Admission to Care Homes during the COVID Pandemic - The First Thirty Days and Beyond

Executive Summary:

Many patients were discharged from acute hospitals to care homes and patients' own homes in the early days of the pandemic. Members of the JHSOC had asked about the process and consequences of following the national requirements to rapidly discharge these patients. Senior Officers of Oxfordshire County Council met with co-opted members of the JHOSC to provide further detail and information about this process.

This report summarises the information obtained and provides data from ONS on mortality rates during this period. Based on the contents of this report, members of JHOSC may wish to consider the following issues for discussion:

1. **That Senior Officers provide further information on the reporting of people who have experienced a delayed discharge from acute hospitals, and how some of the successes in reducing that number can be maintained into the future.**
2. **That Senior Officers provide further information as to the consequences of implementing national guidance associated with the discharge of patients to care homes in the early stages of the pandemic.**
3. **That Senior Officers provide further information on the emerging pattern of community and home-based care, and how this can be linked to current developments in the County.**
4. **That Senior Officers are able to re-affirm a commitment to a review of the response of the system partners to the pandemic, in so far as this would provide a plan of what would be included and a reasonable time scale, given the unpredictability of the current situation.**

Background:

Members of the JHOSC had asked for information about the events concerning the discharge of people from acute hospital during the early days of the pandemic. The members had wished to understand the consequences of implementing the national guidance to free up hospital beds in the early stages of the emergency. This was the period from late February 2020 through until April 16th, when the guidance was changed so that all patients should be tested for SARS-CoV2 virus prior to discharge.

The difficulties encountered by the System Partners between February and April 16th should not be underestimated. There was widespread fear and anxiety at the emergence of a new virus, about which little was known. The Government was making rapid plans to manage the infection, which required health and local authority partners to respond rapidly to a national emergency. Guidance was being issued on virtually a daily basis, often overturning the previous day's advice. There were significant national supply chain difficulties with Personal Protective Equipment (PPE), and national difficulties implementing testing and tracing.

It should be emphasised that during this early stage, the opportunity for local interpretation of national guidance was extremely limited – system partners locally were required to implement national guidance.

This review therefore provides a summary of the consequences of the implementation of the national policy. In turn, this will allow lessons to be learnt, both nationally and locally, providing there is a forum in which further questions can be asked and answered in a "no blame" culture. From the information already provided to JHOSC at its meetings by the System Partners it is clear that there has been extensive learning, as well as some very positive messages about new ways of delivering care. So that these new positive outcomes are not lost, there needs to be a formal review process.

Methodology:

Senior OCC officers (Director of Public Health, and Corporate Director of Adult and Housing Services) met with the co-opted members of the JHOSC on two occasions to provide detailed information on the admission to care homes from acute hospitals, and the processes in place that evolved to protect residents and care workers.

Time Scale: This report addresses the period from the beginning of the pandemic in Oxfordshire (February 2020), through until April 16th, 2020 when national guidance was changed to require patients to be tested for the presence of the SARS-COV2 virus prior to discharge.

However, to understand the impact of this change in guidance, it was necessary to expand the time scale forward beyond April 16th. Information has been provided by the System Partners, that goes up to end of November 2020, and provides a picture of how the impact on care homes has changed over that period. This report does not cover the emergence of the new mutated version of the virus, nor the impact of Oxfordshire being placed in Tier 4 restrictions.

Data: The use of data can both be helpful and a distraction, especially when the data could be inaccurate, or misinterpreted. It is apposite to note that during the period Feb to April

- Testing only occurred for in-patients – the move away from containment testing occurred on March 12th, with only those considered at high risk (in-patients) being tested.
- Some causes of death were identified as being due to COVID, yet no test had been performed
- Systems were being developed to count and analyse positive tests

The consequence of these points is that the system lacked accurate data on positive COVID cases, and deaths caused by COVID infection. So, data on COVID infection rates, and deaths caused by COVID have been omitted from this report.

Only data that is publicly available, self-explanatory and from a reputable source (usually ONS) will be used in this report. The most accurate set of data is all-cause mortality data by

local authority, reported weekly: (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/datasets/deathregistrationsandoccurrencesbylocalauthorityandhealthboard). This data set does not include cause of death but does report place of death. Place of death is categorised as: Home, Care Home, Hospital, Hospice, other communal health establishment, and "elsewhere".

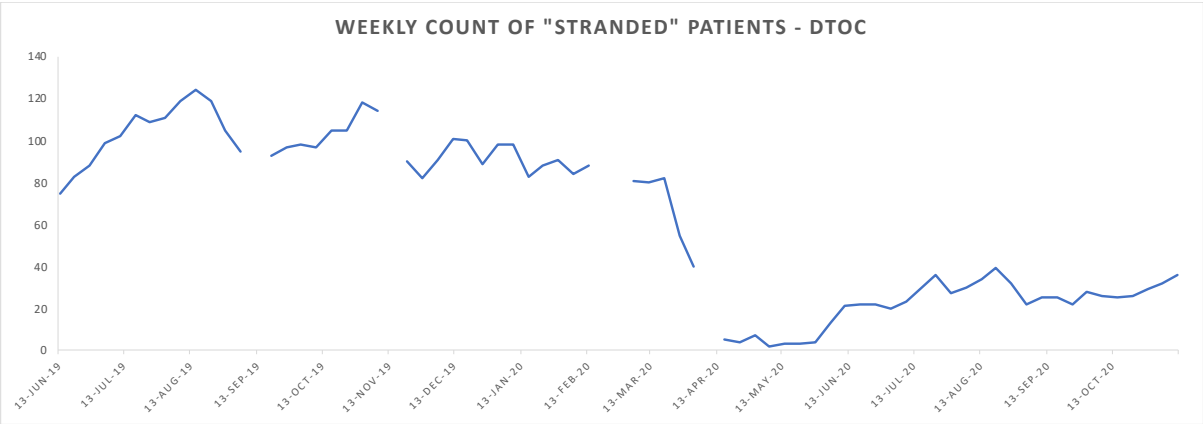
The methodology for reporting Delayed Transfers of Care (DTOC) – those patients who are considered fit for discharge but unable to be discharged – has not changed during the pandemic, although the completeness of the weekly reports is variable (see Fig 1). Recently the terminology has been changed to describe the patients as "stranded" in the health care system. These patients are the residents of Oxfordshire, and the hospitals in which they are stranded are those of Oxfordshire University Health Trust, Oxfordshire Health (including mental health services), and the adjoining acute hospitals in Berkshire, Buckinghamshire, and Gloucestershire. The OCC Officers have advised that national guidance has recently stopped the requirement to report on this weekly data, and that a new measure is being developed.

Results

Stranded Patients

In February it became clear that there would be a surge of admissions to hospital, and that space would be needed to be made to accommodate these new emergency admissions. Hospitals were required to discharge patients as soon as they were fit. This became a national requirement on March 19th.

The graph (Fig.1) below shows the change in the numbers of stranded patients:



It should be noted that the gaps in the graph (Fig 1) above were due to incomplete records

Up until January 2020, the numbers of stranded patients were between 80 and 120 each week, with some reduction in November and December to between 80 and 100 patients. In March this figure fell precipitously to less than 10 as the acute hospitals were prepared for the surge in admissions. From May, the figure has started to climb again, and the latest data is that in November there were 36 patients stranded in the health care system.

Information from the system partners reveal that from March 19th to April 16th 188 people were discharged to their own home, and a further 76 to care homes.

Whilst there is no specific information to the contrary, it is unlikely that any of these patients were tested for COVID prior to discharge – this only became a national requirement on April 16th. The emphasis was on the rapid discharge of people to a safe location.

There has been no reported follow up of these patients to understand:

1. their progress and outcomes either at home or in care homes.
2. the impact of these admissions on the way that those care homes worked, provided protection against infection, and the infection rate amongst other residents.

All-Cause Mortality Data in the First 30 Days

Using the ONS data referenced above, it is possible to examine the change in mortality rates in the early stages of the pandemic:

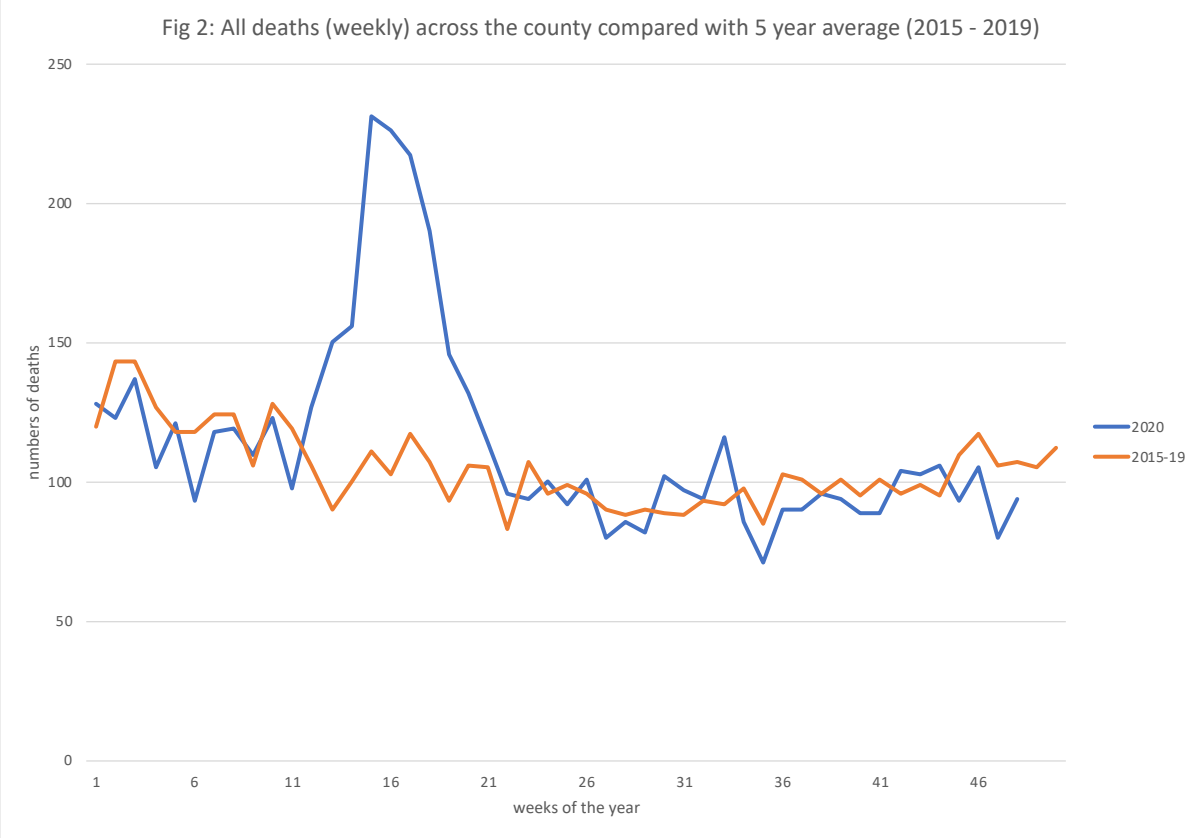


Fig 2 shows that in the early weeks of the year, mortality across the county in 2020 (blue line), was roughly in line with the five-year average (orange line). However, around week 11 (the beginning of March) patients were discharged to home and care homes, and the number of stranded patients fell to below 10. Following that time, the number of deaths increased significantly.

Caution must be exercised in linking cause and effect. It is not possible to draw conclusions based on this graph. Closer analysis of the data is required to ascertain if the changes in

mortality occurred principally in care homes, hospitals or at a patient's home. Given the small numbers involved, there will be wide confidence intervals, that may significantly alter the interpretation of the data.

However, the available data from the ONS is also available by place of registered death.

Technical note: Place of death categories (defined by the ONS) are at the patient's home, at a care home, and in a hospital. It should be noted that the vertical axes on Figs 3 (Hospital), 4 (Care Homes) and 5 (residents own home) are all slightly different, so that comparisons should be made with care.
Three further categories are provided by ONS as a place of death – hospice, "elsewhere" and "other communal health establishment". In total these three categories account for less than 5% of the total and have therefore not been included in this summary.

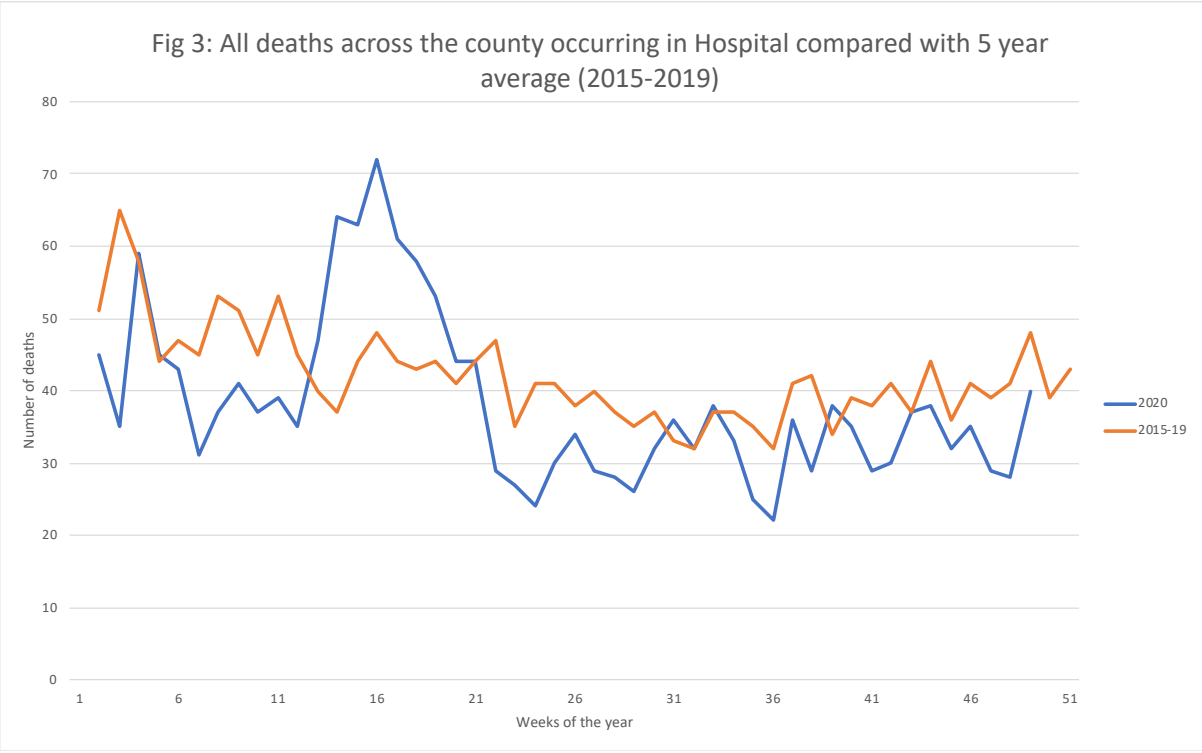


Fig 4: All deaths across the county in Care Homes compared with 5 year average (2015-2019)

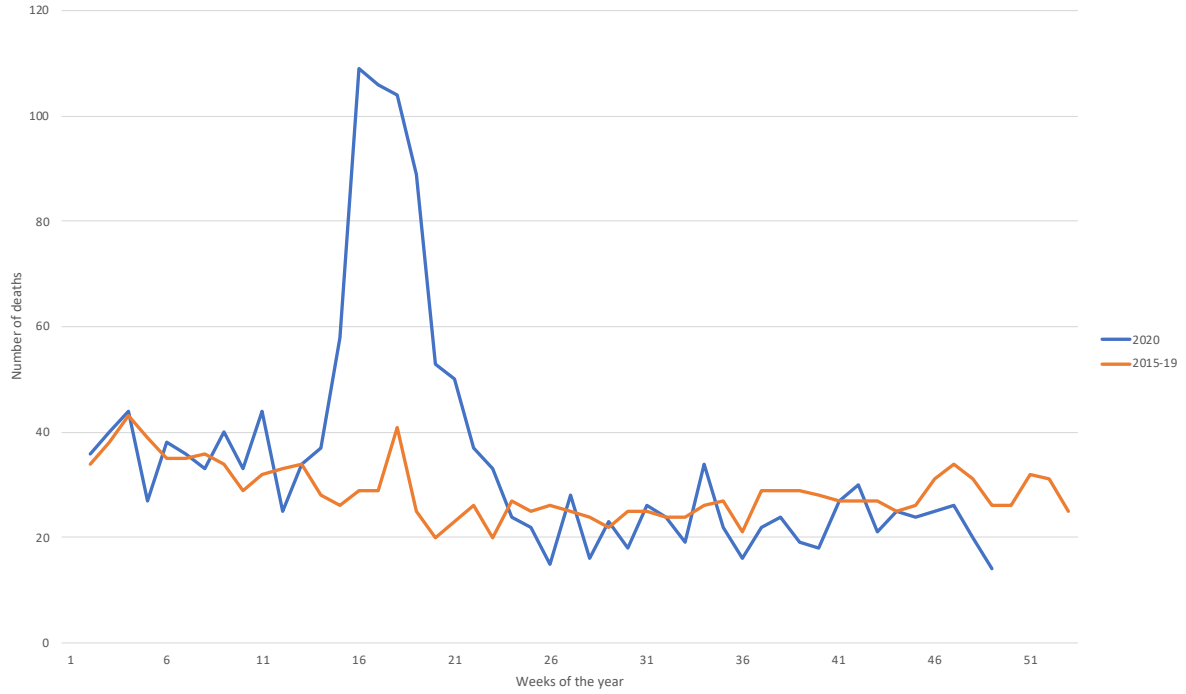
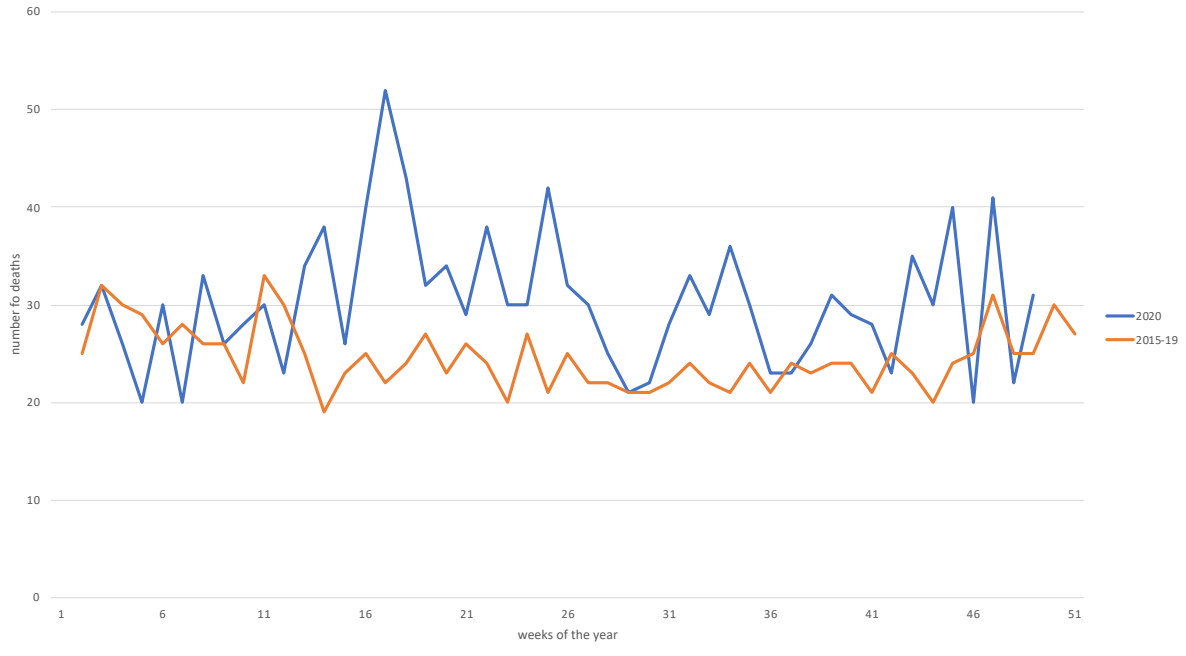


Fig 5: All deaths across the county occurring at Home compared with 5 year average (2015-2019)



It would appear, without any statistical analysis, that end-of-life care has shifted from hospital or care home, to care in the person's own home. This fits with an expectation of what people at the end of their life want – to die in their own home[1]. It is nevertheless important to ensure that where this is what the person wants, or doesn't want, the correct support and facilities are available.

…Beyond 30 days. Protecting Care Homes.

System Partners have provided up to date (Dec 2020) information about care homes, and the processes put in place to protect residents and care workers. This information precedes the county wide roll out of the vaccine programme, any changes that have been introduced to address the move to Tier 4, and the increased infectivity associated with the newly identified viral mutation.

SARS-CoV2 virus Testing in Care Homes:

- All care homes are receiving test kits and are testing residents and care workers
- Residents are tested every four weeks
- Care workers are tested every two weeks

Testing process: Initially either residents or care workers are tested using a lateral flow test strip. If the result is positive, then a PCR swab is taken, and sent to the lab. The lateral flow test returns a result within 30 minutes, whereas the PCR swab takes 2 – 3 days for a result to be returned. In the event of a positive lateral flow test, and whilst awaiting a PCR swab result the individual is isolated. The County Council receives a summary of swab results from each care home on a daily basis – identifying potential outbreaks (defined as two or more individuals with a positive test result in one institution).

Test accuracy: National experts have commented on the accuracy and interpretation of results of lateral flow tests.

False Negatives: the test reports a negative result, but the virus is present. Depending on the operator, false negative results have been reported in up to 50% of tests performed.

False Positives: the test reports a positive result, but the virus is not present. Depending on the clinical context, false positives have been recorded at around 38%.

At the time of this report the BMJ has published a number of articles relating to the accuracy of the lateral flow tests. Interested readers may find those articles here:
https://www.bmj.com/content/371/bmj.m4469
https://www.bmj.com/content/371/bmj.m4744/rr
https://www.bmj.com/content/371/bmj.m4916
https://www.ox.ac.uk/news/2020-11-11-oxford-university-and-phe-confirm-lateral-flow-tests-show-high-specificity-and-are

This is an evolving picture of a complex scientific interpretation of experimental results. Local comment relating to implementation should be tempered appropriately.

Testing Visitors to Care Homes: The System Partners report that care homes are following the national advice on testing visitors to care homes. The original advice was that a single visitor for each resident would need two negative lateral flow tests 14 days apart prior to a visit, and that the potential visitor would have to self-isolate for the 14 days prior to the visit. This was considered onerous, and guidance has recently changed to allow for a single lateral flow test at the time of the visit.

Availability of Personal Protective Equipment (PPE)

The All-Party Parliamentary Group Interim Report on COVID 19 (https://appgcoronavirus.marchforchange.uk/interim_report) has recorded the issues nationally with the provision of PPE in the early weeks and months of the pandemic.

System Partners report that at the time of writing of this report, locally there are no reported issues related to the availability and quality of PPE to care homes. Care homes order PPE through a dedicated web portal, and that provision of this equipment is free to each care home.

National Review of Care Homes

The Care Quality Commission (CQC) suspended normal inspections early in the pandemic. The usual pattern was that around a third of the 130 care homes in Oxfordshire would be inspected on an annual basis. This has ceased.

However, investigations by the CQC are continuing if there have been complaints, or if there has been a whistle blowing incident recorded.

System partners report that OCC continue to exercise oversight of care homes using virtual techniques, and that they are not aware of any problems at present.

Transfers of Care

The process for admitting a resident from a care home to an acute hospital if clinically indicated has not changed. If there is a clinical concern about a resident, the care home will either contact the attending doctor, or call an ambulance. A clinical opinion will be provided, and if appropriate the resident transported to a local hospital for further assessment and treatment. System Partners report that every attendee at Accident and Emergency Departments are now tested for evidence of infection.

System Partners are not aware of situations where an infected patient has been refused/denied transfer because of their infectivity.

System Partners are not aware of any care home using Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) orders as a widespread order across an institution.

The process for discharge from an acute hospital has evolved since April 2020. A patient fit for discharge is tested twice for the presence of SARS-CoV2 virus. If the test is positive, and the patient is fit for discharge, they are transferred to a “designated unit”. Oxfordshire has one 18 bedded designated unit – a unit that has been approved by the CQC to manage patients who are SARS-CoV2 virus positive. System Partners report that occupancy of this unit has never exceeded 10 of the 18 available beds.

Stranded Patients

One of the most dramatic positive consequences of the pandemic was the rapid reduction in the number of stranded patients. As reported above 188 people were discharged to their own home, and 76 to care homes, leaving fewer than 10 stranded in-patients.

Although data is fragmented, (Fig 1) it appears that the number of people stranded has increased to around 30 - 40, but not increased further.

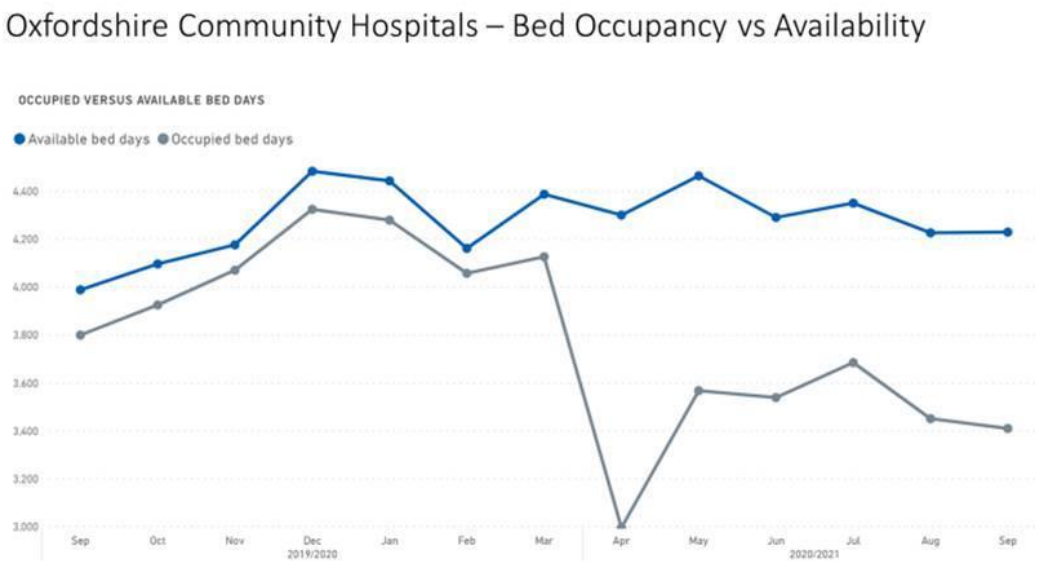
System Partners report that Oxfordshire has a "relative overdependence" on beds

- 148 acute beds – reduced to 129 for social distancing
- 98 short term hub beds
- 18 designated unit beds for people who are SARs-CoV2 virus test positive (see above).

Oxfordshire also has 4200 care home beds per 100,000 population whereas the national average is 2,900 beds per 100,000.

The appointment of a co-ordinator of care to ensure that best use is made of capacity, has helped co-ordinate responses across the health and social care services.

Oxford Health has already separately reported to this Committee on bed occupancy in community hospitals:



From the System Partners perspective, these facts taken together, the over-reliance on beds, the capacity in the system, and the ability to provide care in people's own homes indicate that community resources are being used inefficiently. This is an important and currently poorly communicated viewpoint. That a serendipitous consequence of the pandemic has been the identification of a more effective model of community care is welcome.

Authors:

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References:

1. **Age UK End of Life Review 2013 London (**https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/health--wellbeing/rb_oct13_age_uk_end_of_life_evidence_review.pdf)