Service mapping, and epidemiology of people with MCN.

Objectives

The epidemiological needs assessment seeks to understand, in East Sussex:

1. How many people meet the criteria for MCN and what are their characteristics?
2. What are the most common patterns of need in this population?
3. What are the characteristics associated with having multiple compound needs?
4. How do the population's needs differ from demand and appetite for services?
5. How are existing services meeting the population's needs and/or demands?

Methods: Service Mapping

Local service providers which were asked for quantitative data to contribute to the linked dataset were also asked to complete a form capturing information about their provision. Forms were developed by the research team within East Sussex County Council (ESCC) public health and tested with a member of staff from Changing Futures. These forms were completed in draft within ESCC and sent to providers to amend and approve. These service descriptions were then compared and summarised.

Performance data

Local grant-funded services providing support exclusively to people with MCN (Changing Futures) or to rough sleepers of whom a large proportion have MCN (RSI) routinely report on performance to MCN board.

Both services shared recent performance data pertaining to the number of clients on their caseload and those individuals' outcomes, which were analysed descriptively.

Results: Services in East Sussex

Services available

Providers which submitted data to contribute to the bespoke linked dataset were also asked to complete forms describing their service offer (**Error! Reference source not found.Error! Reference source not found.**). This information can be used with and by clients. It also provides a summary overview of what kind of support people with MCN in East Sussex might have access to, when, and via what routes.

Duration of support

Most services supporting people with MCN in East Sussex (Changing Futures, RSI, housing, SPFT, CGL substance misuse, CGL domestic abuse, and probation) are available to clients for as long as required. Clarion Housing Group provides accommodation to clients for up to nine months with a further six months' resettlement

support provided as required.[1] Some services, however, are funded by short-term grants and therefore the duration of support they provide may be curtailed for financial reasons.

Hours of support

Most services operate from 9am to 5pm, Monday to Friday, though some services have an out-of-hours offer: ESCC Adult Social Care services offer an Emergency Duty Service which can be accessed out of hours, and Changing Futures staff will also occasionally work flexibly outside of core hours to respond to individual client needs; housing authorities have out-of-hours phone lines; and Clarion Housing Group provides an out-of-hours support service from 5pm to 9am Monday to Friday and across the weekends; the probation service has late office hours once or twice a week, and some interventions are offered at weekends or in the evenings. As part of the RSI, outreach begins at 5am on weekdays.

Access routes

Many services supporting people with MCN in East Sussex accept self-referrals, including RSI; CGL's substance misuse and domestic abuse services; housing authorities; Clarion Housing Group; and some mental health services like learning disability services, the veterans' mental health and wellbeing service, the specialist perinatal mental health service, and NHS talking therapies. Most secondary care mental health services are accessed via professional referral only, and Changing Futures does not accept self-referrals.

Waiting times

Most services in East Sussex reported no or short waiting times. People presenting at homelessness services are triaged; those with an urgent need will be seen on the same day, and otherwise clients are seen within two to three weeks, varying by authority and over time. When accepting nominations, Changing Futures clients are normally allocated a worker within two weeks, and then contacted by that worker after three working days. It is worth noting, however, that the service's capacity is capped by the number of staff and where capacity is reached, the service stops accepting nominations entirely. Clarion Housing Group accommodates approximately 80% of new referrals within 48 hours, and otherwise within four to five days. Probation, the RSI, and CGL's domestic abuse service have no waiting times.

SPFT reported that the services work to the national waiting time directives, and did not provide any other information about waiting times.

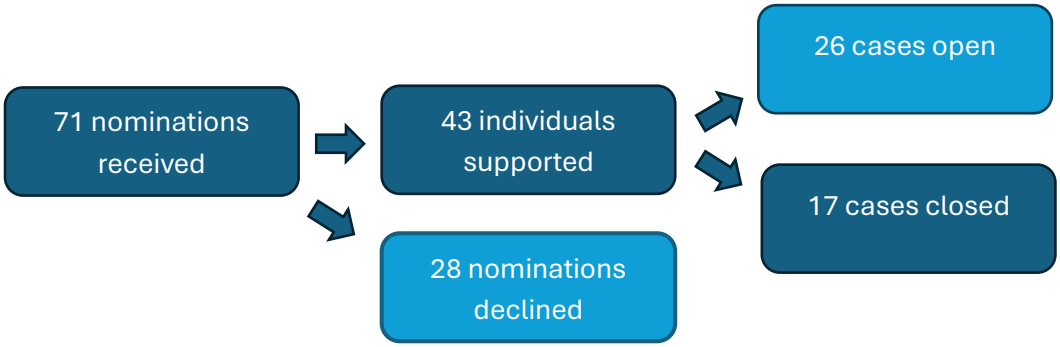
[1] Please note the service reports that it aims to support clients for 6 months but will house them for up to nine, see the service description in **Error! Reference source not found.** for more information

Performance of grant-funded services supporting people with MCN

Changing Futures

Over a one-year period between 2023 and 2024, Changing Futures East Sussex received 71 nominations for help and supported 43 clients (**Error! Reference source not found.Error! Reference source not found.**). Seventeen of those clients had their cases closed to the service in that period.

Figure 1: Nominations received, clients supported, and clients closed by Changing Futures East Sussex, between 24/09/2023 and 24/09/2024



Twelve of the declined nominations were due to team capacity, and seven did not have a reason for declining recorded. Other reasons have been suppressed due to small numbers (<5).

Five of the client closures were related to client goals being met and support no longer being required or desired, and five clients did not have a reason for closure recorded. Other reasons have been suppressed due to small numbers (<5).

Rough Sleepers Initiative

Between July and September 2024, there were 336 cases open to the RSI, with 215 (64%) identified as having MCN (141 individuals were identified as having three needs and 74 as having four needs). Data about experiences of violence were not, at this time, coded.

The individual needs of the total RSI caseload (including those with one or two needs) during this quarter were as follows:

- 336 (100%) had a homelessness need
- 136 (40%) had a mental health need
- 90 (27%) had a substance misuse need
- 41 (12%) had a history of offending or had received a custodial sentence

Out of the 336 individuals on the caseload, 183 (54%) were considered to have meaningfully engaged in the service. Of those 183 who meaningfully engaged, 137 (75%) were people with MCN (87 of those who meaningfully engaged were identified as having three needs and 50 as having four needs).

This suggests that the rate of engagement with the service is higher in people with MCN (64%, 137 out of 215, of those on the caseload with MCN engaged with the service) compared to people on the caseload with one or two needs (38%, 46 out of 121, engaged with the service).

The multi-disciplinary team (MDT) had a caseload of 103 people in this quarter, of whom 88 (85%) had MCN (51 of those on the MDT caseload were identified as having three needs and 37 as having four needs). This suggests that the MDT is prioritising support for people with MCN, as is the intention of the service.

Between July and September 2024, there were 39 RSI clients with MCN (24 with three needs and 15 with four needs) who achieved the outcome of no longer rough sleeping, out of 73 total clients where rough sleeping ended. There were 18 clients with MCN (13 with three needs and 5 with four needs) who achieved the outcome of no longer being homeless, out of 32 total clients where homelessness ended.

Methods: Epidemiological assessment

Approach

In keeping with the overall needs assessment, work undertaken to describe the local MCN population quantitatively adopted the Changing Futures definition of MCN. Therefore, in order to assess the local population it was necessary to use data describing the five need types. Various approaches were considered, including using data from a single service to describe the pattern of multiple needs across their client case load, such as assessing prevalence of needs related to housing, domestic violence, criminal justice, or mental health amongst clients of the substance misuse service. Another option considered would have involved requesting data from multiple services to estimate the minimum number of people with MCN in the county based on the return with the largest count, accepting that the risk of duplication required the assumption of there being no unique individuals across the multiple returns.

The approach ultimately agreed was that of requesting individual-level returns from relevant local providers, pseudonymised using a pseudonymisation key generated by ESCC and used to link returns and deduplicate the extracts, to produce a near-complete dataset of unique residents using relevant services in the county. This approach is not dissimilar to that deployed by Tweed *et al.* in Glasgow.(25) Services were asked to include clients for their own service with at least one of the five needs contributing to MCN, and report on known needs and interactions relating to other key needs which make up MCN. Please see

Quantitative materials for the template. The combined information about services used (reported by the services in question), other needs, and known interactions with different services relating to MCN, was used to identify local service users with MCN. This approach was designed to enable, in a pseudonymised way, identification of people with MCN whose complexity was not previously known to services. For example, a service user known to the substance misuse provider for their substance misuse and mental health needs, and to the housing authority for homelessness, could be identified for the first time as meeting MCN criteria through the linkage process.

After consultation with ESCC Information Governance (IG) for advice regarding feasibility, the individual-level pseudonymisation and linkage approach was chosen as the most complete and accurate process for quantifying the local MCN population.

Specification

The data extract template was developed by ESCC Public Health in consultation with local organisations providing services for the five need groups which comprise MCN. The template comprises fields relating to demography, the five needs, interaction with organisations serving those needs, and additional areas of need such as physical health. The template can be found in

Quantitative materials. Service leads, data analysts, and information governance leads across the invited organisations were consulted and asked to feed back on the template and request for sharing. During the consultation process providers have also described the way fields were recorded on their local systems, and the template was adapted to account for these differences. While this approach necessitated that services used their own definitions of needs to complete the template, guidance was provided to support analysts and to unify anticipated differences in approaches. Providers were asked to report on the needs as follows:

- Homelessness: A record of homelessness
- Substance Misuse: A record of any substance misuse problems
- Mental Health Issues: A record of a current or recent mental health condition
- Domestic Abuse: A record of being a survivor of domestic violence
- Contact with the Criminal Justice System: A record of being on probation

Providers were asked to report on adult service users (18+) who were known to have one of the five needs defined in the MCN criteria and who were 'live' to the service at any point between 1 January 2022 and 31 December 2023, namely known to the provider and not closed prior to January 2022. Providers were asked to report on clients living in the community, or with the potential to live in the community, to facilitate description of East Sussex residents who would be eligible for an adult MCN service. Probation services, for example, were asked to include all clients out in the community in East Sussex, on probation, during the period, regardless of whether their probation began before or ended after the period. Sussex Partnership NHS Foundation Trust (SPFT) provided data on both inpatients and outpatients. SPFT's return was also limited to only patients who had received an "initial assessment" within the two-year period, and had that referral accepted, rather than all patients "live" to the system. This approach meant that people with a long-term, established need who were not newly assessed in the period were not captured in the return. Colleagues at SPFT advised that there were a large number of patient records which remain open on the system despite the patients not having a current need, including patients who previously used services which have since been shut down. Colleagues additionally advised that long-standing patients were relatively likely to have a new "initial assessment" despite already being known to the trust. The approach of using recently assessed patients was considered to be a lower methodological risk, leading to an underestimate rather than an overestimate of MCN among SPFT's patients.

Providers

The local services which participated in the project by sharing pseudonymised data are described in Table 1.

Table 1: Local providers which contributed pseudonymised data to the bespoke linked dataset

Provider	Primary Need Type
Changing Futures	All five needs
Rough Sleeper Initiative	Homelessness
Lewes and Eastbourne Housing Authority	Homelessness
Wealden District Housing Authority	Homelessness
Rother District Housing Authority	Homelessness
Hastings Borough Housing Authority	Homelessness
HM KSS Prison and Probation Service	Criminal Justice
Change Grow Live	Substance Misuse
Clarion Housing Group	Domestic violence, Homelessness
Sussex Partnership NHS Foundation Trust	Mental Health
ESCC Adult Social Care	Various

Data Processing

Pseudonymisation

The pseudonymisation of data shared with ESCC was achieved via a two-stage process.

Stage 1: The first dataset shared from each organisation comprised entirely identifiable service user data, specifically the individuals' first name, second name, and date of birth, and a service user identifier where requested by the data provider. This dataset was shared by each organisation with a member of the Public Health Intelligence Team, MW. This member of staff, MW, was otherwise not part of the project and the lead analyst for the needs assessment did not have access to the identifiable first datasets shared by participating organisations. The information was emailed securely in an encrypted file, with a password sent separately via phone to MW. MW then created a pseudonymisation key for each individual in the dataset. Where the same individual appeared more than once across different services, MW attached the same pseudonymisation key. A matching process was designed to include "grey" matches, namely inexact matches such as names spelt with minor differences, or slight changes to the first name for example using Bill as well as William. Most of this process was automated using a formula within excel to carry out the following processes:

- Exact match using first name, surname name and date of birth
- Grey match using first three letters of first name, surname and date of birth
- Final Grey match using first letter of first name, surname and date of birth

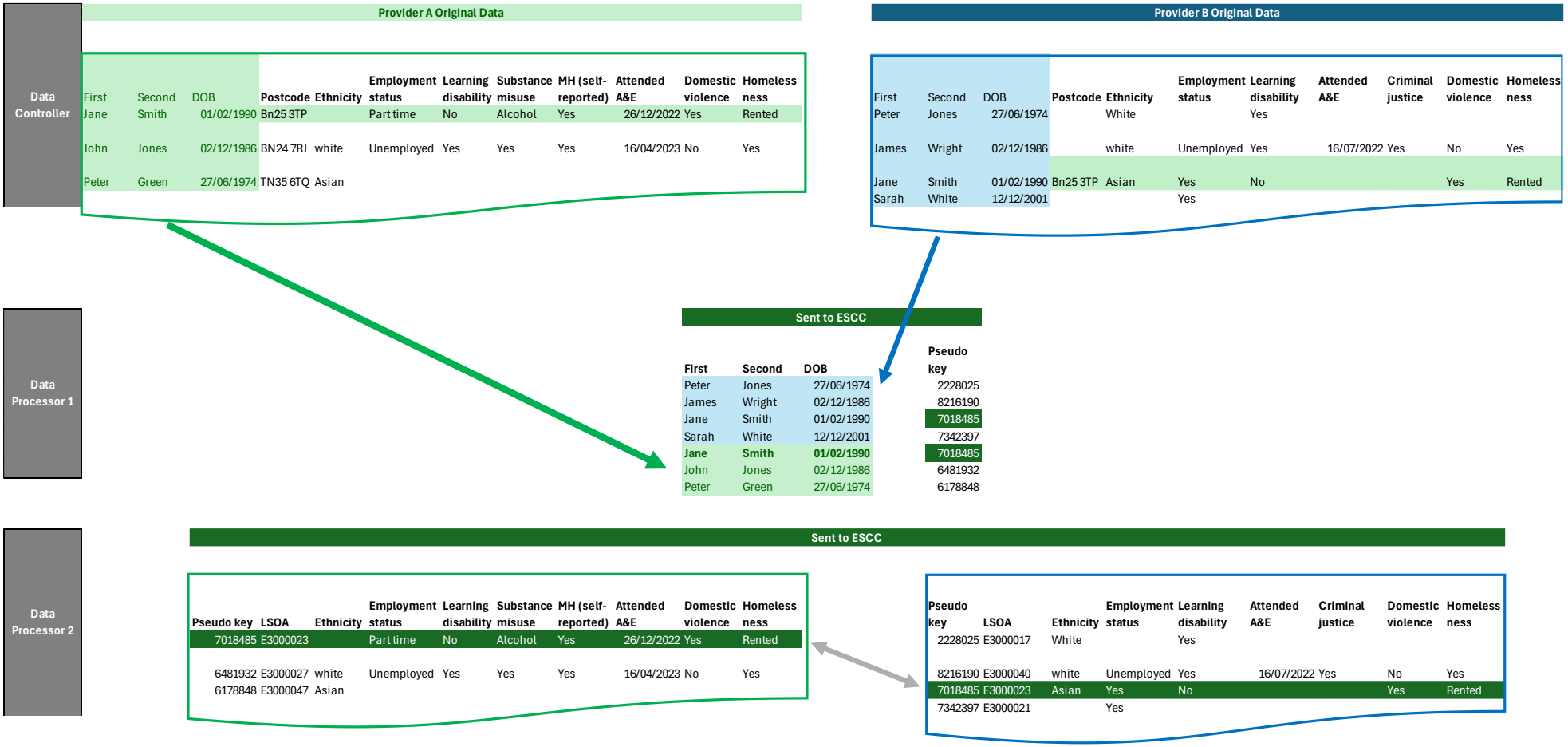
Where duplicates were identified using grey matches, these were manually "matched" or "unmatched" by MW following a review of the output, at which point the original data were used confirm whether they were indeed the same person.

MW returned the identifiable service user data (first name, second name, date of birth, and identifier if supplied) to the respective services, with the pseudonymisation key attached to each service user. Each organisation only received back their own individual-level data, augmented with pseudonymisation keys. This information was emailed securely in an encrypted file, with a password sent separately via phone.

Stage 2: The second stage entailed providers submitting the full data extract describing clients' needs to ESCC having pseudonymised the return using the keys, namely replacing individuals' names and dates of birth with the code returned by MW. Each organisation, upon completing pseudonymisation, emailed their return securely via an encrypted file to the lead analyst, PR, with a password sent separately by phone.

The pseudonymisation process is described in Figure 2.

Figure 2: Pseudonymisation Process



Inclusion

Individuals described in provider submissions were included in the dataset if they were aged 18 or over. All individuals with needs relating to substance misuse, domestic abuse, and probation were included. Individuals in submissions from housing authorities were only considered to have a homelessness need when they were owed a housing duty of some kind (relief, prevention, or main duty), and *not* if deemed to be owed advice only. Individuals in the submission from SPFT whose only recorded main presenting condition was a type of learning disability, dementia, or neurodivergence were not counted as having a mental health need, on the basis that evidence about MCN and local provision for this group conceptualise the mental health component as relating primarily to mood disorders.

Cleaning

Before data were linked, providers' data were cleaned to ensure improved data quality and allow for accurate analysis. In all cases it was necessary for the research team to assume the data from each of the providers were accurate to the best of their knowledge, and consequently apply specific data cleaning rules to deal with any differences the team found when linking data for the same person across different providers. Below are listed the main data cleaning processes which were carried out to prepare the data for analysis and manage some of the differences found in the providers' data:

- **Data standardisation:** For a field of data, providers' responses were standardised so they could be accurately compared. For example, responses from different providers may have been submitted using different text with the same meaning, such as "YES", "yes", or "Y". These variations were all mapped to the single response "Yes" to help standardise the analysis.
- **Eligibility criteria were applied:** Data were reviewed to ensure all eligible individuals were clearly identified. For example, some individuals who were not eligible were included in the providers data submission, such as people who were under 18 years old at the time or cases which were not "live" with the service during the 2022 and 2023 period. In some cases, individuals were included who did not meet a definition of one of the core needs, for example those included in the submission from the mental health trust with Autism and no other mental health need. Ineligible individuals were excluded during the data cleaning process.
- **Deduplication**: Where a provider had submitted more than one line of data for an individual, the record which had the most relevant MCN data was selected. For example, some housing data provided multiple lines per person, some of which described telephone enquiries made by the individual to the housing authority, with no evidence of a need. The entries which identified the claimant as having a homelessness need were selected, and if there were still multiple

entries for a single person, then most recent of these (if it was within the 2022 and 2023 period) was selected for inclusion.

- **Demographic standardisation:** Where demographic information for the same person was different across different providers then a series of rules were applied to help standardise the data. For example, if two providers reported that an individual was aged 31 and one other provider reported they were 30, then the entry from the majority was selected. In certain cases, if this was not possible, the record from a provider with the most recent date given was used. For example, if two submissions gave two different Lower Super Output Areas (LSOAs) for a single person, the team used the LSOA from the provider with the most recent "start date", as this is likely to be the person's most current address.

Linkage

Once all the pseudonymised data had undergone the data cleaning process, the data were prepared for detailed analysis and data linkage. The cleaned data extracts from participating organisations were unified into a single dataset, with additional fields added to each provider's data:

- the provider's name,
- the primary service type of that provider (e.g. housing, substance misuse),
- a unique reference to allow the line of data to be traced back to the exact place it appeared in the original data submission, and
- a field which calculated how many needs a person had (using just the provider's dataset).

Of the providers which submitted pseudonymised data for inclusion in the bespoke linked dataset, described in Table 1, all were linked to identify people with MCN *except* data from ESCC Adult Social Care (ASC) and Changing Futures. ASC data described residents on the services' system as at specific time points in 2022 and 2023 who met one of the five MCN eligibility criteria, and while data about clients' needs were provided, it was not possible to identify whether the needs were current. Start dates with the service were only available for 294 of the 14,253 ASC records, and because ASC offers services which may relate to none of the five core need domains, it was not possible to determine which clients might be "live" to the service for any specific relevant need. The ASC data were, however, still used to contribute to the wider dataset. The cohort of people with MCN was identified using data about need provided by the relevant service providers, namely the five housing authorities (of which Lewes and Eastbourne submitted a joint return, as shown in Table 1), the RSI, Clarion Housing Group, SPFT, probation, and Change Grow Live's (CGL's) substance misuse service. The data from ASC were used in a complementary way to complete and confirm demographic fields for individuals known to an ASC service, but neither to describe individuals' need nor *generate* the cohort.

Changing Futures data were used in a similar way as that service's submission only covered a period outside the time window requested.

If ASC data had been used to generate the cohort of people with MCN, the number of people with MCN in East Sussex in 2022 and 2023 would have increased by 10%. However, these additional individuals with MCN would include an unknown number of people whose needs are historic, thereby artificially inflating the MCN cohort.

As ASC data described the clients known to ASC services at two time points, it was possible to restrict the cohort only to people known to ASC in 2023 who had not been known to ASC in 2022. This technique was applied to identify what proportion of people with a recent ASC need had MCN, but this approach identified only three additional individuals.

Of the people identified as having MCN *without* including needs identified in ASC data, only 15% were present in the ASC data at all, suggesting that a relatively low proportion of people with MCN in East Sussex are known to ASC.

Data caveats

Missing providers

Some important local providers were not able to contribute data to the linked dataset.

CGL shared data for the quantitative arm of the needs assessment on a consent basis. CGL were able to share data for clients of the substance misuse service who had provided explicit consent for sharing, which comprised 88% of their open caseload. CGL also provide a local domestic abuse service, but these clients could not be included in the dataset due to differences in the consenting process.

Brighton Housing Trust Sussex, which provides support to people at risk of or experiencing homelessness in East Sussex, were unable to take part in the pseudonymisation process and consequently did not contribute data.

Lewes District Council and Eastbourne Borough Council housing authorities were only able to share data for a small number of their clients during the period: 269, a fraction of the caseloads shared by other local housing authorities (3,392 from Hastings, 835 from Wealden, and 1,457 from Rother in their complete datasets).

An early decision was taken to use probation data to reflect people with MCN including criminal justice experience living in the community in East Sussex, even though this would inevitably underestimate the level of this need as many people with criminal justice experience are never subject to probation.

Missing fields

The MCN health needs assessment (HNA) team asked providers requested to submit data to ensure their submissions did not include any blank fields. If data from a

particular field were not collected, or the relevant questions were not asked, or data could not be extracted from the providers' own IT systems, providers were requested to note this against the relevant data item. This request was made to allow the MCN HNA team to draw specific analytical assumptions. Unfortunately, this practice was not always adopted and some submissions were not as complete desired. When this happened, blanks were highlighted as "No data" in the analysis. For some providers "No data" may have been equivalent to "No" to the question being asked, "Unknown" if the item was not collected, or it may have meant the provider *did* ask the question when they collected the data but could not report it in their submission. Due to this ambiguity, blanks had to be reported as "No data" in the local analysis, which will have impacted on any prevalence rates calculated or conclusions drawn regarding some of the demographic analysis. In these cases, the limitations of analysis have been highlighted and a range of prevalences has been given when the lack of data was considered to have potentially affected any rates.

Two of the key fields requested from the providers were a "start date" and an "end date". The way these were calculated varied between the different providers. For example, a start date and end date for SPFT may have been an "episode of care" or even a referral date. For housing authorities this may have been a date a case was assessed and when the duty was complete. These dates were needed to help identify whether a person was actively being supported at some point by the provider, and ensure the line of data did not relate to an historic need which was concluded prior to the period of the extract requested.

Information Governance

Sharing

A Data Protection Impact Assessment (DPIA) was undertaken and disseminated to all providers considering sharing data as part of the needs assessment, alongside a Data Sharing Agreement (DSA) also drafted by members of the research team at ESCC. These organisations were asked to consider whether to participate in the process and to consider the information governance implications. Providers were able to use ESCC's draft DSA, adapted if desired, or a locally drafted DSA, to agree the terms for sharing.

Data minimisation was sought during the design of the data collection tools, and this report contains only anonymised aggregated information about local residents.

The data collection and data sharing processes were discussed in consultation with service leads and information governance professionals at invited organisations and as part of the East Sussex MCN Board.

Storage

Data pertaining to this project were stored within a confidential folder within the Public Health Intelligence network, with access restricted to only three members of the Public

Health Intelligence Team. Access restrictions were to be put in place by ESCC ICT team to ensure that only the three named members of the Public Health Intelligence Team, involved in the processing of the data, were able to access the folder. All data stored in the folder was encrypted.

The initial returns describing names and dates of birth, augmented by pseudonymisation keys, were deleted after the keys were generated, their receipt was confirmed by all participating organisations, and those organisations had sent their full pseudonymised dataset back to ESCC. The pseudonymised data extract used to carry the analysis for the MCN needs assessment will be deleted 12 months after the publication of the needs assessment.

Analysis

Members of the research team worked together to devise an analysis plan in advance of creating the linked dataset, which was then refined iteratively as the data were processed. Research questions related to the size and nature of the cohort, the prevalence of individual and combined needs, and any gap between need and service contact. The results of this analysis are presented below.

Results: Epidemiological assessment

The number of people with Multiple Compound Needs

Several estimates of the number of people with MCN in East Sussex have been calculated from the bespoke linked dataset. Data were requested from providers for the period of 1st January 2022 to 31st December 2023, though not all providers were able to share data for the entire period (see Limitations – Quantitative Findings – Completeness of the linked dataset).

Analysis of the number of people with MCN has been undertaken by summing the unique individuals who are reported to have three or more needs within one provider's dataset, and also across multiple providers' returns. The currentness of their needs has been determined by using the earliest dates of presentation to providers, and the latest dates of closure of cases by providers.

The number of people identified as having "live" MCN (namely having three or more needs described by one or more providers, and having their case open with one or more providers) within the entire time period of the data request (2022 and 2023 inclusive) is **1,360** (Table 2). If data were unlinked, the estimate would be 1,124, meaning that 236 additional individuals were identified by linking data to determine whether individuals had additional needs known to other providers. This number of people with MCN was found by analysing information about 12,346 people known to at least one of the submitting providers (excluding Adult Social Care) as having at least one of the relevant needs in the time period.

Table 2: People with three or more needs in East Sussex between 2022 and 2023

All Providers	Total people	Multiple Compound Needs			
		3+	3	4	5
Unlinked data	12,346	1,124	929	189	6
Additional found by linking		236	53	133	50
Total	**12,346**	**1,360**	**982**	**322**	**56**

The number of people identified as having "live" MCN in 2023 (namely having three or more needs described by one or more providers, only including cases with an "end date" in at least one service which is 2023 or ongoing) is **1,191** (Table 3). If data were unlinked, the estimate would be 923, meaning that 268 additional individuals were identified by linking data to determine whether individuals had additional needs known to other providers. The time component of this analysis relates to services' awareness of client needs, not the timing of client needs itself, meaning it is not a traditional prevalence statistic, but it is a close proxy for prevalence, namely the total affected caseload at a point in time. Using the imagery of the epidemiologist's bathtub, the 1,191 people with MCN in 2023 can be thought of as all the water in a bathtub (Figure 3); some of the 1,191 will have recently become known to services, others will have been known to services for many years, and people leave this "live" case cohort via recovery or mortality.

Table 3: People with three or more needs in East Sussex open to providers within 2023

	Total people	**Multiple**	**Compound**	**Needs**	
		3+	3	4	5
Unlinked data	9687	923	765	153	5
Additional found by linking		268	72	146	50
Total	**9687**	**1191**	**837**	**299**	**55**

Figure 3: Incidence and prevalence in the epidemiologist's bathtub(91)

The number of people identified as newly having MCN in 2023 (namely having three or more needs described by one or more providers, with the first report of contact with any service being in 2023) was **378** (Table 4). If data were unlinked, the estimate would be 318, meaning that 60 additional individuals were identified by linking data to determine whether individuals had additional needs known to other providers. The time component of this analysis relates to services' awareness of client needs, not the timing of client needs itself, meaning it is not a traditional incidence statistic, but it is a close proxy for incidence, namely the number of new cases in a defined period. The 378 new cases of MCN in 2023 can be thought of as water coming out of the tap (Figure 3), when the tap is turned on for a duration representing the year period in question, and the 378 form part of the "live" caseload already in the bathtub. These estimates are based on a combination of verified and self-reported needs, and it is worth noting that some of the needs reflected in these data might not require service input.

Table 4: People with three or more needs in East Sussex new to providers in 2023

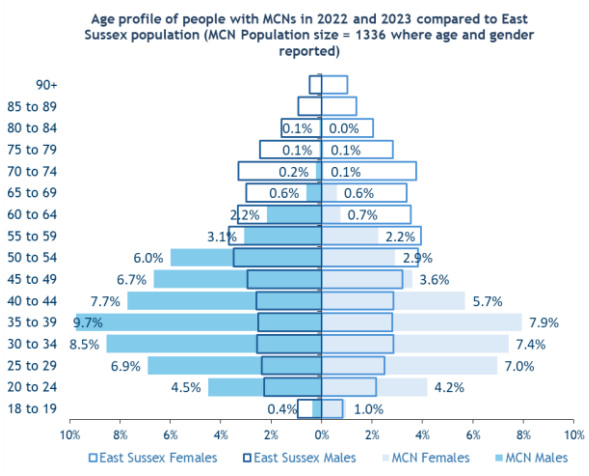
		Multiple Compound Needs			
	Total people	3+	3	4	5
Unlinked data	4426	318	279	38	1
Additional found by linking		60	27	28	5
Total		**378**	**306**	**66**	**6**

The characteristics of people with Multiple Compound Needs

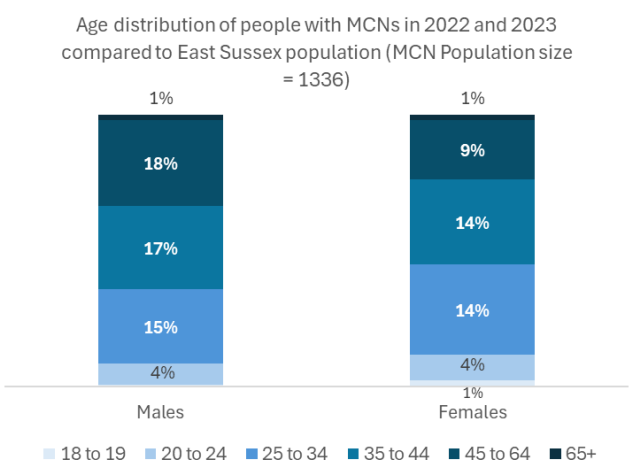
Analyses of the demographic characteristics of the local population with MCN have been conducted on the 1,360 total people identified as having MCN in East Sussex at any point over the two-year period (2022 and 2023 inclusive) for which data were provided. Results are summarised in Figure 4.

Figure 4: Demographic profile of people with MCN in East Sussex in 2022 and 2023

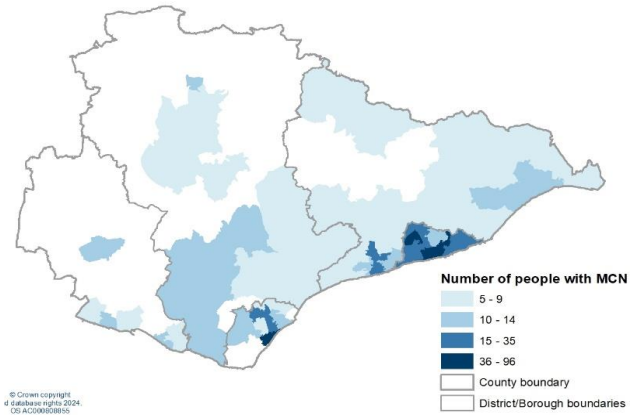
Age Profile



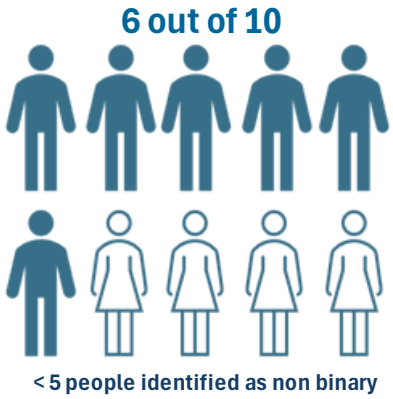
Age Distribution



Geography

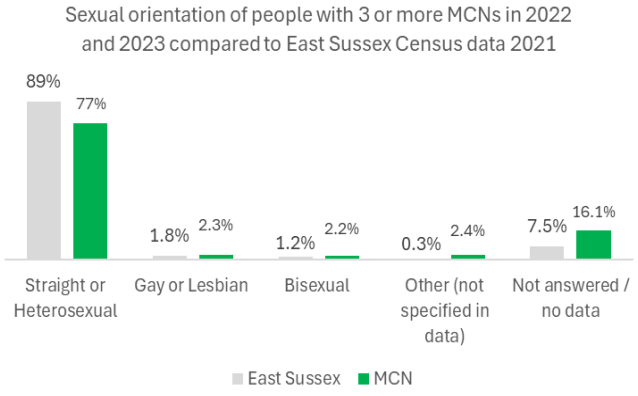


Gender

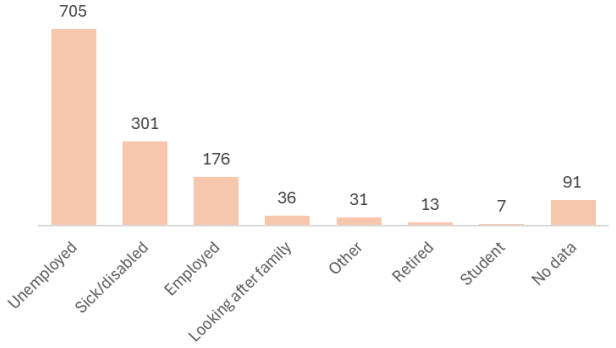


< 5 people identified as non binary

Sexual Orientation

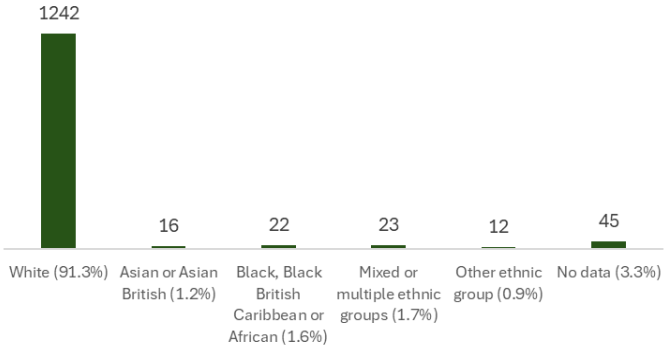


Employment

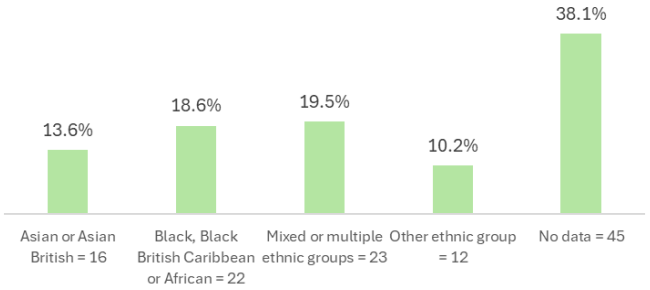


Ethnicity

People with MCNs split by Ethnicity

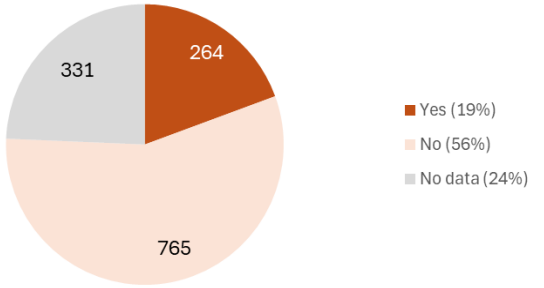


The % of people of a non white ethnicity with MCN



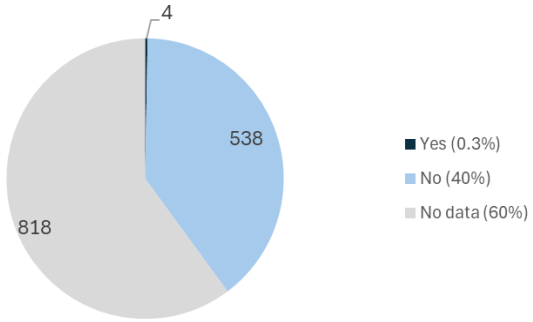
Learning Disability

People with 3 or more MCNs in 2022 and 2023 who reported having a Learning Disability



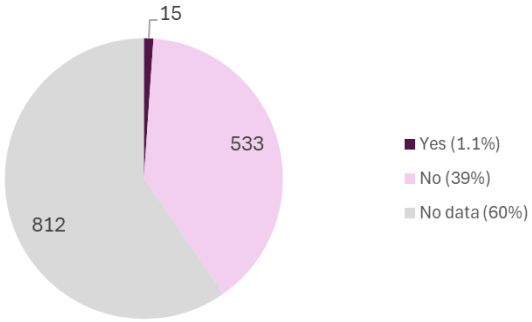
Carer Status

People with 3 or more MCNs in 2022 and 2023 who reported that they were a carer



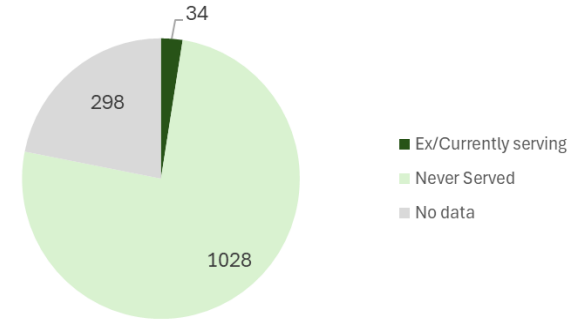
Care Experienced

People with 3 or more MCNs in 2022 and 2023 who reported that they had experienced being in care



Armed Forces

People with 3 or more MCNs in 2022 and 2023 who have served in the armed forces



Gender

There are more men with MCN in East Sussex than women; 57% of the identified cohort was male (excluding those with missing data and those identified as non-binary) (Figure 4).

Age

Figure 4 shows the age profile of the general population in East Sussex, and the proportion of people with MCN in East Sussex in each age band, split by sex. There are few people with MCN in the county older than sixty, though a small but not insignificant number of men with MCN in the 60-64 age band. The most common age band across both men and women is 35-39, with 9.7% of men with MCN being this age and 7.9% of women. Women with MCN are younger than men with MCN in East Sussex, with approximately proportionate representation of women with MCN in the 45-49 age band and proportionally lower representation in all older age bands; and men over-represented proportionately until ages 55-59.

Figure 4 shows the age distribution of the MCN population by comparing the proportion of men with MCN in each age band, and the equivalent for women. Please note that the age bands are not equivalent and include different size age ranges.

Ethnicity

In East Sussex, people with MCN are overwhelmingly (91%) White.

Geography

In East Sussex, there are higher concentrations of people with MCN in Hastings and Eastbourne (Figure 4). These towns, however, are also the location of some of the most deprived areas in the county; the relationship between deprivation and specific challenges facing coastal communities, which might affect MCN status, are difficult to unpick. Figure 4 also shows the numbers of people with MCN in East Sussex Middle Super Output Areas in 2022 and 2023. Numbers less than five have been suppressed for disclosure reasons, as have data relating to the East Sussex refuges. Areas of high concentration are observed in East Sussex towns and in the more deprived coastal communities. There are some significant limitations to the location analysis: analysis was conducted on the most recent reported location (Lower Super Output Area) for each individual, which in a highly transient population may be misleading; many individuals were missing location data; Lewes and Eastbourne housing authorities submitted partial data, meaning that people with MCN in that area are likely under-represented in analysis; and locations may be skewed towards large accommodation settings and hostels.

Excluding those with no address recorded, 1158 people with MCN in East Sussex had an East Sussex postcode; 14 with a Kent postcode; 9 with an outer London postcode; 6 with an inner London postcode; and fewer than 5 in each of West Sussex, Brighton and

Hove, Surrey, Berkshire, and Hampshire. There were no people with MCN in East Sussex, namely using East Sussex services, with an address outside the South East and London.

Learning Disability

Local evidence suggests that rates of learning disability are higher among people in East Sussex with MCN than in the general population: 19% of the population (or 26% of those where data was provided) were described as having a learning disability (Figure 4). There are, however, significant limitations to these data: where neurodivergence like ADHD or Autism was specified in the learning disability field, these characteristics were not counted as a learning disability, but providers who simply reported 'yes' or 'no' against learning disability may have included neurodivergence thus artificially inflating the rate of learning disability in the cohort. Furthermore, 331 of those with MCN had no learning disability data provided, meaning it is difficult to draw conclusions about the true prevalence of learning disability in the cohort.

Sexuality

In people with MCN in East Sussex, data about sexual orientation was missing for 16% of individuals. Including those for whom data was missing, the proportion of people with MCN recorded as being LGBTQ+ was 6.7%; excluding those with missing data, this increases to 8.2%.

Employment

Most people with MCN in East Sussex were found to be unemployed, with a large proportion of the cohort additionally unable to work due to illness or disability (Figure 4). Thirteen percent of the population are recorded as being employed.

Carer Status

Carer status in people with MCN is not well recorded in East Sussex; as Figure 4 shows, there is no data for 60% of the cohort. As such, it is difficult to draw inferences about the proportion of people with MCN with a caring responsibility. However, somewhat reassuringly, the number of people with MCN known to be carers is very low.

Care experience

The majority of people with MCN in East Sussex (60%) do not have information about care experience coded and available to submit as part of the linked dataset. As such, it is difficult to infer what relationship care experience might have with MCN, but the number of individuals with MCN known to have experience of the care system is low.

Armed Forces Experience

Among people with MCN in East Sussex, when those with missing data are included, 2.5% of the population is recorded to have experience of the armed forces (current or historical); when those with missing data are *excluded*, this increases to 3.2%.

Most common demographic groups by need type

Analysis of the most prevalent (*first past the post*) demographic groups in the 1,360 people found to have MCN in 2022 and 2023, split by type of need, shows some notable differences between need types.[2] Table 5 shows the number of people with MCN who have each type of need (not mutually exclusive) and describes the most common:

- age group: 35-39 across all need types,
- gender: male for all needs except domestic violence,
- ethnicity: White, between 90 and 94%, in all groups,
- employment status: unemployment is lowest in those with a domestic violence need (53%), highest in those on probation (62%),
- learning disability status: prevalence is lowest in those with a domestic violence need (19%), highest in those on probation (34%).

For this analysis, individuals with no data against the demographic field have been excluded; this particularly affects analysis of those with a learning disability for whom 24% of individuals were missing data, analysis of armed forces experiences where 22% were missing data, and analysis of care experience where 60% were missing data. This decision was taking to avoid treating those with missing data as *not* having the status or experience, when this is unknown.

Table 5: Demographic patterns by need type in people with MCN in East Sussex in 2022 and 2023

Need	Number with need	Age Group	Gender	Ethnicity	Employment	LGBTQ+	Care Experienced	Veteran	Learning Disability
Homelessness	1095	35 to 39	Males (54%)	White (91%)	Unemployed (56%)	Yes (9%)	Yes (3%)	Yes (4%)	Yes (25%)
Substance Misuse	991	35 to 39	Males (67%)	White (94%)	Unemployed (58%)	Yes (8%)	Yes (3%)	Yes (4%)	Yes (24%)
Domestic Violence	656	35 to 39	Females (78%)	White (90%)	Unemployed (53%)	Yes (11%)	Yes (3%)	Yes (2%)	Yes (19%)
Mental Health	1147	35 to 39	Males (55%)	White (91%)	Unemployed (54%)	Yes (9%)	Yes (3%)	Yes (4%)	Yes (31%)
Probation	625	35 to 39	Males (81%)	White (94%)	Unemployed (62%)	Yes (5%)	Yes (4%)	Yes (2%)	Yes (34%)

Most common demographic groups by complexity

Analysis was also conducted to understand the different demographic profiles of people with three needs only, compared to those with four needs or five needs, among those with MCN in East Sussex in 2022-23. Table 6 shows that rates of both unemployment and learning disability increase as the number of needs increase, and similarly that the population becomes proportionally more White as needs increase. The group with four needs has a slightly younger mode age, and those with five needs are more likely to be female (though the number of people in this group is small, and this may be the result of chance). Once again, analysis excludes those with missing data, which for learning disability is around a quarter of the cohort, for armed forces

[2] The term “probation” is used to describe the need of people with criminal justice experience who are subject to probation.

experience is around a fifth, and for care experience is nearly two thirds of everyone identified as having MCN.

Table 6: Demographic patterns by number of needs in people with MCN in East Sussex in 2022 and 2023

	Number with MCNs	Age Group	Gender	Ethnicity	Employment	LGBTQ+	Care Experienced	Veteran	Learning Disability
3 needs only	982	35 to 39 (17.6%)	Males (57%)	White (89%)	Unemployed (53%)	Yes (8%)	Yes (2%)	Yes (4%)	Yes (23%)
4 needs only	322	30 to 34 (16.9%)	Males (57%)	White (96%)	Unemployed (62%)	Yes (9%)	Yes (4%)	Yes (2%)	Yes (31%)
5 needs	56	35 to 39 (25.4%)	Females (56%)	White (97%)	Unemployed (65%)	Yes (10%)	Yes (7%)	Yes (4%)	Yes (41%)

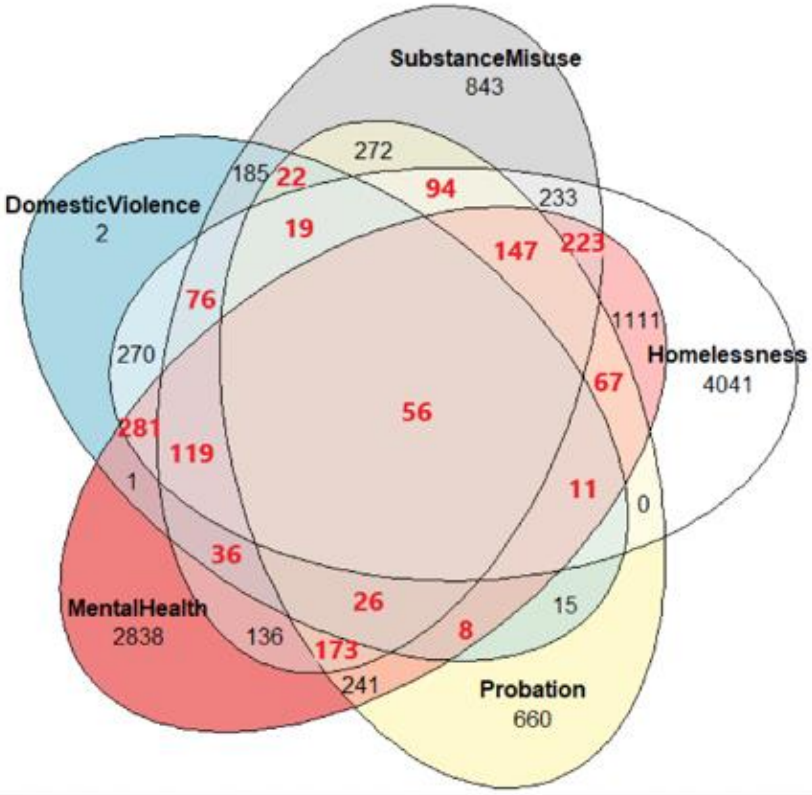
The profile of needs relating to Multiple Compound Needs

The bespoke linked dataset created to understand the profile and needs of people with MCN in East Sussex was created via submissions from local providers which support at least one of the needs which contribute to MCN. Providers shared data on clients "live" or open to their case management system at any point in 2022 to 2023. From this, it has been possible to identify people with three or more needs across one or more providers, as described above.

Figure 5 shows the number of people across the entire dataset, regardless of whether they have MCN, who have every possible combination of needs. This shows, for example, that only two people were identified as having a domestic violence need alone, with no other overlapping needs. Some of the most populous combinations include: people experiencing homelessness and mental health problems, but no other problems (1,111); people experiencing homelessness, mental health, and domestic violence[3] (281); and people on probation with substance misuse needs (272). The rest of the analysis in this report will focus only on those with at least three intersecting needs. The table below describes the total people identified as having each type of need; these are not unique individuals and, as shown in the Venn diagram, the totals per need type are not mutually exclusive. Whereas the figures in the Venn diagram sum to the total population in the linked dataset, there is significant overlap between individuals described in the table.

Figure 5: Intersections of needs amongst people with any need which might contribute to MCN in East Sussex in 2022 and 2023

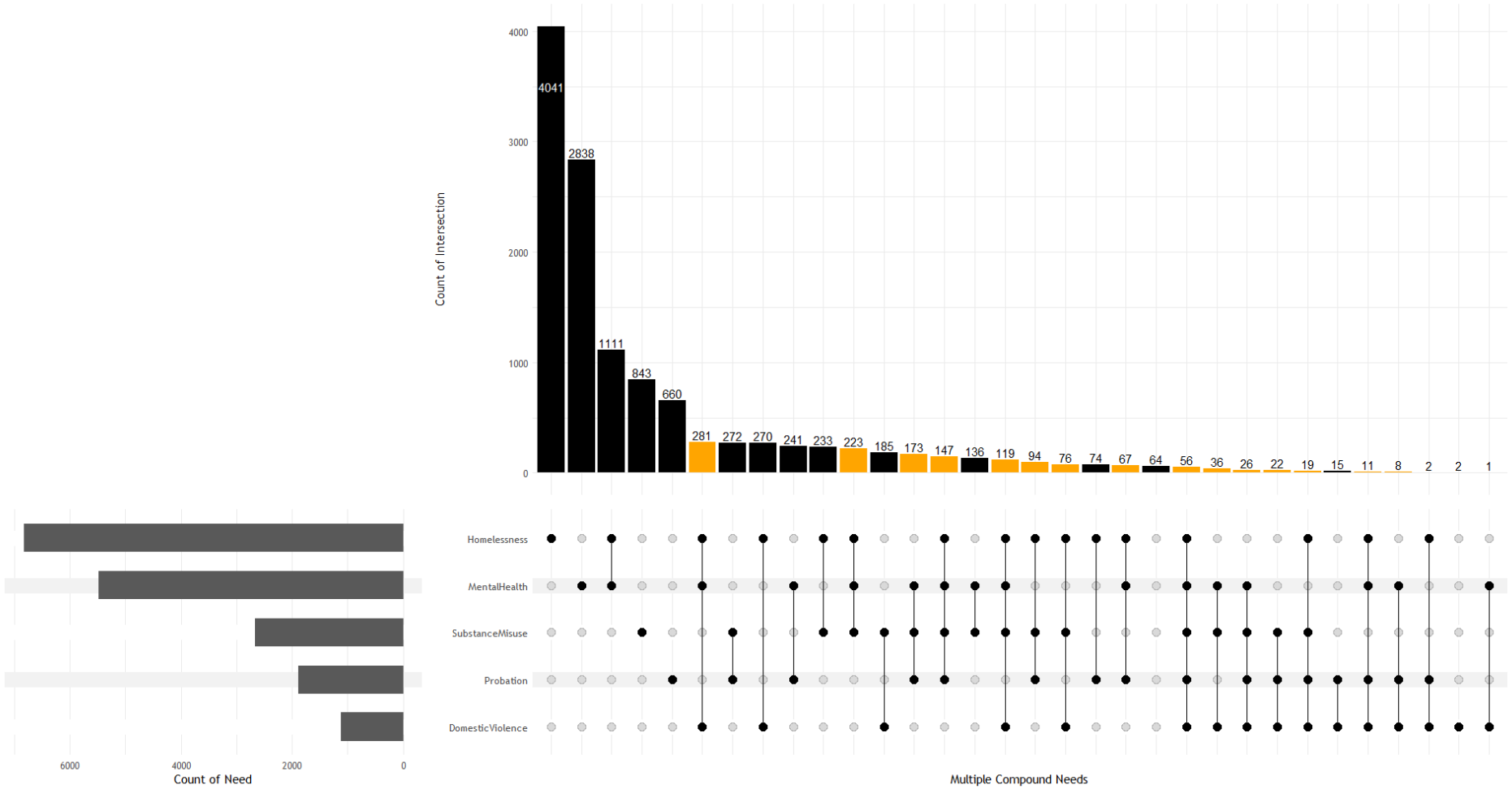
[3] Domestic violence figures here reflect survivors and not perpetrators.



Mental Health	Homelessness	Substance Misuse	Probation	Domestic Violence
5474	6824	2660	1887	1129

These findings are presented in an UpSet plot in Figure 6, which shows the number of people with each need configuration. The horizontal bars at the bottom of the chart show the number of people in the entire dataset of 12,346 with each type of need. The individuals reflected in these bars are not mutually exclusive, and there is a significant degree of crossover between people in each need group. The various possible combinations of needs, from people with only one need through to people with all five needs, are shown in the patterns of linked dots. The number of people with each combination of needs is reflected in the bar chart at the top of the figure. Configurations of needs which meet the criteria for MCN are shown in orange.

Figure 6: Configurations of needs amongst people with any need which might contribute to MCN, in East Sussex in 2022 and 2023



The profile of Multiple Compound Needs

Analysis on prevalence of individual and combination need types has been undertaken on the 1,360 total people identified as having MCN at any point over the two-year period (2022 and 2023 inclusive) for which data were provided.

Individual needs

For people with MCN (three or more needs) in East Sussex, the most common need is mental health, followed by homelessness, then substance misuse, penultimately domestic violence, and finally probation (Table 7).

Table 7: The ranking of individual needs by frequency among people with MCN in East Sussex in 2022 and 2023

MCN type	People with 3+ MCNs who have this need	%
Mental Health	1147	84%
Homelessness	1095	81%
Substance Misuse	991	73%
Domestic Violence	656	48%
Probation	625	46%

The same rank order pattern is found when narrowing the group only to those with three MCNs, excluding those with four or five needs (Table 8).

Table 8: The ranking of individual needs by frequency among people with 3 MCNs only in East Sussex in 2022 and 2023

MCN type	People with 3 MCNs who have this need	%
Mental Health	788	80%
Homelessness	743	76%
Substance Misuse	624	64%
Domestic Violence	425	43%
Probation	366	37%

When the group is limited only to those with four MCNs, excluding those with three or five needs, substance misuse is the most frequent need, followed by (in order) mental health, homelessness, probation, and domestic violence (Table 9).

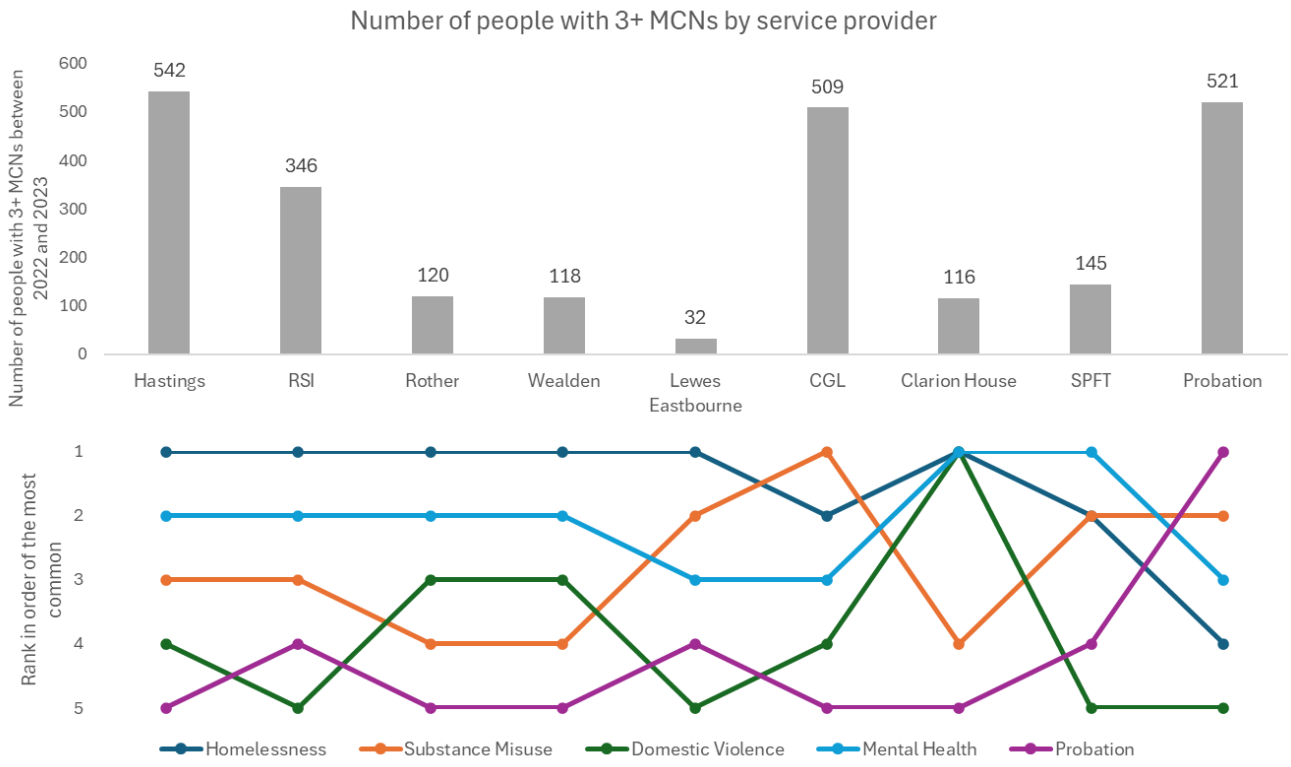
Table 9: The ranking of individual needs by frequency among people with 4 MCNs only in East Sussex in 2022 and 2023

MCN type	People with 4 MCNs who have this need	%
Substance Misuse	311	97%
Mental Health	303	94%
Homelessness	296	92%
Probation	203	63%
Domestic Violence	175	54%

This suggests that substance misuse is a relatively more common need and domestic violence a relatively less common need in the group with more compounding needs.

There are variations in the relative prevalence of the needs among service users with MCN known to different providers. The most common need among clients of each provider is, as would be expected, the need which the provider supports. The exception is Clarion Housing Group, the refuge provider, whose clients necessarily all have a housing need, but interestingly also ubiquitously have mental health needs. The relative prevalence of each need among each provider's client group is reflected in Figure 7, which describes the number of people with MCN per provider and the rank order of individual needs, with the most common need in the top position. The people with MCN associated with each provider are not mutually exclusive, and the same individuals appear in multiple providers' data, as inherent to the nature of MCN.

Figure 7: The number of people with MCN reported in providers data and the needs ranked as the most common for that provider, in East Sussex in 2022 and 2023



Notably, mental health is the only need type which ranks third or higher for clients with every provider. There are also some conspicuous differences between comparable providers, for example domestic violence ranks as a more common need than substance misuse among people with MCN in Rother and Wealden.

Combination needs

For people with MCN (three or more needs) in East Sussex, the most common combination of needs is housing (H), mental health (MH), and substance misuse (SM)

(Table 10). The second most common combination is housing, mental health, and domestic violence (DV). The third most common combination is mental health, substance misuse, and probation (Pr).

Table 10: The ranking of combinations of needs by frequency among people with 3+MCNs in East Sussex in 2022 and 2023

Combinations of Need	Number of people
H+MH+SM	545
H+MH+DV	467
MH+SM+Pr	402
H+SM+Pr	316
H+MH+Pr	281
H+DV+SM	270
MH+DV+SM	237
DV+SM+Pr	123
MH+DV+Pr	101
H+DV+Pr	88

The two most frequent combinations reverse order, and the third most combination remains the same, when narrowing the group only to those with three MCNs, excluding those with four or five needs (Table 11).

Table 11: The ranking of combinations of needs by frequency among people with 3 MCNs only in East Sussex in 2022 and 2023

Combinations of Need	Number of people
H+MH+DV	281
H+MH+SM	223
MH+SM+Pr	173
H+SM+Pr	94
H+DV+SM	76
H+MH+Pr	67
MH+DV+SM	36
DV+SM+Pr	22
MH+DV+Pr	8
H+DV+Pr	2

When the group is limited only to those with four MCNs, excluding those with three or five needs, the most common combinations by some considerable way are housing, mental health substance misuse and probation; followed by housing, mental health, substance misuse and domestic violence (Table 12). This suggest that housing, mental health, and substance misuse needs are almost always involved in people with four combined needs. Furthermore, these data suggest that people with four or more needs

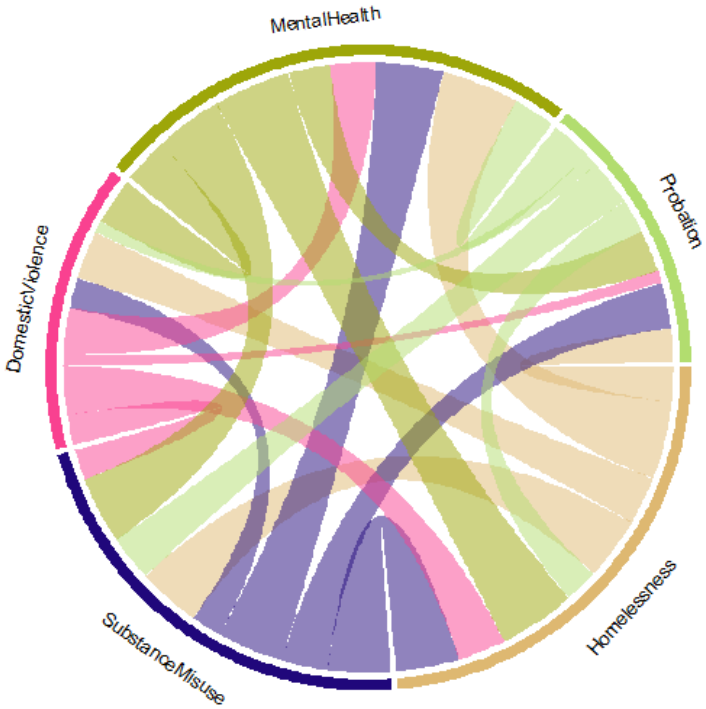
are relatively more likely to have substance misuse and mental health together than other pairs of individual needs; conversely, it is relatively uncommon to experience domestic violence and probation together.

Table 12: The ranking of combinations of needs by frequency among people with 4 MCNs only in East Sussex in 2022 and 2023

Combinations of Need	Number of people
H+MH+SM+Pr	147
H+MH+DV+SM	119
MH+DV+SM+Pr	26
H+DV+SM+Pr	19
H+MH+DV+Pr	11

Figure 8 shows the strength and size of the connections between pairs of need for those people with MCN (three or more needs). Of all the individuals who reported a mental health need (dark green), the largest proportion of them also reported a homelessness need (as shown in the diagram by the thickest of the mental health lines connecting to the homelessness section). Of those with a domestic violence need (pink), however, only a small proportion reported also having a probation need (as shown by the thinnest of the domestic violence lines connecting to the probation section).

Figure 8: Chord diagram to show the size and connection of the different needs with one another, for those people who had 3 or more MCNs in East Sussex in 2022 and 2023



The relationship between need and contact with services

Analysis of the locally-collected linked dataset shows that there is a gap in all services, of varying degrees, between the residents with MCN reported to have a need and the residents with MCN in touch with the relevant service (as determined by *identifying individuals within the returns from those relevant providers*) (Table 13).

These data, and those following, split by need type, do not describe *unique* individuals, meaning that there is crossover of individuals between need types due to the nature of MCN.

Table 13: Of the people with MCN (3+ needs), the number and proportion in touch with services for each of their different needs, in East Sussex in 2022 and 2023

Need	People who had this need (reported by any service provider)	People found in service providers' data	% in touch with a service provider
Homelessness	1095	923	84%
Substance Misuse	991	509	51%
Domestic Violence	656	116	18%
Mental Health	1147	145	13%
Probation	625	521	83%

The proportion of people with MCN with a reported need who were also found to be in touch with the relevant service (as determined by whether those individuals were present in the relevant providers' returns) ranged from 84% of the cohort (homelessness) to 13% (mental health).

The nature of the needs data as a mixture of verified and self-reported will affect this data; for example, mental health needs are more likely to be self-reported than some other need types, and also more likely to have a range in severity including cases mild enough not to require contact with the secondary care mental health trust. The linked dataset did not include data from other NHS organisations, so it is unknown what proportion of people with MCN who reported a mental health need might be getting support from another provider, for example some people may not be eligible for SPFT's services and instead managed in primary care. Another potential explanation, which was mentioned by participants in interviews and focus groups, is people exaggerating a mental health need in an attempt to qualify for other services, like housing. Another factor contributing to the discrepancy may, of course, be issues accessing support; this too was described by participants in interviews and focus groups.

People with other need types, besides mental health, may also be in contact with support services outside of East Sussex or with organisations which did not participate in this Needs Assessment (for example, people with a substance misuse need might attend Alcoholics or Narcotics Anonymous). Furthermore, a key local domestic

violence service provider (CGL) was not able to supply domestic violence data to the linked dataset, so the number of people with MCN with experience of domestic violence in contact with support services may be higher than 18%. The 18% figure represents those using the refuge service, which will not be required or appropriate for all people with MCN with experience of domestic violence.

Providers which shared data with ESCC for this analysis were also asked to include information about the services their clients were known or reported to be in contact with. Table 14 shows the number and proportion of people with MCN with each reported need who have been shown to be in touch with a relevant service. This analysis takes a more generous approach than shown in Table 13 above, by describing an individual as 'in contact' with a service if the person was found in those providers' datasets *or* if any provider reported the service user to be in contact with that service. This approach shows that 91% of people with a homelessness need are in touch (either reported or verified) with a relevant provider, whereas only 23% of those with a domestic violence need and 18% of those with a mental health need are in contact with a support service. Probation has been excluded from this analysis as this is not a service for which there is likely to be unmet need, rather any discrepancies can be attributed to data quality (for example an individual may be a prison leaver but no longer in contact with Probation services).

For people with a domestic violence or mental health need, there is a high proportion of people who cannot be identified as being in touch with a support service. This is likely in part attributable to key services being missing from the linked dataset. For example, the linked dataset does not include information about clients at CGL's domestic abuse service, and one would not expect most people with experience of domestic abuse to require support in a refuge. Nor does the linked dataset include data about people with mental health issues managed in primary care. However, the number of people *reported* to be in touch with mental health and domestic violence services, not specific to those providers which submitted data, is still very low.

Table 14: The proportion of people with MCN who reported a need and stated that they were in touch with the relevant support service (either verified by linking the data or what was reported by the provider) in East Sussex in 2022 and 2023

		Reported as in contact with **support service**			
Need	Number who reported this need	No/no data provided	%	Yes (linked or reported)	%
Homelessness	1095	102	9%	993	91%
Substance misuse	991	435	44%	556	56%
Domestic violence	656	507	77%	149	23%
Mental Health	1147	937	82%	210	18%

The proportion of people with MCN who are in touch with a service for their need increases for all need types when reported contact unverified by linkage is included. This discrepancy might be the result of clients having needs outside of the data time period, meaning that reported contact might in fact be 'verified' by the provider in a different year. Other explanations include issues with recording on either provider's part, or misreporting of contact by service users. However, it could also indicate that, where the percentages were low when comparing the support services' data to what was being reported by any provider, support services may only be seeing the "tip of the iceberg", and a lower proportion of those in need than other providers expect.

While the proportions of people with MCN reported to be in contact with a service for which they have a need change with consideration of reported contact, the patterns and the gaps between reported need and reported support remain. Despite the limitations of this exercise, this comparison suggests that there may be unmet need in some service areas.

Analysis of need versus contact was also undertaken specifically for people with MCN with co-occurring substance misuse and mental health needs. This showed that a very small proportion of those with reported co-occurring conditions were described as being in touch with mental health services (5%), and an even smaller proportion were found in the return from SPFT (3%) (Table 15). This compares to 18% of all people with MCN including a mental health need being described as being in touch with mental health services or found in the data, compared to 13% actually identified in SPFT's return. The pattern was similar for CGL, though the proportions were larger, with 21% of those with MCN including co-occurring conditions reported to be in touch with CGL, and 15% found in CGL's data; compared to 56% reported and 51% found for all people with MCN with a substance misuse need. These patterns suggest that having co-occurring conditions reduces one's chances of having contact with either mental health or substance misuse services.

Table 15: The proportion of people with MCN with both substance misuse and mental health needs who were in touch with a relevant support service (either verified by linking the data or what was reported by the provider) in East Sussex in 2022 and 2023

		Mental Health				Substance Misuse			
	Total	Reported	%	Found	%	Reported	%	Found	%
Mental Health and Substance misuse	647	30	5%	21	3%	133	21%	96	15%

Once again, there are several possible reasons for the differences between those reported and those found to be in touch with services. However, the much lower rate of contact with support services for those with co-occurring conditions, particularly secondary mental health services, echoes the findings of the qualitative analysis that

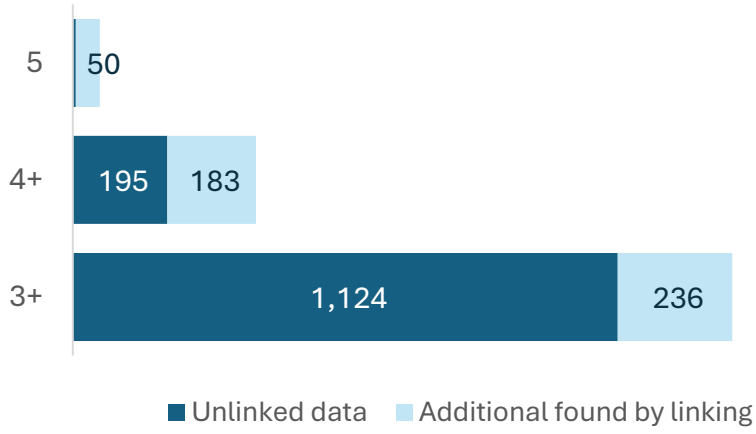
the local co-occurring conditions pathway is not yet successfully bridging the gap for people whose multiple needs make it challenging to provide contemporaneous psychiatric and addiction support.

Completeness of fields describing providers' knowledge of clients' interactions with other services was low for substance misuse, mental health, and domestic violence needs.

The value of data linkage

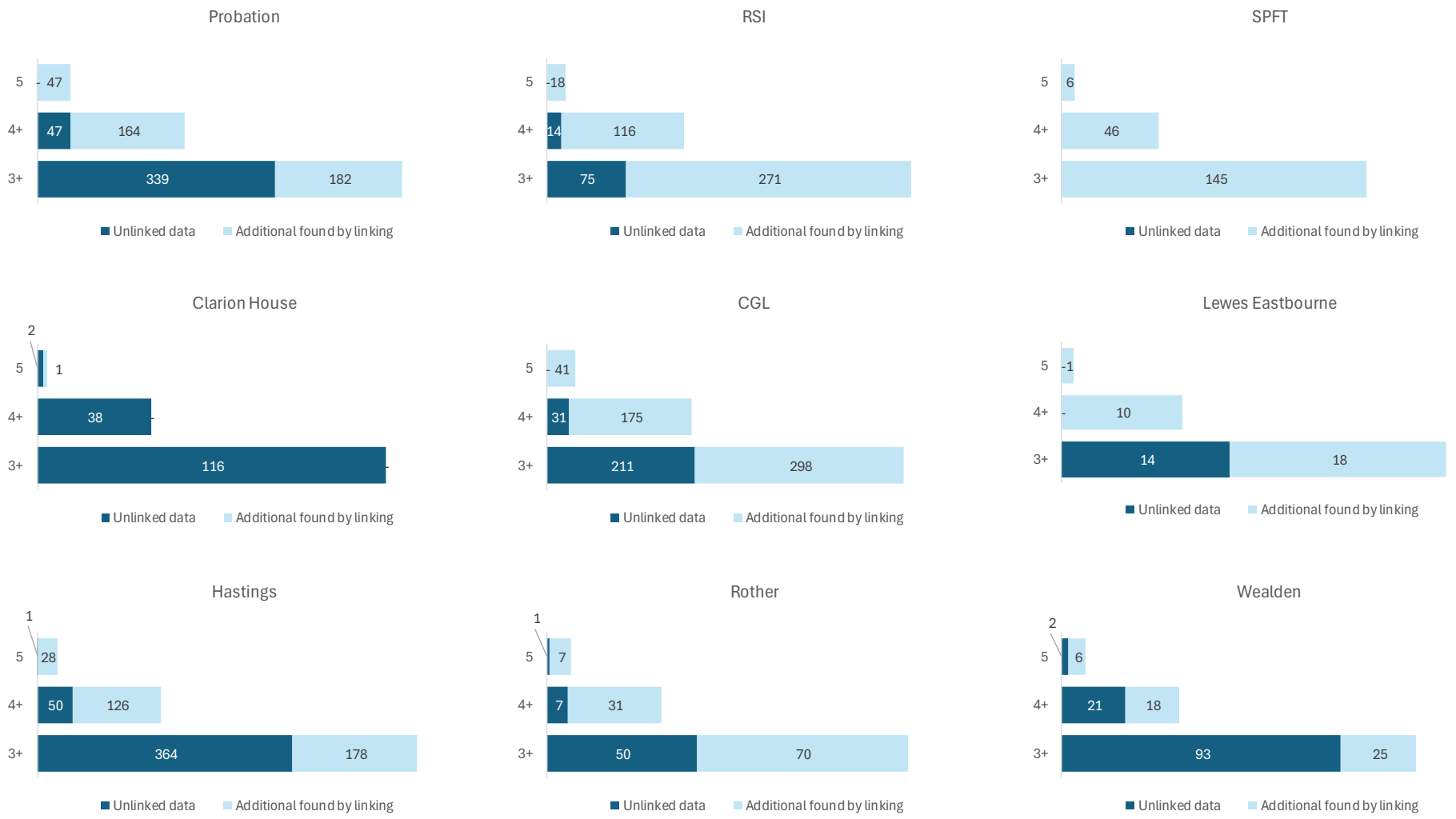
The number of people with MCN in East Sussex, regardless of the specific variable or approach to counting, has been found to be greater using linked data than could be identified by an individual dataset. For example, when considering the 1,360 people identified as having "live" MCN (namely having three or more needs described by one or more providers, and having their case open with one or more providers) within the entire time period of the data request (2022 and 2023 inclusive), linking providers' data has enabled identification of 236 additional people with three or more needs (Figure 9).

Figure 9: People with three or more needs in East Sussex in 2022 and 2023, identified using unlinked and linked data



This is echoed when considering the clients reported on by each provider: all providers, bar the refuge service Clarion Housing Group, had clients with MCN in 2022 and 2023 who were not known to the service (considering only coded data shared as part of the needs assessment) to have MCN. Figure 10 shows the number of people who were in each service's data submission with MCN identified via their submission alone compared to when linkage was used to identify MCN.

Figure 10: People identified with three or more needs per provider in East Sussex in 2022 and 2023 when using unlinked and linked data



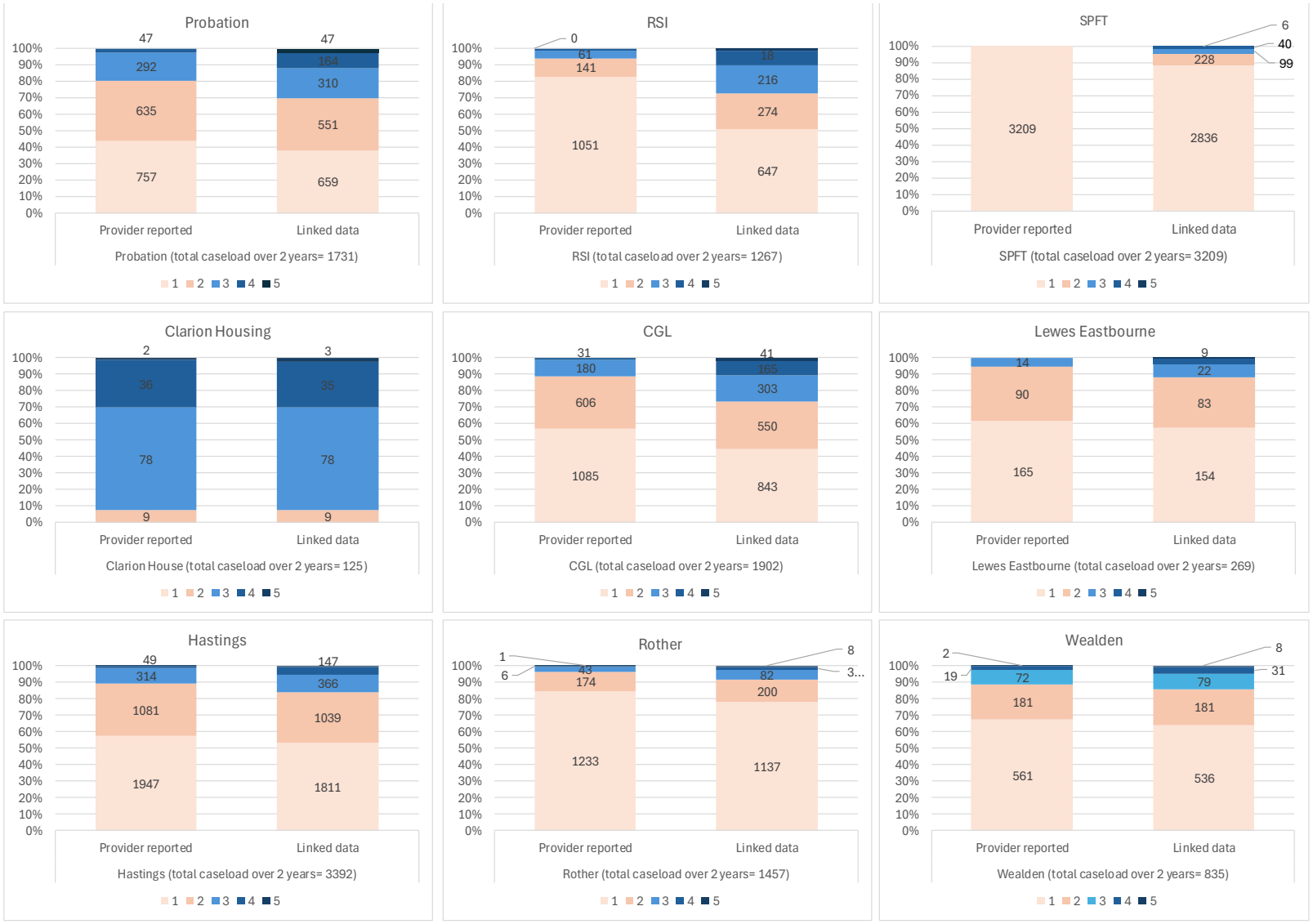
The difference in the number of MCN known to the provider before and after linkage is described in Table 16, which reflects the proportion of people with MCN identified via linkage who the provider already had the information to identify. The proportion of people with MCN, identified using linked data, of whom providers were independently aware, as determined by their submitted data, ranged from 0% for SPFT to 100% for Clarion Housing Group. Most providers could have identified 40-70% of the MCN cohort identified using linked data using only information reported to ESCC from in-house. Clarion Housing Group refuge service is unusual because almost all of its clients have MCN, as determined by this needs assessment's methodology, and the service has very complete recording of data pertaining to MCN. SPFT only provided data about mental health needs, so it was not possible to identify any patients with MCN from SPFT's data alone. The RSI data submission was missing data across many needs for many clients, because much of that information was not coded in 2022 and 2023, though coding has since improved. These data describe individuals known to each provider, meaning individuals will appear across multiple providers rather than uniquely in one row, because of the nature of MCN.

Table 16: People with MCN in East Sussex in 2022 and 2023 as reported by each provider, as found in provider-only data as compared to linked data

	3+ MCNs			
Provider	Provider only data	Linked data	Additional found	% identified from Providers data
CGL	211	509	298	41%
Clarion Housing Group	116	116	0	100%
Probation	339	521	182	65%
RSI	75	346	271	22%
SPFT	0	145	145	0%
Hastings	364	542	178	67%
Lewes-Eastbourne	14	32	18	44%
Rother	50	120	70	42%
Wealden	93	118	25	79%

Among all providers except Clarion Housing Group, people with MCN were identified as a result of data linkage across all need levels (three or more needs, four or more needs, and five needs). The use of linked data, therefore, revealed more complexity among the caseload (as shown in Figure 11Figure 11). Namely, when linked data was used to identify with people with MCN among each provider's case load, the proportion of the caseload shifted to higher rates of greater combinations of needs. For example, CGL's caseload shifted to become proportionally more complex when their clients' needs were identified using other providers' submissions.

Figure 11: Providers' case load mix by each individual's number of needs in East Sussex in 2022 and 2023 using linked and unlinked data



Not only does this analysis of linked data provide a more accurate overview of the casemix of providers' clients' needs, but it also facilitates better understanding of what these needs are and how they combine (please see Quantitative findings – The profile of Multiple Compound Needs).

Utilising linked data as part of this project has generated a more accurate count of people with MCN than possible using unlinked data, by enabling both deduplication to support identification of unique individuals and also identification of needs known to all participating providers about those individuals with MCN. Furthermore, the analysis of linked data offers each provider additional information about their own cohort, utilising the intelligence collected by system partners.

Just as data linkage has been essential to understand the scale and nature of the population with MCN in East Sussex, sharing data will be vital to support a partnership approach to addressing MCN.

The proportion providers' caseloads who are people with Multiple Compound Needs

Providers submitted a pseudonymised data extract describing people engaged with their service with at least one need contributing to MCN. All providers, except Clarion Housing Group were found to have more people with MCN on their caseload than could have been known to the service using their data alone (Table 17**Error! Reference source not found.**). The proportion of people on these caseloads identified as having MCN varies significantly between providers. Clarion Housing Group has by far the greatest proportion of client base with MCN, with 93% of clients being found to have three or more needs. Of all housing authorities, clients at Rother have the lowest rate of MCN, and Hastings the highest.

Table 17: The proportion of each provider's caseload found to have MCN using unlinked and linked data, in East Sussex in 2022 and 2023

		3+ Needs			
	Total people	Provider only	%	When linked	%
East Sussex	12,346	1,124	9%	1360	11%
CGL	1,902	211	11%	509	27%
Probation	1,731	339	20%	521	30%

Clarion House	125	116	93%	116	93%
RSI	1,267	75	6%	346	27%
SPFT	3,209	-	0%	145	5%
Hastings	3,392	364	11%	542	16%
Wealden	835	93	11%	118	14%
Rother	1,457	50	3%	120	8%
Lewes Eastbourne	269	14	5%	32	12%

Limitations

Performance data

Performance data from RSI was only provided per quarter, with no ability to deduplicate individuals appearing in more than one quarter, thereby limiting the descriptive analysis of this dataset to only three months' worth of information.

Data were missing for some Changing Futures clients relating to outcomes, and for some rejected nominations.

Service mapping

The service mapping forms which services were asked to complete were general, and sought information about the service as a whole rather than any provision specific to people with MCN. While this was by design, as most services have no bespoke offer for people with MCN, a limitation of this approach is that responses may reflect provision which is not reflective of the lived experiences of people with MCN.

Design of the dataset

The quantitative arm of the needs assessment was designed to quantify the population with MCN in East Sussex using secondary data. This introduced an unavoidable limitation: that only the population with MCN who were using services would be reflected. There is an unquantifiable unknown level of need among people with MCN not known to the services which contributed quantitative data. Another limitation is the inability to link reported individuals with MCN definitively to the county. People with MCN were included in the East Sussex count if they were in contact with a local service, even if their known address was outside of the county. This decision was taken due to the transient nature of the population, and the likelihood that an address from a different area would not preclude that individual from using services in East Sussex. Services covering a wider area than East Sussex, like Probation, SPFT, and Changing Futures, were asked to provide data about East Sussex clients only; as this criterion was likely informed by address data, this introduces some inconsistency between providers specific to East Sussex and those with a larger footprint.

Providers were asked to submit data for a two-year period, to maximise the chances of describing the local cohort accurately. Needs described by providers in their submissions were not time-specific; namely dates in the data related to engagement with services, rather than development or recovery from specific needs. It was also understood that an individual with MCN may not experience all their

needs contemporaneously. The wider time period was designed to mitigate these limitations so as to capture individuals whose needs were sequential or whose engagement with services did not accurately reflect the timing of their experiences.

The time period was not extended beyond this two-year period for the purposes of data minimisation; with a view to making a reasonable request of providers; and in order to generate a manageable linked dataset. As such, it is not possible to infer time trends from the linked dataset, which is a limitation.

The data collection template and specification were developed in collaboration with partners. It was designed to ask general questions about demography, need, and service contact, on the basis that the various providers contributing data all collected different information and recorded it in different ways. As such, providers were asked to complete the template using their own definitions, for example what the *provider* considers a mental health or substance misuse needs. This introduces several limitations: there are differences in the definitions used between providers; some of the needs described are self-reported rather than verified, particularly mental health need; and it is not possible to audit the responses without additional engagement with the providers. Relatedly, it was not possible to tell whether an individual's homelessness was acute or chronic; some providers described the type of homelessness, for example rough sleeping, but it was not possible to determine which cases might be circumstantial, such as the result of flooding, or issues maintaining a tenancy rooted in disadvantage.

Using routinely collected data also prevented any analysis relating to the severity of needs described, meaning that this needs assessment can reflect the size of the population using the agreed definition but cannot segment it by severity through any method other than the number or combination of needs.

If this exercise were to be repeated, it would be beneficial to provide more guidance to providers about which needs should be reported against learning disability. Many providers simply reported 'yes' or 'no' in the learning disability field, but of those who provided detail, some of the 'yes' responses were linked to neurodivergence like autism and ADHD. Where such detail was given, neurodivergence responses not considered instances of learning disability for analysis, but the 'yes' responses likely describe an unquantifiable combination of true learning disability and neurodivergence, meaning that the learning disability estimate is likely inflated.

As described above in Methods – Quantitative Methods – Specification, SPFT's return pertained only to patients who were accepted to a service following an initial assessment in period. This means that people with MCN at SPFT are likely under-represented in analysis, as patients known to the trust for a longer time and not invited for an initial assessment in the period would not be included.

Information governance

Processes underpinning the information governance for this project took longer than expected to establish and agree with partners. While to some extent this work may have set a precedent for data sharing among these partners, if similar work were to be undertaken in future, a longer timeline of around nine months or more should be factored in for consultation, design, completion of a Data Protection Impact Assessment and Data Sharing Agreement template, and negotiation and agreement to those documents.

Completeness of the linked dataset

Some providers, specifically BHT and CGL's domestic abuse service, were not able to contribute to the linked dataset, as described in Methods – Quantitative Methods – Data Caveats – Missing Providers.

Other providers only provided data for a subset of their caseload: 88% of CGL's substance misuse service users, as permitted by consenting arrangements; and 269 of the clients of Lewes/Eastbourne's housing service, limited to records from October 2022 onwards. These missing elements will have impacted on the results presented, For Lewes/Eastbourne key areas of known deprivation may have been underreported and so, underrepresented in our findings. Similarly with BHT and CGL's domestic abuse data, we will not have a true picture of this service need, or whether these providers were aware of similar needs as reported in other provider's datasets.

No other health providers besides SPFT contributed data to this dataset, meaning that mental health need and support provided in other primary and secondary care settings is not reflected.

Criminal justice experience is solely reflected in the dataset by contact with probation; this will reflect only a subset of people with criminal justice experience in the county, meaning that this need and support is underestimated. This approach was taken due to the sensitivity of criminal data, the challenges in quantifying criminal justice experience and what might be considered sufficient contact to warrant concern, and the difficulty identifying which individuals were resident in the community in East Sussex.

The number of requested fields completed for the caseload varied considerably between providers, with SPFT for example only describing mental health needs and not providing data on any other need type.

Providers' approach to missing data also varied considerably (see section Data Cleaning) on some providers data submissions, containing numerous blank cells rather than specifying whether a blank indicated a 'no' response, no data, or something else.

Quality of the linked dataset

The bespoke linked dataset was subject to significant cleaning and manual work to fill gaps and address "grey" (close, non-identical) matches. Nevertheless, the quality of the data cannot be fully assured due to the nature of the process by which providers used their own definitions to report on need and contact, thereby risking discrepancies. Due to the timelines within which this report was required, and the delays posed by the information governance requirements, the submissions have not been audited. Most potential quality concerns are unknown; an example of an identifiable quality issue is that some providers described individuals' age at the time of submission, rather than at the end of the request period as stipulated (although attempts to try to rectify this was taken during the data cleaning process).

Analysis

Discrepancies in the data required some assumptions to be made during analysis. For example, where multiple descriptions of one person's homelessness were provided by different providers, rules were established to prioritise severity, and when multiple types of homelessness of similar severity were identified, the most recent was taken. The application of such rules entails some risks. For example, if a description of rough sleeping was attached to a homelessness designation deemed to be less severe, this rough sleeping description would have been missed. Nevertheless, this was agreed among the research team to be the most pragmatic approach in light of the volume of data to be processed.

While Adult Social Care data were not used to *generate* the MCN cohort (see Methods – Quantitative Methods – Data Processing – Linkage) they were used to complete demographic data for individuals where some characteristics were unknown to other providers. They were also used to verify information where there were discrepancies between data from other providers. Changing Futures data were used in a similar way, as this service could only provide data for a period outside the time window requested.

Assumptions were made during the linkage process when there were “grey” matches; these decisions were made on an individual basis as part of a manual review, and thus there is a risk of error. There are wider limitations around relying on names and dates of birth to link records, such as if individuals have different names recorded by different services, whether by error or by design, such as a pseudonym.

The time component of this analysis relates to services’ awareness of client needs, not the timing of client needs itself, meaning it is not a traditional prevalence statistic, but it is a close proxy for prevalence, namely the total affected caseload at a point in time.

Quantitative materials

Public Health - Pseudonymised data extract template

An excel spreadsheet template was sent out to all providers detailing the fields of data we would like them to provide, and against each field some guidance notes of how to report the data. Below are extracts from that template (split over multiple pages for presentation).

Field Name	Age (years)	Gender	Ethnicity	Sexual orientation	Armed Forces	Employment status	LOSA/Postcode	GP Practice
Field description	Age in years as at 31/12/2023.	The gender the person identifies as.	The ethnicity the person identifies as.	Sexual orientation theyidentifies as.	Previously or currently serving in the UK Armed Force.	Last known employment status	LSOA (Local Super Output Area) code during this period.	Name or code of their registered GP Practice.
Additional notes	Please will you give the age as at 31 December 2023. If that is not possible please give the age and supply the date (in another column alongside it) the age was calculated e.g. "Age as at 31 March 2022"	Which of the following gender identities do they identify as: Female Male Trans Man Trans Woman Non-binary All other gender identities Prefer not to say Not answered If the gender has not been captured or recorded please will you highlight that so we no that "gender was not recorded" rather than "gender not given".	Which of the following broad ethnic groups do they identify as: White Mixed or multiple ethnic groups Black, Black British Caribbean or African Asian or Asian British Other ethnic group If the ethnicity has not been captured or recorded please will you highlight that. If the ethnicity captured is more variable than the 5 categories above, then please provide that and we will map the data to these broad categories ourselves.	Which of the following does the person use to describe their sexual orientation: Bisexual Gay/ Lesbian Heterosexual/ Straight Other sexual orientation Prefer not to say Not known If sexual orientation has not been captured or recorded then please will you highlight that. If the Sexual Orientation captured was more variable than the categories above, (e.g. instead of "other", "Asexual" was given) then please provide that and we will map the data ourselves.	Please can you supply whether they are: Currently Serving Ex Armed forces Never Served Not known	We want to try to see whether they were in employment/unemployed when they were in contact with your service. If employment has not been captured or recorded please will you highlight that.	For their last known address, please will you supply their LSOA. We can supply a lookup between postcode and the 2019 LSOA code which cover all the south east of England postcodes. It would be helpful to map the postcode to the LSOA. If this a problem them please get in contact and I will see what I can do to help.	If the GP practice is know, please will you include details. If unknown/not recorded or not asked, then please will you state that.

Field Name	Dependents		Carer status	Care Leaver		The dates they were in contact with your service		
	Under 18 years	18 years or older		Residential care leaver	Date left care	Start date	End date	Assessment outcome
Field description	Number of dependent under 18 year olds	Number of adult dependants	Someone who is a registered carer.	Someone who has recently left residential care.	Date they left residential care (if known).	Assessment date	The date the duty ended.	The outcome of the assessment
Additional notes	If you have dependents in your data by "age" then please tell us how many dependents were under 18 (such as children or other young person they are responsible for).	If there is any data on adult dependents (that are being looked after or cared for) the please include the number here.	By carer we mean some who cares for someone who has a disability/illness/is old rather than "childcare".	We want to know if the person has ever been "looked after", so that may not just mean children in care, it could be an adult who has recently been in residential care. Please can you highlight the type of residential care they were previously in (if known). By "recent" we mean at any time within the 12 months previous to them coming in contact with your service.	Please supply the date they left care (if known).	This would be the date of their assessment regardless of whether a duty was owed.	This would be when the "duty ended" in relation to the case, ie. end of a prevention duty, end of relief duty or the date a main duty was accepted/discharged. It is noted that main duties may still have been ongoing beyond the date range we are collecting data, so please note in that column here if it was still ongoing at 31/12/2023.	To help identify all those that were owed a duty please can you record the outomce of the assessmentin this column.

These are the 5 categories of MULTIPLE COMPOUND NEEDs we are interested in for your client/patient

Field Name	Homelessness		Substance misuse		Domestic abuse		Mental health issues		Contact with the Criminal Justice System
	Homelessness status	In contact with homeless provider	Substance misuse issue	In contact with substance misuse provider	Victim of domestic violence	In contact with support services	Mental health condition	In contact with support services	
Field description	A record of homelessness at any point in the 2 years	Name of homelessness provider	A record of any substance misuse problems	If they are in structured treatment please provide name of organisation.	Are they a victim of domestic violence?	If they are in contact with support services please provide the name of the organisation.	A current or recent mental health condition.	If they are in contact with support services please provide the name of the organisation.	On probation at any point in the 2 year period this extract covers
Additional notes	If there is a record of the person being homeless at any point in the 2 year period this extract covers then please include this. If you have specific details about their homelessness status please show this if known e.g. rough sleeper entrenched homeless temp accommodation etc or if that level of detail is not known then simply Yes No Not available to report on Not asked/recorded	If the person was homeless and were in contact with a provider or a support organisation in relation to this, please provide the name of the organisation e.g. RSI BHT Local authority (housing services) If they were not in contact with anyone or it is unknown whether they were, please state this.	If there is a record of the person having a substance misuse problem at any point in the 2 year period this extract covers, then please can you record it here. If you are aware of the type of the problem please can you show it e.g. Drug Alcohol or if that level of detail is not known then simply Yes No Not available to report on Not asked/recorded	If the person has a substance misuse problem and were in contact with a provider in relation to this, please provide the name of the organisation. If they were not in contact with anyone or it is unknown whether they were, please state this.	If there is a record of the person being a victim of domestic violence then please can you show it here. For example: Yes No Not available to report on Not asked/recorded	If the person is a victim of domestic violence and were in contact with a provider in relation to this, please provide the name of the organisation. If they were not in contact with anyone or it is unknown whether they were, please state this.	If there is a record of the person having a mental health condition please can you record it here. If you are aware of the type of condition then please can you show it e.g. Dementia Bipolar or if that level of detail is not known then simply Yes No Not available to report on Not asked/recorded	If the person has a mental health condition and are in contact with any mental health provider, then please provide the name of the organisation. If they were not in contact with anyone or it is unknown whether they were, please state this.	If there is a record of the person being on probation in the past 2 years then please can you show it here. For example: Yes No We are only interested if they were in contact with probation and nothing about any conviction etc. However, if you do not record any information about contact with probation services or are unable to report on it (e.g. because this information is held within case notes which cannot be reported on) then please will you highlight that e.g. Not available to report on Not asked/recorded

	For those people with any of the MULTIPLE COMPOUND NEEDS listed in columns W to AE, which of this additional information do you have on their health		
Field Name	**Physical health** Do they have long term physical health problem?	**Learning disability** Do they have a earning disability?	**Housing duty**
Field description	Do they have any long term/chronic physical health problem?	Do they have a learning disability?	The name of the local authority who has a duty to house them?
Additional notes	If they have reported they have a long term/chronic physical health problem then please can you show it. For example Yes No Not available to report on Not asked/recorded See attach worksheet for a list of some examples of long term/chronic conditions.	Does the person have a learning disability. If details about the learning disability are known, for example: Asperger's Syndrome Autism Autism Spectrum Diagnosis then please include them otherwise Yes No Not available to report on Not asked/recorded	If you capture this information please can you supply the name of the local authority who has a duty to house them.

Additional guidance notes:

Additional notes to help with building/creating an extraction report/query	
1	**Extract Period** to cover the 2 years between: **1 January 2022 to 31 December 2023**
2	We are interested in People/Clients/Patients/Applicant (however you classify them) who had/have cases which resulted in an **initial assessment** at any point during the extract period no matter the outcome and regardless of whether they were owed a full homelessness duty. They should also include any cases that had an *open duty at any point during the 2022/2023* period, which in some cases may mean their assessment date was before 1/1/2022
3	We are **only interested in adults (18 or older) who meet one or more** of the Multiple Compound Need criteria: * Homelessness * Substance missues * Domestic abuse * Mental health issues * Contact with the Criminal Justice System/Probation Columns W to AE in the Data extraction worksheet highlights these in more detail. You may have people on your system that do no have any of these 5 needs, if possible please exclude these.
4	Some providers have reported that they record data by "case" with 1 or more people attached to a case. As we are trying to measure the "need" in the system, it would be helpful to have data on all adults on a particular case if they have 1 or more of the MCN detailed above. Therefore it will be helpful to have the case number so we can tell which individuals were part of the same case.
5	We have also been told that some data is recorded in case notes and so a report cannot be run to extract this information. If so, please will you let us know where that is the case (I have tried to capture that in our data extraction request worksheet).
6	If possible could you provide one person's data per line in your output.