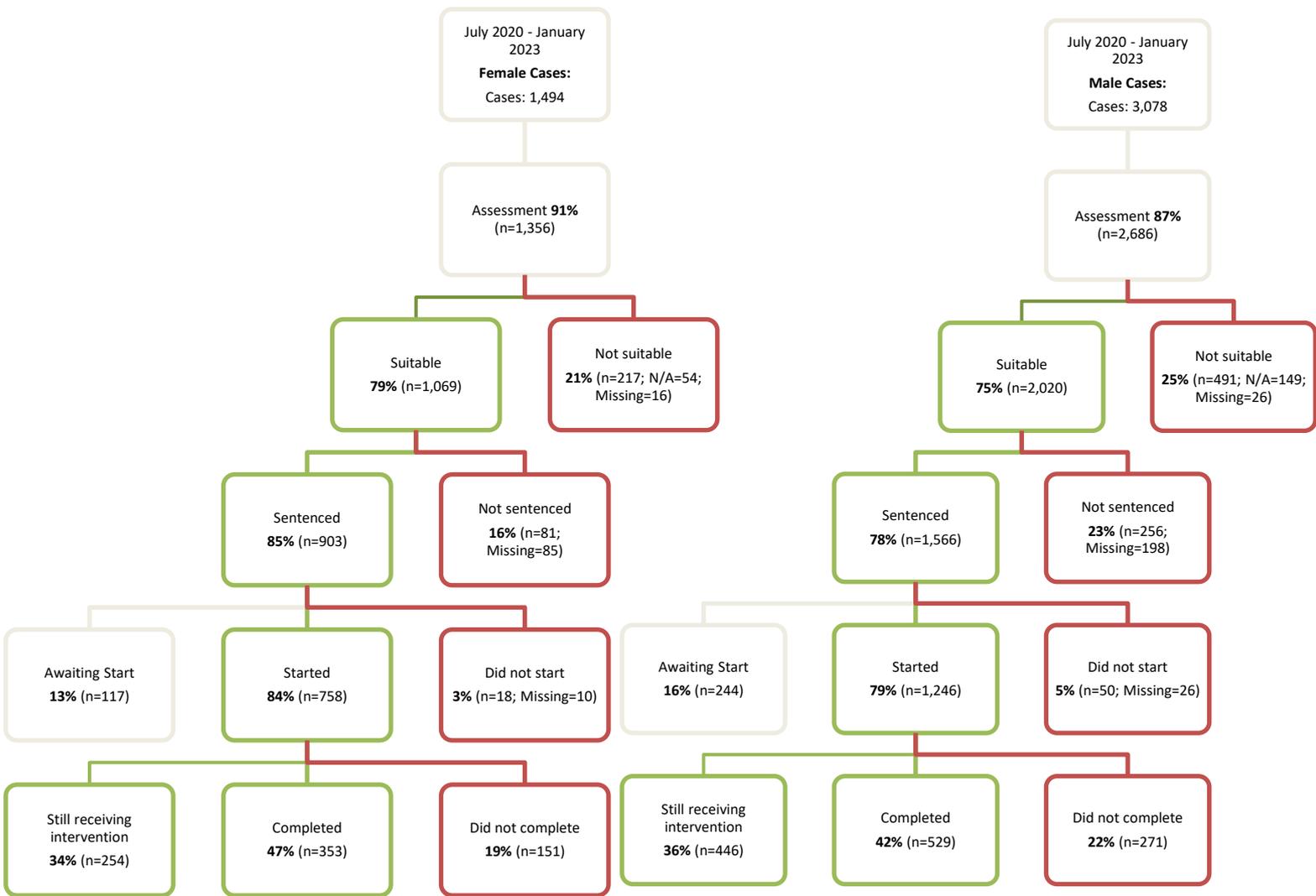
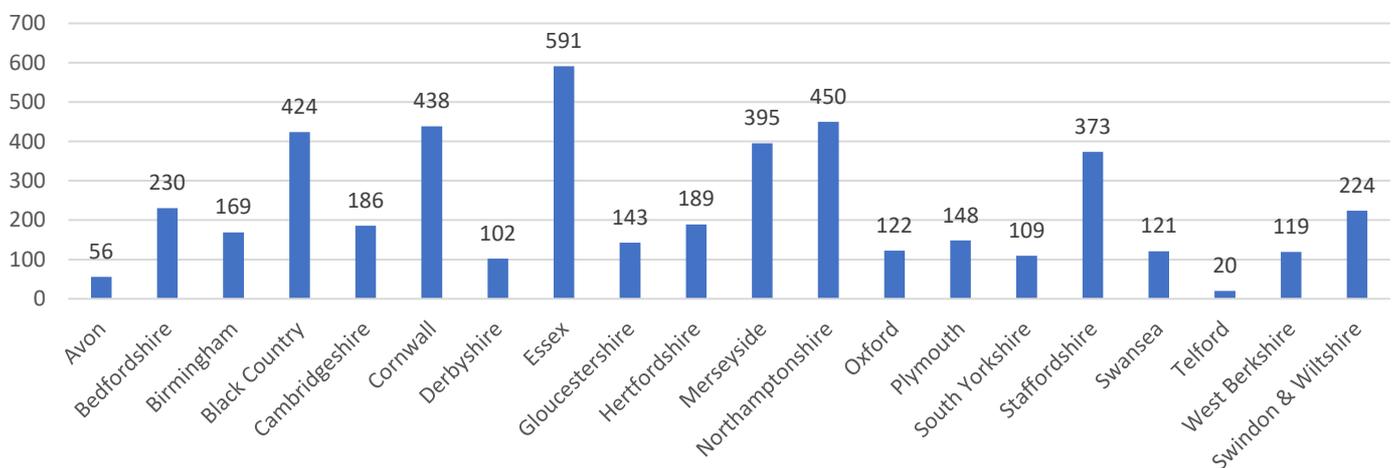


Figure 1.1 shows the number of cases submitted as part of the data set. It should be noted that of some sites were not operational for the full time period.

**Fig 1.1 Total number of cases per Site, July 2020 - January 23, 20**



When cases are organised into six-month periods, Figure 1.2 shows that the number of cases in the evaluation is increasing. Avon, Merseyside, Oxford, South Yorkshire and Telford are additional sites included in the analysis compared to previous reports.

**Fig 1.2 Total Cases - 6 Monthly, Jul 20 - Dec 22, 20 Sites**

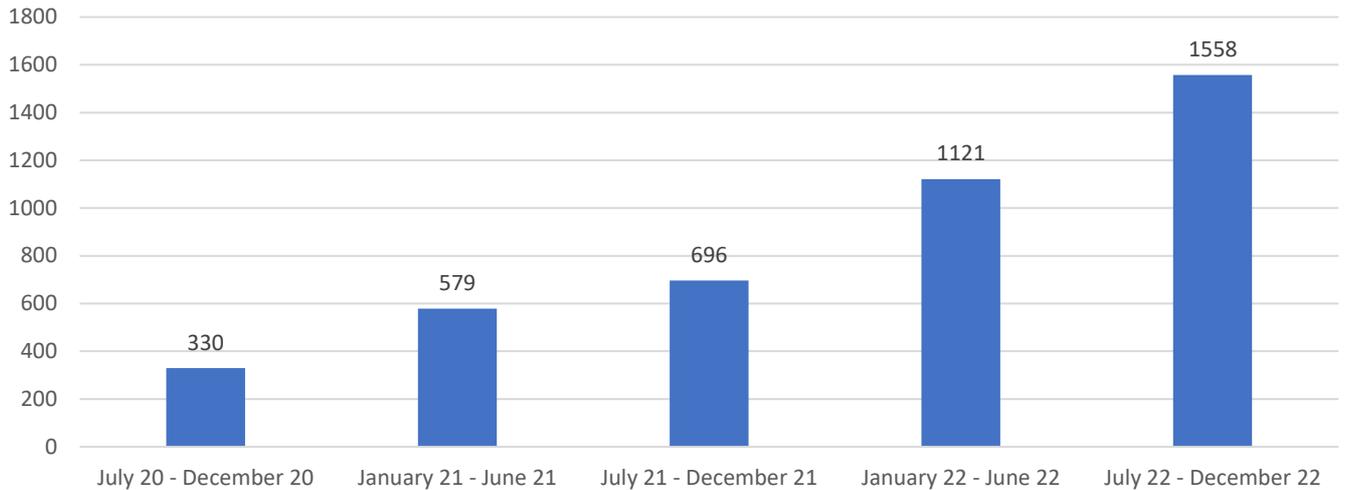


Figure 1.3 shows the total number of cases provided by each site broken down into 6 monthly periods from the start of the evaluation in July 2020. It should be noted sites started providing cases at different points in the evaluation and some sites are currently back dating their data files.

**Fig 1.3 Total Cases per Site - 6 Monthly, Jul 20 - Dec 22, 20 Sites**

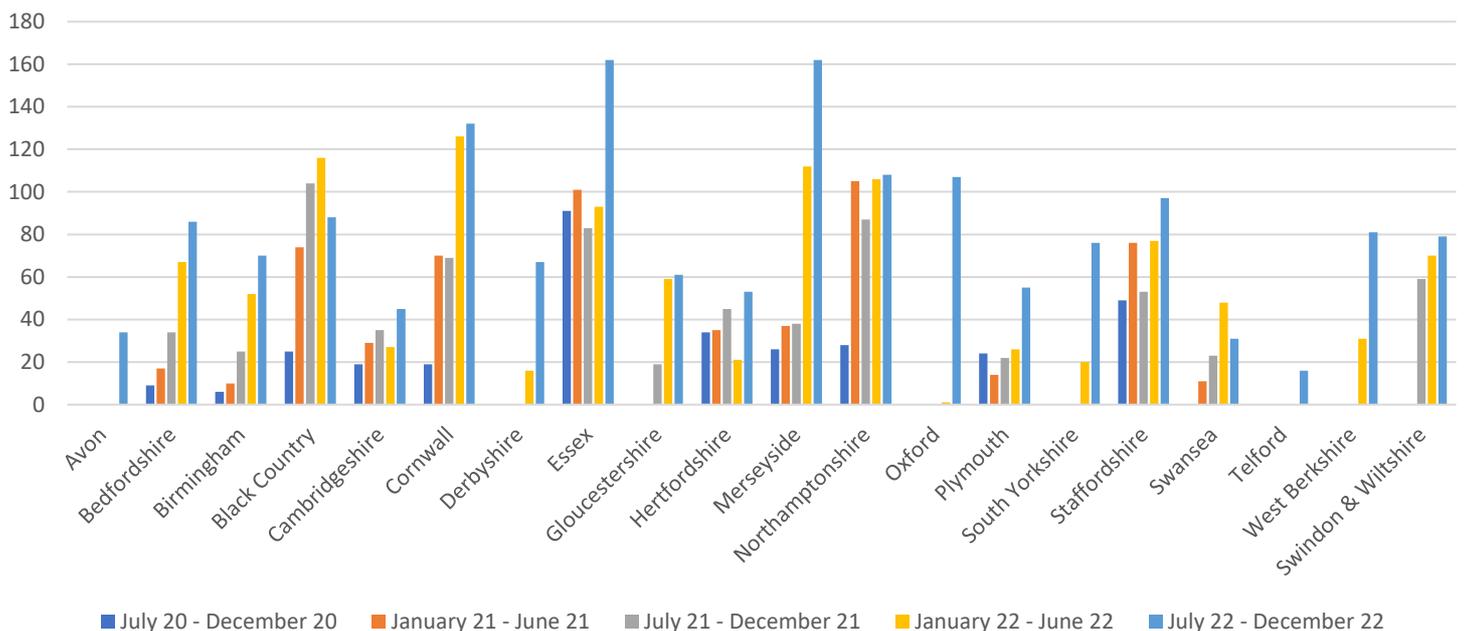


Figure 1.4 shows the client status from the 4,609 cases overall that were provided.

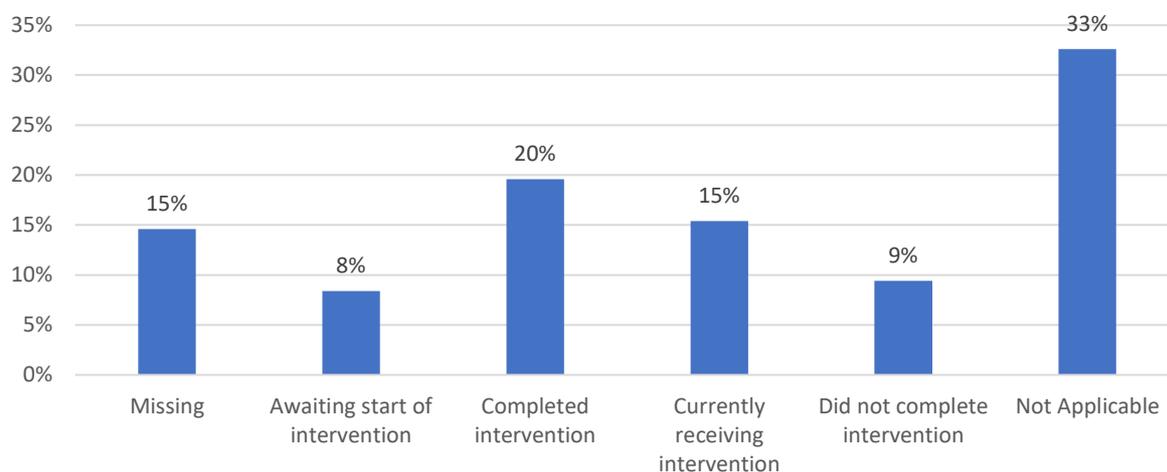
It is important to note that data in this report were processed irrespective of client status, however, it restricts the accuracy in terms of numbers of people where interventions completed or not completed.

The aim of the report is to provide a high-level overview across the participating sites, to complement local reports provided to each local CSTR programme Board to support local programme development, evidence and understanding of identified patterns across the wider dataset.

The report is structured into the following sections:

2. Assessment and Demographic Overview
3. Sentencing
4. Intervention Start
5. Engagement
6. Outcomes and Change
7. Observations

**Fig 1.4 Client Status, 20 Sites, Jul 20 - Jan 23**



## 2. Assessment and Demographic Overview

This section provides an overview of assessment and demographic data between July 2020 and January 2023. Figure 2.1 shows that the number of assessments has a positive trend over time when controlling for the start dates of different programmes.

Fig 2.1 Assessments by Month per Site (based on evaluation start date), 20 Sites, Jul 20 - Jan 23

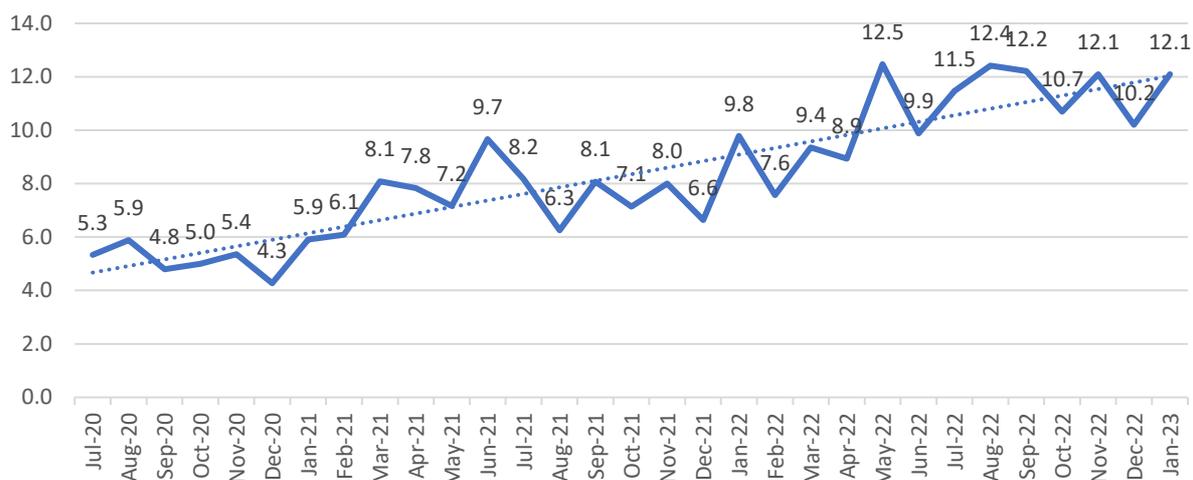
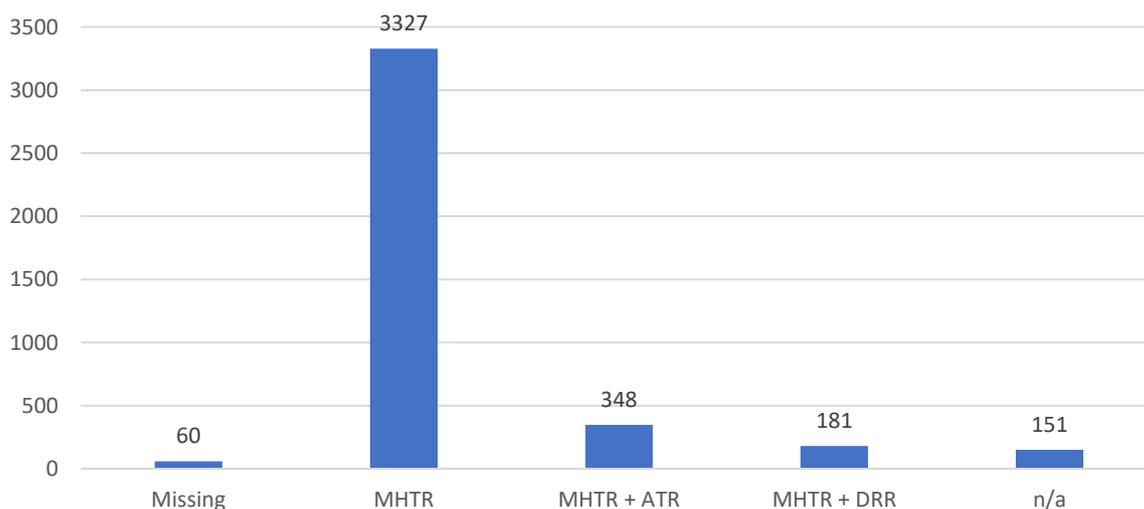


Figure 2.2 shows that most (82%) assessments were completed for MHTR only, with 9% and 4% being assessed for MHTR & ATR or MHTR & DRR respectively. It should be noted, however, MHTR practitioners may not be aware if an assessment has taken place for ATR or DRR. Therefore, these figures should be treated with caution.

Fig 2.2 Assessment Type, 20 Sites, Jul 20 - Jan 23



The process and tools used to assess suitability for an MHTR differ between sites. This variability presents a challenge at interpreting effectiveness of assessment processes and later outcomes, though will allow for comparison between areas.

Table 2.1: Assessment Tool by Site

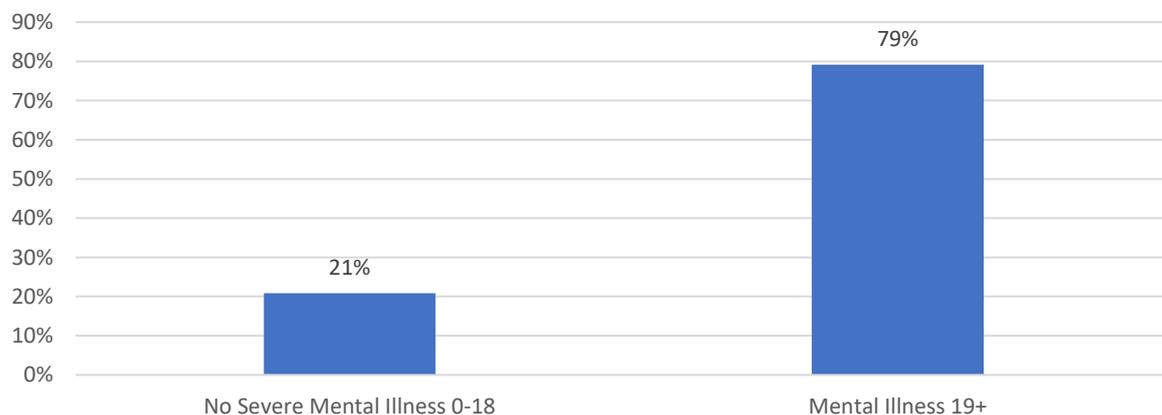
Site	K6	K10	CORE-10	CORE-34	GAD-7	PHQ-9
Avon						
Bedfordshire						
Birmingham						
Black Country						
Cambridgeshire						
Cornwall						
Derbyshire						
Essex						
Gloucestershire						
Hertfordshire						
Merseyside						
Northamptonshire						
Oxford						
Plymouth						
South Yorkshire						
Staffordshire						
Swansea						
Telford						
West Berkshire						
Swindon & Wiltshire						

**K6 Scores**

The K6 was used in 1 site. The K6 (Kessler-6) is a non-specific distress scale that screens for severe mental illness, containing 6 items. Score range from 6 – 30, with higher scores indicating a greater tendency towards mental illness. Score 19 and over indicate mental distress.

Of 479 individuals assessed using K6, 381 (79%) were found to be in mental distress.

Fig 2.3 Assessment - K6, 1 Site



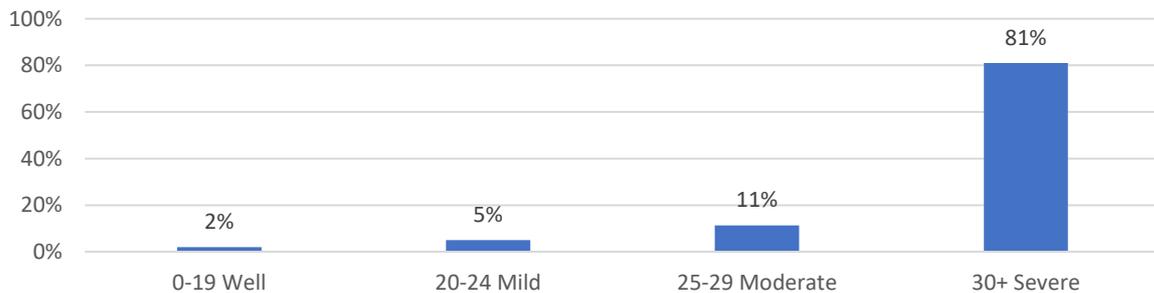
### **K10 Scores**

The K10 was used in 10 sites. The K10 (Kessler-10) is a self-report 10-item questionnaire to assess anxiety and depressive symptoms in the previous 4 weeks. Scores range from 10-50 and is interpreted in the following levels:

- Scores under 20 are likely to be well;
- Scores 20-24 are likely to have a mild mental disorder;
- Scores 25-29 are likely to have a moderate mental disorder; and
- Scores over 30 are likely to have a severe mental disorder.

Of 959 individuals (Avon: 45; Beds: 6; Blacks: 20; Cambs: 167; Corn: 287; Herts: 57; Oxfo: 113; Plym: 55; West Berk: 105; Swin/Wilt: 104) assessed using K10, most individuals were identified as being in severe level of distress.

**Fig 2.4 Assessment - K10, 10 Sites**



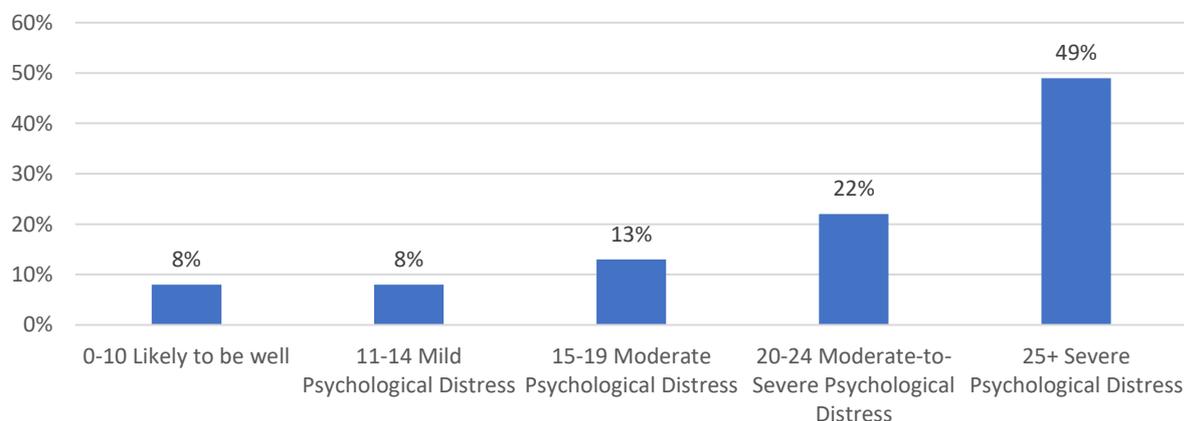
### **CORE-10 Scores**

The CORE-10 is a shortened version of the CORE-34, with items covering anxiety, depression, trauma, physical problems, functioning and risk to self. Higher scores indicate higher levels of general psychological distress. Scores range from 0 – 40 and is interpreted in the following levels:

- Scores under 10 are likely to be well;
- Scores 11-14 are likely to have mild psychological distress;
- Scores 15-19 are likely to have moderate psychological distress;
- Scores 20-24 are likely to have moderate-to-severe psychological distress; and
- Scores over 25 are likely to have severe psychological distress.

Of 989 individuals (Birm: 88; BC: 65; Corn: 382; Glou: 17; Mers: 37; Staff: 298; Telf: 15; Swin/Wilt: 87) assessed using CORE-10, most individuals were identified as being in severe psychological distress.

**Fig 2.5 Assessment - CORE-10, 8 Sites**



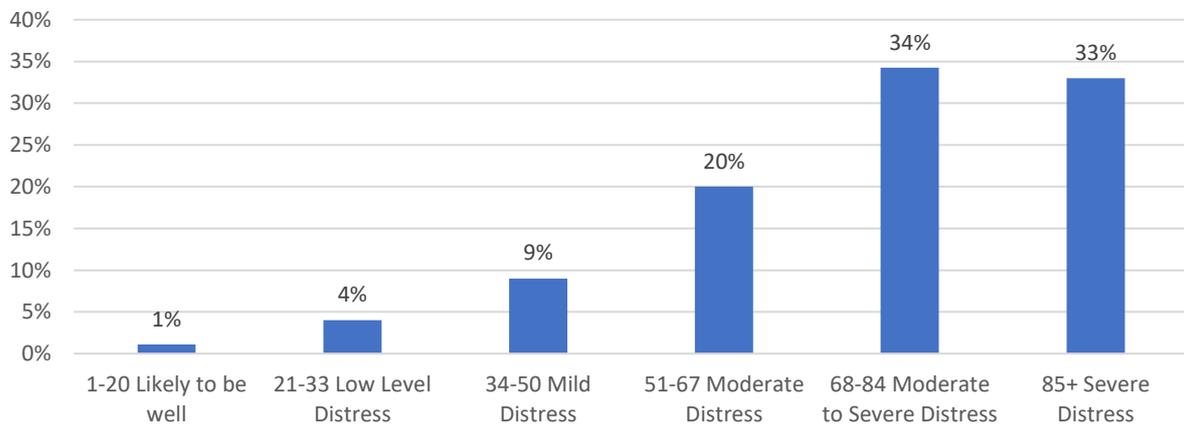
### CORE-34

The CORE-34 is a generic measure of psychological distress across four domains: wellbeing (4 items); problems/symptoms (12 items); life functioning (12 items) and risk (6 items). Higher scores indicate higher levels of general psychological distress. Scores can be interpreted into the following levels:

- Scores 1-20 are likely to be healthy;
- Scores 21-33 are likely to be low level psychological distress;
- Scores 34-50 are likely to be mild psychological distress;
- Scores 51-67 are likely to be moderate psychological distress;
- Scores 68-84 are likely to be moderate-to-severe psychological distress; and
- Score 85+ are likely to be severe psychological distress.

Of 644 individuals (Avon: 43; BC: 7; Derb: 53; Glou: 80; Mers: 14; North: 115; Plym: 1; South York: 55; Swan: 113; Swin/Wilt: 163) assessed using CORE-34, 79 (51%) were identified as being in mental distress, with 111 in severe mental distress.

Fig 2.6 Assessment Outcome - CORE-34, 10 Sites



In total following assessment, 3103 (76%) individuals were identified as being suitable for MHTR intervention.

Fig 2.7a Assessment - Suitability, 20 Sites, Jul 20 - Jan 23

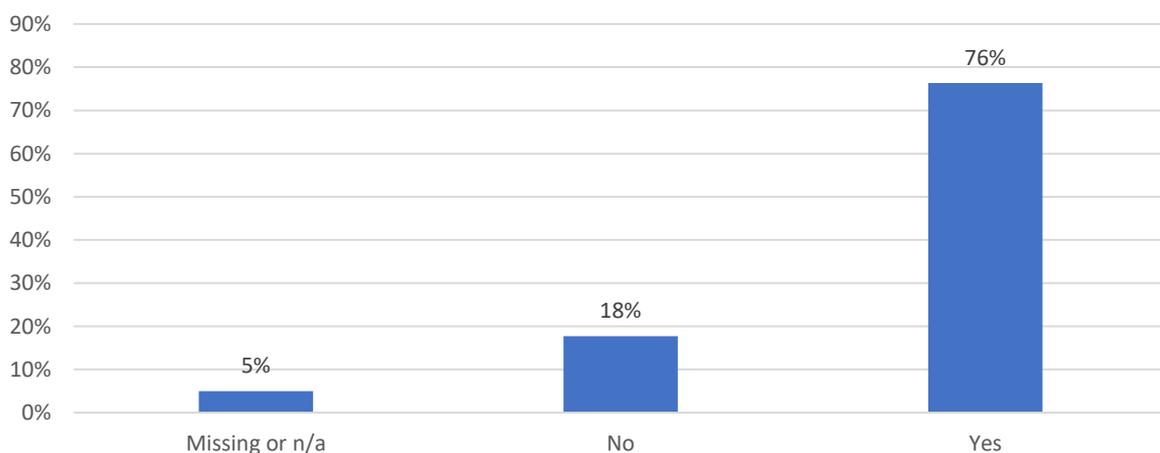
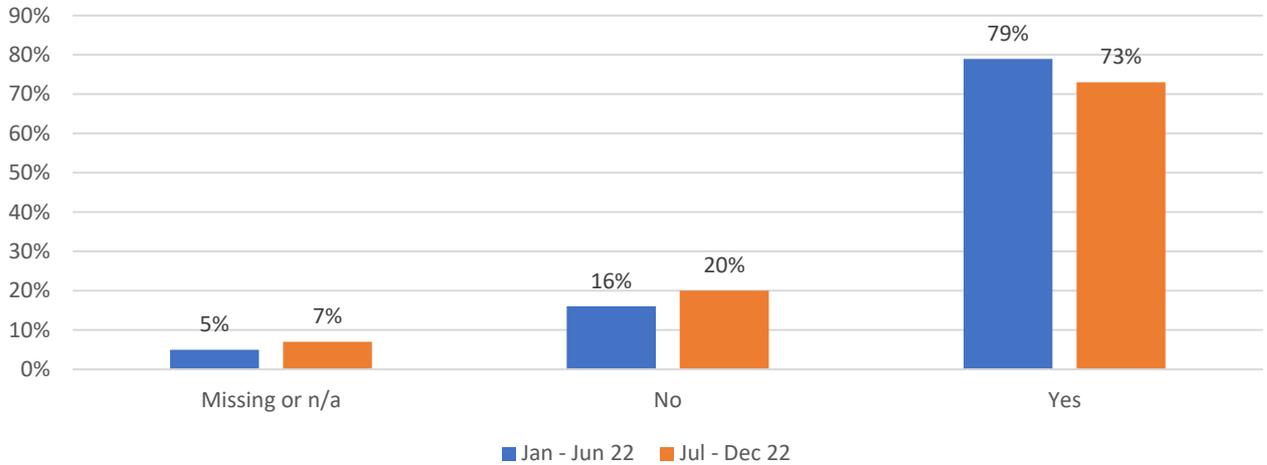
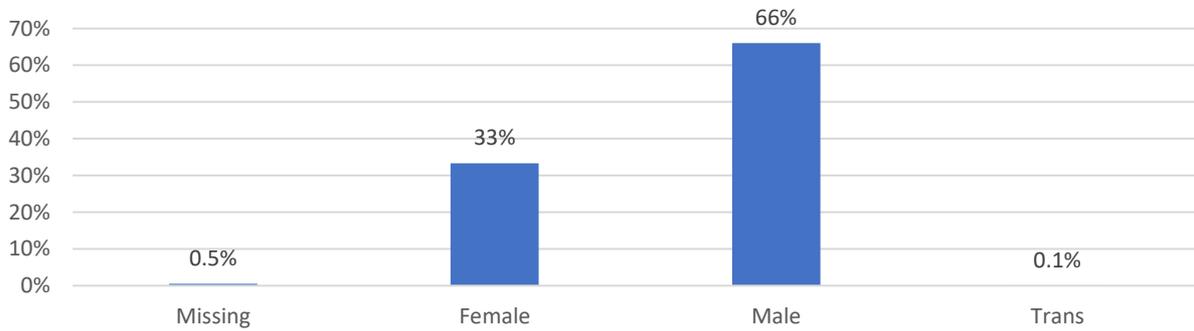


Fig 2.7b Assessment - Suitability, 20 Sites, Jan 22 - Dec 22



Demographic data presented in this Chapter are based on the 4,067 assessments completed. Figure 2.8a illustrates gender of those assessed, showing higher proportions of men than women.

Fig 2.8a Assessments - Gender, 20 Sites, Jul 20 - Jan 23



It is noted, however, these are differences when looking at the results at a local level, with some sites focussing on female only pathways.

Fig 2.8b Assessments - Gender, 18 Sites, Jul 20 - Jan 23  
(Excluding female only sites)

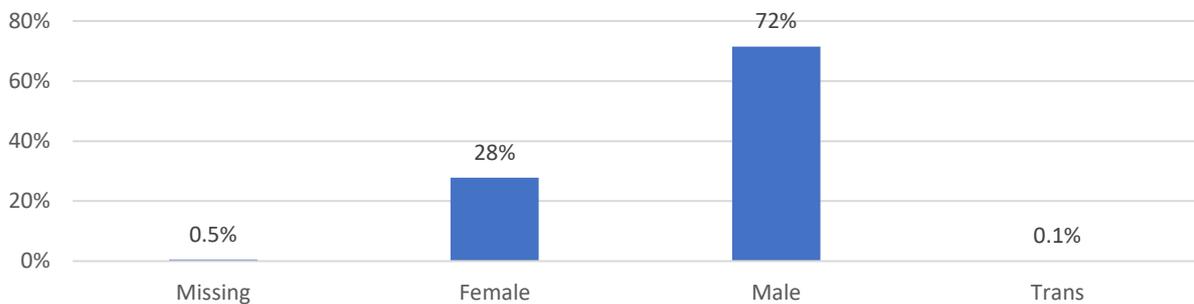


Fig 2.8c Assessments - Gender, 20 Sites, 6 monthly

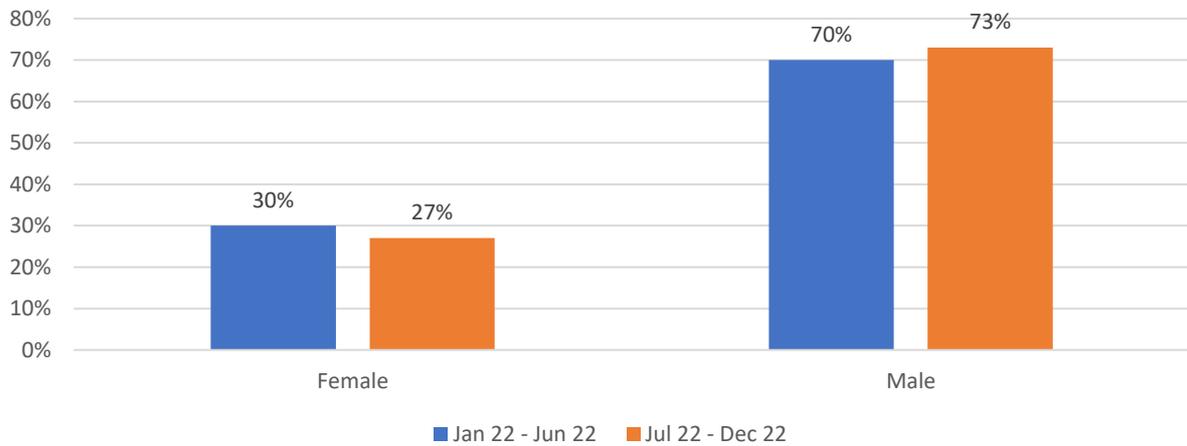


Figure 2.9 shows that most individuals assessed were aged between 25 and 34 years, followed by 35 – 44 years.

Fig 2.9a Assessments - Age, 20 Sites, Jul 20 - Jan 23

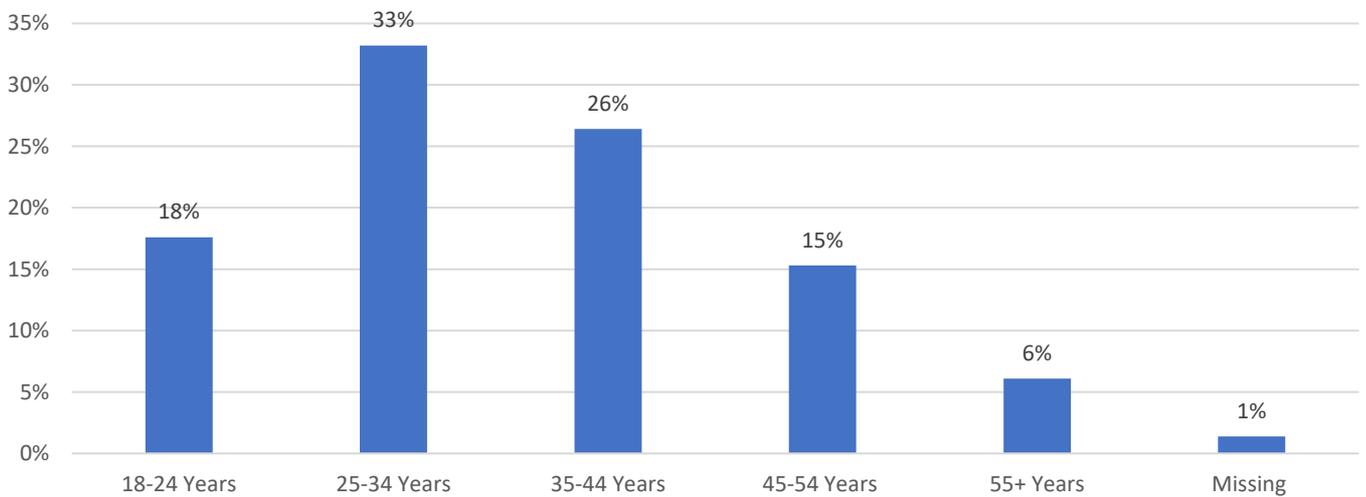


Fig 2.9b Assessments - Age, 20 Sites, 6 monthly

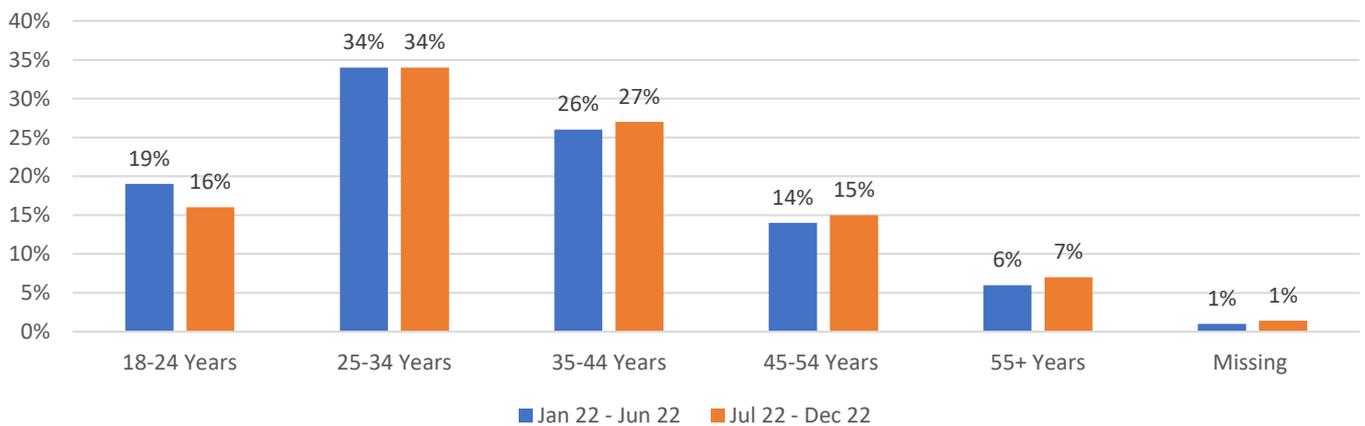


Figure 2.10 shows that most individuals assessed were White (77%). 8% of those assessed were from Asian, Black and Mixed ethnic groups.

Fig 2.10a Assessments - Ethnicity, Jul 20 - Jan 22, 20 Sites

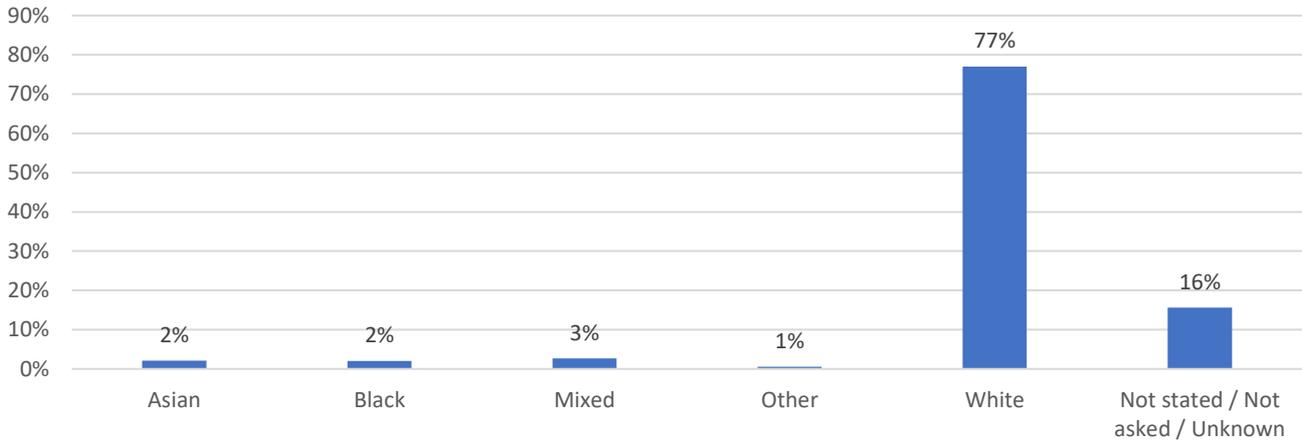
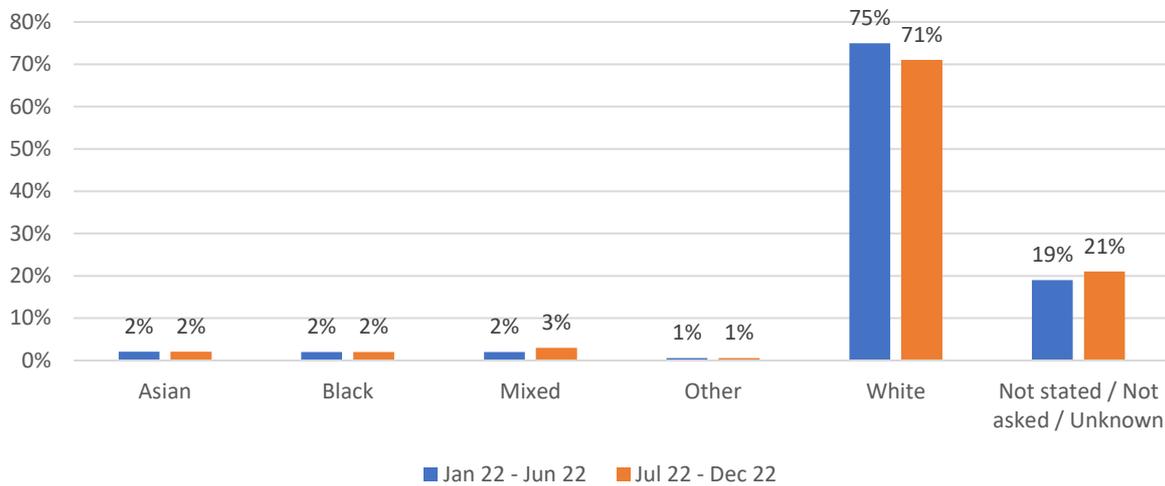
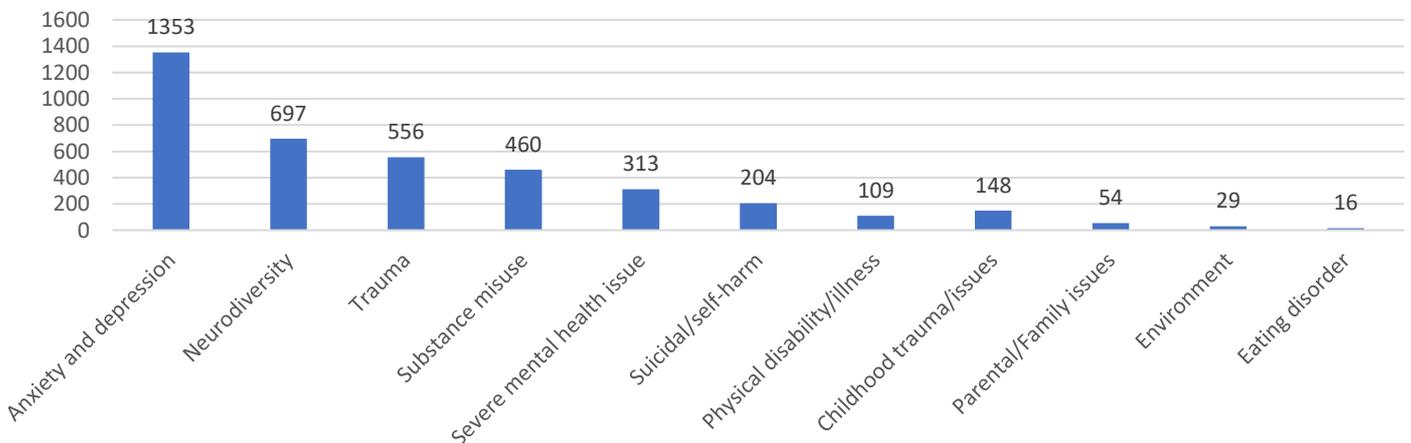


Fig 2.10b Assessments - Ethnicity, 6 monthly, 20 Sites



There were a range of vulnerabilities identified during the assessment process in 15 sites, illustrating the diversity and complexity of needs, illustrated in Figure 2.11. Additional data surrounding vulnerabilities was collected through disabilities and neuro developmental disorder data. In total, 3,939 vulnerabilities were identified in the assessment, with the most frequent being anxiety and depression (1353), and neurodiversity (697). It should be noted multiple vulnerabilities may be noted for individuals.

Fig 2.11 Assessment - Vulnerabilities, 20 Sites, Jul 20 - Jan 23



Within the files, 74 (2%) individuals were identified as meeting perinatal criteria, with 38 being pregnant at the point of assessment. Of those assessed, 226 (6%) were sole carers and 76 (2%) had previously served in the armed forces.

Figure 2.12 illustrates the documented Primary Offence Type of individuals assessed, showing that the most frequent offence type was violence against the person, representing 30% of primary offences. This was followed by motoring offences.

Fig 2.12 Assessments - Offence Types, Jul 20 - Jan 23, 20 Sites

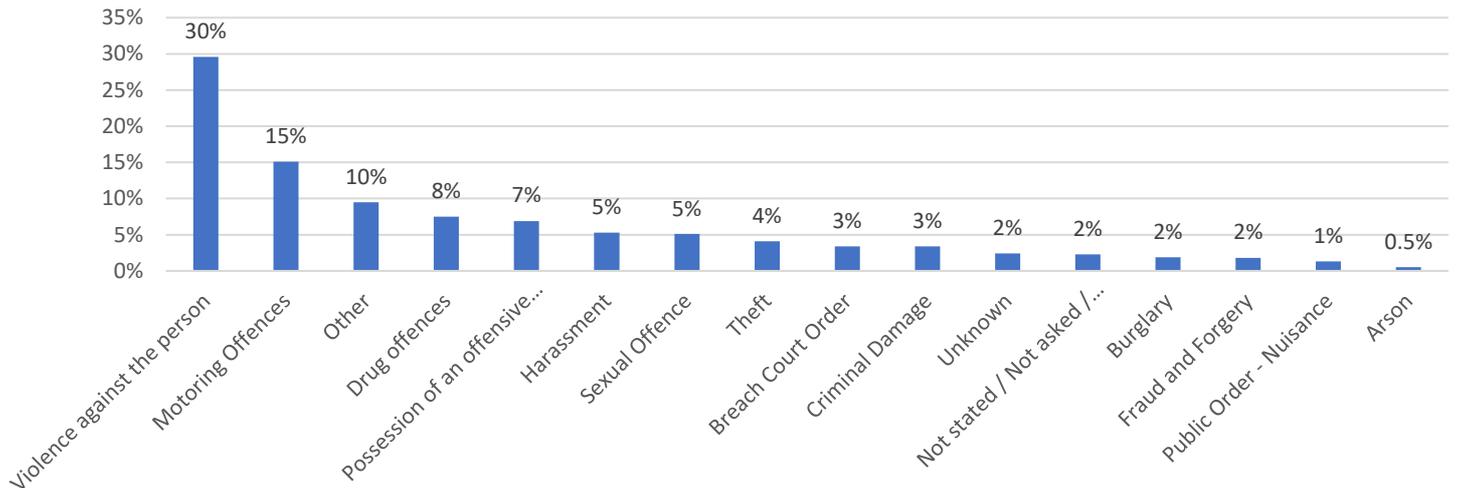
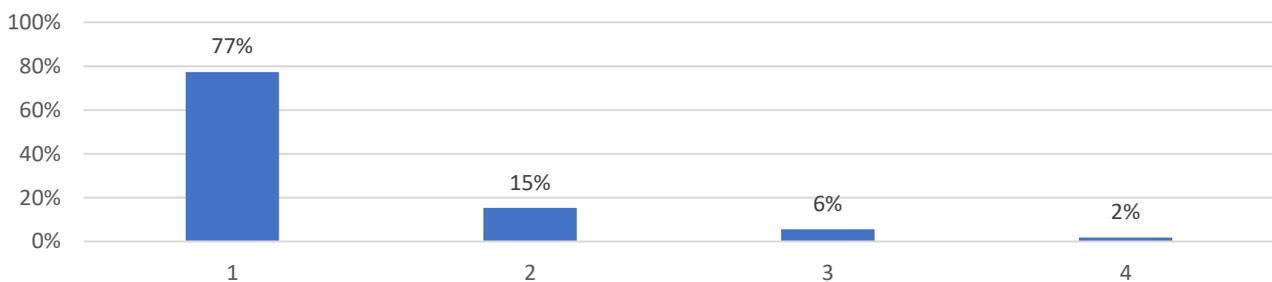


Figure 2.13 shows that most individuals had only one offence recorded at point of assessment within the file.

Fig 2.13 Number of Current Offences per Person, Jul 20 - Jan 23, 20 Sites

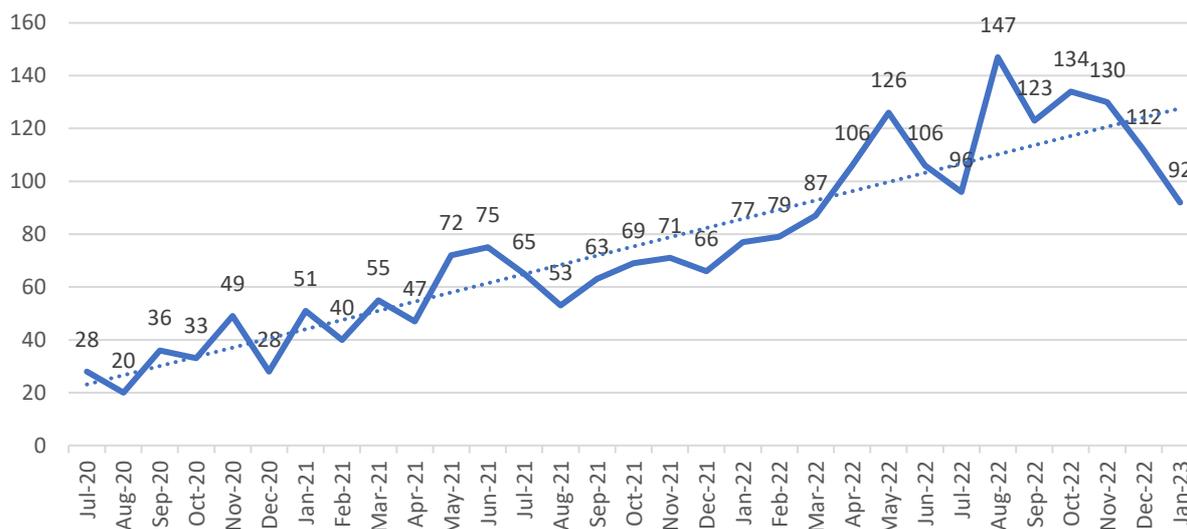


### 3. Sentencing

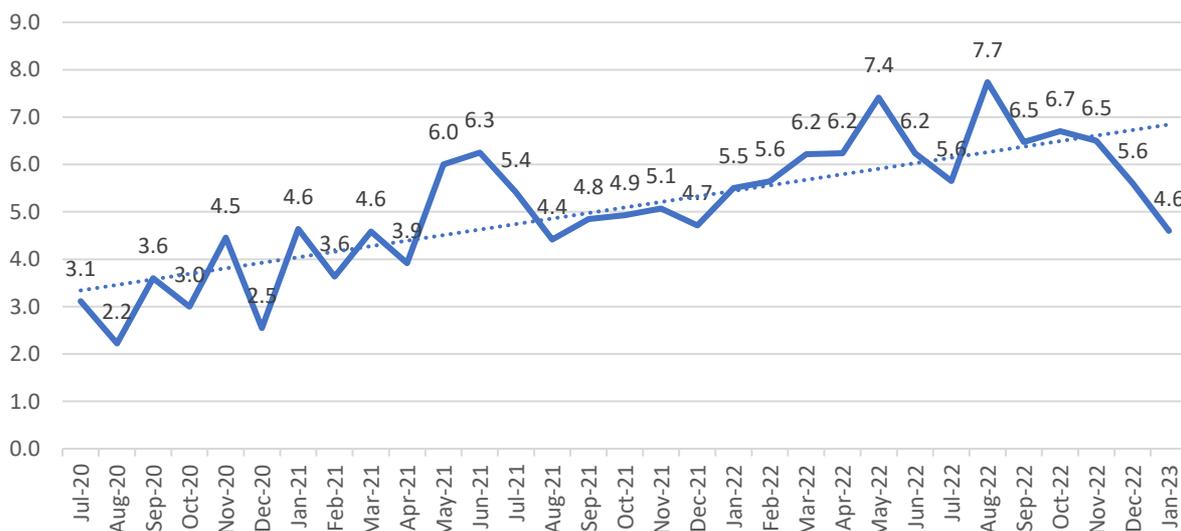
This section relates cases where a sentencing outcome was provided (n = 2,820).

Figure 3.1a shows sentence date by month, illustrating an increase in sentences over time. Figure 3.1b shows the average number of sentences per month per site.

**Fig 3.1a Sentence Date by Month for those sentenced to MHTR or Dual Orders, 20 Sites, Jul 20 - Jan 23**



**Fig 3.1b Sentence Date by Month for those sentenced to an MHTR or Dual Orders, 20 Sites, Jul 20 - Jan 23 (Divided by number of Sites)**



The gap between assessment and sentencing for most cases was within one month, with 332 (11%) sentenced on the same day. Less than 6% of cases had a gap between assessment and sentencing over 3 months.

Fig 3.2 Assessment to Sentence Gap (Days) - 6-Monthly

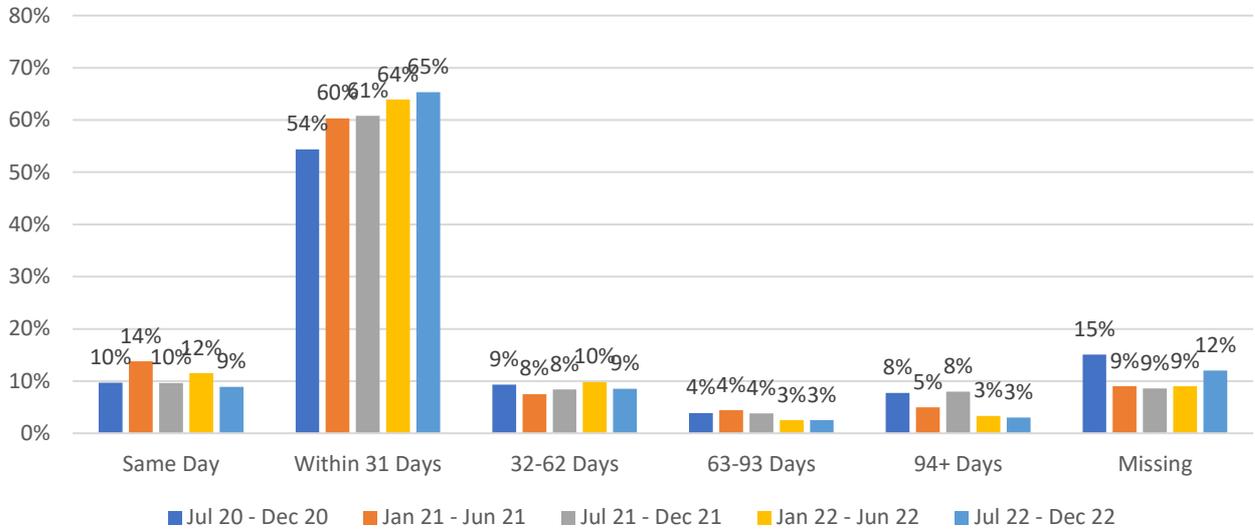


Fig 3.3 Assessment to Sentence Gap (Days), 20 Sites, 6 monthly

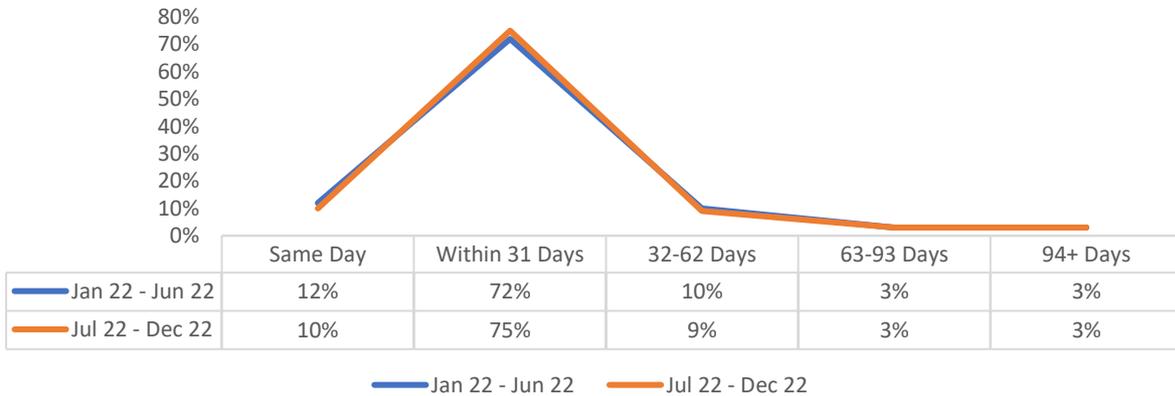


Figure 3.4a shows cases where individuals were considered suitable for an MHTR (n = 3,103). Most individuals assessed and recommended as suitable for an MHTR were sentenced to an MHTR (69%). There were 11% of cases where the recommendation for an MHTR was declined. Missing cases and N/A include cases where sentence has not yet been passed. When excluding missing cases and N/A, the proportion of sentence outcomes which included an MHTR or Combined Order was 88%.

Fig 3.4a Sentence Outcome, 20 Sites, Jul 20 - Jan 23

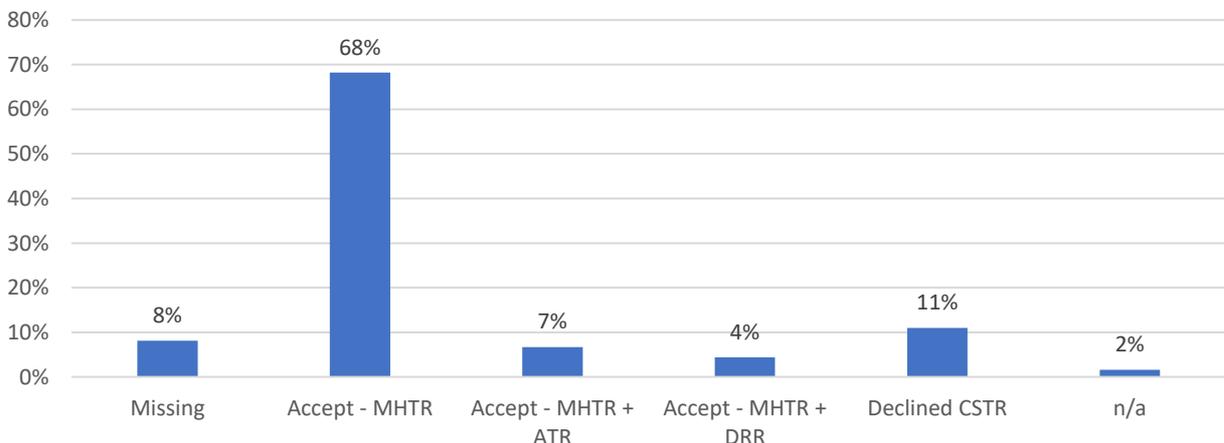


Fig 3.4b Sentence Outcome, 20 Sites, Jul 20 - Jan 23

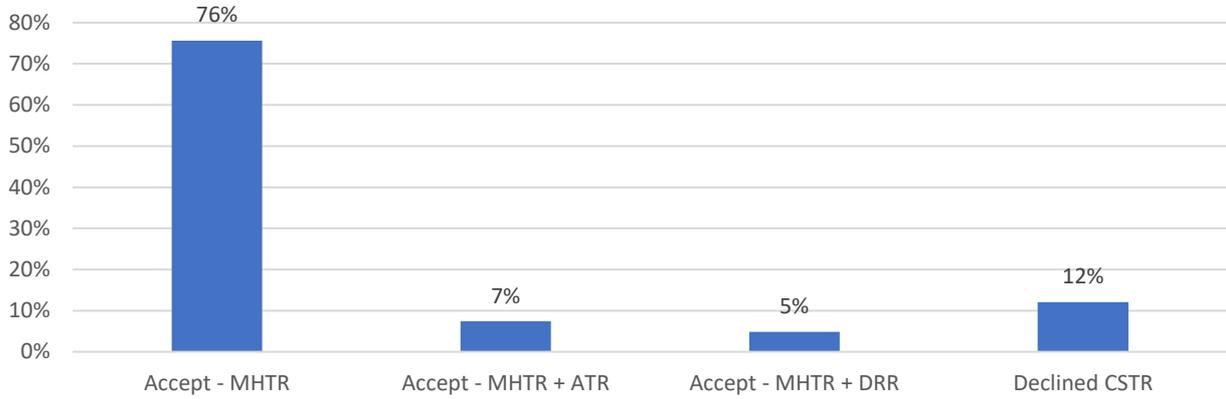


Fig 3.4c Sentence Outcome, 20 Sites, 6 Monthly

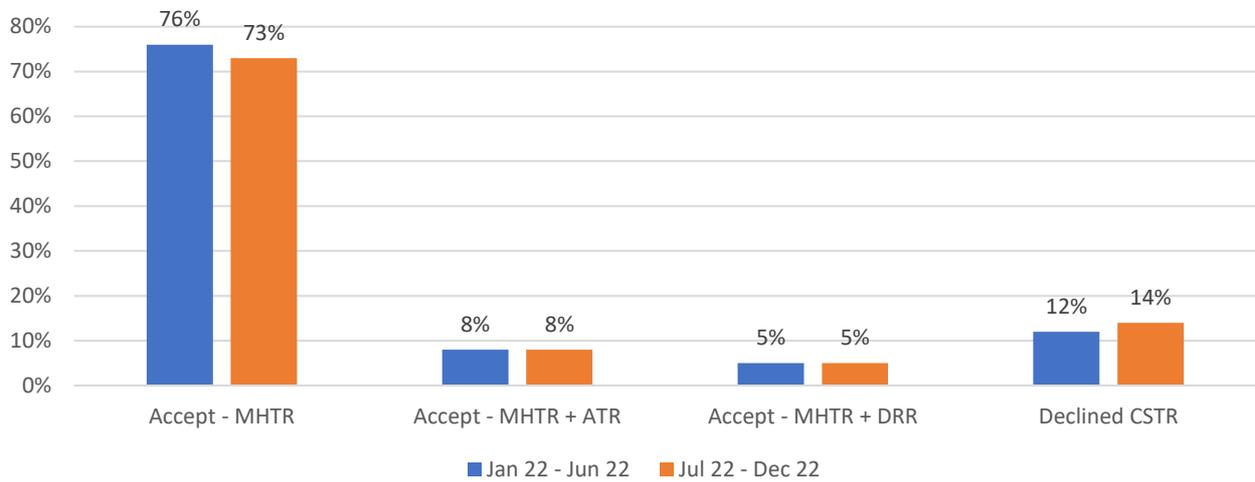


Fig 3.5 Percentage of those found suitable who are then Sentenced to MHTR or Combined Order, 3 monthly, 20 sites, Jul 20 - Dec 22



In the 360 cases where MHTR was declined, Figure 3.6a shows what sentences were passed. Most frequently, (53%) custodial sentences were passed where MHTR was recommended.

Figure 3.6a If CSTR declined, what was outcome?

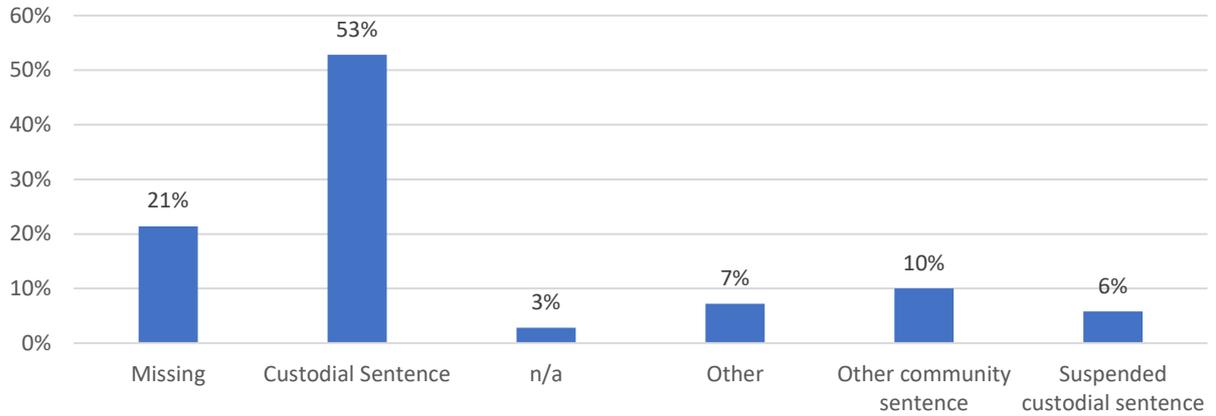
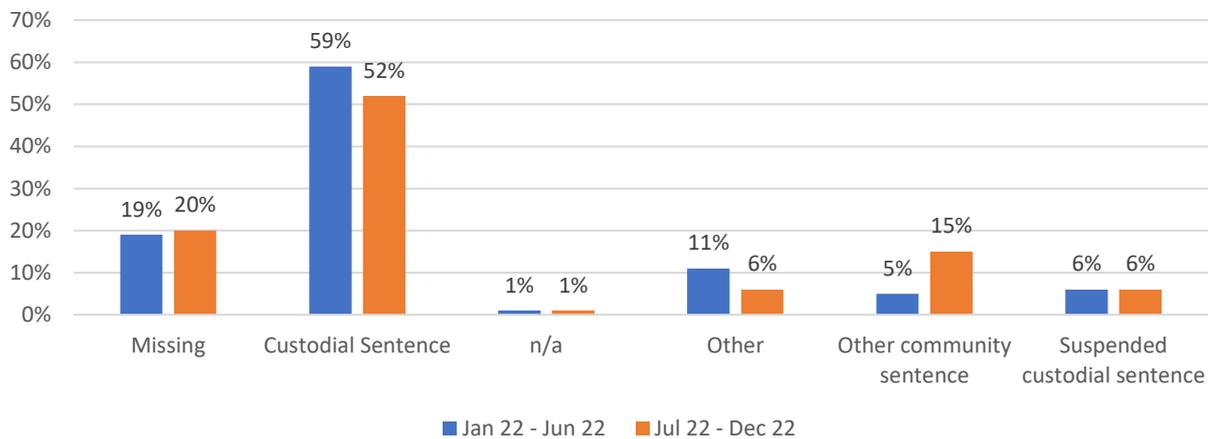


Figure 3.6b If CSTR declined, what was outcome? Six monthly



## 4. Start of Intervention

This section provides an overview of data captured at the start of the intervention. There were 1,854 cases with an intervention start date. Figure 4.1 shows the client status of individuals with a start date.

Fig 4.1 Client Status for individuals with a start date, 20 Sites, Jul 20 - Jan 23

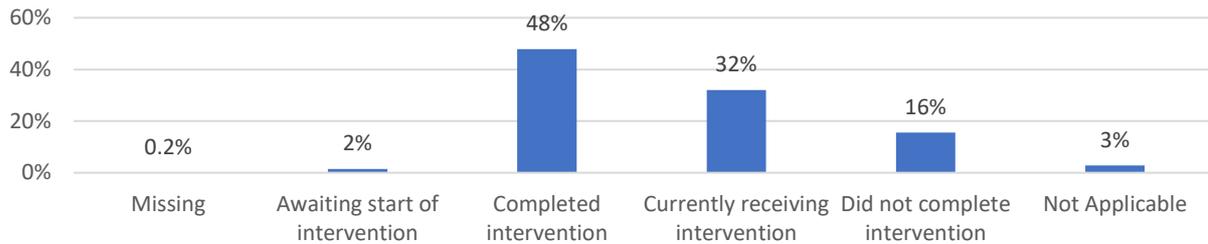


Fig 4.2a shows the number of interventions starting each month has risen over time, peaking in January 2023. Given that new sites joined the programme at later date, Figure 4.2b shows the average number of interventions per month divided by the number of sites contributing data to the evaluation at that given time.

Fig 4.2a Intervention Start Dates, 20 Sites, Jul 20 - Jan 23

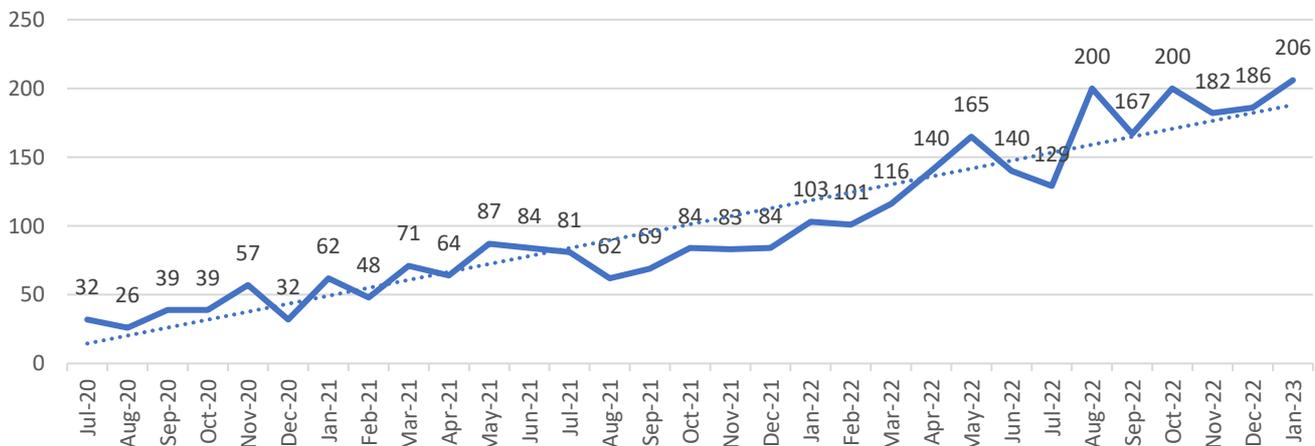


Fig 4.2b Intervention Start Dates, 20 Sites, Jul 20 - Jan 23  
(Divided by number of Sites)

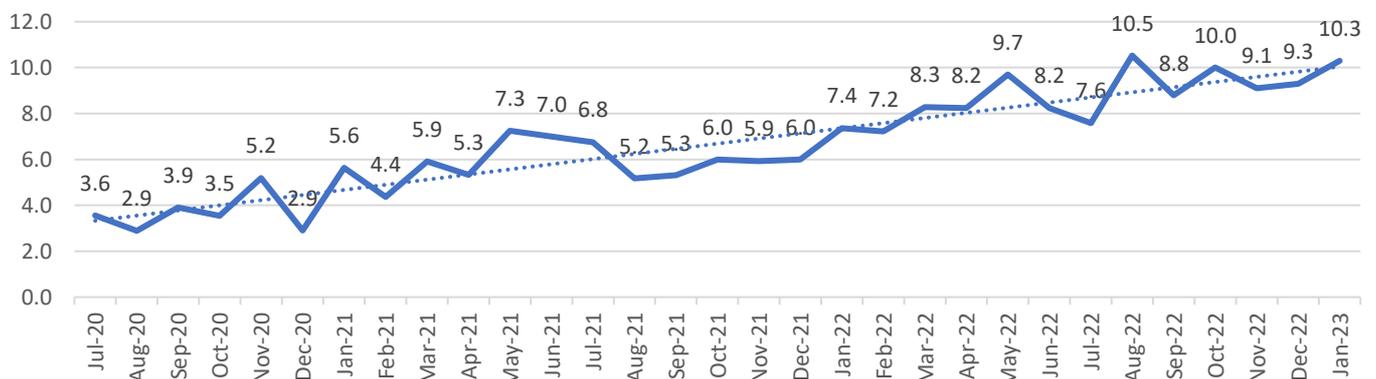
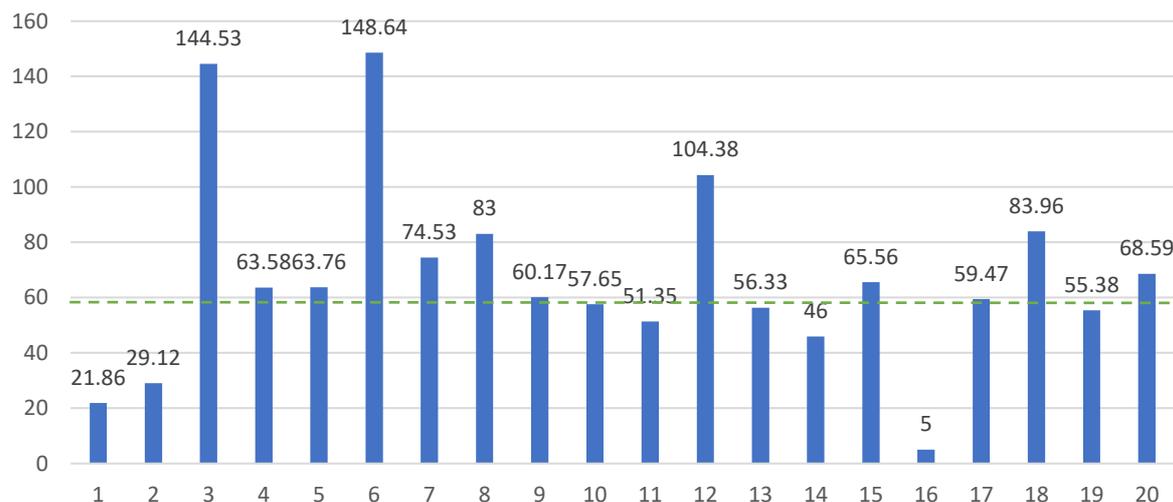
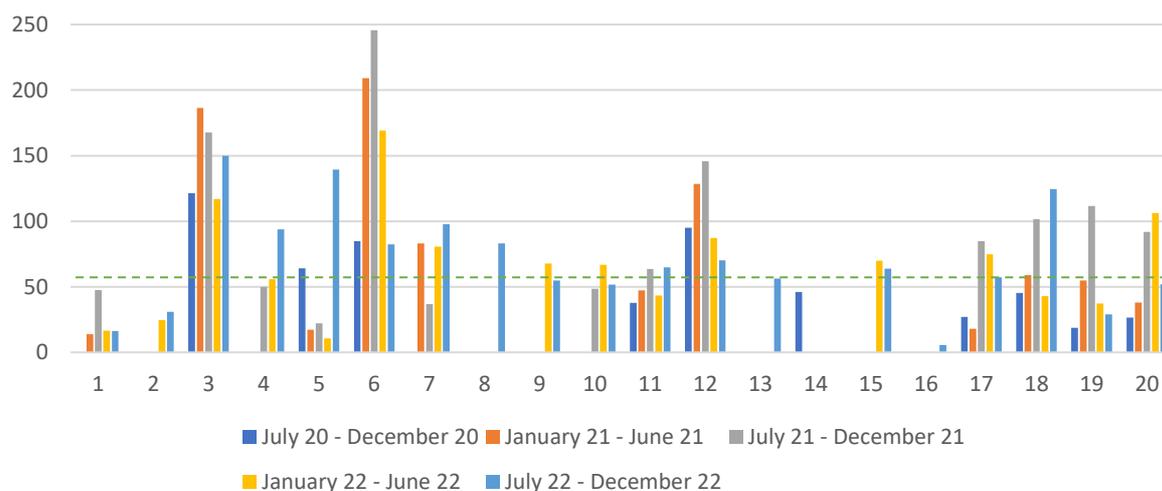


Figure 5.3a shows the mean number of days between sentence and start date where the dotted green line illustrated the 8-week cut off after which outcomes seem to be affected by this gap.

**Fig 4.3a Mean number of days between sentence and start date for those sentenced to an MHTR only, 20 site, Jul 20 - Jan 23**



**Fig 4.3b Mean number of days between sentence and start date for those sentenced to an MHTR only, per site, 6 monthly, 20 Sites, Jul 20 - Dec 22**



In the first session, individuals complete psychometric measures to assess severity of distress, including: CORE-34, GAD-7, and PHQ-9.

### CORE-34

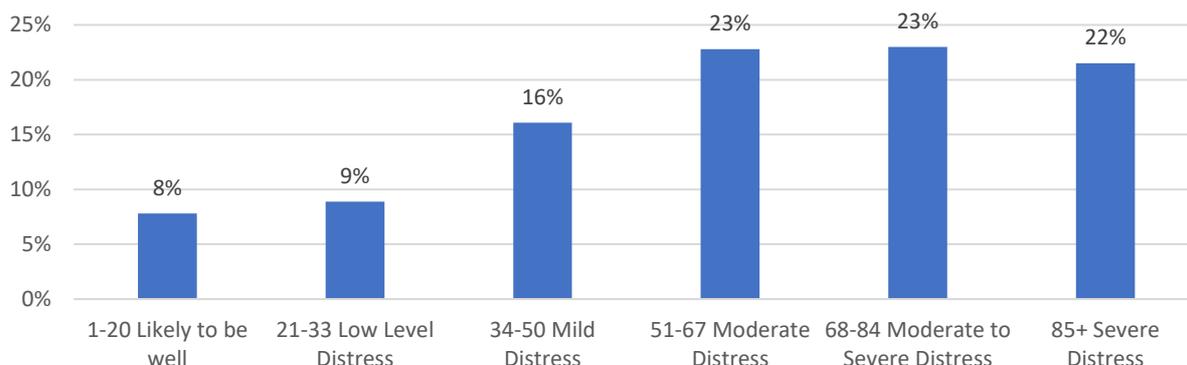
There were 1106 individuals who were assessed at the start of the intervention using CORE-34. Scores can be interpreted into the following levels:

- Scores 1-20 are likely to be healthy;
- Scores 21-33 are likely to be low level psychological distress;
- Scores 34-50 are likely to be mild psychological distress;
- Scores 51-67 are likely to be moderate psychological distress;

- Scores 68-84 are likely to be moderate-to-severe psychological distress; and
- Score 85+ are likely to be severe psychological distress.

The CORE-34 scores in the first session show how recorded distress scores show how most individuals were assessed to have moderate (23%) or moderate-to-severe distress (23%).

**Fig 4.4 Start of Intervention - CORE-34, 20 Sites, Jul 20 - Jan 23**



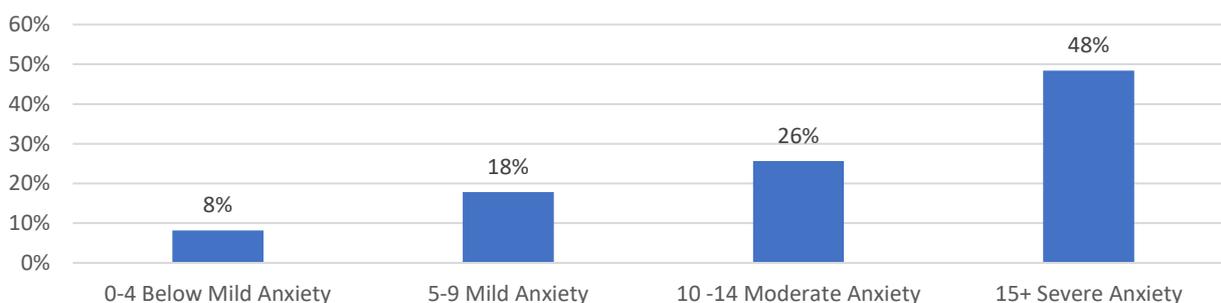
### **GAD-7**

The next measure is the GAD-7, which measures generalised anxiety disorder (GAD). Scores for each measure are assessed between 0-3 and overall results are interpreted into the following levels:

- Score 0-4 Below Mild Anxiety;
- Scores 5-9 Mild Anxiety;
- Scores 10-14 Moderate Anxiety; and
- Scores 15+ Severe Anxiety.

There were 1,521 individuals who were assessed at the start of the intervention using GAD-7. The GAD-7 scores in the first session show most individuals (48%) have severe anxiety.

**Figure 4.5 Start of Intervention - GAD-7, 20 Sites, Jul 20 - Jan 23**



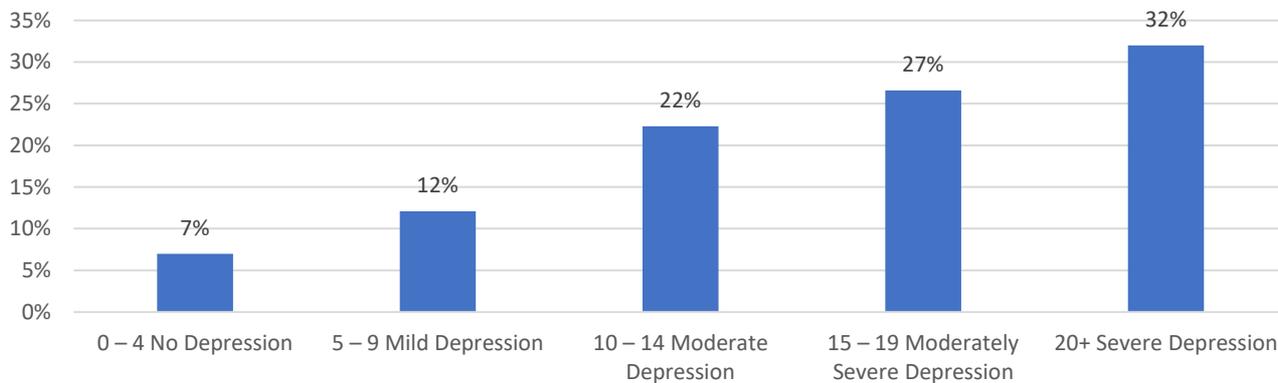
### **PHQ-9**

The next measure used was the PHQ-9 - Patient Health Questionnaire. The PHQ-9 is a brief depression severity measure, where scores for measure are assessed between 0 - 3, with higher scores indicating higher severity of depression. Scores are interpreted into the following levels:

- Scores 0 – 4 No Depression
- Scores 5 – 9 Mild Depression
- Scores 10 – 14 Moderate Depression
- Scores 15 – 19 Moderately Severe Depression
- Scores 20+ Severe Depression

There were 1,525 individuals assessed using PHQ-9 at the start of the intervention. Most individuals (32%) were assessed as having severe depression.

Figure 4.6 Start of Intervention - PHQ-9, 20 Sites, Jul 20 - Jan 23



## 5. Engagement

This section of the report focuses on the pathway and profiles of programme non-completers in comparison to programme completers to provide insight on the differences between these cohorts. The aim is to identify areas of improvement with regards to non-completer identification and pathways.

Out of the individuals that had a recorded start day for the treatment, 31 were recorded as having no or zero sessions. Of 825 remaining the average number of sessions attended was 8.6. 32% (472) of the sample had 12 sessions, 33% (484) had 6-11 sessions, 26% (385) had 1-5 sessions and 8% (118) had more than 12 sessions. This data should be treated with caution, as some of the cases included may have not successfully completed the intervention.

As previously stated, 2,482 individuals were sentenced to an MHTR, of which 1,854 had a start date of intervention. Of those who started 676 individuals were either awaiting to start the intervention, currently completing the intervention or their client status was not provided. This section will analyse the remaining 1,178 service users who were divided in program completers (888) and non-completers (290). Non completers were excluded from analysis if their lack of completion was due to moving out of area or being deceased.

Figures 5.1 and 5.2 show the percentage of individuals who did not complete the intervention during intervals of 6 and 3 months. This data evaluates only individuals who either have completed the program or have been categorised under non-completed status. It appears that there has been a peak in non completion rates between January 21 and June 21. It appears there is a slight increase in the likelihood of non-completing over time, this might be due to new sites entering the programme at later stages.

**Fig 5.1 Engagement - Percentage of non-completers 6 monthly, 20 Sites**

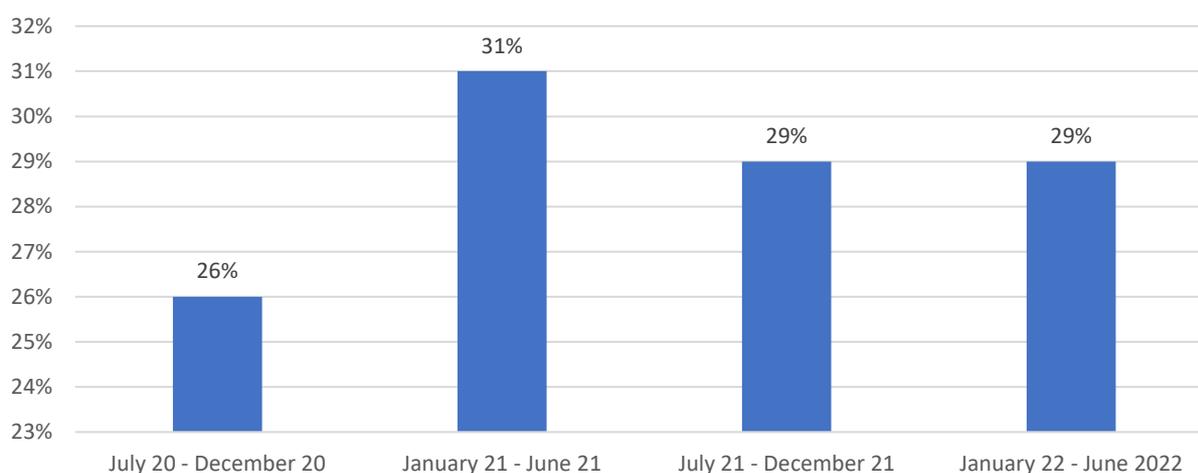


Fig 5.2 Engagement - Percentage of non-completers 3 monthly, 20 Sites

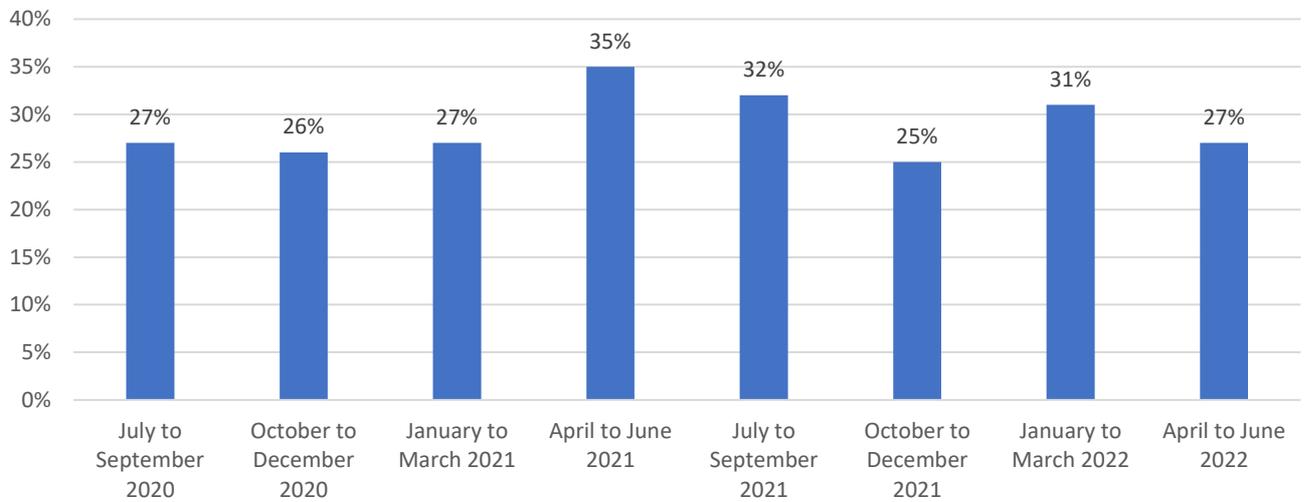
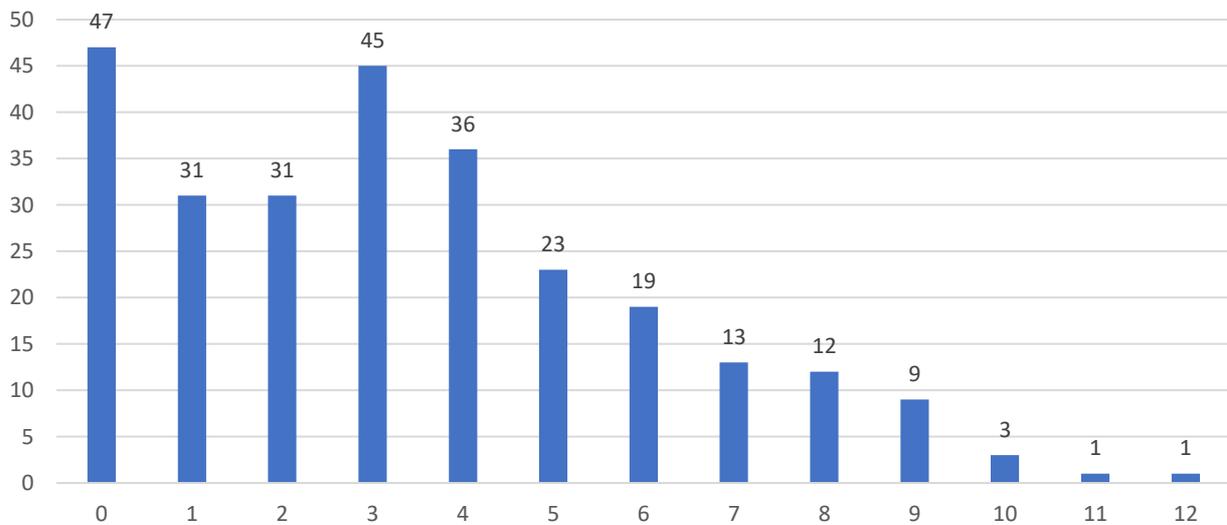


Figure 5.3 shows the number of attended sessions treatment non-completers attended. 224 non-completers attended one or more sessions suggesting the possibility that programme might have small benefits even to non-completers.

Fig 5.3 Engagement - Number of attended sessions for treatment non-completers, 20 Sites



Figures 5.4a and 5.4b show the mean number of days between assessment to start date between treatment completers and non-completers. It shows that the mean number of days is higher for treatment non-completers suggesting the period of time between assessment and sentence might affect likelihood of completing the intervention. 80% of the sample is within the grey boxes to exclude the effect of outliers.

Fig 5.4a Engagement - Mean number of days between assessment and start date (Grey = 80% of Cohort)

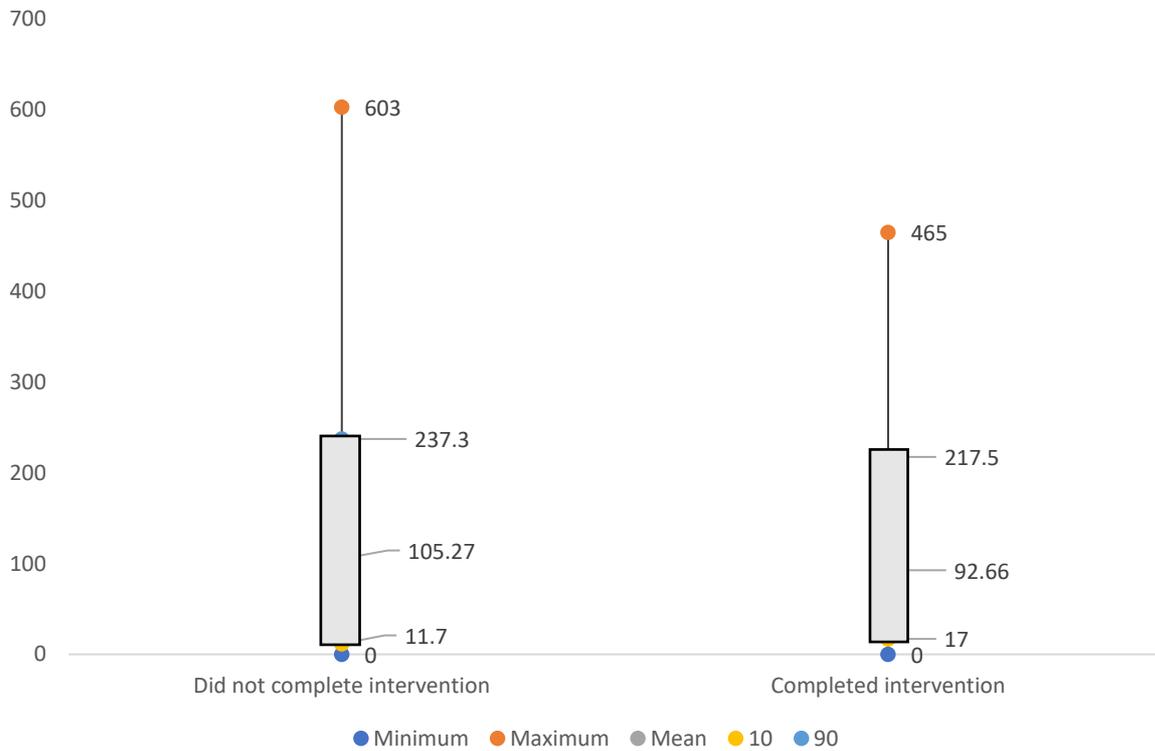
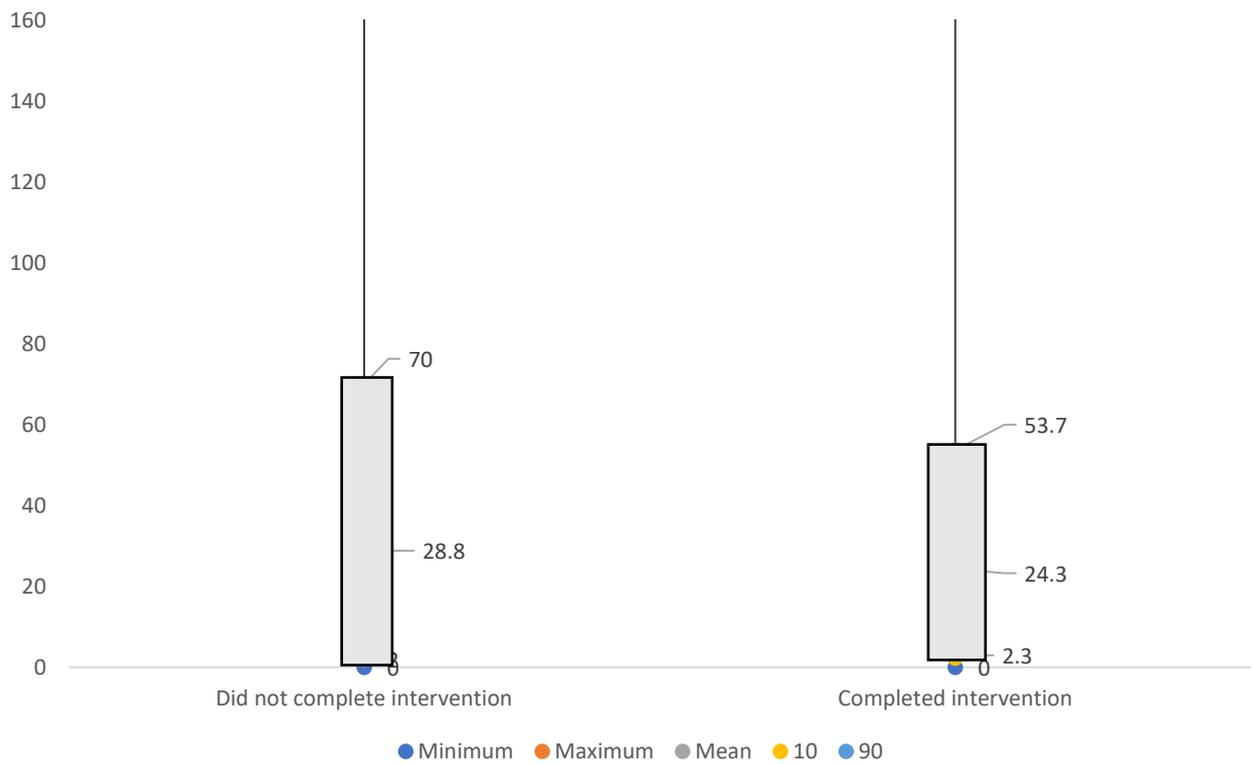


Fig 5.4b Engagement - Mean number of days between assessment and sentence (Grey = 80% of cohort)



Finally, Figure 5.5 below illustrates how individuals who did not complete the treatment (Mean=91) had on average a longer waiting time between their sentencing and the start date of intervention than those completing the treatment (Mean=71).

Fig 5.5 Engagement - Mean number of days between sentence and start date (Grey = 80% of Cohort)

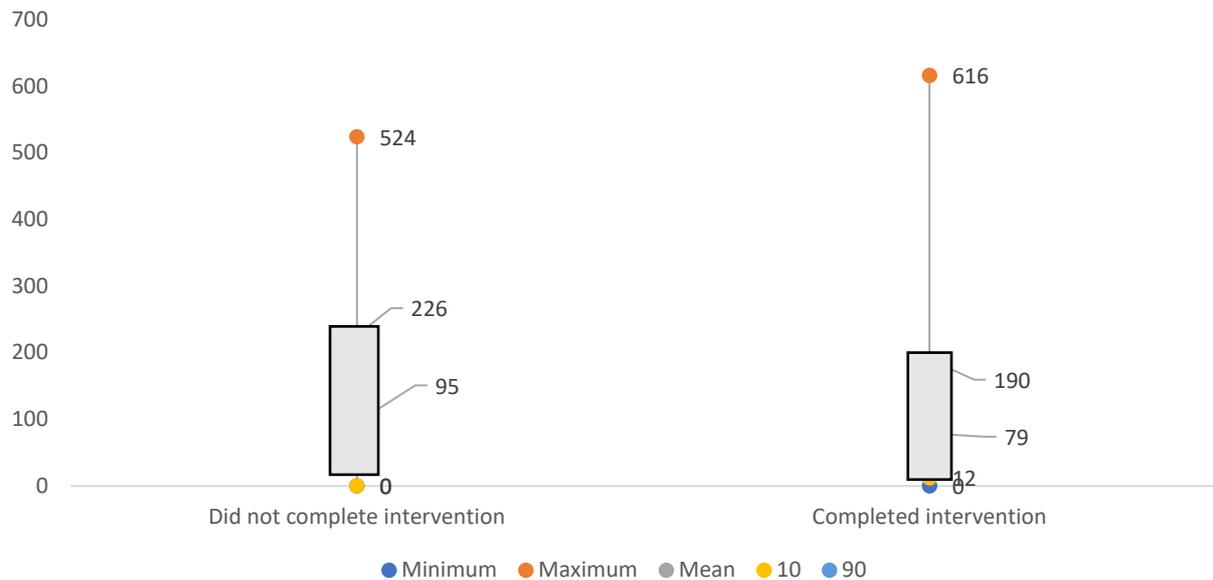
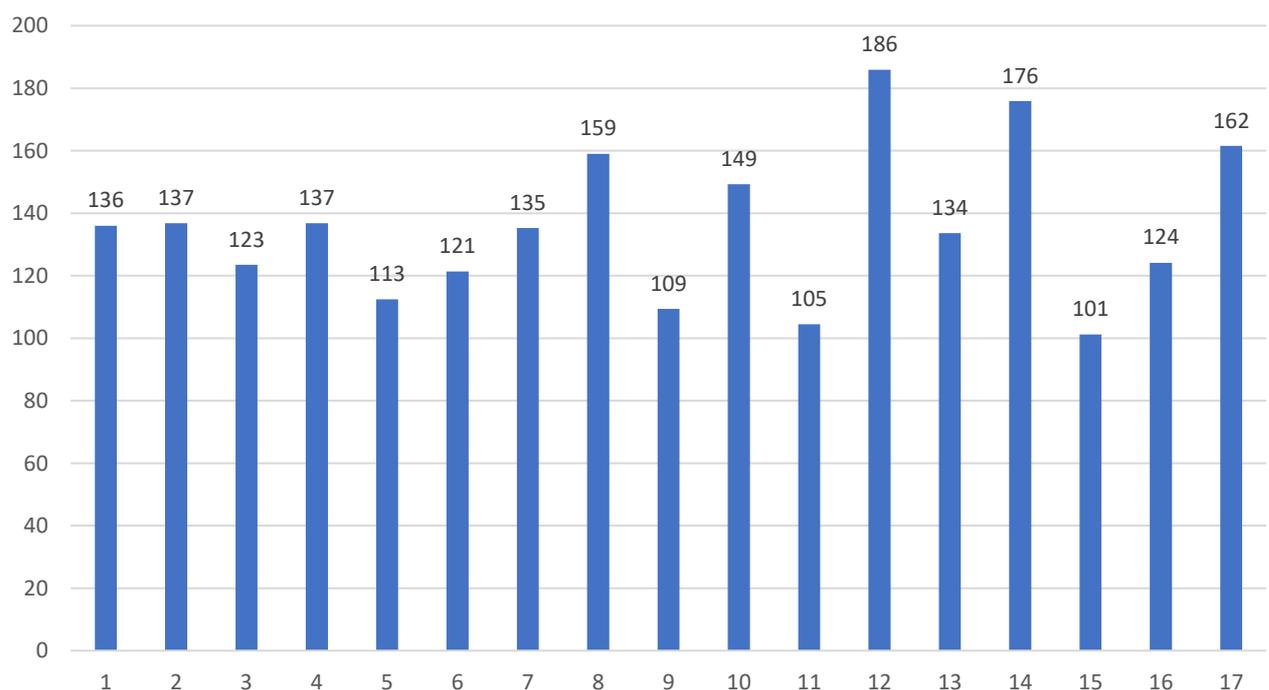


Figure 5.6 shows the mean length of intervention in days for treatment completers for all sites in the evaluation for whom that data was available. In order to attenuate the 'Covid' effect the analysis includes only data provided between January and December 2022.

Fig 5.6 Mean length of intervention for treatment completers only, 17 Sites, Jan - Dec 2022

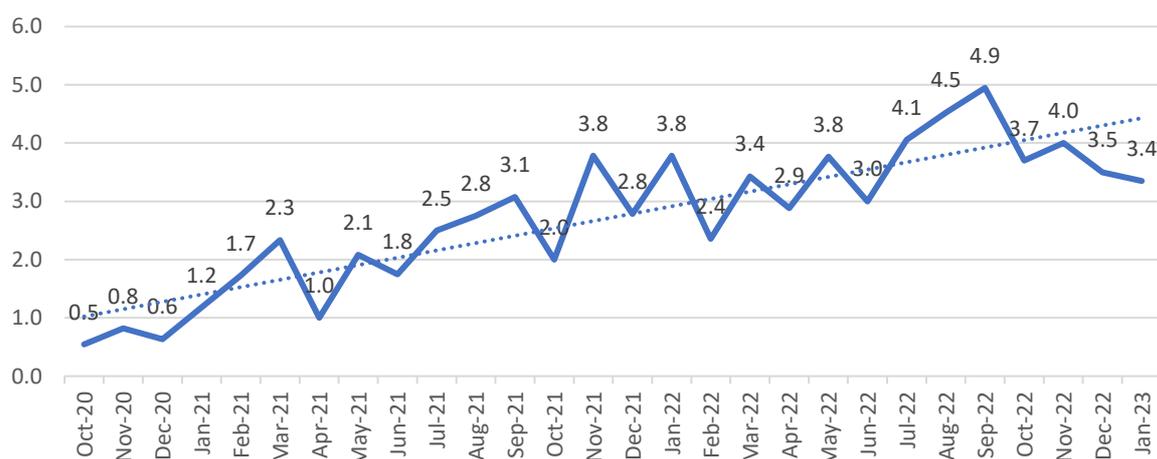


## 6. Outcomes and Change

This section concerns the recorded outcomes for individuals who completed the intervention and what change was measured in the psychometric measures. Data is not presented on individuals who did not complete the intervention, as levels of missing data restrict insight.

Overall, there were 1,212 individuals with a recorded end date of intervention across 20 sites. Of those 3 (0.2%) was recorded as 'Awaiting start of intervention', 854 (71%) are recorded as completing, 96 (8%) are recorded as 'currently receiving the intervention', 235 (19%) are recorded as 'not completing the intervention' and for 21 (2%) the client status is 'Not Applicable'. Therefore, the dataset requires tidying at a local site level to reassess client status to address contradictory information.

Fig 6.1 Average intervention End Dates by Site, 18 Sites, Jul 20 - Dec 22



For those that are recorded as not completing reasons given were:

- Did not engage (55)
- Breached/ committed further offence (17)
- Moved out of area (11)
- Court order expired (10)
- Discharged ('not workable') (10)
- Had no MH needs (4)
- Needs had been met through other MH support/ therapy (4)
- Died (3)
- Physical condition (2)
- A reason was not given for 13 cases.

Out of the individuals that completed the treatment, 3 were recorded as having no or zero sessions. Out of the remaining 843 the average number of sessions attended was 10.9. 50% (418) of the sample had 12 sessions, 33% (277) had 6-11 sessions, 4% (33) had 1-5 sessions and 14% (115) had more than 12 sessions.

Out of 783 individuals who completed the intervention and for whom the number of missing sessions was provided, 612 (78%) had one missed session or more. The average number of missed sessions for those that did miss a session was 3 sessions. It is noted that frequencies of missed sessions are likely to have been influenced by Covid restrictions.

In the data there were 107 (4%) reported breaches. The type of breach was recorded in 66 cases as 'breach of MHTR', 39 was recorded as 'breach of combined order', 66 were recorded as 'not applicable' and 2 were recorded as 'Breached by probation' and 'Breached due to reoffending'. Figure 6.2a illustrated the recorded reasons for 146 breaches. For individuals who completed the intervention between January and June 2022 there were 5 reported 'Breaches of Combined Order' and 9 reported 'Breaches of MHTR' whereas for those that completed the intervention between July and December 2022 there were 8 reported 'Breaches of Combined Order' and 15 reported 'Breaches of MHTR'.

Fig 6.2a Reason for Breach, 20 Sites, Jul 20 - Jan 23

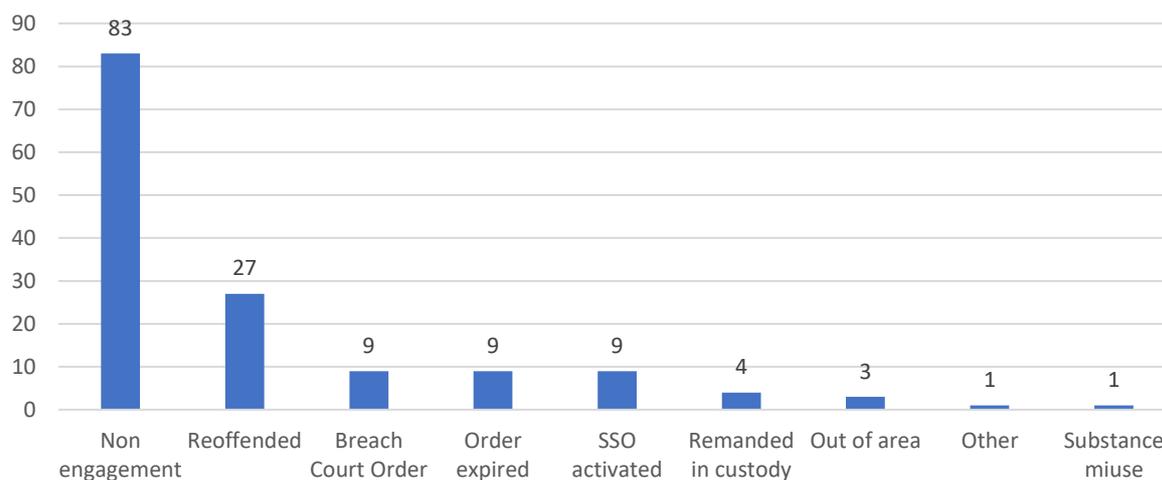
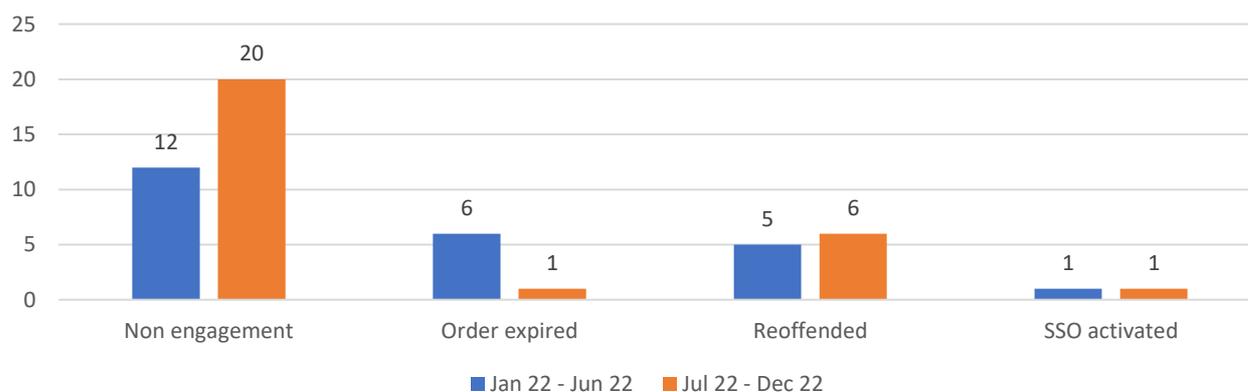


Figure 6.2b Reasons for Breach for those with an end of intervention date in the last year, 7 sites, 6 Monthly



**CORE-34**

There were 538 individuals with pre and post CORE-34 scores. The average pre-score was 58.95 (in the mid-range of moderate psychological distress). The average post score was 35.81 (which is at the lower end of mild psychological distress). The average reduction was -23 and this difference was statistically significant  $t(537) = 20.603, p < 0.01$ .

Fig 6.3a CORE-34 Pre/Post Range and Mean, 20 Sites, Jul 20-Jan 23  
(Grey = 80% of cohort)

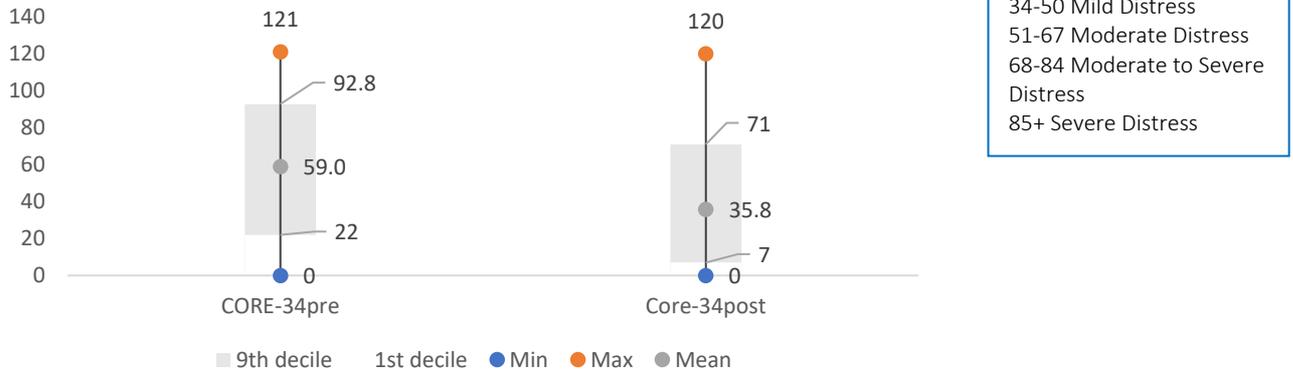
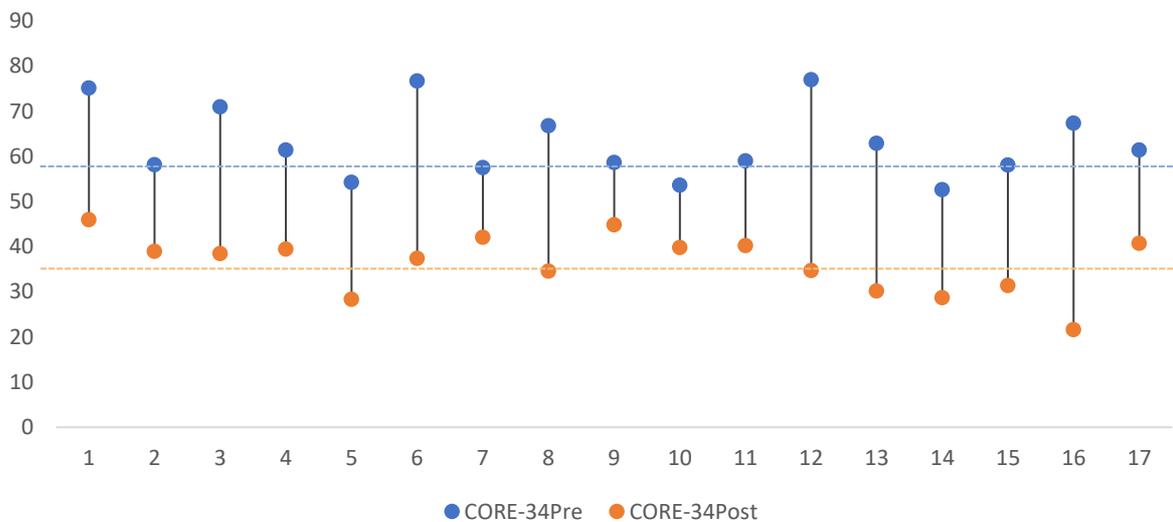


Figure 6.3b shows the mean CORE-34 score before and after the intervention for 17 sites for which the data was available. This graph highlights that although the reduction of global distress is present in all sites, there was variability when it comes to the magnitude of the intention’s impact across sites.

Fig 6.3b Mean CORE-34 before and after intervention per site, 17 Sites, Jul 20 - Jan 23



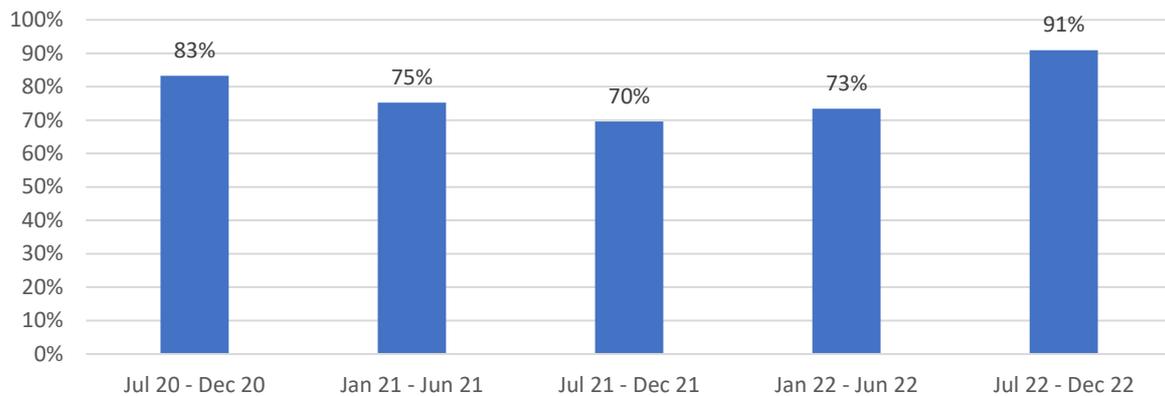
Reliable change for the CORE-34 is change that exceeds that which might be expected by chance alone or measurement error and for the CORE-OM is represented by a change of 5 or more in the clinical score.

In the sample of 537, 75% (404) saw a 5 or more point reduction in their pre to post CORE-34 score. 11% (61) saw no reliable change (i.e. between -4 and +4) and the remaining 13% (72) saw a reliable worsening (5+).

For those within the group that saw a reliable change the mean pre-score was 64.73 (this would be categorised as moderate psychological distress) whereas for those with no reliable change the mean pre-score was 39.91 (this would be categorised as mild psychological distress). Therefore, those that saw a positive change were on average starting 24.82 points higher on the CORE-34 scale than those

that did not. For those that did see a positive reliable change the average mean post score was 31.08 (therefore on average a 33.7-point reduction in their pre to post score).

Figure 6.4 Percentage of positive reliable change CORE-34



The graph below illustrates 6 different cohorts presenting different levels of distress at the start of the intervention. It is clear from the graph that individuals who start from a category presenting a higher level of distress present the highest benefits at the end of the intervention.

Fig 6.5a Mean level of distress before and after treatment for different distress profiles, 20 Sites, Jul 20 - Jan 23

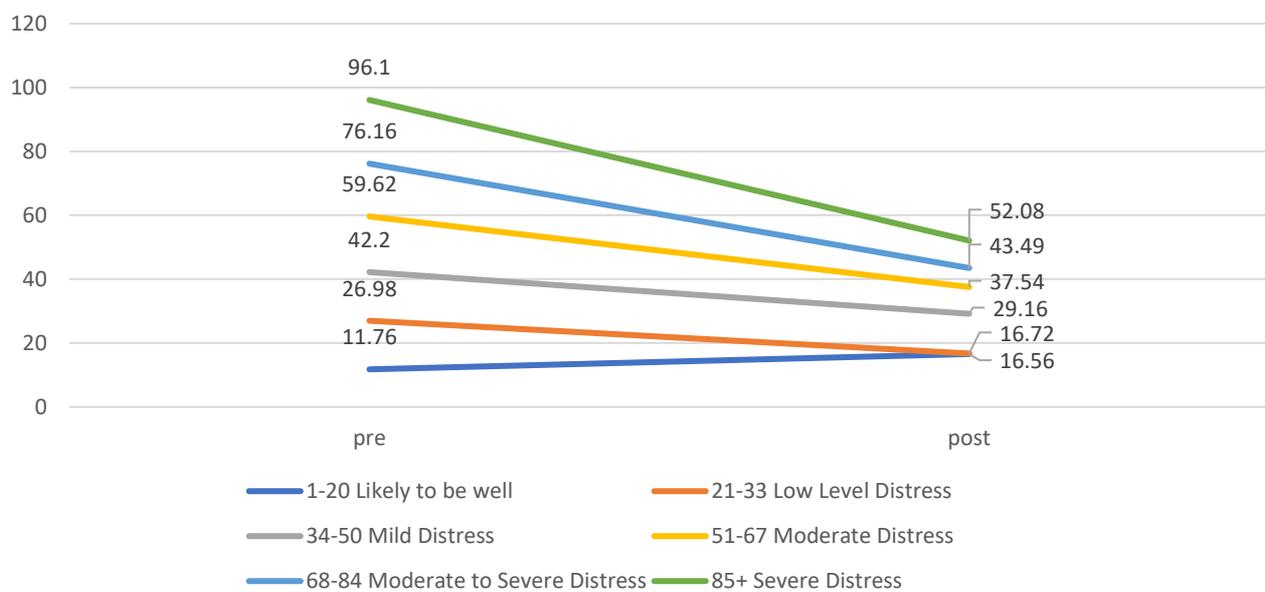
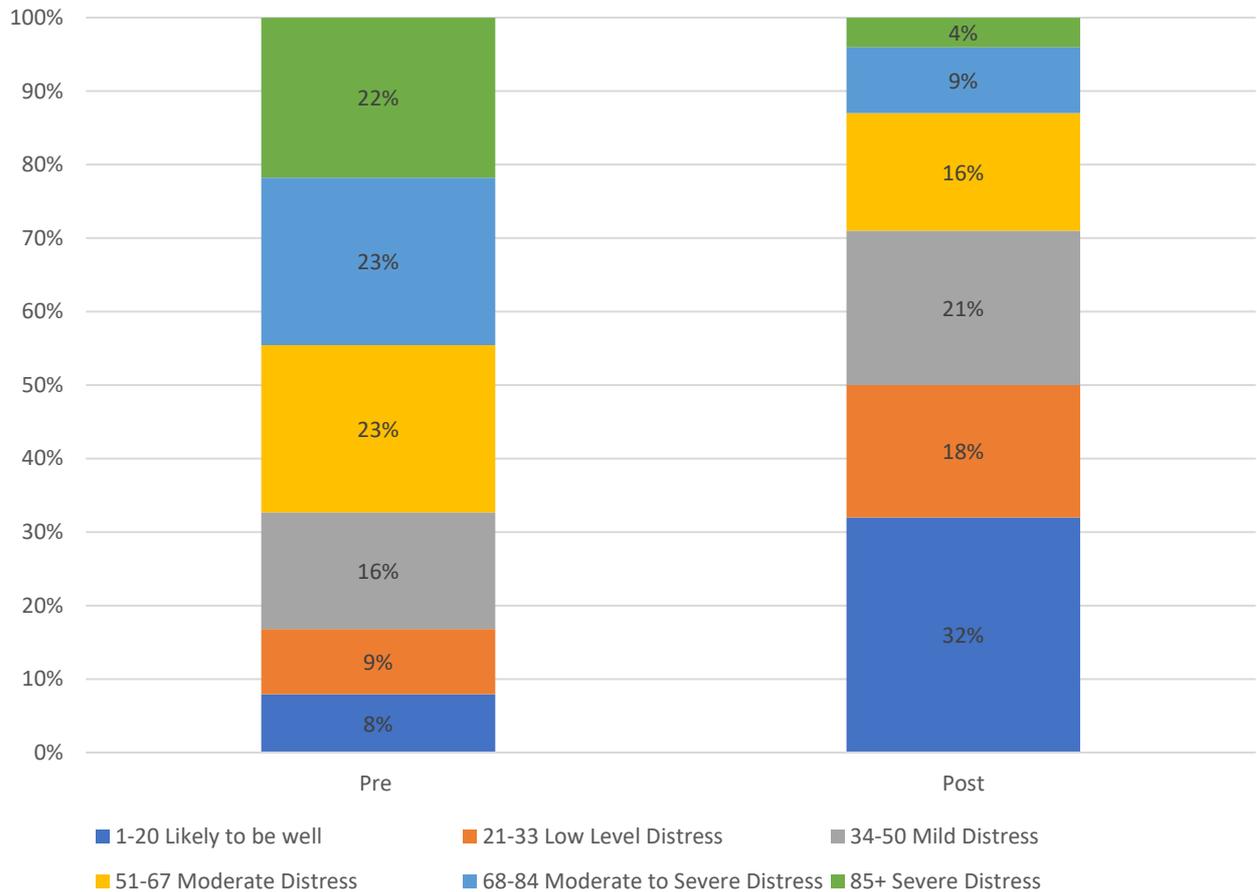


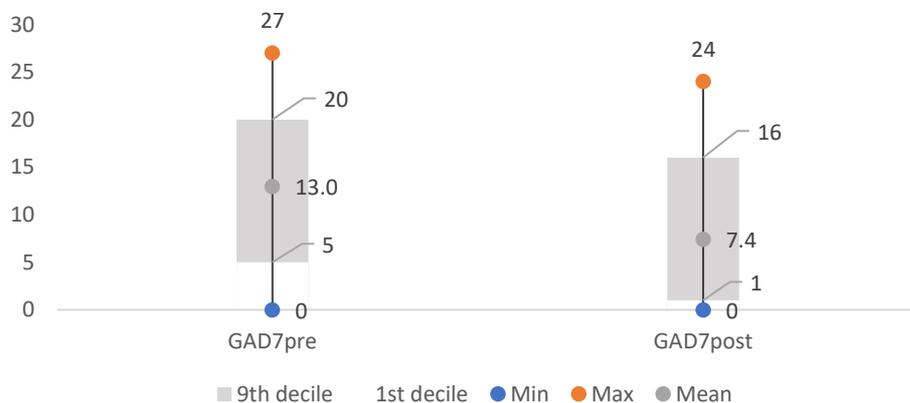
Fig 6.5b Percentage of different distress profiles before and after treatment, Jul 20 - Jan 23



**GAD-7**

There were 756 individuals with pre and post GAD-7 scores. The average pre-GAD-7 score for this group was 12.95 (Mid moderate anxiety) and the average post score was 7.43 (Mid mild anxiety). Therefore, the average reduction was -5.5 and this difference was statistically significant  $t(755) = 24.396$  and  $p < 0.01$ .

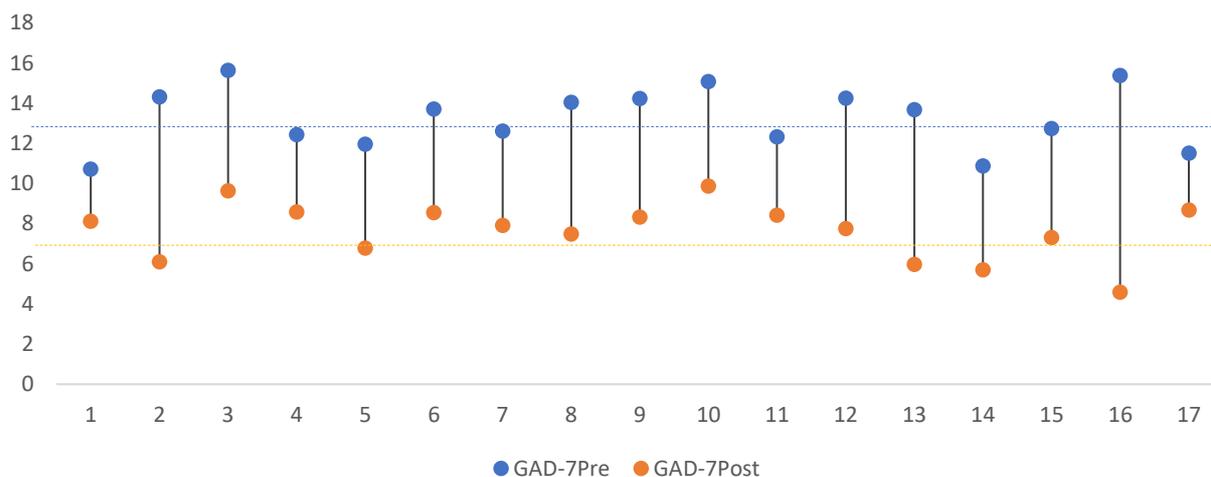
Fig 6.6a GAD-7 Pre/Post Range and Mean, 20 Sites, Jul 20 - Jan 23  
(Grey = 80% of cohort)



0-4 Below Mild Anxiety  
5-9 Mild Anxiety  
10-14 Moderate Anxiety  
15+ Severe Anxiety

Figure 6.6b shows the mean GAD-7 score before and after the intervention for 17 sites for which the data was available.

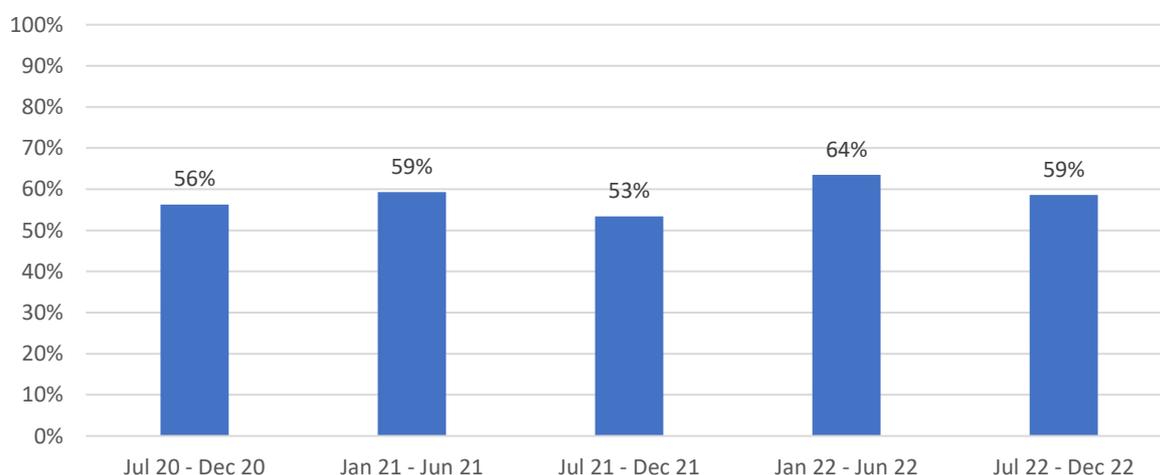
Fig 6.6b Mean GAD-7 before and after intervention per site, 17 Sites, Jul 20 - Jan 23



Reliable change for the GAD-7 is change that exceeds that which might be expected by chance alone or measurement error and for the GAD-7 is represented by a change of 4 or more in the clinical score. In the sample of 756, 59% (442) saw a 4 or more point reduction in their pre to post GAD-7 score. 37% (276) saw no reliable change (i.e. between -3 and +3) and the remaining 5% (38) saw a reliable worsening (4+).

For those within the group that saw a reliable positive change the mean pre-score was 14.95 (this would be categorised as the top end of moderate anxiety) whereas for those with no reliable change the mean pre-score was 10.30 (on the cusp of mild and moderate anxiety). Therefore, those that saw a positive change were on average starting 4.65 points higher on the GAD-7 scale than those that did not. For those that did see a positive change the average mean post score was 5.31 therefore on average about a 9.6-point reduction in their pre to post scores.

Fig 6.7 Percentage of positive reliable change GAD-7



The graph below illustrates 4 different cohorts presenting different levels of anxiety at the start of the intervention. It is clear from the graph that individuals who start from a category presenting a higher level of anxiety present the highest benefits at the end of the intervention.

Fig 6.8a Mean level of distress before and after treatment for different general anxiety profiles, 20 Sites, Jul 20 - Jan 23

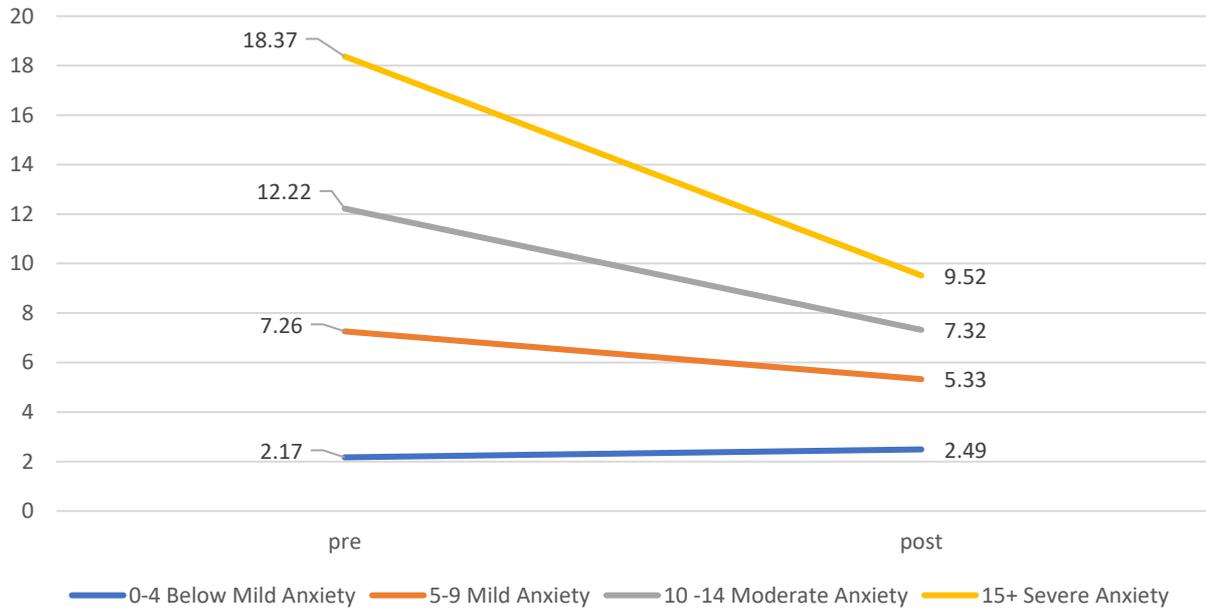
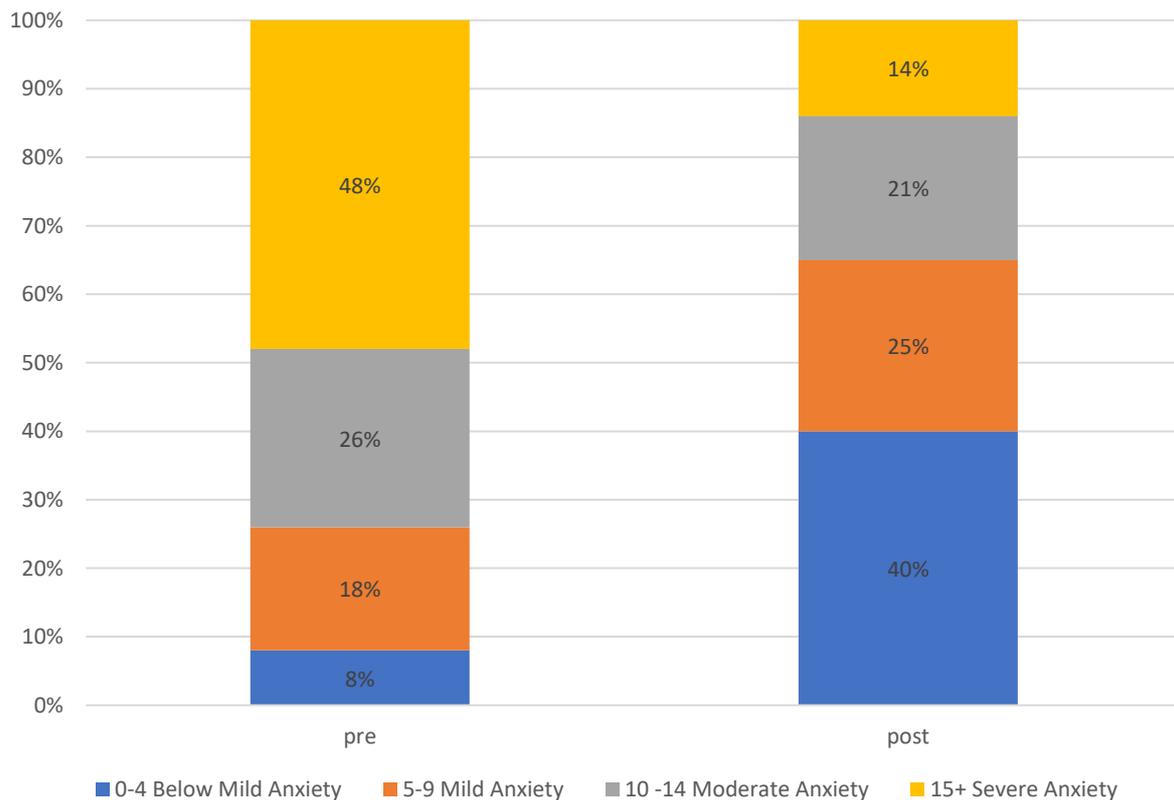


Fig 6.8b Percentage of different anxiety profiled before and after treatment, Jul 20 - Jan 23



### PHQ-9

There were 759 individuals with pre and post scores on the PHQ-9. The average pre-score was 15.03 (on the cusp of moderate to moderately severe depression) and the average post score was 8.66 (mild depression). Therefore, the average reduction was -6.37 and this difference was statistically significant  $t(758) = 23.168, p < 0.01$ .

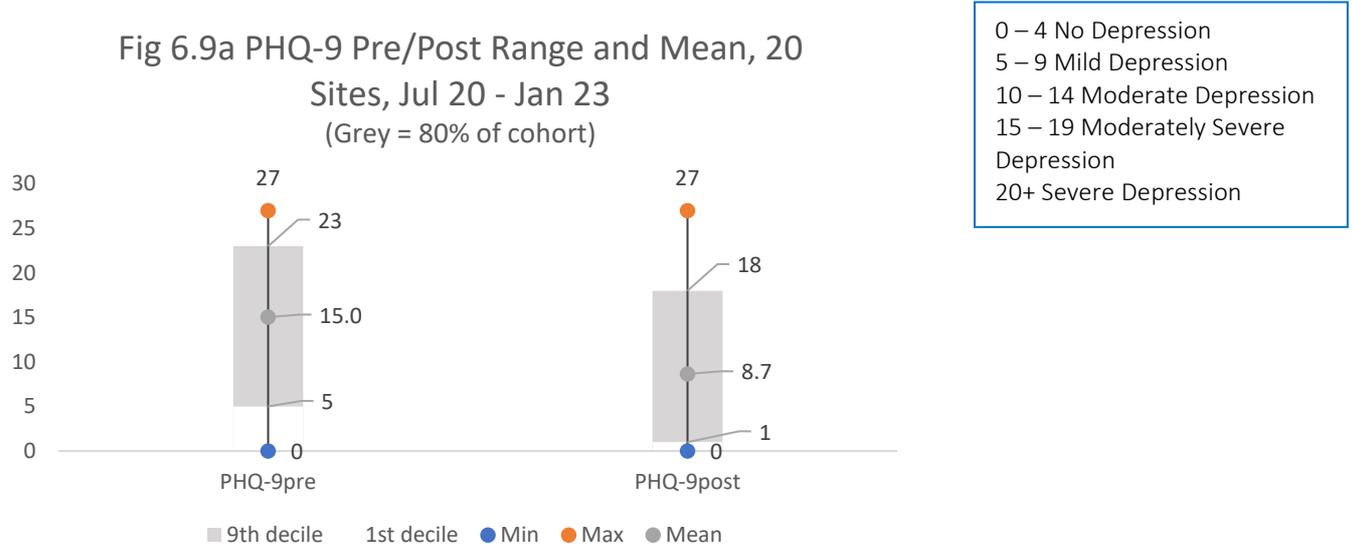
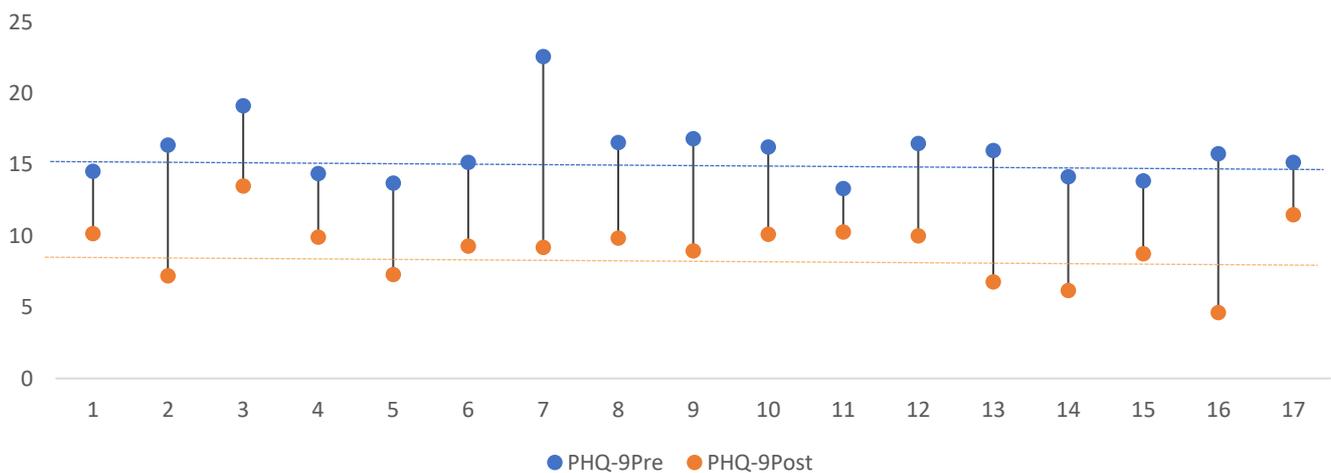


Figure 6.9b shows the mean PHQ-9 score before and after the intervention for 17 sites for which the data was available.

**Fig 6.9b Mean PHQ-9 before and after intervention per site, 17 Sites, Jul 20 - Jan 23**

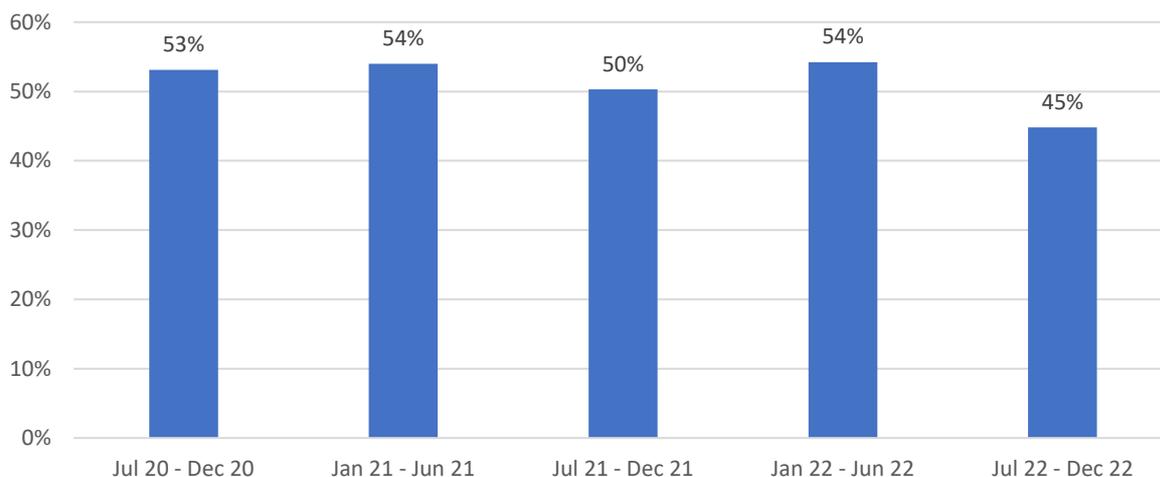


According to the Improving Access to Psychological Therapies: Measuring Improvement and Recovery Adult Services: Version 2 (NHS England, June 2014) the PHQ-9 score must change by more than or equal to 6 to be considered reliable.

In the sample of 756, 52% (397) saw a 6 or more point reduction in the PHQ-9 score. The remaining 48% (362) saw no reliable change (i.e. between -5 and +5) or a reliable worsening (i.e. 6+). Those that saw a worsening in the PHQ-9 were a minority (3.6%, 27).

For those within the group that saw a reliable change the mean pre-score was 18.03 (this would be categorised as moderately severe) whereas for those with no reliable change the mean pre-score was 11.95 (this would be categorised as moderate depression). Therefore, those that saw a positive change were on average starting 6 points higher on the PHQ-9 scale than those that did not. For those that did see a positive change the average mean post score was 6.3 (therefore on average a 12- point reduction in their pre to post score).

Fig 6.10 Percentage of positive reliable change PHQ-9



The graph below illustrates 5 different cohorts presenting different levels of anxiety at the start of the intervention. It is clear from the graph that individuals who start from a category presenting a higher level of anxiety present the highest benefits at the end of the intervention.

Fig 6.11a Mean level of depression before and after treatment for different depression profiles, 20 Sites, Jul 20 - Jan 23

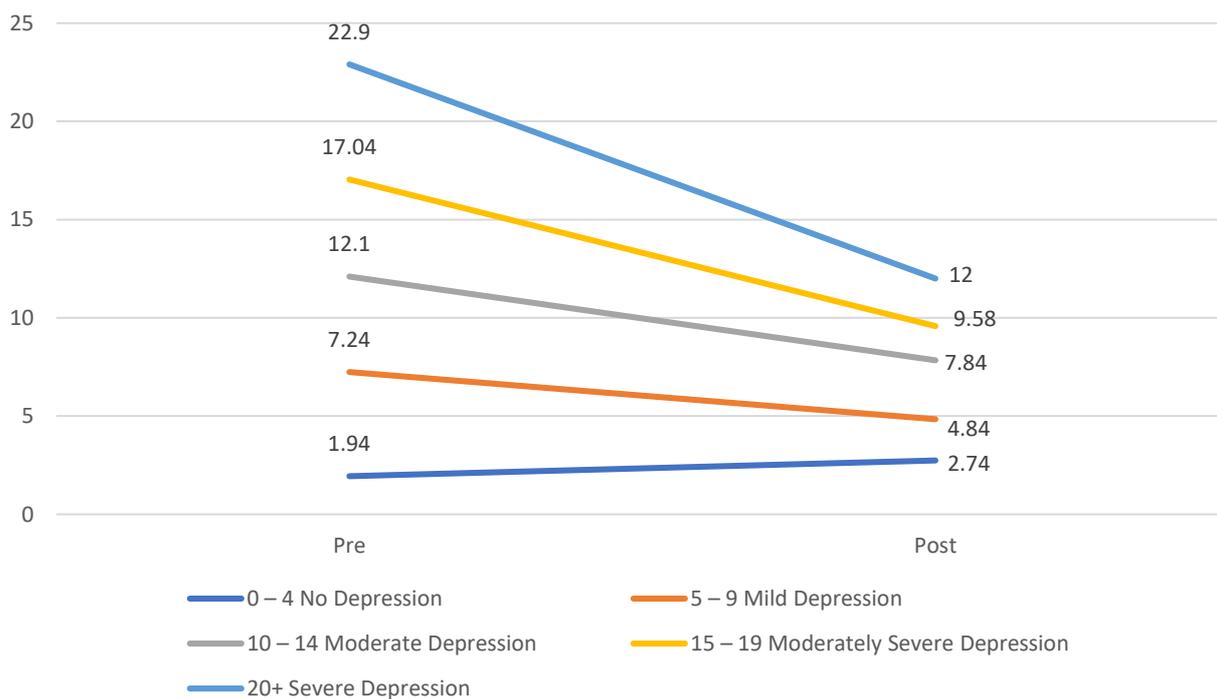
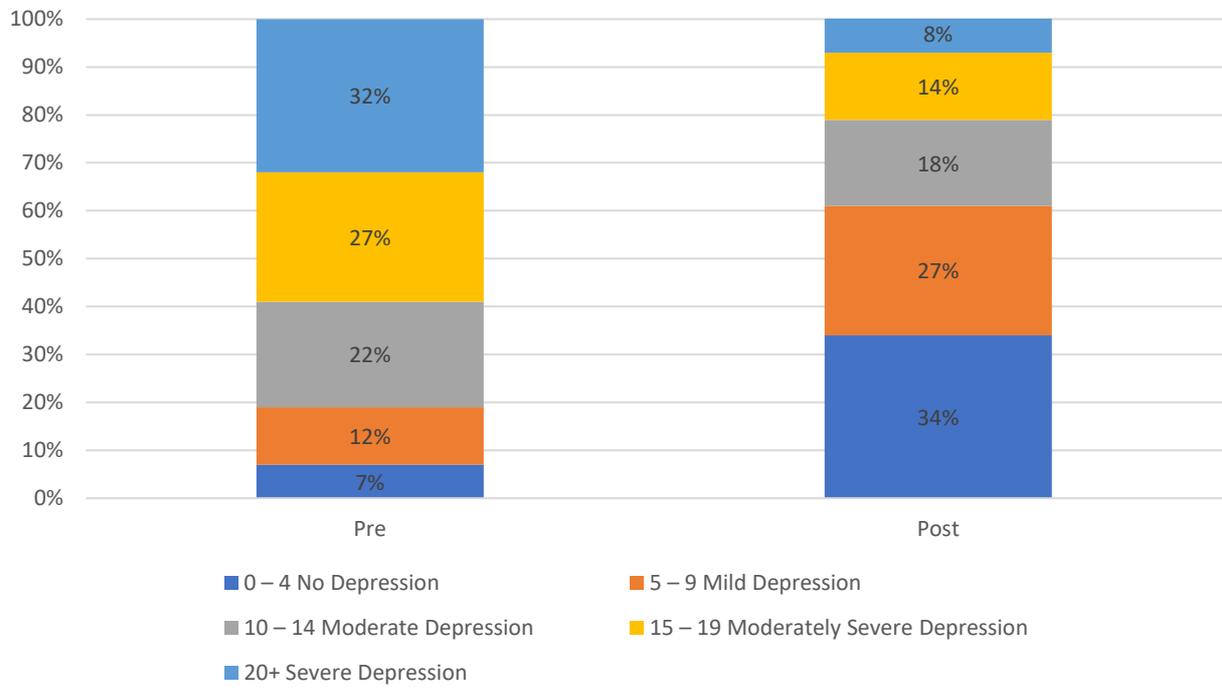


Fig 6.11b Percentage of different depression profiles before and after treatment, Jul 20 - Jan 23



## 7. Observations

Overall, the analysis and results presented in this report from 22 sites remains very positive. The analysis of 30 months data continues to demonstrate **how MHTR interventions are having a statistically significant benefit in terms of mental distress, anxiety and depression.** The analysis shows that:

- 75% experienced a positive reliable change in terms of global distress (CORE-34);
- 59% experienced positive reliable change in terms of anxiety (GAD-7); and
- 52% experienced a positive reliable change in terms of depression (PHQ-9).

Of those who completed the intervention and completed all psychometrics (CORE-34, GAD-7 and PHQ-9) (n=466), 39% (180) experienced change across all 3 of the psychometrics measured at the start and end of the intervention, 19% (90) experienced positive reliable change across 2 of the measures and a further 22% (104) experienced positive change in one of the measures. Therefore, for those who completed the intervention, **80% experienced a positive reliable change in at least one of the psychometrics measured.**

The analysis presents, however, significant variation between the sites which is investigated further and detailed in local reports.

The report details how the number of assessments per site has steadily increased over time. It is noted however, that the proportion of individuals found suitable following assessment in the last 6 months has decreased. The report reveals wide variation in terms of the tools used to determine suitability for MHTR in the assessment process.

**R. It is recommended that this variation is considered initially at the clinical leads national network to inform the national MHTR operational guidance.**

The number of sentences to MHTR or combined order per site has increased over time, but there was a significant dip in January 2023. This dip may be a data entry issue but warrants further attention to investigate the reasons for this drop. The proportion of individuals being sentenced to an MHTR following an assessment of being suitable for the MHTR has increased over time. When investigating this trend, it was identified that the sites where declines at court was most prevalent were more established or long-standing sites.

**R. Where this pattern is identified at a local level, it is recommended that the local programme board explore why individuals would not be sentenced at Court and explore options to improve conversion.**

Finally, data seems to suggest that females go through the pathway more effectively, with higher proportions of women being found suitable after assessment (79% compared to 75% for males) and higher proportion of females getting sentenced after being found suitable (85% compared to 78% for males). This will be explored further in an IPSCJ Briefing Paper focused on gender.



**IPSCJ Point of Contact:** Professor Matthew Callender  
[matthew.callender@northampton.ac.uk](mailto:matthew.callender@northampton.ac.uk)  
@MattCallender1

**IPSCJ Address:**  
Institute for Public Safety, Crime and Justice,  
University of Northampton,  
University Drive, Waterside Campus,  
Northampton,  
NN1 5PH  
United Kingdom

**IPSCJ Telephone:**  
+44 (0) 1604 89 3304

**IPSCJ Email:**  
[ipscj@northampton.ac.uk](mailto:ipscj@northampton.ac.uk)

**Visit the IPSCJ Webpage:**  
<https://www.northampton.ac.uk/research/research-institutes/institute-for-public-safety-crime-and-justice>

**Explore the IPSCJ on Pure:**  
<https://pure.northampton.ac.uk>  
[Institute for Public Safety, Crime & Justice — University of Northampton's Research Explorer](#)

**Follow IPSCJ on Twitter:**  
@ipscj