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LONG-TERM RESIDENTIAL CARE IN IRELAND

DEVELOPMENTS SINCE THE ONSET OF THE COVID-19 PANDEMIC

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AN INSTITIÚID UM THAIGHDE EACNAMAÍOCHTA AGUS SÓISIALTA
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ABBREVIATIONS

ADL	Activities of daily living
CDC	Caisse des dépôts et consignations
CNU	Community Nursing Unit
CPI	Consumer Price Index
CSO	Central Statistics Office
ED	Emergency Department
EIB	European Investment Bank
ESRI	Economic and Social Research Institute
EU	European Union
GP	General practitioner
HCA	Healthcare assistant
HIPE	Hospital In-Patient Enquiry
HIQA	Health Information and Quality Authority
HPSC	Health Protection Surveillance Centre
HRB	Health Research Board
HSE	Health Service Executive
ISPGM	Irish Society of Physicians in Geriatric Medicine
LHO	Local Health Office
LTRC	Long-term residential care
NHI	Nursing Homes Ireland
NHS	National Health Service
NHSS	Nursing Home Support Scheme – 'Fair Deal'
NTPF	National Treatment Purchase Fund
OECD	Organisation for Economic Co-operation and Development
OpCo	Operating Company
PPE	Personal Protective Equipment
PropCo	Property company
RCQPS	Research Collaborative in Quality and Patient Safety
REIT	Real Estate Investment Trust
TAPS	Temporary Assistance Payment Scheme
TIPS	Temporary Inflation Payment Scheme
UK	United Kingdom
WHO	World Health Organization

EXECUTIVE SUMMARY

INTRODUCTION

Long-term residential care (LTRC) is a key component of health and social care in Ireland. Prior to the pandemic, over 32,000 people used LTRC. As the population grows, especially at older ages, the importance of a LTRC sector that meets the needs of the population increases. The COVID-19 pandemic had a significant impact on the LTRC sector in Ireland and internationally. LTRC residents saw high rates of COVID-19 infection and disproportionately high rates of deaths from COVID-19. At the same time, the pandemic also presented a number of challenges for LTRC workers, operators and regulators. These challenges may inhibit the sustainability of the sector.

The aim of this report is to examine how COVID-19 impacted the LTRC sector, and the changes in the sector that occurred since the onset of the pandemic. This report is one of a number of outputs from a Research Collaborative in Quality and Patient Safety (RCQPS) funded project[1] that examines LTRC and COVID-19 in Ireland. The report will set the scene for later work which seeks to provide recommendations to help ensure the sustainability of the LTRC sector in the medium term.

LTRC SUPPLY

Using data from the HIQA Bed Registry from February 2020 to December 2022, we examined LTRC supply changes since the onset of the pandemic. In December 2022, there were 31,728 LTRC beds in Ireland, a decrease of 336 beds from the beginning of the pandemic. This decrease is partly a result of the closure of smaller independently owned and operated LTRC homes (i.e. LTRC home that are not part of operator groups) in rural areas, with 18 per cent of all small LTRC homes (<30 bed) closing during this period. In addition, while few public LTRC homes closed, bed reductions within public LTRC homes contributed to supply reductions, with nearly half of all public homes recording a decrease in their bed supply.

The report also shows the emergence of a small number of larger private LTRC homes in urban regions. Since the onset of the pandemic, almost every county has seen a decline in LTRC beds. However, Dublin and commuter belt counties have seen increases, driven by the opening of large (>150 beds) LTRC homes by private equity funded owners and operators. Dublin and commuter belt counties,

[1] The RCQPS is a collaborative initiative between the Health Research Board (HRB), the Health Service Executive (HSE), the Royal College of Physicians of Ireland (RCPI) and the National Quality Improvement Team. The award scheme was established in 2013 to advance nationally relevant research in the area of quality and patient safety.

especially Kildare, now have the highest LTRC bed supply per 1,000 population aged 65+. More rural counties such as Laois, Sligo, Donegal, Monaghan, Kerry and Leitrim have the lowest per capita supply. Regional inequalities are likely to increase further with LTRC planning data showing that, by the end of 2024, private equity funded owners and operators are set to open several other large facilities, all situated in counties with the highest per capita LTRC bed supply.

LTRC OWNERSHIP AND OPERATORS

We detail ownership of LTRC homes in Ireland in this report. Analyses are based on a number of different information sources, including the HIQA Bed Register, LTRC home websites, and owner and operator websites. Input from key stakeholders was also used to inform ownership details of LTRC homes. We show that LTRC in Ireland is predominantly funded by the State but supplied by private operators. In 2022, in total, 83 per cent of all LTRC home beds were provided by voluntary/private sector LTRC homes, with private for-profit operators alone contributing 74 per cent. Regional variations in ownership exist, with over 90 per cent of LTRC beds in Meath and Kildare now provided by private for-profit operators.

The ownership landscape of the LTRC sector in Ireland has changed considerably in recent years. Independently owned and operated LTRC homes, often family run businesses that until recently dominated the Irish LTRC sector, now only supply 35 per cent of beds. There has been a marked shift towards a consolidation of LTRC homes under larger operator groups. Many of these operators are recent entrants to the Irish market, financed by international private equity. There are 15 medium/large operators (defined as those operating at least five LTRC homes), with 14 of these medium/large operators being private equity financed. These operators are responsible for 38 per cent of all LTRC beds, a figure set to rise based upon current trends.

The increased dominance of private equity funded medium/large operators means that the LTRC sector is now closely linked to international economic conditions. Most medium/large operators are owned by organisations based in other countries, and these operators operate LTRC homes in numerous countries. As an example of how international factors can impact ownership of LTRC in Ireland, there exists now an unusual situation, in which the largest LTRC operator in Ireland is effectively owned by the French State. This outcome occurred after resident safety-concerns in France within the Orpea operator group led to the group coming under the control of the *Caisse des dépôts et consignations* (CDC), the French State's investment fund.

The study also highlights the new landscape, where LTRC home ownership and care provision are being separated. The more traditional independently owned and operated LTRC homes, as well as public LTRC homes, do not separate the ownership and operating (care provision) component of their business. However, many private LTRC homes are owned by one entity (real estate owner – 'PropCo', who generally are Real Estate Investment Trusts (REITs)), but care is provided by a separate entity (operator – 'OpCo'). These OpCo/PropCo arrangements result in operators paying a rent to REITs who do not pay corporation tax on property rental income. It also allows for distance between ownership and resident care, regulations, hiring etc. Evidence from other countries has shown some negative effects of REITs and private equity in healthcare and LTRC, especially during the COVID-19 pandemic.

COVID-19 OUTBREAKS IN LTRC SETTINGS

Building upon related work funded by the RCQPS grant, this report examines factors associated with COVID-19 outbreaks and outbreak severity in LTRC homes in Ireland in the first year of the pandemic (March 2020 – March 2021). Two-thirds of LTRC homes had at least one COVID-19 outbreak, resulting in 8,502 confirmed COVID-19 cases and 2,107 COVID-19 deaths among LTRC residents. No difference was observed between public and voluntary/private homes in the probability of experiencing a COVID-19 outbreak. Larger LTRC settings (measured by bed numbers), and being located within a county with high community COVID-19 rates, were associated with a higher likelihood of an outbreak. Larger LTRC homes were over 3.5 times more likely to have a COVID-19 outbreak compared to smaller homes. We find a clear geographic difference, with a larger percentage of LTRC homes in the East and in Border counties having a COVID-19 outbreak in Wave 1.

LTRC FUNDING

This report examines the funding of the sector in detail and examines some funding initiatives such as the Temporary Assistance Payment Scheme (TAPS) introduced during the COVID-19 pandemic. We identify large differences in Nursing Home Support Scheme (NHSS) funding across public and voluntary/private LTRC homes, with average prices for a NHSS-funded bed in public LTRC homes 55 per cent higher than in a voluntary/private LTRC home. NHSS prices per bed have also not kept pace with increases in general inflation seen in recent years. Variation in NHSS funding is also observed across counties. Once more Dublin and the commuter counties receive more NHSS funding per capita (1,000 population aged 65+) than rural counties.

Analysis of the Temporary Assistance Payment Scheme (TAPS) showed that during the 2020-2021 period, €132 million was paid through TAPS. Cleaning/infection control and staffing costs (nursing and healthcare assistants (HCAs)) made up the

majority of TAPS expenditure. Interestingly, claims for nursing and HCA remained high throughout the period, and were not influenced by COVID-19 infection peaks. In contrast, claims for agency staffing were clearly impacted by infection peaks and outbreaks in a LTRC home. We find that the use of TAPS prospectively had little impact on the probability of a COVID-19 outbreak taking place, or the severity (as measured by the percentage of residents infected) of an outbreak. However, LTRC homes that experienced an outbreak were much more likely to use TAPS, and have high levels of TAPS payments, in the months subsequent to an outbreak. LTRC homes that are part of medium/large operator groups used TAPS more consistently, regardless of COVID-19 outbreak status. For all TAPS categories, small independently owned and operated LTRC homes had the lowest use of TAPS.

CONCLUSIONS

In conclusion, it is vital, as the needs of our ageing population grow and evolve, that policies harmonise financial incentives for operators and care providers with the primary objective of fulfilling residents' health and social care needs. The continued reliance on the for-profit sector to deliver LTRC in Ireland will also require development of a LTRC sector favourable for the State, residents, and care providers. It is crucial for the sustainability of the sector that a balance between the financial viability of providers, compliance with regulations covering health and social care needs, and the strategic planning of supply to meet demand across the country occurs. Therefore, a robust regulatory framework that centres on resident care and operator transparency should be at the centre of policies (Ikram et al., 2021; Bangerter, 2023).

The LTRC sector faces a number of key challenges as it emerges from the COVID-19 pandemic period. We identify regional inequalities in LTRC supply and, based upon future planned development, these inequalities are likely to be exacerbated in the near term. Allocating resources to mitigate regional inequalities and encourage public or private LTRC home developments in regions of low relative supply will be required.

Policies that harmonise financial incentives for care providers with the primary objective of fulfilling residents' health and social care demands within a more integrated care environment are required. Accordingly, modifications to the Fair Deal scheme are likely to be required to ensure more adequate funding for LTRC residents so that funding and care can be targeted at residents' specific care and support needs. The adoption of a new assessment tool (called interRAI) has the ability to better tailor services to residents' needs, as well as align funding with services provided. In addition, good decision-making requires accurate information. Improving the data on residents and providers is vital.

CHAPTER 1

Introduction

1.1 INTRODUCTION

Long-term residential care (LTRC) forms a central component of the care of older people in Ireland. In 2019, total expenditure on LTRC was €1.96 billion and an estimated 32,000 people lived in LTRC settings, of whom 94 per cent were aged 65 years and older (Walsh et al., 2021). In 2023, over five per cent of the total public health and social care budget will be spent on LTRC for older people (Health Service Executive, 2023). With a growing and ageing population, demand for LTRC is projected to grow further in the coming years (Walsh et al., 2021). Between 2019 and 2035, the population aged 65+ is projected to increase by over 50 per cent (Walsh et al., 2021). However, LTRC in Ireland is emerging from a period of challenges and substantial changes.

LTRC in Ireland and internationally, has faced significant changes and challenges in recent years, particularly since the onset of the COVID-19 pandemic in early 2020. The LTRC sector in Ireland, and internationally, experienced a disproportionate impact from the COVID-19 pandemic. In many European countries, over half of all COVID-19 deaths initially occurred among LTRC residents (Comas-Herrera et al., 2021). In Ireland, from March 2020 to March 2021, there were over 8,500 confirmed COVID-19 cases and more than 2,100 COVID-19 deaths among LTRC residents (Walsh et al., 2023). The pandemic also placed financial strains on both the State and LTRC providers. LTRC homes faced increased costs due to the need to adapt spaces for COVID-19-specific areas, enhance cleaning and infection controls and address staffing absences due to high rates of COVID-19 infection (Frazer et al., 2021a). This led the State to provide significantly more resources to the sector, and led to the establishment of the Temporary Assistance Payment Scheme (TAPS) to offer financial support to LTRC homes.

The landscape of LTRC providers has also evolved in recent years. A growing proportion of LTRC is now provided by the private sector, with over three-quarters of LTRC homes privately owned and operated by the end of 2022 (HIQA, 2022). Many of LTRC providers are now large, private equity funded Real Estate Investment Trusts (REITs), following a trend also observed internationally (Batt et al., 2022). Studies from the US indicate that REIT-owned LTRC homes often operate different staffing models compared to their non-REIT counterparts (Braun et al., 2023) and tended to have poorer resident outcomes during the pandemic (Gupta et al., 2021). The rise of private equity funded LTRC providers raises questions about the alignment of incentives between profit and care outcomes (Offodile et

al., 2021), especially in a country where the State is the predominant funder of care.

Since the COVID-19 pandemic's outset, a significant number of small LTRC homes (many in rural areas) have closed, leading to a reduction in LTRC bed supply across most Irish counties (HIQA, 2022). These closures have occurred despite an increasing population at older ages (Walsh et al., 2021). This shift towards private provision and reliance on a few large providers could challenge the sector's ability to meet the care and support needs of those who require care and support in the medium term.

Furthermore, the pandemic also intensified the debate among policymakers and long-term care stakeholders on the appropriateness of the current model of care for older people. This is epitomised by the expert panel on nursing homes, established to advise the Minister of Health on the future of LTRC (Frazer et al., 2021), highlighting the need for a shift towards more home-based care for older people, outside of LTRC homes. This shift is likely to significantly affect LTRC demand, the complexity of residents' needs entering residential care, and the need to better integrate LTRC with other health and social care services.

Providing evidence on which policymakers can plan for how best to deliver and incentivise LTRC over the medium term is important. The aim of the analysis in this report is to quantify and discuss the main developments in the sector since the onset of the COVID-19 pandemic and to identify important challenges for the sector. The research focuses on the impact of the COVID-19 pandemic on outbreaks and deaths in LTRC settings, the government response to the pandemic (e.g. the TAPS for LTRC homes), and changes in supply and ownership of LTRC beds across the country.

This report is one of a number of outputs from an RCQPS-funded project that examines LTRC and COVID-19 in Ireland. The report will set the scene for later work which seeks to provide recommendations to help ensure the sustainability of the sector in the coming years.

1.2 LONG-TERM RESIDENTIAL CARE IN IRELAND

1.2.1 Overview

LTRC is provided mainly to older people who require personal and nursing care for impairments that can affect their activities of daily living (ADL). This care is provided in residential care settings, often characterised as ‘nursing homes’. However, care provided to residents can differ across individuals and may also

include shorter stays for rehabilitation, convalescence and, increasingly, palliative care. LTRC settings are often the last residence of an individual, and in Ireland prior to the COVID-19 pandemic, 23 per cent of all deaths occurred in LTRC homes (Matthews et al., 2021).

1.2.2 Ownership

The ownership structure of LTRC homes in Ireland can be broadly partitioned into three forms – public (predominantly Health Service Executive (HSE) owned and operated), voluntary (private 'not-for-profit'), and private ('for-profit'). Public and voluntary LTRC homes were the predominant providers of LTRC up to the early 2000s (Walsh et al., 2022). Since then, the private sector has become the dominant provider, with over 82 per cent of LTRC beds now within private for-profit homes. The shift towards private provision of LTRC was driven initially by tax incentives introduced to encourage an increase in private provision in the early 2000s. Subsequently, the establishment of the Nursing Homes Support Scheme (NHSS, 'Fair Deal') in 2009 provided increased financial security for the sector, attracting both Irish and non-Irish LTRC operators to the sector. At the same time, reductions in both public and voluntary provision occurred, driven by fiscal constraints and public employment ceilings from the Great Recession, as well as increased regulatory requirements for upgraded facilities (Wren et al., 2017; Mercille, 2018).

Under the Health Act (2007) all LTRC facilities (public, voluntary and private) must register with the Health Information and Quality Authority (HIQA) and comply with the conditions and requirements set by HIQA. HIQA can inspect nursing homes for registration purposes and to ensure quality standards. In December 2022, there were 558 centres registered with HIQA providing care for older people.

1.2.3 Funding

LTRC care funding differs considerably from other health and social care services. Funding is tied to eligibility, and the current system of eligibility for publicly funded or subsidised residential care was established on a statutory basis in 2009 with the introduction of the NHSS, commonly referred to as the 'Fair Deal' scheme. The scheme aimed to make State support consistent and equitable across all settings (Pierce et al., 2010). NHSS applicants undergo both a care needs assessment and a financial assessment to establish if they require long-term care and, if such care is required, how much they will contribute to the cost of this care (Collins, 2019). While LTRC is predominantly publicly funded through the NHSS, other funding sources include out-of-pocket payments by residents or their families, private health insurance and other voluntary payments.

All LTRC homes that participate in the NHSS receive a weekly payment per resident, calculated on a LTRC home by LTRC home basis. The method used to set prices differs between public and private/voluntary LTRC settings. In public homes, the maximum weekly cost per bed is calculated by the HSE (Department of Health, 2021). The cost per resident is calculated using the total eligible costs of the nursing home with an assumed 95 per cent occupancy rate (Department of Health, 2021). For private and voluntary homes, the National Treatment Purchase Fund (NTPF) negotiates prices on behalf of the State. The NTPF has no role in negotiating prices for public LTRC homes, which are determined by the HSE.

1.3 OBJECTIVES OF THE REPORT

This report has three objectives:

- First, to outline supply of LTRC in Ireland and describe changes in the supply of LTRC across regions, and ownership type since the onset of the COVID-19 pandemic. The report pays particular attention to the increase in internationally financed private LTRC operators and owners, and some of the implications of the new ownership structures to the sustainability of the sector.
- Second, to examine COVID-19 outbreaks in LTRC and the implication of the pandemic on the sustainability of the sector. In Chapter 5, analysis examines COVID-19 outbreaks and deaths across LTRC homes in the first three waves of the pandemic (e.g. prior to the introduction of the vaccination programme). The report also examines whether COVID-19 outbreaks impacted LTRC funding, and closures during this period.
- Third, the report examines the funding structure of LTRC in Ireland, and examines how new funding mechanisms, such as TAPS, introduced in response to the COVID-19 pandemic were used.

1.4 STRUCTURE OF THE REPORT

The report is structured as follows. Chapter 2 introduces the data and methodology used for the quantitative analyses in the report and provides key definitions. Chapter 3 provides an overview of the supply of LTRC in Ireland and outlines changes in supply across regions since the onset of COVID-19. Chapter 4 discusses the new operator ownership structure in the sector. Chapter 5 provides results on COVID-19 outbreaks in LTRC in the first three waves of the pandemic. Chapter 6 discusses funding of the sector and Chapter 7 concludes.

CHAPTER 2

Data and methodology

2.1 INTRODUCTION

This chapter outlines the main data sources and definitions used in the analysis. Data from a number of sources were used in this analysis. The chapter first provides information on key ownership definitions used throughout the report. This chapter also outlines the data on COVID-19 outbreaks in LTRC and outside LTRC homes (e.g. in the local community) provided by the Health Protection Surveillance Centre (HPSC), and LTRC home registrations and characteristics provided by HIQA.

The statistical methods employed in this report are explained in detail in later chapters.

2.2 DEFINITION – OWNERSHIP TYPE

Ownership type is a key LTRC home characteristic within our analytical framework. Here, three ownership types are identified – public, voluntary and private, with details gathered from the HIQA Bed Register (see Section 2.3.1). There is no evidence that any LTRC facility was recategorised (e.g. from public to private) between February 2020 and December 2022. The three main ownership categories are:

- **Public**: Public LTRC homes are predominantly owned and operated by the HSE. All HSE homes are listed as public homes in the analysis. The HSE homes include a small number of LTRC homes that are owned by the HSE, but where care to residents is provided by a private for-profit operator. In addition to HSE-owned LTRC homes, the 'public nursing homes' list includes a number of LTRC homes owned and operated by Section 38 organisations.[2] These organisations, while not owned by the HSE, are financed almost entirely by State funding and are considered public organisations. Thus, we also categorise a small number of LTRC homes owned by Section 38 organisations as public LTRC homes in this analysis.
- **Voluntary**: Two separate NHSS costs are published annually on NHSS rates per bed per week provided to LTRC homes; public nursing homes, and voluntary and private nursing homes.[3]

[2] 'Section 38 documentation relates to the Agencies provided with funding under Section 38 of the Health Act, 2004. This is limited to 23 non-acute agencies and 16 voluntary acute hospitals currently within the HSE Employment Control Framework.' https://www.hse.ie/eng/services/publications/non-statutory-sector/section-38-documentation.html.

[3] https://www2.hse.ie/services/schemes-allowances/fair-deal-scheme/financial-assessment/.

- We categorise all LTRC homes that are not owned by the HSE or Section 38 organisations (and do not appear on the NHSS 'public nursing homes' list) as voluntary/private LTRC homes. In most analysis in this report, voluntary and private LTRC homes are included together. However, it is important that some distinction is made between voluntary and private for-profit LTRC homes. First, LTRC homes run by religious orders or community groups (voluntary LTRC homes) are not-for-profit homes and predominantly registered as charities. Second, not all voluntary LTRC homes are funded by the NHSS, as discussed in more detail in Section 6.3, and are more likely to provide shorter-term care. In some analysis in this report, where deemed appropriate, we further partition voluntary and private (for-profit) homes. This partition is made based upon the 'registered provider' variable gathered in the HIQA Bed Register, being a religious order, a registered charitable organisation, and/or a guaranteed limited company.
- **Private**: Private homes are owned and operated by commercial businesses and are assumed to have for-profit status.

In this report, we also examine the ownership and operator structure within the voluntary and private LTRC sectors. Determinations were made as to whether the LTRC home was independently owned and operated or part of wider operating groups. These determinations were based upon input from a number of different information sources, including the HIQA Bed Register, LTRC home websites, owner and operator websites, media articles on LTRC home sales and acquisitions, CBRE (a global commercial real estate service that follows real estate investment in Ireland), as well as engagement with a number of stakeholders in the sector.

2.3 DATA SOURCES

2.3.1 HIQA Bed Register

The main dataset used throughout the analysis was the HIQA Bed Register dataset. HIQA is an independent monitoring body that promotes quality and safety in Irish health and social care, and it is the regulator of LTRC. In order for a LTRC home to provide care to older people in Ireland, it must have an up-to-date registration with HIQA. All LTRC home registrations are included in the Bed Register and the register is updated regularly.

The HIQA Bed Register dataset captures information on LTRC home address, provider (with the categorisation of public, voluntary or private ownership), and size measured as the number of beds (maximum occupancy) at the time of registration. The HIQA Bed Register also lists a unique HIQA centre registration number. This ID is included on all HIQA reports of a LTRC home, and it has allowed us to merge data from the register with other datasets in our analysis. Importantly

for the analysis of COVID-19 in LTRC, the HIQA Bed Register dataset allows for the identification of LTRC homes that had no COVID-19 outbreaks.

For this report, extracts from the register were downloaded on a number of dates from the HIQA website.[4] The analysis undertaken in the report mainly relied on register data from three timepoints – February 2020 (prior to the onset of the COVID-19 pandemic), March 2021 (which equates to the end period for which data on COVID-19 outbreaks in LTRC were available for this analysis), and December 2022.

2.3.2 Nursing Home Support Scheme (NHSS)

Information on the weekly payments made to LTRC homes via the NHSS was gathered from the NTPF website. These data list the average weekly payments for each LTRC home separately and are available at different points in time. The payment rates are published by the NTPF regularly. For this report, we used information on NHSS payments primarily from December 2022. However, we also examined payments during previous periods to identify any large changes in payments over time.

As discussed in Section 2.2, the NTPF lists payments to public LTRC homes and voluntary/private LTRC homes separately. This allowed us to partition LTRC homes in our analysis into public or voluntary/private LTRC homes. In combination with the HIQA Bed Register, these lists also allowed us to identify those voluntary/private LTRC homes that do not receive any payments from the NHSS.

2.3.3 Temporary Assistance Payment Scheme (TAPS)

TAPS was established in April 2020 to provide financial support to all voluntary and private LTRC homes impacted by the effects of COVID-19. Data on payments made to LTRC homes via this scheme were made available to the research team for the period of April 2020 to December 2021 by the Department of Health. Payments via the scheme were made on a monthly basis. TAPS is closely related to the NHSS. TAPS payments are made to LTRC homes by the NTPF, and the scheme was only available to LTRC homes that already received payments via the NHSS.

The TAPS data provided for this analysis include all payments made to LTRC homes in each month, and the category for which payments were made. In the dataset, it is possible to identify separate payments made to LTRC homes in the same month across different categories (e.g. cleaning/infection control and agency pay).

[4] https://www.hiqa.ie/areas-we-work/older-peoples-services.

No information on payment requests that were made and rejected by the NTPF is available.

The list of reasons for which TAPS payments were used is extensive, but these were subsequently classified by the NTPF into a smaller number of categories, which could be further aggregated into two non-pay related and four pay-related categories. The two non-pay categories included were:

- **Cleaning and infection control** (e.g. infection prevention and control measures, PPE, disinfectants, waste disposal);
- **Non-pay other** (e.g. staff COVID-19 training, communications, additional equipment rent);

and four pay categories:[5]

- **Nursing** (overtime, additional staffing);
- **Healthcare Assistants** (HCA, also called direct patient care in the data; overtime, additional staffing);
- **Agency Staff** (mainly nursing and HCA but also agency cleaning);
- **Pay other** (e.g. porters, administrative staff, indirect support staff).

2.3.4 COVID-19 outbreaks in LTRC

Data on COVID-19 outbreaks in LTRC homes were provided by the HPSC. The HPSC is a specialist service for the surveillance of communicable diseases including COVID-19 in Ireland. During the pandemic, the HPSC was central in collecting and collating information on COVID-19 outbreaks and deaths, including within LTRC homes.

The data provided for this report include all HPSC confirmed COVID-19 cases and deaths linked to COVID-19 outbreaks[6] in LTRC homes. Data were included from 1 March 2020 to 31 March 2021. The HPSC dataset included information on outbreak ID, date of the first and last notified COVID-19 confirmed case, number of cases and deaths (partitioned by residents and healthcare workers), and hospitalisations. The dataset also captured the HIQA home ID, allowing us to merge COVID-19 data with data from the HIQA Bed Register and the NHSS.

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5 Nursing and HCA are examined separately. Nurses and HCAs often perform differing tasks. While nurses are trained to provide more medical care, HCAs are trained to better support the non-medical requirements of LTRC home residents.

6 An outbreak is defined as the occurrence of two or more laboratory-confirmed COVID-19 cases, irrespective of whether symptoms were present, or two or more cases of illness with symptoms consistent with COVID-19 infection, where at least one individual is a confirmed case (HIQA and HPSC, 2022).

Length of a COVID-19 outbreak in a LTRC home was determined from the date of the earliest confirmed case to 14 days after the last notified COVID-19 confirmed case. This meant that a small number of outbreaks that were recorded with separate outbreak IDs had start and end dates that overlapped. In our analysis, we merged these outbreaks together, summated cases and deaths, and treated these merged outbreaks as one outbreak in the analysis. In the analysis we examine only COVID-19 cases and deaths among residents (aged 65 years and older).

2.3.5 COVID-19 in community

Data on COVID-19 outbreaks in the community were downloaded from the HPSC website. These data capture the number of confirmed COVID-19 cases in each county on each day during the period. We estimate community COVID-19 rates (cases per 10,000 population) by subtracting LTRC cases from total cases and dividing community cases by population within each county in 2020 using data from the Central Statistics Office (CSO).[7]

[7] https://www.cso.ie/en/releasesandpublications/fp/fp-ipeads/irishpopulationestimatesfromadministrativedatasources2020/populationestimates/.

CHAPTER 3

Long-term residential care supply

3.1 INTRODUCTION

There have been significant changes in the supply of LTRC in Ireland since the onset of the COVID-19 pandemic. This chapter provides an overview of such changes between February 2020 and December 2022. There is a particular focus on regional variations in supply (and changes therein) as well as changes across different types of ownership.

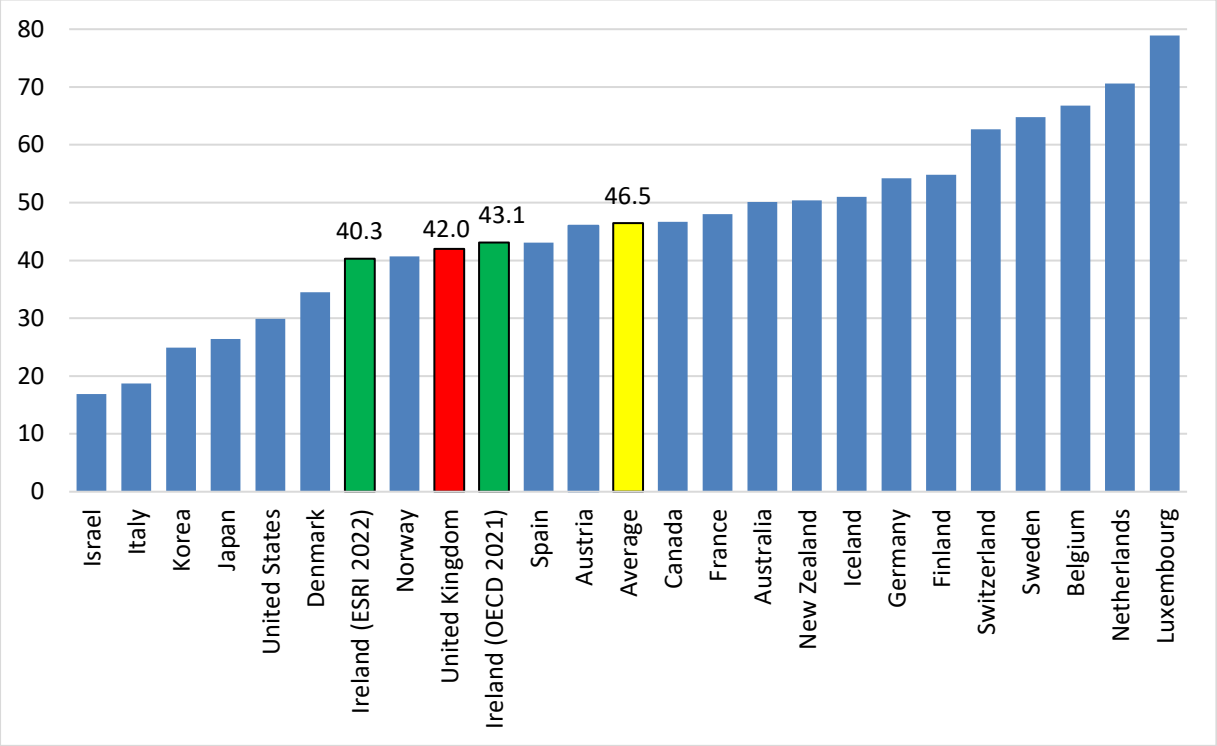
First, this chapter puts LTRC supply in Ireland in an international context. Section 3.2 highlights how Ireland's supply of LTRC beds per 1,000 population aged 65+ compares with other OECD countries. Variations in supply across counties in Ireland, pre- and post-COVID-19, are shown. Discussion is also given to planned LTRC home construction in the coming years.

3.2 INTERNATIONAL COMPARISON

Comparing LTRC supply across countries is challenging due to differences in the organisation of health and social care systems across countries. For instance, services offered in LTRC settings in one country may be provided in hospitals or community settings in another country. However, comparing supply across countries can provide useful insights. Figure 3.1 shows LTRC beds per 1,000 population aged 65+ across OECD countries. The OECD average of 46.5 beds per 1,000 population aged 65+ masks large variations across countries. For example, bed numbers range from 16.9 per 1,000 population aged 65+ in Israel to 78.9 in Luxembourg.

According to OECD statistics, in 2021 Ireland had 43.1 LTRC beds per 1,000 population aged 65+. However analysis undertaken for this report suggests that this number has reduced to 40.3 in 2022. Per capita LTRC supply in Ireland is similar to (and likely slightly below) the UK which has a similar LTRC system to Ireland.

FIGURE 3.1 LTRC BEDS PER 1,000 POPULATION AGED 65+ ACROSS THE OECD, 2021



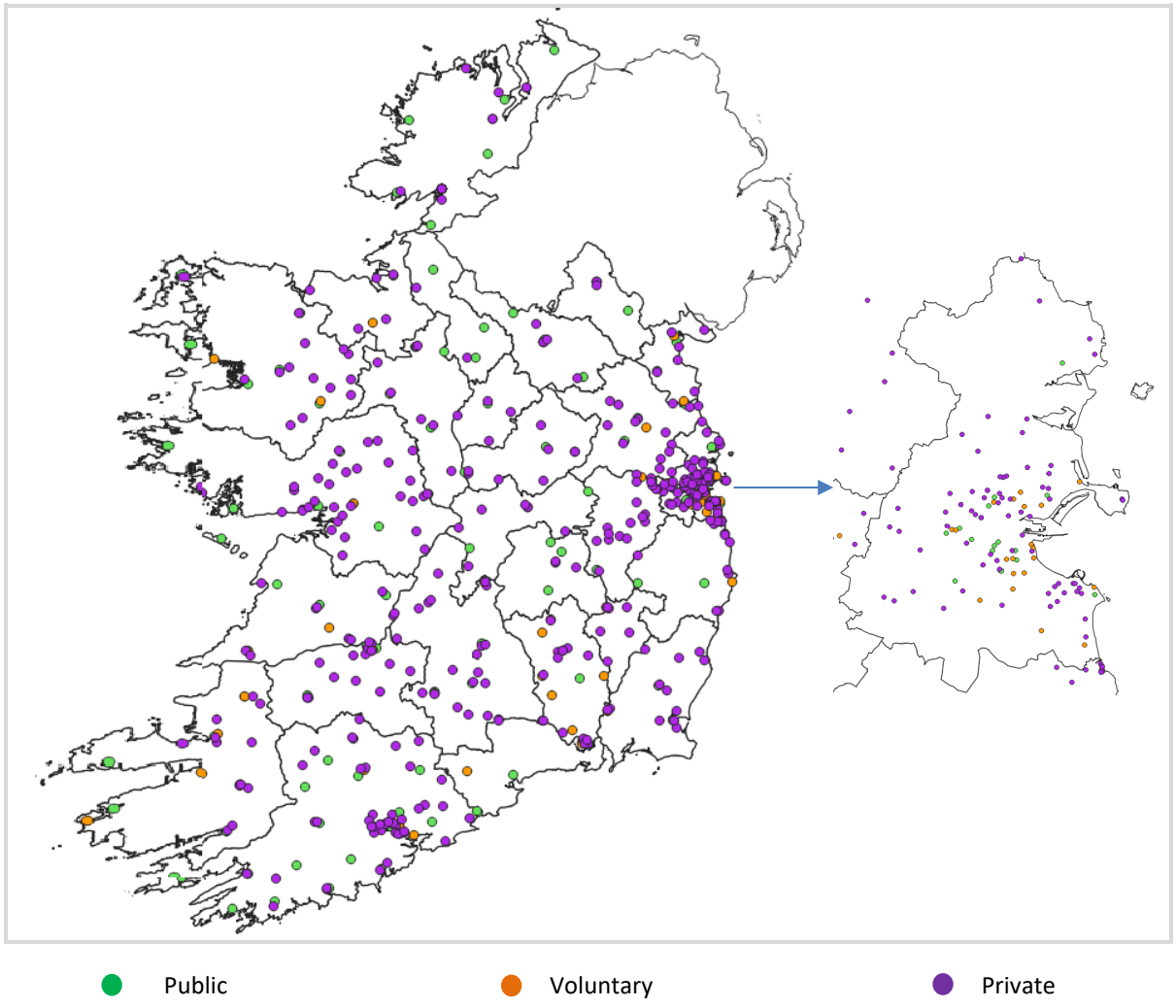
Source: OECD. https://stats.oecd.org/Index.aspx?QueryId=30142.
Note: The data relates to 2021 or nearest available year.

3.3 REGIONAL VARIATION

3.3.1 LTRC home location

Figure 3.2 shows the location of all 558 LTRC homes operating in Ireland in December 2022. In this figure, LTRC homes are partitioned into public (Green), voluntary (Orange), and private for-profit (Purple). This figure highlights the dominance of private LTRC homes across all counties in Ireland. In some counties there are no, or relatively few, voluntary LTRC homes; while public LTRC homes are relatively more common in Leitrim, Donegal and rural Cork.

FIGURE 3.2 LOCATION OF LTRC HOMES OPERATING, DECEMBER 2022

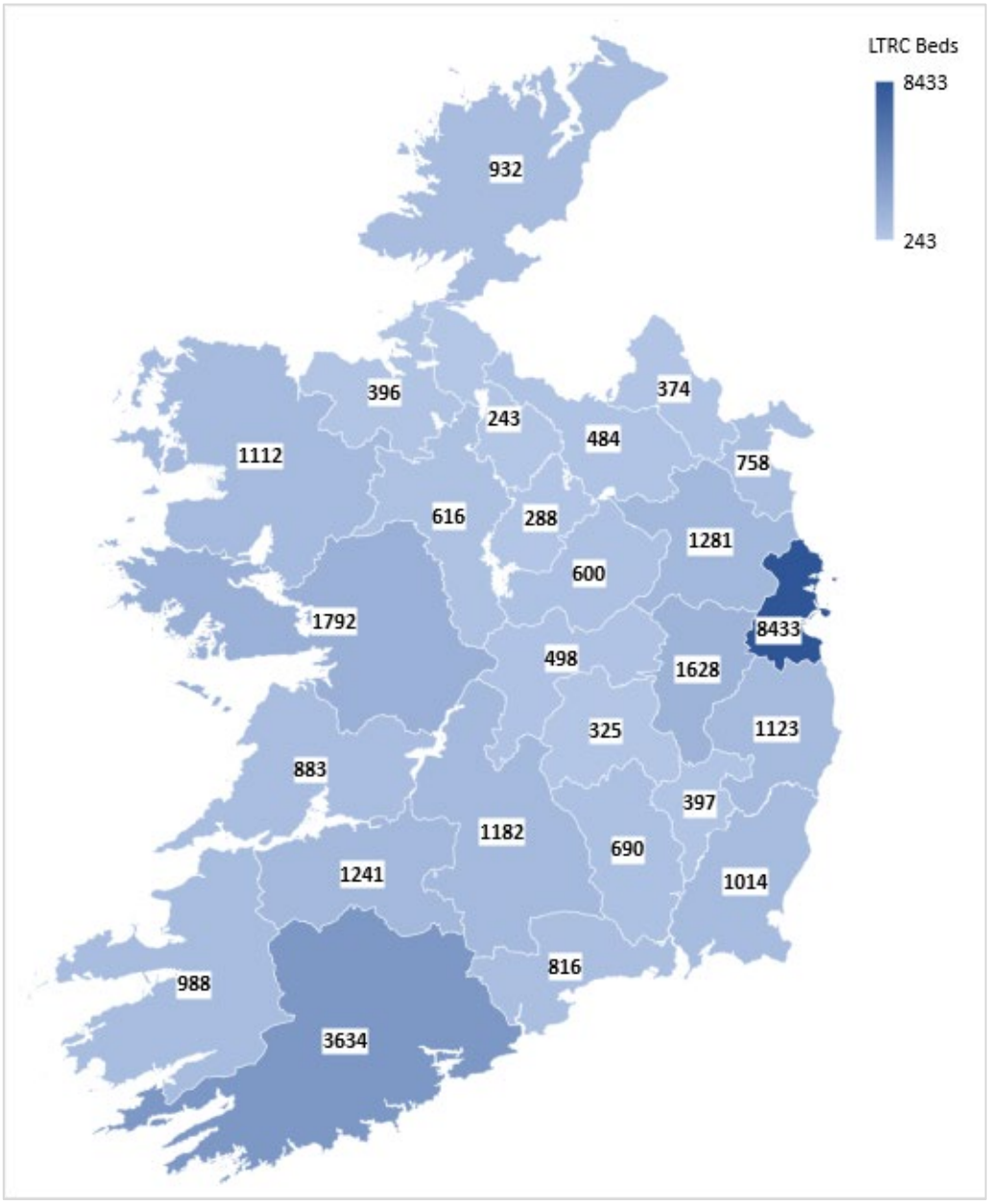


Source: HIQA Bed Register.

3.3.2 LTRC beds per county

In December 2022, there were 31,728 LTRC beds across 558 LTRC homes. Figure 3.3 shows the number of LTRC beds in each county in Ireland. As the largest county, Dublin has the highest number of beds (8,433), followed by Cork (3,634), Galway (1,792) and Kildare (1,628).

FIGURE 3.3 LTRC BEDS ACROSS COUNTIES IN IRELAND, DECEMBER 2022

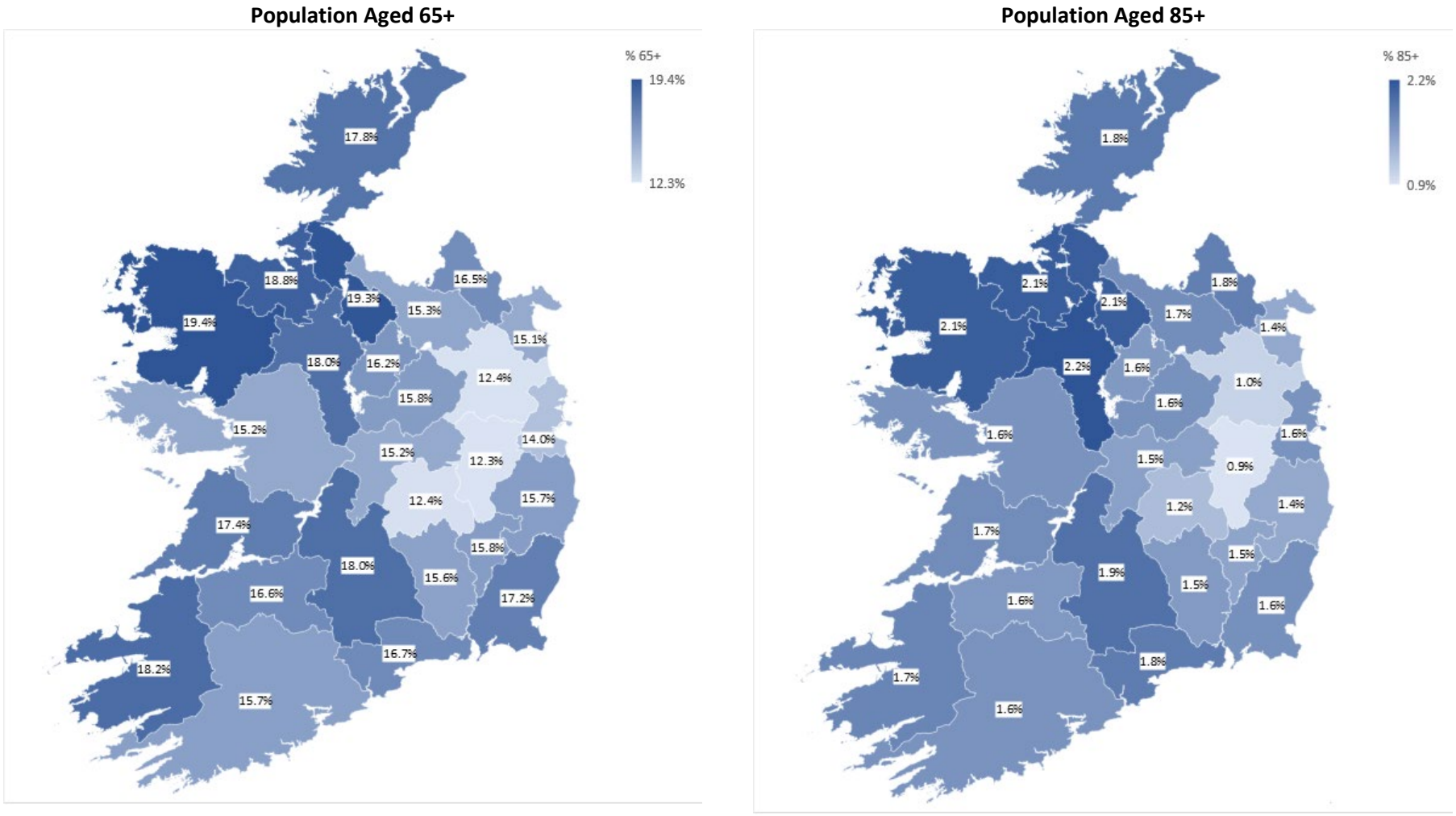


Source: HIQA Bed Register.

3.3.3 LTRC beds per capita (aged 65+) per county

In LTRC research, beds per population aged 65+ is commonly used to compare difference in bed supply (see OECD figures above and Smith et al., 2019). However the average age of LTRC residents in Ireland is over 83 (Collins, 2019), with many residents aged 85+. Therefore, in this analysis we compare supply using both 65+ and 85+. Figure 3.4 highlights the percentage of each county aged 65+ and 85+ in 2022 according to the CSO Census. Large variation is seen. The 'youngest' counties are in the Dublin commuter belt, with only 12.3 per cent and 0.9 per cent of the population in Kildare aged 65+ and 85+ respectively. Counties in Connacht tend to have the 'oldest' populations, with 19.4 per cent and 2.1 per cent of the population in Mayo aged 65+ and 85+ respectively.

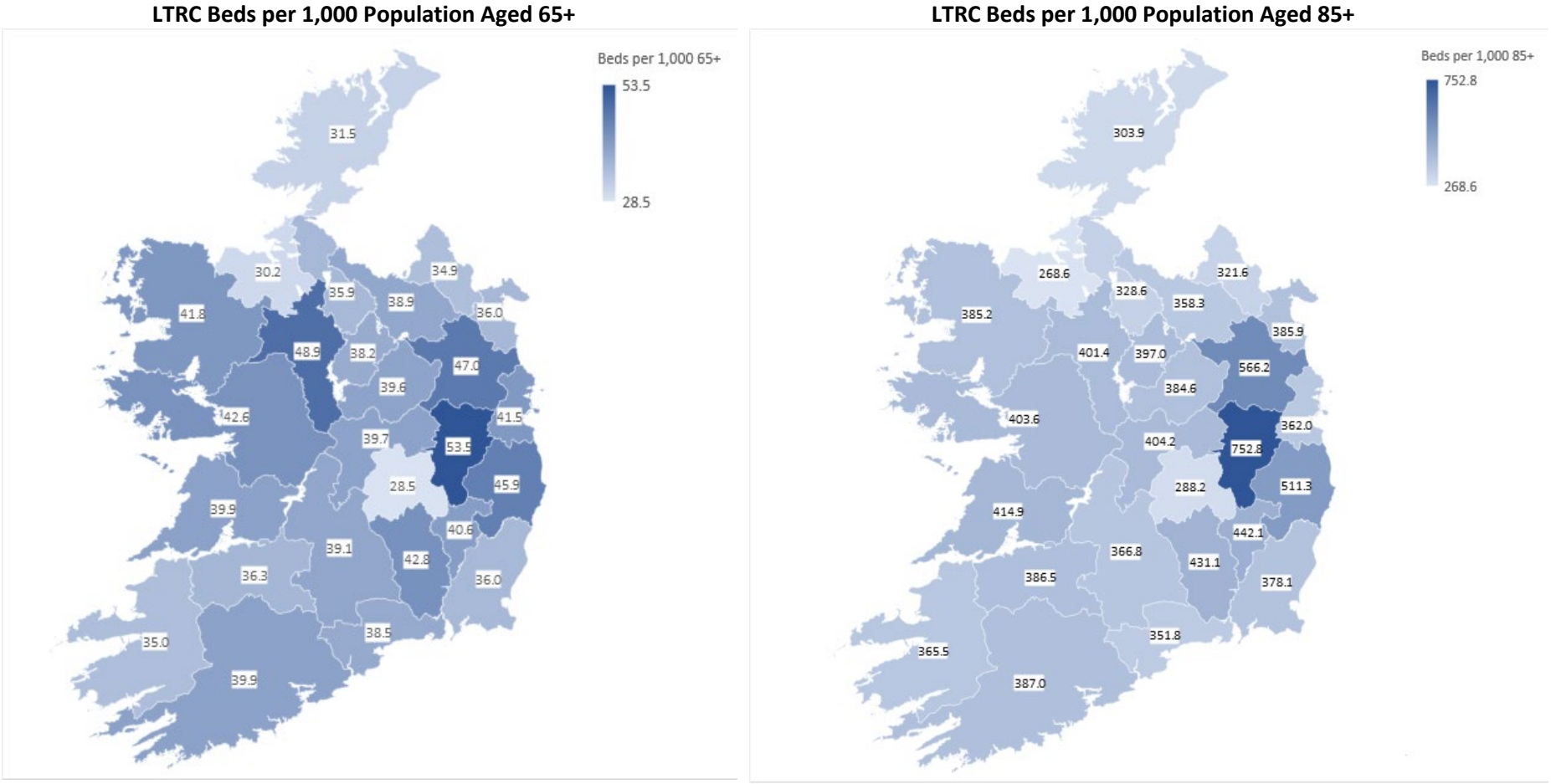
FIGURE 3.4 PERCENTAGE OF POPULATION AGED 65+ AND 85+ ACROSS COUNTIES, 2022



Source: CSO Census 2022.
Note: National averages: 65+ = 15.4 per cent; 85+ = 1.6 per cent.

Figure 3.5 shows the number of LTRC beds per 1,000 population aged 65+ and 85+ in each county in Ireland in December 2022. There are significant variations in bed supply across counties. When considering the 65+ age group, the number of LTRC beds per 1,000 population ranges from a high of 53.5 in Kildare to a low of 28.5 in (neighbouring) Laois. Dublin and other commuter belt counties, such as Meath and Wicklow, also have relatively high LTRC bed supply. Meanwhile, more rural counties, including Sligo, Donegal, Monaghan, Kerry and Leitrim, have some of the lowest relative bed capacity. The results are similar when the 85+ age group is used as the denominator. However Dublin's LTRC supply reduces to below average when considering this age group.

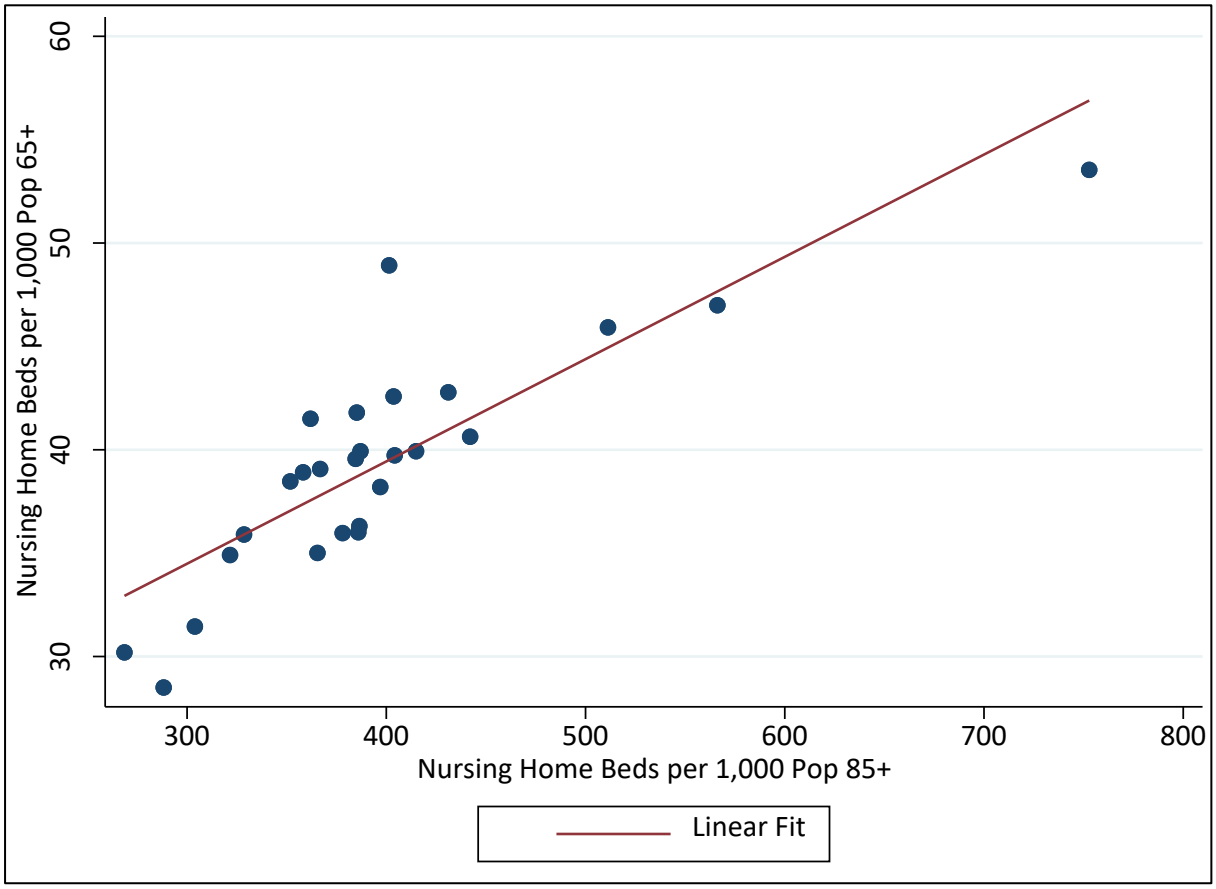
FIGURE 3.5 LTRC HOME BEDS PER 1,000 POPULATION AGED 65+ AND 85+ ACROSS COUNTIES, 2022



Source: CSO Census 2022.
Note: National averages: 65+ = 40.3; 85+ = 390.1.

While the previous figure shows that there are some differences in the relative ranking of counties according to the age group denominator chosen, for the sake of brevity and in line with previous research (OECD statistics and Smith et al., 2019), beds per 1,000 aged 65+ will be used through the remainder of this report. Figure 3.6 underpins this decision. There is a clear linear correlation between bed supply per 1,000 population aged 65+ and aged 85+ across counties.

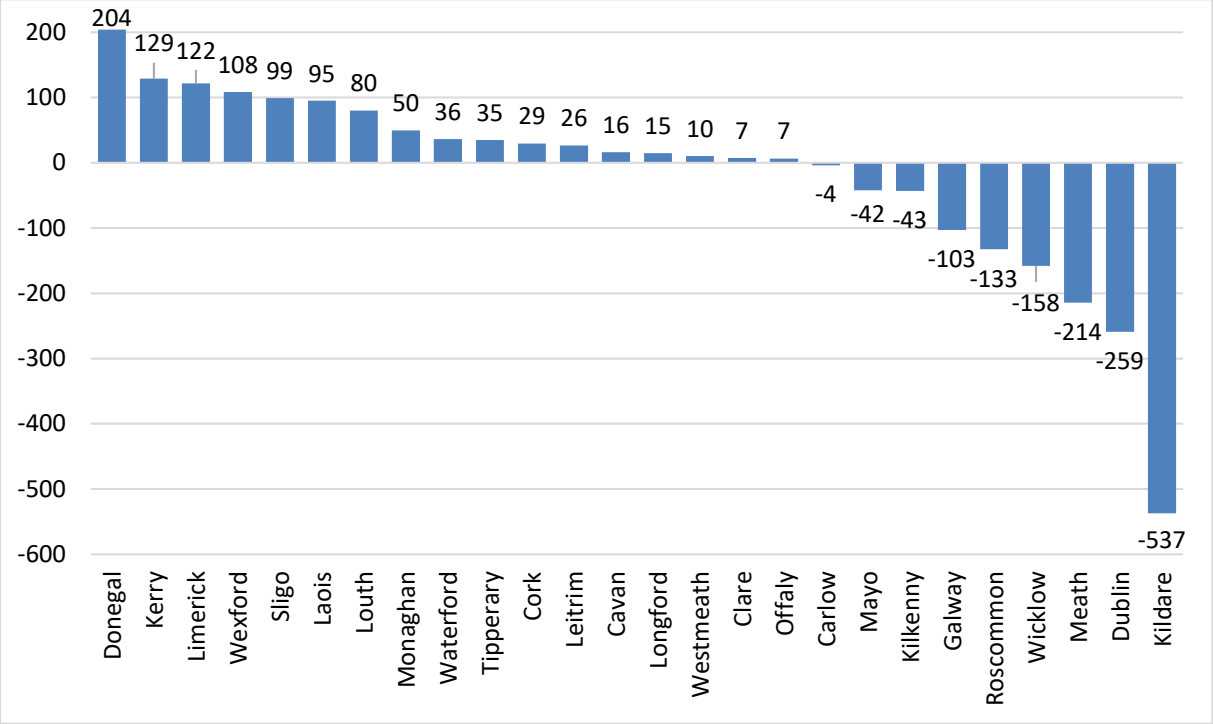
FIGURE 3.6 CORRELATION BETWEEN COUNTY PER CAPITA LTRC BED SUPPLY USING 65+ AND 85+ POPULATION DENOMINATORS



Source: CSO Census 2022.
Notes: National averages: 65+ = 40.3; 85+ = 390.1.

Figure 3.7 shows the number of LTRC beds each county requires to meet (or the number of beds that exceed) the national average. Donegal, Kerry, Limerick and Wexford would require at least 100 additional LTRC beds to meet the national average supply, while Sligo and Laois, the counties with the lowest relative supply, would require more than 90 beds. At the other end of the scale, Kildare, Dublin and Meath exceed the national average by 537, 259, and 214 beds respectively.

FIGURE 3.7 LTRC BEDS REQUIRED TO MEET NATIONAL AVERAGE OF BEDS PER 1,000 POPULATION AGED 65+



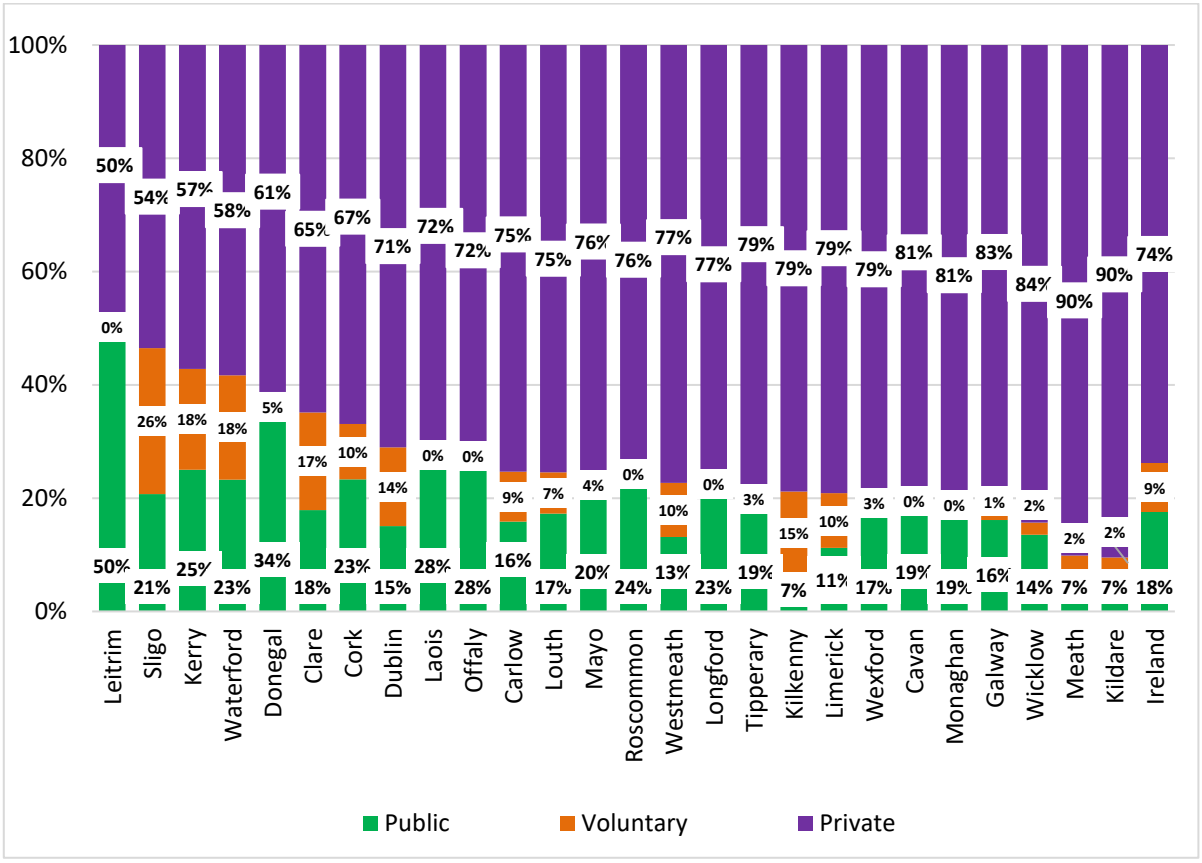
Sources: HIQA Bed Register 2022; CSO Census 2022.

3.3.4 LTRC beds by ownership type

The predominant ownership category of LTRC homes also differs across counties. Figure 3.8 shows the percentage of LTRC beds in each county provided by public, voluntary, and private for-profit homes. Overall, 18 per cent of beds are in public LTRC homes, 9 per cent in voluntary homes, and the majority (74 per cent) in private for-profit homes. In all counties, the majority of LTRC beds are provided in private homes. The lowest percentages of beds provided in private homes are found in counties on the western seaboard including Leitrim (50 per cent), Sligo (54 per cent), Kerry (57 per cent), Donegal (61 per cent) and Clare (65 per cent). Counties with the highest rates of private bed provision include Kildare (90 per cent), Meath (90 per cent) and Wicklow (84 per cent). These counties also have amongst the highest beds per capita in Ireland.

Leitrim (50 per cent), Donegal (34 per cent), Offaly (28 per cent), and Kerry (25 per cent) have the highest proportion of public LTRC beds, while only 2 per cent of LTRC beds in Meath and Kildare are in public LTRC homes. The proportion of voluntary LTRC beds differs considerably across counties. Seven counties have no voluntary LTRC beds, while Sligo (26 per cent), Kerry (18 per cent), Waterford (18 per cent), Clare (17 per cent), and Kilkenny (15 per cent) have the highest percentage of voluntary LTRC beds.

FIGURE 3.8 LTRC BEDS BY OWNERSHIP TYPE IN COUNTIES IN IRELAND, DECEMBER 2022



Source: HIQA Bed Register 2022.

3.4 CHANGES IN LTRC SUPPLY: FEBRUARY 2020 – DECEMBER 2022

3.4.1 LTRC home closures

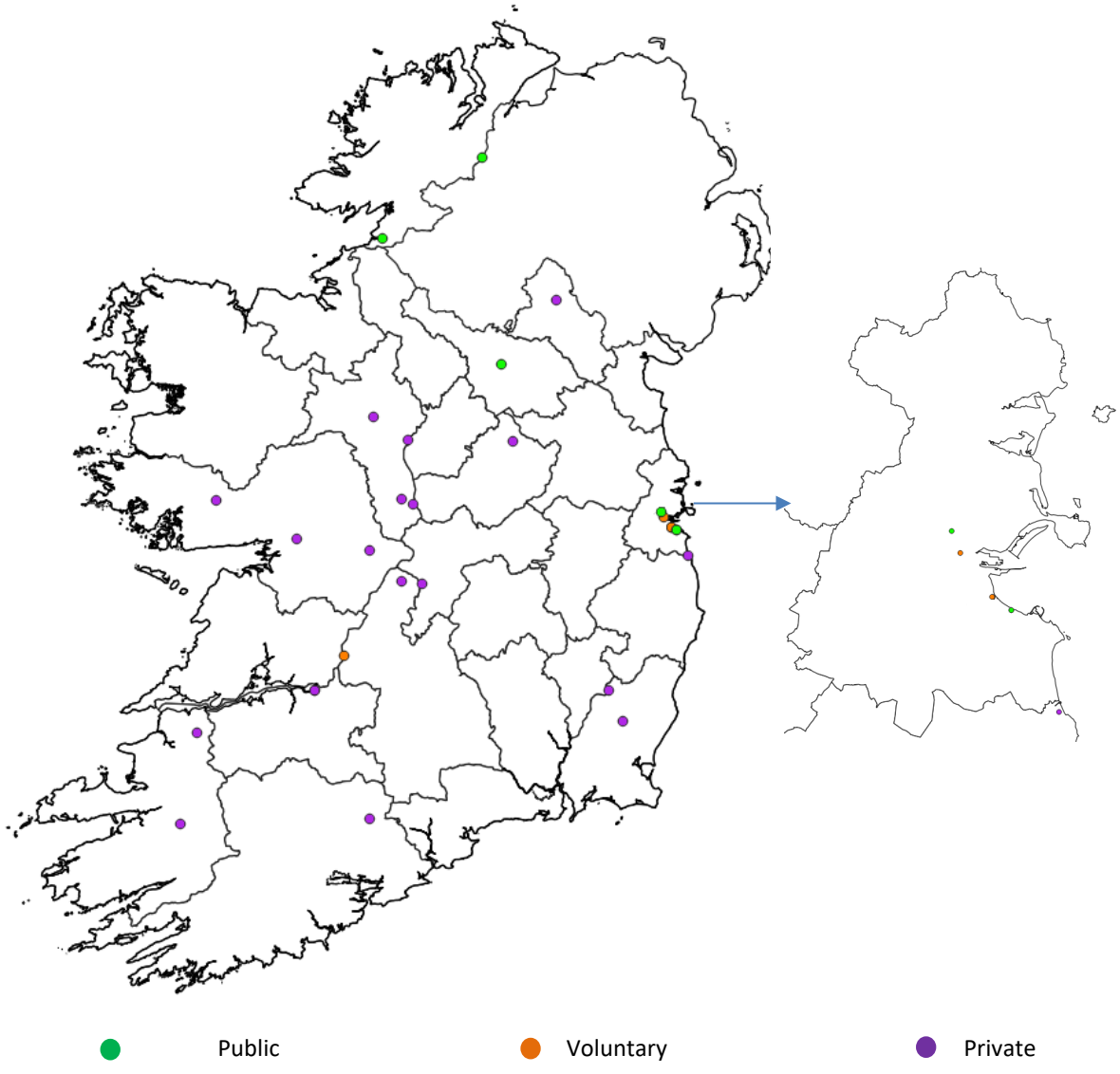
Between February 2020 and December 2022, 28 LTRC homes closed, comprising five public homes, five voluntary homes, and 18 private homes. Figure 3.9 shows the location of all LTRC homes that closed, categorised by public (Green), voluntary (Orange), and private for-profit (Purple). Dublin, Galway, and Roscommon each saw at least three LTRC homes close during this period. Interestingly while five LTRC homes closed in Dublin (two are on the St Vincent's hospital site and may appear as one 'dot' in Figure 3.9), two of these homes were public (HSE-owned) and three were voluntary (i.e. there were no private LTRC home closures in Dublin during this period).

Although a small number of LTRC homes closed temporarily or changed ownership during this period,[8] they were not considered in the analysis on closures. While a

[8] One LTRC home was transformed into a transitional care facility, but it is counted as a closure in this analysis since it is no longer registered with HIQA as a designated centre for older people. Two public LTRC homes in Tipperary and Donegal closed temporarily or were effectively replaced by a new facility near the previous site, and therefore not included here.

small number of LTRC homes stated their intention to close in 2023, these homes are not considered in the analysis on closures.[9] Therefore, it is important to exercise caution when interpreting closures below, as December 2022 represents a snapshot at a point in time, and closures and openings may have occurred since then.

FIGURE 3.9 LOCATION OF LTRC HOMES CLOSED BETWEEN FEBRUARY 2020 – DECEMBER 2022



Source: HIQA Bed Register.

3.4.2 LTRC home bed changes

In addition to the LTRC homes that closed, a number of LTRC homes also reduced their bed supply. This was in part due to new regulations issued by HIQA, while

9 For example, New Lodge Bloomfield Nursing Home, a voluntary LTRC home with 24 beds is included in the December 2022 HIQA Bed Register. However in late 2022, the owners of the home announced their intention to close the facility for LTRC in 2023. https://www.irishtimes.com/health/your-family/2022/09/12/two-more-nursing-homes-to-close-amid-costs-crisis-in-care-sector/.

COVID-19 and the need for changes to facilities (BDO and Nursing Homes Ireland, 2022) may also have informed some of these closures.

Table 3.1 presents changes in the total bed supply for LTRC in Ireland from February 2020 to December 2022, categorised as public or voluntary/private. In February 2020, there were 32,064 LTRC beds in Ireland, compared to 31,728 LTRC beds in December 2022. This equates to 336 fewer beds (1 per cent lower) in Ireland in December 2022 compared to pre-COVID-19. Although public homes only accounted for five of the 28 closed homes, all bed closures occurred in public homes. Within public LTRC, including closures, there were 693 fewer LTRC beds, whereas voluntary and private homes had an additional 357 beds, despite experiencing most of the closures. The difference between home closures and bed closures emphasises the need to scrutinise both changes in homes and bed supply within homes to gain a precise reflection of changes in bed supply since the onset of the COVID-19 pandemic.

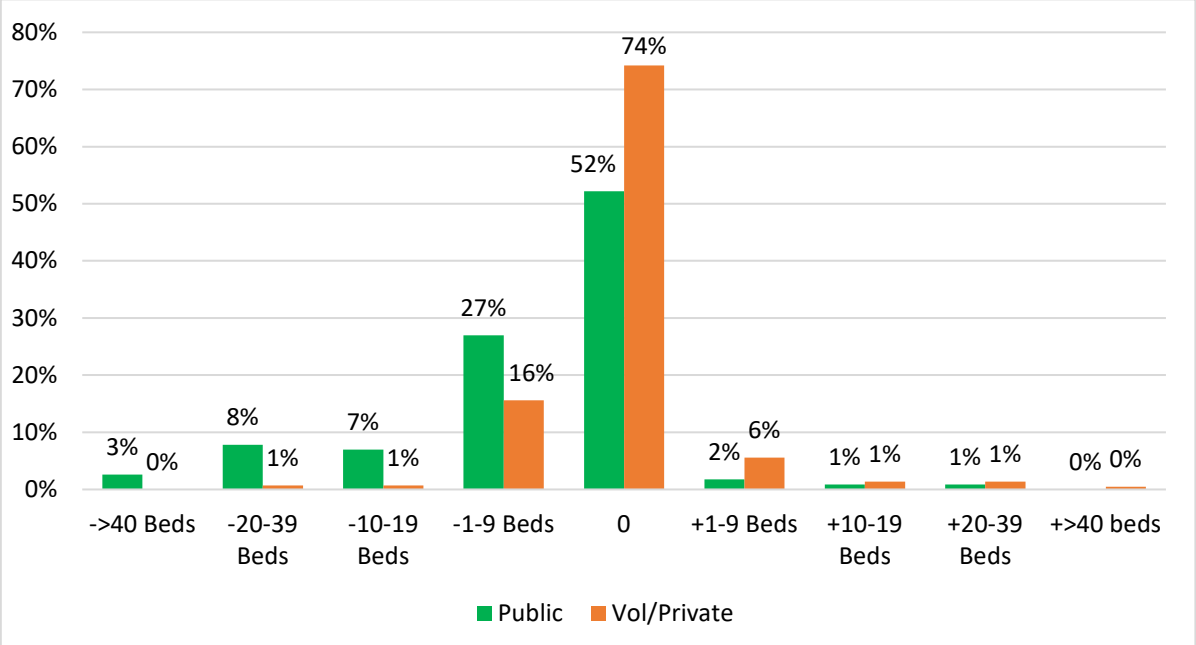
TABLE 3.1 LTRC BED CHANGES BY OWNERSHIP TYPE BETWEEN FEBRUARY 2020 – DECEMBER 2022

	Changes in LTRC Beds
Public	-693
Voluntary/Private	357
Total	**-336**

Source: HIQA Bed Register.

Figure 3.10 highlights the changes in LTRC bed supply within LTRC homes ownership category that were operating across the period. Among voluntary/ private homes, the majority (74 per cent) experienced no changes, 9 per cent had an increase, and 17 per cent experienced a decrease in their bed supply. Notably, most changes were small, ranging from (plus or minus) 1-9 beds. However, public LTRC homes displayed a different trend. A total of 52 per cent of public homes reported no changes, and 4 per cent experienced a small increase. However, nearly half of all public homes recorded a decrease in their bed capacity. More than a quarter of these homes had 1-9 fewer beds, while 7 per cent reported a decrease of 10-19 beds, and over 10 per cent of public LTRC homes saw a reduction of at least ten beds.

FIGURE 3.10 LTRC BED SUPPLY CHANGES PER 1,000 POPULATION AGED 65+ BETWEEN FEBRUARY 2020 – DECEMBER 2022, IRELAND

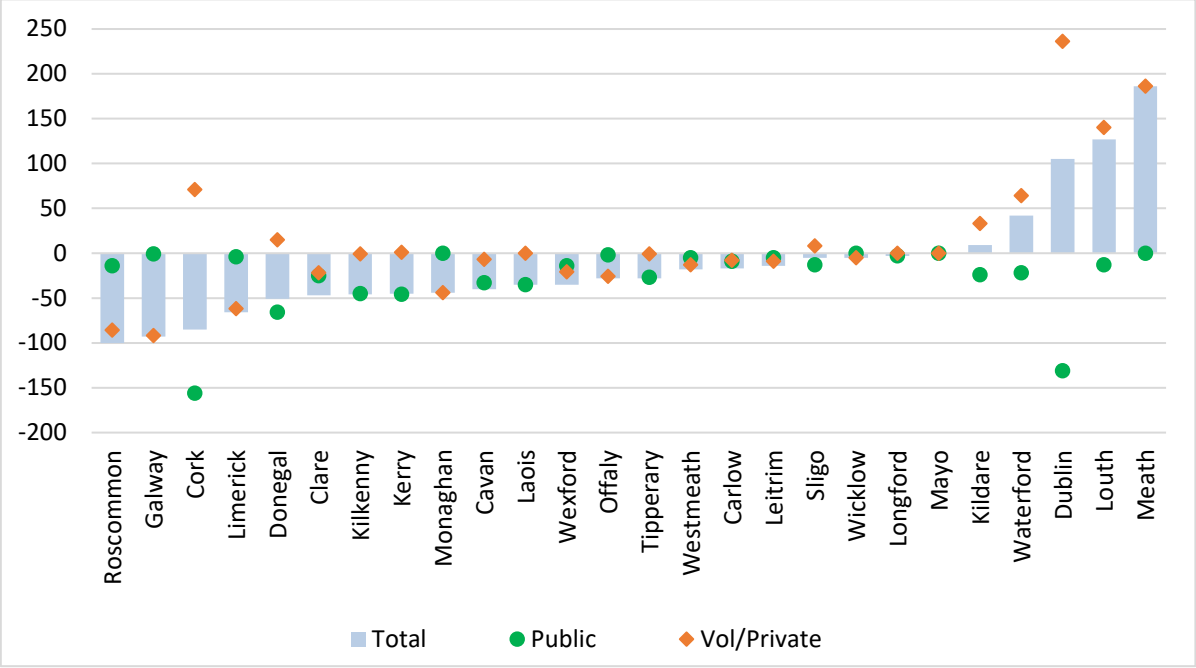


Source: HIQA Bed Register.

Figure 3.11 highlights the reduction, or increase, in LTRC beds across counties between February 2020 and December 2022. This figure incorporates both LTRC home closures and bed increases/decreases. Most counties saw a reduction in LTRC bed supply. Roscommon, Galway, Cork, Limerick, and Donegal (where a large number of homes closed), all saw a reduction of at least 50 beds. A small number of counties, mainly Dublin and its commuter counties, as well as Waterford, saw an increase in beds during this period.

Partitioning by ownership, almost all counties saw a reduction in beds within public LTRC homes. The largest reductions were seen in Cork (-156), Dublin (-131), Donegal (-66) and Kerry (-46). Most counties, driven largely by home closures, saw large reductions in voluntary/private bed supply. Roscommon (-86), Galway (-92), Limerick (-62) and Monaghan (-44) saw the largest reductions in voluntary/private home bed supply. However, there were large increases in voluntary/private bed capacity in Dublin (+236), Meath (+186), Louth (+140), Kildare (+33), Cork (+71) and Waterford (+64). In the counties that experienced an increase, the rise in supply was attributed to the opening of a small number of purpose-built large homes. These homes typically had over 100 beds.

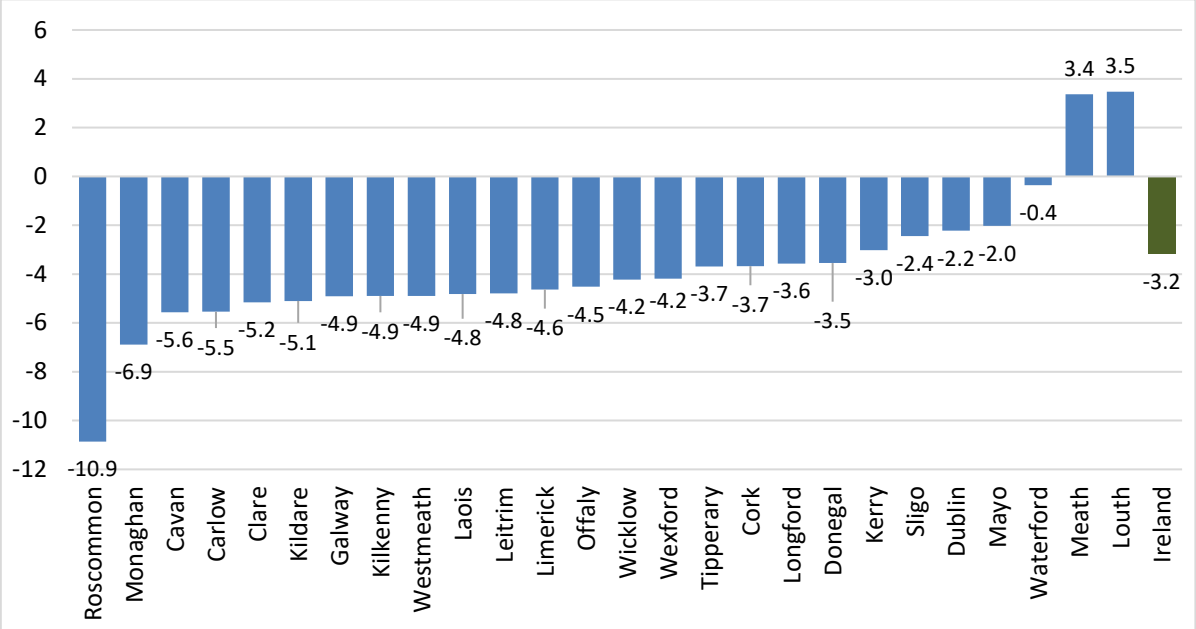
FIGURE 3.11 LTRC BED SUPPLY CHANGES ACROSS COUNTIES BETWEEN FEBRUARY 2020 – DECEMBER 2022



Source: HIQA Bed Register.

Figure 3.12 illustrates changes in LTRC beds per 1,000 population aged 65+ in each county across the period under review. LTRC beds per capita decreased by 3.2 beds (from 43.5 to 40.3), with almost all counties experiencing a reduction. The largest decreases were observed in Roscommon, Monaghan, Cavan, Carlow and Clare. Even Kildare, which had the highest number of beds per capita in December 2022, experienced a decline during this period. However, both Meath and Louth, which saw the opening of new large LTRC homes, experienced an increase in beds per capita.

FIGURE 3.12 LTRC BED SUPPLY CHANGES PER 1,000 POPULATION AGED 65+ ACROSS COUNTIES BETWEEN FEBRUARY 2020 – DECEMBER 2022



Sources: HIQA Bed Register. CSO Census 2016 and 2022.
Notes: CSO data show that the population aged 65+ increased across all counties between 2020 and 2022.

LTRC home closures were one of the main factors contributing to LTRC bed supply reductions during this period. However the characteristics of LTRC homes that closed may have differed from homes that remained open.

Table 3.2 presents estimates of the percentage of LTRC homes that closed by size and ownership type. A slightly higher percentage of voluntary/private homes closed (5.3 per cent) than public homes (3.3 per cent). Most of the LTRC homes that closed were smaller. Overall, 17.8 per cent of all small homes (<30 beds) ceased operating during this period. This compares to only 1 per cent of large homes (50+ beds) closing down. Small voluntary/private homes are shown to be driving much of the closures, with 22.9 per cent closing compared to 6.5 per cent of small public homes.

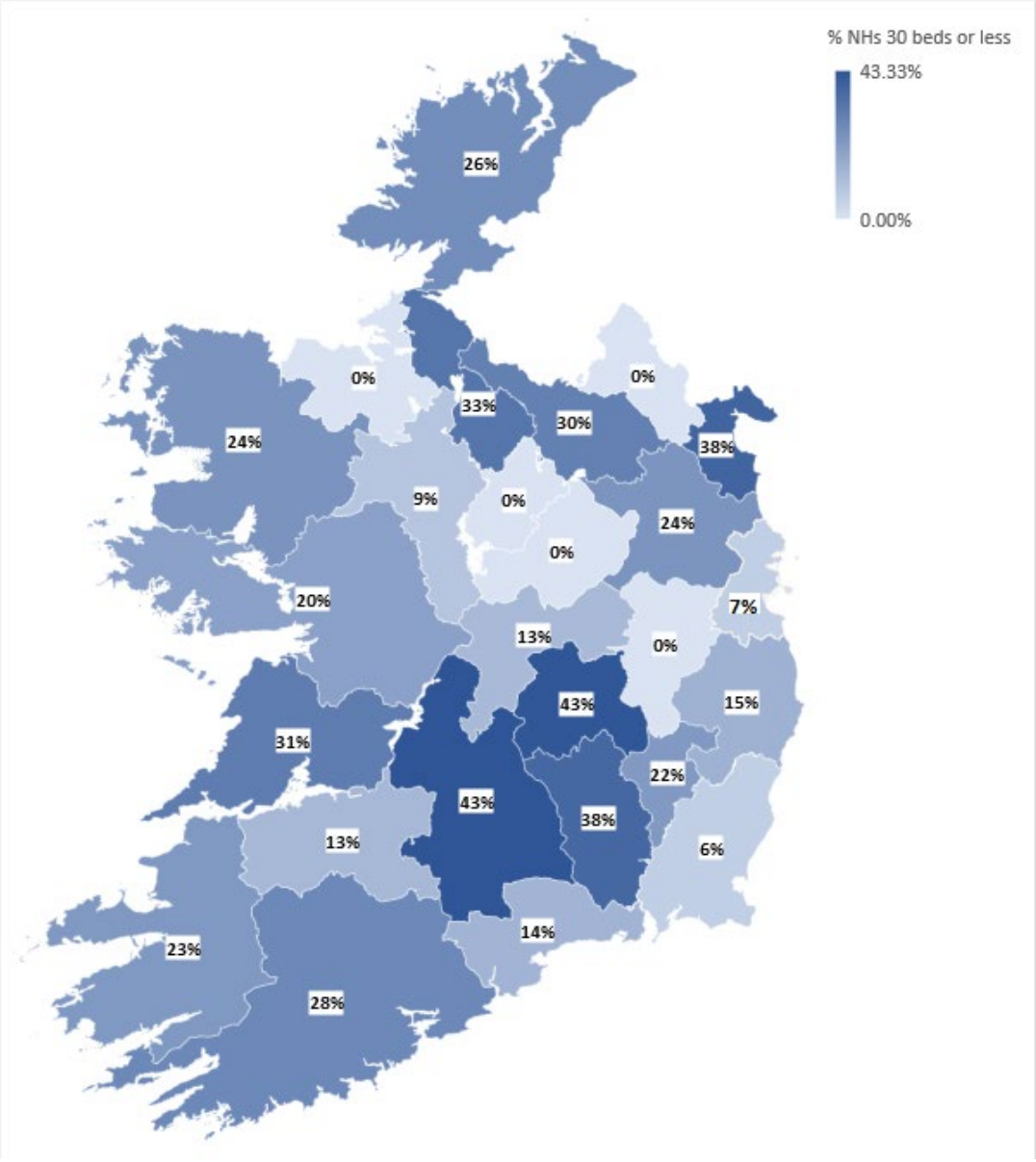
TABLE 3.2 LTRC HOME CLOSURES BETWEEN FEBRUARY 2020 – DECEMBER 2022 BY HOME SIZE, IRELAND

	% LTRC Homes Closed		
	All Homes %	Public %	Vol/Private %
<30 Beds	17.8	6.5	22.9
30-39 Beds	3.4	7.4	1.6
40-49 Beds	4.3	0.0	5.0
50+ Beds	1.0	0.0	1.2
Total	**4.9**	**3.3**	**5.3**

Source: HIQA Bed Register.

For a myriad of reasons (e.g. HIQA standards, staffing, business viability) smaller LTRC homes are likely to continue to be at a higher risk of closure. Figure 3.13 illustrates the percentage of all LTRC beds located in homes with less than 30 beds as of December 2022. This figure may allow us to identify counties at disproportionate risk of LTRC home closures. Tipperary (43 per cent), Laois (43 per cent), Kilkenny (38 per cent), Louth (38 per cent) and Leitrim (33 per cent) have over one-third of all LTRC beds in smaller (<30 beds) LTRC homes. Other counties, including Sligo, Longford, Westmeath, Kildare and Monaghan have no beds in small LTRC homes, while only 7 per cent of beds in Dublin are in such homes.

FIGURE 3.13 PERCENTAGE OF LTRC BEDS IN LTRC HOMES WITH 30 BEDS OR LESS, DECEMBER 2022



Source: HIQA Bed Register.

3.5 PLANNED LTRC BED SUPPLY

In December 2022, the Department of Health announced plans to construct seven new Community Nursing Units (CNUs) by end-2024.[10] This will increase public LTRC bed supply by 530 beds. CNUs are a form of LTRC home and offer care to residents with a range of needs, encompassing general care for individuals with dementia, physical disabilities, and cognitive impairment. CNUs will be registered with HIQA to provide care to older people and accommodate those who require both short-term and longer-term accommodation. In some cases, these new CNUs will replace some recently closed facilities such as St Finbarr's in Cork. These will be among the first public LTRC homes constructed in a number of years.

Unlike previous public LTRC home developments, these CNUs will be constructed via Public Private Partnerships (PPPs). As part of the plan, €250 million of funding will be provided by the European Investment Bank (EIB), NORD/LB (one of Germany's largest commercial banks), and Bank of Ireland. The CNUs will be leased by the HSE and will be handed over to the HSE after 25 years.

In addition, a number of private LTRC homes are due to be developed by end-2024. In their February 2023 document outlining the Irish nursing home market,[11] CBRE listed 16 new LTRC home developments that are expected to start providing care in 2023 and 2024. These 16 new LTRC homes will increase private bed supply by 1,750 beds. These are all exclusively new as opposed to replacement homes with the average size of each home being 109 beds (ranging from 60 beds to 151 beds). Of these 16 LTRC homes, six will be located in Dublin, and all are being constructed by medium/large operators.

Table 3.3 outlines the planned bed increases that will occur from the new public and private LTRC home developments. In total, there are a planned 2,280 additional beds across 12 counties. However, 16 counties will receive no additional beds (from new LTRC home developments) in the next two years. Dublin[12] and Cork are projected to have the largest increases in bed supply, with all new beds in Dublin being located in private LTRC homes.

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10 Each CNU comprises multiple 25-bed (room) households, consisting of both single and twin bedrooms with ensuite facilities. Each household will be equipped with a dayroom, sunroom, dining area, break-out spaces, activity spaces etc. https://www.gov.ie/en/press-release/f4f06-minister-for-health-and-minister-for-mental-health-and-older-persons-announce-community-nursing-units-for-cork-kerry-kilkenny-louth-tipperary-and-westmeath-by-2024/#:~:text=Each%20CNU%20is%20made%20up,the%20performance%20of%20everyday%20tasks.

11 https://www.cbre.com/insights/figures/the-irish-nursing-home-market-summary.

12 248 beds located in North Dublin and 558 beds located in South Dublin.

TABLE 3.3 ADDITIONAL LTRC BEDS FROM PLANNED LTRC HOMES IN 2023/2024, BY COUNTY

County	Public LTRC Beds	Private LTRC Beds	Total LTRC Beds
Dublin	-	806	806
Cork	165	171	326
Kilkenny	95	170	265
Waterford	-	182	182
Kerry	130	-	130
Wicklow	-	119	119
Sligo	-	105	105
Laois	-	101	101
Meath	-	96	96
Louth	50	-	50
Tipperary	50	-	50
Westmeath	50	-	50
Total	**530**	**1,750**	**2,280**

Source: CBRE and Department of Health, June 2023. No evidence was found that counties not listed have plans for additional LTRC beds.

3.6 CONCLUSION

This chapter showed that between February 2020 and December 2020, there were substantial changes in LTRC bed supply in Ireland. During this period, LTRC bed supply reduced by 336 beds. The majority of these reductions were due to closures within public LTRC homes (693 fewer public LTRC beds). While there has been an increase in private LTRC beds (357 additional beds) at a national level during this period, there has also been a large number of private LTRC home closures. The majority of home closures have occurred in independently owned and operated LTRC homes with less than 30 beds. During this period, over a fifth of such LTRC homes have closed.[13] In this chapter we identify those counties with the largest percentage of beds within smaller LTRC homes, who are likely to continue to be at risk of closure over the coming years.

We identify large regional inequalities in LTRC bed supply, with beds per capita (aged 65+) highest in Kildare (53.5 beds per 1,000 aged 65+) and lowest in Laois (28.5 beds per 1,000 aged 65+). Kerry, Donegal, Limerick and Wexford are also found to have amongst the lowest LTRC beds per capita, with Dublin, Meath and Wicklow amongst the highest. This relatively high level of LTRC beds within the Dublin commuter belt is also likely to continue based upon planned LTRC home developments.

[13] While we do not examine supply prior to 2020, it is important to highlight that LTRC closures were relatively common prior to the COVID-19 pandemic too. Between 2017 and 2019, 13 private homes and one voluntary home closed https://nhi.ie/wp-content/uploads/2021/04/BDO-NHI-Private-Voluntary-Nursing-Home-Survey-2019-2020.pdf.

Public LTRC home beds now constitute only 18 per cent of all LTRC bed supply, with voluntary LTRC homes contributing 9 per cent of beds. The remaining 74 per cent of beds are in for-profit private LTRC homes. This picture marks a continuation of movement away from the public and voluntary sectors towards private LTRC providers seen over the last two decades. Based upon planned LTRC developments, the relative size of the private LTRC home sector is likely to increase further.

Within the private LTRC sector, the recent years have also seen the arrival of large private equity financed LTRC home providers and REITs into Ireland. This has resulted in considerable consolidation of the sector. We cover this in greater detail in the subsequent chapter.

CHAPTER 4

Long-term residential care ownership and operators

4.1 INTRODUCTION

The previous chapter outlined large changes in the supply of LTRC beds in Ireland since the onset of the COVID-19 pandemic. Many smaller LTRC homes have closed, and there has been a continued move from smaller independently owned and operated LTRC homes towards larger operators who operate multiple LTRC homes. This chapter examines operator and ownership structure in the LTRC sector in Ireland, and the newer form of operation and owner structures that exist. The chapter presents analysis of estimates of the ownership and operating structure that exists in Ireland as of December 2022.

4.2 OWNERSHIP AND OPERATORS IN IRELAND

Traditionally, the majority of private LTRC homes in Ireland were independently operated and owned, often by a family run business. In recent years there has been a significant consolidation of LTRC homes under small or larger groups that own and/or operate multiple LTRC homes. This practice has been relatively common in the voluntary sector. For example, the Sisters of Nazareth, one of the largest religious orders in the State, have historically been large providers of health and long-term care. Currently the Sisters of Nazareth own and operate six LTRC homes. However, in recent years there has been increased consolidation within the for-profit private LTRC sector. In addition to smaller LTRC homes closing, smaller independently owned and operated LTRC homes have been sold to larger operator groups. A small number of private operators and owners now have a large percentage of all LTRC beds in Ireland.

Public, voluntary, and small independent LTRC homes are owned and operated by the same organisation. For example, the HSE owns the majority of public LTRC homes (the real estate owner); the HSE is registered with HIQA as operator of these homes, and care is provided to residents by staff employed by the HSE. In contrast, many private LTRC homes are owned by one entity (real estate owner – PropCo), but care is provided by a separate entity (operator – OpCo). In many cases, OpCo/PropCo contracts are in place between owners and operators, that separates the real estate (physical building(s)) from the operating business.

4.2.1 OpCo/PropCo

To aid understanding of these OpCo/PropCo arrangements:

- OpCo (Operating Company): OpCo refers to the entity responsible for the day-to-day operations and management of a LTRC home. The OpCo typically

handles activities such as providing care services, staffing, administration, and overseeing the overall functioning of the home. Therefore, the OpCo is primarily focused on delivering care to residents. NHSS contracts are between the NTPF and the OpCo. The operator can be seen as a tenant.

- PropCo (Property Company): PropCo, on the other hand, refers to the entity that owns the physical property or real estate where the LTRC home operates. It is responsible for acquisition of the home, as well as the development and maintenance of the home. Typically, the PropCo leases or rents the property to the OpCo, similar to a landlord. Furthermore, in many instances, the OpCo itself originally owned the LTRC home, prior to selling it to the PropCo, who subsequently leased it back to the OpCo. This has been found to be a common occurrence within the LTRC sector in the US (Batt et al., 2022). One of the largest PropCos in Ireland, the Belgian-based REIT Aedifica have stated that it is customary in Ireland that a LTRC home is let to an OpCo 'on the basis of a new irrevocable 20-year triple net lease that is fully indexed to the consumer price index (CPI)'.[14] However, the specific arrangements and structures can vary in different LTRC settings.

There is a reasonable amount of information on LTRC operators in Ireland, and the LTRC homes that they operate. This is in part due to operators being required to register a LTRC with HIQA and renew registrations once a new operator takes charge of a LTRC home. Most operators are also members of NHI, the representative group of voluntary and private LTRC homes. But less is known about LTRC property companies. In 2023, the CBRE published a list of the largest PropCo and OpCo providers in Ireland. There were 15 operators listed that each operated over 400 LTRC beds. Furthermore, there were six property owners listed that owned at least 500 beds, the largest of these being Euryale and Aedifica. Each of these property companies are REITs, and most REIT funding now originates outside of Ireland.[15]

4.2.2 Real Estate Investment Trusts (REITs)

Institutional investors such as REITs are common within real estate in Ireland. REITs that operate in Ireland are required to be publicly listed companies that are listed on any European stock exchange. REITs do not pay corporation tax on property rental income, or capital gains tax on sales of their properties. This therefore lowers the taxes paid on income earned from OpCo payments, and makes real estate, such as LTRC homes, attractive to international REITs. In the LTRC sector, some of the largest European REITS that invest in LTRC entered the Irish LTRC market since the onset of COVID-19 (CBRE, 2023). REITs as a business model largely

14 https://aedifica.eu/wp-content/uploads/2022/05/AED_CP2022_EN_NaasIE_2022-05-18_BB.pdf.
15 https://www.cbre.com/insights/figures/the-irish-nursing-home-market-summary.

rely on rental income.[16] Various sources have highlighted annual net rental yields of 4 per cent to 5.5 per cent in recent years, similar to other European countries (Aedifica, 2022).

REITs are a modern feature of LTRC care in Ireland. However, such organisations have been part of health and social care sectors in other countries for a number of years.

4.2.3 Private equity

Many LTRC home owners and operators are increasingly funded (at least partially) by private equity funds. There is a strong correlation between REITs and private equity, while private equity is also the key funder of LTRC operators in many cases.

Private equity generally refers to an asset class of investments in privately held companies or businesses that are not publicly traded on stock exchanges. It involves investing in equity or ownership stakes in companies that are not listed on public markets, with the aim of generating returns over the long term. In this context, it is often difficult to ascertain some private equity investments in LTRC in Ireland. Private equity is a new feature of the LTRC sector in Ireland. However, in countries such as the US, private equity owned providers are now the dominant providers of health and social care (Bruch et al., 2023), and private equity owns a substantial part of other parts of the Irish health and social care system. Some of the largest private hospital groups,[17] general practice groups,[18] pharmacies,[19] and diagnostic service groups,[20] are all fully or partially financed via private equity. Currently the majority of medium/large providers receive partial or full funding from private equity, many of whom rely on financing from France, Belgium, Germany and the Netherlands (CBRE, 2023).

4.2.4 Private equity and outcomes

Despite the increasing importance of REITs in health and social care, there has been a paucity of research into their impact (Batt et al., 2022). The research that has been undertaken has shown that having a REIT as an LTRC owner has impacts on outcomes. For example, evidence from the US comparing REIT purchased versus non-REIT purchased LTRC homes found a 6.25 per cent decrease in registered

16 https://www.revenue.ie/en/companies-and-charities/financial-services/reit/index.aspx.

17 For example, the Mater Private Network are owned by Infravia Capital Partners (https://infraviacapital.com/companies/mater-private/), who are also the owners of the CareChoice LTRC care provider group. Santry Sports Clinic is owned by the Carlyle and Cardinal Capital Group.

18 For example, Centric Health (https://www.irishtimes.com/business/health-pharma/care-centre-group-centric-secures-50m-in-funding-1.3688761).

19 For example, McCauley Pharmacy Group (https://www.carlyle.com/media-room/news-release-archive/carlyle-cardinal-ireland-invests-sam-mccauley-chemists-limited).

20 For example, Affidea (https://www.affidea.com/media/news/affidea-becomes-part-of-groupe-bruxelles-lambert).

nurse staffing levels in years 2 and 3 after REIT investment (Braun et al., 2023), as operators 'appeared to replace more expensive and skilled (registered nurse) RN staffing with less expensive and skilled staff'. Small increases in nursing assistants were also observed (Braun et al., 2023).

Private equity funds' increasing participation in health and social care has also raised questions regarding incentive alignment between profits and resident outcomes (Offodile et al., 2021). These funds are attracted to LTRC, as it is a sector that is growing from ageing populations, funding is dominated by State provision, and the providers of care often hold a lot of influence in negotiating prices to provide care (Gupta et al., 2021). In recent years, the 5 per cent annual rental yields from LTRC in Europe (Aedifica, 2022) compares favourably to returns from other economic sectors. In other countries, such as in the UK, private equity funds increase market share by purchasing economically distressed LTRC homes, (Kotecha, 2019).

There is now increasing evidence from the US (Gupta et al., 2021), England (Patwardhan et al., 2022) and other countries that the introduction of private equity has changed the landscape of health and social care, and often results in poorer outcomes for residents. For instance, Gupta et al. (2021) show that private equity ownership increases the short-term mortality of Medicare LTRC residents by 10 per cent; while in England, private equity funded LTRC homes (and independently operated homes) have lower quality and regulatory compliance scores (Patwardhan et al., 2022). Other downstream effects have also been found, with purchases of LTRC homes by private equity funds associated with increased costs and use of emergency department and hospital care for ambulatory care sensitive conditions (Braun et al., 2021). There is less evidence that private equity funded LTRC homes had worse resident case and mortality rates during COVID-19 (Braun et al., 2020).

4.3 SUPPLY ACROSS OPERATOR GROUPS

This section examines the distribution of LTRC homes across operator groups in Ireland. Analysis focuses on the 558 LTRC homes registered with HIQA in December 2022. The analysis of supply across operators used information from a number of different information sources, including the HIQA Bed Register, LTRC home websites, owner and operator websites, media articles on LTRC home sales and acquisitions, and the CBRE. The authors also undertook engagement with a number of stakeholders in the sector for this analysis.

Table 4.1 provides an overview of the number of LTRC operators in Ireland. We estimate that there are 263 separate firms operating within the LTRC sector. Of these, the majority (226) are small independent operators who own and operate a

single LTRC home. The majority of these independent operators are voluntary or private for-profit. The average size of independently operated homes is 50 beds, and these 226 homes have 11,191 beds, which represents 35.3 per cent of all LTRC beds.

A small number of operators own and operate two separate LTRC homes. In most instances these homes are proximate in location, and in most respects these small operators are most similar to independent operators. The 32 homes operated by these 16 organisations have 1,789 beds which represent 6 per cent of LTRC beds, with average size of each home being 56 beds.

We estimate that there are six 'small' operators with between 3-4 separate LTRC homes. Once again, in most instances these homes are proximate in location. The 19 homes operated by these small operators have 1,206 beds which represents 3.8 per cent of LTRC beds, with average size of each home being 63 beds.

There are seven 'medium'-sized operators in Ireland with 5-9 LTRC homes. These operators provide 3,166 beds, representing 10 per cent of all beds, and the average size of these homes being 67 beds. One medium-sized operator is a voluntary organisation, with the remainder being private for-profit.

There are eight 'large' operators in Ireland, with 10+ LTRC homes each. These eight large operators have 8,805 beds in total, which represents 27.8 per cent of all beds, with average size of these homes being 76 beds. All of these large operators in Ireland are private for profit.

Finally, there are 118 public LTRC homes in Ireland, with the majority of these owned by the HSE.[21] Across these 118 homes, average bed size is only 47 beds, there are 5,571 beds representing 17.6 per cent of all LTRC beds.

[21] HSE includes LTRC homes and centres that are Section 38 agencies including Beaumont Hospital, Leopardstown Park Hospital, Our Lady's Hospice and Care Services, Peamount Healthcare, St James's Hospital, and the Royal Hospital Donnybrook.

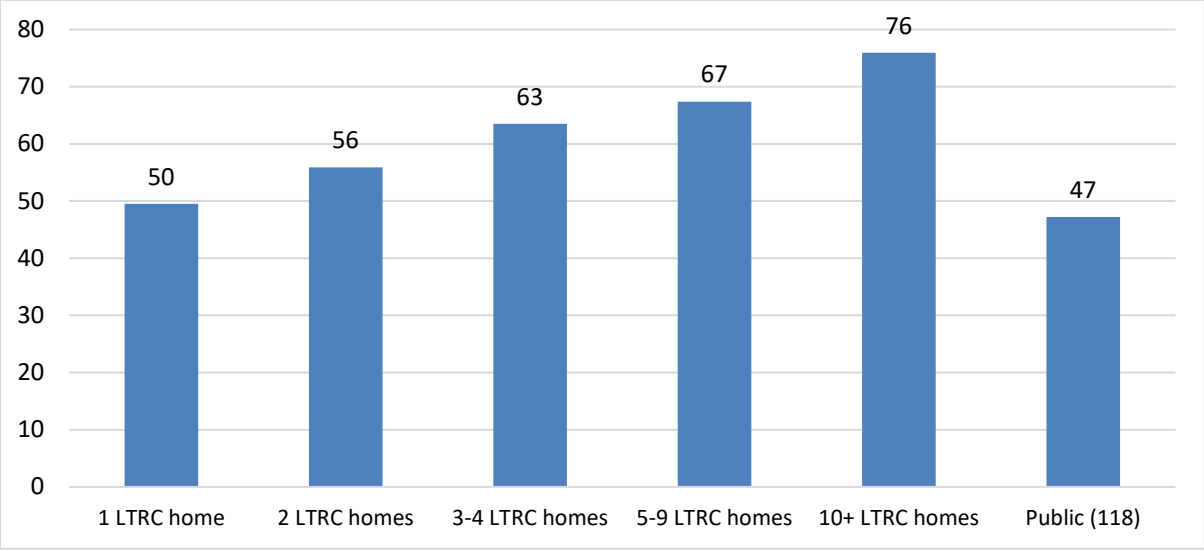
TABLE 4.1 LTRC HOME OPERATORS IN IRELAND, DECEMBER 2022

Number of LTRC Homes Operated	Number of Operators	Number of Voluntary Operators	Number of Private Operators	LTRC Homes	Mean Size	Total Beds	% Total Beds
1 LTRC home	226	44	182	226	50	11,191	35.3
2 LTRC homes	16	2	14	32	56	1,789	5.6
3-4 LTRC homes	6	2	4	19	63	1,206	3.8
5-9 LTRC homes	7	1	6	47	67	3,166	10.0
10+ LTRC homes	8	0	8	116	76	8,805	27.8
Public	-	-	-	118	47	5,571	17.6
Total	**263**			**558**		**31,728**	

Sources: HIQA Bed Register and authors' analysis of numerous other information sources.

Figure 4.1 illustrates the differences in LTRC home size (beds) across operator size. LTRC homes independently operated (i.e. operators only operate one LTRC home) have 50 beds on average, while larger operators' (10+ homes) homes have on average 76 beds in each LTRC home – over 50 per cent larger than independent LTRC homes. Some of this difference is due to the age of centres. Many LTRC homes within large operator groups were recently built or refurbished, while many independent LTRC homes tend to be older. Furthermore, the larger homes may reflect larger operators prioritising economies of scale.

FIGURE 4.1 AVERAGE LTRC HOME SIZE (BEDS) BY OWNERSHIP/OPERATOR SIZE, DECEMBER 2022



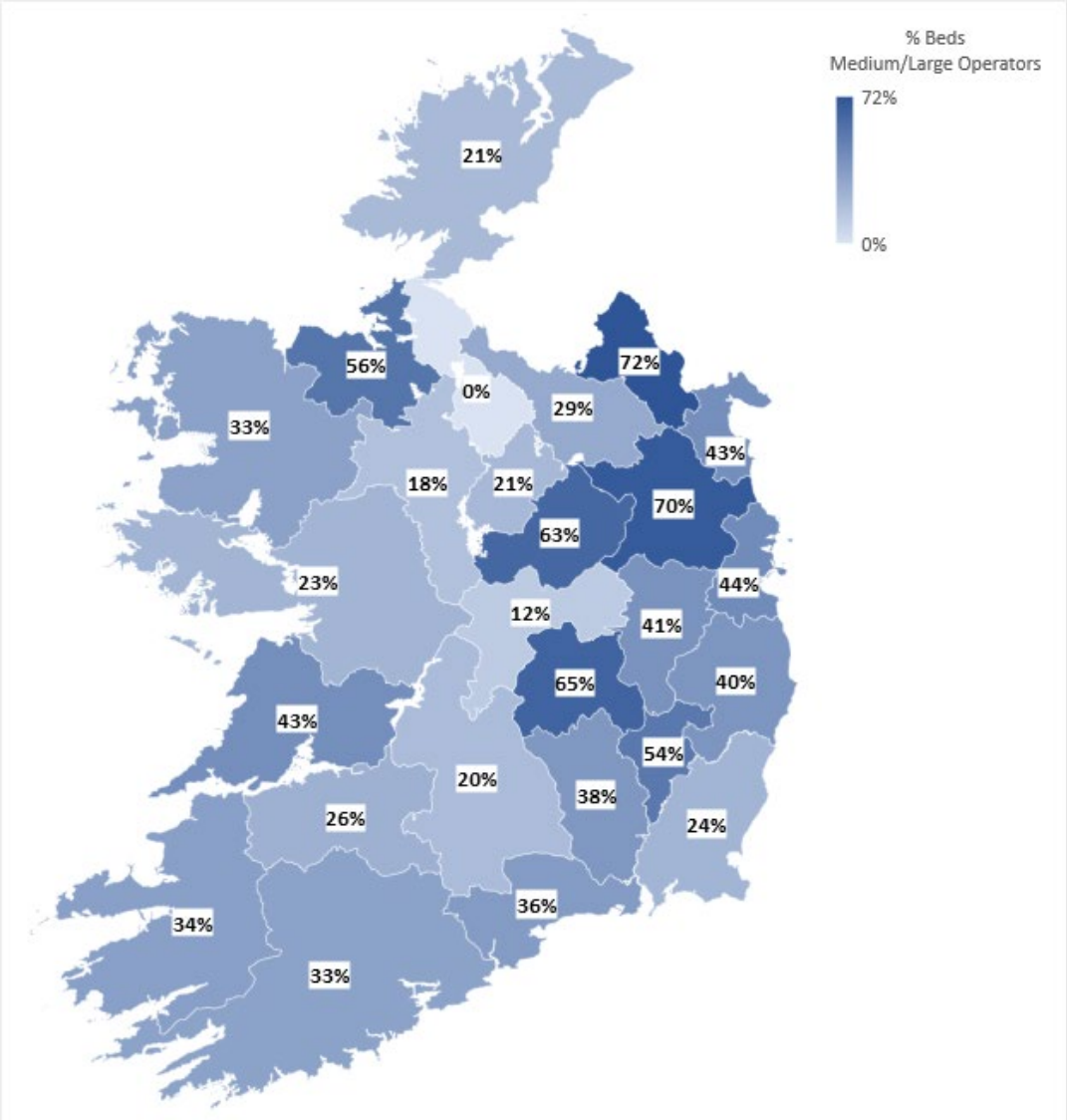
Source: HIQA Bed Register.

Figure 4.2 illustrates the percentage of LTRC homes that are operated by medium or large operators in each county. There are large differences across counties. In general, there is an East/West split, with medium/large groups being more common in counties including Monaghan (72 per cent), Meath (70 per cent), Laois

(65 per cent), Westmeath (63 per cent), Dublin (44 per cent) and Louth 43 per cent). Other counties such as Leitrim (0 per cent), Offaly (12 per cent) and Roscommon (18 per cent) have the lowest percentages of beds provided by medium/large operators.

Which counties are at a higher risk of continued LTRC home closures is potentially driven by the composition of the operators in that county. Those counties with more medium/large operators, where no small (<30 beds) homes exist, are at lower risk of continued closures of smaller homes. Counties where the HSE and independent voluntary and private homes are most prevalent are likely to be at higher risk based on trends up to December 2022.

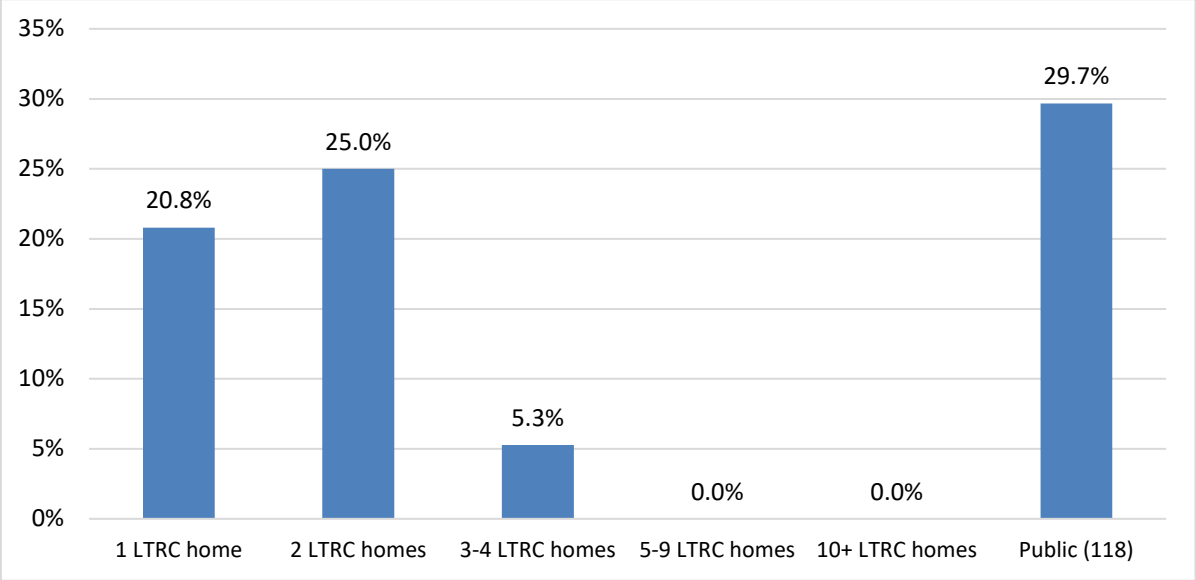
FIGURE 4.2 PERCENTAGE OF LTRC BEDS IN MEDIUM (5-9 HOMES) AND LARGE (10+ HOMES) OWNERSHIP/OPERATOR GROUP HOMES IN COUNTIES IN IRELAND, DECEMBER 2022



Source: HIQA Bed Register.
Note: National Average = 38 per cent.

There is a clear linear relationship between operator size and average LTRC home size as highlighted in Figure 4.1. Figure 4.3 shows that 20.8 per cent of independently operated LTRC homes, 25 per cent of homes in groups that operate two homes, and 29.7 per cent of HSE homes have 30 beds or less. However, amongst medium and large owner/operator groups, there are no smaller homes.

FIGURE 4.3 PERCENTAGE OF LTRC HOMES WITH <30 BEDS BY OWNERSHIP/OPERATOR SIZE, DECEMBER 2022



Source: HIQA Bed Register and authors' analysis.

4.4 CONCLUSION

Since the onset of COVID-19, there have been significant changes in who owns and operates LTRC homes in Ireland. In addition to the supply changes discussed in the previous chapter, there has been a significant increase in medium and larger operators. By the end of 2022, over 11,000 LTRC beds in Ireland were located in LTRC homes linked to 15 medium/large private equity funded operators. This equates to 37 per cent of all LTRC beds. Nevertheless, the distribution of these homes is not regionally uniform, with counties like Monaghan, Meath and Laois housing more than two-thirds of beds within such facilities.

Despite this shift towards larger operators in Ireland, as shown in the preceding chapter, independent and small operators remain the dominant form of LTRC owners and providers. While independent LTRC homes closing may impact local areas, a closure by a large provider will have widespread implications, including the need for the State, or international bodies, to step in and take over care. The largest provider of LTRC beds in Ireland has effectively been nationalised.[22] In 2023,

[22] https://www.la-croix.com/France/Affaire-Orpea-scandale-nationalisation-5-etapes-2023-02-01-1201253295.

Orpea came under the control of the *Caisse des dépôts et consignations* (CDC), the French state's investment fund. This decision followed an investigation in France, highlighting widespread concerns within many LTRC homes, including poor quality of care for residents across LTRC homes. However, it is expected that the influence of larger operators will continue to grow, while smaller independently owned and operated LTRC homes face the risk of closures.

CHAPTER 5

COVID-19 outbreaks in LTRC settings in Ireland, March 2020 – March 2021

5.1 INTRODUCTION

The LTRC sector was at the centre of the COVID-19 pandemic in Ireland and internationally. COVID-19 deaths among LTRC residents accounted for over half of all COVID-19 deaths in many counties (Comas-Herrera et al., 2021). Over half of all COVID-19 deaths across the first three waves of the pandemic in Ireland were linked to outbreaks in LTRC (HIQA and HPSC, 2022).

A limited number of studies have investigated the effects of COVID-19 on LTRC in Ireland (Kennelly et al., 2020; Pierce et al., 2020; Hurley et al., 2021; HIQA and HPSC, 2022; Martin et al., 2022; Walsh et al., 2023). Each of these studies has emphasised the disproportionate impact of COVID-19 on the LTRC sector, as well as the challenges of preparing the system to mitigate its effects. One study by Martin et al. (2022) outlined recommendations by the Irish Society of Physicians in Geriatric Medicine (ISPGM) to make the sector more resilient to COVID-19 and infectious diseases. The authors identified improvements in governance structures, increases in staffing levels, and better infection and control environments within LTRC homes as recommendation to improve LTRC home resilience. Many of these recommendations have been echoed in other analysis undertaken (Kennelly et al., 2020; Pierce et al., 2020; Hurley et al., 2021; HIQA and HPSC, 2022; Martin et al., 2022; Walsh et al., 2023).

The HPSC and HIQA collaborated on research that examined the factors associated with COVID-19 outbreaks in LTRC across the first three waves of the pandemic (HIQA and HPSC, 2022). Overall, the authors found that location and size of home (as measured by number of beds) were key factors associated with the probability of an outbreak. Having higher community COVID-19 rates and being located in the proximity of other homes with an outbreak were found to increase the likelihood of an outbreak. These associations were found to be consistent across waves.

A large international literature has identified a number of factors associated with COVID-19 outbreaks in LTRC settings including facility size, form of ownership and community rates of COVID-19 (Frazer et al., 2021a; Konetzka et al., 2021). Larger LTRC homes (Konetzka et al., 2021; Aalto et al., 2022) and homes with higher rates of occupancy (Dutey-Magni et al., 2021; Torres et al., 2022) have been found to have had more COVID-19 outbreaks and higher COVID-19 mortality rates. While outbreak probability increased with facility size, higher nurse-resident ratios were

shown to ameliorate COVID-19 infection spread once it entered a facility (Figueroa et al., 2020; Dutey-Magni et al., 2021).

Another strand of literature has examined whether LTRC ownership, specifically for-profit status, is associated with worse COVID-19 outcomes, with somewhat mixed results. Evidence from the UK found that excess deaths per bed were much higher in not-for-profit LTRC homes (Morciano et al., 2021). However, in countries such as Canada, for-profit providers had higher rates of cases, longer outbreak length, and higher mortality compared to not-for-profit homes (Stall et al., 2020). Reviewing the literature, studies noted that, while in general for-profit status may be correlated with higher rates of LTRC COVID-19 outbreaks and mortality (Bach-Mortensen et al., 2021), this association was attenuated when other factors such as LTRC home size, resident casemix, staff shortages and especially community COVID-19 rates were controlled for (Kruse et al., 2021).

High rates of COVID-19 in the community where LTRC homes are located is arguably the largest predictor of outbreaks and severity of outbreaks within LTRC (Aalto et al., 2022). Across a range of countries, COVID-19 incidence rates in communities surrounding LTRC homes (Brown et al., 2020; Stall et al., 2020; White et al., 2020; Shallcross et al., 2021; HIQA and HPSC, 2022), or communities where LTRC staff reside (Shen, 2022), was the most significant risk factor for LTRC home outbreaks. Previous research into LTRC outbreaks also argued that studies that failed to control for community COVID-19 rates were likely confounded (Konetzka et al., 2021).

The aim of the analysis in this chapter is to examine the factors associated with COVID-19 outbreaks and outbreak severity in LTRC homes in Ireland.

5.2 COVID-19 OUTBREAK VARIABLES

We combined information from the HIQA Bed Register and HPSC COVID-19 dataset (detailed in Chapter 2) to examine COVID-19 outbreaks in LTRC care across the first three waves of the COVID-19 pandemic (March 2020 – March 2021). The analysis focuses on resident cases and deaths.[23] We include all 572 LTRC homes registered with HIQA across the full period of study.

The HPSC defined an outbreak as either two or more laboratory-confirmed cases of COVID-19, irrespective of symptomatic presentation, or two or more illness cases with symptoms consistent with COVID-19 infection where at least one person is a confirmed case. Related work by Walsh et al. (2023) also used HIQA Bed

[23] The HPSC data include confirmed COVID-19 cases for healthcare workers also.

Register and HPSC COVID-19 datasets to examine COVID-19 outbreaks in LTRC. They examined the probability of a COVID-19 outbreak as well as other outcomes including the severity of an outbreak (percentage of residents infected and COVID-19 death rates). That analysis provides an in-depth examination of the factors associated with COVID-19 outbreaks and deaths in LTRC care homes. We focus on the probability of a COVID-19 outbreak in analysis in this chapter and the geographical variation in LTRC home COVID-19 outbreaks.

We examine the probability of a COVID-19 outbreak in a LTRC home, considering various LTRC home-level factors. We created a binary variable that indicated whether an outbreak started in a LTRC home for each day during the study period (1 March 2020 – 31 March 2021), following the method of Walsh et al. (2023). The outbreak variable follows the HPSC's definition of an outbreak as either two or more laboratory-confirmed cases of COVID-19, irrespective of symptomatic presentation, or two or more illness cases with symptoms consistent with COVID-19 infection where at least one person is a confirmed case. Days on which an outbreak was already ongoing were excluded from the analysis. Undertaking analyses at the LTRC home-day level provided us with 208,123 observations (572 homes across 396 days, minus days with an open outbreak). Logistic regressions were estimated:

$$\Pr(Outbreak)_{h,d} = \beta_0 + \beta_1 OwnerType_h + \beta_2 CovidRates_{h,d-7:d-1} + \beta_3 Homesize_h + \beta_5 Z_{h,d} + W + County + \varepsilon_{h,d}, \quad (5.1)$$

where $\Pr(Outbreak)_{hd}$ is the probability of a COVID-19 outbreak in LTRC home *h* beginning on day *d*. $OwnerType_h$ captures whether the LTRC home is public, voluntary, or private (for-profit).

A key explanatory variable of interest in this analysis is community COVID-19 rates (daily COVID-19 cases per 10,000 people) within the county where the LTRC home is located, excluding cases related to outbreaks in long-term care facilities. Previous evidence suggests that LTRC home outbreaks typically lag outbreaks within the surrounding communities (Malikov et al., 2021) and studies that failed to control for community COVID-19 rates were likely confounded (Konetzka et al., 2021). Our measure is affected by COVID-19 testing availability and guidance, which varied across counties and over time. To address these issues, we developed community-level COVID-19 variables for each wave, and further split this variable into quintiles. This approach allowed analyses of relative variations in community COVID-19 rates within each wave. Our measure, $CovidRates_{h,d-7:d-1}$, accounts for the average community COVID-19 rates seven days prior to a potential outbreak following the approach taken by Walsh et al. (2023). This measure is included in both linear and squared forms in our regressions.

$Homesize_h$captures the maximum bed occupancy of the LTRC home (<40 beds, 40-59 beds, 60+ beds). $Z_{h,d}$ is a vector of other LTRC home level characteristics (e.g. average NHSS payments). Due to the significant temporal fluctuations in COVID-19, such as advancements in the prevention and treatment of COVID-19, readiness of LTRC homes, COVID-19 variant changes, and vaccination availability, as well as geographic variation in COVID-19 incidence rates at the end of the period of study, Wave (W) and $County$ fixed effects were incorporated. Standard errors are clustered at the LTRC home level. Results are presented as odds ratios.

5.3 LTRC HOME COVID-19 OUTBREAK RESULTS

Table 5.1 provides an overview of COVID-19 outbreaks in LTRC between March 2020 and March 2021. Sixty-five per cent of all LTRC homes had at least one COVID-19 outbreak in the first year of the pandemic, with 545 separate outbreaks reported overall. Wave 1 saw the highest percentage of homes with an outbreak. There were 8,502 confirmed COVID-19 cases and 2,107 COVID-19 deaths among LTRC residents.

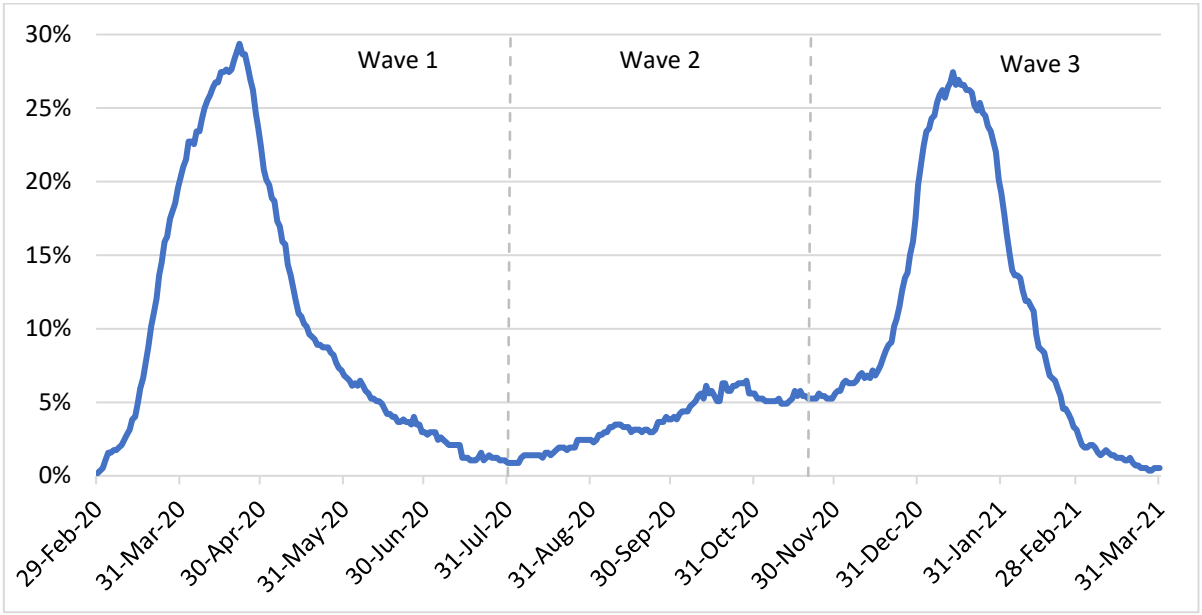
TABLE 5.1 DESCRIPTIVE STATISTICS OF LTRC COVID-19 OUTBREAKS, 1 MARCH 2020 – 31 MARCH 2021

	All	Public	Vol/Private
Outbreaks (n)	545	106	439
Outbreaks Wave 1 (01/03/2020 – 01/08/2020)	238	45	193
Outbreaks Wave 2 (02/08/2020 – 21/11/2020)	87	20	67
Outbreaks Wave 3 (22/11/2020 – 31/03/2021)	220	41	179
Outbreaks (%)	64.9%	65.5%	64.7%
Outbreak Wave1	44.2%	42.5%	44.7%
Outbreak Wave2	7.2%	10.6%	6.3%
Outbreak Wave3	32.0%	32.7%	31.8%
Resident Cases	8,502	1,291	7,211
Resident Deaths	2,107	296	1,811

Source: HIQA Bed Register and HPSC COVID-19 data.

Figure 5.1 plots the percentage of LTRC homes with an open COVID-19 outbreak between March 2020 and March 2021. Over 25 per cent of all homes reported an open outbreak at the height of both Wave 1 and Wave 3. At the end of Wave 3, as the vaccination scheme was rolled out to LTRC home residents (end December 2020), the percentage of LTRC home outbreaks reduced considerably. This finding follows previous evidence showing the effectiveness of the COVID-19 vaccination in reducing COVID-19 rates in LTRC, especially during 2021 (HIQA and HPSC, 2022).

FIGURE 5.1 LTRC HOMES WITH AN OPEN COVID-19 OUTBREAKS, MARCH 2020 – MARCH 2021

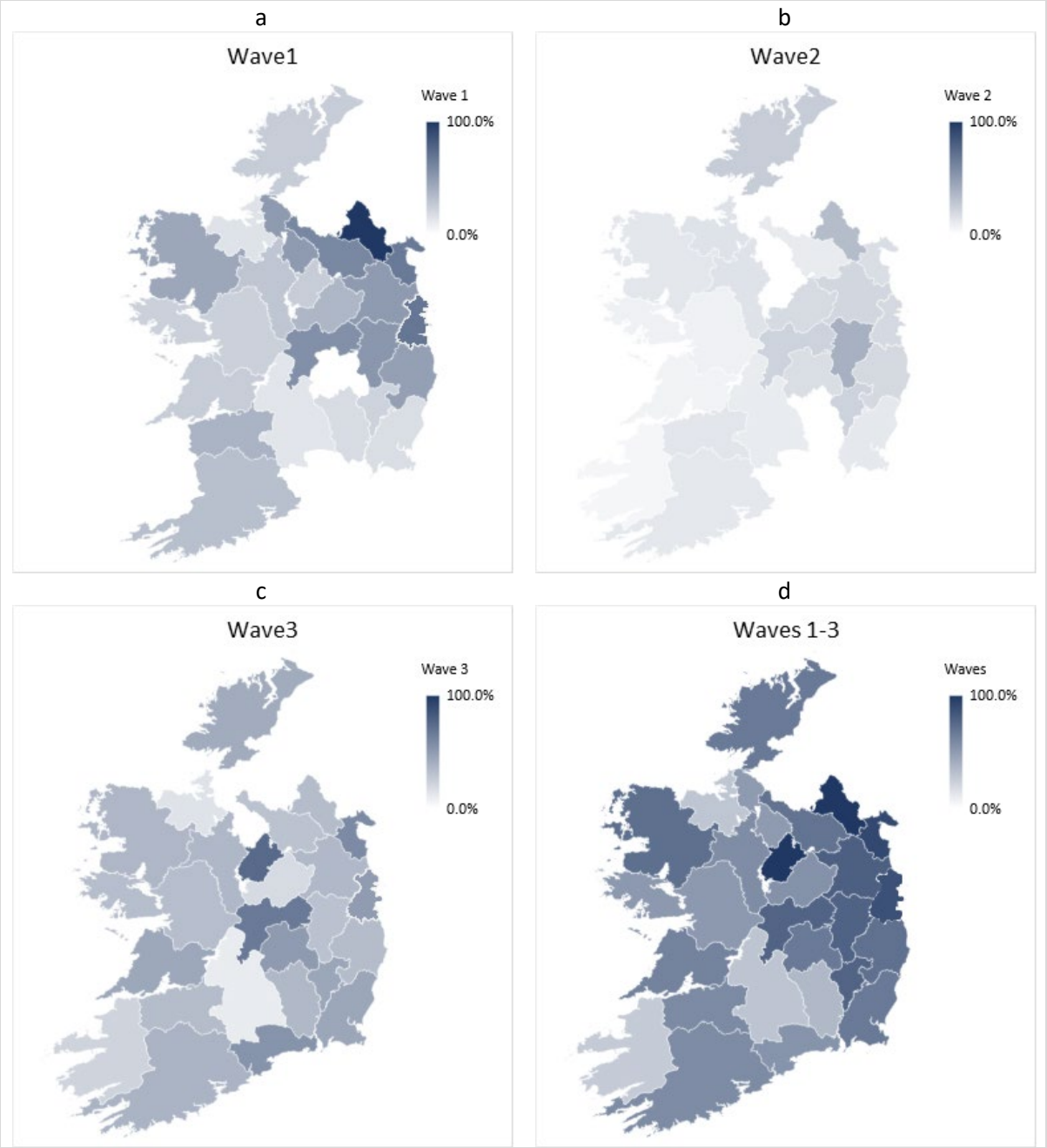


Source: HIQA Bed Register and HPSC COVID-19 data.

Figure 5.2 plots the percentage of LTRC homes with a COVID-19 outbreak in each wave by county. In Wave 1, clear geographic difference emerges with a larger percentage of LTRC homes in the East and in Border counties reporting a COVID-19 outbreak. All LTRC homes in Monaghan reported an outbreak, while in Louth, Dublin, and Cavan, over 60 per cent of homes reported an outbreak. No LTRC home in Kerry, Laois or Waterford reported a COVID-19 outbreak in Wave 1. The observed geographic variation in outbreaks across LTRC homes closely mirrored the variance in community COVID-19 rates.

In Wave 2, a small percentage of LTRC homes reported an outbreak, while Wave 3 saw a large percentage of LTRC homes experiencing an outbreak. All counties (except Leitrim) had outbreaks. Longford (75 per cent) and Offaly (67 per cent) had the highest percentage of homes with a reported outbreak. Less geographical variation was observed in Wave 3 compared to Wave 1, again in line with community COVID-19 rates. Examining Waves 1-3 together, a geographical variation is discernible, but this is mainly driven by the variation that occurred in Wave 1.

FIGURE 5.2 PERCENTAGE OF LTRC HOMES BY COUNTY WITH AN OUTBREAK IN WAVE 1, WAVE 2, WAVE 3 AND WAVES 1-3, 28 FEBRUARY 2020 – 31 MARCH 2021



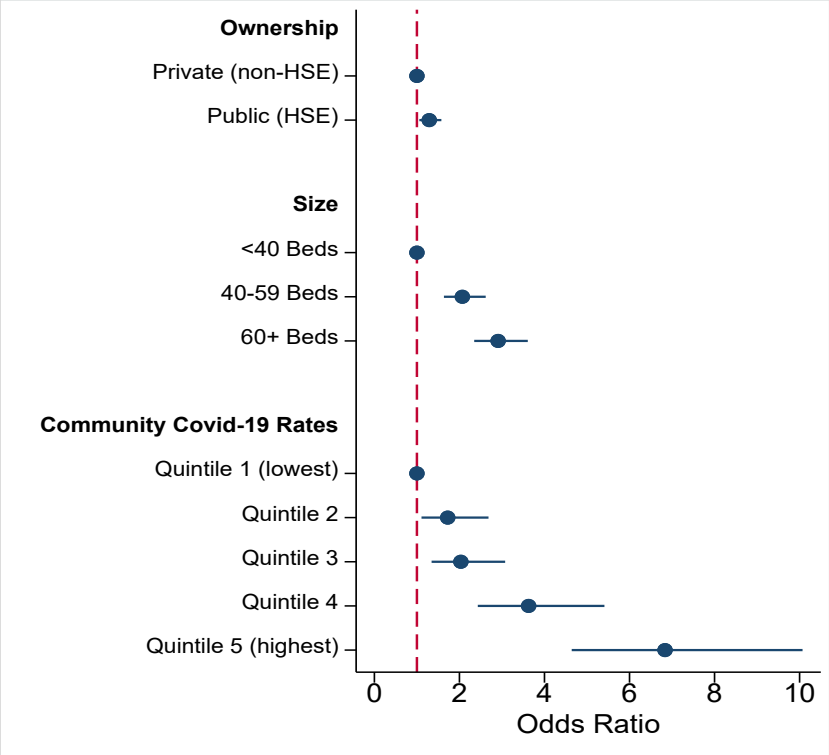
Source: HIQA Bed Register and HPSC COVID-19 data.

5.4 LTRC HOME CHARACTERISTICS AND COVID-19 OUTBREAKS

Figure 5.3 presents results on LTRC factors associated with LTRC home COVID-19 outbreaks – also highlighted in Walsh et al. (2023). No difference in the probability of an outbreak was observed between public and voluntary/private LTRC homes. Larger LTRC homes were over 3.5 times more likely to have a COVID-19 outbreak compared to smaller homes. The evidence shows that being located within a county with high community COVID-19 rates was the largest determinant of a COVID-19 outbreak. LTRC homes located in the highest quintile of community

COVID-19 rates were 6.8 times more likely to have an outbreak than homes in the lowest quintile.

FIGURE 5.3 DETERMINANTS OF LTRC COVID-19 OUTBREAKS, 1 MARCH 2020 – 31 MARCH 2021



Source: HIQA Bed Register and HPSC COVID-19 data.
Note: Odds ratios with 95 per cent confidence intervals following a logistic regression at the LTRC home-day level (n=208,123); Community COVID-19 rates represent average cases per 10,000 population in preceding seven days in county where LTRC home is located; LTRC homes removed from analysis if experiencing an open outbreak. Standard errors clustered at the LTRC home level. Red dotted line equates to an odds ratio of 1, or reference line. A full table of results can be found in Walsh et al. (2023).

5.5 COVID-19 OUTBREAKS AND LTRC HOME CLOSURES

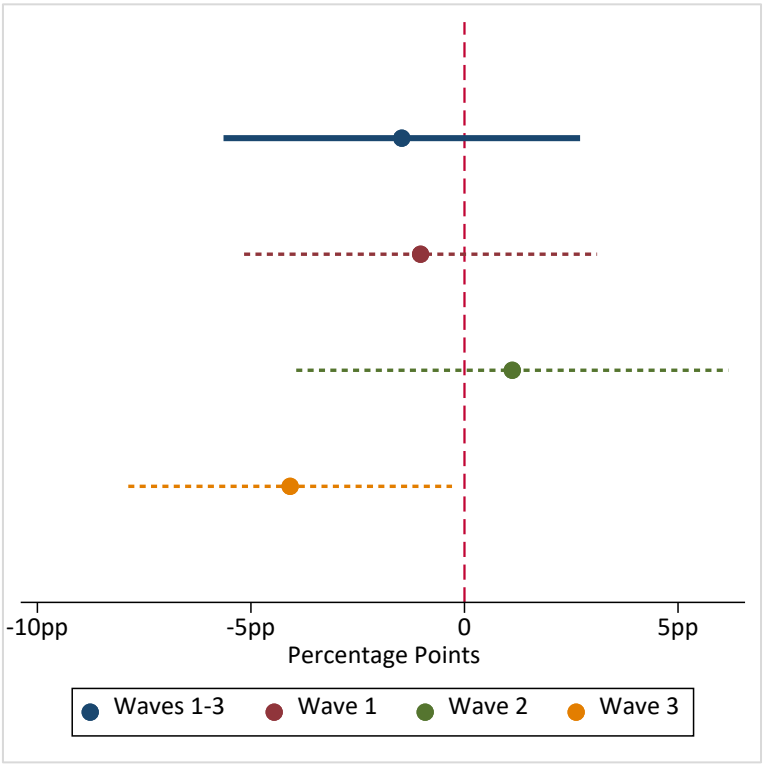
In the previous chapter we identified a number of LTRC closures since the onset of the COVID-19 pandemic. Generally, LTRC homes that closed were predominantly smaller independently owned and operated LTRC homes. The factors influencing the decision to close are likely multifaceted. However, it is possible that COVID-19 outbreaks were one of these factors. In this section, we seek to shed some light on whether LTRC closures were related to COVID-19 outbreaks. Using a linear regression and controlling for a range of LTRC home characteristics,[24] we examine whether having a COVID-19 outbreak between March 2020 and March 2021, and across each wave, is related with LTRC home closures across the March 2020 – December 2022 period.

[24] Control variables include LTRC home ownership (public, voluntary or for-profit private), size, and county.

Figure 5.4 presents results on the association between LTRC home closures and COVID-19 outbreaks. The regression analysis finds having a COVID-19 outbreak was not associated with a LTRC home closing. In most cases the point estimate was negative, and results show that having an outbreak in Wave 3 may have actually reduced the probability of closure. However, this is likely due to a small number of LTRC homes having effectively closed by November 2020, when Wave 3 began.

While we do not place any causal inference on these results, they do suggest that having a COVID-19 outbreak may not have been a key factor underpinning a LTRC home's decision to cease operating.

FIGURE 5.4 LTRC HOME CLOSURES AND COVID-19 OUTBREAKS, MARCH 2020 – DECEMBER 2022



Source: HIQA Bed Register and HPSC COVID-19 data.
Note: Percentage point differences with 95 per cent confidence intervals following linear regression at the LTRC home level (n=572). Regression controls for LTRC home size, ownership type, and county. Standard errors clustered at the LTRC home level. Red dotted line equates to zero.

5.6 CONCLUSION

COVID-19 had detrimental effects on LTRC residents in Ireland. In the first year of the pandemic, there were over 8,500 confirmed COVID-19 cases among residents and over 2,100 residents died from COVID-19. Two-thirds of all LTRC homes reported COVID-19 outbreaks.

The chapter's analysis demonstrates significant geographical disparities in COVID-19 outbreaks within LTRC homes, particularly during Wave 1. The regions that experienced the most significant outbreaks in Wave 1 were those located in Eastern and Border counties and the observed geographic variation closely mirrored the variance in community COVID-19 rates. Moreover, this finding reinforces the analysis in Figure 5.2 that indicates LTRC homes situated in counties with the highest COVID-19 community rates were seven times more likely to have an outbreak compared to LTRC homes located in counties with the lowest community rates. The key factor found to be associated with LTRC COVID-19 outbreaks was the level of the virus circulating in the local community. These results follow similar findings in Ireland (HIQA and HPSC, 2022) and internationally (Brown et al., 2020; Stall et al., 2020; White et al., 2020; Shallcross et al., 2021; Aalto et al., 2022). As highlighted in Walsh et al. (2023), counties with higher outbreak rates also saw disproportionately high COVID-19 mortality.

There was no evidence that public or voluntary/private LTRC homes had a disproportionately higher probability of COVID-19 outbreaks. However, in keeping with the international evidence, we did find that larger LTRC homes were much more likely to have had an outbreak (Konetzka et al., 2021; Aalto et al., 2022). Previous research has argued that larger LTRC homes require more staff, and staff mix with a larger number of residents compared to smaller LTRCs (Emmerson et al., 2021), while the authors argue that larger LTRC homes may rely more on agency staff, or have staff working across multiple homes within an operator a group. These factors present increased opportunities to transmit COVID-19 to LTRC homes (Emmerson et al., 2021). Research from the US has also shown that COVID-19 rates in communities where LTRC staff reside, even after controlling for community rates surrounding a LTRC home's location, are strongly associated with a larger probability of a COVID-19 outbreak (Shen, 2022).

Using more detailed analysis, Walsh et al. (2023) found an interaction between LTRC home size and community COVID-19 rates, with larger LTRC homes most impacted by high rates of COVID-19 in the local community. In that study, estimates show that the daily probability of a COVID-19 outbreak in a large LTRC home in counties where community COVID-19 rates were highest was 0.9 per cent, compared to 0.3 per cent in the smallest LTRC homes in such counties. We were unable to examine COVID-19 outbreaks across operator groups.

The data on ownership and operator groups included in Chapter 4 are based on a particular point in time, December 2022. During the February 2020 – December 2022 period, there were a number of acquisitions of LTRC homes by operators. However, we were unable to ascertain the exact time period where a LTRC changed ownership or came under the control of an operator group. This prevented us

examining how COVID-19 outbreaks differed across private LTRC homes within different operator groups.

Previous literature does point to other vital measures such as national 'lockdowns', visiting restrictions and the provision of personal protective equipment (PPE) and infection control procedures reducing the impact of COVID-19 on LTRC. The most vital of these was the introduction of COVID-19 vaccination programmes. Data on these other factors were not available for this analysis. However, HIQA and HPSC (2022) find that vaccination of LTRC home residents reduced the probability of an outbreak by 70 per cent (analysis undertaken up to May 2021).

Finally, the analysis in this chapter highlighted that while COVID-19 clearly impacted the viability and sustainability of LTRC homes more generally, homes that experienced LTRC outbreaks did not necessarily see higher rates of closure. This is an important finding, as there is no evidence that having been directly impacted by a COVID-19 outbreak was one of the factors that underpinned closure. Based upon evidence shown in Figure 5.3, and outlined in detail in Walsh et al. (2023), larger LTRC homes were more likely to have a COVID-19 outbreak. However, Table 3.2 highlighted that the majority of LTRC homes that closed during this period were smaller homes (<30 beds). These two factors may explain the lack of an association between outbreaks and closures.

CHAPTER 6

Long-term residential care funding

6.1 INTRODUCTION

One of the key facets of a sustainable LTRC sector relates to funding. This chapter provides an overview of LTRC funding in Ireland. The chapter details the main funding options within LTRC, namely the NHSS, and the TAPS which was established on a temporary basis. The chapter provides evidence on how NHSS payments and TAPS payments differ across LTRC homes. The chapter also presents analysis on TAPS, including its use and the extent to which it was associated with COVID-19 outbreaks.

6.2 OVERVIEW OF FUNDING

LTRC in Ireland is primarily funded by the State, with the predominant funding mechanism being the NHSS, also known as the 'Fair Deal' scheme. The NHSS provides financial support to help with the cost of care for LTRC home residents. Residents also contribute a proportion of their income and assets. Currently, (single) residents contribute 80 per cent of their assessable income, and 7.5 per cent of their assets (first €36,000 assets are exempt) per annum, for the first three years of their LTRC.[25] However, a number of other residents' categories exist, all of which use different forms of funding.

Table 6.1 provides details on the main funding categories of LTRC residents in Ireland, and the number of residents and cost/expenditure of each category in 2019, prior to the COVID-19 pandemic. Table 6.1 shows that in 2019, there were almost 32,000 LTRC residents in Ireland, with the majority of them aged 65 years and older. NHSS-funded residents represented 73 per cent of LTRC residents. In addition, an estimated 12 per cent of LTRC residents funded their care privately.

It is estimated that in 2019, total expenditure on LTRC was €1.96 billion, the NHSS accounting for the majority, €1.42 billion, of this spend (Walsh et al., 2021). The average cost of an LTRC bed was €61,209 per annum (€1,177 weekly) across all bed and financing categories.

[25] https://www2.hse.ie/services/schemes-allowances/fair-deal-scheme/financial-assessment/.

TABLE 6.1 LONG-TERM RESIDENTIAL CARE RESIDENT CATEGORIES, 2019

Category	Funding	Residents N	Residents aged 65+ N	Annual cost of bed €	Expenditure €m
NHSS long-stay residents	Public and Private	23,307	22,033	61,021	1,422.2
Publicly financed long-stay residents under legacy schemes	Public	470	418	61,021	28.7
Privately financed long and short-stay residents	Private	3,815	3,632	54,163	206.6
Publicly financed short-stay residents	Public	4,374	4,134	68,378	299.1
Total	-	**31,966**	**30,217[a]**	**61,209**	**1,956.6**

Source: Walsh et al., 2021. Analysis based on HSE and NHI data.
Note: [a] This equates to 4.3 per cent of the population aged 65 years and older in 2019.

6.3 NURSING HOME SUPPORT SCHEME (NHSS)

The NHSS is managed by the HSE, however the contract for the bed and care provided to a resident is between the LTRC home and the resident. The National Treatment Purchase Fund (NTPF) determines the cost of a bed in voluntary/private LTRC homes on a home-by-home basis.

Under the NHSS, residents contribute 80 per cent of their income and 7.5 per cent of their assets towards the cost of care, while the government covers the remaining expenses. The financial assessment excludes the first €36,000 of assets (or €72,000 for couples). The resident contribution can be deferred through the 'Nursing Home Loan', and the principal residence (and farm and business, if applicable) is only included in the financial assessment for the first three years of a person's time in care. In 2019, the total expenditure on the NHSS was €1.42 billion, and the State contributed €994.1 million to the scheme, corresponding to approximately 70 per cent of the cost of the scheme (Walsh et al., 2021).

Although a care needs assessment is carried out by a health professional for NHSS applicants, the current NHSS funding system does not consider the level of dependency of residents. Rather, the care needs assessment determines whether an individual is eligible (or not) for the NHSS scheme. This lack of resident-centred funding may result in inadequate funding for residents with high levels of dependency. Additionally, the NHSS does not provide extra funding for cognitive impairments, such as dementia, despite regulatory standards set by HIQA for the care of residents with dementia in LTRC homes. This separation between residents' care needs and financing provided to LTRC homes is a problematic feature of the current funding system.

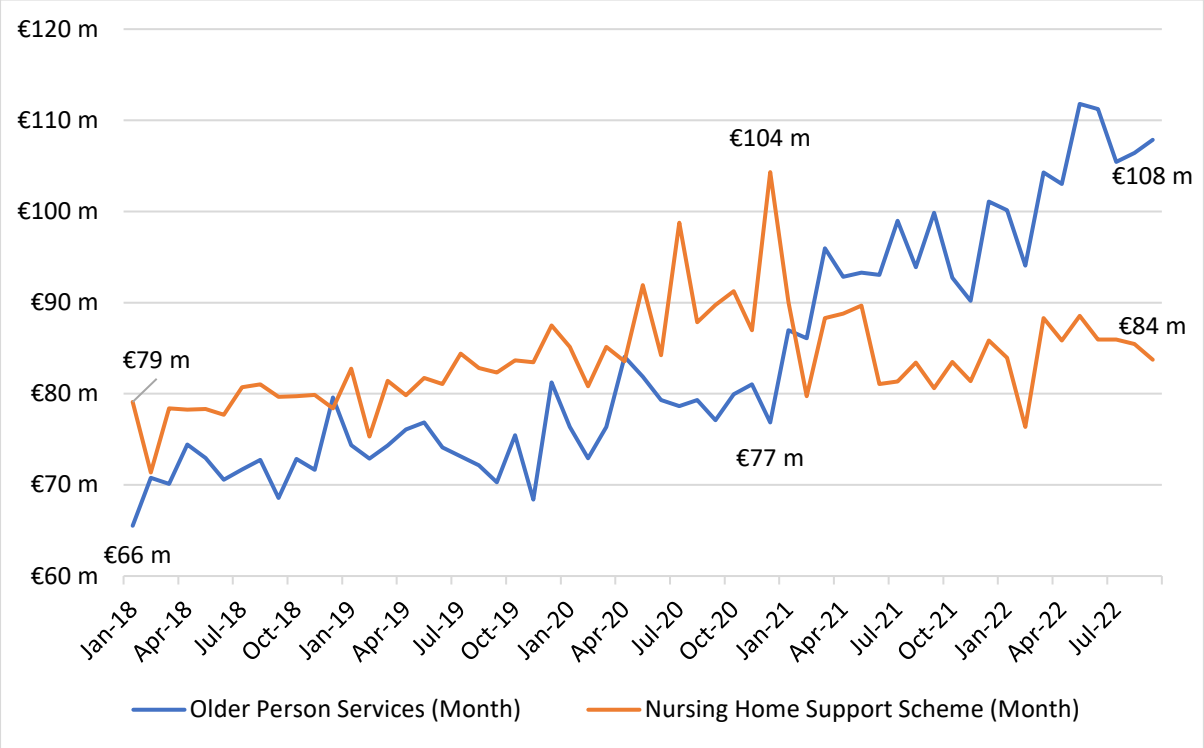
The NTPF has no role in negotiating NHSS prices for public LTRC homes, which are determined by the HSE. But the NTPF are the body responsible for NHSS payments made to voluntary and private LTRC homes. According to a 2021 review of the pricing system of the NHSS (NTPF, 2021), the NTPF bases the prices provided for a NHSS bed on four criteria:

- Costs reasonably and prudently incurred by the nursing home and evidence of value for money;
- Price(s) previously charged;
- The local market price;
- Budgetary constraints and the obligation on the State to use available resources in the most beneficial, effective and efficient manner to improve, promote and protect the health and welfare of the public (NTPF, 2021).

The NTPF uses a county-level benchmark ('local market price') as one of its four pricing criteria when determining payments to LTRC homes. This results in a low level of within-county variation once the public/private nature of LTRC homes are accounted for. This county benchmarking is also used when determining the price paid to new LTRC homes and operators entering into NHSS agreements (NTPF, 2021).

The level of funding for LTRC has changed considerably since the onset of the COVID-19 pandemic. Recent changes in the model of care for older people has seen an increase in funding for home support (Health Service Executive, 2022). In addition, the COVID-19 pandemic has seen an increase in non-residential care, and a levelling-off of spending on residential care. Using information from the HSE's Performance Assurance Reports, published quarterly, Figure 6.1 shows there has been a redistribution of HSE funding for Older Persons' care away from the NHSS. In 2018, the majority of expenditure on the HSE Older Persons' budget was spent on the NHSS (€943 million), compared to €861 million for other Older Persons' (primarily home support) care. At a monthly level, in January 2018, €66 million was spent on Older Persons' services by the State, compared to €79 million spent on the NHSS. By January 2020, expenditure increased to €77 million on Older Persons' services and €104 million on the NHSS. A sharp drop in NHSS funding coincided with the onset of the COVID-19 pandemic. Since then, Older Persons' services expenditure increased at an accelerated rate, while NHSS spending reduced considerably and plateaued. As of September 2022 (the latest figures available at the time of writing), the State spent €108 million on Older Persons' services, compared to €84 million spent on the NHSS.

FIGURE 6.1 HSE OLDER PERSONS' BUDGETS, JANUARY 2018 – SEPTEMBER 2022



Source: HSE's Performance Assurance Reports.

While seldom discussed, not all LTRC homes have contracts with the NTPF to provide care under the NHSS. Box 6.1 outlines in more detail those LTRC homes not included in the NHSS, and how they differ from NHSS-funded homes.

BOX 6.1 LTRC HOMES NOT FUNDED VIA THE NHSS

There is no comprehensive list of nursing homes in Ireland that are not funded by the NHSS. Therefore, this report compared all LTRC homes listed as funded by the NHSS and compared that list to the LTRC homes registered with HIQA in December 2022, allowing us to compile a list of LTRC homes that are registered with HIQA to provide care to older people, but who are not listed as receiving funding from the NHSS. Out of the 558 LTRC homes registered with HIQA in December 2022, 541 were listed by the NTPF as providing care under the NHSS, with one in practice being fully privately funded (see notes below). All private (for-profit) LTRC homes registered with HIQA provide care under the NHSS.

The Table below lists the LTRC homes not included in the NHSS. These 17 LTRC homes have 493 beds (1.6 per cent of total bed capacity), tend to be owned and operated by voluntary organisations, and are based predominantly in four counties (Kilkenny, Tipperary, Waterford and Carlow). The average size of non-NHSS LTRC homes is 29 beds, compared to 57.7 beds for NHSS funded LTRC homes. Many of these LTRC homes provide shorter-term care, or step-down facilities.

The list highlights the diversity in Older Persons' service provision across counties in Ireland and available services are often based upon local factors and dependent upon how the services have evolved in different ways through time. For example, of the 16 LTRC homes based in Kilkenny, six are not funded under the NHSS.

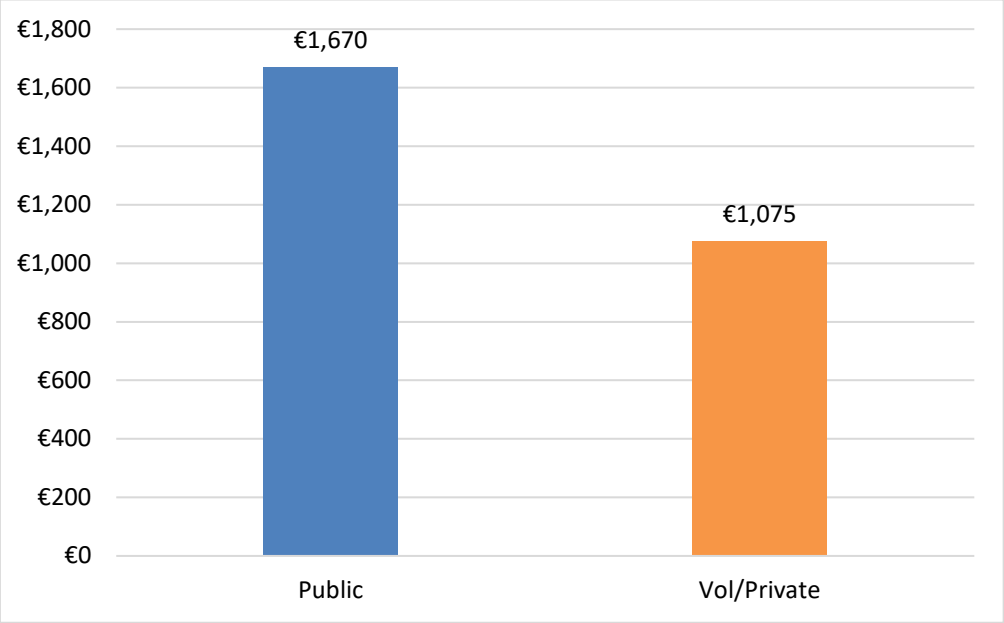
County	LTRC home title	Owner Type
Carlow	St Fiacc's House	Voluntary
Carlow	St Lazerian's House	Voluntary
Cork	Unit 1, St Stephen's Hospital	Public
Dublin	Cherryfield Housing with Care	Voluntary
Dublin	Mount Carmel Community Hospital (Short Stay Beds)	Public*
Kilkenny	Gahan House	Voluntary
Kilkenny	Mount Carmel Supported Care Home	Voluntary
Kilkenny	O'Gorman Home	Voluntary
Kilkenny	Prague House	Voluntary
Kilkenny	Rosedale Residential Home	Voluntary
Kilkenny	St Joseph's Supported Care Home	Voluntary
Mayo	Marian House Alzheimer Unit	Voluntary
Tipperary	Cluain Arann Welfare Home & Community Nursing Unit	Public
Tipperary	St. Anthony's Unit	Public
Waterford	Holy Ghost Residential Home	Voluntary
Waterford	St Carthage's House	Voluntary
Wexford	Abbeygale House	Public

Source: HIQA Bed Register and NHSS.
Notes: * LTRC home owned by HSE, but a private organisation operates services on behalf of the HSE.
Newtownpark House, operated by CareChoice, is included by the NTPF as having an agreed price to provide care through the NHSS, though it operates as a fully privately funded home according to its website In 2023. An additional CareChoice operated LTRC home in Cork, Beaumont Care Home, announced it was withdrawing from providing NHSS-funded care.

6.3.1 NHSS payments by ownership type

NHSS payments differ considerably across public and voluntary/private homes. Figure 6.2 shows that in 2022, average NHSS payments per week were €1,670 in public LTRC homes compared to €1,075 in voluntary/private LTRC homes. This difference equates to average payments for an NHSS-funded bed in public LTRC homes being 55 per cent higher than an NHSS-funded bed in a voluntary/private LTRC home.

FIGURE 6.2 NHSS BED PAYMENTS PER WEEK, 2022



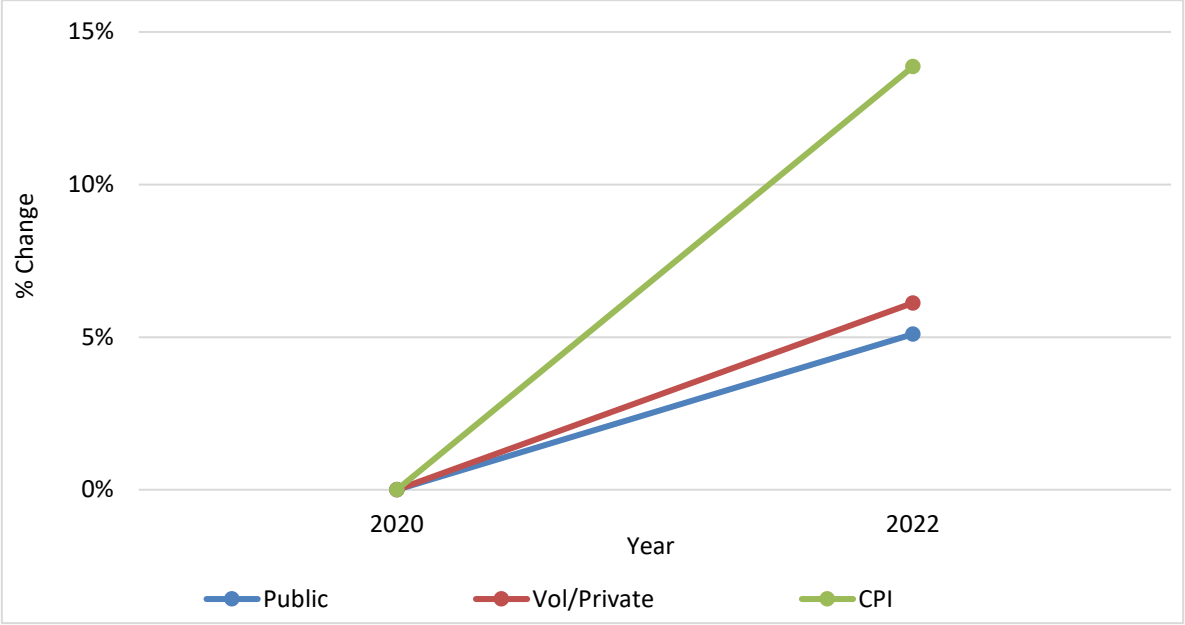
Source: NHSS.

It is likely that the variance between public and voluntary/public LTRC homes identified in Figure 6.2 underestimates the true variance. The 2021 'Value for Money' report showed that among LTRC homes that provided information for the report, the majority of public LTRC homes incurred costs that exceeded the cost of the NHSS (Department of Health, 2021). These costs were covered by respective Community Healthcare Organisation budgets, or wider community service budget (Department of Health, 2021). The logic behind this additional funding is that allowing charges above the maximum care cost to be billed to the NHSS would either reduce the number of individuals the NHSS could support or extend waiting times for funding access. They may result in prolonged stays in hospitals or unsuitable home situations for individuals requiring long-term care. However, a similar argument also prevails in voluntary/private LTRC homes, but they do not have similar budgets available to them. The report estimated that if all eligible components were charged to the NHSS, weekly funding for NHSS residents in public LTRC homes, would increase by an average of in €99, or 6 per cent, per resident (Department of Health, 2021).

The COVID-19 period, combined with the Russian invasion of Ukraine in February 2022, saw changes in the overall cost of living, which also impacted the LTRC sector. Figure 6.3 highlights the percentage increase in NHSS payments for public and voluntary/private LTRC homes between 2020 and 2022, and total inflation as measured by the Consumer Price Index (CPI; January 2020 – December 2022). During this period, average NHSS payments increased by 5.1 per cent and 6.1 per cent for public and voluntary/private LTRC homes respectively. However, during these two years, CPI increased by 13.9 per cent, more than double the increase for

payments. Specific costs, which may have a disproportionate impact on LTRC homes, such as energy costs, increased by an even larger amount than CPI. There is more recent evidence of higher increases in NHSS funding in 2023. A recent short report from Nursing Homes Ireland (NHI) showed that between January 2022 and January 2023, average NHSS payments per bed increased by 8.9 per cent in public LTRC homes and 3.1 per cent in voluntary/private LTRC homes,[26] which suggests that this funding issue continues to persist.[27]

FIGURE 6.3 AVERAGE NHSS BED PAYMENT CHANGES COMPARED TO INFLATION (CPI), 2020 – 2022



Source: NHSS and CSO.
Note: CPI = Consumer Price Index. The CPI for 2020 reflects January 2020. The CPI for 2022 Reflects December 2022.

6.3.2 NHSS payments by county

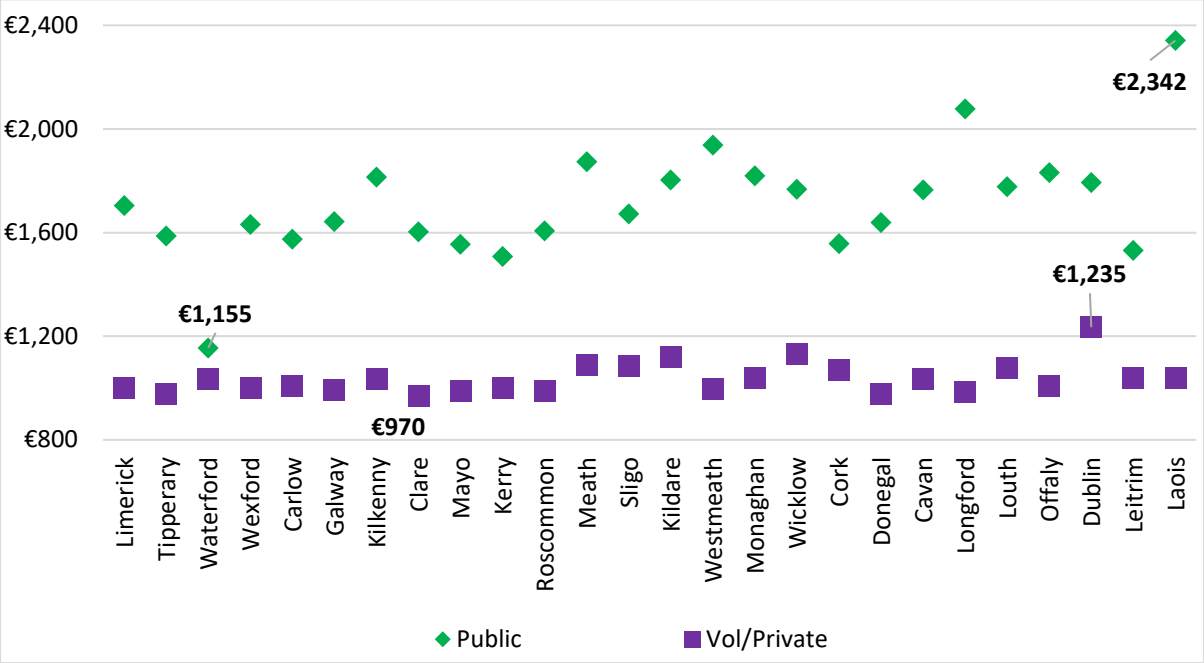
Figure 6.4 presents average NHSS payments for all LTRC homes in 2022 across each county, with results presented for public and voluntary/private homes separately. Laois has the highest average NHSS payments per week at €1,597, while Limerick has a much lower average at €1,063. The variation in NHSS payments across counties can be primarily attributed to the composition of LTRC homes in each county, with counties that have a greater percentage of beds provided in public homes having higher average payments.

The NHSS data indicate that there are some variations in average NHSS payments to voluntary/private LTRC homes across counties. Specifically, voluntary/private

[26] https://nhi.ie/wp-content/uploads/2023/04/Fair-Deal-County-By-County-Comparrison-HSE-Private-Voluntary-January-2023.pdf.
[27] https://nhi.ie/wp-content/uploads/2023/04/Fair-Deal-County-By-County-Comparrison-HSE-Private-Voluntary-January-2023.pdf.

LTRC homes in Dublin exhibit the highest average payments at €1,235, whereas those in Clare have the lowest average at €970. However, it is noteworthy that variation in payments to public LTRC homes across counties is considerably greater than that observed for voluntary/private LTRC homes.

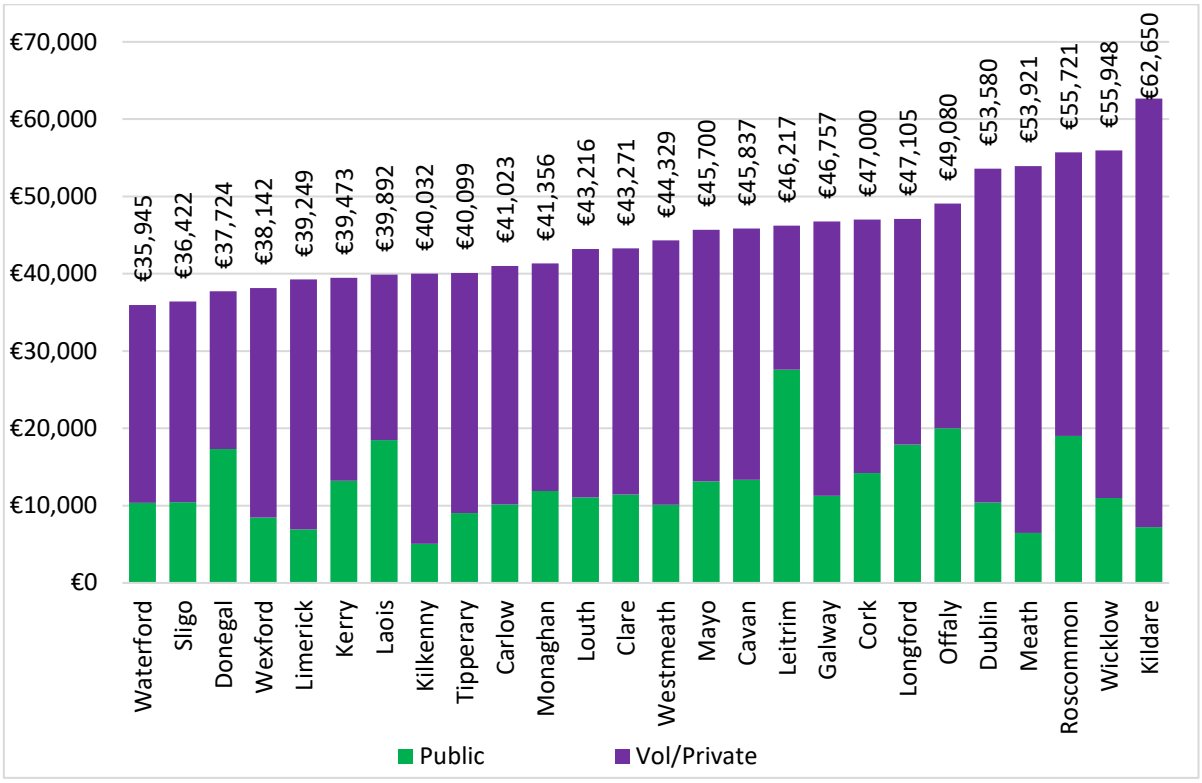
FIGURE 6.4 AVERAGE NHSS BED PAYMENTS PER WEEK BY PROVIDER TYPE AND COUNTY, 2022



Source: NHSS.

The interaction between the number of NHSS beds available within a county and the average NHSS payment allocated to each bed plays a pivotal role in determining the geographical variation in NHSS funding. Similarly, not all LTRC homes are funded via the NHSS. Figure 6.5 shows the average NHSS payments per 1,000 population aged 65+ taking each of these factors into account. Kildare, Roscommon, Wicklow, Meath and Dublin have the highest NHSS expenditure per capita of over €50,000 per week. This is substantially higher than NHSS expenditure per capita in Waterford, Sligo, Donegal and Wexford. The figure highlights large geographical disparities in NHSS funding.

FIGURE 6.5 NHSS BED PAYMENTS PER WEEK PER POPULATION AGED 65+, BY OWNERSHIP AND COUNTY, 2022



Source: NHSS, CSO Census 2022.

6.4 TEMPORARY ASSISTANCE PAYMENT SCHEME (TAPS)

TAPS provides financial support to voluntary and private LTRC homes that incurred additional expenses due to the COVID-19 pandemic. The scheme was one of the earliest LTRC COVID-19 government initiatives. TAPS began in April 2020 and was initially set to end in 2021 but was later extended until September 2022. LTRC homes could apply for TAPS funding and specify how the money would be used. There was a broad list of options to use the funding including for purchasing PPE, paying for nursing overtime, agency staff, or information and communication technology. During the 2020-2021 period, €132 million was paid through TAPS. This represents a substantial level of support to LTRC when considered in relation to the €960.1 million provided by the State to the LTRC sector through the NHSS in 2019.

The NTPF administers TAPS applications and makes payments to LTRC homes. TAPS applications evolved somewhat since the scheme was introduced. Originally, TAPS had both a 'Standard Assistance' and an 'Outbreak Assistance' component. The standard assistance component consisted of a 'prospective' payment and a 'retrospective reconciliation' based on actual costs that occurred, while the outbreak assistance component was based on costs incurred following the confirmation of a COVID-19 outbreak by HSE Public Health and to the HPSC.

All costs were required to be receipted. While initially TAPS had two components for claims, in reality the categories were the same across components, and in the TAPS data collected for the scheme payments were not differentiated by assistance component.

Claims could be made for direct (e.g. new staff hiring costs, additional hours costs) and indirect staff costs (e.g. employer PRSI, etc.), as well as non-pay costs (e.g. cleaning and infection control, PPE, communication devices). The NTPF included a monthly cap on TAPS payments made. This cap was calculated on the basis of the average number of residents in the LTRC home two months prior to the month to which the claim related, and this cap also followed a sliding payment scale based upon LTRC home size, with payments gradually reducing as the number of residents increased. In July 2021, there was a large change in the scheme, and only the 'Outbreak Assistance' remained, and payments reduced substantially thereafter.

Descriptive analysis in this section focuses on TAPS data between April 2020 and November 2021 provided to the authors to undertake this analysis. However, regression analysis examining the association between TAPS and COVID-19 outbreaks concentrates on the April 2020-June 2021 period. A supplemental piece to this research by Walsh (2023) examines the TAPS scheme in greater detail. Provided below are the key findings from Walsh, 2023. In the analysis, it was possible to categorise all claims into two non-pay categories:

- Cleaning and infection control (e.g. infection prevention and control measures, PPE, disinfectants, waste disposal);
- Non-pay other (e.g. staff COVID-19 training, communications);

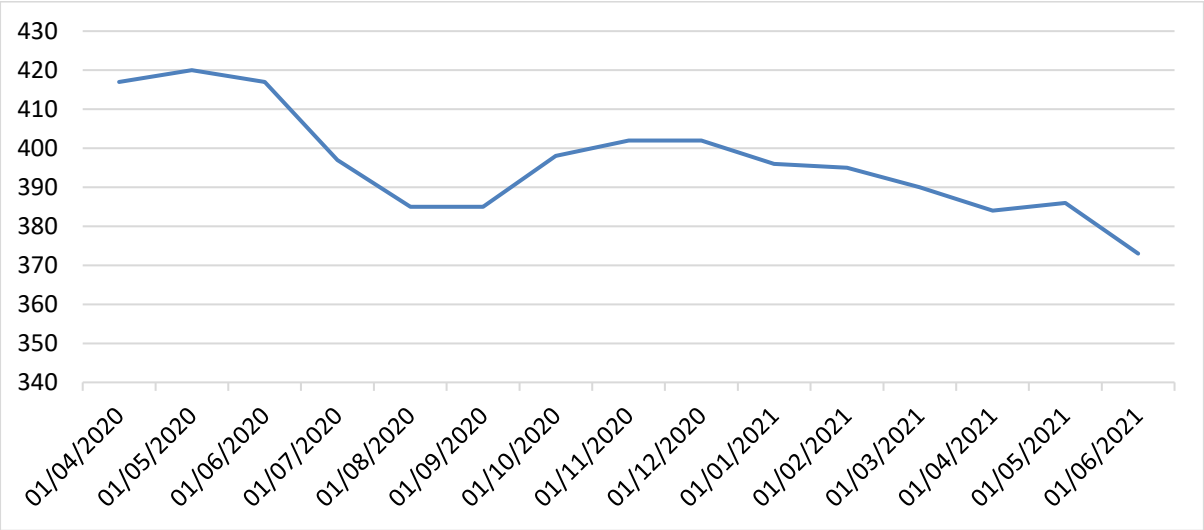
and four pay categories:

- Nursing (overtime, additional staffing);
- Healthcare Assistants (HCA – overtime, additional staffing);
- Agency Staff (mainly nursing and HCA but also agency cleaning);
- Pay other (e.g. porters, administrative staff, indirect support staff).

6.4.1 Temporary Assistance Payment Scheme funding categories

Figure 6.6 shows that over this period, 437 LTRC homes were funded in at least one month by TAPS, with most LTRC homes using TAPS consistently up to June 2021.

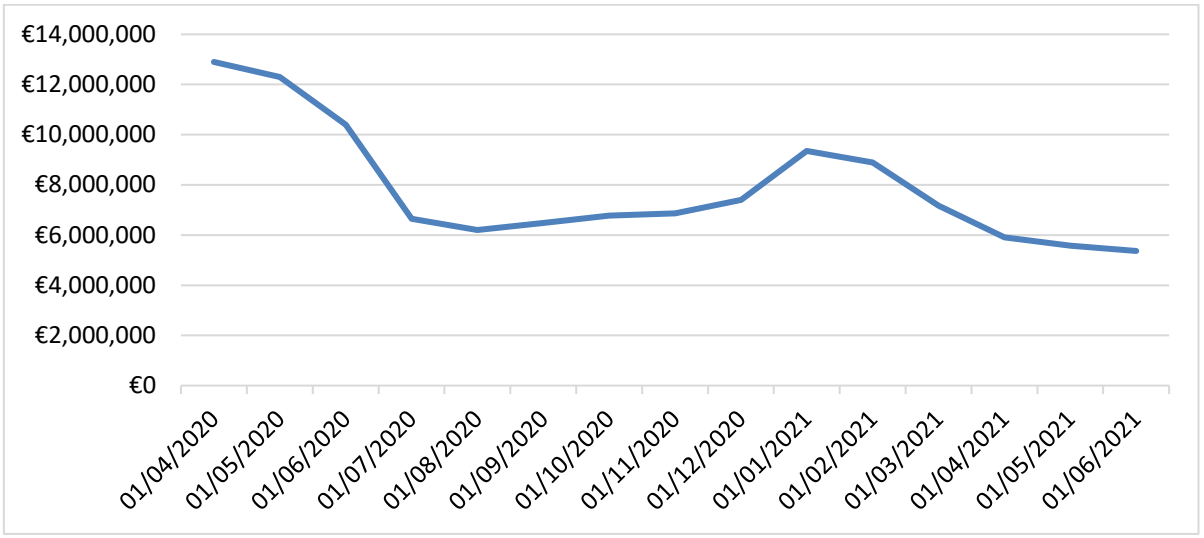
FIGURE 6.6 NUMBER OF LTRC HOMES FUNDED BY TAPS, APRIL 2020 – JUNE 2021



Source: TAPS.
Notes: 437 LTRC homes were eligible for TAPS.

Figure 6.7 shows that the highest expenditure on TAPS occurred at the beginning of the pandemic. In April 2020, €12.9 million was provided to LTRC homes via the scheme. Expenditure reduced thereafter but peaked in January 2021 in line with very high rates of COVID-19 in LTRC (see Figure 5.2), and in the community. Overall expenditure reduced considerably after changes to the scheme in July 2021.

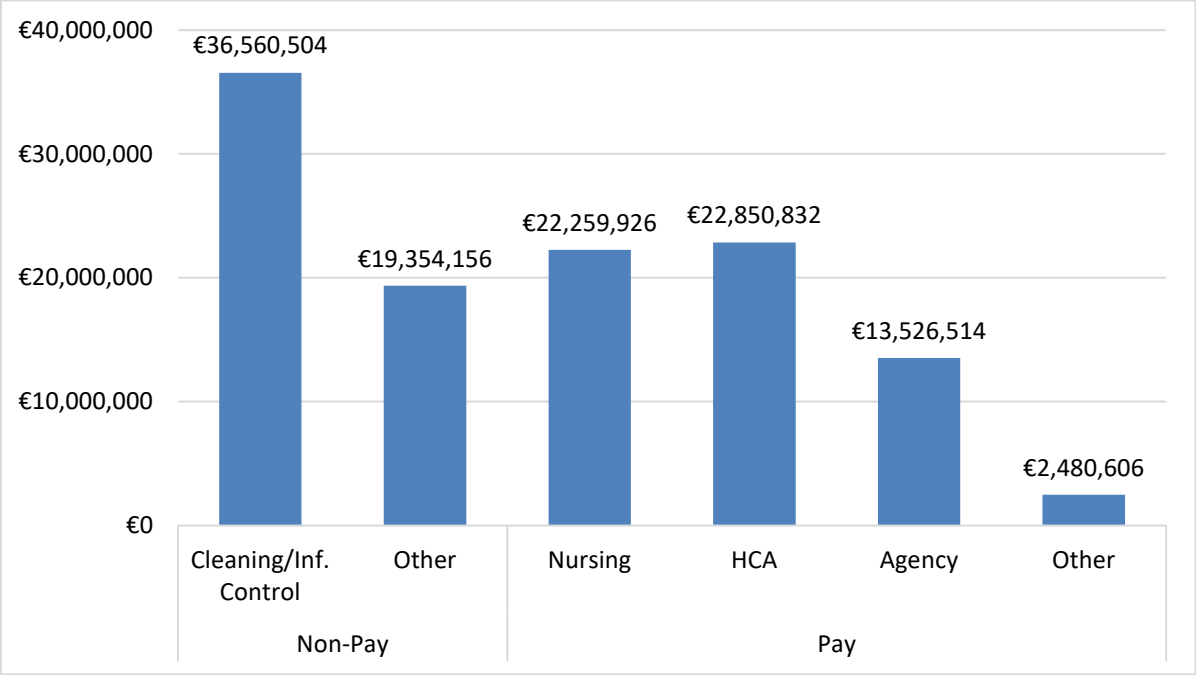
FIGURE 6.7 MONTHLY TAPS EXPENDITURE, APRIL 2020 – JUNE 2021



Source: TAPS.

Figure 6.8 illustrates the aggregated categories of TAPS expenditure. Overall, 30 per cent of all TAPS was spent on cleaning and infection control. A combined 51 per cent of all TAPS was spent on staffing, with an equal amount spent on nursing and HCAs.

FIGURE 6.8 TAPS EXPENDITURE CATEGORIES, APRIL 2020 – JUNE 2021



Source: TAPS.
Note: HCA: Healthcare Assistants. Agency covers all agency staff pay, but mainly nursing and HCA agency staff.

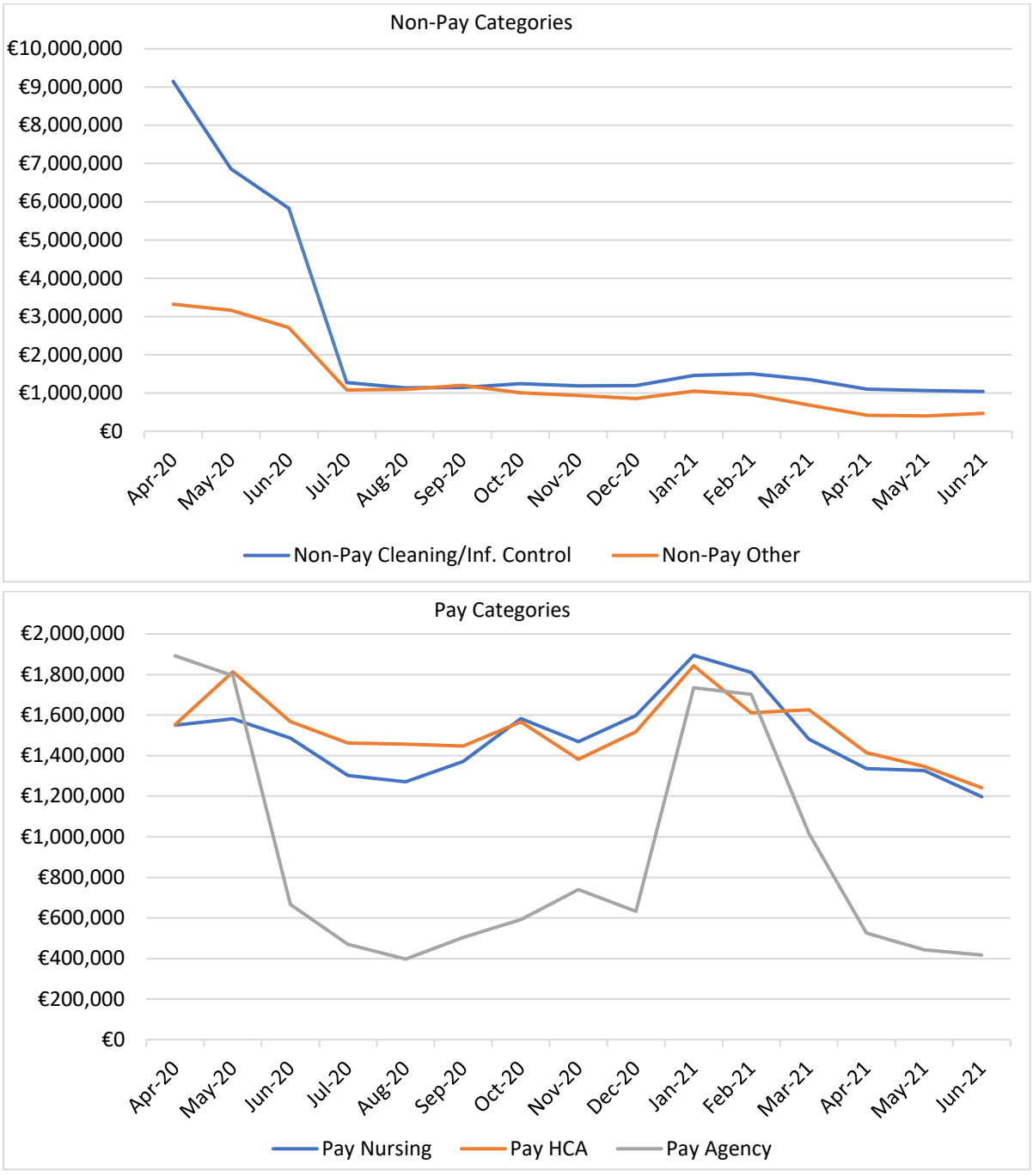
Figure 6.9 shows monthly expenditure across non-pay and pay TAPS categories. While cleaning/infection control made up 30 per cent of TAPS payments, this figure highlights that these payments were concentrated in the first three months of the scheme (April-June 2020) when approximately €22 million was spent on cleaning/infection control. However, in subsequent months expenditure in this category reduced considerably. Other non-pay costs (e.g. staff COVID-19 training, communications equipment) had lower levels of expenditure, but also saw reductions after the first three months.

In relation to the pay TAPS categories, two distinct patterns are evident. Firstly, TAPS is consistently utilised for Nursing and HCA personnel throughout all months, and the levels of expenditure for these categories do not coincide with the peaks and troughs in COVID-19 rates that were experienced during this period. This indicates that TAPS was employed consistently by LTRC homes throughout the scheme, and staffing concerns were a persistent issue in these homes. Additionally, a comparable amount of expenditure was allocated to Nursing and HCA in each month, which implies that there was no substitution between different levels of staffing through TAPS, at least at the broader level.

Second, there is a noticeable lack of consistency in the expenditure on agency staff. The expenditure on agency staff closely aligns with the peaks and troughs of

COVID-19 rates during this period, with the highest expenditure on agency staff recorded at the onset of the pandemic and again in January/February 2021, when COVID-19 rates were at their peak. Again, this points to staffing concerns driving TAPS expenditure, but spending on agency staff was likely related to cover required due to high rates of COVID-19 among LTRC home staff.

FIGURE 6.9 TAPS NON-PAY AND PAY EXPENDITURE BY MONTH, APRIL 2020 – JUNE 2021



Source: TAPS.
Note: HCA: Healthcare Assistants. Agency covers all agency staff pay, but mainly nursing and HCA agency staff.

6.4.2 Temporary Assistance Payment Scheme and COVID-19 outbreaks

In this section we examine whether the use of TAPS reduced the probability and severity of COVID-19 outbreaks in LTRC. We combined information from TAPS with the HIQA Bed Register and HPSC COVID-19 dataset used in Chapter 5. For this analysis, we included only the 427 voluntary/private LTRC homes eligible for TAPS that were operating continuously between February 2020 and June 2021.[28]

In line with the analyses presented in Chapter 5, we focus on the probability of a COVID-19 outbreak (using the HPSC's definition of an outbreak). As TAPS was provided on a monthly basis, we also examine COVID-19 outbreaks at the month level. We created a new binary variable for each month, which takes a value of 1 if an outbreak began in that month, and a value of 0 otherwise. Months in which an outbreak was ongoing, or where an outbreak began in the previous month, were excluded from the analyses. This provided us with 5,551 LTRC home-month observations for the analysis. Logistic regressions were estimated:

$$\Pr(Outbreak)_{h,t} = \beta_0 + \beta_1 TAPS_{c,h,t-1} + \beta_2 CovidRates_{h,t-1} + \beta_3 Groupsize_h + \beta 4 Homesize_h + \beta_5 Z_{h,t} + t + County + \varepsilon_{h,t}, \quad (6.1)$$

where $\Pr(Outbreak)_{h,t}$ is the probability of a COVID-19 outbreak beginning in LTRC home h in month t . $TAPS_{c,h,t-1}$ is a dummy variable indicating whether the LTRC home h received TAPS (by category c) in month $t-1$. Separate regressions were estimated for each TAPS category. A month lag was included for TAPS to account for potential delays in applying for and receiving funding, and for the potential benefits of the funding to accrue.

Similarly to the approach taken in Chapter 5, a key variable of interest is community COVID-19 rates in the county where the LTRC home is located. We include a measure, $CovidRates_{h,t-1}$, that captures county-level COVID-19 rates (confirmed cases per 10,000 population) in month $t-1$ in both linear and squared forms. Once more, this aligns with evidence that LTRC home outbreaks lag behind those in surrounding communities (Malikov et al., 2021). $Groupsize_h$ captures the size of the LTRC home operator (1 home, 2-4 homes, 5+ homes). $Homesize_h$ captures maximum bed occupancy of the LTRC home (<40 beds, 40-59 beds, 60+ beds). $Z_{h,t}$ is a vector of other LTRC home-level characteristics. t is a monthly time trend and $County$ are county fixed effects.

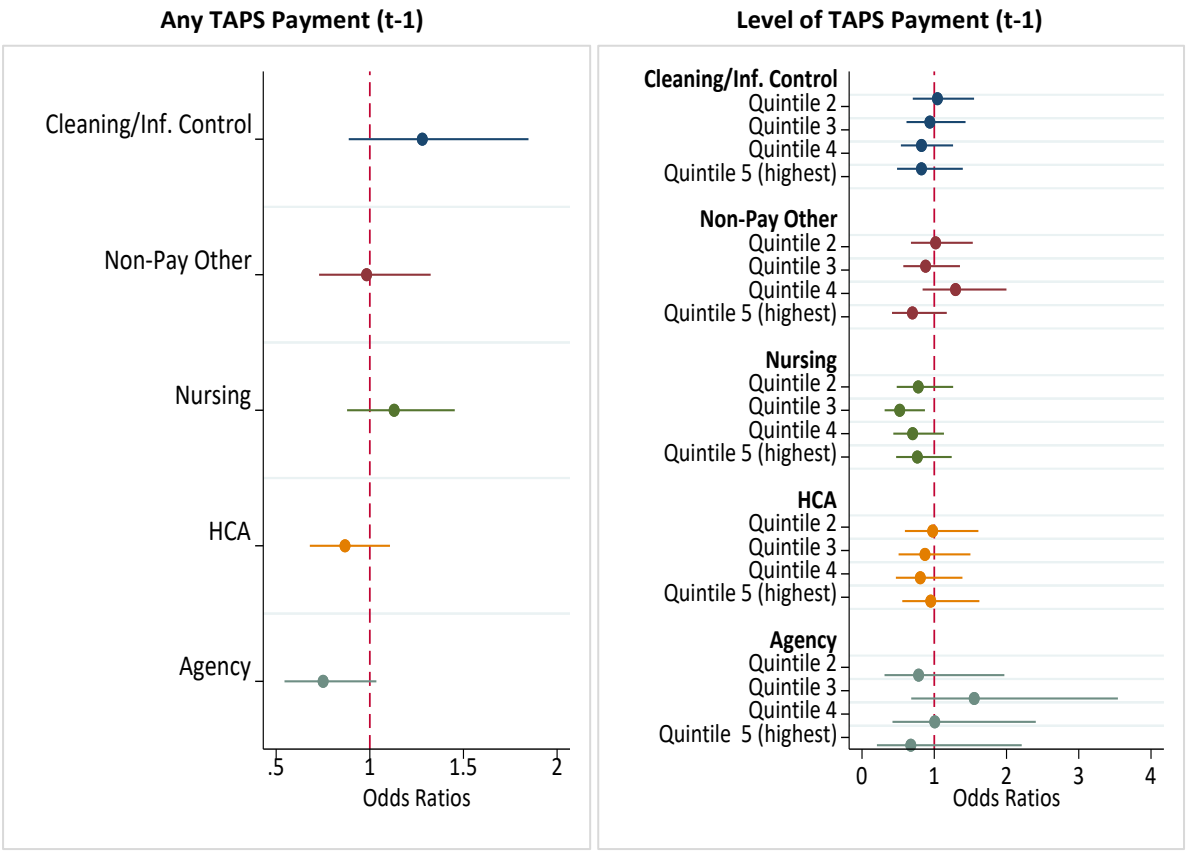
In addition, for LTRC homes that received TAPS payments, we examined whether the level of TAPS payments received per resident/bed ($\frac{TAPSAmount_{c,h,t-1}}{Beds}$) was

[28] A small number of LTRC homes that closed or opened during this period were not included. The 427 voluntary/private LTRC homes included used almost 98 per cent of TAPS funding during the period of study.

associated with the probability of a COVID-19 outbreak. This variable was further split into quintiles for ease of interpretation, and replaced $TAPS_{c,h,t-1}$ in Equation 6.1 (LTRC home size was also removed from the regression as it was captured within the TAPS amount per resident variable). Across all models, standard errors are clustered at the LTRC home level and results are presented as odds ratios.

Figure 6.10 presents results from logistic regression analysis examining the impact of TAPS use and TAPS payment amounts in the preceding month on the likelihood of a COVID-19 outbreak in LTRC homes. Separate regressions were performed for each TAPS category, with results presented as Odds Ratios graphs including 95 per cent confidence intervals. The findings from the binary TAPS measure (Any TAPS Payment (t-1)) indicate that the use of TAPS did not prospectively decrease the probability of a COVID-19 outbreak. Similarly, the analysis of TAPS payment amounts across quintiles (Level of TAPS Payment (t-1)) shows no evidence that TAPS payments reduced the likelihood of COVID-19 outbreaks.

FIGURE 6.10 TAPS PAYMENTS AND COVID-19 OUTBREAKS, APRIL 2020 – MARCH 2021



Source: TAPS
Note: HCA: Healthcare Assistants. Agency covers all agency staff pay, but mainly nursing and HCA agency staff.

We also examine the extent to which a COVID-19 outbreak impacted the use of TAPS by LTRC homes, and whether TAPS use differed across LTRC home characteristics. Logistic regressions were estimated:

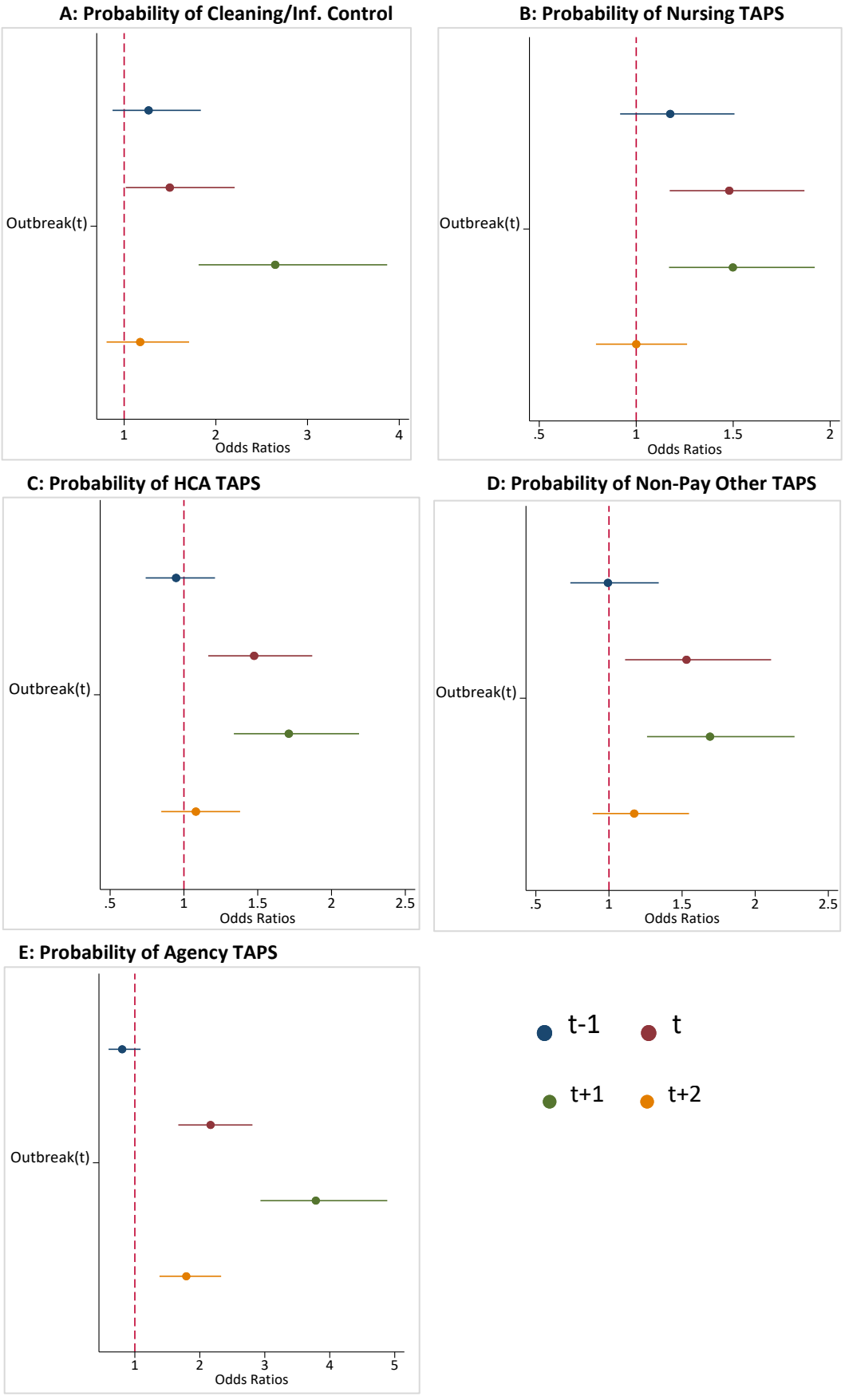
$$\Pr(TAPS)_{c,h,t=j} = \beta_0 + \beta_1 Outbreak_{h,t} + \beta_2 CovidRates_{h,t=j} + \beta_3 Groupsize_h + \beta 4 Homesize_h + \beta_5 Z_{h,t} + t + County + \varepsilon_{h,t}, \quad j=t\text{-}1, \quad t, t+1, t+2, \tag{6.2}$$

where $\Pr(TAPS)_{c,ht=j}$ are estimated for each month period (t-1, t, t+1, t+2) and each category c, to examine the use of TAPS during, and subsequent, to a COVID-19 outbreak. Once more standard errors are clustered at the LTRC home level and results are presented as odds ratios.

Figure 6.11 compares the probability of TAPS use for LTRC homes with and without a COVID-19 outbreak across four months (t-1 – t+2). For all TAPS categories, no difference in TAPS use is seen in month t-1, the month prior to a potential outbreak occurring. However, LTRC homes that have a COVID-19 outbreak have a much higher probability of using TAPS following an outbreak occurring. Examining results for non-pay categories, LTRC homes with a COVID-19 outbreak had a higher probability of using TAPS for cleaning/infection control in month t and month t+1 (month t: OR=1.5; month t+1: OR=2.6) and other non-pay categories (month t: OR=1.5; month t+1: OR=1.7).

More variation in results is observed across the pay categories. LTRC homes with a COVID-19 outbreak had a higher probability of using TAPS for Nursing (month t: OR=1.5; month t+1: OR=1.5), HCA (month t: OR=1.5; month t+1: OR=1.7), and for Agency (month t: OR=2.2; month t+1: OR=3.8). This latter result is likely driven by high infection rates among LTRC home staff during an outbreak, forcing the LTRC home to invest heavily in outside agency staff to cover high rates of absenteeism.

FIGURE 6.11 TAPS NON-PAY AND PAY EXPENDITURE BY MONTH FOR LTRC HOMES WITH AND WITHOUT AN OUTBREAK (T), APRIL 2020 – JUNE 2021



Source: TAPS.
Note: HCA: Healthcare Assistants. Agency covers all agency staff pay, but mainly nursing and HCA agency staff.

6.5 TEMPORARY INFLATION PAYMENT SCHEME (TIPS)

In November 2022, the Temporary Inflation Payment Scheme (TIPS) was announced for voluntary and private LTRC homes to help with the costs of energy inflation experienced following the Russian invasion of Ukraine. TIPS is administered by the NTPF. All NHSS-funded LTRC homes are eligible for the scheme and applications for the scheme began in November 2022, and initially covered the energy cost increase experienced from July 2022 (i.e. backdated payments to July were possible). Homes are required to provide evidence using bills and can be reimbursed up to 75 per cent of their energy claims up to a maximum payment of €5,250 per month for each LTRC home.[29] A budget of €10 million has been allocated initially for the scheme.[30] Data on TIPS were not available for this analysis.

6.6 CONCLUSIONS

This chapter examined the key LTRC funding schemes during the COVID-19 period. First, during this period, evidence shows a shift in the model of care away from residential care, especially since the COVID-19 pandemic. The lower spending on the NHSS may also be reflective of the impact of COVID-19 in LTRC homes, specifically related to mortality and apprehension of entering LTRC homes. However, a significant portion of the divergence recently can be attributed to the large investments in home support and community care for older people.

There is no evidence to suggest that differences in NHSS payments to LTRC homes had an impact on the probability of closure. However, large variations in NHSS funding were observed across public and voluntary/private LTRC homes, and across counties. Some of these differences may be due to differing bodies determining NHSS payments for public (the HSE) and voluntary/private (the NTPF) LTRC homes. There also exist large variations in NHSS prices, and therefore per capita funding, across counties.

The NTPF uses county-level benchmarks and historical pricing as key criteria when determining NHSS prices. The NTPF have stated that such benchmarking may perpetuate what investors see as anomalies in the NHSS and encourage operators to invest in those counties with the highest NHSS prices (NTPF, 2021). This may in part explain the clustering of new LTRC home investments in a small number of counties as outlined in Section 3.5, where the NHSS prices are largest. The analysis shows that five of the seven counties with the highest NHSS price will see the

29 https://www.ntpf.ie/home/TIPS.htm.

30 https://www.gov.ie/en/press-release/0ecc0-ministers-for-health-announce-10-million-new-scheme-to-support-private-and-voluntary-nursing-homes-with-costs-of-energy-inflation/#:~:text=Minister%20for%20Health%2C%20Stephen%20Donnelly,from%20July%20to%20December%202022.

commencement of new private LTRC homes in 2023 and 2024, but none of the 13 counties with the lowest NHSS prices, or lowest per capita NHSS funding, will see any new private LTRC home commencements.

There are a number of changes to the NHSS pricing that have been proposed by a 2021 review of the scheme. In addition to using historical prices and the annual budget provided to the NHSS, more forward-looking budgetary information (e.g. pay inflation), and the need for LTRC beds in some regions, may help improve the sustainability of the sector (NTPF, 2021).

CHAPTER 7

Discussion

7.1 KEY FINDINGS

The COVID-19 pandemic had a significant impact on the LTRC sector in Ireland. We show in this report that the pandemic had a major impact on LTRC residents. Over 8,500 residents were infected with COVID-19 prior to the introduction of vaccinations. The pandemic also had impacts on LTRC providers' funding, and potentially medium- to long-term sustainability of the sector. This report examines how COVID-19 affected the sector, and the key changes in LTRC that have been experienced from the onset of the pandemic until end-2022.

7.1.1 LTRC supply

Since the onset of the COVID-19 pandemic, there have been marked shifts in the supply of LTRC beds in Ireland. By end 2022, the number of LTRC beds per capita (for those aged 65 and over) in Ireland lagged behind the OECD average. In February 2020, there were 32,064 LTRC beds in Ireland, compared to 31,728 LTRC beds in December 2022, i.e. 336 fewer beds. While this equates to only a 1 per cent reduction, the decline occurred disproportionately in rural counties that have a relatively low supply of beds. This decline is partly due to the closure of smaller private LTRC homes in rural areas. These closures have understandably received extensive media attention. Nonetheless, the emergence of a small number of larger private LTRC homes has offset these closures on a national level, introducing additional voluntary/private LTRC beds. The predominant factor in the bed decreases during this period has been the closure of 693 beds in public LTRC homes. We show that this is not the result of closures of public LTRC homes, but rather due the fact that almost half of public LTRC homes saw bed closures.

This trend of closing smaller LTRC homes and public LTRC beds has amplified geographic inequalities in LTRC bed supply. Kildare has the highest number of beds per 1,000 population aged 65+, with 53.5 beds, while neighbouring Laois has 28.5 beds per 1,000 population aged 65+. Dublin and other commuter belt counties also boast a relatively high LTRC bed supply. In contrast, more rural counties such as Sligo, Donegal, Monaghan, Kerry and Leitrim find themselves with the lowest per capita supply. Since the onset of the pandemic, almost every county has seen a decline in LTRC beds. However, Kildare, Waterford, Dublin, Louth and Meath have seen increases, driven by the opening of large (>150 beds) LTRC homes by private operators. All openings were made by large private equity financed operators. Our analysis also indicates that by the end of 2024, these operators are set to open several other large facilities, all situated in counties with the highest per capita LTRC bed supply.

Planning and resource allocation measures should be used by the State as a lever to reduce regional inequalities in LTRC supply. The developments of CNUs in the upcoming period provide policymakers with a potential template for further investment in public LTRC facilities. However, due to the large role played by the private sector, measures to encourage private LTRC providers to locate new LTRC homes in more rural regions and in regions of low relative supply will also be required.

7.1.2 LTRC ownership and operators

The trend towards private for-profit ownership in LTRC homes has persisted since the onset of the COVID-19 pandemic. By December 2022, the voluntary/private sector supplied 83 per cent of all LTRC home beds, with private for-profit operators contributing 74 per cent. County-level differences in supply by ownership type are evident. For instance, in Leitrim, Sligo and Kerry, just over half the beds are provided by private for-profit operators. In contrast, this proportion rises to 90 per cent in Dublin commuter belt counties like Meath and Kildare and is high in Dublin.

Since the onset of the pandemic, there has been a marked shift towards a consolidation of LTRC homes under larger operator groups. Many of these operators are recent entrants to the Irish market, financed by international private equity. Currently, Ireland has 15 medium/large LTRC operators, each operating at least five LTRC homes. One of these operators is a religious organisation, with the remaining being private equity financed operators. Collectively, these operators are responsible for 38 per cent of all LTRC beds, a figure poised to rise with the opening of a small number of new large LTRC homes. This compares to the 35 per cent of beds now provided by independently owned and operated LTRC homes, who until recently dominated the Irish LTRC sector.

We highlight that the introduction of these operators into the Irish LTRC sector has changed the financial and operating landscape considerably. While independent LTRC homes, as well as public LTRC homes, are owned and operated by the same entity, many private LTRC homes are owned by one entity (PropCos, who generally are REITs), but care is provided by a separate entity (OpCo). These OpCo/PropCo arrangements result in operators paying a rent to REITs who do not pay corporation tax on property rental income. It also allows for distance between ownership and resident care, regulations, hiring etc. Evidence from other countries has shown some negative effects of REITs and private equity in healthcare and LTRC, especially during the COVID-19 pandemic (Braun et al., 2023).

The general modus operandi of REITs and private equity was to invest in, and take ownership of, companies with the goal of enhancing their value and subsequently

selling the company at a profit in a relatively short amount of time. As these players are relatively new to the sector, it is difficult to know how their increased involvement will impact the medium to long term sustainability of the sector.

7.1.3 COVID-19 outbreaks in LTRC

Building upon related work by Walsh et al. (2023) and HIQA and HPSC (2022), this report examined the factors associated with COVID-19 outbreaks and outbreak severity in LTRC homes in Ireland in the first year of the pandemic (March 2020 – March 2021). We show that 65 per cent of all LTRC homes had at least one COVID-19 outbreak; these outbreaks were associated with 8,502 confirmed COVID-19 cases and 2,107 COVID-19 deaths among LTRC residents. No difference was observed between public and voluntary/private homes in the probability of experiencing a COVID-19 outbreak. However, larger LTRC settings (measured by bed numbers) and location with a county with high community COVID-19 rates were associated with a higher likelihood of an outbreak. Larger LTRC homes were over 3.5 times more likely to have a COVID-19 outbreak compared to smaller homes. The evidence shows that being located within a county with high community COVID-19 rates was the largest determinant of a COVID-19 outbreak.

We find a clear geographic difference, with a larger percentage of LTRC homes in the East and in Border counties having a COVID-19 outbreak in Wave 1. All LTRC homes in Monaghan had an outbreak, while in Louth, Dublin and Cavan, over 60 per cent had an outbreak. The observed geographic variation in outbreaks across LTRC homes closely mirrored the variance in community COVID-19 rates. Indeed, Wave 3 saw a large percentage of LTRC homes experiencing an outbreak again in line with community COVID-19 rates. Examining Waves 1-3 together, a geographical variation is discernible, but this is mainly driven by the variation that occurred in Wave 1.

7.1.4 LTRC funding

One of the key facets of a sustainable LTRC, and highly related to supply, is the funding of the sector. This report examined the funding of the sector in detail and examined some funding initiatives such as the TAPS introduced during the COVID-19 pandemic.

We highlight that pre-pandemic (2019), the majority of funding for HSE Older Persons' services goes to the NHSS. However, as the model of care of older people adjusts towards funding more care for people at home, aggregated NHSS funding has reduced since the onset of the pandemic. We identify large differences in NHSS funding across public and voluntary/private LTRC homes. In 2022, average prices for a NHSS-funded bed in public LTRC homes was 55 per cent higher than in a

voluntary/private LTRC home. Prices provided have also not kept up pace with increases in general inflation seen in recent years.

As with supply, large geographic differences in NHSS bed prices are found across counties. Voluntary/private LTRC homes in Dublin have the highest average payments at €1,235 per week, whereas those in Clare have the lowest average at €970. However, we find that variation in NHSS payments to public LTRC homes across counties is considerably greater than that observed for voluntary/private LTRC homes. Combining the effects of geographic differences in supply and payments, we show very large differences in NHSS funding per capita (aged 65+) across counties. Kildare, Roscommon, Wicklow, Meath and Dublin have the highest NHSS expenditure per capita of over €50,000 per week, compared to NHSS expenditure per capita of less than €38,000 in Waterford, Sligo and Donegal.

Until recently, assessments of care needs followed a rudimentary, non-standardised process. A new tool, the interRAI Single Assessment Tool (SAT) is a comprehensive assessment system used to understand the care and social support needs of older individuals. It is increasingly being used in Ireland as a standardised tool that provides a thorough assessment for those seeking Home Support or applying for the NHSS. This SAT not only informs care planning by highlighting areas for improvement and potential health declines but also consolidates vital health information. As a result, there is a possibility to incorporate the SAT into funding for the NHSS. Incorporating the InterRAI SAT will allow for NHSS funding to better align with residents' individual health and social care needs. It may also reduce some of the disparities in NHSS expenditure per capita across counties driven by county-level NHSS payment decisions. The thoroughness of the dimensions covered by the interRAI SAT provide a good basis for such inclusion in the funding mechanism. The need to incorporate the SAT increases with the ever-increasing dependency needs of residents now entering LTRC.

Voluntary and private LTRC homes, and NHI, have often discussed the large difference in the NHSS prices paid per bed in public versus voluntary/private LTRC homes.[31] While there has been discussion that public LTRC homes may cater to higher dependency residents, which may be the case for certain rehabilitation centres, in terms of NHSS residents there is little evidence showing this. The 'Value for Money' report stated that this assumption is based on anecdotal evidence only as there is no single assessment tool used to determine the individual care needs of residents in nursing homes (Department of Health, 2021). Expansion of the interRAI SAT into the NHSS funding would help in diverting higher prices to LTRC

[31] https://nhi.ie/wp-content/uploads/2023/04/Fair-Deal-County-By-County-Comparrison-HSE-Private-Voluntary-January-2023.pdf.

homes with residents with higher levels of care need. A divergence between public and voluntary/private prices however is likely to remain due to staffing composition differences and wages. Public LTRC have on average 2.5 times more nurses per resident than voluntary/private LTRC homes (Department of Health, 2021). HSE workers will also have costs for pensions and overheads that differ from voluntary/private LTRC homes (Department of Health, 2021). Currently, the NTPF is not mandated to consider the LTRC sector's future supply needs in negotiating NHSS prices with operators. The issue of capacity and geographic equality of supply remains the responsibility of the Department of Health, and to some extent the HSE. With the recognised need for additional capacity, and with the geographic inequalities in supply highlighted in this report, cross-body communication may be required. The NTPF have stated that they actively engage with operators who are interested in expanding supply or locating in areas, often at a very early planning stage.

Analysis of the TAPS found substantial use by voluntary/private LTRC homes eligible for the scheme. During the 2020-2021 period, €132 million was paid through TAPS. Cleaning/infection control and staffing costs (nursing and HCAs) made up the majority of TAPS expenditure. Interestingly, claims for nursing and HCA remained high throughout the period, and were not influenced by COVID-19 infection peaks. In contrast, claims for agency staffing were clearly impacted by infection peaks and outbreaks in a LTRC home.

We find that the use of TAPS prospectively had little impact on the probability of a COVID-19 outbreak taking place, or the severity (as measured by the percentage of residents infected) of an outbreak. However, LTRC homes that experienced an outbreak were much more likely to use TAPS, and have high levels of TAPS payments, in the months subsequent to an outbreak. This was most clearly seen for agency staffing claims.

7.2 LIMITATIONS

A major limitation of the analysis included in this report was a lack of timely data on a range of factors relating to the LTRC sector in Ireland. There is no centralised dataset that includes information on the characteristics of residents living in LTRC settings. Consequently it was not possible to examine the impact of resident-level characteristics on COVID-19 outcomes. Recent analysis, for example, suggests that those diagnosed with dementia were at increased risk of COVID-19 (Wang et al., 2021). It is possible that some of the COVID-19 differences observed across LTRC settings are due to the characteristics of residents within those homes. We were unable to examine such factors in this research.

Similarly, there is no centralised national dataset that includes information on staffing levels, staffing mix or physical facilities including single room occupancy, communal facilities, isolation facilities, investment made during the pandemic, or LTRC home acquisitions by medium/large operators. Consequently, it was not possible to examine how such factors impacted COVID-19 outcomes or differ across homes. The lack of data has also been highlighted as an issue in other countries (Burton et al., 2022). These data limitations hinder the ability of policymakers to make efficient decisions on funding, supply and care quality, and respond to potential issues within the sector.

7.3 CONCLUSIONS

The LTRC sector in Ireland and elsewhere has been undergoing transformation since the onset of COVID-19. The disproportionate impact of COVID-19 on the sector has had implications for residents, workers, operators, and also policymakers. The high levels of COVID-19 infection, morbidity and mortality that occurred in LTRC homes was an unfortunate legacy of the pandemic. The pandemic shed light on the need to discuss what LTRC care is, and what role Irish society wishes it to play in health and social care, and how to plan the sector accordingly to meet residents' needs. In this report we have attempted to provide some context to these discussions by examining the impact COVID-19 had on the sector and highlighting the key changes that have occurred since the onset of the pandemic.

Consistent with the international experience, the analysis in this report found that COVID-19 rates in the community in Ireland were more closely associated with COVID-19 outbreaks in the LTRC sector. Consequently, in the future, attempts to reduce the impact of infectious diseases (such as COVID-19 and influenza) in LTRC homes should be directed not only at the individual homes but also at the wider community, through measures which include vaccinations and awareness of factors which are likely to encourage the spread of such infectious diseases. We also find that larger LTRC homes had much higher rates of COVID-19 outbreaks. In the context of the shift towards larger LTRC homes, regulations around the physical infrastructure of new LTRC homes to reduce the potential impact of disease outbreaks is warranted.

A key finding from this research is that the past number of years has seen an evolution towards a dominance of private supply. There has been consolidation among private operators and innovative financial structures, such as REITs and private equity funded owners and operators. The pandemic also expedited policymakers' move away from LTRC for many older people with social care needs. While it has long been recognised that most older people prefer to remain in their own home and community as they age, it took until the pandemic before policy placing home support on a statutory footing was set in motion. This is likely to

curtail some demand for LTRC, notwithstanding the large increase in the older population projected in the medium-term, but potentially increase the average health and social care needs of LTRC residents. This will have implications on factors like staffing and funding.

The 'Value for Money' review outlined that:

> *within a defined period of time (determined by the Department) care needs assessments used to determine funding under the Nursing Homes Support Scheme should be undertaken using the interRAI Single Assessment Tool (Department of Health, 2021).*

Underscoring the recommendations from the 'Value for Money' report (Department of Health, 2021), our findings on variations in supply that seem to be highly correlated with NHSS payments suggest introducing the interRAI SAT systematically into the NHSS funding mechanism would be advisable. In their response to the value report, the Department of Health agreed with this recommendation and:

> *is in the process of finalising plans with the HSE to implement the rollout of interRAI. Funding has been made available for its national roll out in community settings, with an initial focus on the home support sector.*[32]

It is imperative this type of funding mechanism does not result in cherry-picking of less complex residents by private LTRC homes, or even the refusal of NHSS residents. If perceived as economically unviable, these providers might shut down, constricting supply even further.

The international experience with large international operators financed by private equity offers important lessons for Ireland. Such arrangements often create an environment where profit motives can supersede care quality. The situation with Orpea, the largest LTRC operator in Ireland, is illustrative. Following revelations about care quality issues for residents, in 2023 Orpea came under the control of the Caisse des dépôts et consignations (CDC) the French state's investment fund, i.e. the French state effectively nationalised the operator. This decision has resulted in the peculiar situation where the French state is effectively the main funder of Ireland's largest LTRC operator. This instance underscores that while medium/large operators entering the LTRC market is resulting in increased investment and infrastructure, it also may increase Ireland's vulnerability to international economic dynamics in the LTRC sector. Private equity is international, and changes to the international economic environment can have repercussions on LTRC in Ireland.

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[32] https://assets.gov.ie/207531/d0d9d453-d755-4740-8732-b0aa647af74e.pdf.

We find that 14 medium/large operators dominate LTRC supply in Ireland. From an economic perspective, a small number of providers of State-funded health or social care resulted in these operators transitioning from being passive price acceptors to strong negotiators, potentially driving up prices. Evidence from other countries suggests that more stringent oversight as well as increased reporting on private equity ownership of LTRC homes may be warranted (Braun et al., 2021). Financial arrangements in the LTRC sector also warrant scrutiny as part of the wider regulation of the sector. Many for-profit LTRC homes in Ireland now rely on OpCo/PropCo structures, with long-term CPI-indexed loan repayments. However, the unexpected surge in inflation, especially after the Russian invasion of Ukraine, raises concerns about the sustainability of these arrangements, especially as NHSS payments have not kept pace as shown.

The increasing level of REITs and private equity owners and operators in the Irish LTRC sector may also require changes in how the sector is funded. In a system which is majority publicly funded but privately provided, there will always exist a structure that satisfies cost minimisation and care quality from the State with profit maximisation from the provider. The continuing drift towards private for-profit supply, especially by large international operators, will continue to require significant effort to align these values, even with the introduction of a SAT in a future funding mechanism. The change in the composition of ownership towards OpCo/PropCo structures is likely to have implications for how the NTPF applies prices on LTRC homes. OpCo/PropCo:

> *structures put in place by investors to avail of capital allowances on nursing homes, property owning and nursing home operations can be carried out in separate corporate vehicles (PropCo: OpCo structures), but remain in effect in common ownership. These structures can cause challenges for NTPF in reviewing financial information and in considering the impact on pricing* (NTPF, 2021).

In other words, the lack of information on LTRC ownership may complicate the ability of the NTPF to negotiate prices with LTRC homes.

Another key issue highlighted is geographic inequality of supply. This issue has been highlighted previously (Smith et al., 2019), but the location of new private LTRC homes in Ireland adds to these inequalities. Driven by profit motives, private providers are likely to establish homes in high-demand areas and where NHSS payments are highest, thereby exacerbating existing inequalities in LTRC supply. The 2021-2030 National Development Plan acknowledges the imbalance, with a proposed shift from the current 20:80 public-private split (Government of Ireland, 2021). Since this publication, the dominance of private provision has increased to 83 per cent, driven in part by the closure of 693 LTRC beds in public LTRC homes

between February 2020 and December 2022. The planned CNUs and 530 beds that will be built will help increase public supply, but fail to turn the tide from private provision of LTRC.

While it has long been recognised that most older people prefer to remain in their own home and community as they age, in the past in Ireland there was a failure to implement policy which would support the provision of the formal and informal services that are necessary for older people to remain in their own home. Building upon many of the ideas outlined in Sláintecare (Houses of the Oireachtas Committee on the Future of Healthcare, 2017) and the expert panel on nursing homes (Frazer et al., 2021b), a Statutory Home Support Scheme has been proposed, though no timeline on when this will be introduced is currently available. Evidence shows that resourcing such a scheme to reduce admission into LTRC homes could considerably reduce LTRC demand (Walsh et al., 2021), and this would likely be cost neutral (Walsh et al., 2021).

Decision-making requires accurate information. Improving the data on residents and providers is vital. High-quality care in homes relies on robust data. There now exist templates such as the care home Minimum Data Set in the US, and also InterRAI. Using these data should prompt care discussions among staff and clinicians, as well as policymakers (Gordon et al., 2022). Some recent developments on health and social care in Ireland may help with the data limitations. There are plans to introduce a new function for the Chief Inspector to establish and maintain a reporting mechanism for the data collection with care homes.[33] The collection of such data could be pseudonymised and shared with agencies such as HIQA to aid policies to improve resident care and target resources more efficiently. These data would improve the general transparency of LTRC. The adoption of electronic health records for residents and the transition to digital care records should be a key goal for policymakers, while more information on providers and operators would allow policymakers to assess any risks to sustainability, costs and care quality within LTRC homes.

In conclusion, it is vital, as the needs of our ageing population grow and evolve, that policies align financial incentives for operators with the overarching goal of meeting residents' health and social care needs. Our continued reliance on the for-profit sector will also require promotion of a favourable environment for large operators. Therefore, a robust regulatory framework that centres on resident care and operator transparency should be at the centre of policies (Ikram et al., 2021; Bangerter, 2023).

[33] https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_health/submissions/2022/2022-11-23_opening-statement-laura-casey-principal-officer-department-of-health_en.pdf.

REFERENCES

Aalto, U.L., K.H. Pitkälä, K. Andersen-Ranberg, S. Bonin-Guillaume, A.J. Cruz-Jentoft, M. Eriksdotter, A.L. Gordon, M. Gosch, I. Holmerova, H. Kautiainen, M. Kivipelto, J. Macijauskiene, D. O'Neill, N. van den Noortgate, A.H. Ranhoff, J.M.G.A. Schols, K. Singler, M. Stankunas and J. G. Ouslander (2022). 'COVID-19 pandemic and mortality in nursing homes across USA and Europe up to October 2021', *European Geriatric Medicine* 13(3): 705-709.

Aedifica (2022). *Annual Financial Report 2021: Building futureproof healthcare real estate.*

Bach-Mortensen, A., B. Verboom, A. Movsisyan and M. Esposti (2021). 'A systematic review of the associations between care home ownership and COVID-19 outbreaks, infections and mortality', *Nature Aging* 1: 948-961.

Bangerter, L.R. (2023). 'The Role of Private Equity in Health Care for Older Adults', *Public Policy & Aging Report* 33(2): 41-43.

Batt, R., E. Appelbaum and T. Katz (2022). 'The Role of Public REITs in Financialization and Industry Restructuring'. Institute for New Economic Thinking Working Paper Series (189).

BDO and Nursing Homes Ireland (2022). *Private & Voluntary Nursing Home Survey results 2020/2021*, Nursing Homes Ireland.

Braun, R.T., H.-Y. Jung, L.P. Casalino, Z. Myslinski and M.A. Unruh (2021). 'Association of Private Equity Investment in US Nursing Homes With the Quality and Cost of Care for Long-Stay Residents', *JAMA Health Forum* 2(11): e213817-e213817.

Braun, R.T., D. Williams, D.G. Stevenson, L.P. Casalino, H.Y. Jung, R. Fernandez and M.A. Unruh (2023). 'The Role Of Real Estate Investment Trusts In Staffing US Nursing Homes', *Health Aff (Millwood)* 0(0): 101377hlthaff202200278.

Braun, R.T., H. Yun, L.P. Casalino, Z. Myslinski, F.M. Kuwonza, H.-Y. Jung and M.A. Unruh (2020). 'Comparative Performance of Private Equity–Owned US Nursing Homes During the COVID-19 Pandemic', *JAMA Network Open* 3(10): e2026702-e2026702.

Brown, K.A., N. Daneman, S.A. Buchan, A.K. Chan and N.M. Stall (2020). *Temporal Variations in the Intensity of Care Provided to Community and Nursing Home Residents Who Died of COVID-19 in Ontario, Canada*, medRxiv: 2020.2011.2006.20227140.

Bruch, J.D., C. Foot, Y. Singh, Z. Song, D. Polsky and J.M. Zhu (2023). 'Workforce Composition In Private Equity-Acquired Versus Non-Private Equity-Acquired Physician Practices'. *Health Aff* (Millwood) 42(1): 121-129.

Burton, J.K., A.T. Wolters, A.-M. Towers, L. Jones, J. Meyer, A.L. Gordon, L. Irvine, B. Hanratty, K. Spilsbury, G. Peryer, S. Rand, A. Killett, G. Akdur, S. Allan, P. Biswas and C. Goodman (2022). 'Developing a minimum data set for older adult care homes in the UK: exploring the concept and defining early core principles', *The Lancet Healthy Longevity* 3(3): e186-e193.

CBRE (2023). *Market Outlook 2023 Report*. CBRE.

Collins, D. (2019). *Social Impact Assessment Series: Nursing Home Support Scheme (NHSS).* Dublin, Irish Government Economic and Evaluation Service.

Comas-Herrera, A., J. Zalakaín, E. Lemmon, D. Henderson, C. Litwin, A.T. Hsu, A.E. Schmidt, A.G., F.M. Kruse and J.-L. Fernández (2021). 'Mortality associated with COVID-19 in care homes: international evidence'. I. L.-T. C. P. N. Article in LTCcovid.org. CPEC-LSE.

Department of Health (2021). *A value for money review of nursing home care costs.* Department of Health, Dublin.

Dutey-Magni, P.F., H. Williams, A. Jhass, G. Rait, F. Lorencatto, H. Hemingway, A. Hayward and L. Shallcross (2021). 'COVID-19 infection and attributable mortality in UK care homes: cohort study using active surveillance and electronic records (March-June 2020)', *Age Ageing* 50(4): 1019-1028.

Emmerson, C., J.P. Adamson, D. Turner, M.B. Gravenor, J. Salmon, S. Cottrell, V. Middleton, B. Thomas, B.W. Mason and C.J. Williams (2021). 'Risk factors for outbreaks of COVID-19 in care homes following hospital discharge: A national cohort analysis', *Influenza Other Respir Viruses* 15(3): 371-380.

Figueroa, J.F., R.K. Wadhera, I. Papanicolas, K. Riley, J. Zheng, E.J. Orav and A.K. Jha (2020). 'Association of Nursing Home Ratings on Health Inspections, Quality of Care, and Nurse Staffing With COVID-19 Cases', *JAMA* 324(11): 1103-1105.

Frazer, K., L. Mitchell, D. Stokes, E. Crowley and C. Kelleher (2021). *COVID-19 Nursing Homes Expert Panel Examination of Measures to 2021*: Report to the Minister for Health. Dublin, Department of Health.

Frazer, K., L. Mitchell, D. Stokes, E. Lacey, E. Crowley and C.C. Kelleher (2021a). 'A rapid systematic review of measures to protect older people in long-term care facilities from COVID-19', *BMJ Open* 11(10): e047012.

Frazer, K., L. Mitchell, D. Stokes, E. Crowley and C. Kelleher (2021b). *COVID-19 Nursing Homes Expert Panel Examination of Measures to 2021*: Report to the Minister for Health. Dublin, Department of Health.

Gordon, A.L., K. Spilsbury, W.P. Achterberg, R. Adams, L. Jones and C. Goodman (2022). 'From Warkworth House to the 21st century care homes: progress marked by persistent challenges', *Age and Ageing* 51(7).

Government of Ireland (2021). *Project Ireland 2040: National Development Plan 2021-2030*. Dublin, Ireland.

Gupta, A., S.T. Howell, C. Yannelis and A. Gupta (2021). 'Does Private Equity Investment in Healthcare Benefit Patients? Evidence from Nursing Homes', NBER Working Papers 28474.

Health Service Executive (2022). *Winter Plan October 2022 – March 2023*. Dublin, Health Service Executive.

Health Service Executive (2023). *National Service Plan 2023*. Dublin, Health Service Executive.

HIQA (2022). *Overview Report on the Monitoring and Regulation of Older Persons Services in 2020 and 2021*. Dublin, Health Information and Quality Authority.

HIQA and HPSC (2022). *Analysis of factors associated with outbreaks of SARS-CoV-2 in nursing homes in Ireland*. Health Information and Quality Authority.

Houses of the Oireachtas Committee on the Future of Healthcare (2017). *Sláintecare Report*. Dublin, Houses of the Oireachtas.

Hughes, K., Z. Feng, Q. Li, M. Segelman, I. Oliveira and J.G. Dey (2023). 'Rates of Nursing Home Closures Were Relatively Stable Over the Past Decade, But Warrant Continuous Monitoring', *Health Affairs Scholar*.

Hurley, E. and S. Burke (2021). 'Governmental response to the COVID-19 pandemic in Long-Term Care residences for older people: preparedness, responses and challenges for the future'. Working Paper 08/2021. M. COVID-19.

Ikram, U., K.-K. Aung and Z. Song (2021). 'Private Equity and Primary Care: Lessons from the Field', *Catalyst non-issue content* 2(6).

Kennelly, B., M. O'Callaghan, D. Coughlan, J. Cullinan, E. Doherty, L. Glynn, E. Moloney and M. Queally (2020). 'The COVID-19 pandemic in Ireland: An overview of the health service and economic policy response', *Health Policy Technol*.

Konetzka, R.T., E.M. White, A. Pralea, D.C. Grabowski and V. Mor (2021). 'A systematic review of long-term care facility characteristics associated with COVID-19 outcomes', *Journal of the American Geriatrics Society* 69(10): 2766-2777.

Kotecha, V. (2019). *Plugging the leaks in the UK care home industry – strategies for resolving the financial crisis in the residential and nursing home sector*. The Centre for Health and the Public Interest, London. UK.

Kruse, F.M., J. Mah, S. Metsemakers, M. Andrew, S. Sinha and P. Jeurissen (2021). 'Relationship between the Ownership Status of Nursing Homes and Their Outcomes During the COVID-19 Pandemic: A Rapid Literature Review', *Journal of long-term care*.

Malikov, K., Q. Huang, S. Shi, N.M. Stall, A.R. Tuite and M.P. Hillmer (2021). 'Temporal Associations between Community Incidence of COVID-19 and Nursing Home Outbreaks in Ontario, Canada', *Journal of the American Medical Directors Association* 22(2): 260-262.

Martin, A., N.N. Boyle, J. Cooke, S.P. Kennelly, R. Martin, M. Mulroy, M. O'Connor, S. O'Keeffe and D. O'Neill (2022). 'Responding to Needs of Residents in Long Term Care in Ireland', *Irish Medical Journal* 113(9): 181-187.

Matthews, S., M. Pierce, S. O'Brien Green, E. Hurley, B.M. Johnston, C. Normand and P. May (2021). *Dying and death in Ireland: what do we routinely measure, how can we improve?* Dublin: Irish Hospice Foundation.

Mercille, J. (2018). 'Neoliberalism and health care: the case of the Irish nursing home sector', *Critical Public Health* 28(5): 546-559.

Morciano, M., J. Stokes, E. Kontopantelis, I. Hall and A.J. Turner (2021). 'Excess mortality for care home residents during the first 23 weeks of the COVID-19 pandemic in England: a national cohort study', *BMC Medicine* 19(1): 71.

NTPF (2021). *Review of Pricing System for Long Term Residential Care Facilities*. Dublin, Ireland, NTPF.

Offodile, I.A., M. Cerullo, M. Bindal, J.A. Rauh-Hain and V. Ho (2021). 'Private Equity Investments In Health Care: An Overview Of Hospital And Health System Leveraged Buyouts, 2003-17', *Health Aff (Millwood)* 40(5): 719-726.

Patwardhan, S., M. Sutton and M. Morciano (2022). 'Effects of chain ownership and private equity financing on quality in the English care home sector: retrospective observational study', *Age and Ageing* 51(12).

Pierce, M., S. Fitzgerald and V. Timonen (2010). *Summary and Comparison of Key Social Provisions for Older People in the Republic of Ireland and Northern Ireland*. Dublin, Centre for Ageing Research and Development.

Pierce, M., F. Keogh and E. O'Shea (2020). *The impact of COVID-19 on people who use and provide long-term care in Ireland and mitigating measures*.

Shallcross, L., D. Burke, O. Abbott, A. Donaldson, G. Hallatt, A. Hayward, S. Hopkins, M. Krutikov, K. Sharp, L. Wardman and S. Thorne (2021). 'Factors associated with SARS-CoV-2 infection and outbreaks in long-term care facilities in England: a national cross-sectional survey', *The Lancet Healthy Longevity* 2(3): e129-e142.

Shen, K. (2022). 'Relationship between nursing home COVID-19 outbreaks and staff neighborhood characteristics', *PLOS ONE* 17(4): e0267377.

Smith, S., B. Walsh, M.-A. Wren, S. Barron, E. Morgenroth, J. Eighan and S. Lyons (2019). *Geographic Profile of Healthcare Needs and Non-Acute Healthcare Supply in Ireland*. ESRI Research Series 90.

Stall, N.M., A. Jones, K.A. Brown, P.A. Rochon and A.P. Costa (2020). 'For-profit long-term care homes and the risk of COVID-19 outbreaks and resident deaths', *Cmaj* 192(33): E946-e955.

Torres, M.L., D. Palma Díaz, A. Oliver-Parra, J.-P. Millet, D. Cosialls, M. Guillaumes, C. Rius and H. Vásquez-Vera (2022). 'Inequities in the incidence and mortality due to COVID-19 in nursing homes in Barcelona by characteristics of the nursing homes', *PLOS ONE* 17(6): e0269639.

Walsh, B. (2024). *Government Supports and COVID-19 Outcomes: Evidence from the Temporary Assistance Payment Scheme for Nursing Homes*, Forthcoming.

Walsh, B., S. Connolly and M.-A. Wren (2023). *Covid-19 in the Community and Outbreaks in Long-Term Residential Care in Ireland*. pp. 23-32. doi: https://doi.org/10.31389/jltc.191.

Walsh, B., S. Connolly, M.A. Wren and L. Hill (2022). 'Supporting sustainable long-term residential care in Ireland: a study protocol for the Sustainable Residential Care (SRC) project', *HRB Open Res* 5: 30.

Walsh, B., C. Keegan, A. Brick, S. Connolly, A. Bergin, M.-A. Wren, S. Lyons, L. Hill and S. Smith (2021). *Projections of Expenditure for Primary, Community and Long-term Care in Ireland 2019–2035, Based on the Hippocrates Model*. ESRI Research Series 126. Dublin, Economic and Social Research Institute.

Walsh, B. and S. Lyons (2021). *Demand for the Statutory Home Support Scheme*. ESRI Research Series 122.

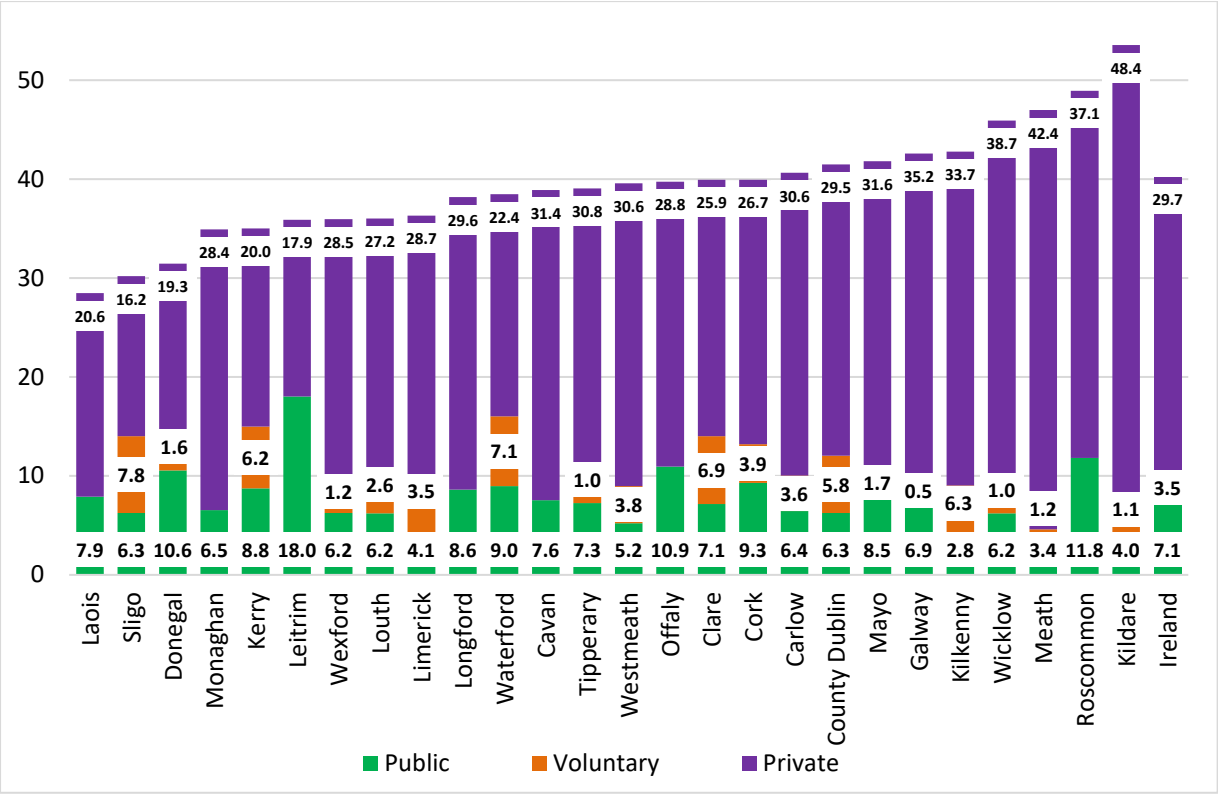
Wang, Q., P.B. Davis, M.E. Gurney and R. Xu (2021). 'COVID-19 and dementia: Analyses of risk, disparity, and outcomes from electronic health records in the US', *Alzheimers Dement* 17(8): 1297-1306.

White, E.M., C.M. Kosar, R.A. Feifer, C. Blackman, S. Gravenstein, J. Ouslander and V. Mor (2020). 'Variation in SARS-CoV-2 Prevalence in U.S. Skilled Nursing Facilities', *Journal of the American Geriatrics Society* 68(10): 2167-2173.

Wren, M.A., C. Keegan, B. Walsh, A. Bergin, J. Eighan, A. Brick, S. Connolly, D. Watson and J. Banks (2017). *Projections of Demand for Healthcare in Ireland, 2015-2030. First Report from the Hippocrates Model.* Research Series Number 67. Dublin, Economic and Social Research Institute.

APPENDIX

FIGURE A.1 LTRC BEDS BY OWNERSHIP TYPE PER POPULATION AGED 65+ IN COUNTIES IN IRELAND, DECEMBER 2022



Source: HIQA Bed Register 2022; CSO Census 2022.

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