Working Paper 4: Volunteering in the Pandemic Evidence from Two UK Volunteer Matching Services

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Abstract

The onset of COVID-19 and the ensuing lockdown elicited a surge in individuals expressing a desire to volunteer. However, the scale of these volunteers, and the difficulties of operating under COVID restrictions, meant that the majority were not matched to volunteering opportunities. Later lockdowns saw similar, smaller surges in volunteers coming forward, and by this point organisations were better able to mobilise more of this voluntary action. We examine administrative data from two volunteer-matching systems across the four nations of the UK in 2019 to 2021 to understand the scale, timing and characteristics of this UK-wide desire to help. We highlight the challenge of so many volunteers at once in difficult circumstances; the changing demographics of those coming forward; and the concern that some groups may be left behind as volunteering returns to 'normal' again.

Contents

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Introduction

The challenge of understanding phenomena such as volunteering during the pandemic is the difficulty of collecting individual-level data in a timely fashion at sufficient scale. We use administrative app data collected from volunteering matching services that provides a real-time look at how one mode of volunteer participation evolved before, during and in the aftermath of the COVID-19 pandemic.

Evidence from the Community Life Survey (NCVO, 2021)[1] suggests that formal volunteering rates fell sharply in 2020/21 from 37% to 30% of the population, while informal volunteering held steady. Regular (monthly) formal volunteering also fell during the pandemic, while regular informal volunteering rose substantially from 28% to 47%. While these large surveys produce a representative snapshot of volunteering over the period, we are also interested in understanding how the dynamics of volunteering interacted with pandemic restrictions.

We show that significant numbers of individuals responded to the start of the crisis by registering to volunteer. However, the challenges facing organisations in responding to the crisis meant that it was not possible to mobilise the large numbers of people volunteering. As organisations adjusted they were better able in the second wave to match a further surge in voluntary action to volunteering roles.

We use data from England, Wales, Scotland and Northern Ireland to explore both broad patterns and nation differences in the character and timing of the voluntary action that was mobilised.

Describing the dataset

Our datasets come from two providers of volunteer matching services. These contain organisation, opportunity and individual volunteer data between March 2019 and August 2021.

This data is administrative data, generated in the process of running the volunteer matching service. It contains both data on the characteristics of the organisations and individuals, as well as the transactional data from interactions with opportunities. In our analysis we focus primarily on the characteristics of volunteers registering with the two platforms, and how this changes over time.

The datasets were acquired from two volunteering app organisations, TeamKinetic and BeCollective. The TeamKinetic data came in seven data tables, including volunteer data, volunteering organisation data, volunteering sub-organisation data ('providers'), volunteering opportunities data (tasks that are open to more than 1 volunteer), opportunity session data (linked to relevant volunteers), volunteer tasks data (tasks that are open to only 1 volunteer), and task session data (linked to relevant volunteers). The BeCollective data consisted of three tables, including volunteer data, volunteering opportunities data, and opportunity session data (linked to relevant volunteers).

Both data providers shared two main data exports; the first one in May for BeCollective and July for TeamKinetic, the second in early September (both providers). Since the second exports from both organisations had some cases missing that had been present in the first export, the second dataset versions consist of the first export data with any new data from the second export merged in.

The data cleaning mainly involved removing irrelevant cases from the datasets as well as recoding some data variables. Cases were removed if they were duplicates (e.g. duplicate volunteer in the volunteer data), if they were aged below 18, if they were located outside the UK, if they referred to future dates, or if there was no corresponding data in the other datasets (e.g. opportunity sessions related to volunteers that however are not listed in the volunteer data). Data was recoded if it was inconsistent (e.g., for ethnicity, descriptions varied widely and need to be recoded into consistent

[1] https://beta.ncvo.org.uk/ncvo-publications/uk-civil-society-almanac-2021/volunteering/

categories) or incorrect (e.g., unrealistic ages such as 140), and additional variables were computed to support analysis (e.g., the first day a volunteer became active in an opportunity).

We must be careful in considering the sub-population of volunteers that is captured by this data. We are recording registrations and activities by individuals engaging in formal volunteering (within the context of an organisation), and this largely excludes informal volunteering or mutual aid. The apps have been used by a mixture of Volunteer Centres and volunteer-involving organisations. The data represents only volunteering that has been recorded through one of these two apps, and does not capture volunteering taking place outside of that. As such, we do not provide complete coverage of volunteering during COVID by any means. In addition, it may also be the case that the volunteers who use one of these two apps differ in some unobserved ways from volunteers active through other routes.

Analytical approach

Given the caution about representativeness of the dataset, we focus on comparisons through time, and particularly between pre- and post-COVID volunteering. We are therefore asking the question: how did volunteering taking place through channels such as Team Kinetic and Be Collective change during the course of the pandemic?

We have focussed on time series analysis of the volunteers and opportunities from pre-COVID (1st January 2020) to August 2021. We primarily examine how these characteristics change over different phases of the pandemic. The approach is largely descriptive using data visualisation. Where appropriate, we use some basic curve-fitting and confidence intervals to aid comparison. The analyses include analysis within nations; comparisons between nations; and some analysis of the pooled UK data. In some analyses, where available, we have used pre-pandemic data from 1 March 2019.

We operationalise seven distinct pandemic phases as seen in Table 1. These will not match perfectly the differing policies and restrictions across the four nations, but they are intended to aid comparison. As we will see, they do seem to provide a good fit to patterns in the time series across the nations.

Table 1: Operationalisation of Phases of COVID19 Restrictions in the UK

Phase	Dates	Notes
Pre-COVID	Before 20 March 2020	The timelines for the pandemic have been constructed from online resources for the UK[1], Scotland[2], Wales[3], Northern Ireland[4] and England[5].
First lockdown	20 March to 30 May 2020	Although people were advised to avoid bars and restaurants on 16 March, and the first national lockdown was applied on 23 March, bars, restaurants and schools were closed from 18 March (Wales)[3]; 20 March (England, Scotland).[1,2]
Summer easing	1 June to 23 Sept 2020	Phased re-opening of schools in England from 1 June, with non-essential shops opening on 15 June. Further easing in August, and 'eat out to help out' scheme. New restrictions announced on 22 Sept in England.[5] Scotland: Move to Phase 1 of route map begins on 29 May.[3] School pupils return from 11 August. Wales: 'Stay at home' changed to 'Stay local' on 29 May, and non-essential business prepare to open in June.[3] Bars, restaurants and cafes with outdoor spaces will prepare to re-open outdoors from 13 July 2020
Local lockdowns	24 Sept to 31 Dec 2020	England: New restrictions on working from home and hospitality from 24 Sept. Three tier system 14 Oct Wales: Local restrictions in Caerphilly from 8 Sept, with nationwide restrictions from 24 Sept. Firebreak on 23 Oct, further national restrictions on 9 Nov.[3] Scotland: Local restrictions from route map continue, increased restrictions from 23 Sept, with five-tier system from 2 Nov. [2] Northern Ireland: National restrictions 16 Oct 2020[4,6]
Winter lockdown	1 Jan to 8 Mar 2021	England: Tier Four announced 19 Dec, with restrictions across England from 26 Dec. Scotland: Mainland Scotland in lockdown from 5 Jan.[3] Wales: Lockdown restrictions were introduced on 19 Dec 2020[3]
Easing	9 March 2021 to 19 July 2021	England: Return to school from 8 March.[5] Non-essential retail opens 12 April. Remaining economy re-opens 21 June. Scotland: Easing timetable published on 16 Mar, with 'stay at home' lifted from 2 April. Schools return from 15 March.[2] Wales: 'Stay local' replaces lockdown restrictions from 13 March, with 'stay local' lifted from 27 March. Northern Ireland: 'Pathway out of restrictions' published 2 March[6]. All Primary schools return to face-to-face from 22 March[4]
Opening Up	After 20 July 2021	England: 'Freedom Day' marks ending of COVID restrictions on 20 July 2021 Scotland: Move to level 0 across country from 19 July, with most restrictions removed from 9 Aug Wales: Move to level one from 17 July, and to level zero from 7 Aug[3] Northern Ireland: Restrictions eased, and live music resumes, from 5 July.[4]

[1] https://style.ons.gov.uk/category/coronavirus/important-dates-and-events/

[2] https://spice-spotlight.scot/2021/09/10/timeline-of-coronavirus-covid-19-in-scotland/

[3] https://research.senedd.wales/research-articles/coronavirus-timeline-the-response-in-wales/

[4] https://en.wikipedia.org/wiki/Timeline_of_the_COVID-19_pandemic_in_Northern_Ireland_(2020)

[5] https://www.instituteforgovernment.org.uk/sites/default/files/timeline-lockdown-web.pdf

[6] https://www.nidirect.gov.uk/information-and-services/coronavirus-covid-19/regulations-and-restrictions

[7] https://style.ons.gov.uk/category/coronavirus/writing-about-the-coronavirus/#local-lockdowns-and-restrictions

Overview of main findings

Our analysis is presented in the form of eight research findings. In each, we present the visualised time series of key variables across the UK nations to illustrate the pattern. Where possible these cover all four nations, but data limitations means that some analyses exclude Northern Ireland.

Finding One:
All four nations saw large peaks in volunteering immediately following lockdown in March/April 2020. The Winter lockdowns also saw significant peaks in volunteers registering.

Finding Two:
The number of new opportunities posted fell during lockdown at the same time as volunteer registrations were spiking. Opportunities posted remained historically low until the winter lockdown when they rallied across all three nations

Finding Three:
In the Team Kinetic data we can observe recorded volunteer activity. Most volunteers did not go on to record activity in the data (although they may have been active unrecorded). However, volunteers were more likely to become active, and were active faster, in the second lockdown than the first.

Finding Four:
The average age of volunteers increased dramatically in the surges at both lockdowns. Analysis shows that it is older age groups increasing participation that pushed up the average, while the level of volunteering amongst younger age groups was steady.

Finding Five:
Across all four nations women are more likely to volunteer than men. There is no evidence that this fluctuated significantly during the course of the pandemic.

Finding Six:
Understandably, volunteering by people with disabilities was proportionally lower in both lockdown periods, although it seemed to recover somewhat between lockdowns. In the final easing phase registration of disabled volunteers recovered to pre-pandemic levels, but activity appears not to have, and opening up seems to be having a negative effect on participation almost as big as the two lockdowns.

Finding Seven:
In England and Scotland it was the middle 60% by deprivation who became more likely to volunteer. In Wales, the biggest increase in participation was amongst those living in the most affluent areas.

Finding Eight:
England saw a lockdown surge in urban volunteers, while Scotland saw its increase in rural volunteers. Wales and Northern Ireland, with the most rural volunteers, did not see a difference in rurality at the start of lockdown. In all four nations the level of rural volunteering seems to have returned to pre-COVID levels.

Finding One:

All four nations saw large peaks in volunteering immediately following lockdown in March/April 2020. The Winter lockdowns also saw significant peaks in volunteers registering.

All four nations experienced spikes in volunteer registrations through either the Team Kinetic or Be Collective apps of ten to one hundred times the pre-COVID average. This is concentrated around the start of the first lockdown in late-March and April 2020, and is not repeated through the rest of the time series. Figure 1 shows the number of volunteer registrations over time.

Smaller spikes in volunteer registrations are observed across all four nations again in early 2021 at the start of the winter lockdown period. Wales has the earliest rise, in late December 2020, perhaps reflecting their earlier lockdown decision.

All four nations saw the lowest number of volunteer registrations during the summer easing phase, particularly around July 2020. Northern Ireland's low was earlier, but recovered quickly, although for England, Wales and Scotland registrations had recovered to above the pre-COVID average by September/October 2020 as various local lockdowns came into force.

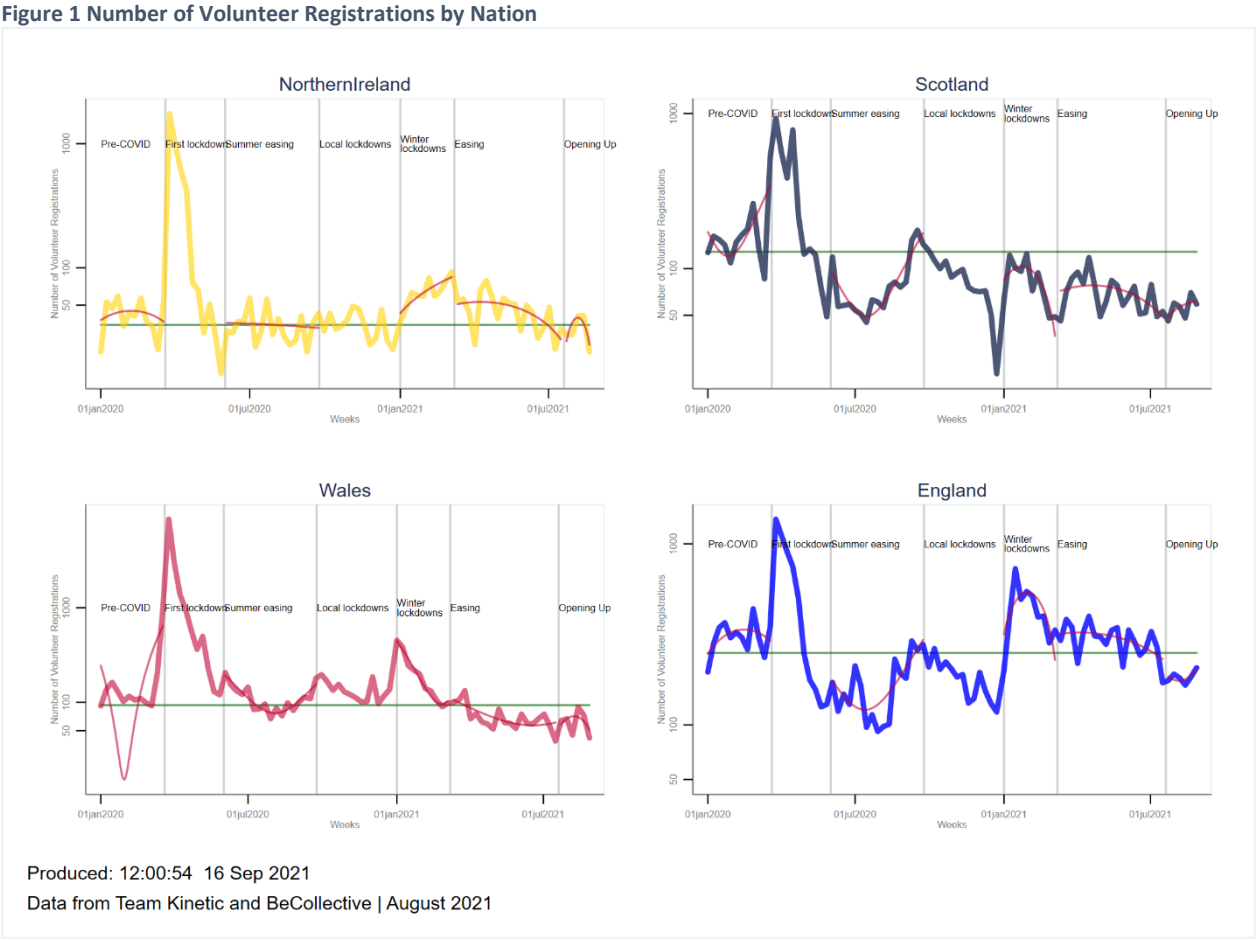
Figure 2 shows the number of volunteer registrations as a proportion of the pre-COVID average (measured January to February 2020) so that the relative sizes of the fluctuations can be observed. The largest proportional increase in registrations at the first lockdown were observed in Wales and Northern Ireland, with smaller proportional increases in England and Scotland. In the winter lockdown Wales had the earliest and largest proportional rise in registrations.

All four nations are experiencing lower numbers of volunteer registrations through the apps in the final opening up phase compared to pre-COVID levels, although only in Scotland is this difference particularly significant.

What does this mean?

The exclusion of informal volunteering, mutual aid and alternative channels for formal volunteering means that we can't directly quantify the full extent of the volunteering response in the UK. However, overall, this analysis suggests a strong association between volunteer registrations and the severity of COVID restrictions, with registrations increasing at the start of lockdowns, and decreasing again as restrictions ease. It shows the speed of the volunteering response across all four nations, and how this was repeated through the course of the pandemic as restrictions were again imposed.

Figure 1 Number of Volunteer Registrations by Nation



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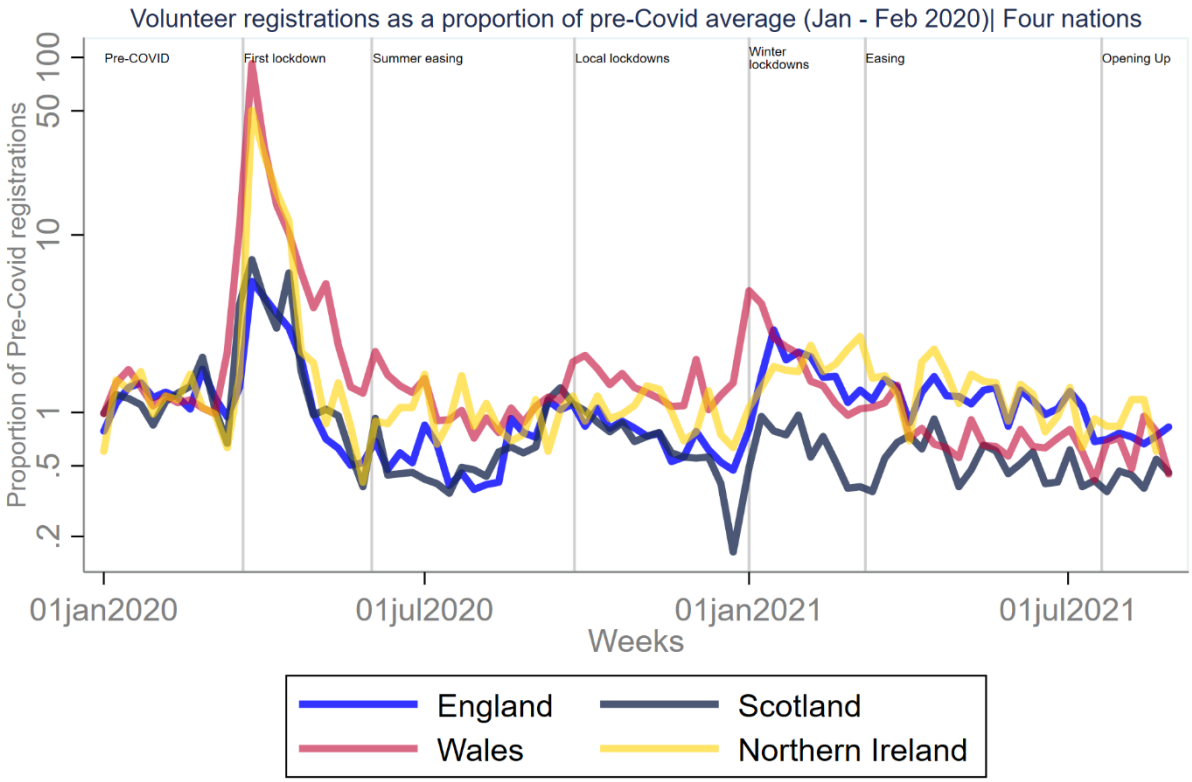
Data from Team Kinetic and BeCollective | August 2021

Figure 2 Volunteer Registrations as a Proportion of pre-COVID average by Nation



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Data from Team Kinetic and BeCollective | August 2021

Finding Two:

The number of new opportunities posted fell during lockdown at the same time as volunteer registrations were spiking. Opportunities posted remained historically low until the winter lockdown when they rallied across all three nations. By the end of the period however, opportunities posted have still not recovered to their pre-pandemic numbers.

The opportunity data gives us a somewhat limited picture of demand for volunteers. In the datasets we can observe the number of opportunities that have been posted, and the matching of volunteer registrations to opportunities. However, we can't be certain how long an opportunity that has been posted is 'live' for, or be sure that an organisation that has suspended activities would necessarily take down their posted opportunities. As such, we have to focus on the number and timing of opportunities being posted as a proxy for demand for volunteers.

Figure 3 shows that England, Scotland and Wales all saw a fall in the number of opportunities from March to June 2020 in the first lockdown. Pre-pandemic, around 200 opportunities per week were being posted in the two systems, in Figure 4. This fell as low as 50 during the first lockdown. While the summer easing saw opportunity numbers climb slowly, they declined again as the local and then winter lockdowns came into force.

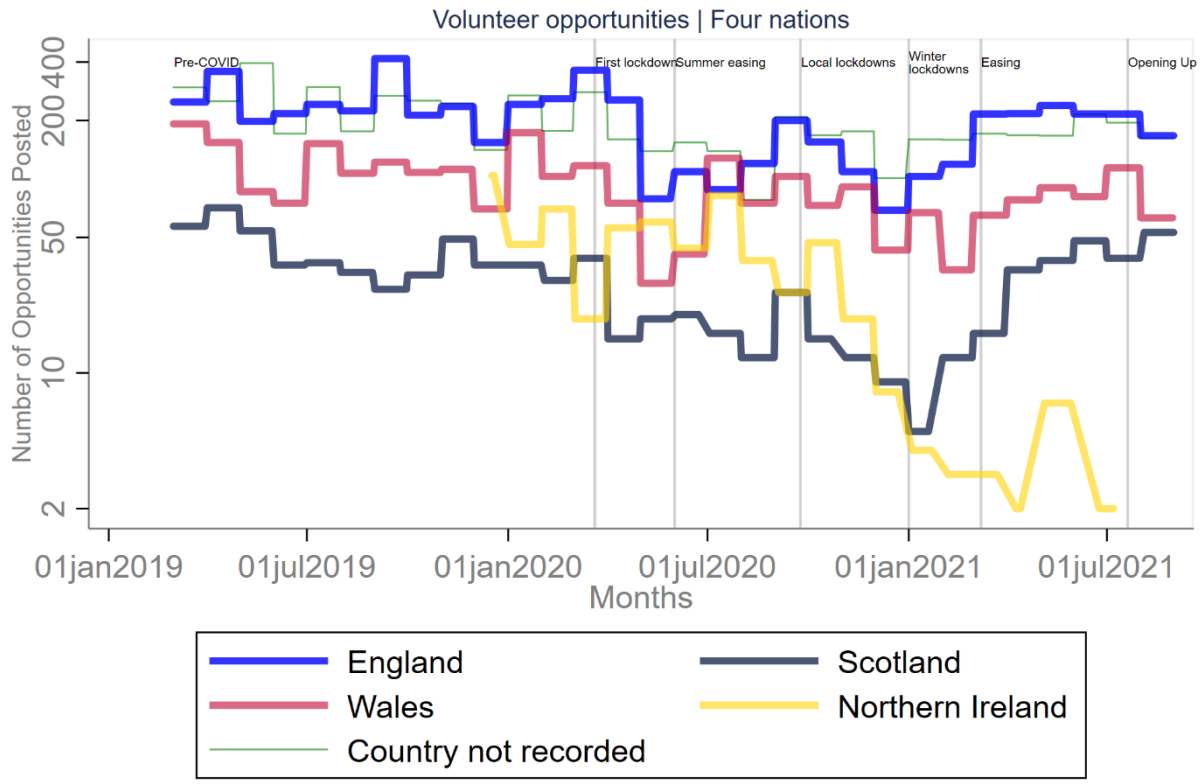
There was a steeper increase in the number of opportunities during easing in Summer 2021 for England Scotland and Wales, but this seems to have levelled out again at the end of the time series in August 2021 well below the pre-COVID levels of new opportunities. The number of new opportunities recorded in Northern Ireland is very low across 2021.

A significant number of opportunities are not recorded with a nation. These are shown separately in green in Figure 3, but are included in the total represented in Figure 4. A small number of organisation's opportunities have been excluded from this analysis where large numbers of opportunities (>100) were uploaded by a single organisation on one day, representing a bulk import. The opportunity data for Northern Ireland is a smaller sample, covering a shorter time period, and so care must be taken in interpreting those patterns.

What does this mean?

The number of opportunities available does seem correlated with the pandemic phases. Opportunities are highest pre-pandemic, during summer easing, and approaching the summer of 2021. Opportunities fell during lockdowns. This means that demand for volunteers (or at least the demand that could be operationalised by organisations) was not well-matched to the peaks in the supply of volunteers represented by registrations. This likely reflects the capacity of organisations to deliver volunteering opportunities under lockdown restrictions. It shows how significant the effect of lockdown was on the volunteer-involving organisations. But it also poses a challenge for the mobilisation of voluntary action in a crisis that warrants further reflection. Also concerning is the fact that the level of opportunities being posted has not shown any sign of returning to pre-pandemic levels even as restrictions have eased.

Figure 3 Number of Volunteering Opportunities by Posting Date for England, Scotland and Wales



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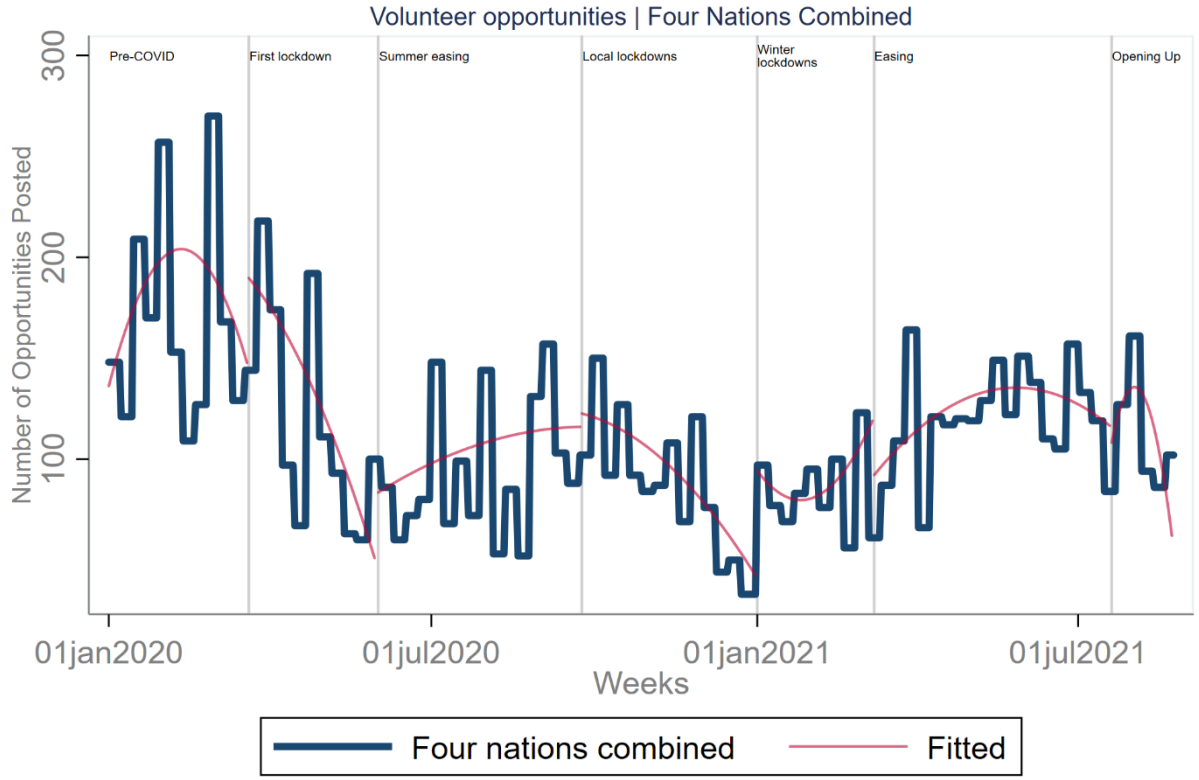
Data from Team Kinetic & BeCollective | August 2021

Figure 4 Number of Volunteering Opportunities Combined by Posting Date for England, Scotland and Wales



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Data from Team Kinetic & BeCollective | August 2021

Finding Three:

In the Team Kinetic data we can observe recorded volunteer activity. Most volunteers did not go on to record activity in the data (although they may have been active unrecorded). However, volunteers were more likely to become active, and were active faster, in the second lockdown than the first.

Combining finding one and finding two, we see the challenge in mobilising volunteers when the public response reacts to the crisis, while the crisis restricts the ability of organisations to offer volunteering opportunities. From the Team Kinetic data (England, Wales and Scotland) we have records of the match between volunteers and opportunities, and can therefore examine which volunteers went on to become active after registration.

Figure 5 shows the number of volunteers registering who went on to record activity. For England, this shows a clearly larger spike in the later Winter lockdown of early 2021, despite the greater number of overall registrations in the first lockdown. Scotland and Wales, in contrast, retain their largest peaks in active volunteers at the first lockdown date, although total numbers are much smaller.

Using a longer pre-COVID time series (from March 2019) and combining data from England, Wales and Scotland (shown in the left panel of Figure 6), we can see that the conversion rate for a volunteer registration to an active volunteer with recorded activity within twelve weeks is normally quite low at about 10%. We observe a sharp discontinuity at the onset of lockdown: activity rates fell to 4% in early March, jumping to 10% briefly as lockdown began. This suggests that the volunteers who registered before and after lockdown were different from each other, as just that one week made a big difference in whether they went on to become active or not. However, throughout the first lockdown volunteer conversion to activity was lower than the pre-COVID average.

The conversion rate recovers to its normal level of about 10% immediately before the local lockdowns in late 2020 following the summer easing, before falling again. However, it increases dramatically to 50% briefly in early 2021, and remains well above it's pre-COVID average until the start of summer 2021. Volunteers registering at the start of the winter lockdown in early 2021 show such a high conversion rate that this smaller spike in registrations actually resulted in a larger number of active volunteers.

Figure 7 shows the mean and median number of weeks between registration and first activity. Overall both these measures have fallen across the pandemic period; that is, newly registered volunteers are matched more quickly to activities. It has also become more consistent, with the mean much closer to the median by the end of the period. Since the spike in registrations at the start of the January 2021 winter lockdown, the time to match volunteers to activities has been consistently lower than at any point previously.

What does this mean?

Conversion rates from volunteer registration to activity are generally quite low – but this is consistent with the pre-pandemic period. Conversion to activity was highest, and the time to first activity lowest – in the early 2021 Winter lockdown and following easing periods. Volunteer-involving organisations may have been in a much better position to mobilise the second surge of voluntary action that coincided with the second lockdown. Faster matching times at the end o the period suggest greater efficiency in getting new registrants active as restrictions have eased.

Figure 5 Number of Volunteers going on to Record Activity by Registration Week for England, Wales and Scotland

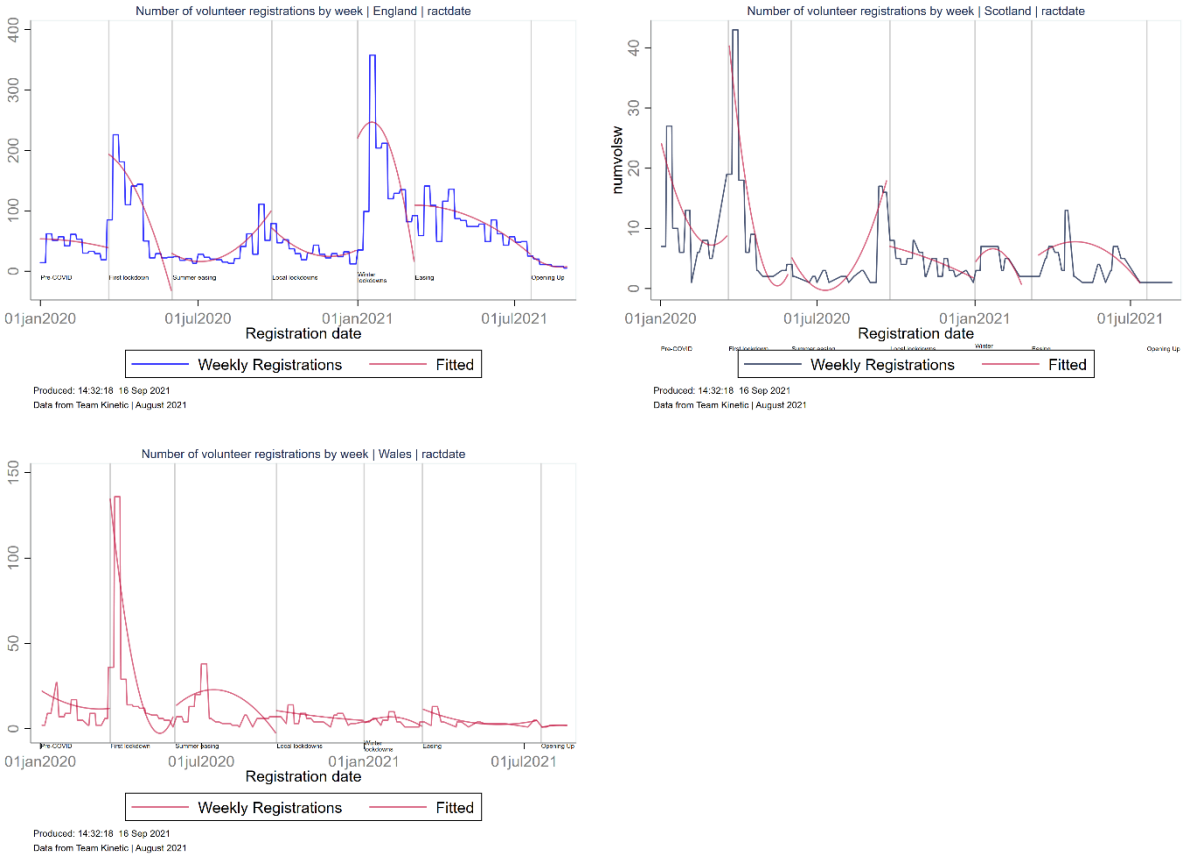


Figure 6 Activation Rates by Registration Week for England, Wales and Scotland

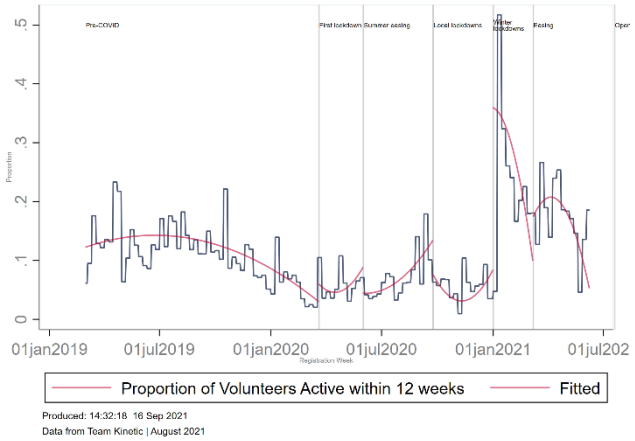
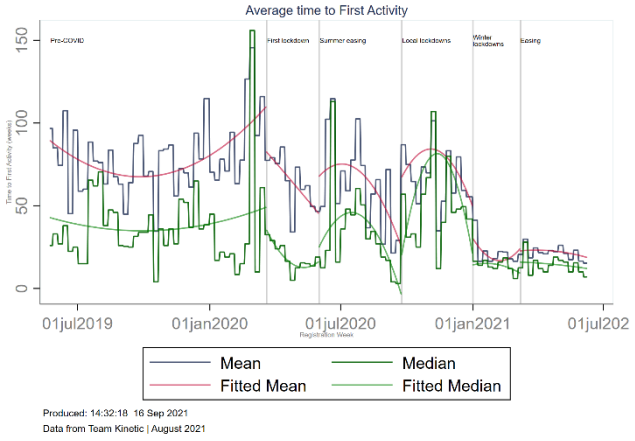


Figure 7 Time to First Activity by Registration Week for England, Wales and Scotland Combined



Finding Four:

The average age of volunteers increased dramatically in the surges at both lockdowns. Analysis shows that it is older age groups increasing participation that pushed up the average, while the level of volunteering amongst younger age groups was steady.

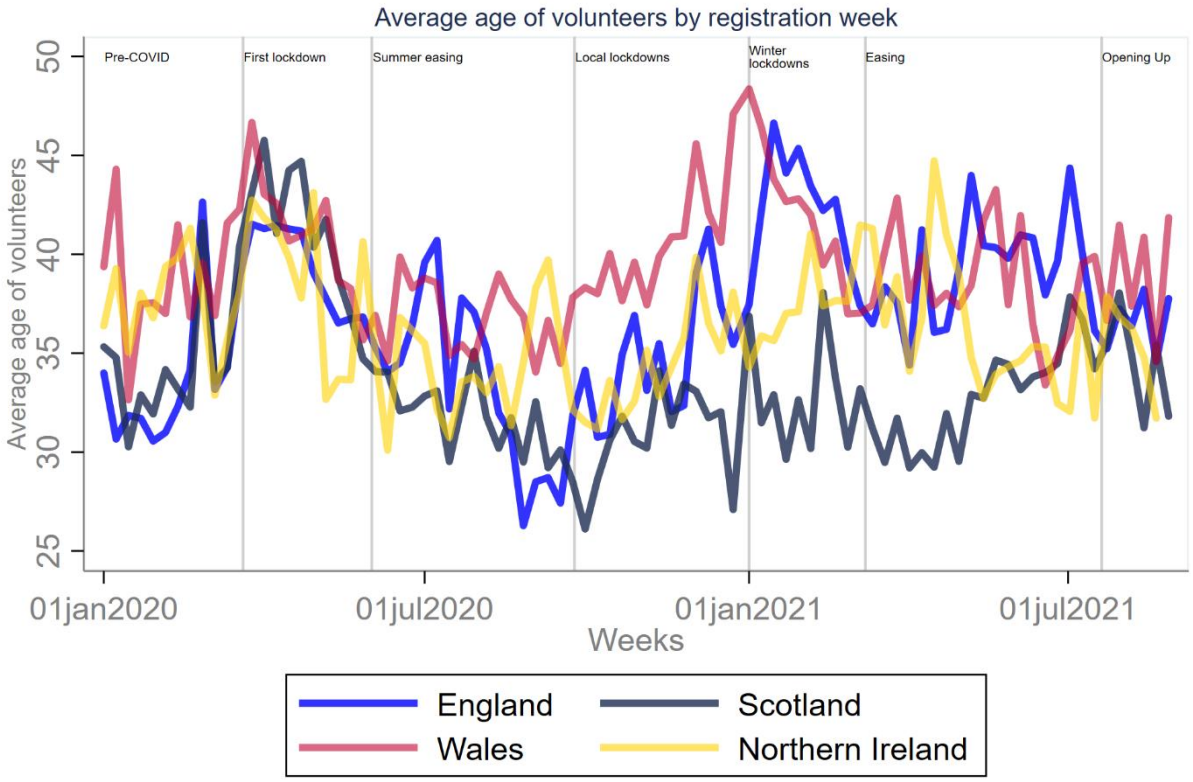
The four nations show remarkably similar patterns in the average age of volunteers registering through the apps across the pandemic period (Figure 8). Scotland is the exception, with the average age of volunteers remaining low through the autumn and winter of 2020 into spring of 2021. The average age of volunteers using the app pre-pandemic was about 33 years old in England and Scotland, and about 37 years in Wales and Northern Ireland. All four nations saw a dramatic rise in the age of volunteer app users at the start of the first lockdown, with the average age rising by about ten years. While this gradually fell again through lockdown and the summer easing in 2020, it rose to even higher peaks in England and Wales at the start of the winter lockdown. However, by the opening up period from July 2021 the average age profile of volunteers using the apps had broadly returned to pre-pandemic levels.

Figure 9 shows in more detail for England the dynamics of the registrations from different age groups. The level of registrations amongst 18 to 27 years olds has remained very steady through the pandemic with little variation. In contrast, there was a big jump in registrations by volunteers aged 28 to 67 which pushed up the average age. The age groups with the biggest jumps in registrations were 48 to 57 year olds and 58 to 67 year olds. These age groups fell in participation again during the summer easing, but saw another spike at the start of winter lockdown, with the numbers of 38 to 67 year olds actually exceeding the 18 to 27 age group at some points. Registration by age groups do seem to have returned to their pre-pandemic levels during the opening up period in mid-2021.

What does this mean?

The users of volunteering apps are a younger demographic than the profile of formal volunteers more generally. Despite this, the significant increases in registration associated with both lockdowns was driven largely by increased participation by those aged 38 to 67, falling again outside of the lockdowns. This is consistent with these age groups being furloughed, or working from home, and looking for volunteering opportunities during the lockdown periods. It is encouraging that a broader range of ages were able to access volunteering in this way. However, the increased participation of these age groups in volunteering through this medium does not seem to have been sustained, with levels quickly returning to normal as pandemic restrictions eased.

Figure 8 Average Age of Volunteers at Registration for Four Nations



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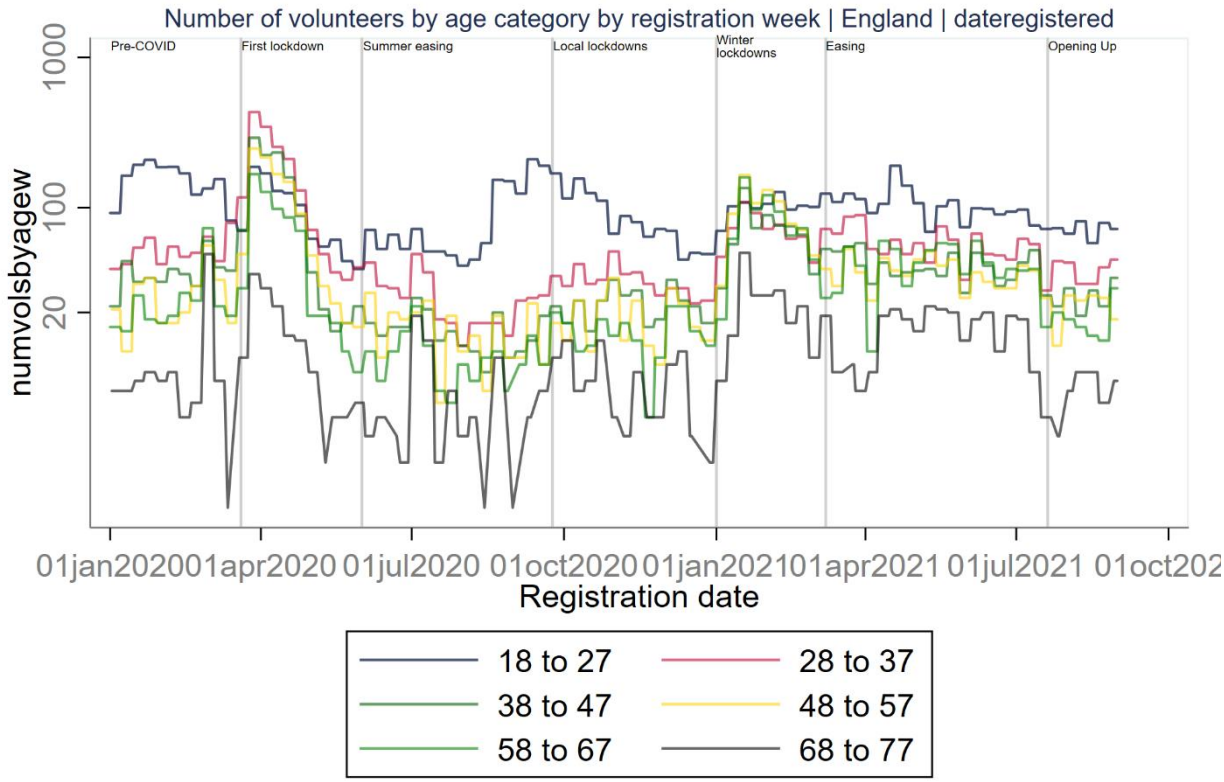
Data from Team Kinetic and BeCollective | August 2021

Figure 9 Number of Volunteers Registering by Age Category for England



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Data from Team Kinetic | August 2021

Finding Five:

Across all four nations women are more likely to volunteer than men. There is no evidence that this fluctuated significantly during the course of the pandemic.

The gendered pattern of volunteering through these apps is consistent with broader patterns for formal volunteering participation, where a greater proportion of volunteers are women, as seen in Figure 10. This is consistent across all four nations, and remained fairly steady during the pandemic as a whole.

Examining the first lockdown in more detail, it does appear that there was a slight increase in the proportion of female volunteers registering during lockdown, levelling off in the summer easing period.

Figure 11 focuses on England, and only on volunteer registrations who went on to record activity. This shows broadly the same steady gender difference, with some minor patterns. It does appear that at the start of both lockdowns active volunteers were even more likely to be female. It also seems that at the end of the period the proportion of women is increasing, although this may suggest a gender difference in the time taken between registration and recording volunteer activity.

What does this mean?
Gender differences in volunteering participation are well-known and well-studied. These strong effects do not seem to have been shifted dramatically by the pandemic, although there is some evidence that volunteer registrations did become slightly more likely to be female during lockdown. Although a small effect, it is worth reflecting on this pattern in the context of the emerging evidence on the increased load borne by women of work and childcare during home-working and home-schooling pandemic restrictions.

Figure 10 Proportion of Male and Female Volunteers Registering for Four Nations

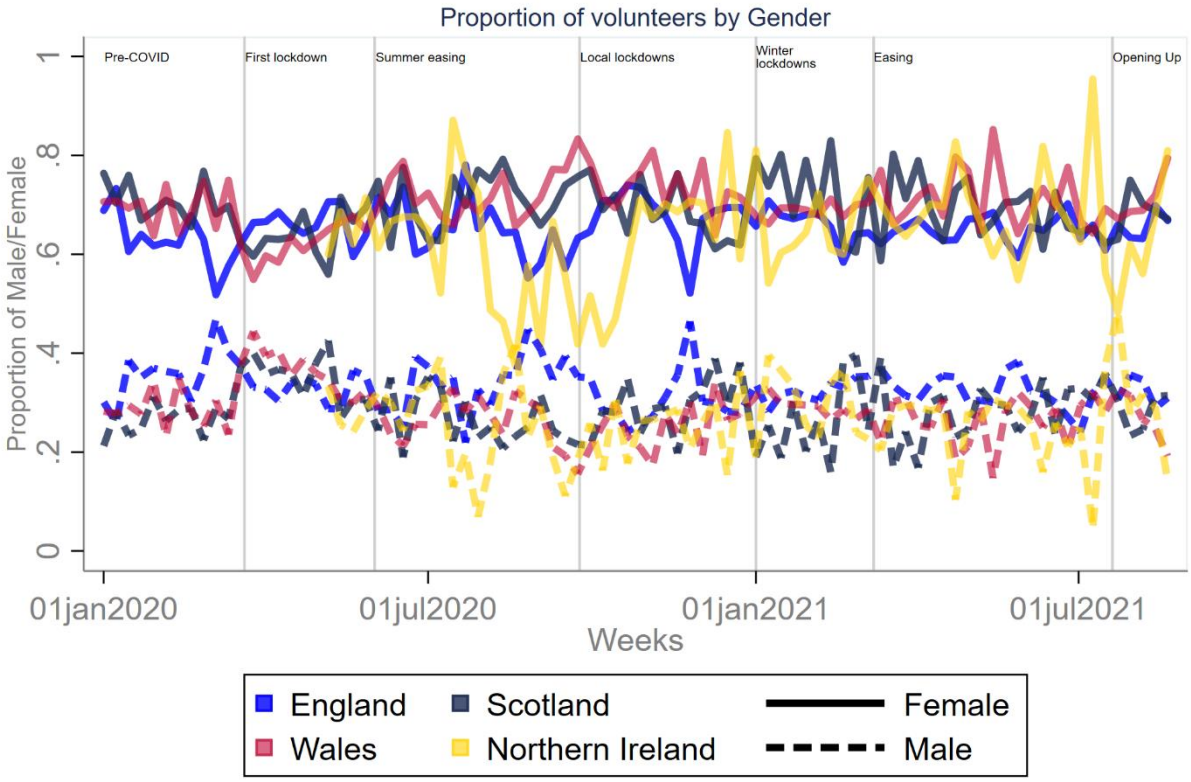
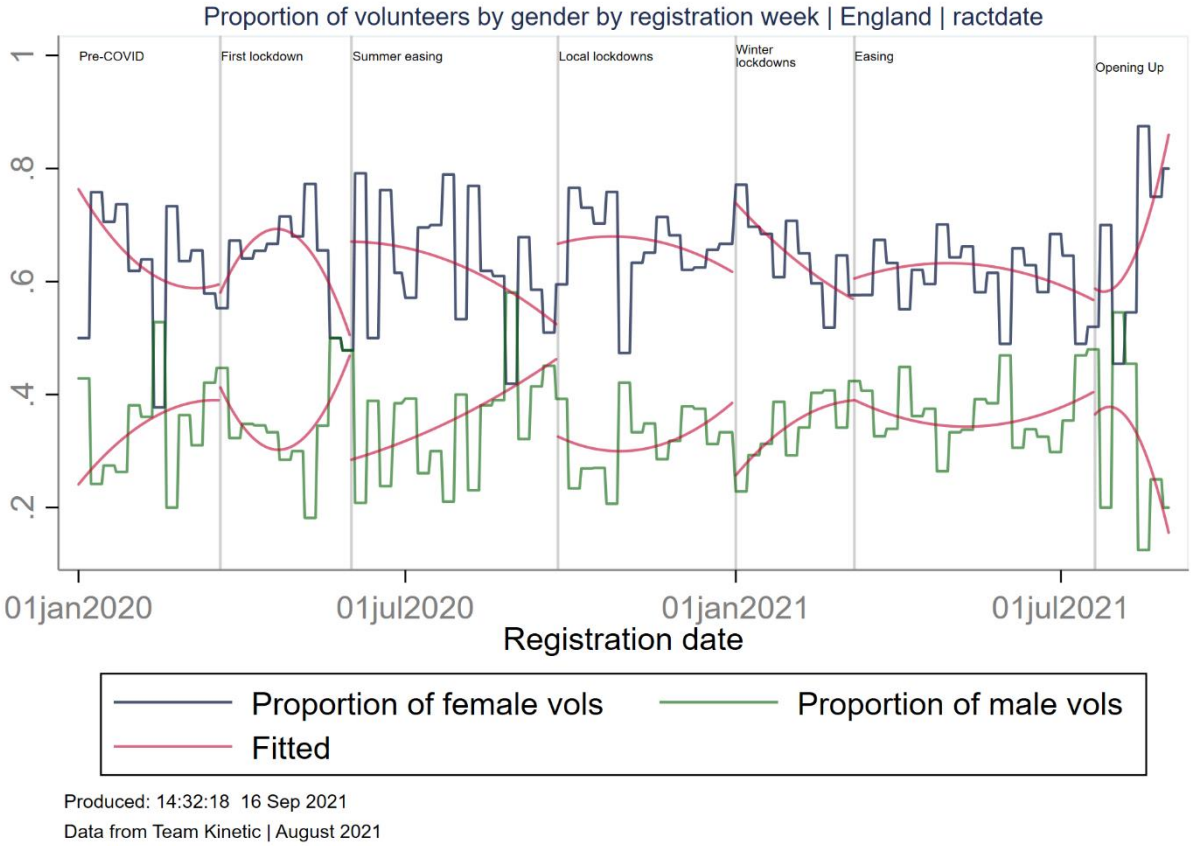


Figure 11 Proportion of Male and Female Volunteers going on to Record Activity by Registration Week for England



Finding Six:

Understandably, volunteering by people with disabilities was proportionally lower in both lockdown periods, although it seemed to recover somewhat between lockdowns. In the final easing phase registration of disabled volunteers recovered to pre-pandemic levels, but activity appears not to have, and opening up seems to be having a negative effect on participation almost as big as the two lockdowns.

The three nations in which we can examine patterns in volunteering participation by disability show remarkably similar patterns in Figure 12. The onset of both the first lockdown and the second, winter lockdown saw a sharp drop in the proportion of volunteers registering with disabilities. This quickly recovered again in both the summer easing periods, even exceeding pre-pandemic levels.

However, more concerning is that in the final opening up period from July 2021 all three nations have seen a drop in the proportion of volunteer registrants with disabilities. One possibility is that volunteers with disabilities, which will include some people in vulnerable groups, have been more cautious in returning to volunteering once most of the COVID restrictions were lifted, in contrast with the two easing periods where COVID levels were lower and many restrictions still in place.

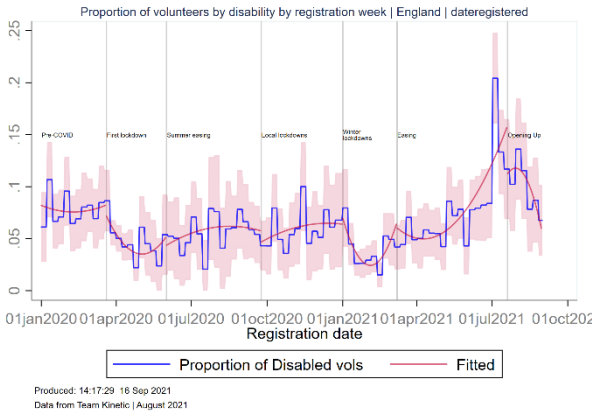
The shaded confidence intervals in these graphs show that while there are some clear discontinuities around the onset of lockdown, other differences could be explained by random variation. The small size of sub-samples makes more nuanced analysis challenging. Figure 13 shows the proportion of disabled volunteers split into over- and under-60 age categories for England. This shows that it is the over-60-with-disabilities that has reacted most strongly to the lockdown, though with significant uncertainty around the estimates that make disentangling the effects challenging. Interestingly, this graph suggests that it is the younger group of disabled volunteers that is driving the falling numbers in the final opening up period.

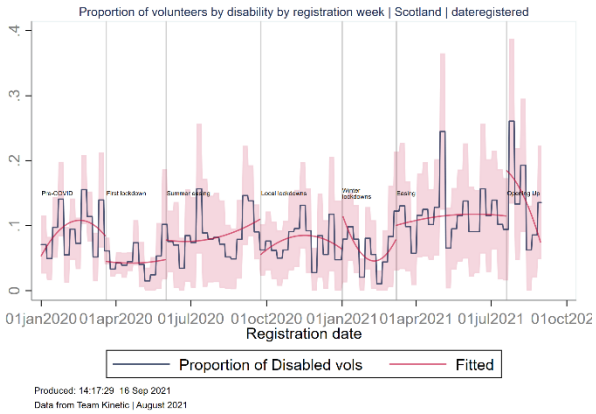
The left panel of Figure 14 shows the proportion of volunteers recording activity who were disabled. This echoes the patterns in registrations, but emphasises that the numbers of volunteers becoming active is very low at the end of the time period. The right panel shows the time between registration and first activity for volunteers with and without disabilities. Pre-pandemic there is little difference, but as lockdown approaches the time to active for disabled volunteers gets very high (between 6 months to a year). The sharp discontinuity in March 2020 shows the difference in those registering before and after lockdown. The match time for disabled volunteers continues to be higher for volunteers through lockdowns, although it does seem to be equalising again by the end of the period.

What does this mean?

We can see that potentially more vulnerable groups were the most likely to reduce their volunteering during the lockdowns. This recovered as COVID levels dropped while restrictions were in place, but the same has not been true in the opening up phase when restrictions were dropped and case numbers rose. Most concerning is that participation by disabled volunteers – both younger and older – is reaching its lowest in the opening up phase and so has not recovered to pre-pandemic levels. Mitigating risk, and reassuring volunteers in vulnerable groups, will be essential as we move out of the pandemic if we are not to exclude these individuals as society reopens.

Figure 12 Proportion of Volunteers Registering with a Disability for England, Wales and Scotland





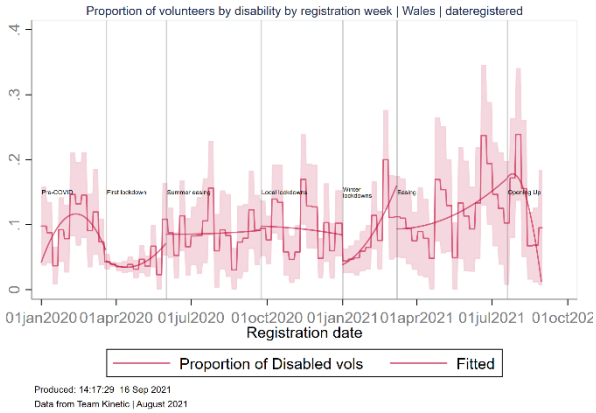


Figure 13 Proportion of Volunteers Registering with a Disability for England by Age Category

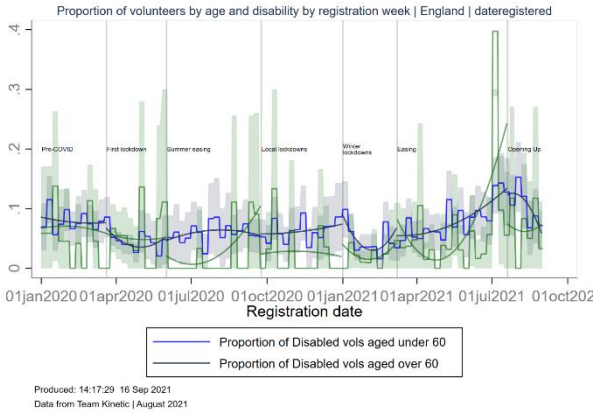
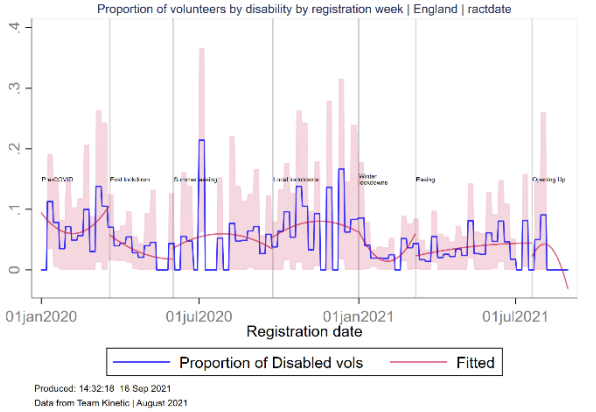
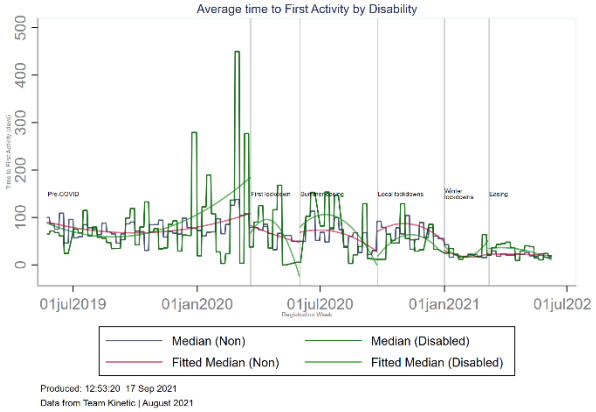


Figure 14 Proportion of Volunteers with a Disability who Record Activity and Time to First Activity by Registration Date





Finding Seven:

In England and Scotland it was the middle 60% by deprivation who became more likely to volunteer. In Wales, the biggest increase in participation was amongst those living in the most affluent areas.

The pre-pandemic deprivation profile of the three nations, England, Scotland and Wales, are both broadly representative and quite similar. How these patterns of deprivation and volunteer registration evolved early in the pandemic are surprisingly different across the nations. In Figure 15, Figure 16 and Figure 17 you can compare the nations across the horizontal, and look at deprivation patterns within the nations down the vertical.

In the first lockdown, England saw an initially big drop in registrations from the most affluent areas, and a sharp increase in registrations from the middle 60%. Registrations from the most affluent did recover by May 2020, while they declined in both the middle 60% and bottom 20%. Scotland saw a very similar sharp increase in registrations from the middle 60%, but no affect from affluent areas and a much sharper drop in the most deprived areas. Wales was different again, with a sharp increase in volunteering from the most affluent areas, and only small relative drops in the middle 60% and bottom 20%.

Beyond the first lockdown the patterns in volunteer registration by deprivation are less clear. England and Wales both have an over-representation of volunteer registrations from more affluent areas. In contrast, in Scotland the volunteer registrations are much more likely to be in relatively deprived areas.

What does this mean?

The pre-pandemic deprivation profile of volunteers registering was quite similar across the nations. But the divergence in profile at the onset of the pandemic suggests that there was not a clear deprivation pattern in the volunteering response to lockdown, but rather that the app is being used by different groups in different nations. Beyond the first lockdown, England and Wales do see volunteers from the most deprived areas under-represented, which would be consistent with historic patterns in formal volunteering. Given what we know about the association between deprivation and different forms of voluntary action (e.g. formal/informal/mutual aid) we must take care in reading too much into formal volunteering fluctuations by deprivation.

Figure 15 Proportion of Volunteers Registering in the 20% Least Deprived Areas

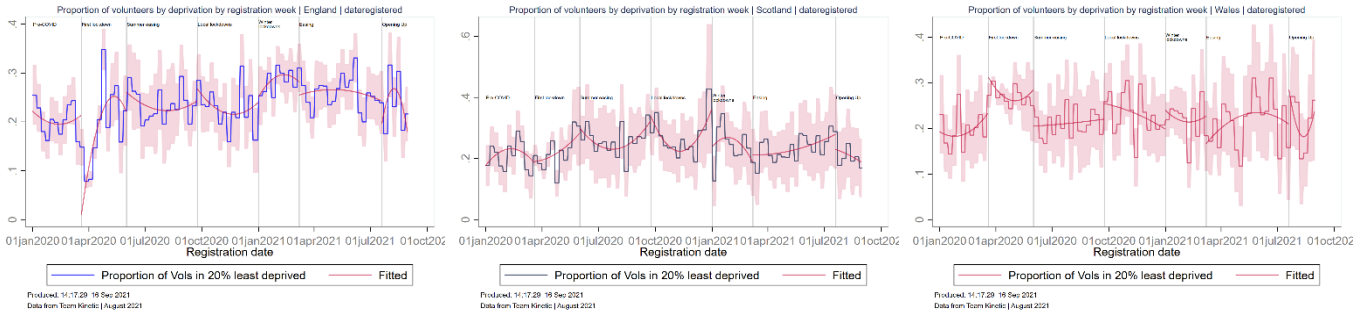


Figure 16 Proportion of Volunteers Registering in the Middle 60% Areas by Deprivation

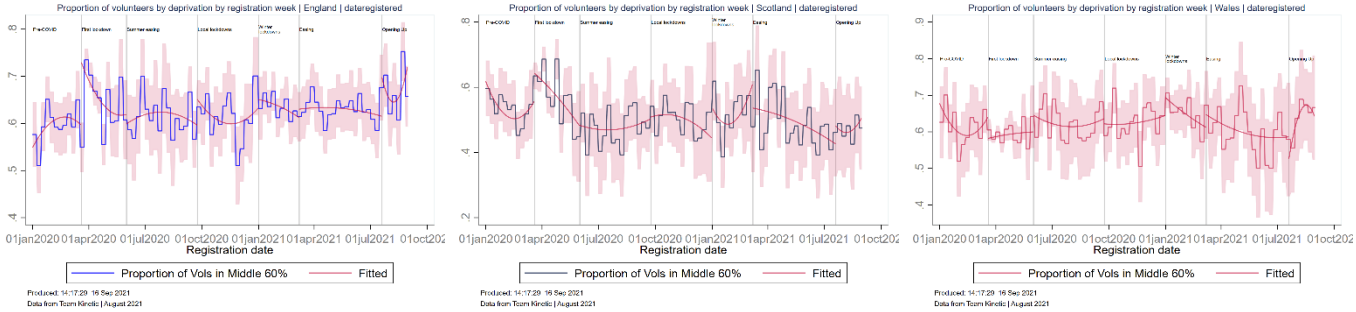
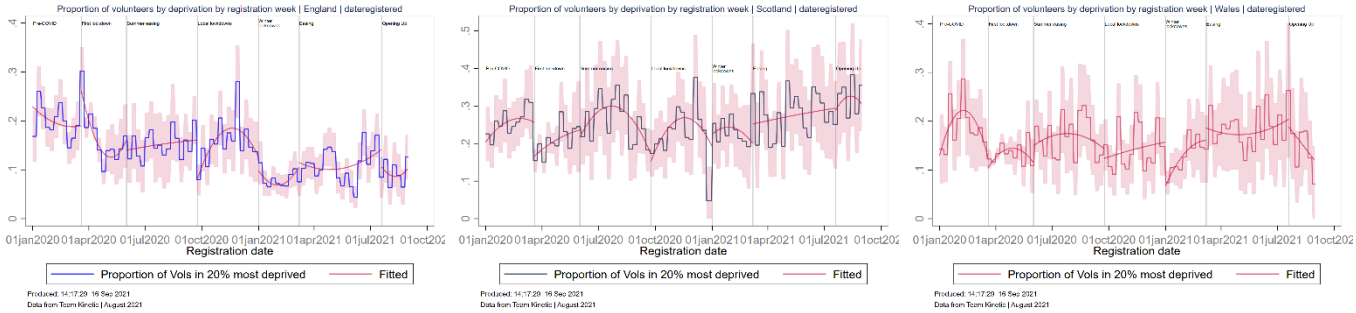


Figure 17 Proportion of Volunteers Registering in the 20% most Deprived Areas



Finding Eight:

England saw a lockdown surge in urban volunteers, while Scotland saw its increase in rural volunteers. Wales and Northern Ireland, with the most rural volunteers, did not see a difference in rurality at the start of lockdown. In all four nations the level of rural volunteering seems to have returned to pre-COVID levels.

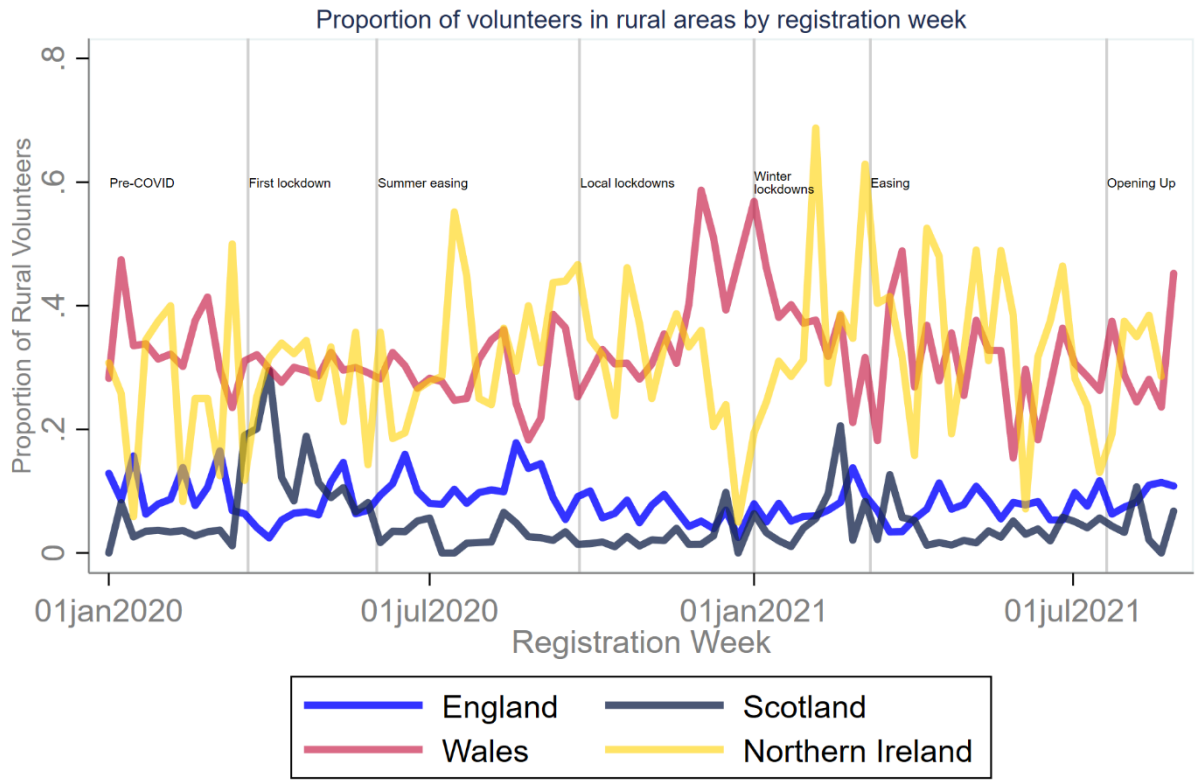
Figure 18 and Figure 19 show the same information in presented in two different ways. The first shows the proportion of volunteer registration from individuals living in rural areas over time. The second shows how this rate of rurality has changed proportionally relative to the average level pre-pandemic. We need to be careful in interpreting nation differences in the rurality of volunteers, as these may be driven by how the app is being used in the four nations rather than the underlying geography.

The two nations with the highest level of rural volunteer registrations, Wales and Northern Ireland, also saw the least dramatic urban/rural differences in the volunteer response to the first lockdown. In contrast, volunteer registrations in Scotland were eight times more likely to be rural than pre-pandemic, while in England registrations were four times more likely to be urban. Prior to the winter lockdown, in December 2020, England and Scotland saw the same pattern again. This time volunteering in Northern Ireland also responded, with registrations becoming much more urban. Overall the urban/rural pattern of volunteering in Wales varied much less than the other nations, although the Welsh peak in rural volunteer numbers did come in the run-up to the winter lockdown.

What does this mean?

To differing extents, it seems that rural volunteering in Scotland and Wales was more responsive to lockdown, with urban volunteering having greater prominence again in the easing periods. But only in Scotland was this effect really pronounced. England seemed to experience the opposite pattern, and this may be explained by differences in the composition of organisations using the volunteering app. We know that rurality is routinely associated with higher levels of volunteering participation, and so might have expected the bigger rural response we observe in Scotland and Wales. However, use of app-based forms of volunteering recruitment may be more prevalent in more urban areas, so we must take care in interpreting the lack of this effect in England and Northern Ireland.

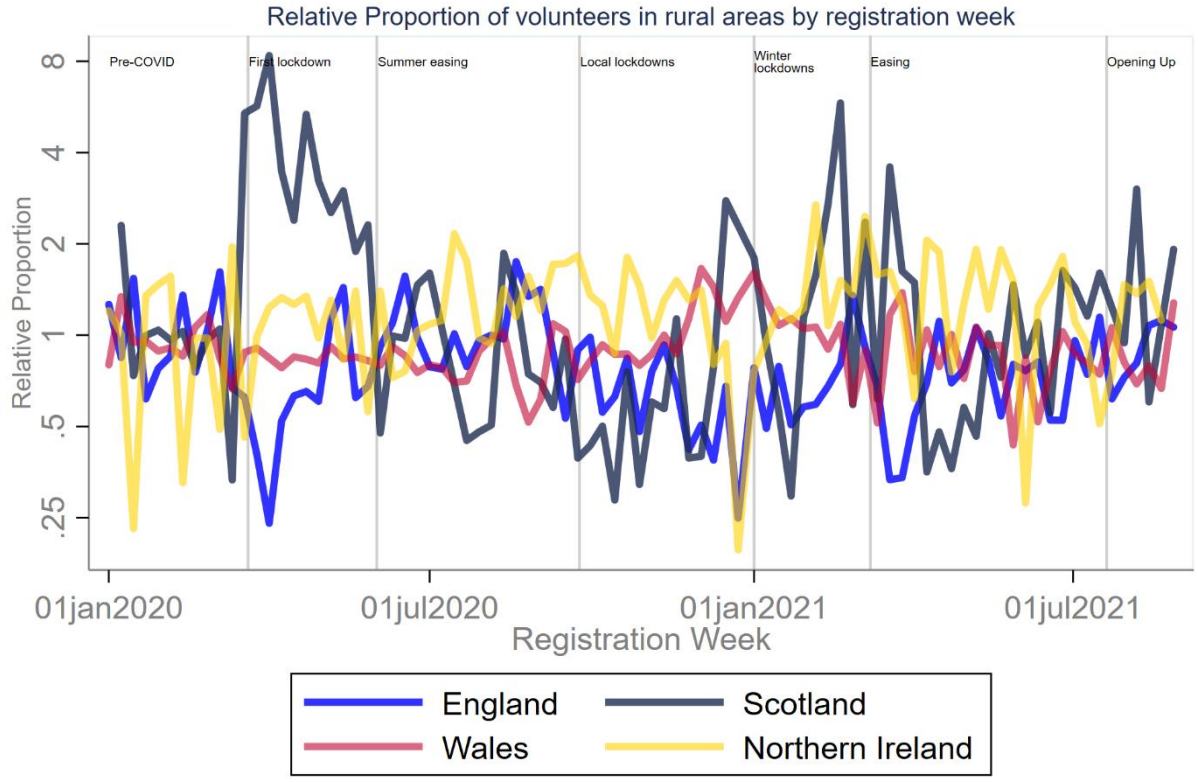
Figure 18 Proportion of volunteers in rural areas for four nations



Produced: 11:31:40 17 Sep 2021

Data from Team Kinetic and BeCollective | August 2021

Figure 19 Relative proportion of volunteers in rural areas for four nations



Produced: 11:31:40 17 Sep 2021

Data from Team Kinetic and BeCollective | August 2021

Conclusion

Across the nations, the data is consistent with a large initial surge of volunteering which overwhelmed the available opportunities. In later lockdowns, organisations seem better prepared and more moderate surges were better matched to opportunities. Despite different policy responses, the phase patterns in volunteering seem significant across nations. While some characteristics (gender, age, disability) have very similar patterns across nations, others (deprivation, rurality) do differ quite strongly by nation.

It is certainly true that technology made registering to volunteer easier than it otherwise would have been during the pandemic. While the profile of volunteer registrants tends to be younger than volunteers more broadly, the apps were used by quite broad demographics in terms of age, gender, rurality and deprivation, with strong patterns showing that they were being accessed by 'different' people than had been using them pre-pandemic as a way to volunteer.

However, registering is only the first step, and we know that organisations had significant challenges in mobilising such a large number of volunteers in a short space of time, particularly when also navigating COVID restrictions and pandemic pressures themselves. The app data presented here shows that starkly: the conversion of volunteer registrations to activity took longer, or didn't happen, particularly in the first lockdown. We can't tell from this data whether this significant number of people went on to volunteer in other ways, either outside the app system or through informal volunteering or other community action. But it is clear that it was simply not possible to manage the shear scale of the voluntary action response to the crisis of the pandemic.

But the positive story is the second, smaller surge in voluntary action associated with the winter lockdowns in 2021 and early 2021. Here we again saw large numbers of new volunteers registering. But this time match rates to activity went up rather than down, and the time between registration and activity fell rather than rose. This likely reflects volunteer-involving organisations greater readiness, both in terms of the policies and procedures in place to provide COVID-safe volunteering, and the anticipation of greater supply that allowed the opportunities for volunteers to be in place.

It would be unreasonable to expect that organisations would be able to respond as quickly in a fast-developing crisis such as the first lockdown. However, the second lockdown response shows that with the right preparation in place organisations can mobilise a dramatic surge in the supply of volunteers. It is worth reflecting on what support and preparation could be in place to help organisations manage a future outpouring of the desire to take voluntary action in response to a crisis.

This analysis also helps us to shed light on the dynamics that may lie behind the patterns in formal and informal volunteering observed in the survey data (NCVO, 2021). The fall in formal volunteering participation does not seem to have been driven by a fall in the willingness to volunteer, but rather by the effect that restrictions had on whether opportunities were available to volunteer. And while formal opportunities were limited, the survey data shows that significant numbers of people engaged instead in informal volunteering, often focussed on their local communities.

Where we need to be cautious is the extent to which volunteering is returning to 'normal'. Some deviations from normal are to be welcomed: more use of technology to access volunteering, and a broader profile of age and deprivation using that technology. But others might create cause for concern: the falling participation of those in the more deprived communities in England and Wales;

and the decline in volunteer registrations amongst those with disabilities even as society is re-opening.

In comparing nations, we face the challenge of disentangling the different policy contexts, different COVID responses, and the different ways in which the volunteering apps are being used. Conclusions drawn from this analysis, therefore, must only be taken together with the evidence from across these domains. Comparisons between the UK nations bring lots of potential, creating 'natural experiments' where different policies are delivered on comparable populations. But we must also take great care in not over-interpreting differences, particularly where they may be driven by how a tool, such as the volunteering app systems, are being used in those countries.

But what is striking is how similar the patterns are across the nations. We see the same spikes in registrations, and the same patterns in activity. Despite different policy responses and timing, the broad pandemic phases do seem to match to changes in the numbers and profile of volunteers over time. And by late 2021, we see most characteristics returning to pre-pandemic levels across the four nations.

Where we see differences – primarily in deprivation and rurality patterns – these are characteristics associated with place rather than individuals. And this is a good reminder that context matters. *Where* the app is being used for volunteer recruitment is intertwined with *how* it is being used.

We can be reassured that volunteering on the whole is resilient. The challenges of the first lockdown did not deter volunteers registering in the second. Where formal volunteering was not possible, informal volunteering seems to have sprung up in its place. On most characteristics, volunteer registrations have returned to normal. But we must be concerned with those who risk being left behind due to COVID risks as society returns to normal if volunteering is to be a diverse and inclusive activity. This may require fresh thinking in the ways in which people can get involved, and feel safe in their involvement, as we come out of the COVID-19 pandemic.

APPENDIX ONE | App data analysis – Descriptives

1. BeCollective data

1.1 Main sample sizes & data exclusions

Most recently exported on: 26/08/21

Total & excluded sample sizes	Datasets					
	NI volunteers	NI opportunities	NI sessions	AU/NZ volunteers	AU/NZ opportunities	AU/NZ sessions
Starting sample size	7814	591	427	11920	248	93
Missing from July*	8	100	0	5	793	793
New from August*	831	20	13	2083	241	88
Excluded duplicates	4	0	0	0	0	0
Excluded, aged <18	389	0	10	218	0	20
Final sample size	7429	691	417	11707	1041	866

*Some rows in the first export were no longer present in this export. The new ones were added to the previous dataset.

Also, 4 NI users, 28 AU/NZ users, 1 NI session, and 2 AU/NZ sessions had ages above 100 (age recoded to NA)

1.2 Cutting down to only relevant dates (1 Mar 2019 – 26 Aug 2021)

Total & excluded sample sizes	Datasets					
	NI volunteers	NI opportunities	NI sessions	AU/NZ volunteers	AU/NZ opportunities	AU/NZ sessions
Starting sample size	7429	691	417	11707	1041	866
Excluded, irrelevant dates	0	0	0	2613	0	0
Excluded, no corresponding vol data	0	0	10	0	0	286
Excluded, no corresponding opp data	0	0	9	0	0	0
Final sample size	7429	691	398	9094	1041	580

1.3 Volunteer descriptives

This table describes the volunteer sample within the key period from 1 Mar 2019 to 26 Aug 2021.

Data type	Descriptive	NI volunteers	AU/NZ volunteers
Sample size	N	7429	9094
Sign up date to platform	Earliest sign-up	21/06/2019	02/03/2019
	Latest sign-up	24/08/2021	24/08/2021
Gender	Missing data (%)	4124 (55.5%)	4670 (51.4%)
	Female (% among non-missing data)	2288 (69.2%)	3107 (70.2%
	Male (% among non-missing data)	992 (30.0%)	1279 (28.9%)
	Other (% among non-missing data)	10 (0.3%)	14 (0.3%)
	Prefer not to say (% among non-missing data)	15 (0.5%)	24 (0.5%)
Age*	Missing data (%)	4 (0.0%)	64 (0.7%)
	Minimum age	18.0	18.0
	Maximum age	88.0	100.0
	Mean age	39.4	44.7
	Standard deviation	14.0	17.1
Hours	0 hours volunteered (%)	7049 (94.9%)	8411 (92.5%)
	Minimum hours volunteered (above 0)	0.08	0.25
	Maximum hours volunteered	2556.00	12710.02

	Mean hours volunteered (among above 0s)	139.56	279.04
	Standard deviation (among above 0s)	500.36	1354.23
	Median hours volunteered (among above 0s)	6.00	8.00
Region / country	Missing data (%)	3474 (46.8%)	4644 (51.1%)
	Northern Ireland (assumed, dataset origin)	3831 (96.9%)	n/a
	Australia (based on known data)	n/a	2487 (55.9%)
	New Zealand (based on known data)	n/a	1903 (42.8%)
	Unknown (either AU/NZ)	n/a	60 (1.3%)

**Ages above 100 recoded to NA*

1.4 Opportunity descriptives

Data type	Descriptive	NI opportunities	AU/NZ opportunities
Sample size	N	691	1041
Start dates	Earliest	17/12/2019	04/03/2019
	Latest	07/07/2021	29/07/2021
Opportunity type	Virtual opportunity (%)	52 (7.5%)	246 (23.6%)
	In person opportunity (%)	639 (92.5%)	795 (76.4%)
Opportunity accessibility	Public opportunity (% among non-missing data)	488 (70.6%)	713 (68.9%)
	Private opportunity, e.g. for members (% among non-missing data)	203 (29.4%)	322 (31.1%)
	Missing data (%)	0 (0.0%)	6 (0.1%)
Covid tagged	Yes (%)	201 (29.1%)	131 (12.6%)
	No (%)	490 (70.9%)	910 (87.4%)
Applied volunteers	0 volunteers applied	300 (43.4%)	512 (49.2%)
	Minimum volunteers applied (above 0)	1.0	1.0
	Maximum volunteers applied	215.0	77.0
	Mean (among above 0s)	8.3	2.8
	Standard deviation (among above 0s)	19.0	4.4
	Median (among above 0s)	3.0	2.0
Approved volunteers	0 volunteers approved	614 (88.9%)	706 (67.8%)
	Minimum volunteers approved (above 0)	1.0	1.0
	Maximum volunteers approved	62.0	21.0
	Mean (among above 0s)	6.8	2.6
	Standard deviation (among above 0s)	12.3	3.1
	Median (among above 0s)	2.0	1.0
	No. of instances of volunteers being approved	525	882
Hours	0 hours volunteered (%)	643 (93.1%)	764 (73.4%)
	Minimum hours volunteered (above 0)	2.00	0.02
	Maximum hours volunteered	37584.00	516.00
	Mean hours volunteered (among above 0s)	984.10	27.91
	Standard deviation (among above 0s)	5423.32	60.80
	Median hours volunteered (among above 0s)	48.00	8.00
Region / country	Missing data (%)	50 (7.2%)	245 (23.5%)
	Northern Ireland (assumed, dataset origin)	691 (100.0%)	n/a
	Australia (based on known data)	n/a	420 (52.8%)
	New Zealand (based on known data)	n/a	372 (46.7%)
	Unknown (either AU/NZ)	n/a	4 (0.5%)

1.5 Session descriptives

Data type	Descriptive	NI sessions	AU/NZ sessions
Sample size	N	398	580
Gender	Missing data (%)	204 (51.3%)	237 (40.9%)
	Female (% among non-missing data)	141 (72.7%)	249 (72.6%)
	Male (% among non-missing data)	52 (26.8%)	91 (26.5%)

	Other (% among non-missing data)	1 (0.5%)	2 (0.6%)
	Prefer not to say (% among non-missing data)	0 (0.0%)	1 (0.3%)
Age*	Missing data (%)	1 (0.3%)	23 (4.0%)
	Minimum age	18.0	18.0
	Maximum age	75.0	75.0
	Mean age	40.0	38.0
	Standard deviation	14.7	13.1
Hours	0 hours volunteered (%)	120 (30.2%)	121 (20.9%)
	Minimum hours volunteered (above 0)	0.08	0.02
	Maximum hours volunteered	2556.00	490.00
	Mean hours volunteered (among above 0s)	163.64	12.64
	Standard deviation (among above 0s)	573.97	31.88
	Median hours volunteered (among above 0s)	4.00	4.00

**Ages above 100 recoded to NA*

2. TeamKinetic data

2.1 Main sample sizes & data exclusions

Most recently exported on: 02/09/21

Total & excluded sample sizes	Datasets						
	Organi-sations	Providers	Volunteers	Oppor-tunities	Oppor-tunities by volunteer	Tasks	Tasks by volunteer
Starting sample size	186	13483	184056	43494	390800	6440	6381
Missing from July*	0	60	1937	98	~27000	0	2
New from August*	76	5858	26197	6245	?	238	374
Excluded duplicates	0	0	0	0	0	0	0
Excluded, aged <18	0	0	4930	0	0	0	0
Excluded, non-UK	5	183	1741	895	0	0	0
Excluded, future date	0	0	0	0**	5914	0	0
Excluded, no corresponding opp data	0	0	0	0	5739	0	0
Excluded, no corresponding vol data	0	0	0	0	22603	0	16
Excluded, no corresponding provider data	0	0	0	0	0	1059	0
Excluded, no corresponding task data	0	0	0	0	0	0	1052
Final sample size	181	13360	179322	42697	384859	5381	5315

*Some rows in the first export were no longer present in this export. The new ones were added to the previous dataset.
**As with the July data, these were not excluded yet at this step (only later when also cutting too old opportunities), but some exist, as was the case in the July data.

This export also newly includes organisations that are no longer active. Also, 1664 vols had ages above 100 (age recoded to NA). Volunteer ethnicity: Some data categories are very vague (e.g. “Asian”) while others are very detailed (e.g. “Asian or Asian British – Vietnamese”. Recoded to 6 basic ethnic groups (common denominators). Tricky assumptions (common categories): “British” (13.8%), “English” (7.3%) were assigned to the “White or White British” category (most likely the category with the least false assignments). Also, in the oppbyvol dataset, 1 negative value in vohours and 8 negative values in prohours were recoded to 0.

2.2 Cutting down to only relevant dates (1 Mar 2019 – 2 Sep 2021) and adding additional variables

Total & excluded sample sizes	Datasets						
	Organi-sations	Providers	Volunteers	Oppor-tunities	Oppor-tunities by volunteer	Tasks	Tasks by volunteer
Cleaned sample size	181	13360	179322	42697	384859	5381	5315
Excluded, irrelevant dates	0	0	82457	24665	176844	15	0
Excluded, no corresponding vol data	0	0	0	0	67209	0	14
Excluded, no corresponding task data	0	0	0	0	0	0	15
Excluded, no corresponding opp data	0	0	0	0	4420	0	0
Final sample size	181	13360	96865	18032	136386	5366	5286

2.3 Volunteer descriptives

Data type	Descriptive	UK total[1]	England	Scotland	Wales	NI
Sample size	N	96865	43878	18808	30286	51
Sign up date[4]	Earliest sign-up/registration to platform	02/03/2019	02/03/2019	02/03/2019	02/03/2019	09/03/2019
	Latest sign-up/registration to platform	02/09/2021	02/09/2021	02/09/2021	02/09/2021	09/06/2021
Gender	Missing data (%)	544 (0.6%)	333 (0.8%)	107 (0.6%)	44 (0.1%)	0 (0.0%)
	Female (% among non-missing data)	62111 (64.5%)	28458 (65.4%)	12287 (65.7%)	19332 (63.9%)	31 (60.8%)
	Male (% among non-missing data)	31861 (33.1%)	14289 (32.8%)	5489 (29.4%)	10686 (35.3%)	19 (37.3%)
	Other (% among non-missing data)	616 (0.6%)	250 (0.6%)	157 (0.8%)	113 (0.4%)	1 (2.0%)
	Prefer not to say (% among non-missing data)	1733 (1.8%)	548 (1.3%)	768 (4.1%)	111 (0.4%)	0 (0.0%)
Age[3]	Missing data (%)	867 (0.9%)	313 (0.7%)	28 (0.1%)	18 (0.1%)	0 (0.0%)
	Minimum age	18.0	18.0	18.0	18.0	18.0
	Maximum age	100.0	100.0	98.0	96.0	63.0
	Mean age	38.6	37.5	36.7	41.8	28.1
	Standard deviation	15.9	15.9	15.6	15.7	12.5
Ethnicity[4]	Missing data (%)	7852 (8.1%)	3422 (7.8%)	2815 (15.0%)	579 (1.9%)	10 (19.6%)
	White or White British (% among non-missing data)	71504 (80.3%)	28733 (71.0%)	13086 (81.8%)	27855 (93.8%)	34 (82.9%)
	Asian or Asian British (% among non-missing data)	7213 (8.1%)	4646 (11.5%)	1350 (8.4%)	882 (3.0%)	3 (7.3%)
	Black or Black British (% among non-missing data)	3122 (3.5%)	2171 (5.4%)	432 (2.7%)	315 (1.1%)	0 (0.0%)
	Mixed (% among non-missing data)	2395 (2.7%)	1452 (3.6%)	329 (2.1%)	464 (1.6%)	1 (2.4%)
	Other (% among non-missing data)	1610 (1.8%)	1141 (2.8%)	314 (2.0%)	59 (0.2%)	0 (0.0%)
	Prefer not to say (% among non-missing data)	3169 (3.6%)	2313 (5.7%)	482 (3.0%)	132 (0.4%)	3 (7.3%)
Disability[2]	No (%)	90577 (93.5%)	41369 (94.3%)	17296 (92.0%)	28291 (93.4%)	46 (90.2%)
	Yes (%)	6154 (6.4%)	2424 (5.5%)	1492 (7.9%)	1969 (6.5%)	4 (7.8%)
	Not sure (%)	44 (0.0%)	22 (0.1%)	10 (0.1%)	11 (0.0%)	0 (0.0%)
	Prefer not to say (%)	90 (0.1%)	63 (0.1%)	10 (0.1%)	15 (0.0%)	1 (2.0%)
CRB[2]	Currently have accepted criminal check (%)	1676 (1.7%)	1380 (3.1%)	11 (0.1%)	271 (0.9%)	0 (0.0%)
	Currently do not have accepted criminal check (%)	95189 (98.3%)	42498 (96.9%)	18797 (99.9%)	30015 (99.1%)	51 (100.0%)
Inductions[2]	Inducted (e.g. attended interview) (%)	14624 (15.1%)	12831 (29.2%)	453 (2.4%)	946 (3.1%)	11 (21.6%)
	Not inducted (%)	82241 (84.9%)	31047 (70.8%)	18355 (97.6%)	29340 (96.9%)	40 (78.4%)
Index of Multiple Deprivation	Missing data (%)	9342 (9.6%)	5153 (11.7%)	128 (0.7%)	171 (0.6%)	48 (94.1%)
	Located in 20% most deprived areas (% among non-missing data)	14756 (16.9%)	5705 (14.7%)	4646 (24.9%)	4404 (14.6%)	1 (33.3%)
	Located in middle 60% of areas (% among non-missing data)	52812 (60.3%)	24972 (64.5%)	9630 (51.6%)	18209 (60.5%)	1 (33.3%)

	Located in 20% least deprived areas (% among non-missing data)	19955 (22.8%)	8048 (20.8%)	4404 (23.6%)	7502 (24.9%)	1 (33.3%)
Rural / urban	Missing data (%)	6774 (7.0%)	2750 (6.3%)	64 (0.3%)	108 (0.4%)	48 (94.1%)
	Located in urban area (% among non-missing data)	75773 (84.1%)	37920 (92.2%)	17277 (92.2%)	20542 (68.1%)	3 (100.0%)
	Located in rural area (% among non-missing data)	14318 (15.9%)	3208 (7.8%)	1467 (7.8%)	9636 (31.9%)	0 (0.0%)
Hours[5]	0 hours volunteered (%)	84124 (86.8%)	34168 (77.9%)	17227 (91.6%)	29192 (96.4%)	44 (86.3%)
	Minimum hours volunteered (above 0)	0.16	0.25	0.20	0.16	6.00
	Maximum hours volunteered	11210.00	3388.00	8879.92	11210.00	227.00
	Mean hours volunteered (among above 0s)	44.85	38.19	37.92	96.47	65.71
	Standard deviation (among above 0s)	173.93	85.36	252.64	420.93	78.06
	Median hours volunteered (among above 0s)	12.25	12.00	10.00	19.00	32.00
No. of tasks completed[6]	Missing data / no tasks completed (%)	96458 (99.6%)	43565 (99.3%)	18806 (100.0%)	30203 (99.7%)	51 (100.0%)
	Minimum no. of tasks	1.0	1.0	2.0	1.0	n/a
	Maximum no. of tasks	510.0	510.0	4.0	293.0	n/a
	Mean no. of tasks	12.6	11.9	3.0	16.3	n/a
	Standard deviation	37.1	36.0	1.4	43.0	n/a
	Median no. of tasks	3.0	3.0	3.0	3.0	n/a

[1] Includes Channel Islands (n = 5), Isle of Man (n = 6) and volunteers with an unknown UK region (n = 3831); [2] No missing data; [3] Ages above 100 recoded to NA; [4] Volunteer ethnicity: Some data categories are very vague (e.g., "Asian") while others are very detailed (e.g., "Asian or Asian British – Vietnamese". Recoded to 6 basic ethnic groups (common denominators). Tricky assumptions (common categories): "British" (around 13%) and "English" (around 7%) were assigned to the "White or White British" category (most likely the category with the least false assignments); [5] These refer only to the opportunities (open to several volunteers) not tasks (open to single volunteer) which have no hour data available; [6] These refer only to tasks (open to single volunteer), not opportunities (open to several volunteers)

2.4 Organisations descriptives

Data type	Descriptive	
Sample size	N	181
Region / country	Missing data (%)	39 (21.5%)
	England (% among non-missing data)	96 (67.6%)
	Wales (% among non-missing data)	18 (12.7%)
	Scotland (% among non-missing data)	28 (19.7%)
	Northern Ireland (% among non-missing data)	0 (0.0%)

2.5 Providers descriptives

Data type	Descriptive	
Sample size	N	13360
Region / country	Missing data (%)	5604 (41.9%)
	England (% among non-missing data)	4102 (52.9%)
	Wales (% among non-missing data)	2157 (27.8%)
	Scotland (% among non-missing data)	1492 (19.2%)
	Northern Ireland (% among non-missing data)	4 (0.1%)
	Channel Islands (% among non-missing data)	1 (0.0%)

2.6 Opportunities descriptives

Table below includes only opportunities with start date on/after 1 Mar 2019 and until 28 May 2021

Data type	Descriptive	
Sample size	N	18032
Region / country	Missing data (%)	5884 (32.6%)
	England (% among non-missing data)	8425 (69.4%)
	Wales (% among non-missing data)	2811 (23.1%)
	Scotland (% among non-missing data)	912 (7.5%)
	Northern Ireland (% among non-missing data)	0 (0.0%)
CRB required	Yes	1218 (6.8%)
	No	16814 (93.2%)

Induction required	Yes	2653 (14.7%)
	No	15379 (85.3%)
Gender restrictions	No gender restrictions	17923 (99.4%)
	Female only	93 (0.5%)
	Male only	16 (0.1%)
No. of days opportunity is open	Missing data (%)	48 (0.3%)
	Minimum no. of days (years)	0.0 (0.0)
	Maximum no. of days (years)	36745.0 (100.7)
	Mean no. of days (years)	400.0 (1.1)
	Standard deviation (years)	945.5 (2.6)
	Median no. of days (years)	342.5 (0.9)
Maximum no. of hours available	Minimum no. of hours	0.00
	Maximum no. of hours	2672.00
	Mean no. of hours	204.80
	Standard deviation	373.66
	Median no. of hours	2.00
Total hours logged per opportunity	Missing data / no hours logged (%)	12992 (72.0%)
	Minimum no. of hours	0.16
	Maximum no. of hours	44469.75
	Mean no. of hours	156.87
	Standard deviation	922.13
	Median no. of hours	21.00
Total no. of unique volunteers per opportunity	Missing data / no volunteers (%)	12235 (67.9%)
	Minimum no. of volunteers where volunteer was matched	1.0
	Maximum no. of volunteers	2044.0
	Mean no. of volunteers	8.1
	Standard deviation	39.1
	Median no. of volunteers	2.0

2.6.1 Opportunities by volunteers descriptives

Table below includes only opportunities with hours logged between 1 Mar 2019 and 28 May 2021

Data type	Descriptive	
Sample size	N	136386
Hours logged per volunteer per opportunity	Missing data / no hours logged (%)	16986 (12.5%)
	Minimum no. of hours	0.01
	Maximum no. of hours	1694.00
	Mean no. of hours	4.42
	Standard deviation	21.05
	Median no. of hours	3.00

**Rounded down from 8.88 * 10^{-16}*

2.7 Tasks descriptives

Table below includes only tasks added on or after 1 Mar 2019 and targeted for completion on or before 28 May 2021

Data type	Descriptive	
Sample size	N	5366
Task category	Delivery (%)	4064 (75.7%)
	Telephone Support (%)	510 (9.5%)
	Patient Transfer (%)	123 (2.3%)
	Response Team (%)	8 (0.1%)
	Something Else (%)	661 (12.3%)
Date added	Earliest date of added task	06/04/2020
	Latest date of added task	31/08/2021

Date completed	Missing data (%)	172 (3.2%)
	Earliest task completion date	14/04/2020
	Latest task completion date	01/09/2021
Target date for completion	Earliest task target date	02/04/2020
	Latest task target date	01/09/2021
Task status	New (%)	4 (0.1%)
	Applied (%)	8 (0.1%)
	Assigned (%)	162 (3.0%)
	Completed (%)	5192 (96.8%)
Criminal check required	Yes (%)	236 (4.4%)
	No (%)	5130 (95.6%)
ID check required	Yes (%)	3393 (63.2%)
	No (%)	1973 (36.8%)
Previous link with provider required for access to task	Yes (%)	701 (13.1%)
	No (%)	4665 (86.9%)

2.7.1 Tasks by volunteers descriptives

Table below includes only tasks with task IDs present in the above task data

Data type	Descriptive	
Sample size	N	5286
Task status	Applied (%)	7 (0.1%)
	Assigned (%)	158 (3.0%)
	Completed (%)	5121 (96.9%)
Application status	Applied (%)	1 (0.0%)
	Accepted (%)	5285 (100.0%)
No. of volunteers per task	Number of tasks with 1 volunteer (% of unique task IDs)	5272 (99.9%)
	Number of tasks with 2 volunteers (% of unique task IDs)	7 (0.1%)

APPENDIX TWO | List of Figures