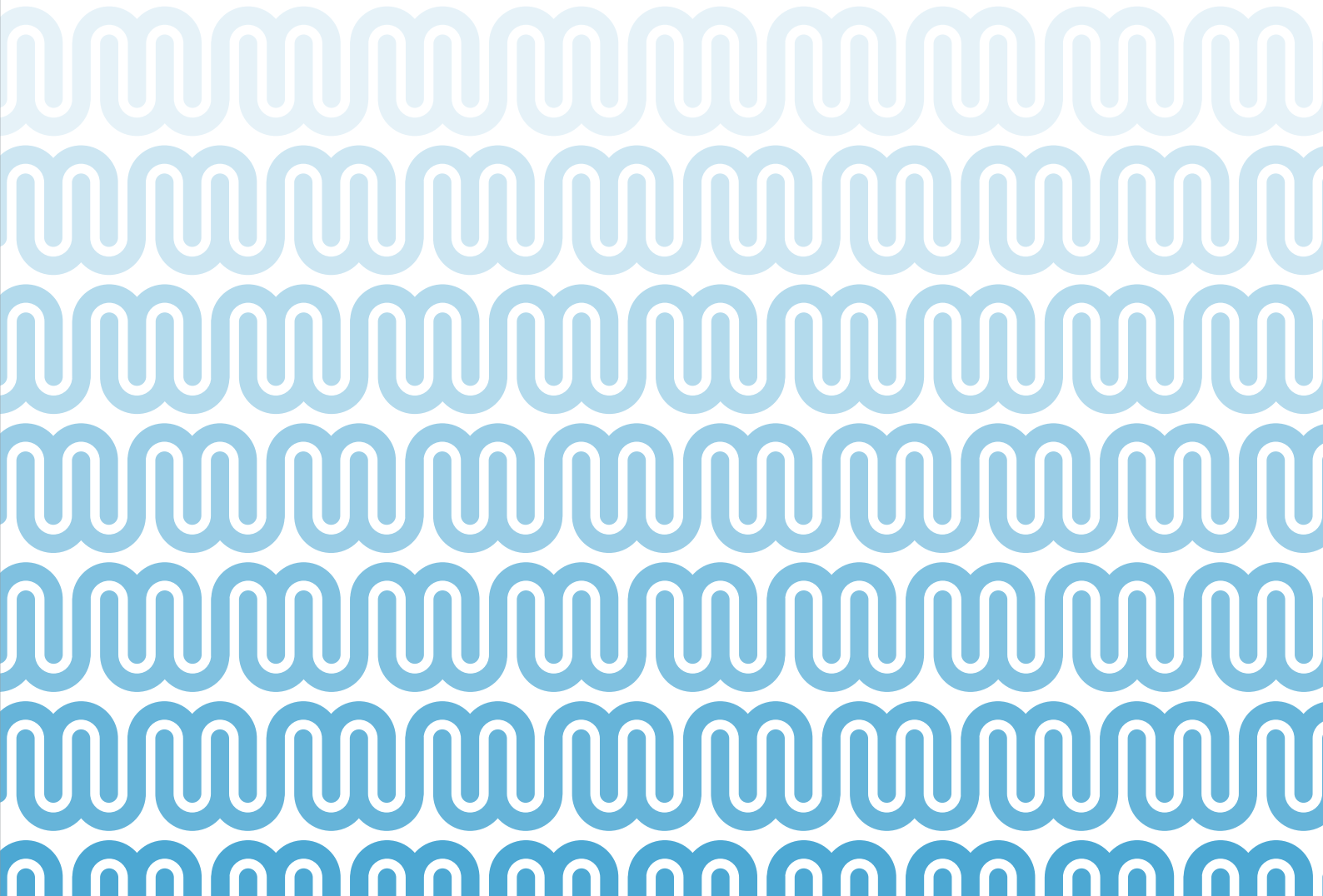
mental welfare commission for scotland

Characteristics of compulsory treatment orders in Scotland

An analysis to inform future law reform

Statistical Monitoring

June 2022



Our mission and purpose

Our Mission

To be a leading and independent voice in promoting a society where people with mental illness, learning disabilities, dementia and related conditions are treated fairly, have their rights respected, and have appropriate support to live the life of their choice.

Our Purpose

We protect and promote the human rights of people with mental illness, learning disabilities, dementia and related conditions.

Our Priorities

To achieve our mission and purpose over the next three years we have identified four strategic priorities.

- To challenge and to promote change
- Focus on the most vulnerable
- Increase our impact (in the work that we do)
- Improve our efficiency and effectiveness

Our Activity

- Influencing and empowering
- Visiting individuals
- Monitoring the law
- Investigations and casework
- Information and advice

This report was submitted to the Scottish Mental Health Law Review for 29 May, and published on 10 June 2022.

Contents

Executive summary

Compulsory treatment is considered necessary in certain circumstances where an individual is very mentally unwell. Such treatment is regulated by the Mental Health (Care and Treatment) (Scotland) Act 2003 ('the Mental Health Act'), which is currently under review. In contrast to emergency and short-term detentions, in which an individual can be detained in hospital for up to 72 hours and 28 days, respectively, compulsory treatment orders (CTOs) initially last up to six months, but can be extended further, meaning an individual's liberty is deprived or restricted for a prolonged period.

Information on individuals who are treated under CTOs in Scotland is scarce. Research from other UK jurisdictions has suggested that community-based compulsory treatment might not reduce re-admissions. A white paper on reform of the Mental Health Act in England and Wales highlighted concerns that community-based compulsion goes on for longer than is necessary and queried as to whether it achieves real benefit and data that demonstrates that it is disproportionately used with minoritised ethnic communities.

In this report we looked at information about i) all CTOs ('CTOs'), ii) hospital-based CTOs ('hospital CTOs'), and iii) community-based CTOs ('community CTOs') to understand how this type of intervention has been used over the last 14 years in Scotland. Some of this information relates to individuals, while other relate to an episode of detention.

We extracted information about CTOs from the Mental Welfare Commission for Scotland's ('the Commission') data information system. We calculated relevant statistics to compare differences between groups and assess the likelihood of CTOs being first or subsequent, extended or not extended, and of an individual having had previous Mental Health Act episodes before being compulsorily treated on a direct transfer to a community CTO.

This work was commissioned and in-part funded by the Scottish Mental Health Law Review (SMHLR), however the content was written and prepared independently by the Mental Welfare Commission for Scotland ('the Commission').

Key findings

1. The number of CTOs has increased over time; there were more than twice as many individuals on a community CTO in 2020-21 compared to 2007-08 while the number of hospital CTOs increased by only 16%. The proportion of individuals on community CTOs increased from 30.2% in 2007-08 to 44.8% in 2020-21.
2. Minoritised ethnic groups are overrepresented among individuals on CTOs, compared to representation in the general population. Over the 14-year period reported here, around 15% of individuals on both hospital and community CTOs over the period were from minoritised ethnic groups, compared to 4% in the general population (2011 census).
3. Among CTO episodes that ended over the period, new orders had a median length of 6 months (the statutory review point) while the median length of all subsequent CTOs was nine months. New CTOs were shortest for the oldest age group (>65). They were longest for those of mixed ethnicity. Subsequent CTOs were shorter for the <18s and >65s, longer for males, and longer for those from the most deprived communities in Scotland.

4. Over time, fewer CTOs that lasted beyond the mandatory review point were extended; of episodes starting in 2007, 57.3% were extended while of those starting in 2020 only 43.7% were extended; the calculated likelihood of extension of a CTO was 0.52 (that is, about 50% less likely) in 2020 compared to 2007.
5. The rise in community CTOs over time is driven by more individuals from the previous year staying on an order rather than new individuals being placed on an order. The number of new community CTOs each year has been relatively stable with an average of 329 each year (SD=30.3).
6. Among those who had a direct transfer to a community CTO, where the Tribunal hearing determined community-based treatment and it was not preceded by a hospital CTO, about one in three had no previous episodes of detention under the Mental Health Act.

Recommendations to SMHLR

Review duration of CTOs and review points

In keeping with work that the Commission has undertaken on short-term detention certificates (STDCs), we find that the ending of the use of compulsory powers coincides with the legislated endpoints of periods of compulsion. The SMHLR should therefore consider whether duties to review detention and compulsion are being met and consider whether durations of CTOs and review points/mechanisms require revision.

Review safeguards for community-based compulsion

The increase in the use of community-based CTOs is a factor in the rise in the use of compulsion. The number of new community CTOs has remained relatively stable over time while a continuation of orders drives the observed rise. The Commission has previously recommended revocation strategies being part of the plan for individuals. This does not appear to be happening. The SMHLR should consider formal legislation requiring revocation strategy, lengths and reviews of community based CTOs and a requirement with mechanisms to review/assure that a person is achieving real benefit from community based compulsion.

Propose mechanisms for post-legislative scrutiny

The number of people on community CTOs has far exceeded the initial projections. The SMHLR should recommend post-legislative scrutiny mechanisms for any changes it recommends to reducing the use of community-based compulsion.

Develop systems leadership for data monitoring

There is an on-going issue with ensuring data-linkage between available datasets to address questions such as how community-based CTOs may have impacted on compulsion more broadly and how this is linked to resources shifting to community-based services. Data and technology are not being used to their full potential to enable necessary change at local and national level. The SMHLR ought to consider legislating for duties on an organisation to lead and ensure collaboration between organisations to use this potential. This should include exploring how ICD-11 diagnostic codes may inform future monitoring.

Take a universalist approach to reduce inequalities

The SMHLR should review the data in this report that shows inequalities in how community-based CTOs are used. It is the Commission's view that that measures taken for all to improve requirements, safeguards and scrutiny around the use of Community based CTOs can help to reduce inequalities across age, gender, ethnicity and deprivation.

Background

Compulsory treatment orders (CTOs) set out conditions for individuals to comply with where it has been decided that they need to be provided treatment for mental illness under the Mental Health (Care and Treatment)(Scotland) Act 2003 ('the Mental Health Act'). A CTO can be hospital based (hereafter hospital CTO) or community based (hereafter community CTO).

When a CTO application is made, by a mental health officer (MHO), it is sent to the Mental Health Tribunal for Scotland ('the Tribunal') where a hearing determines if the individual requires to be treated under compulsory measures. This can be on a hospital CTO or a community CTO. The application includes two medical reports, an MHO report, and a proposed care plan. The Tribunal decides whether a CTO is to be granted. An initial CTO is granted for up to six months, the responsible medical officer (RMO) can extend this for a further six months and thereafter 12 months. A tribunal must review a CTO, if it has not been referred to one, every two years.

Of all detentions that occurred in 2020-21 only 25% progressed to a CTO. This means that most detention orders each year are shorter periods of compulsory treatment [1]. However, when looking at all individuals subjected to detention on 2 January 2021, the majority were hospital CTOs (40.6%) and community CTOs (32.8%) [1]. These are two fundamental measures that we use to count detentions; one focuses on orders or episodes (also known as incidence) and the other on individuals (also known as point prevalence). We will explain this further later in this report.

In our 2020-21 monitoring report, we found the following pattern for the incidence of new Mental Health Act orders in that year [1]:

- The age-standardised rates of detention increase gradually by age group, with higher rates in males than females, except for the <18s where the rate is higher among girls.
- The rate of CTOs varies greatly between health boards and local authorities.
- Among all CTOs around a third live in the most deprived areas of Scotland, with a clear downward gradient across the Scottish Index of Multiple Deprivation (SIMD), meaning far fewer people in the most affluent areas of Scotland were subject to a CTO.
- A relatively high proportion of people on CTOs are from minoritised ethnic groups; 7.6% were of Asian; African, Caribbean or Black; Mixed; or any other ethnicity. In the general population only 4% are from these ethnic groups [2].

On community-based CTOs, a report published in 2006 noted that "before the 2003 Act was passed, the Scottish Executive estimated that in Scotland, at any one time, there might be about 200 people subject to community-based CTOs" (p. vii) [3]. In 2020-21 there were around 1,200 individuals on a community CTO [1]. Against this, over recent years, the number of inpatient beds for psychiatric, addiction and learning disability treatment has fallen. Between 2014 and 2019, the number of beds declined by 13.5% from 4,532 to 3,922 [4]. A guide to the Mental Health Act describes how "community-based CTOs may allow the flexibility of control which will allow the least restrictive alternative to be applied in many cases, and make detention operative only in cases where there is no realistic alternative available" (p. 77) [5]. It is difficult to say anything about the direction of causality, however we raise this interplay

between increasing psychiatric treatment in the community and the bed reduction at the outset.

Impact of community-based CTOs on patient outcomes

Research has been undertaken to look at whether community-based CTOs lead to improvements in care-related outcomes. Taylor et al. [6] investigated the impact of introducing community CTOs and found that before individuals were placed on a community CTO their mean number of days in hospital was 66.1. After their community CTO this declined to 39.3 (p<0.01). Reductions in days in hospital was significant for both males and females – the impact between genders was not significantly different, meaning that both males and females had similar reduction in days in hospital [6]. Elsewhere in the UK, the Oxford Community Treatment Order Evaluation Trial (OCTET) included a randomised sample of 330 patients with psychosis and assessed the impact of a community CTO compared to voluntary status via Section 17 leave. The study did not find any difference in readmissions after 36 months, meaning those on a community CTO were readmitted to the same extent as those who were not placed on an order. The authors therefore concluded that community CTOs do not provide benefit to these patients [7].

How do individuals perceive being subject to a CTO?

A review of research from seven countries on individuals subject to community-based compulsory treatment showed that "levels of perceived coercion varied quite markedly in studies" [8]. Some patients felt that while the community-based compulsion restricted their freedom, there were less restrictions than hospital-based treatment [8]. The setting which individuals are involuntarily treated is therefore important in considering what impact an order has on patients' feelings on coercion.

One of the studies included in the above review was from Scotland and included 49 individuals of whom one third were on community CTOs [9]. The study found both that participants felt that compulsion could be necessary and that they did not need the restrictions they were under. Some individuals felt the tribunal system was dynamic and offered the opportunity for service users to be involved, while others felt that professionals had most input and the needs of the person was not necessarily met as they felt that they did not have an opportunity to speak. Community CTOs were mainly felt to be a way for medication adherence though while participants felt that it restricted their lives, there was some recognition of positive aspects in comparison to hospital-based treatment [9].

Why we did this work

We have seen that the number of CTOs, both community and hospital based, have increased over time. We also recognise that there is a debate, based on existing research, on whether community CTOs reduce re-admissions and how they benefit individuals. However, until now there has not been a thorough investigation of CTOs in Scotland in terms of trends, characteristics of those subject to an order, and how long individuals are subject to CTOs.

In the context of the current review of the Mental Health Act, and the continued increase particularly in community CTOs, a thorough investigation is timely. This report provides a

foundation of information about time spent on and progression of CTOs and community-based CTOs in Scotland over a 14-year-period.

While this is a statistical report, we recognise that each of the instances we report here relates to an often-long period of compulsory measures that may impact on the person and those important to them.

What we did

We had six specific questions we wanted to answer with this work, which are described in Box 1.

Box 1. Questions guiding the project

Question 1: How long, on average, are people subject to a CTO and does this differ by age, gender, ethnicity, deprivation, and health board?

Question 2: How long are first-time CTOs and are there differences in length by age, gender, ethnicity, deprivation, and health board?

Question 3: What proportion of all CTOs are extended and does this differ by age, gender, ethnicity, deprivation, and health board?

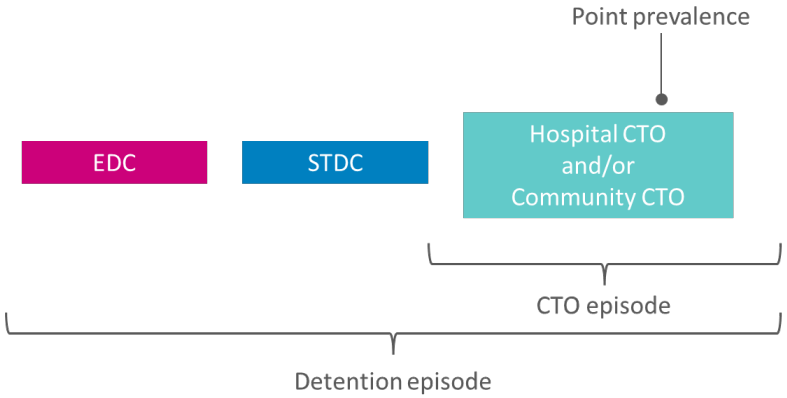
Question 4: What is the number and characteristics of individuals on continued (those who continued a CTO from the previous year) and new community CTOs (including those varied from a hospital-based CTO) since 2007?

Question 5: How many individuals each year transfer directly onto a community-based CTO (without first being placed on a hospital CTO) and does this differ by age, gender, ethnicity, deprivation, and health board?

Question 6: Have those who go directly onto a community CTOs been subject to detentions in the past?

In this report we look at CTOs in two ways, and it is important to clarify these different 'measures'. Firstly, Figure 1 shows an overview of how we look at detention data. We sometimes count an entire episode (a detention episode) which can start with an EDC, STDC or CTO. In this report we specifically look at CTOs, which includes hospital CTOs and community CTOs. Within a CTO episode, an individual may have been on both. In our report we talk about episodes, rather than individuals, as over time an individual may have had several episodes. Finally, we count individuals. This means that we take the 'point prevalence', which is the number of individuals on an order/episode at a given point in time (first Wednesday in January each year). This is distinctly different to a CTO episode, which may change over time, whereas the 'point prevalence' gives us a snapshot at a certain point in time. The information in this report does not include interim CTOs.

Figure 1. Description of terms used within the report[1]



About the data the Commission collects

The data in this report is routinely collected information about compulsion in Scotland. All compulsion under the Mental Health Act is reported to the Commission using forms and the information is processed by the Commission's Casework Administration Team. Information on compulsion is important to follow up on cases of concern and forms part of our monitoring activity, which is a part of the Commission's statutory role [1].

Datasets and data quality

Datasets included in the analyses for this report are outlined in Table A1. It is important to note that while the completion of ethnicity has improved over time by cross referencing within our data management system [10], the completion of postcode data is of poorer quality. In our last monitoring report, we were able to 'clean the data' for the most recent year yielding a completion rate of >90% for new CTO orders [1]. This often included scanning errors or typing errors when the form was filled in, which could be corrected.

For older records in this report we have a much higher proportion of postcodes missing all together. Table A1 shows that matching of postcodes to the SIMD was possible for <75% of records. This should be considered when interpreting the results, as it may not adequately reflect all records.

Data analysis

We calculated descriptive statistics for the relevant questions and compared differences between groups using X^2 test. For length of CTOs, we calculated the median length, as the data is highly skewed towards shorter orders, and the interquartile range (IQR). The median represents the 'midpoint' where 50% of all observations lie and the IQR represents the first and third quartile where 25% and 75% of observed values lie.

For comparison of length between groups we used Mann Whitney U test and independent samples median test. For continuous variables with normal distribution (age) we calculated the mean and standard deviations (SD) and for comparison of groups we used independent

[1] This is just one illustrative example – a CTO episode could, for example, include just one hospital-based order and be preceded only by an STDC.

samples t-test. Finally, we calculated odds ratios (ORs) with 95% confidence intervals (CIs) to assess the likelihood of, for example, having a CTO extended.

All these tests were used to assess whether differences between groups were statistically significant (indicated with a *p*-value of less than 0.05). Where differences have statistical significance, we can say that they have not occurred by chance, whereas any differences that are not statistically significant could have happened by chance.

What we found

Trend and characteristics of CTOs in Scotland

A higher proportion of people on a CTO are treated in hospital than in the community (Figure 2). The proportion of community CTOs increased from 30.2% in 2007-08 to 44.8% in 2020-21. In absolute numbers there were more than twice as many individuals on a community CTO in 2020-21 as in 2007-08 (1,243 vs 571) while the number of individuals on a hospital CTO only increased by 16% (1,532 vs 1,316).

Figure 2. Point prevalence of community and hospital CTOs, by year

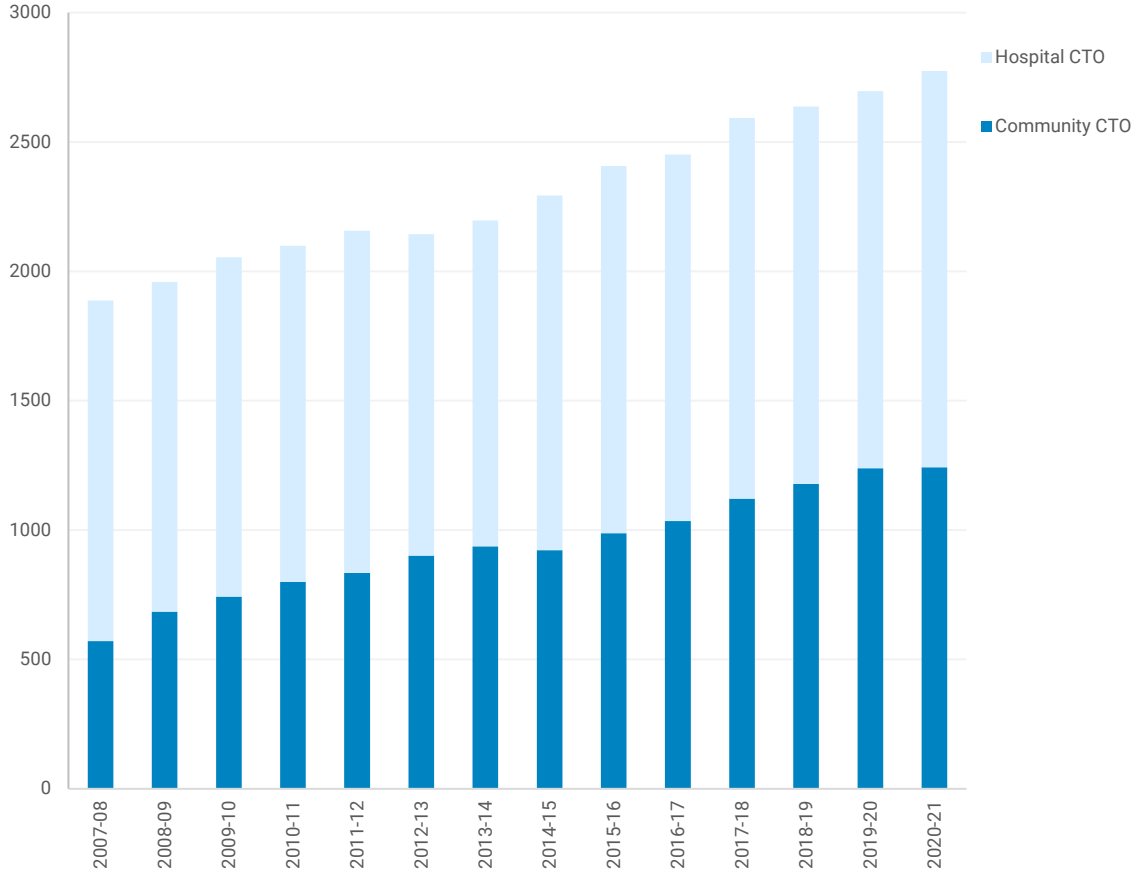


Table 1 shows that compared to hospital CTOs: a higher proportion of community CTOs were male and lower proportion were female; were on average a year and a half younger; a higher proportion were of African, Caribbean or Black, and White Other British while a lower proportion were Asian; and a higher proportion were from SIMD quintile 1 and fewer from SIMD quintile 4.

Table 1. Characteristics of CTOs, 2007-20

Characteristic	Grouping	Community CTO n (%)	Hospital CTO n (%)	Test statistic (df)	p-value
Gender	Female	4,612 (35.8)	7,674 (42.0)	87.2 (1)[a]	<0.0001
	Male	8,587 (64.2)	11,479 (58.0)		
Age (years)	Mean (SD)	46.0 (13.8)	47.6 (18.1)	8.5 (32,350)[b]	<0.0001
Age group	<18 years	56 (0.4)	355 (1.9)	1,074(4)	<0.0001
	18-24 years	559 (4.2)	1,551 (8.1)		
	25-44 years	5,569 (42.2)	6,954 (36.3)		
	45-64 years	5,768 (43.7)	6,552 (34.2)		
	65+ years	1,247 (9.4)	3,741 (19.5)		
Ethnicity	African, Caribbean or Black	1,494 (12.8)	1,762 (10.9)	72.27 (4) [a]	<0.001
	Asian	346 (3.0)	735 (4.5)		
	White Other British	1,324 (11.4)	1,674 (10.3)		
	White Other	214 (1.8)	362 (2.2)		
	White Scottish	8,251 (71.0)	11,681 (72.0)		
SIMDc	1 (most deprived)	864 (39.4)	1,168 (35.8)	17.8 (4) [a]	0.001
	2	603 (27.5)	943 (28.9)		
	3	388 (17.7)	543 (16.7)		
	4	182 (8.3)	367 (11.3)		
	5 (least deprived)	156 (7.1)	240 (7.4)		

[a]X^2; [b]t-statistic; [c]note that 58.7% of postcodes could not be matched to SIMD

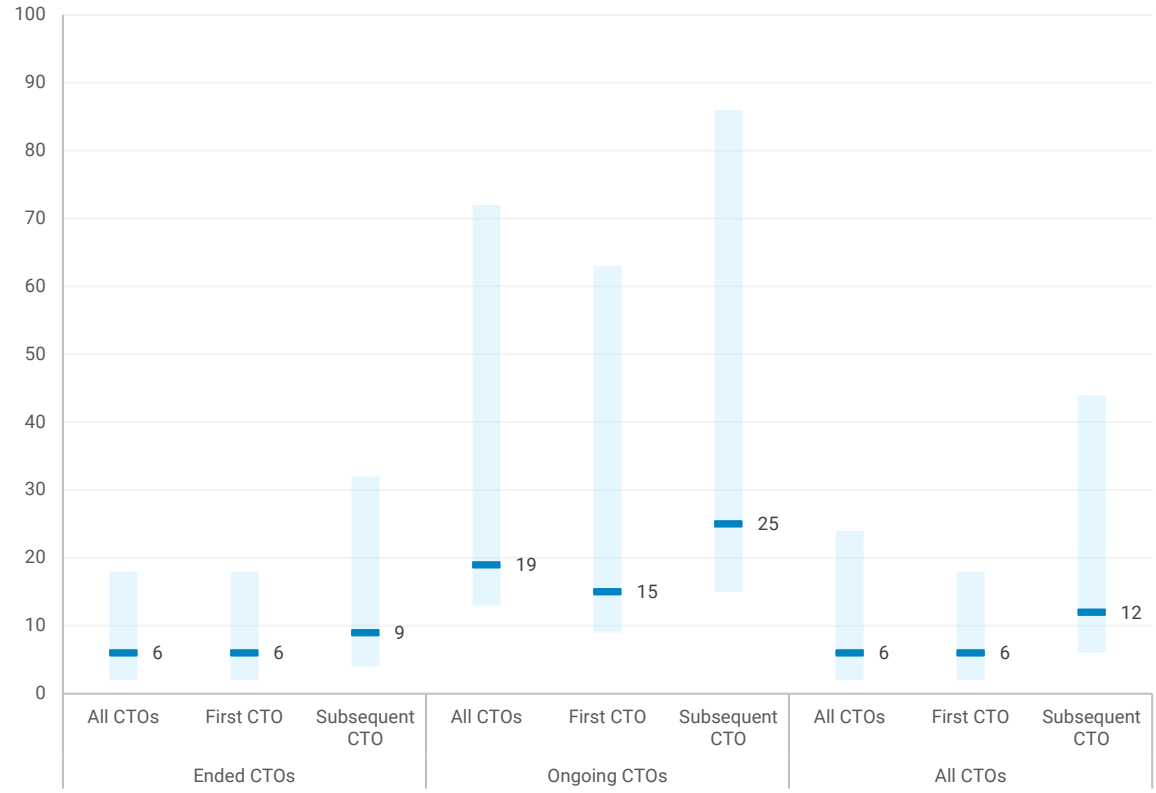
How long do CTOs last?

Length of all CTOs

We first looked at how long CTOs last, which we divided into CTOs that had ended and those that were ongoing; that is orders in existence that hadn't ended at the time of data extraction (August 2021). In the following sections we focus on episodes that had ended, unless otherwise specified, since we will only know with certainty how long they lasted once they have ended.

Figure 3 shows that ended episodes had a median length of 6 months (IQR=4-12) while ongoing orders had a median length of 19 months (IQR=6-53). First CTOs were shorter than subsequent CTOs, both for ended and ongoing. The overall median length of all CTOs, regardless of if they had ended or not, was 6 months (IQR=6-18), with subsequent CTOs being twice as long as first CTOs (mdn=12, IQR=6-32 vs mdn=6, IQR=4-12). Further descriptive information is provided in Table A2.

Figure 3. Median length of CTOs (IQR in shaded area)



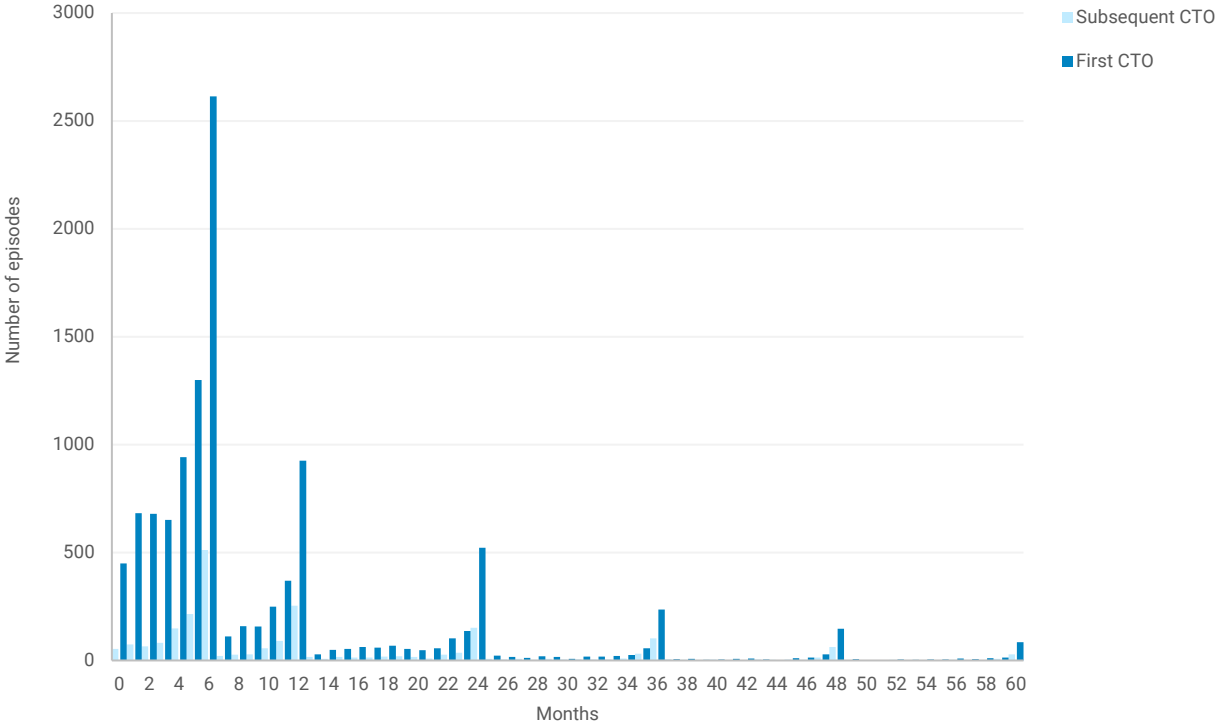
Length of ended CTOs

Most orders in the period were first CTOs (82.9%) while 17.1% were subsequent CTOs and the difference in length between first and subsequent CTOs was significantly different (U=11101661, p<0.001). The profile of first and subsequent CTOs was similar for SIMD, ethnicity, and health board but significantly more subsequent CTOs were females and the mean age of subsequent CTOs was significantly younger than first CTOs (45.0 vs 51.8 years, t=17.6(17804), p<0.0001) (Table A3).

There are clear peaks at 6, 12, 24, 36, 48 and 60 months[2] (Figure 4), which correspond with legally binding review points. When we grouped CTOs into periods of interest, up to 36 months, we found that significantly more first CTOs lasted six months or less, while a higher proportion of subsequent CTOs lasted 7-12 months, 12-24 months, 25-36 months, or more than 36 months (X^2=245.13(4), p<0.001), i.e. a subsequent CTO is more likely to last longer.

[2] Note that the figure excludes the smaller number of episodes lasting longer than 60 months

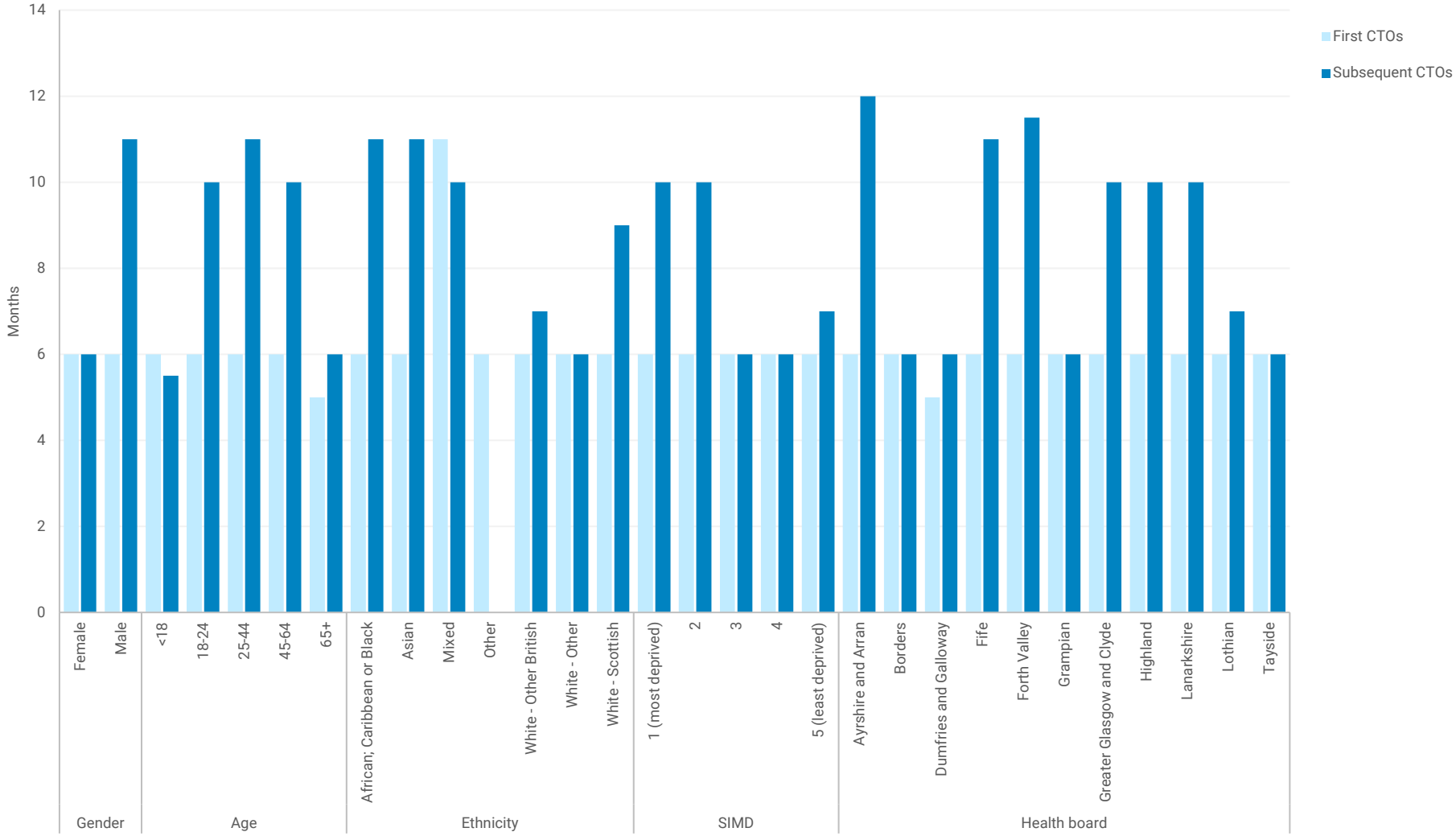
Figure 4. Length of ended CTOs



We looked at length of CTOs based on demographic characteristics, to see if there were any differences between first CTOs and subsequent CTOs. Figure 5 shows that:

- The median length of first CTOs was shorter for those over 65 years (mdn=5, IQR=3-7) and longer for those of mixed ethnicity (mdn=11, IQR=5-24) but consistently for all other demographic characteristics the median length was 6 months.
- Subsequent CTOs were shorter for the youngest (<18) and oldest age groups (65+) (mdn=5.5, IQR=2-12.5 and mdn=6, IQR=4-12, respectively) and longest for 25-44-year-olds (mdn=11, IQR=6-24). They were also longer for males than females (mdn=11, IQR=6-24 vs mdn=6, IQR=5-18), and for those in SIMD category 1 and 2 (both mdn=10, IQR=5-23 and mdn=10).
- Subsequent CTOs were longer in Ayrshire and Arran (mdn=12 months, IQR=6-24) but median length was over 10 in several other health boards. It is noteworthy that the State Hospital (not included in Figure 5) had much higher median length of first CTOs than any other health board – the median was 29 months (IQR=45) with a range from 0 to 104 months. For subsequent CTOs at the State Hospital there were <5 CTOs and no median could be calculated.

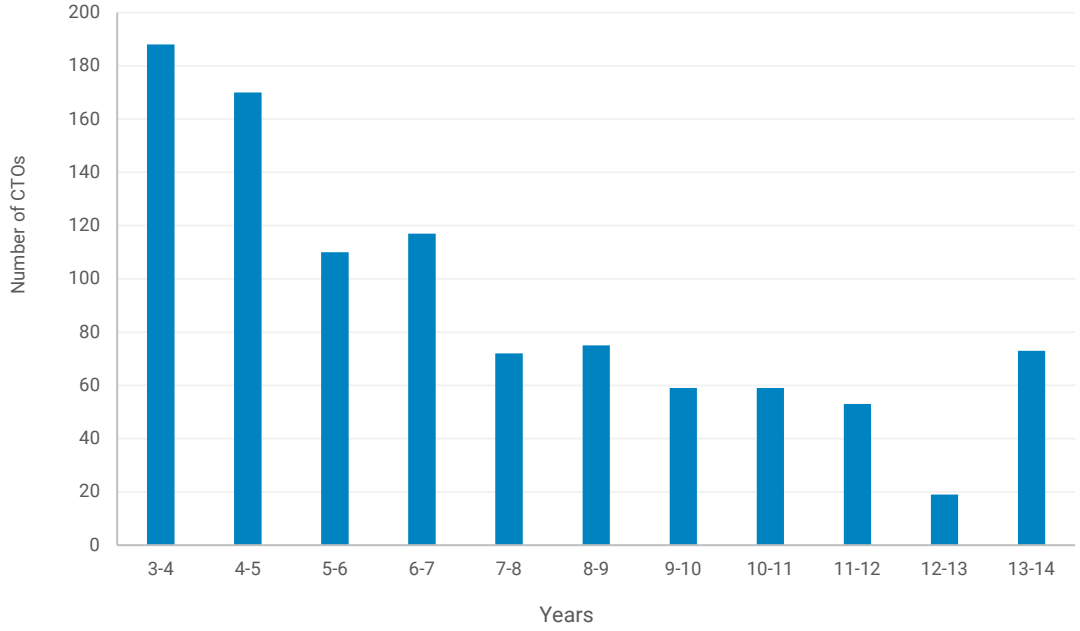
Figure 5. Median length of first and subsequent CTOs by demographic characteristics, 2007-20



CTOs that have lasted more than three years

As noted above, some CTOs have lasted a long time meaning individuals have been under compulsory treatment for extended periods of time. We therefore looked in more detail at orders that lasted more than three years. At the time of data extraction there were 995 (33.4% of all ongoing CTOs) CTOs that had thus far lasted more than three years. The median length was 6.1 years (IQR=4.4-9.2 years). Figure 6 shows that there is a smaller group of people (n=73) who have been on an order for 13-14 years. This constituted about 2% of all ongoing CTOs.

Figure 6. Length of 'long', ongoing, CTOs in years[3]



We then wanted to know what the characteristics of this group were and if they differ to CTOs that had thus far lasted less than three years. Among CTOs >3 years, compared to <3 years, we found: a higher proportion male (64.3% vs 55.6%, X^2=20.65(1), p<0.001), younger age (41.2 years vs 48.0 years, t=9.9(2976), p<0.0001), and a higher proportion from the most deprived SIMD category (42.1% vs 33.5%, p<0.001) (Table A4). There were no statistically significant differences between health boards or ethnicity groupings.

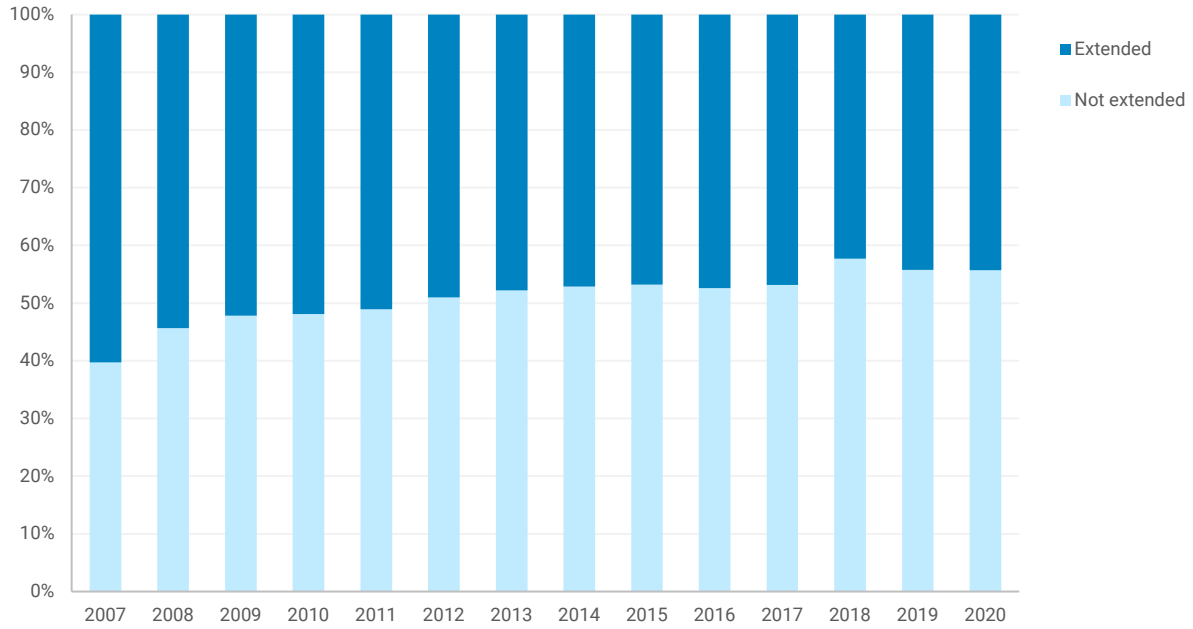
How many CTOs are extended?

We looked at extended CTOs, which means that the order was extended beyond the initial six-month period. Any orders shorter than six months were not included since they would not be extended until the review point.

Over time, fewer episodes were extended (Figure 7) – 57.3% of episodes that started in 2007 were extended compared to 43.7% of those that started in 2020. CTOs in 2020 were about 50% less likely to be extended compared to in 2007 (OR=0.52, 95% CI: 0.43-0.63, p<0.0001).

[3] The length brackets have been categorised as 37-48 months for 3-4 years, 49-60 months for 4-5 years and so on

Figure 7. Proportion of eligible CTOs that were extended, by year



We firstly looked at the characteristics of extended and non-extended CTOs (Table A5). The profile of extended CTOs was: a higher proportion male, aged 25-44 and 45-64 years, and living in the most deprived areas of Scotland. We found statistically significant, but only very small, differences between health boards and different ethnic groups (Table A4). We also calculated the likelihood of a CTO being extended (Table A6) and found that:

- males were more likely to have a CTO extended compared to females;
- compared to those <18 years, the likelihood of an extension increased for each age group until the age of 65, after which those aged 65-84 and 85+ years had a lower likelihood of the CTO being extended;
- those of Mixed ethnicity had a higher likelihood an extension while White Other British and White Other had a lower likelihood of an extension, compared to White Scottish;
- the likelihood an extension increased for each SIMD category and was highest in the most deprived quintile, compared to the least deprived quintile; and
- the likelihood of an extension was higher in Forth Valley while in Dumfries and Galloway, Fife, Grampian, Lanarkshire and Tayside CTOs were significantly less likely to be extended compared to Greater Glasgow and Clyde.

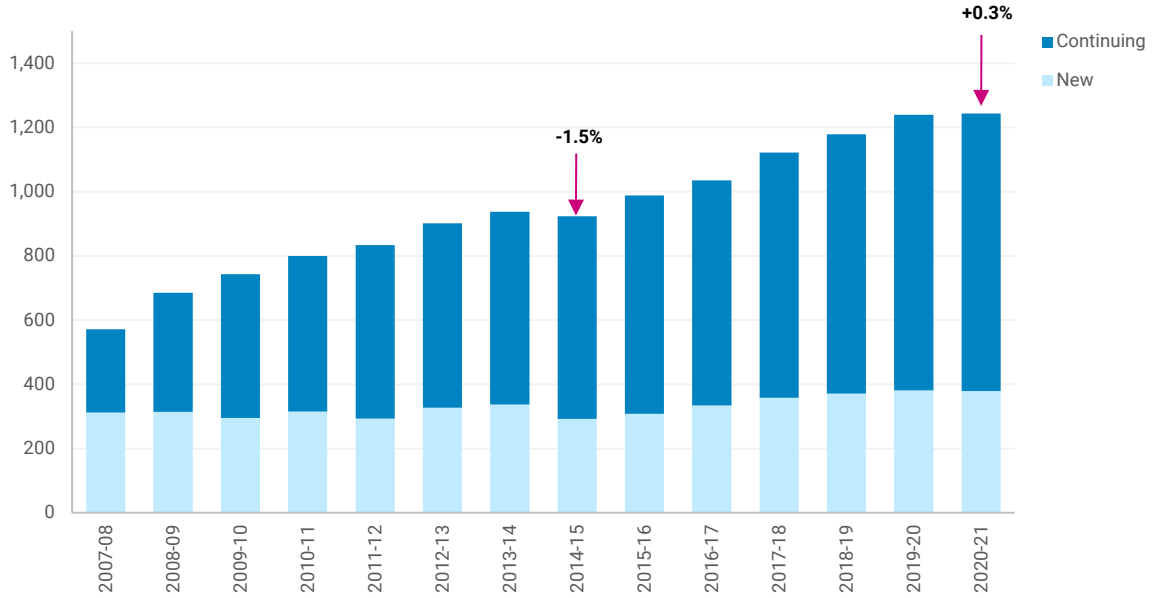
What is the trend and characteristics of individuals on community-based CTOs?

Annual changes of community CTOs

The number of community CTOs has increased in a linear fashion – there were more than twice as many community CTOs in 2021 than in 2007-08 (Figure 8). The proportion of community CTOs that were continuing from the previous year was 45% in 2007 and 70% in 2020-21. In other words, the increase in community CTOs is mainly down to more people staying on orders from the previous year.

Outliers in the data are 2014-15 where there was a large decrease in new community CTOs and 2020-21, due to a decrease in new community CTOs and only a small increase in continuing CCTOs. While the latter is perhaps an effect of Covid, the former is currently unclear what may have impacted on the trend of new community CTOs.

Figure 8. Point prevalence of individuals on a community CTO order on the first Wednesday in January

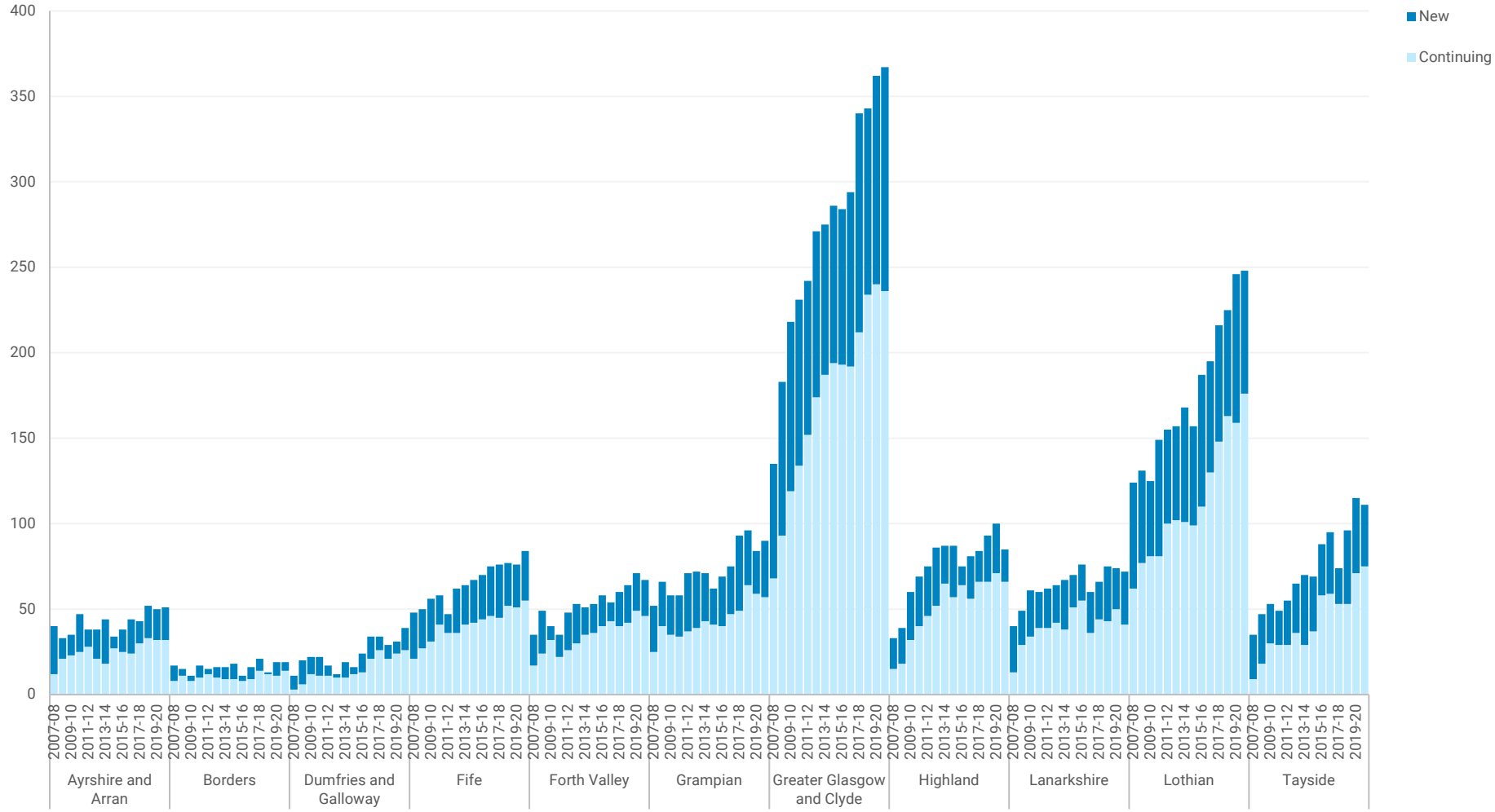


There have been some changes in the characteristics of individuals on community CTOs over the period. We noted that:

- The average age has increased – those whose order continued from the previous year was on average seven years older in 2020-21 compared to 2007-08 (49.2 vs 42.3 years) while those on new orders were on average 1.2 years older (43.6 vs 41.9 years).
- The gender gap for new community CTOs has decreased – in 2007-08 the male-to-female ratio was 2.0:1[4] for new orders which by 2020-21 had decreased to 1.4:1. For continuing orders the ratio decreased, but by far less – in 2007-08 the ratio was 2.2:1 and in 2020-21 it was 1.9:1.
- Males on continuing orders were on average 9 years older and new orders 1.5 years older in 2020-21, females on continuing orders were on average 2.1 years older but those on a new order were on average 0.5 years younger (see Table A7). For both males and females the mean age of new orders in 2020-21 was lower than in 2019-20 (females 50.0 to 45.6 and males 45.4 to 41.3).
- Figure 9 shows the number of community CTOs in 11 of the 14 health boards over time. In the largest health boards (Greater Glasgow and Clyde and Lothian) there was a steep increasing trend in number of community CTOs over the period, while in Fife the curve was slightly flatter yet steady increase and in Forth Valley, Grampian and Tayside the overall trend was an increase in number of CCTOs though with some significant fluctuations. Notably in Ayrshire and Arran and the Borders there is no clear trend.

[4] Male to female ratio means that for every one female there is x number of males – in this case 2 males to every 1 female

Figure 9. Number of new and continuing community CTOs by health board and year[5]



[5] The number of CCTOs in Shetland and Western Isles is <5 for each reporting year and <10 for the State Hospitals and these are therefore excluded from the analysis.

Characteristics of new and continued community CTOs

We then compared new and continued community CTOs to see whether there were any differences in their characteristics across the period (Table 2). We found that:

- Those on continued orders were significantly older than those on new orders and across all years (mean=47.1 vs mean=44.1, t=24.06, *p*=<0.0001).
- Significantly more individuals on continued orders were male. Males were significantly younger than females, both for new orders (41.6 vs 47.7 years, t—15.8, *p*<0.001) and continued orders (44.9 vs 51.6 years, t=-22.6, *p*<0.001).
- A significantly higher proportion of new orders, compared to continued orders, were among individuals of Asian ethnicity, White others and White Scottish while a lower proportion were African, Caribbean or Black, and White Other British.
- A significantly higher proportion of new orders, compared to continued orders, were among individuals from the least deprived areas of Scotland while the proportion of continued orders was significantly higher among those from the most deprived areas.
- There were significantly differences between health boards, however these differences were small.

Table 2. Demographic characteristics on individuals on community CTOs, numbers (and percentages)

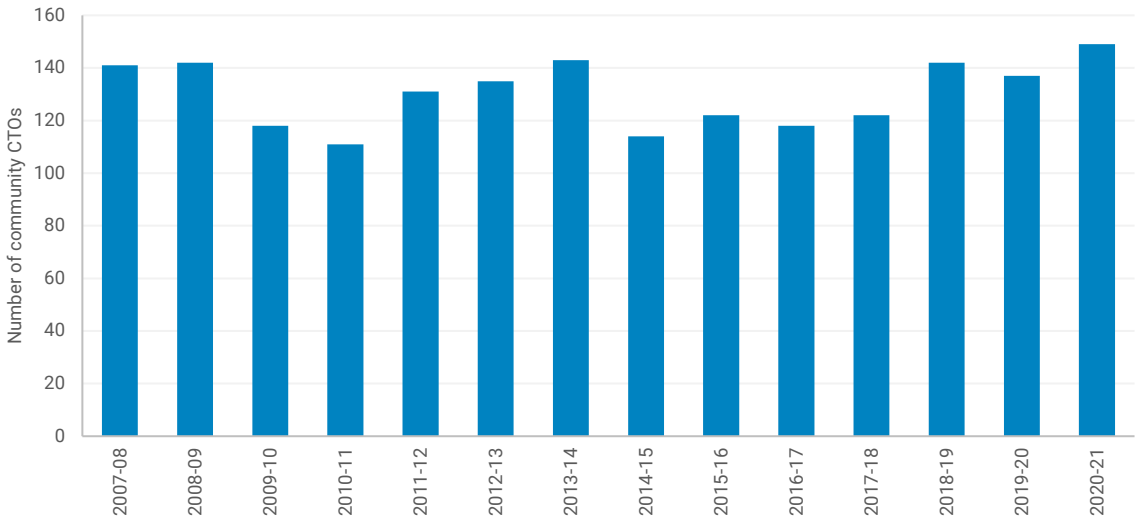
Category	Grouping	Continued	New	Total	Test statistic	*p*-value
Age	Mean(SD)	47.1 (13.2)	44.1 (14.7)	46.0 (13.8)	12.1(13197)[a]	<0.001
Age group	<18	12 (0.2)	44 (1.3)	56 (0.7)	248(4)[b]	<0.001
	18-24	216 (4.2)	343 (9.9)	559 (6.6)		
	25-44	3,377 (49.0)	2,192 (48.6)	5,569 (48.9)		
	45-64	3,896 (38.5)	1,872 (31.4)	5,768 (35.5)		
	65+	799 (8.1)	448 (8.8)	1,247 (8.4)		
Gender	Female	2,741 (33.2)	1,871 (39.1)	4,612 (35.8)	36.18(1)[b]	<0.001
	Male	5,559 (66.8)	3,028 (60.9)	8,587 (64.2)		
Ethnicity	African, Caribbean or Black	976 (14.2)	518 (10.6)	1,494 (12.7)	52.48(4)[b]	<0.001
	Asian	169 (4.7)	177 (7.0)	346 (5.7)		
	White Other British	827 (15.5)	497 (14.1)	1,324 (14.9)		
	White Other	107 (2.7)	107 (3.8)	214 (3.2)		
	White Scottish	5,285 (62.9)	2,966 (64.4)	8,251 (63.5)		
SIMD	1 (most deprived)	1,886 (37.7)	1,188 (35.8)	3,074 (36.8)	10.54(4)[b]	0.033
	2	1,298 (26.1)	839 (25.3)	2,137 (25.7)		
	3	824 (17.4)	531 (17.0)	1,355 (17.2)		
	4	560 (12.3)	371 (12.4)	931 (12.4)		
	5 (least deprived)	316 (6.6)	266 (9.4)	582 (7.9)		
Health board	Ayrshire and Arran	351 (4.1)	236 (4.5)	587 (4.3)	36.64(10)[b]	<0.001
	Borders	145 (1.8)	79 (1.5)	224 (1.7)		
	Dumfries and Galloway	206 (2.4)	124 (2.4)	330 (2.4)		
	Fife	568 (7.3)	342 (7.0)	910 (7.2)		
	Forth Valley	482 (6.1)	256 (5.4)	738 (5.8)		
	Grampian	610 (7.3)	407 (8.6)	1,017 (7.8)		
	Greater Glasgow and Clyde	2,428 (29.2)	1,403 (29.9)	3,831 (29.5)		
	Highland	714 (8.7)	340 (6.8)	1,054 (7.9)		
	Lanarkshire	554 (6.3)	342 (6.7)	896 (6.4)		
	Lothian	1,589 (19.3)	894 (18.5)	2483 (19.0)		
	Tayside	586 (7.5)	436 (8.9)	1,022 (8.1)		

[a]t-statistic [b]X^2

Direct transfer onto community CTOs

Figure 9 shows the number of individuals who transferred directly onto a community CTO each year between 2007-08 and 2020-21, meaning the placement of the order was community rather than hospital which was determined at the hearing and not preceded by a hospital-based order. Over the period, 1,825 community CTOs started this way, which was an average of 130 (SD=12.1) per year.

Figure 9. Number of individuals who had a direct transfer to community CTO by year



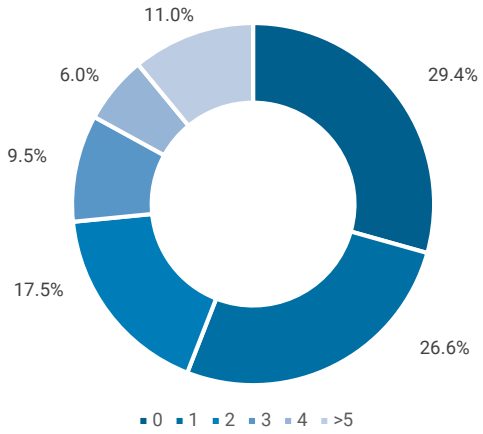
Over the entire period, we found that:

- A higher proportion of direct community CTOs were male than female (56.5% vs 43.5%, respectively), however this changed with time as the proportion of females increased from 34.8% in 2007-08 to 51.7% in 2020-21 (mean=43.4%, SD=4.8). The gender distribution in 2020-21 was significantly different to 2007-08 (X^2=8.447(1), p=0.004).
- The age distribution varied over the years, but as with overall CTOs, most individuals were aged 25-44 or 45-64 years.
- There was a significantly higher proportion males than females in the age groups <25 years[6] (12.0% vs 6.1%, respectively) and 25-44 years (48.6% vs 38.7%, respectively) while in the older age groups there was a significantly higher proportion females (40.6% vs 32.9% for 45-64 years-olds and 14.6% vs 6.6% for 65+) (X^2=63.58(4), p<0.0001).
- The proportion of all direct transfers to community CTOs from each of the mainland health boards varied over the years with no clear trend. Across all years, the highest proportion of orders were in Greater Glasgow and Clyde (28.8%) followed by Lothian (23.0%).

We also explored how many previous episodes individuals who went directly onto a community CTO had before the order. Overall, about one third had not been detained previously (Figure 10).

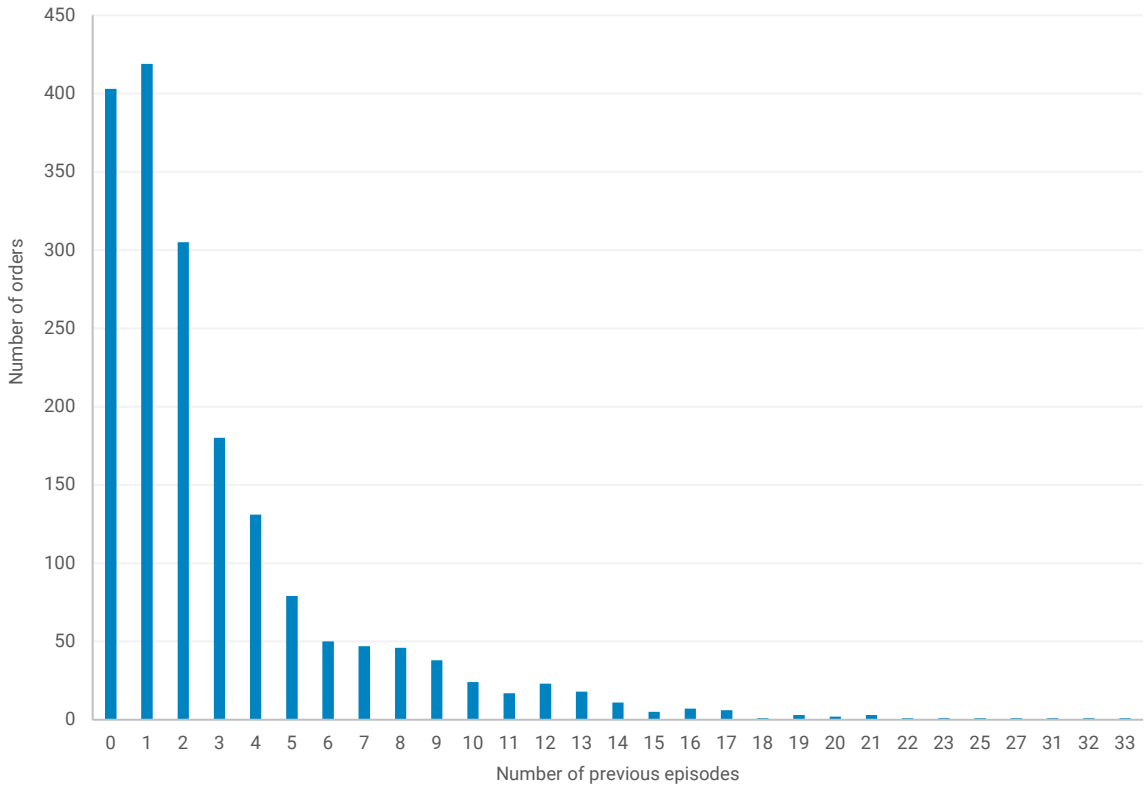
[6] Due to low number of individuals aged 0-15 years and 16-17 years these groups were merged with the 18-24 year group.

Figure 10. Number of previous episodes among individuals who transferred directly onto a community CTO



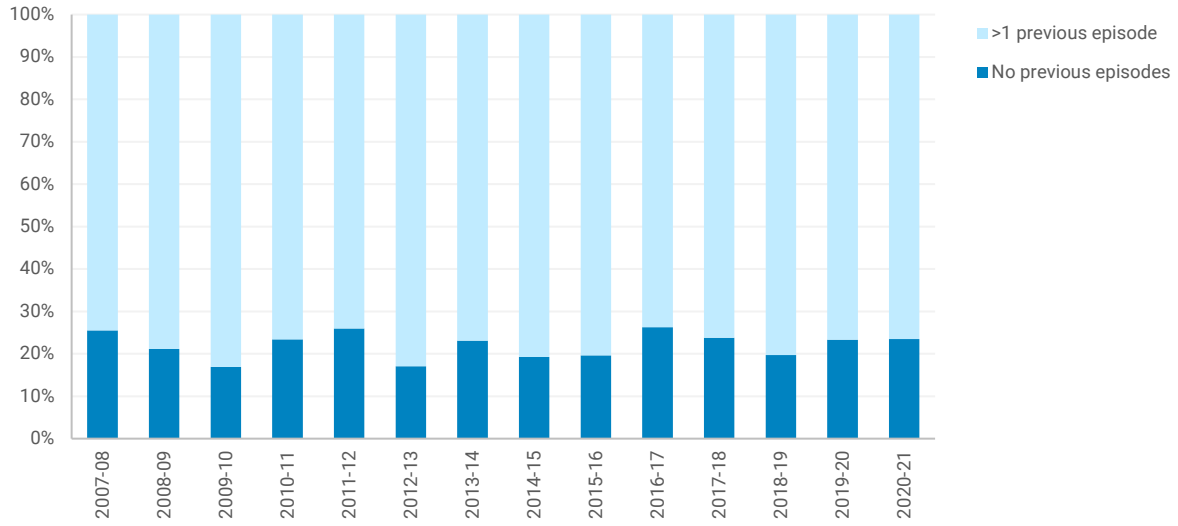
We explored the number of episodes of detention individuals on direct community CTOs had been subject to in the past. Overall, the median number of episodes was 2 (IQR=1-4, range=0-33) (Figure 11).

Figure 11. Number of previous episodes among individuals on direct community CTOs



The median number of previous episodes was 2 (IQR=1-4) which was the same across all years, apart from 2008-09 where the median number of previous episodes was 1. There was no clear pattern of individuals with no previous episodes going directly onto a community CTO (Figure 12), with an average of 22.1% across all years (range=16.9%-26.3%).

Figure 12. Proportion of direct community CTOs with no or >1 previous episode



We compared the number of previous episodes by demographic characteristics (Table A8). There was no statistical difference in number of previous episodes for any characteristics other than age, where the median number of detentions was lower in the <25 and >65 age group (mdn=1, IQR=0-2 and mdn=1 IQR=0-2, respectively) compared to the 25-44 age group (mdn=2, IQR=1-4) and the 45-64 age group (mdn=2, IQR=1-6) (p<0.001).

We looked at the proportion of individuals on direct community CTOs who had previous episodes of detention by demographic characteristics. Table 9 shows that the only significant differences between groups was in relation to age, as a higher proportion of <25s and >65s had previous episodes of detention prior to their direct community CTO compared to those aged 25-44 and 45-64 years.

Table 9. Previous episodes of detention among individuals on direct community CTOs

Category	Grouping	Previous episodes n(%)		X^2(df)	p-value
		Yes	No		
Gender	Female	615 (77.6)	178 (22.4)	0.108(1)	0.776[a]
	Male	807 (78.2)	225 (21.8)		
Age	<25 years	109 (63.4)	63 (36.6)	68.184(3)	<0.001
	25-44 years	637 (78.8)	171 (21.2)		
	45-64 years	562 (85.0)	99 (15.0)		
	65+ years	114 (62.0)	70 (38.0)		
Ethnicity	African, Black or Caribbean	24 (75.0)	8 (25.0)	1.704(5)	0.888
	Asian	44 (78.6)	12 (21.4)		
	Mixed	*	*		
	White Other British	88 (83.0)	18 (17.0)		
	White Other	60 (77.9)	17 (22.1)		
	White Scottish	1,034 (80.3)	253 (19.7)		
SIMD	1 (most deprived)	339 (77.2)	100 (22.8)	2.191(4)	0.701
	2	252 (78.8)	68 (21.3)		
	3	198 (80.5)	48 (19.5)		
	4	115 (75.2)	38 (24.8)		
	5 (least deprived)	107 (76.4)	33 (23.6)		

[a]Fisher's exact; *n<5 or secondary suppression

When comparing the likelihood of having had no previous episodes before a direct community CTO (Table A8) we found that:

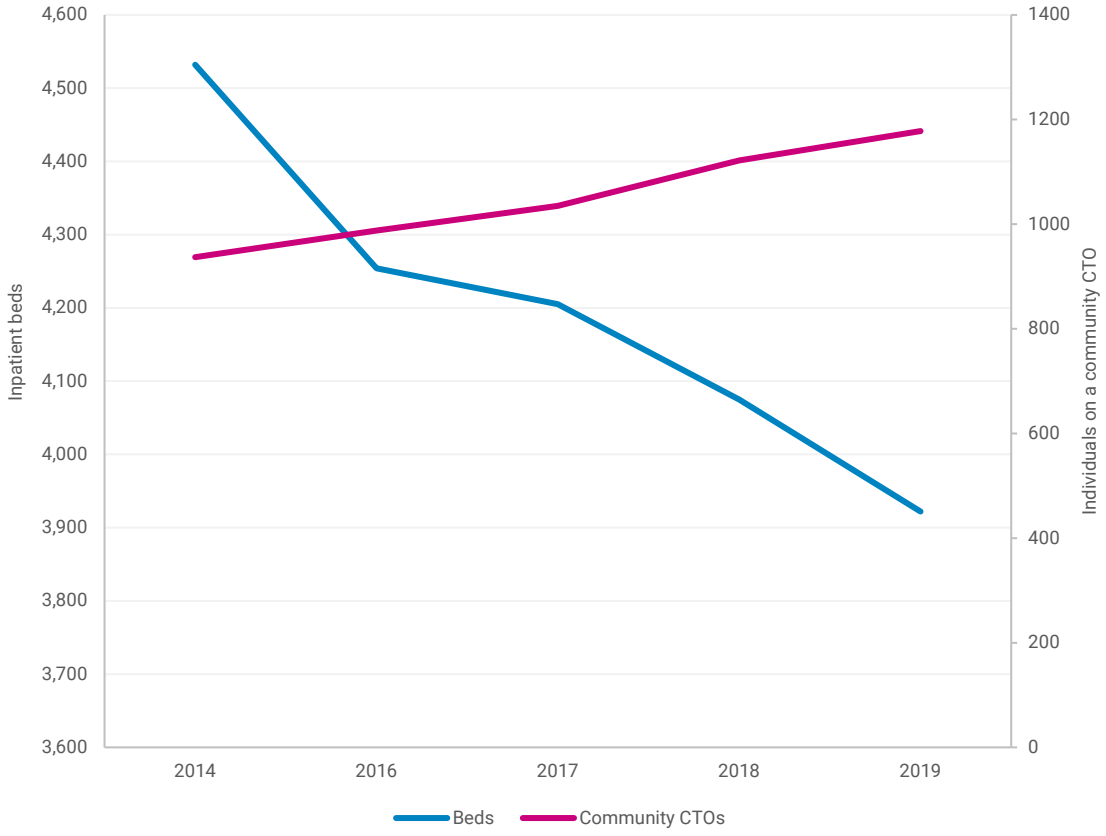
- Those over 65 were slightly more likely to have had no previous episodes, compared to <25s, while all other age groups were less likely to have had no previous episodes.
- There were no significant differences in likelihood of a direct community CTO with no previous episodes between ethnic groups or SIMD quintiles.

What this means

In this report we have shown how community CTOs has risen steadily over the last 14 years, mainly because more people each year were continuing an order from the previous year. The current number of people subject to community based compulsion is six times greater than the estimate from the Scottish Executive of 200 people being subject to community-based CTOs and there is no indication that the trend of community based compulsion is likely to change.

Data from Public Health Scotland (PHS) shows that between 2014 and 2019 the number of beds fell by 13% for inpatient beds for psychiatry, addiction and learning disability (Figure 13) [4]. During the same time, our own data shows that while beds have fallen, community-based CTOs have risen. While there are likely many factors that play part in this rise, we suggest that reduced inpatient beds may have led to more community CTOs. Whilst this might be a cause for a cautious optimism in the reduction of detention in hospital, the fact that many people on community CTOs tend to continue on these suggest that that compulsion as a practice is increasing, albeit in the community. There are remarkably few studies on what it feels like to be living with a community based compulsory treatment order.

Figure 13. Number of inpatient beds (left axis) and number of individuals on a community CTO (right axis)



Source: Public Health Scotland [4] and Mental Welfare Commission for Scotland (data included in the current report)

Guidance that underpins the workings of mental health legislations across the UK is clear that patients are treated in the least restrictive way. At a population level the introduction of legislation enabling community-based compulsory treatment in England was supposed to increase the threshold at which people might require in-patient care.

However, there is little evidence to say this is the case as detention rates continue to rise. Indeed, in evidence to the post-legislative Committee at the House of Lords on the English Mental Health Act's Community Treatment Orders, reference is made to how the Scottish provisions might have led to an initial reduction in detentions, but that detentions have risen again[11].

Within the Commission, we have been informed from practitioners and service users in Scotland that there is a perception and a practice for people to remain subject to community CTOs to ensure that they receive input from wider Community Mental Health Teams or financial or other benefits.

There are also concerns whether the restrictions are reciprocal. The Policy Memorandum that accompanied the original bill that led to the current Mental Health Act set out that based on the principle of reciprocity, a patient subject to compulsory measures would be expected to receive what was reasonably available- and this meant that community based mental health services would have to improve for the new community-based compulsion to work [5].

There were concerns expressed to the Millan Committee that recommended the introduction of community-based compulsory treatment orders that these would become a mechanism of control without the commitment of resources to ensure appropriate services are available [5].

The Commission's themed visit in 2010 to those who had been subject to a community-based CTO for more than two years recommended that local authorities review the actions they were taking to meet the requirements of sections 25-31 of the Mental Health Act with a particular reference to educational, employment and vocational opportunities [12].

There remains concern as to whether people receive the support they need to develop their capabilities and whether Community Mental Health Teams have the access they need to the resources to deliver this; or whether community CTOs has simply become a vehicle to ensure concordance with treatment as more narrowly defined. This will be a focus for a forthcoming visit to people on community-based CTOs that the Commission intends to conduct in 2022-23.

Another recommendation following the Commission's themed visit in 2010, which is supported by the data in this report, is the need for consideration of a revocation strategy formed with the person and those important to them. Such a strategy should indicate what progress needs to be made for the compulsion to end, rather than a focus on the legal criteria being met for ongoing compulsion.

We note also that the endpoints of CTOs more generally coincide with the mandatory points of compulsion ending. This is in keeping with the Commission's work on STDCs which showed that compulsion tended to end with mandatory endpoints [13]. For CTOs this is even more

important given the longer duration of compulsion, especially for community-based CTOs where the numbers are rising year-on-year.

Scotland is not alone with these concerns about the length and numbers of community CTOs. The White Paper on reforming the Mental Health Act in England and Wales sets out the UK Government's commitment to reducing the number of Community Treatment Orders. It introduces more stringent measures before these apply, a time-limit, and requirement that they produce a genuine benefit to the individual [14].

The Commission's response to the Scottish Mental Health Law Review in the summer of 2020 suggested that there should be a mechanism to consider revocation strategies [15]. The Commission hopes that this new report will be a catalyst for the conversation on what changes the Scottish Mental Health Law Review might recommend in mental health legislation in Scotland.

The profile of community CTOs, overall, is different to that of those on hospital CTOs – those on community CTOs are to greater extent male, somewhat younger, has a higher proportion of individuals from ethnically minority groups, and a higher proportion of those from the most deprived areas of Scotland. This might suggest that people with particular diagnoses are more likely to be subject to community based CTOs but we are unable to comment on this currently.

The Commission has led work around reducing racial inequality in mental health services in Scotland, which made recommendations across the public sector to reduce the inequalities that exist [10]. This report adds to the discomfort that many feel on exploring the data around the use of mental health legislation across Scotland's communities.

The data shows that mixed race people are more likely to experience a longer first CTO; that communities of colour are generally more likely to have longer subsequent CTOs; and that the Black community is over-represented in the CTO and community CTO population, making up 12.8% of the community CTO population in this study compared to their 1% representation in the general population [2]. This is worrying but in keeping with findings from other parts of the UK. In England and Wales recent data showed that black or black British people were over ten times more likely to be given a Community Treatment Order than white people [14].

Our data also shows that the use of community-based compulsion is greater in areas of higher deprivation. This may point to the need for greater investment in mental health services in those areas to realise the reciprocity of approach that this approach requires.

Steps to reduce the use of community-based compulsion, increase safeguards around their use and/or to ensure that those subject to these measures achieve therapeutic benefit, will lead to better outcomes for those who experience the greater inequalities.

We note the finding that one-third of people subject to community-based compulsion have not had any prior longer duration of hospital treatment. Given that that community-based CTOs are at least as likely to be extended as not extended, this finding deserves attention and consideration of whether there should be a required period of hospital treatment including, where appropriate suspended hospital treatment, to establish whether a community-based CTO is actually required.

This may seem counter-intuitive to the principle of least restriction, *at that time*, however in viewing the episode over time, it may be that people are likely to experience less overall compulsion if they have had further treatment in hospital or on a suspended hospital based CTO than on a community based CTO.

Limitations

While this report is based on a large dataset of routinely collected information, there are several limitations that need to be taken into consideration. Firstly, our data on ethnicity has been improved over time through the way we are able to link information across the data information system. However, it is not complete and may therefore accurately reflect differences between ethnic groups as the ethnicity of about 15% of the records is missing.

Postcode information is also incomplete, and this is leading to a large amount of missing information for SIMD categories. In our most recent monitoring report [1] we were able to manually clean the data, often this was because errors in data entry or distortion during the scanning process and could be manually corrected, which limited the amount of missing information. For older records, postcodes appear to be missing all together and with this large number of records it was not feasible to undertake a cleaning exercise.

Diagnosis of the individual subject to the CTO is indeed recorded on the detention form, but the way in which our systems have been set up currently does not allow us to extract information about diagnosis according to ICD-10. We are looking at how we can work with updates of our information systems and the transition to ICD-11 to enable us to do this in the future.

In a few places, we noted some changes from the start of the period to the most recent year, but it was not part of our aim to systematically look at changes over time and conclusions are therefore drawn on information from the entire 14-year-period. As things might have changed, these conclusions might therefore not represent how things are now.

Conclusion

CTOs have tended to last for six months (median length), but subsequent CTOs have tended to be longer. We can see some distinct differences in characteristics of individuals on new and continued CTOs, first and subsequent CTOs, extended and non-extended CTOs, and direct transfers to community CTOs. The profile of community CTOs, overall, is different to that of those on hospital CTOs – those on community CTOs are to greater extent male, somewhat younger, has a higher proportion of individuals from ethnically minority groups, and a higher proportion of those from the most deprived areas of Scotland. The current law reform process should take these findings into consideration in shaping future legislation, to ensure that individuals to the greatest extent possible have their needs and rights met when they receive involuntary treatment, which should be for as short a period as possible.

Recommendations to SMHLR

Review duration of CTOs and review points

In keeping with work that the Commission has undertaken on short-term detention certificates (STDCs), we find that the ending of the use of compulsory powers coincides with the legislated endpoints of periods of compulsion. The SMHLR should therefore consider whether duties to review detention and compulsion are being met and consider whether durations of CTOs and review points/mechanisms require revision.

Review safeguards for community-based compulsion

The increase in the use of community-based CTOs is a factor in the rise in the use of compulsion. The number of new community CTOs has remained relatively stable over time while a continuation of orders drives the observed rise. The Commission has previously recommended revocation strategies being part of the plan for individuals. This does not appear to be happening. The SMHLR should consider formal legislation requiring revocation strategy, lengths and reviews of community based CTOs and a requirement with mechanisms to review/assure that a person is achieving real benefit from community based compulsion.

Propose mechanisms for post-legislative scrutiny

The number of people on community CTOs has far exceeded the initial projections. The SMHLR should recommend post-legislative scrutiny mechanisms for any changes it recommends to reducing the use of community-based compulsion.

Develop systems leadership for data monitoring

There is an on-going issue with ensuring data-linkage between available datasets to address questions such as how community-based CTOs may have impacted on compulsion more broadly and how this is linked to resources shifting to community-based services. Data and technology are not being used to their full potential to enable necessary change at local and national level. The SMHLR ought to consider legislating for duties on an organisation to lead and ensure collaboration between organisations to use this potential. This should include exploring how ICD-11 diagnostic codes may inform future monitoring.

Take a universalist approach to reduce inequalities

The SMHLR should review the data in this report that shows inequalities in how community-based CTOs are used. It is the Commission's view that that measures taken for all to improve requirements, safeguards and scrutiny around the use of Community based CTOs can help to reduce inequalities across age, gender, ethnicity and deprivation.

Acknowledgments

This work was undertaken by Dr Lisa Schölin, University of Edinburgh, with colleagues at the Mental Welfare Commission. The work was commissioned by the SMHLR, however the content was written and prepared independently by the Commission.

Abbreviations

CI	confidence interval
CTO	compulsory treatment order
IQR	inter quartile range
MHO	mental health officer
RMO	responsible medical officer
SD	standard deviation
SIMD	Scottish Index of Multiple Deprivation

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Appendix – Data tables

Table A1. Overview of datasets included in the analyses

Question	Description	Years	Number	Ethnicity	SIMD
1	CTO episodes that started from 2007 to 2020, excluded episodes where the episode because the individual died, there were errors in start and end date. Includes both ended orders (n=14,076, focus of the main analysis) and ongoing orders (n=2,978)	2007→2020[b]	14,008	86.2%	65.2%
2	Same as question 1	-||-	-||-	-||-	-||-
3	Episodes that started before 1 January 2021 were included, as episodes after that we may not have received or there may not be an extension. Excluded episodes where death ended the episode.	2007-2020	16,317	72.0%	64.4%
4	Point prevalence of all individuals on a community CTO	2007-08→2020-21	13,199	83.4%[a]	74.6%[a]
5	Orders where the CCTO was not a variation to community, i.e. the CTO hearing determined 'community'.	2007-08→2020-21	1,825	86.2%	71.1%
6	Same as question 5	-||-	-||-	-||-	-||-
NA	Comparison of community CTOs and hospital CTOs, using point prevalence of all individuals on a CTO.	2007-08→2020-21	32,352	86.1%	41.3%

[a]Refers to the year 2020-2, [b]Only episodes with a start date before 1 January 2021 were included as after that we may not have received or there might not be an extension. SIMD completion relates to the number of postcodes that simply were missing or that were a hospital postcode and therefore not relevant to calculate SIMD. Ethnicity completion excludes those where ethnicity was not reported and those that had nothing completed all together or the ethnicity form was missing and ethnicity cannot be matched with any other episodes for the same person.

Table A2. Length of CTOs, 2007-20

	Ended orders			Ongoing orders[a]			Ongoing and ended		
	All CTOs	First CTO	Subsequent CTO	All CTOs	First CTO	Subsequent CTO	All CTOs	First CTO	Subsequent CTO
Number	14,076	11,661	2,415	2,978	1,936	1,042	17,172	13,703	3,469
Median	6	6	9	19	15	25	6	6	12
IQR	4–12	4–12	5–23	6-53	6-48	10-61	6-18	4-12	6-32
Mode	6	6	6	6	6	6	6	6	6
Range	0-158	0-158	0-156	0-174	0-174	0-168	0-174	0-174	0-168

[a]ongoing as of August 2021 when the data was extracted

Table A3. Characteristics of first and subsequent CTOs, 2007-20

Category	Grouping	First CTO	Subsequent CTO	All CTOs	X^2	*p*-value
Gender	Female	5,585 (48.5)	1,269 (53.0)	6,854 (49.1)	17.3(1)	<0.001
	Male	6,076 (51.5)	1,146 (47.0)	7,222 (50.9)		
Age	<18	467 (4.7)	50 (3.2)	517 (4.5)	426.56(4)	<0.001
	18-24	959 (9.1)	232 (12.6)	1,191 (9.6)		
	25-44	3,131 (24.9)	965 (41.2)	4,096 (27.1)		
	45-64	3,019 (22.2)	797 (27.0)	3,816 (22.8)		
	65+	4,085 (39.0)	371 (16.1)	4,456 (35.9)		
Ethnicity	African; Caribbean or Black	36 (1.6)	127 (1.4)	163 (1.3)	22.53(6)	0.001
	Asian	65 (2.8)	245 (2.6)	310 (2.5)		
	Mixed	21 (0.9)	45 (0.4)	66 (0.5)		
	Other	1 (0)	33 (0.4)	34 (0.3)		
	White - Other British	182 (8.0)	780 (8.2)	962 (7.9)		
	White - Other	125 (5.5)	425 (4.6)	550 (4.5)		
	White - Scottish	1,852 (81.2)	8,292 (82.4)	10,144 (83.0)		
SIMD	1 (most deprived)	2,358 (31.0)	490 (31.3)	2,848 (31.0)	15.65(4)	0.004
	2	1,749 (23.0)	426 (27.2)	2,175 (23.7)		
	3	1,446 (19.0)	277 (17.7)	1,723 (18.8)		
	4	1,149 (15.1)	207 (13.2)	1,356 (14.8)		
	5 (least deprived)	907 (11.9)	168 (10.7)	1,075 (11.7)		
Health board	Ayrshire and Arran	521 (4.2)	107 (4.2)	628 (4.2)	24.80(10)	0.006
	Borders	176 (1.6)	42 (2.0)	218 (1.6)		
	Dumfries and Galloway	312 (2.8)	59 (2.2)	371 (2.7)		
	Fife (HB)	878 (7.5)	167 (6.7)	1,045 (7.4)		
	Forth Valley	545 (4.8)	95 (4.1)	640 (4.7)		
	Grampian	1,089 (9.4)	262 (11.2)	1351 (9.6)		
	Greater Glasgow and Clyde	3,389 (29.6)	636 (26.5	4,025 (29.2)		
	Highland	702 (5.8)	146 (5.7)	848 (5.8)		
	Lanarkshire	926 (8.0)	176 (7.5)	1102 (7.9)		
	Lothian	1,917 (16.6)	462 (19.7)	2,379 (17.0)		
	Tayside	1,131 (9.8)	248 (10.3)	1,379 (9.9)		

Table A4. Point prevalence of individuals on an ongoing CTO[a] lasting less than or more than three years

Category	Grouping	<3 years	>3 years	X^2	*p*-value
Gender	Female	880 (44.4)	355 (35.7)	20.6(1)	<0.001
	Male	1,103 (55.6)	640 (64.3)		
Age	Mean (SD)				
Age group	<18	68 (3.4)	19 (1.9)	172.2(4)	<0.0001
	18-24	205 (10.3)	102 (10.3)		
	25-44	628 (31.7)	463 (46.5)		
	45-64	642 (32.4)	364 (36.6)		
	65+	440 (22.2)	47 (4.7)		
Ethnicity	African; Caribbean or Black	44 (2.5)	13 (1.5)	9.1(6)	0.168
	Asian	64 (6.7)	21 (2.4)		
	Mixed	20 (1.1)	13 (1.5)		
	Other	*	*		
	White - Other British	136 (7.8)	68 (6.7)		
	White - Other	79 (4.5)	30 (3.4)		
	White - Scottish	1,400 (80.0)	737 (83.1)		
SIMD	1 (most deprived)	633 (33.5)	253 (42.1)	19.1(4)	<0.001
	2	465 (24.6)	138 (23.0)		
	3	334 (17.7)	100 (16.6)		
	4	276 (14.6)	75 (12.5)		
	5 (least deprived)	181 (9.6)	35 (5.8)		
Health board	Ayrshire and Arran	79 (4.1)	38 (3.9)	17.65(10)	0.06
	Borders	29 (1.5)	16 (1.6)		
	Dumfries and Galloway	60 (3.1)	21 (2.2)		
	Fife	118 (6.0)	71 (7.3)		
	Forth Valley	114 (5.8)	72 (7.4)		
	Grampian	163 (8.4)	77 (7.9)		
	Greater Glasgow and Clyde	566 (29.0)	283 (28.9)		
	Highland	114 (5.8)	77 (7.9)		
	Lanarkshire	170 (8.7)	59 (6.0)		
	Lothian	345 (17.7)	180 (18.4)		
	Tayside	195 (9.9)	85 (8.7)		

[a]ongoing as of the data extraction in August 2021; *n< or secondary suppression

Table A5. Demographic characteristics of extended and not-extended CTOs 2007-20, n(%)

Category	Grouping	Not extended	Extended	All years Total	X^2	*p*-value
Gender	Female	4,391 (51.8)	3,354 (52.8)	7,745 (47.5)	133.87(1)	<0.0001
	Male	4,083 (48.2)	4,489 (57.2)	8,572 (52.5)		
Age	<18	318 (3.8)	240 (3.1)	558 (3.4)	857.62(5)	<0.0001
	18-24	656 (7.7)	767 (9.8)	1,423 (8.7)		
	25-44	2,136 (25.2)	2,866 (36.5)	5,002 (30.7)		
	45-64	2,108 (24.9)	2,498 (31.9)	4,606 (28.2)		
	65-84	2,746 (32.4)	1,359 (17.3)	4,105 (25.2)		
	85+	510 (6.0)	113 (1.4)	623 (3.8)		
Ethnicity	African; Caribbean or Black	108 (1.5)	95 (1.4)	203 (1.4)	22.07(6)	0.001
	Asian	179 (2.4)	184 (2.7)	363 (2.6)		
	Mixed	33 (0.5)	59 (0.9)	92 (0.6)		
	Other	23 (0.3)	19 (0.3)	42 (0.3)		
	White - Other British	617 (8.4)	495 (7.2)	1,112 (7.8)		
	White - Other	346 (4.7)	275 (4.0)	621 (4.4)		
	White - Scottish	6,025 (82.2)	5,750 (83.6)	11,775 (82.9)		
SIMD	1 (most deprived)	1,611 (29.4)	1,872 (35.1)	3,483 (32.2)	83.44(4)	<0.0001
	2	1,262 (23.0)	1,324 (24.8)	2,586 (23.9)		
	3	1,024 (18.7)	954 (17.9)	1,978 (18.3)		
	4	864 (15.8)	692 (13.0)	1,556 (14.4)		
	5 (least deprived)	720 (13.1)	492 (9.2)	1,212 (11.2)		
Health board	Ayrshire and Arran	381 (4.6)	326 (4.4)	707 (4.5)	62.44(10)	<0.0001
	Borders	143 (1.7)	114 (1.4)	257 (1.6)		
	Dumfries and Galloway	238 (2.9)	181 (2.3)	419 (2.6)		
	Fife	633 (7.6)	548 (7.2)	1,181 (7.4)		
	Forth Valley	330 (3.9)	450 (5.5)	780 (4.6)		
	Grampian	847 (10.1)	691 (9.1)	1,538 (9.7)		
	Greater Glasgow and Clyde	2,347 (28.1)	2,314 (29.7)	4,661 (28.8)		
	Highland	495 (5.7)	517 (6.6)	1,012 (6.1)		
	Lanarkshire	728 (8.5)	560 (7.1)	1,288 (7.9)		
	Lothian	1,448 (17.3)	1,308 (16.5)	2,756 (17.0)		
	Tayside	825 (9.7)	769 (10.1)	1,594 (9.9)		

Table A6. Univariate analysis of having a CTO extended (1) vs not extended (0) 2007-20

Category	Grouping	OR	CI	*p*-value	z
Year	2007	Ref			
	2020	0.52	0.43-0.64	<0.0001	6.448
Gender	Female	Ref			
	Male	1.43	1.35-1.53	0.0001	11.554
Age	<18	Ref			
	18-24	1.54	1.27-1.88	0.0001	4.347
	25-44	1.77	1.48-2.12	0.0001	6.382
	45-64	1.57	1.31-1.87	0.0001	4.987
	65-84	0.65	0.54-0.78	0.0001	4.601
	85+	0.29	0.22-0.38	0.0001	9.104
Ethnicity	White - Scottish	Ref			
	African; Caribbean or Black	0.92	0.69-1.21	0.565	0.575
	Asian	1.07	0.87-1.32	0.486	0.697
	Mixed	1.87	1.22-2.87	0.004	2.878
	Other	0.86	0.47-1.59	0.642	0.465
	White - Other British	0.84	0.74-0.95	0.006	2.751
	White - Other	0.83	0.70-0.97	0.027	2.208
SIMD	5	Ref			
	4	1.17	1.00-1.36	0.040	2.046
	3	1.36	1.17-1.57	<0.001	4.2
	2	1.53	1.33-1.76	<0.001	6.082
	1	1.70	1.48-1.94	<0.001	7.848
Health board	Greater Glasgow and Clyde	Ref			
	Ayrshire and Arran	0.86	0.74-1.01	0.079	1.751
	Borders	0.80	0.62-1.04	0.099	1.648
	Dumfries and Galloway	0.77	0.63-0.94	0.011	2.523
	Fife	0.87	0.77-0.99	0.046	1.992
	Forth Valley	1.38	1.18-1.61	0.001	4.149
	Grampian	0.82	0.73-0.92	0.001	3.208
	Highland	1.05	0.92-1.21	0.406	0.831
	Lanarkshire	0.78	0.68-0.88	<0.001	3.916
	Lothian	0.91	0.83-1.00	0.068	1.82
	Tayside	0.83	0.74-0.93	0.002	3.034

[a]note that there were a large number of postcodes for which a corresponding postcode could be found, often because the postcode was missing all together

Table A7. Mean age by gender for new and continued community CTOs

	Females			Males		
Year	**New**	**Continued**	**All**	**New**	**Continued**	**All**
2007-08	46.1	49.9	47.7	39.9	38.7	39.4
2008-09	48.3	48.6	48.5	39.8	40.9	40.4
2009-10	46.5	48.8	47.9	40.9	42.3	41.7
2010-11	48.4	49.3	48.9	41.4	43.1	42.4
2011-12	45.9	52.0	49.3	41.2	43.4	42.7
2012-13	48.6	50.3	49.6	41.0	43.8	42.8
2013-14	48.0	52.0	50.4	41.8	44.2	43.3
201415	48.4	51.6	50.4	41.2	44.9	43.7
2015-16	49.1	52.5	51.2	42.9	44.6	44.1
2016-17	45.7	53.5	50.6	42.3	45.9	44.7
2017-18	47.6	52.8	50.8	42.2	46.1	44.9
2018-19	48.7	52.6	51.1	43.9	46.2	45.5
2019-20	49.8	52.6	51.5	45.5	47.1	46.6
2020-21	46.2	51.9	49.7	41.6	47.8	46.0
All years	47.7	51.7	50.1	41.9	44.9	43.8

Table A8. Odds for having had previous no episodes before a direct community CTO

Category	**Grouping**	**OR**	**CI**	***p*-value**	**z**
Gender	Female	ref			
	Male	0.963	0.779-1.203	0.742	0.329
Age	<25	ref			
	25-44	0.464	0.326-0.661	<0.0001	4.256
	45-64	0.305	0.209-0.444	<0.0001	6.183
	65+	1.062	0.691-1.633	0.783	0.276
Ethnicity	White - Scottish	ref			
	African; Caribbean or Black	1.362	0.604-3.068	0.455	0.746
	Asian	1.114	0.580-2.141	0.744	0.326
	Mixed	0.681	0.151-3.062	0.616	0.501
	White - Other British	0.836	0.494-1.413	0.503	0.668
	White - Other	1.158	0.664-2.018	0.605	0.517
SIMD	5 (least deprived)	ref			
	4	1.071	0.627-1.830	0.801	0.252
	3	0.786	0.457-1.298	0.347	0.94
	2	0.875	0.545-1.405	0.580	0.553
	1 (most deprived)	0.957	0.610-1.449	0.846	0.194

Table A9. Median number of previous episodes among direct community CTOs

Category	Grouping	N	Previous episodes (%)	Range	Median	IQR	*p*-value
Total	—	1,825	77.9	0-33	2.0	1-4	
Gender	Female	615	77.6	0-33	2.0	1-4	0.977
	Male	807	78.2	0-23	2.0	1-4	
Age	<25	109	63.4	0-11	1.0	0-2	<0.001
	25-44	637	78.8	0-32	2.0	1-4	
	45-64	562	85.0	0-31	2.0	1-6	
	65+	114	62.0	0-33	1.0	0-2	
Ethnicity	African, Black or Caribbean	24	75.0	0-9	1.0	0.25-3.75	0.532
	Asian	4	78.6	0-17	1.5	1-3	
	Mixed	12	85.7	0-14	3.0	1-8	
	White Other British	88	83.0	0-21	2.0	1-4	
	White Other	60	77.9	0-20	2.0	1-4	
	White Scottish	1,034	80.3	0-33	2.0	1-4	
SIMD	1 (most deprived)	339	77.2	0-21	2.0	1-4	0.203
	2	252	78.8	0-27	2.0	1-5	
	3	198	80.5	0-18	2.0	1-4	
	4	115	75.2	0-20	2.0	0.25-4	
	5 (least deprived)	107	76.4	0-22	1.5	1-3	

'Other' ethnicity was excluded due to n<5. Note that there is a large number of individuals for whom SIMD was not available. P-value for independent samples median test.

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