An Roinn Sláinte
Department of Health

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

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Design Guide for Long-Term Residential Care Settings for Older People

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1. Introduction

1. Introduction:

1.1 Policy context:

The Irish population is growing across all regions and age-groups, with the most significant growth seen in the older age-groups. For the most part, our older population clearly indicates their preference to age in place, in their own homes, for as long as possible. The Irish Government's strategic goal is to deliver a new model of integrated older persons' health and social care services, across the care continuum, supporting older people to remain living independently in their own homes and communities for longer, in line with the Sláintecare vision for receiving the right care, in the right place, and at the right time.

Throughout the COVID-19 pandemic, as part of the overall national response, there was a necessary and sustained focus on older people. The pandemic highlighted the important need to move to new models of care for older people and the *COVID-19 Nursing Home Expert Panel*[1] recommendations provided a guiding framework, not only for the immediate pandemic response in long-term residential care settings for older people, but also more broadly for a wide-ranging programme of improvement and reform for older persons' care.

It is recognised that care provided in residential care settings will continue to be an important part of the continuum of care for older people into the future. For those who avail of long-term residential care, it is therefore critical that this care is provided in settings with innovative designs that can provide an appropriate home for those who need this type of care and that can meet all other requirements.

1.2 Purpose of this Guide:

The aim of this design guide is to describe and illustrate what good building design looks like for long-term residential care settings for older people. High-quality design, planning, and construction is vital in creating safe environments that enable high quality care, supporting positive experiences and outcomes in homely environments that meet the health and social care needs of residents in these settings.

This guide seeks to balance the need for people to live well, maintain relationships with family and friends, and exercise autonomy and control, with other considerations, including infection prevention and control (IPC).

The guide will articulate best practice in design for long-term residential care settings for older people and will provide a common benchmark against which the standard of these settings can be measured, without limiting innovation. The guide is underpinned by international principles and recognised approaches to designing environments for older people. It aims to empower older people to make more informed choices when selecting long-term residential care settings by improving transparency around the standard of accommodations available. The guide will also support the development of workplaces that allow staff to provide high quality personal and clinical care.

[1] Department of Health, "COVID-19 Nursing Homes Expert Panel: Final Report," (Dublin, Department of Health, 2020).

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This publication provides guidance for those:

- Designing a new long-term residential care setting for older people
- Extending an existing long-term residential care setting for older people
- Converting/adapting a building that is not currently registered as a residential care setting (e.g. hotel)
- Refurbishing/retrofitting/renovating an existing long-term residential care setting for older people

This document should be used to guide applications to the Chief Inspector within the Health Information and Quality Authority (HIQA) to register a new designated centre for older people or vary the existing registration of such a centre.

This guide will not be applied retrospectively to existing long-term residential care settings for older people.

Following publication of this guide, new build long-term residential care settings for older people, extensions to existing residential care settings for older people, and conversions/adaptations of a building that is not currently registered as a residential care setting (e.g. hotel), will be expected to comply with this guide.

In circumstances where the design and planning phase of a residential care setting commenced prior to the publication of this guidance document, and evidence of this fact can be provided to the Chief Inspector, there is no expectation that this guide will be complied with.

This guide is also relevant in the case where existing long-term residential care settings for older people are being retrofitted, refurbished, or renovated, and should serve as a reference guide for providers, outlining best practice design principles. However, in these circumstances, existing settings will not be expected to comply with this guide, considering the limitations that may be imposed by existing building systems and conditions.

This design guide:

- Refers to Regulations, Standards, and other guidance used by The Chief Inspector within HIQA
- Explains about other regulatory bodies, relevant legislation, and provides signposts to good practice that providers should be aware of
- Will be used by the Chief Inspector (HIQA) to guide the *pre-application registration advice process* and as part of the registration and inspection process for residential care settings

It is recognised that the regulations and guidance documents referenced in this guide may be updated in the future. With this in mind, this guidance document may be reviewed and updated in response to emerging evidence and evolving expectations.

1.3 The Chief Inspector (HIQA) - Pre-Application Registration Advice Process:

The intention of this guide is to support those seeking to deliver long-term residential care services for older people in the State.

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In the case of new build long-term residential care settings for older people, extensions to existing residential care settings for older people, and conversions/adaptations of buildings that are not currently registered as a residential care setting (e.g. hotel), registered providers should consult with the Office of the Chief Inspector on the proposed building plans prior to seeking planning permission.

Applicants can seek pre-application registration advice on HIQA's website[2].

As part of the pre-application registration advice process, the Chief Inspector of Social Services will ask applicants to provide detailed plans and information so that inspectors can consider the suitability of the applicant's plans and can suggest improvements, where appropriate. The Inspector's comments during the pre-application registration advice process will not guarantee registration, but they will be able to alert applicants to areas that do not comply with the relevant regulations, standards, and best practice (including this guide).

The Chief Inspector has a duty to consider each application on its own merits. It may be the case that applicants have innovative ideas and suggestions about how to build a long-term residential care setting for older people that leads to high-quality experiences and outcomes. The Chief Inspector is always keen to discuss new ideas and innovative approaches and applicants are encouraged to raise these with inspectors.

This design guide is compatible with HIQA's *National Standards for Residential Care Settings for Older People* (2016),[3] which are used for self-evaluation, registration, and inspection. These national standards provide part of the framework for the Chief Inspector, in conjunction with relevant regulations, to assess whether residential services are providing high-quality, safe, and effective services and supports for the people who live in these facilities, in line with the requirements of the Health Act 2007, as amended.

Where existing providers are planning building works or refurbishments, they should involve people using the existing service and their families in planning improvements. Co-design helps ensure that a shared vision can be developed and that design approaches are appropriate in particular contexts.

Providers should consider the relevant legislation, regulations, and guidance documents for long-term residential care settings for older people. As a provider, you are also responsible for seeking advice from statutory agencies and consultants about high-quality design principles for the people you propose to provide a service for, including:

- Fire safety
- Planning and building standards
- Health and safety
- Food safety standards

[2] The Chief Inspector (HIQA), "Pre-Application Registration Advice Process."
[3] Health Information and Quality Authority, "National Standards for Residential Care Settings for Older People," (Cork, HIQA, 2016).

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2. Planning, Building Control System, and Fire Safety Management

2. Planning, Building Control System, and Fire Safety Management:

2.1 Planning:

New long-term residential care settings for older people and conversions, extensions, and retrofits to existing properties, must comply with relevant planning legislation.

In this regard, the key piece of legislation is:

- *The Planning and Development Act 2000*[4] and accompanying regulations (cited as the Planning and Development Regulations 2001 to 2020)

The Planning and Development Act 2000 (as amended) forms the foundations for planning in Ireland. This Act covers a large range of planning-related issues and combines a wide range of different legislation into one place.

There have been several changes to the legislation since 2000, which are set out in the administrative consolidation drawn up by the Law Reform Commission.[5]

The principal regulations underpinning the Planning and Development Acts are the *Planning and Development Regulations 2001 (S.I. No. 600 of 2001)*. Several Regulations amending the 2001 Regulations have been made, which, taken together, are collectively cited as the *Planning and Development Regulations 2001 to 2023*. An unofficial consolidation of the *Planning and Development Regulations 2001- 2023*[6] has been prepared for ease of reference by users.

2.1.1 Planning Applications and Planning Advice:

A planning authority considers several matters when deciding on a planning application, including:

- The proper planning and sustainable development of the area (e.g., appropriate land use (zoning), road safety, development density, size, location, adherence to established planning and development practices)
- Provisions of the development plan
- Any other relevant plans (e.g. local area plan)
- Government or Ministerial policy

Section 247 of the *Planning and Development Act, 2000-2020,* sets out the formal procedure for prospective applicants seeking planning advice. Planning Authorities actively encourage pre-application discussions prior to the submission of any planning application.

From a planning perspective, it is also useful to include the views and preferences of partner stakeholders at conception stage, which may include environmental planning teams, architects,

[4] The Planning and Development Act (as amended), 2000, (Ireland). https://www.gov.ie/pdf/?file=https://assets.gov.ie/118297/b65e91a5-ea82-460a-9f8c-cc6bb8c754f5.pdf#page=null.

[5] Administrative Consolidation of the Planning and Development Act, 2000, (Ireland). https://revisedacts.lawreform.ie/eli/2000/act/30/front/revised/en/html.

[6] Planning legislation, "An unofficial consolidation of the Planning and Development Regulations 2001- 2023," gov.ie, November 1, 2019, https://www.gov.ie/en/publication/c0ac2-planning-legislation-primary-legislation/.

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community representatives, legal representatives, as well as fire officers. **Multi agency meetings at pre-application planning stage would be recommended.** Community engagement prior to application stage would also be helpful, noting the importance of transparency and engagement with the local community/immediate neighbours.

This guidance document for long-term residential care settings for older people should be consulted by planning authorities when making a decision on a planning application or during the pre-planning advice process. All prospective long-term residential care settings for older people should adhere to the standards outlined in this guide.

Ideally, the Chief Inspector of Social Service's pre-application registration advice process should have been completed before a planning application is submitted to a planning authority and inspectors should have approved in principle the design and proposed location of the facility.

2.1.2 Development Plans:

A development plan is the main public statement of planning policies for local communities. It sets out the land use, amenity, and development objectives and policies of the planning authority for a six-year period. There are 31 local authorities in Ireland and each local authority must prepare a new development plan every six years. Local area plans set out objectives for the proper planning and sustainable development of a specific area and are consistent with the provisions of the development plan.

The development plan consists of a written statement of objectives and includes maps that give a graphic representation of how a city/county will develop and improve in a sustainable way in a six-year period. The core strategy of the plan shows that the plan is consistent with the *National Planning Framework (NPF)*[7] and *Regional Spatial and Economic Strategies (RSES)* policies. Elected members (Councilors) are responsible for making, reviewing, and varying the development plan. It is their duty to adopt the plan with the technical help of their officials (the local authority chief executive, planners, etc.). Public consultation on the development plan must also be carried out.

All planning applications are assessed against the standards and objectives contained in the development plan before a decision is made to grant or refuse planning permission.

It is strongly recommended that this guidance document for long-term residential care settings for older people should be consulted by planning authorities when development plans are being written. All prospective long-term residential care settings for older people should adhere to the guidance outlined in this document, both in terms of design, and location.

[7] Government of Ireland, "National Planning Framework, Project Ireland 2040," (Dublin, Government of Ireland, 2018).

2.2. Building Control System:

The *Building Control Acts 1990 to 2022*[8] set out the statutory framework for the regulation and oversight of building activity in Ireland based on:

- Clear legal requirements as set out in the Building Regulations
- Detailed Technical Guidance Documents (TGDs) to outline how these requirements can be achieved in practice
- Clear administrative procedures for demonstrating compliance in respect of an individual building or works as set out in Building Control Regulations
- The responsibility for compliance resting first and foremost with building owners, designers, and builders of buildings
- The responsibility for enforcing compliance with the Building Regulations resting with the 31 Building Control Authorities

2.2.1 Building Regulations:

The aim of the building regulations is to provide for the safety and welfare of people in and about buildings. *The Building Regulations 1997 - 2022*[9] apply to the design and construction of new buildings (including dwellings).

In relation to existing buildings,[10] the Building Regulations have specific provisions applying to:

- Material alterations, extensions, and repair or renewals
- Provision of services, fittings, and equipment (by way of new work or by way of replacement)
- Material changes of use
- Major renovations

The minimum performance requirements that a building must achieve are set out in the second schedule to the Building Regulations.

These requirements are set out in 12 parts (classified as Parts A to M) as follows:

- **Part A** - Structure
- **Part B** - Fire Safety
- **Part C** - Site Preparation and Resistance to Moisture
- **Part D** - Materials and Workmanship
- **Part E** - Sound
- **Part F** - Ventilation
- **Part G** - Hygiene

[8] Administrative consolidation of the Building Control Act, 1990, (Ireland). https://revisedacts.lawreform.ie/eli/1990/act/3/front/revised/en/html.
[9] Department of Housing, Local Government and Heritage, "Building Regulations," gov.ie, December 8, 2022, https://www.gov.ie/en/publication/1d2af-building-regulations/.
[10] Department of Housing, Local Government and Heritage, "Bringing Back Homes – A Manual for the Reuse of Existing Buildings, Appendix 2," (Dublin: DHLGH, 2018).

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- **Part H** - Drainage and Waste -Water Disposal
- **Part J** - Heat Producing Appliances
- **Part K** - Stairways, Ladders, Ramps and Guards
- **Part L** - Conservation of Fuel and Energy
- **Part M** - Access and Use

Technical guidance on compliance with the various parts of the Building Regulations is given in the related Technical Guidance Documents (TGDs),[11] parts A to M respectively. Where works are carried out in accordance with the relevant TGDs, such works are considered to be, *prima facie*, in compliance with the relevant Building Regulations.

2.2.2 Building Control Regulations:

The Building Control Regulations 1997 to 2022[12] set out certain administrative and procedural requirements which must be fulfilled to demonstrate that individual buildings or works have complied with the minimum standards set out in the Building Regulations.

The building control regulations empower competence and professionalism in construction projects and establish a chain of responsibility that begins with the owner. With certain limited exceptions, the owner must assign competent persons to design, build, inspect and certify the building works who, in turn, must account for their role through the lodgement of compliance documentation, inspection plans, and statutory certificates. The roles and responsibilities of owners, designers, builders, assigned certifiers, etc. during building works are set out in the *Code of Practice for Inspecting and Certifying Buildings and Works.*[13]

Building control procedures vary for different categories of buildings and for different circumstances. Generally, the building control process requires that:

- A Commencement Notice, signed by the owner, is submitted to the Building Control Authority prior to the commencement of works; in most cases this notice must be accompanied by a statutory Design Certificate, forms relating to the assignment of the Builder and the Assigned Certifier, and a preliminary Inspection Plan.

- In the case of commercial buildings and apartment blocks, a Disability Access Certificate and a Fire Safety Certificate is obtained from the local building control authority.

- During the construction stage, where significant changes to the submitted design or the assignment of roles occurs, drawings and documentation for the changes should be submitted to the local authority before the relevant work commences.

[11] Department of Housing, Local Government and Heritage, "An unofficial consolidation of the Planning and Development Regulations 2001- 2023", (Dublin, DHLGH, 2021).
[12] Administrative consolidation of the Building Control Regulations, 1997, (Ireland). https://revisedacts.lawreform.ie/eli/1997/si/496/front/revised/en/html.
[13] Department of Housing, Local Government and Heritage, "Code of Practice for Inspecting and Certifying Buildings and Works", (Dublin, DHLGH, 2016).

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- A Statutory Certificate of Compliance on Completion, together with relevant compliance documentation and the Inspection Plan, as implemented, is lodged with the Building Control Authority before the building is occupied or used.

The Building Control Management System (BCMS) facilitates Building Control Authorities, building owners, builders, and construction professionals in discharging their separate responsibilities under the Building Control Act 1990. Further information can be found on the National Building Control and Market Surveillance Office website.[14]

Disability Access Certificate:

A Disability Access Certificate (DAC) is a certificate granted by a Building Control Authority (BCA) which certifies that certain works, if constructed in accordance with the granted Certificate, will comply with the requirements of Part M of the Building Regulations.

A building cannot be opened, operated, or occupied, or permitted to be opened, operated, or occupied, unless a DAC (or, as the case may be, a revised Disability Access Certificate) has been granted by the building control authority in relation to the building.

A revised Disability Access Certificate is required where a significant revision is made to the design or works of a building or an extension of a material alteration to, or a material change of use of, a building in respect of which a DAC has been granted by a BCA.

Enforcement of the Building Regulations/Building Control Regulations:

Responsibility for enforcement of the Building Regulations, and Building Control Regulations is delegated under the Acts to the building control authorities (i.e. the 31 local authorities) who are independent in the exercise of their statutory powers. The Building Control Authorities monitor compliance with Building Regulations in their area having regard to:

- The minimum requirements for the design and construction of buildings as set out in the Building Regulations
- The detailed TGDs showing how these requirements can be achieved in practice for common, non-complex buildings
- Procedures set out in the Building Control Regulations for demonstrating compliance in respect of an individual building or works

Buildings Control Authorities have extensive powers of inspection and enforcement under statute. Authorised officers of each local Building Control Authority have delegated powers to:

- Scrutinise proposals and inspect works in progress
- Serve enforcement notices on owners and builders for non-compliance
- Institute proceedings for breaches of any requirements outlined in the Acts, or any regulations made thereunder
- Seek High Court orders to mitigate danger to the public where serious noncompliance poses risks to public safety

[14] National Building Control and Market Surveillance Office, "Welcome to the Building Control Management System (BCMS)," nbco.localgov.ie, November 7, 2023, https://nbco.localgov.ie/.

Failure by an owner or a builder to demonstrate compliance with the Building Regulations or the Building Control Regulations or to rectify any such non-compliance may be an offence under the Building Control Acts. If successfully prosecuted in court, such offences may lead to a fine and/or a term of imprisonment.

2.2.3 European Union Energy Performance of Buildings Directive:

The *Energy Performance of Building Directive (EPBD)*[15] sets requirements at an EU level for Member States to improve the energy performance of buildings and make an important contribution to the reduction of greenhouse gas emissions, including installation of appropriate infrastructure to enable the installation of recharging points for electric vehicles.

There has been a series of regulations and guidance produced over recent years to transpose the requirements of the EPBD and, in addition, several consequential amendments to Building Regulations. Enforcement of these regulations is also the responsibility of the 31 Building Control Authorities, which have comprehensive statutory powers to deal effectively with cases where noncompliance with the requirements is identified.

2.3. Fire Safety:

Fire is a real risk to the safety of people living in long-term residential care settings for older people. The risk of injury and death from fire is significantly higher in older age groups, due to impaired mobility, frailty, and use of medication, amongst other reasons.

The potential impact from fire is greatly increased if providers do not mitigate against fire risk and do not have suitable fire prevention and oversight measures in place in the residential care setting. Experience from other jurisdictions has shown that implementing good fire safety management policies, effective fire precautions, and comprehensive staff training, will help to protect residents, staff, and visitors, from the consequences of fire.

There are two key aspects to fire safety in residential care settings. Firstly, in the design and construction of the building, and secondly, in the use and management of the building.

2.3.1 Part B - Fire Safety - Building Regulations:

Part B (Fire Safety) of the Second Schedule to the Building Regulations[16] and the associated *Technical Guidance Document B*[17] deal with Fire Safety. Where works are carried out in accordance with TGD B, such works are considered to be, *prima facie*, in compliance with *Part B (Fire Safety) of the Building Regulations*.

2.3.2 Fire Safety Certificates:

Apart from houses and certain agricultural buildings, a Fire Safety Certificate is required for all new buildings, as well as material changes of use and certain alterations and extensions to buildings. A Fire

[15] European Commission, "The Energy Performance of Building Directive," energy.ec.europa.eu, October 27, 2023, https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en.

[16] Building Regulations (Amendment) (Part B) Regulations, 2006, (Ireland). http://www.irishstatutebook.ie/eli/2006/si/115/made/en/print.

[17] Department of Housing, Local Government and Heritage, "Technical Guidance Document B - Fire Safety," (Dublin, DHLGH, 2006).

Safety Certificate must be obtained **before** work starts unless an application has been made for a 7 Day Notice.

A Fire Safety Certificate is a certificate granted by a Building Control Authority which certifies that the building or works, if constructed in accordance with the plans, documents, and information submitted to the Authority, would comply with the requirements of *Part B of the Second Schedule to the Building Regulations 1997,* as amended.

2.3.3 Fire Safety Management:

The Fire Services Acts, 1981 and 2003,[18][19] provide the primary statutory basis for fire safety in Ireland. Under Section 18(2) of the Act, the statutory responsibility for fire safety in buildings of all kinds to which the legislation applies is placed on the "person having control" of the premises.

A duty is placed on the "person having control" to "*take all reasonable measures to guard against the outbreak of fire on such premises, and to ensure as far as is reasonably practicable the safety of persons on the premises in the event of an outbreak of fire".* In the case of a residential care setting in Ireland (a designated centre), the person having control over the premises is the registered provider.

Section 18(3) of the Act also places a duty on every person on such premises, including occupants and visitors, to *"conduct himself in such a way as to ensure that as far as is reasonably practicable any person on the premises is not exposed to danger from fire as a consequence of any act or omission of his."*

Section 22 of the *Fire Services Acts* gives powers of inspection to authorised persons of a fire authority. A fire authority may serve a fire safety notice where a building which constitutes a danger to life in the event of a fire occurring is considered to be a "potentially dangerous building" under the act.

Advice and guidance with respect to obligations of the "person having control" are outlined in the *Fire Safety Guide for Building Owners and Operators* Guide[20] for persons having control under *Section 18(2) of the Fire Services Acts 1981 and 2003* published by the Department of Housing, Local Government, and Heritage (DHLGH). This guide is intended to assist every person having control over premises in the practical understanding and effective management of the fire safety requirements and in discharging their statutory responsibilities for fire safety in premises.

2.3.4 HIQA Fire Safety Handbook (issued by the Chief Inspector):

In January 2021, the Chief Inspector of Social Services (HIQA) published a Fire Safety Handbook[21] to help providers to meet their fire safety obligations under the:

- *The Health Act 2007*, as amended
- The relevant regulations under the Act

[18] Fire Services Act, 1981, (Ireland). https://www.irishstatutebook.ie/eli/1981/act/30/enacted/en/html.
[19] Licensing of Indoor Events Act, 2003, (Ireland). https://www.irishstatutebook.ie/eli/2003/act/15/enacted/en/html.
[20] Department of Housing, Local Government and Heritage, "Fire safety Guide for Building Owners and Operators," (Dublin, DHLGH, 2023).
[21] Chief Inspector of Social Services, "Fire Safety Handbook - A guide for providers and staff of designated centres (version 1.1)," (Cork, HIQA, 2023).

- The relevant national standards related to fire safety

The handbook is written to assist both existing providers and intended providers to meet their responsibilities under the legislation mentioned above. This may be for the renewal of their registration or for a new designated centre being registered. For the purposes of the HIQA guidance, a new designated centre may be within an existing building and might not always be within a newly constructed building.

Providers are responsible for protecting residents from fire and for complying with the relevant requirements. To achieve this, they must develop and implement an effective fire safety programme.

It is important to note that providers have obligations under other legislation related to fire safety and building control which are outside of the remit of the Chief Inspector of HIQA. The guidance contained in the Handbook does not detail all aspects or specifics of other legislation and the provider should ensure their design team or fire safety professional refers to the appropriate legislation.

2.4. Health and Safety:

The Safety, Health, and Welfare at Work Act, 2005[22] places responsibility for occupational health and safety on all stakeholders. The Act develops the role of employers, employees, and the Government in framing and implementing occupational safety and health policy in Ireland.

For designing or carrying out construction work, the *Safety, Health, and Welfare at Work (Construction) Regulations 2013 (S.I. No. 291 of 2013)*[23] prescribe the main requirements for the protection of the safety, health and welfare of persons working on construction sites and to give further effect to *Council Directive 92/57/EEC*[24] on the minimum safety and health requirements at temporary or mobile construction sites.

These Regulations are designed to clarify and strengthen the general duties of all parties as regards securing occupational safety, health, and welfare in construction work, including those of clients, project supervisors, designers, contractors, and employees.

These Regulations apply to all construction projects including the alteration, decoration, maintenance and repair of buildings and the installation, maintenance, and removal of mechanical and other systems fixed within or to structures. They place obligations on clients and designers to ensure that health and safety is considered **before** any construction work begins.

[22] The Safety, Health and Welfare at Work Act, 2005, (Ireland). https://www.irishstatutebook.ie/eli/2005/act/10/enacted/en/print.
[23] The Safety, Health and Welfare at Work (Construction) Regulations, 2013, (Ireland). https://www.irishstatutebook.ie/eli/2013/si/291/.
[24] European Agency for Safety and Health at Work, Directive 92/57/EEC - temporary or mobile construction sites, 2021, (Europe). https://osha.europa.eu/en/legislation/directives/15#:~:text=This%20Directive%20lays%20down%20minimum,linking%20all%20the%20parties%20involved.

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3. Statement of Purpose for Long-Term Residential Care Settings for Older People

3. Statement of Purpose for Long-Term Residential Care Settings for Older People:

A Statement of Purpose is required in order to register or renew the registration of a residential care setting for older people (designated centre).

The regulations under the Health Act 2007 (as amended) that require providers to compile a written Statement of Purpose for designated centres and submit as part of the registration process are as follows:

- Health Act 2007 (Care and Welfare of Residents in Designated Centres for Older People) Regulations 2013 to 2022[25][26][27]
- Health Act 2007 (Registration of Designated Centres for Older People) Regulations 2015 to 2017[28][29]

A Statement of Purpose describes the aims and objectives of any registered long-term residential care setting and must include details of the type and range of services that will be provided.

The Chief Inspector within HIQA views the Statement of Purpose as one of the most important documents that a registered provider is required to have in relation to the range of service(s) they are providing.

The Chief Inspector has provided guidance on the Statement of Purpose for designated centres for older people to assist providers.[30]

The regulations outline what is required to be included in a Statement of Purpose. It is acknowledged that as part of the pre-application registration advice process a provider may not be able to meet all the requirements and submit a finalised Statement of Purpose. However, for the purpose of a meaningful pre-application registration advice process the provider should give careful consideration and provide precise details when describing the type and range of services and the arrangements in place to support the health and social care, wellbeing, and safety of residents.

A service's aims and objectives are key factors in determining the design of a building and a Statement of Purpose, alongside the plans, must be submitted, as part of the pre-application registration advice process.

[25] Health Act 2007 (Care and Welfare of Residents in Designated Centres for Older People) Regulations, 2013, (Ireland). https://www.irishstatutebook.ie/eli/2013/si/415/made/en/print.
[26] Health Act 2007 (Care and Welfare of Residents in Designated Centres for Older People) (Amendment) Regulations, 2016, (Ireland). https://www.irishstatutebook.ie/eli/2016/si/293/made/en/print.
[27] Health Act 2007 (Care and Welfare of Residents in Designated Centres for Older People) (Amendment) Regulations, 2022, (Ireland). https://www.irishstatutebook.ie/eli/2022/si/628/made/en/print.
[28] Health Act 2007 (Registration of Designated Centres for Older People) Regulations, 2015, (Ireland). https://www.irishstatutebook.ie/eli/2015/si/61/made/en/print.
[29] Health Act 2007 (Registration of Designated Centres for Older People) (Amendment) Regulations, 2017, (Ireland). https://www.irishstatutebook.ie/eli/2017/si/430/made/en/print.
[30] The Chief Inspector of HIQA, "Guidance on the Statement of Purpose for designated centres for Older People," (Cork, Office of the Chief Inspector, 2018).

At a minimum, the Statement of Purpose should:

- Clearly describe the aims and objectives of the designated centre
- Set out the specific care and support needs that the service intends to meet
- Set out the range of services and supporting facilities to be provided at the designated centre to meet the residents' care and support needs
- Clearly define the admission criteria to the designated centre, including the age range and sex of the residents for whom the centre is intended
- Set out the fire precautions and associated emergency procedures

Once a designated centre is registered, the registered provider must always operate strictly in accordance with the Statement of Purpose as outlined in their conditions of registration.

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4. Location and Community Connection

4. Location and Community Connection:

The physical location and community connection of a long-term residential care setting for older people is a vitally important consideration. Long-term care settings in isolated locations, or in locations peripheral to communities, are sub-optimal for residents, visitors, and staff alike.

One of the key principles informing HIQA's *National Standards for Residential Care Settings for Older People in Ireland* is to:

'*Promote integration within the community and the development of social networks*.'

Development of a long-term residential care setting for older people should be in response to an identified local need and due diligence in this regard should be undertaken by providers. Settings that are located centrally within a community will benefit from proximity and access to the community, local amenities, services, local parks, green spaces, public transport, and walking and cycling infrastructure.

A residential care setting that is integrated and connected with the local community can also have a positive impact on people's wellbeing and help to tackle isolation and loneliness. A sense of connectedness supports resilience in older people, particularly those living with dementia. Location and connection to family and community are therefore important, not only in terms of social interaction, but also in terms of a resident's resilience and their ability to adapt to adversity.

To provide a properly located and connected environment, important considerations include:

- The long-term residential care setting should be situated in an area suitable for domestic living and should avoid non-domestic locations such as industrial or retail sites.
- Being close to the local community to ensure people living in the service are not isolated from their family, friends, and community amenities.
- Access to public transport systems, cycling routes, pedestrian walkways, and adequate car parking (including disabled parking spaces close to entrances), bicycle and motorcycle parking, to allow both staff and visitors easy access to the setting.
- When choosing a site, intended providers should consider proximity to, or co-location with, existing community services (such as primary care centres), recreational spaces, and other residential options (e.g., housing for older people), thereby facilitating interaction with the wider community.
- Environmental site conditions should support health, wellbeing, and privacy, providing a calm and relaxing setting in terms of air quality, acoustics, views, and contact with nature.
- Noise/pollution should be minimised to a level that is in keeping with a residential setting. Care settings should not be built next to a railway, airport, noisy main road, or entertainment venue.
- When deciding on the location of a residential care setting, the provider should consider the availability of other services that residents may need to access in the community (e.g., hairdressers, beauty salons, cafes, or places of worship).

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5. General Design

5. General Design:

The built environment of a long-term residential care setting for older people plays an important role in enhancing the quality of life of residents, promoting a positive visitor experience for friends and family, and improving the working environment for staff. Good environmental design can help to reduce the impact of the changing mobility, cognition, and frailty that older people may experience and can help to support their physical, cognitive, and psychological wellbeing. Good design also adapts to meet changing needs over time.

This chapter provides general design principles to consider when planning, designing, building, and refurbishing a long-term residential care setting for older people. The model of care provided, as outlined in the Statement of Purpose, is a key determinant in all building design considerations.

5.1 Universal Design and Dementia Inclusive Design:

Universal Design is the design and composition of an environment so that it can be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability, or disability. An environment (or any building, product, or service in that environment) should be designed to meet the needs of all people who wish to use it. This is not a special requirement for the benefit of only a minority of the population. It is a fundamental condition of good design.

If an environment is accessible, usable, convenient, and a pleasure to use, everyone benefits. By considering the diverse needs and abilities of all throughout the design process, universal design creates environments that meet peoples' needs.

5.1.1 Dementia Inclusive Design:

Many people may enter long-term residential care with a diagnosis of dementia, but it is also recognised that dementia in residential settings is under-diagnosed.[31] Estimates suggest that about half of those in residential care have dementia, whether diagnosed or not.[32] The design of the physical environment is increasingly being recognised as an important aid in the care of people with Alzheimer's disease and other dementias and is regarded as a therapeutic resource to promote wellbeing and functionality among people with dementia.

Dementia is extremely individualised, and each person's needs will differ, depending on their experience of symptoms, their age at onset of dementia, their overall health status, their personality, and their preferences. As a result, a range of personalised and coordinated supports are required to enable people to adapt and cope with the onset of dementia and its progression. Further information can be found in the HSE's *Model of Care for Dementia* (2023).[33]

People living with dementia in a long-term residential care setting require an acceptable amount of space to mirror as closely as possible the home environment. The residential care setting should be monitored to provide acceptable levels of noise and stimulation. Freedom and choice of movement

[31] Cahill, Suzanne, Eamon O'Shea, Maria Pierce, Creating Excellence in Dementia Care: A research review for Ireland's National Dementia Strategy (Dublin and Galway: Trinity College Dublin and National University of Ireland, Galway, 2012).

[32] Eammon O'Shea, Suzanne Cahill, and Maria Pierce, "Developing and Implementing Dementia Policy in Ireland," NUI Galway and Centre for Economic and Social Research on Dementia, (2017), https://dementia.ie/wp-content/uploads/2020/01/Developing_and_Implementing_Dementia_Policy_in_Ireland.pdf.

[33] Health Service Executive, "Model of Care for Dementia in Ireland," (Dublin, HSE, 2023).

through the centre should be possible. Areas of quiet space for reflection and interaction with others are also important.

The physical environment should encourage and support independence while promoting safety. The optimal environment should feel comfortable, familiar, and home-like. It is important to provide easy, safe, and secure access to the outdoors while maintaining a safe environment. Designing facilities to support people with a reduced level of cognitive function is practical and achievable.[34]

Accommodation for people living with dementia should:

- Compensate for disability
- Maximise independence, reinforce personal identity, and enhance self-esteem/confidence.
- Be orientating and understandable
- Control and balance stimuli
- Welcome relatives and the local community
- Demonstrate care for staff

Design features that should be considered in a facility to provide quality accommodation for people living with dementia include:

- Small size, in terms of the numbers of people accommodated in a dementia specific unit. Less than 12 people is recommended
- A familiar building style that is domestic and home-like
- Plenty of scope for ordinary activities (e.g., unit kitchens)
- Unobtrusive inclusion of safety features
- Rooms for different functions that are equipped with furniture and fittings familiar to the age and generation of the residents
- A safe, accessible, outside space
- Single bedrooms with sufficient space for a reasonable amount of personal belongings
- Good signage and multiple cues where possible (e.g., sight, smell, sound)
- Use of objects rather than colour for orientation
- Enhancement of visual access
- Control of stimuli, especially noise

These design features should be considered in the design of dementia inclusive residential services and should include all the rooms and areas that form part of the residential service. It is important to recognise that some small changes can have a major impact on improving accessibility for people with dementia.

[34] Grey, Thomas, Mark Dyer, Maria Pierce, Susan Cahill, Universal Design Guidelines: Dementia Friendly Dwellings for People with Dementia, their Families and Carers. (Dublin: The Centre for Excellence in Universal Design at the National Disability Authority, 2015).

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The Household Model of Care and Dementia:

It is critical that residential care settings accommodating people with dementia take appropriate account of the needs of these residents, even where the centre in question is not formally described as specialising in dementia. When remaining at home is no longer an option for people with dementia, extensive research has identified the household model as the best alternative solution when long-term residential care is required. Dementia-inclusive households, with 12 of less people, provide environments that are domestic in setting and appropriate in scale, supporting people living with dementia to remain independent for longer.

The aim in dementia-inclusive households is to create culture, practices, and procedures based on a person-centred approach which provide the opportunity for the additional time needed to enable the independence and functioning of the resident to the highest level possible. This independence and functioning are grounded in providing opportunities for residents to continue to direct their own lives in accordance with their cognitive and physical abilities in an environment which reflects the comforts of home.

The built environment has been shown to be a key factor in the achievement of positive outcomes for residents with dementia and for staff. The design of a building acts as a catalyst for change and can support cultural transformation by creating an appropriate mix of private, semi-private, and communal areas that are non-institutional and homely in nature. A key objective is to provide opportunities for residents to engage in normal everyday activities based on a resident's previous routines and lifelong habits and to involve residents and their families in decision-making processes.

Further information on good practice can be found in the HSE's *Dementia Design Brief for Residential care.*[35]

Inpatient Mental Health Services for Older People and Psychiatry of Later Life:

Some older people with dementia may experience a mental health difficulty or mental health disorder that results in admission to an inpatient mental health service.

Whilst the focus of this guide is on 'designated centres' for older people that are regulated by the Chief Inspector within HIQA, it is recognised that people with dementia may also be accommodated in mental health inpatient units ('approved centres') that are regulated by the Mental Health Commission.

The importance of the physical environment in fostering good mental health is well established and is of paramount importance where someone is being treated for a mental illness in an inpatient unit.[36] Optimal physical environments are associated with shorter lengths of stay, lower levels of aggression and critical incidents, better client outcomes, and better staff conditions and satisfaction. Patients' experience of such spaces can have a highly emotional dimension, which suggests that the design of mental health facilities should be investigated as a potential means to influence therapeutic efficacy.

[35] Health Service Executive, "Design Brief: 10 Bed Dementia Specific Household - Residential Care Centre," (Dublin: HSE, 2016), 1-28.
[36] Mental Health Commission, "A Report on Physical Environments in Mental Health Inpatient Units," (Dublin, MHC, 2021).

Further information on the built environment as it relates to 'approved centres' can be found on the Mental Health Commission website.[37]

5.2 Size:

Smaller scale, home-like, or household models in long term residential care settings for older people have been linked to increased resident satisfaction and improved quality of life.[3839] Research further suggests that people living in smaller long-term residential care settings experience better quality care[40] and that smaller size settings may be less institutional and are easier to relate to and more comfortable in terms of scale.[4142]

The impact of the COVID-19 pandemic on the long-term residential care sector has been profound. A study undertaken by the Economic and Social Research Institute (ESRI) entitled *COVID-19 in the Community and Outbreaks in Long-Term Residential Care in Ireland* (2023)[43] points to research which indicates that larger long-term residential care homes and homes with higher rates of occupancy have been found to have more COVID-19 outbreaks and higher COVID-19 mortality rates.

In the context of the *COVID-19 Nursing Homes Expert Panel Report* (2020),[44] many respondents reflected on the prevalent nursing home model of care in Ireland and questioned the appropriateness of providing very large nursing homes. Several respondents also discussed the need for older people to move to smaller residential care households with a lower number of residents and a move away from building large facilities. Other respondents highlighted the progress made in the disability sector in moving people with disabilities out of congregated settings.

It is recommended that long-term residential care settings for older people should have no more than 84 residents in total.

(Some flexibility may apply on a case-by-case basis where HIQA, in the context of the pre-application registration advice process, determines that that the proposed facility is size appropriate in relation to population need, site location, and community connection).

[37] The Mental Health Commission, "The Mental Health Commission," mhcirl.ie, November 20, 2023, https://www.mhcirl.ie/.
[38] Lauren Cohen, Sheryl Zimmerman, David Reed, Patrick Brown, Barbara J. Bowers, Kimberly Nolet, Sandra Hudak, and Susan Horn, "The Green House Model of Nursing Home Care in Design and Implementation," Health services research 51, no. 1 (2016): 352-377, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5338211/.
[39] Hilde Verbeek, et al., "*Small, homelike care environments for older people with dementia: a literature review*," International Psychogeriatric 21, no. 4 (2009): pp. 252-64.
[40] Richard Baldwin et al., "Does size matter in aged care facilities? A literature review of the relationship between the number of facility beds and quality," Health Care Management Review 42, no.4 (2017): 315-327.
[41]Richard Fleming, Kirsty A Bennett, Key Principles for Improving Healthcare Environments for People with Dementia (Australia: The Agency for Clinical Innovation (ACI) Aged Health Network, 2014).
[42]Richard Fleming, Kristy A Bennett, Environmental Design Resources (Australia: Dementia Training Australia, 2017).
[43] Brendan Walsh, Sheelah Connolly, and Maev-Ann Wren, "Covid-19 in the Community and Outbreaks in Long-Term Residential Care in Ireland", Journal of Long-Term Care, (2023): pp. 23–32, https://doi.org/10.31389/jltc.191.
[44] Department of Health,"COVID-19 Nursing Homes Expert Panel: Final Report," (Dublin, Department of Health, 2020).

The provider should demonstrate that the size of the long-term residential care setting for older people has been determined by local need, population group, and the care focus of the service. This should be reflected in the Statement of Purpose for the centre and submitted during the pre-application registration advice process provided by the Chief Inspector of HIQA.

If a residential care setting for older people has more than one storey, it is imperative that residents on all floors should have access to safe, appropriate, usable, and meaningful outdoor space, such as a balcony or roof garden. Access to upper floors for visitors should be facilitated through spacious and well-ventilated circulation routes, ideally without having to travel through key living spaces within the building.

5.2.1 The Household/Teaghlach Model of Care:

The traditional culture of care in residential care settings in Ireland has been informed and shaped by the medical tasks and care routines of health care professionals. The '*Household'* or *'Teaghlach'* model of residential care aims to shift the culture of care away from the task-orientated model to one that supports older people to direct their own lives 'at home', supported by consistent and valued teams of care staff in an environment reflective as much as possible of the older person's own home. Underpinning this is a value system of person centeredness and an honouring of older people.

These principles recommend dividing the residential care setting into domestic-style units, or households, that are domestic in scale, supporting older people to direct their own lives in accordance with their cognitive and physical abilities, in a built environment that reflects the comforts of home. Smaller group living is associated with less social isolation, better communication and engagement, less confusion, better orientation and wayfinding, and easier provision of care. The '*Household*' or '*small scale living*' model of long-term residential care has already been adopted in several countries.

Small group living settings promote a homely and accessible environment. The benefits of small group living can be compromised where there are too many units or households within a large building. Small group living settings should not be a thoroughfare to other shared facilities or service areas of the premises.

It is recommended that long-term residential care settings for older people in Ireland adopt the Household/Teaghlach model of residential care (with a maximum of 12 residents per household).

The advantages of small group living include:

- The household model promotes person-centred care rather than an institutional care model.
- The design can be domestic in nature, homely, and so, more familiar.
- Residents are not overloaded with stimuli of noise, activity, and too many other people.
- It may be easier for people to participate in domestic activities.
- People often experience less stress in smaller units or households.
- Small group living can empower residents, improve cognitive and functional capacity, and promote dignity, pride, and social engagement.
- It can facilitate a synergy between the care culture and the built environment.
- It is easier for staff to get to know individual residents and understand what matters to them.

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- The small group living model can enhance team development, knowledge, and expertise that produces high-quality care.
- Staff develop a greater sense of ownership and pride in their unit or household.
- It promotes good infection outbreak control.

5.3 General Layout and Design Considerations:

The general layout and design of residential care settings is a crucial factor in enhancing the quality of life of residents while promoting safety and security, self-realisation, social engagement, meaningful activities, and a sense of home.

The general layout and design should provide the following (further information on specific items will be provided throughout this guide):

- Households which accommodate 12 or less people, providing a homely and domestic environment.
- Each household should be accessible without having to travel through other households.
- Each household must have the ability to operate independently and be self-contained if required (to facilitate cohorting) and should be designed so that the flow of goods, services, and waste materials that can cause cross-contamination between contaminated and clean items is minimised.
- Newly built residential care settings should generally consist of single person bedrooms unless there is a specific requirement for some twin/double bedrooms to meet the needs of some residents.
- All resident bedrooms must have ensuite shower and toilet facilities.
- A suitable kitchen, equipped to meet the aims and objectives of the service.
- It is recommended to use appropriate signage to assist with wayfinding in both the internal and external environment of a long-term residential care setting.
- It is important that residential care settings are designed with appropriate consultation and that the design facilitates good infection prevention and control (IPC) practices and has the quality and design of finishes and fittings that enable thorough access, cleaning, and maintenance to take place.
- Sufficient, accessible, separate storage for documents, medication, personal protective equipment (PPE), laundry, cleaning consumables, sterile consumables, resident equipment (such as wheelchairs and hoists), as well as food storage etc. across the premises.
- Waste disposal to comply with all legislation[45] that controls the management of healthcare risk waste (including sharps)[46] and healthcare non-risk waste as well as workplace health and safety.
- Buildings of more than one floor should provide safe, independently accessible outdoor space, such as a balcony or roof garden, that provides contact with nature for each small group setting.

[45] Environmental Protection Agency (EPA), "Waste Legislation," epa.ie, https://www.epa.ie/our-services/licensing/waste/waste-licensing/waste-legislation/.
[46] Prevention of Sharps Injuries in the Healthcare Sector Regulations, 2014, (Europe). https://www.hsa.ie/eng/Legislation/New_Legislation/S_I_135_of_2014.pdf.

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- Visiting facilities with outdoor access to enable visiting without accessing the long-term residential care settings in the event of infection outbreaks.

Each household must include:

- An identifiable entry to each household
- Bedrooms with an accessible ensuite wet floor shower room
- At least one bathroom, with assisted bath (or assisted shower, provided this meets residents' needs) per household
- Choice of public rooms to spend time in, for example, one sitting room and one dining room, or an open plan kitchen/dining/sitting room
- Accessible kitchen area for use by residents and their visitors
- Communal accessible toilets co-located with communal areas for ease of access
- Separate storage areas for all requirements such as resident equipment, hoists, commodes, laundry etc. and supplies
- Garden areas for residents and visitors to enjoy

Infection Prevention and Control (IPC) considerations must be involved in the design of the environment. Advice should be sought from infection prevention and control experts early in the design phase, at planning stage, during construction, and right through to the selection of surface finishes, furniture, and other fixtures and fittings. The layout must be such that should infection outbreaks occur, resident placement is arranged in a way that supports the need for isolating or cohorting. Further information on IPC can be found in NCEC's *National Clinical Guideline No. 30 – Infection Prevention and Control* (2023)[47] and the HSE's *Infection Control Guiding Principles for Buildings - Acute Hospitals and Community Settings* (2023).[48]

Where the residential care setting is offering areas open to the public or other services, the security, safety, privacy, dignity, and human rights of people who live in the service must always be respected.

5.3.1 Interior Design:

Long-term residential care settings for older people must provide a safe and homely environment and include familiar objects that have meaning for residents and can contribute to an improved quality of life. Impersonal or functional design can make a resident feel like they are living in temporary accommodation and not their home. Soft furnishings, such as chairs and cushions, are to be encouraged, as they provide a more homely feel and can hold great emotional value to residents.

These considerations must be balanced with the need for an environment that can reduce the risk of harm from the spread of transmissible micro-organisms, for example, by using materials, fixtures, and fittings, that can be effectively cleaned.

[47] National Clinical Effectiveness Committee (NCEC), "National Clinical Guideline No. 30 – Infection Prevention and Control," gov.ie, July 31, 2023, https://www.gov.ie/en/publication/a057e-infection-prevention-and-control-ipc/.
[48] Health Service Executive, "Infection Control Guiding Principles for Buildings Acute Hospitals and Community Settings," (Dublin, HSE, 2023).

It is important to ensure that any design complies with all legislation, regulations, or standards, such as building standards, fire safety, food hygiene, health and safety, infection prevention and control (IPC), and waste.

5.4 Bedrooms:

The physical space of a bedroom has special meaning to all of us. It is a private space of our own where we keep our most personal possessions. Bedrooms offer privacy and a sense of security.

In long-term residential care settings for older people, bedrooms hold even more importance. They can be home to people for several years, offering privacy within group living environments. Personalising a bedroom is a way to make life in long-term residential care settings feel more like home. Treasured possessions and familiar pieces of furniture, including those brought from home, can help to create a sense of familiarity, and make a person feel more comfortable.

It is important to consider how to make bedrooms feel like home for residents and how to support residents to control aspects of their bedroom whilst supporting IPC measures. There should be sufficient storage space in the bedroom to accommodate an individual's care equipment such as a wheelchair, and other personal care items. Bedrooms should be designed to allow people to have as much independence as possible.

Everyone should have the choice of a single bedroom. In some circumstances, people may wish to share a double or twin room with someone with whom they have a prior relationship.

5.4.1 Size and facilities in Bedrooms:

For single rooms, there should be a minimum of 16.5m^2 of usable floor space (excluding ensuite facilities),[49] with head space of at least two metres. Some people may require additional space for care equipment to meet their needs and the room should be large enough to accommodate this. Many people will be used to sleeping in a double bed and feel more comfortable with this. There should be enough space to have a double bed, even in single rooms, if a person wishes.

Bedrooms should have these facilities:

- Enough space for care equipment such as walking aids and a wheelchair. A risk-based approach should be taken to ensure that the environment is appropriate for carrying out clinical activities and undertaking manual handling operations while maintaining a good standard of infection control. In a twin room, for privacy and IPC reasons, it is imperative that staff can attend to one resident in a bedroom without impinging on the bed space or equipment of a neighbouring resident.
- It is also important that the physical environment complies with disability access requirements and does not compromise the privacy and dignity of residents.
- Bedrooms should have adequate room for residents to have personal furnishings (such as a favourite chair), pictures, plants, and other items, to create a domestic feel. These personal objects (e.g., self-care items, photographs, and messages from family and friends) should be situated where the resident can see them.
- There should be easy access to equipment around the bed area. Provision of alcohol-based hand rub should be available at the point of resident care.

[49] Ibid.

- A lockable space to keep money and valuables.
- A digital connection to enable personal entertainment, connecting with family/friends and supporting clinical need.
- Adequate ventilation and natural daylight.
- Windows that can be opened and have a pleasant outlook from a seated position.
- There must be ensuite shower and toilet facilities provided in each bedroom. The bedroom should be designed so that the ensuite door is visible (within eyeline) from the bed.
- A call system must be in place.
- Ability to dim lights at night to enable care tasks to be carried out with a greater level of comfort.
- Space to receive visitors, at a physical distance (for example, 2m), if necessary. Rooms should have adequate seating space for family and other visitors that would allow more autonomy independence, and flexibility, and does not interfere with care of the person.
- Storage for PPE for staff (e.g., disposable gloves and aprons). This should be available outside the resident's room and, as required, at the point of care. It should be stored in a manner that is discrete and which prevents environmental contamination.
- If the service to be provided, as set out in the Statement of Purpose, envisages a high percentage of residents who will require oxygen therapy, then it may be wise to consider the installation of an integrated gas supply system.
- Medicine storage within bedrooms, if appropriate, must be away from radiators and must not be within the ensuite facility.
- Enclosed storage is required for care equipment and products such as continence aids and catheter equipment. These items should be protected from environmental contamination or handling by visitors and people living in the care setting.
- Fire retardant furnishings that are easily cleaned are a necessary consideration.
- Ceiling hoists, where installed, should not impact on the aesthetic of the bedroom.
- Overbed tables, if in use, should lower to the level of the resident to facilitate ease of dining, whether in bed, or sitting in a chair.

5.5 Toilets and bathrooms:

5.5.1 Ensuite facilities:

- Ensuites must have a wet-floor shower, wash-hand basin, and toilet.
- The room size should be at least 6m^2 in total.[50] However, it may need to be larger than this to provide enough room for assistance from staff.
- All fixtures and fittings should be easy to see and intuitive to use. Good lighting and the use of tonal contrast is also imperative.
- Doors should have locks that staff can open in an emergency.

[50] Health Service Executive, "Infection Control Guiding Principles for Buildings Acute Hospitals and Community Settings," (Dublin: HSE, 2023).

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- Adequate ventilation must be in place.
- A call system must be in place.
- Heights of wash-hand basin, shaving point, wall cabinets, and mirror should be accessible.
- Built-in sink units must be suitable for individuals who wish or need to sit at the sink.
- Grab rails and toilet seats should be in a contrasting colour to the background/walls to make them stand out.
- Additional safety features associated with access to water may be required for some individuals.
- Storage for toiletries and other personal items should be available and away from the toilet and hand-wash basin to prevent environmental contamination. Where the ensuite is attached to a twin room, separate storage should be provided for each resident.
- All wash-hand basins should be sealed to a waterproof splash-back.
- Wall-mounted liquid soap and good quality paper-towel dispensers should be available.
- Separate pedal operated bins for disposing of non-risk healthcare waste.
- Flooring should be seamless, smooth, slip resistant, easily cleaned, and appropriately wear-resistant.
- The ensuite should be visible by a resident from the head of the bed to assist with wayfinding. Consideration should be given to the use of colour coding doors and contrasting colours to assist with wayfinding.
- Night lighting should also be provided to aid orientation.

5.5.2 Shared Toilets:

- Toilets should be comfortable and accessible, easy to find, and intuitive to use. There must be toilet(s) close to the public rooms, but to meet hygiene regulations, these toilets must not open directly onto living and dining areas. Appropriate toilet signage may be helpful to assist people with dementia in accessing toilets.
- All toilets must have sufficient space for wheelchair access with enough width and turning space. More details can be found on the Irish Wheelchair Association website.[51]
- Cubicle toilets are not acceptable.

5.5.3 Visitor Toilets:

- Designated visitor toilets and hand hygiene facilities in sufficient numbers should be available near the entrance of the long-term residential care settings for older people.
- In larger care settings, it would be preferable if there was a designated visitors toilet on each floor. These must be fully accessible and include a baby changing area.

[51] The Irish Wheelchair Association, "Access to the Built Environment," iwa.ie, April 14, 2023, https://www.iwa.ie/access-guidelines/great-outdoors-access-guidelines/7-access-to-the-built-environment/#7point3.

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5.5.4 Assisted Baths:

- People should be able to choose to have a regular bath. Baths are not just for personal hygiene but can be therapeutic for people, providing relaxation, enjoyment, and easing of joint pain. It is therefore important to make sure the bathroom is pleasant and homely.
- All residents should have access to an assisted bath. There must be sufficient space for wheelchair access with enough width and turning space for wheelchairs and hoists.

5.6 Communal Areas:

Communal spaces such as visitor rooms, sitting rooms, and dining rooms, must not be thoroughfares to other parts of the long-term residential care setting. There should be a minimum of four square metres of communal space for each resident, which excludes residents' bedrooms, corridors, entrance hall spaces, and communal bathrooms.

The service's Statement of Purpose needs to be considered when planning shared areas. Having a range of different spaces for residents to choose where to spend their time is essential. Public spaces should be positioned so that they are accessible to people living in the service and where they can be easily supported by staff.

Long-term residential care settings for older people should provide a homely environment that promotes health and wellbeing. This would include features such as:

- A focal point for the lounge such as a view, fish tank, or a mock fireplace.
- Windows that are accessible by residents to sit at and enjoy the views.
- Fresh air and natural daylight.
- Smaller lounges and dining areas.
- Communal space should include smaller rooms for those who do not want to spend time in larger communal areas and to facilitate residents to meet with visitors that they may not be comfortable entertaining in their bedroom. This room should allow for private and uninterrupted conversations.
- All long-term residential care settings for older people should have a visiting room with outdoor access, to accommodate large groups of visitors.
- Where long corridors or lengthy circulation distances exist, accessible and comfortable seating should be provided at appropriate intervals. Handrails should be provided in corridors, as appropriate.
- Occasional sitting areas, for example, chairs in alcoves, or at windows, to give destination points and a choice of areas in which to spend time. However, full consideration should be given to the quantity and flammability of furniture or other items left in hallways to ensure that they do not pose a fire risk and that the means of escape are not compromised.
- Digital connections and equipment to enable group activities for classes, concerts, faith services, and connecting with others.
- Space to accommodate visitors and family life. Long-term care settings should be welcoming to people of all ages and support intergenerational contact.
- Each setting and household should provide opportunities for independent, safe access, to outdoor spaces, including gardens, roof terraces, and balconies.

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- In outdoor communal spaces, careful consideration must be given to the safety of all residents, including those residents who may have exit-seeking behaviours.
- The provision of conservatories is encouraged, but consider the effects of sun glare, heat, and cold in the area.
- Where social facilities, such as cafes, beauty and therapy facilities, rooms with multi-sensory equipment, or art and creative activity rooms are provided, the location of these rooms must be considered at an early stage to ensure suitable ventilation.

5.7 Dining Rooms:

The dining room in each household should be designed to enhance people's dining experience. The dining areas must comply with food safety legislation and be able to be adequately cleaned. In sitting/dining rooms, consider issues such as noise and the impact of other activities during dining, such as people watching television or using digital devices.

There should be enough space and seating in the dining area of each household for staff and visitors to sit with residents during meals. There should also be dining tables available that accommodate wheelchairs. There must be adequate room for a meal trolley to be used within the dining room for serving food if there is not an adjacent servery.

5.8 The Kitchen:

A domestic-style kitchen must be provided that is accessible to people who live in a household and their visitors. Household kitchens contribute to creating a homely appearance, support meaningful activity, and help to provide important routines and independence for residents. The household kitchen may receive food from a central kitchen or be the primary location for food preparation.

Kitchens must have a readily accessible handwash sink for hand washing purposes, including liquid soap, and paper towels, in line with environmental health recommendations/standards.

Service providers should seek advice on kitchen plans from the HSE Environmental Health Services before commencing building a kitchen. Kitchens must also be considered carefully in the premises' fire safety risk assessment. Notification of a food business should be made to the HSE Environmental Health Services before the facility starts operating.

It is the responsibility of individual food business operators to comply with the relevant food safety and food hygiene legislation that applies to their food business and to ensure that the food they produce is safe.

Consideration must be given to where the central kitchen will be situated in relation to other facilities within the long-term residential care setting for older people. Providers should consider:

- The kitchen must not be situated next to the laundry and dirty utility areas.
- The kitchen must be designed and situated to support effective and safe food transportation.
- The kitchen must be appropriately ventilated.
- The size of the kitchen must be suitable to cater for the number of people living in the long-term residential care setting.
- The design should support minimal intrusion on the living areas from kitchen deliveries and catering activity.

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- Floors should be seamless, impermeable, slip-resistant, and be easily cleaned.
- Fire safety guidance on kitchens and cooking can be found in HIQA's *Fire Safety Handbook - A guide for providers and staff of designated centres* (2023).[52]

The Food Safety Authority of Ireland (FSAI) works with other state agencies, including the Health Service Executive (HSE), to ensure that food law is enforced. General hygiene rules that are applicable to all food businesses can be found on FSAI website.[53] For further guidance, providers should refer to the current list of food legislation and official agencies which can be found on the FSAI website.[54]

5.9 Ancillary Areas:

Provision of ancillary areas include a laundry, a dirty utility room, a clean utility room, and a cleaning room. It is important that ancillary areas are of an acceptable standard to support effective infection prevention. Clean and dirty areas must be kept separate, and the workflow patterns of each area should be clearly defined.

The design and finish of ancillary areas should facilitate good cleaning and these areas should have facilities for hand-hygiene and sufficient storage for supplies and equipment.

5.9.1 Central Laundry:

The importance of a good laundry service to people in long-term care settings cannot be overestimated. When planning laundry facilities, the location of these rooms must be considered at an early stage to ensure they are situated away from sleeping areas, have appropriate ventilation, and where appropriate, include electromagnetic hold-open or swing-free devices for fire doors.

If the service aims to promote independence by offering choice for people to do their own laundry, the facilities must be suitable to support resident safety. This would include ensuring best practice IPC.

For optimum Infection Prevention and Control, every facility should have a policy on how to manage linen that includes collection, transport, and storage of linen on-site. In addition, facilities should have a policy for how to manage service users' personal laundry. More information can be found in the *Community Infection Prevention and Control Manual: A practical guide to implementing Standard and Transmission-Based Precautions in Community Health and Social Care Settings* (2022).[55]

The layout of laundry areas must be designed to ensure that effective cleaning can be undertaken. The size of the room and washing machines required will depend on its use and whether laundry will

[52] Health Information and Quality Authority, "Fire Safety Handbook (version 1.1)," (Cork: HIQA, 2023).
[53] Food Safety Authority of Ireland, "Food Hygiene," fsai.ie, July 28, 2022, https://www.fsai.ie/enforcement-and-legislation/legislation/food-legislation/food-hygiene.
[54] Food Safety Authority of Ireland, "FSAI Act and Related Legislation," fsai.ie, September 14, 2023, https://www.fsai.ie/enforcement-and-legislation/enforcement/fsai-act-and-related-legislation#:~:text=The%20Food%20Safety%20Authority%20of%20Ireland%20Act%201998%20contains%20two,official%20agencies'%20under%20the%20Act.
[55] Health Service Executive, "Community Infection Prevention and Control Manual: A practical guide to implementing Standard and Transmission-Based Precautions in Community Health and Social Care Settings, Section 3.10," (Dublin, HSE, 2022).

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be done off site. Finishes to walls, floors, work surfaces, and equipment, must be capable of withstanding regular cleaning and the impact of mechanical cleaning equipment.

Segregation of clean and dirty linen is of the utmost importance to prevent cross contamination. The laundry facilities must support a dirty to clean circulation process without crossing over. There should be two separate doors, one to bring in dirty laundry, and one for clean linen to exit following the dirty to clean circulation process. Where satisfactory arrangements cannot be achieved, providers may be required to outsource their laundry.

Equipment such as washing machines and driers should have the capacity to reflect the service's needs and be of an industrial type that includes a sluicing cycle. Hand sluicing of laundry is not permitted. Domestic-type machines may only be used for laundering personal items of clothing belonging to residents, and if used, should be situated in each unit or household. Where clothing may be contaminated, heavily soiled, or stained with emollient creams, it would be appropriate that they were laundered in the main laundry.

At a minimum, the laundry should contain:

- A stainless-steel sink with double drainer serviced with an instant supply of hot and cold water
- A wash-hand basin
- Suitable and sufficient worktops and racking for sorting, drying, and storage of laundry
- Adequate space to separate clean and dirty laundry
- An adequate number of washing machines of industrial standard (with disinfection temperatures for washing soiled laundry), and dryers
- An ironing facility
- Storage for domestic cleaning equipment
- Short term storage for clean linen/clothing
- Storage space to accommodate linen trolleys for distributing clean laundry
- Appropriate facilities to allow the segregation of used linen, heat labile linen, and infectious linen, in appropriate containers which are clearly identifiable

Other things to be considered include:

- The site of the laundry in relation to bedrooms, lounges, living, dining, and kitchen areas to prevent disturbance from noise and vibration.
- The times of day or night that the laundry will be operating and whether this will require sound proofing.
- A ventilation system that will minimise the level of airborne or droplet contamination and dust to minimise the risk of cross infection.
- Floors that are particularly subject to traffic when wet should be seamless, impermeable, slip resistant, and easily cleaned.

Different types of washing machines have different requirements which must be considered, for example, temperature control, or ozone systems, which needs more space. All washing machines must be fitted with accurate heat sensors so that the disinfection stage of each wash can be monitored. Appropriate temperatures for washing must be used so that machines can achieve thermal

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disinfection. All facilities must have documented policies on the collection, transportation, and storage of linen.

5.9.2 Dirty Utility Room:

A dirty utility room in a long-term residential care setting for older people must prevent other sanitation facilities from being contaminated with human waste and ensure that the movement of all waste products, including waste that may be contaminated with blood or other bodily fluids, is accountable to a single end destination.

The planning and design of the dirty utility room should incorporate the following features:

- A designated clinical wash-hand basin (as per HBN 00-10)[56]
- A suitably sized general-purpose sink
- An automated thermal washer or disinfector which should be of a type that can deal with the disposal of human waste
- A macerator may be considered, as appropriate, as an efficient way to dispose of single use items, such as bed-pan liners (the location should be carefully considered to prevent noise and disturbance)
- A door with a lock or keypad so that access is restricted to staff
- Built-in cupboards for safe storage of equipment or products
- Lockable cupboards for safe storage of cleaning chemicals
- Space for the storage of waste
- Space for staff to work safely, for example, by restricting the number of people in the space at one time
- Area where washed items will be placed for drying (incl. drying rack for urinals)
- Space for a pedal operated bin for healthcare risk waste and healthcare non risk waste
- The environment must be able to withstand regular and effective cleaning
- There should be sufficient space allowed for the storage and decontamination of commodes (storage post cleaning should be in the clean area of the dirty utility to avoid cross contamination). Where possible, clean equipment should be stored in a designated storage area

A dirty utility room may be in use 24-hours a day so careful consideration will need to be given to the location. It should be located:

- Where noise and odours will not adversely impact on the people who live in the care setting
- Where used sanitary ware does not need to be transported past the kitchen, reception, lounge, and dining room areas

[56] Department of Health (UK), "Health Building Note (HBN) 00-10, Design for flooring, walls, ceilings, sanitary ware and windows," (London: UK Department of Health, 2013).

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The dirty utility room must be a separate room from the cleaner's room which is for the storage of cleaning and housekeeping equipment.

5.9.3. Clean Utility Room:

A clean utility room is predominantly used for the storage of products such as sterile/clean equipment and medication. All items must be stored correctly.

Sterile items including dressings/equipment should be stored in the clean utility to avoid the risk of contamination in resident's rooms.

5.9.4. Cleaner's Room:

The cleaner's room is used to facilitate day-to-day cleaning services for a defined area. Cleaning materials and equipment in daily use should be stored in this room. The room should be provided with a sink and janitorial unit as well as a wash-hand basin. There should be unrestricted access to the sink and janitorial unit.[57]

Space should be provided for cleaning items including the cleaning trolley and mopping system, a vacuum cleaner, a scrubbing/polishing machine (for hard floors), as required, and other appropriate cleaning equipment. The *Safety, Health, and Welfare at Work (Chemical Agents) Regulations 2001 to 2021*[58], apply to any enterprise where hazardous chemical agents are used or generated.

The planning and design of a cleaner's room should incorporate the following:

- All cleaning equipment, including component parts, should be clean and well-maintained, with no blood or bodily substances, rust, dust, dirt, debris, and spillages.
- All cleaning equipment should be cleaned daily in accordance with cleaning specification and used in accordance with the cleaning manual and stored inverted and dry, as appropriate. Equipment with water reservoirs should be stored empty and dry.
- Storage facilities should be provided in each work area with adequate ventilation, a hot and cold-water supply, and hand-wash facilities.
- The room should have sufficient space and facilities to allow non-disposable cleaning equipment to be thoroughly cleaned after use and for the disposal of cleaning solutions.
- All cleaning products and consumables should be stored on shelves in locked cupboards and all cleaning products and equipment should comply with colour coding policy.
- There should be space for a pedal operated bin (healthcare risk and non-risk waste bins, as appropriate).
- The environment must be able to withstand regular cleaning.
- Space should be provided for segregation and storage of mops, buckets, and other cleaning equipment with a lockable Control of Substances Hazardous to Health Regulations (COSHH)

[57] Department of Health (UK), "Health Building Note (HBN) 00-10, Part C," (London: UK Department of Health, 2013).
[58] Health and Safety Authority, "Chemical Agents Legislation," hsa.ie, November 7, 2023, https://www.hsa.ie/eng/your_industry/chemicals/legislation_enforcement/chemical_agents_and_carcinogens/legislation_and_code_of_practice/chemical_agents_legislation/.

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cupboard for cleaning supplies. There should be a process for the transport of used mop heads to the laundry.

- HEPA filtered vacuum cleaners and scrubbing and polishing machines (for hard floors) must be stored safely. There should be a cleaning and maintenance programme for the use of vacuum cleaners and their filter changes and for scrubbing machines.

The long-term residential care setting should plan to follow a cleaning schedule, as detailed in in HIQA's *National Standards for Infection Prevention and Control in Community Services* (2018).[59]

5.10 Outdoor Facilities:

Having access to the outdoors is an essential design component of a long-term residential care setting for older people. Outdoor space should be independently accessible for all people living in the care service. People should be able to choose to spend extended periods outdoors. Being outdoors can have a powerful effect on people's wellbeing and can help rekindle past interests and hobbies. It can also contribute to maintaining fitness, increasing social interaction, increasing vitamin D levels, and improving outlook on life.

Each household must have safe and easily accessible outdoor space on every level of the care setting, for residents and visitors. Using outdoor spaces, particularly covered areas, can provide valuable visiting spaces. Where this space is communal, full consideration must be given to the evacuation strategy for the premises.

Safe and accessible outdoor space is particularly important for residents with dementia, allowing them to spend more time outdoors, helping to regulate the body clock, promoting exercise, and providing multisensory experiences. In many cases a person with dementia may just want to go outside, and providing safe outdoor space may satisfy the desire and prevent them from travelling further afield if this presents a risk to their safety.

Well-designed and safe balconies and terraces can provide many of the same benefits as a ground level garden, including access to fresh air, daylight, views, and contact with nature and the outdoors. These spaces become even more important if a resident is located on an upper floor or is unable access a ground level garden due to illness, frailty, or infection control.

When designing and planning outdoor facilities for a long-term residential care setting for older people, the following should be considered:

- Accessibility for people who have mobility problems. Procedures should be in place to actively ensure that access to an outdoor space can be achieved by all residents, including those on upper floors.

- Factors that promote resident use of the outdoors include the visibility of gardens, the ability to find and use access doors, the attractive appearance of gardens, and good door threshold design.

[59] Health Information and Quality Authority, "National Standards for Infection Prevention and Control in Community Services," (Cork, HIQA, 2018).

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- Place outdoor furniture close to the door out to the garden from living rooms to support activity and use.
- Providing a balcony with a minimum depth of between 1500mm and 1800mm will ensure that it can function as an additional outdoor space. While a typical balcony with standard 1200mm high balustrade may be appropriate in most cases, it may also be worth considering the creation of a 'winter garden' style balcony which is fully enclosed. A risk assessment may also determine the necessity for a 1800mm high safety glazing or similar balcony balustrade or full height screening.
- Providing separate, small, themed gardens, such as sensory, raised flower, and vegetable beds.
- The site design should create good environmental site conditions that provide a healthful, calm, and relaxing setting in terms of air quality, acoustics, views, and contact with nature.
- Dependent on garden size, digital connectivity in the garden, greenhouses, and summerhouses would allow the use of devices outdoors and provide wider independence.
- Spaces for children outdoors should also be considered and would generally account for increased visits and length of visits.
- Recognisable signs, symbols, and directions, to help people find their way to the garden.
- Potting shed or greenhouse to encourage participation in gardening activities.
- Gazebos, or sheltered and shaded seating in the garden, for people and their visitors.
- Individual private garden spaces which people can access from their bedroom.
- Appropriate lighting, security, and disabled access.
- Paths around the outdoor area should be easy to see, simple in layout, and wide enough to suit different levels of mobility. Paths should be slip-resistant, level, and free from clutter and changes in tonal contrast. Seating at regular intervals should be available.
- Waste storage, service deliveries, and staff car parks should be separate (including separate entrances) and inaccessible to residents and visitors accessing the garden spaces.
- The outdoor environment must be evaluated with respect to the movement of vehicles and pedestrians and adequate control measures put in place to eliminate or reduce any risk of injury because of vehicular contact with persons.
- When assessing the outdoor environment, consider the work activities, the traffic type (e.g., visitor and staff vehicles, delivery, and emergency vehicles etc) and the volume and the circulation of vehicular and pedestrian traffic.

5.11 Lifestyle and Social Opportunities:

Lifestyle and social opportunities are integral to people's health and wellbeing. It is therefore essential that the building, grounds, and location of the long-term residential care setting for older people support a range of opportunities for residents. Participating in lifestyle and social activities help residents increase their psychological wellbeing but also boost physical and social wellbeing by fostering new connections and providing a sense of structure.

5.11.1 Pets:

Keeping pets or providing animal areas within the grounds of a long-term residential care setting can have undoubted positive therapeutic benefits for residents. It is important to discuss providing animal

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areas within the grounds with local environmental health services, comply with relevant guidance, and obtain appropriate licenses and permissions.

Assistance, therapeutic, and companion animals, are used in long-term residential care settings for older people. Accommodation for assistance animals, such as guide dogs for people with visual impairment, is particularly important. Where this is practiced, the residential care setting must have a policy on infection prevention and control for animal-assisted interventions, with input from an infection prevention and control expert.

Pets require food and exercise, and meeting these needs can give residents a sense of purpose and increase their physical activity. An increasing number of providers have arrangements in place for therapy dogs to visit and some providers have pets that live in the centre including dogs, cats, and rabbits.

If a long-term residential care setting for older people is considering introducing pets or pet therapy, several factors should be considered:

- The residents' wishes should inform any decisions.
- A risk assessment must be conducted in advance with control measures in place to mitigate any identified risks.
- Residential care settings should also establish that potential pets have been socialised and are suitable for residents.
- The residential care setting's policy on pets should also be clearly communicated to residents and potential residents.
- The welfare of the pet must always be considered.

5.11.2 Smoking:

Irish public health law states that smoking is banned in enclosed places of work.[60] The purpose of the ban is to protect employees and the public from exposure to the harmful and toxic effects of tobacco smoke in the workplace.

There are a few premises that are exempt from the ban on smoking in the workplace, including long-term residential care settings for older people (nursing homes).

Every provider must protect the health of staff, residents, and visitors to their premises. In the case of exempted buildings, this means that providers can, if they want, designate certain areas of their premises as *smoking* or *non-smoking* to minimise risk. For example, the providers of a long-term residential care setting for older people could specify that residents, staff, and visitors, can only smoke outside or in a designated smoking room.

If the smoking of tobacco products by residents is permitted in the long-term residential care setting, it must be included in the risk management procedures to ensure the safety of residents and staff,

[60] Public Health (Tobacco) Acts, 2002 to 2015, (Ireland). https://www.irishstatutebook.ie/eli/2002/act/6/enacted/en/html.

along with its inclusion in the fire safety strategy. The careless use of cigarettes and other smoking materials is a common cause of fire and injury and can sometimes be fatal.

For each resident that smokes, appropriate assessment, and care plans, should be prepared. The smoking supervision needs of residents should be identified. Staff must be trained to identify unsafe smoking practices, increased risk to the resident from an adverse health event due to a pre-existing medical condition, or unsafe use of lighters or matches.

If a long-term residential care setting for older people provides a designated room or outside area for smoking, the room must:

- Have been designated by the person in charge as being a room in which smoking is permitted
- Have a ceiling and, except for doors and windows, be completely enclosed on all sides by solid floor-to-ceiling walls and have a ventilation system that does not ventilate into any other part of the premises
- Be clearly marked as a room in which smoking is permitted
- Have a fire rated glass panel
- Have a fully equipped first aid kit, to include burn gel, readily accessible
- Have accessible emergency call alarms, fire extinguishers, and an appropriate escape route
- Have flame retardant furniture and furnishings in a good state of repair
- Have proper ventilation with doors closed
- Have metal bins to dispose of used cigarettes
- Have an intervening door so that the door to the smoke room is not directly accessed from the corridor/hallway
- Have internet coverage to enable digital activity whilst using this space

It is recommended that, along with providing a safe and appropriate smoking environment, the provider should provide access to a smoking cessation programme to all residents and staff who may find it beneficial.

Vaping of electronic cigarettes:

If vaping of electronic cigarettes, also known as e-cigarettes, by residents, visitors, and staff is permitted in the centre, e-cigarettes should be identified as a potential ignition source, and appropriate fire precautions must be considered.[61]

5.12 Energy Efficiency Considerations:

The importance of reducing energy requirements associated with the built environment is one of the challenges identified in the Climate Action Plan 2019.[62] It is recommended that all proposals for long-term residential care settings for older people should maximise energy efficiency through siting,

[61] Ibid.
[62] Department of the Environment, Climate and Communications, "Climate Action Plan 2019," (Dublin, Department of the Environment, Climate and Communications, 2019).

layout, design, and incorporate best practice in energy technologies, conservation, and smart technology.

Both new long-term residential care settings for older people and refurbishments should consider green roof technologies, passive solar design, provision of photovoltaic solar panels, active renewable energy generation, and water conservation. All building designs should maximise natural ventilation, solar gain, and daylight, where possible.

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6. Health and Safety - Common Design Features

6. Health and Safety - Common Design Features:

It is important for providers of long-term residential care settings for older people to consider how design and building features will reduce risks from harm but also promote a high-quality of life and a homely environment.

6.1 Infection Prevention and Control:

Infection Prevention and Control (IPC) is a key issue in both the design and operation of long-term residential care settings for older people. The COVID-19 pandemic disproportionately negatively impacted the long-term care sector in Ireland and demonstrated the importance of effective IPC strategies and procedures. IPC measures played a crucial role in preventing and controlling the transmission of COVID-19 to nursing homes and in tackling the spread of COVID-19 in facilities where the virus was present.

The key principles of IPC in the built environment for Irish long-term residential care settings are set out the NCEC's *National Clinical Guideline No. 30 – Infection Prevention and Control* (2023).[63] Further information on good practice can be found in the HSE's *Infection Control Guiding Principles for Buildings in acute and community healthcare settings* (2023).[64]

Research and investigation have consistently confirmed that health and care environments can be a reservoir for organisms with the potential for infection. Indoor environments with high occupancy, such as long-term residential care settings, remain at-risk settings. For infections to be reduced, it is imperative that IPC is an integral part of the planning and design stages of a new-build or refurbishment project and that input continues up to the final build stage.

Buildings should be designed to support future service requirements, being cognisant of infection prevention and control as a standard. Prevention and control of healthcare associated infection and the management of antimicrobial resistance requires a multi-disciplinary approach. Consideration should be given as to how the building could, to the greatest practical extent, support a self-contained area with capacity to receive and care for residents and provide services for staff working in that area, as required during an outbreak. This may require multiple access points to stream residents through separate entrances and exits. This may also require modification of the ventilation of that area.

Any measures put in place to assist with infection prevention and control must not have an adverse effect on the fire safety measures within the building. Therefore, it may be appropriate to review the fire risk assessment at the same time.

6.1.2 Personal Protective Equipment (PPE):

PPE (for example, gloves, aprons, face masks, and visors) should be located close to the point of use and stored to prevent environmental contamination in a clean/dry area until required for use. There should be discreet PPE stations in areas such as dining rooms, sitting rooms, and bathrooms.

[63] National Clinical Effectiveness Committee, "National Clinical Guideline No. 30 – Infection Prevention and Control," (Dublin, Department of Health, 2023).
[64] Health Service Executive, "Infection Control Guiding Principles for Buildings Acute Hospitals and Community Settings," (Dublin: HSE, 2023).

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Consideration should be given to the environmental factors associated with the use, or improper use, of PPE, and where possible, interventions to influence behaviour change should be considered.

Consideration must be given to the disposal of PPE after removal. There is a requirement for separation of waste at source into healthcare risk waste and non-risk waste. Waste must be contained in the appropriate receptacle (e.g., a designated foot-operated waste bin), identified by colour and label, and disposed of according to the facility waste management plan.

6.2 Water:

Measures to control the spread of micro-organisms in health and social care premises include the use of alcohol-based hand-rubs (ABHRs). ABHRs must be available for staff as near to the point of care as possible.

Sufficient hand-wash basins remain vital in promoting good hand hygiene. These must be appropriately situated in relation to the care activity and staff use. Good placement of clinical hand-wash basins will reduce the likelihood of underused water outlets, as the under-use of taps encourages colonisation with Legionella and other micro-organisms.

Cross transmission from sinks connected to the water network, including kitchen sinks, showers, and wastewater pipework, occurs in healthcare facilities, regardless of single room separation. Published epidemiologic investigations have linked sink drains to transmission of multidrug-resistant organisms, and it is now emerging that sink drains are also a source of transmission of susceptible gram-negative pathogens.

Providers must conduct a risk assessment regarding the locations of clinical hand-wash facilities, determine the control measures in place for Legionella, and have a plan and governance structure in place for the monitoring of this. The NCEC's *National Clinical Guideline No. 30 – Infection Prevention and Control* (2023)[65] indicates that to prevent the growth of Legionella and other bacteria, the *US Centers for Disease Control and Prevention* guidelines recommend that healthcare facilities maintain cold water at a temperature below 20°C, store hot water above 60°C, and circulate hot water with a minimum return temperature of 51°C.

Providers should have regard to the following:

- The Prevention and Control of Infection from Water Systems in Healthcare Facilities Sub-Committee of the HPSC Scientific Advisory Committee's *Guidelines for the Prevention and Control of Infection from Water Systems in Healthcare Facilities* (2015)[66]
- UK Department of Health, Health *Building Note (HBN) 00-10 Part C*[67]

6.2.1 Private Water Supplies:

If the building has, or will have, a private water supply, it is essential that this is discussed with the local Environmental Health Team.

[65] National Clinical Effectiveness Committee, "National Clinical Guideline No. 30 – Infection Prevention and Control," (Dublin, Department of Health, 2023).
[66] Health Service Executive Health Protection Surveillance Centre (HPSC), "Guidelines for the Prevention and Control of Infection from Water Systems in Healthcare Facilities," (Dublin, HSE, 2015).
[67] Department of Health (UK), "Health Building Note (HBN) 00-10, Part C – Sanitary Assemblies," (London: UK Department of Health, 2013).

Hose reel firefighting equipment can be a source of Legionella and other waterborne pathogens and should be avoided wherever possible and replaced with appropriate portable fire extinguishers. The siting and building of associated tanks, pipes, and equipment to run such a system must be part of the building information made available to local authorities as part of the planning process. In addition, any private water supplies used for firefighting purposes, such as hydrants, must be subject to a suitable maintenance regime and should be always available for use. This includes appropriate ground maintenance to ensure the growth of shrubbery and grass do not affect emergency access.

6.2.2 Hot and Cold-Water Outlets:

Long-term residential care settings for older people need high water temperatures for a number of reasons, including the need to satisfy demand for hot water, efficient running of the boiler, and controlling the risk from Legionella bacteria.

If hot water used for showering or bathing is above 43°C there is increased risk of serious injury or fatality. Where vulnerable people who use care services are at risk from scalding during whole body immersion, water temperatures must not exceed 43°C. Integral anti-scald devices must be fitted to all hot water outlets that residents have access to. Any precautions taken must not introduce other risks, for example, from Legionella bacteria. Cold water must be stored and distributed below 20°C.

6.3 Sink Design, Taps, and Hand Hygiene Facilities:

Hand hygiene is the single most important factor in the prevention of healthcare associated infection (HAI). Compliance with hand hygiene guidelines can be improved by having sufficient, conveniently placed, and well-designed hand hygiene facilities, including hand-wash sinks. These should be accompanied by the provision of instructional posters (for clinical hand wash basins). High-quality hand hygiene practices must be at the top of the list of priorities when designing and planning new long-term residential care settings for older people or if the refurbishment of existing premises is being undertaken.

It is important to be mindful of the following:

- Sinks have complex associated pipework and difficult to eradicate biofilms and persistent contamination remains for prolonged periods. This highlights the importance of the environmental reservoir.
- Sinks should be situated in the ensuites of a resident's bedroom and not within the main living area of the bedroom.
- The depth of the sink is an important factor in the potential spread of resistant organisms, especially if the sink depth is less than 19cm, as this is associated with splashing into the surrounding area.
- The flow rate of the water should be less than 260ml a second as anything higher is associated with splashing and surrounding contamination.

6.3.1 Wash-Hand Basins/Clinical Wash-Hand Basins within Ensuites, Toilets, and Bedrooms:

Wash-hand basins within ensuites should be appropriate to the person using the sink, should be of a type that is recognisable, and people should be encouraged to carry out good hand hygiene. Thermal mixing valves must be fitted to all sinks to prevent scalds from hot water.

There is no requirement for a clinical wash-hand basin in the bedrooms of residential care settings for older people. However, it is recommended that long-term care facilities should be designed to include

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some resident bedrooms with a clinical hand-wash basin to cater for the care of residents with specific needs. Clinical wash-hand basins should however be strategically located along adjacent access corridors.

When installed, the following should apply to clinical hand-wash basins:

- Should conform to HBN 00-10 Part C - Sanitary Assemblies[68]
- Should be accessible and located so that they are convenient for us.
- Hand hygiene can generally be supported by having a clinical hand-wash sink within easy walking distance of each room together with appropriate access to alcohol-based hand rub (wall-mounted hand hygiene stations with alcohol-based hand rub should be available at all entrances and exits and outside every room, clinical areas, and at point of care)
- As a guide, there should be approximately one clinical hand-wash basin for every 10 resident rooms

6.3.2 Taps:

Taps must be capable of delivering a constant flow of water without having to always have one hand on the tap. Press-down taps should not be used. They have too short a delivery time, which would not allow adequate hand washing. Non-touch, infrared, and sensor taps should not be used as they have a greater risk of their complex internal surfaces becoming contaminated with micro-organisms and biofilms.

Taps should not be aligned to run directly into the drain, as contamination from the drain could be mobilised and splashing occur. Mixer taps should be used as hands must be washed under warm running water. Taps should be of a design that empty after use.

6.3.3 Hand Hygiene Facilities in Staff and Clinical Areas:

As well as being readily accessible in all resident care areas, hand hygiene facilities must be placed in all areas where careful attention to hygiene is essential such as kitchens, laundries, clinical areas for drug preparation, and staff amenities (for example, bathrooms, toilets, and changing rooms). This also includes settings such as treatment or procedure rooms.

A clinical area is one which is used to house medical equipment and/or for the treatment of people using the service. Clinical areas must have hand hygiene facilities (for example, handwashing, or access to alcohol-based hand rubs) and clinical wash-hand basins. Clinical wash-hand basins should also conform with the HBN 00-10 Part C - Sanitary Assemblies or equivalent standards.[69] It is recommended that items should not be stored within 2m (where possible) of clinical hand wash basins to avoid contamination by splashing.

6.4 Windows:

Any accessible windows that are two metres or more above external ground level, which can be opened and are large enough for a person to fall out of, should be restricted to a maximum opening of 100 millimetres or less.

[68] Ibid.
[69] Ibid.

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Window restrictors should only be able to be disengaged using a special tool or key, if and when required. Sensors linked to alarm stations may also be beneficial in certain circumstances.

Important considerations:

- All bedrooms and communal rooms must have windows that can be opened and have a pleasant outlook from a seated position or from confined to bed, providing natural ventilation.
- Where the bedroom has a patio door, there should also be a window that can open.
- There should be enough light, particularly natural light, which is particularly important for older people and those with cognitive impairment or reduced sight, as it affects vision, mood, and ability to sleep at night.
- There should be deep windowsills so that familiar items can be put on display.
- The privacy of residents must not be compromised by the location of parking areas or other people overlooking the building if there are full-length windows or patio doors.
- The overall building and the design of the windows should be carefully considered where high noise level, pollution, or dust levels may be a potential problem.

Risk Assessments - Windows and Balconies:

There may be a risk to older people in residential care settings from falls from a height which are likely to cause harm. These risks are associated with open windows and unsafe balconies.

To adequately manage the risks from falls from windows and balconies, it is imperative that a risk assessment is carried out as necessary and adequate arrangements are put in place to manage and control any identified risks.

6.5 Ventilation, Lighting and Heating:

All bedrooms and public rooms in a long-term residential care setting for older people must have controllable ventilation, lighting, and heating. This not only helps to provide comfort, but also takes into consideration the health, wellbeing, and choices of residents.

Sensors and voice control technologies can increase levels of independence by allowing residents to turn on and off heating, lighting, and ventilation. Movement sensors which allow low lighting to get brighter for night-time toilet use can also be beneficial. Connectivity should be sufficient so that these features can be considered.

6.5.1 Ventilation:

Ventilation is the supply of outside air into a building to replace stale or polluted indoor air. Where outdoor air pollution is of concern, air filtration or cleaning may be required before bringing the air into the building. Ventilation or air conditioning systems in long-term residential care settings for older people must have a dedicated source of outdoor air. Recirculation units are not recommended as they could be responsible for recirculating and spreading airborne viral particles.

Ventilation and air filtration are examples of 'engineering controls' that can play a key role in removing airborne particles from enclosed spaces and can complement other measures such as administrative controls and the use of personal protective equipment. Any healthcare facility may deal with infectious agents transmitted through the air and infectious people may not always be easy to

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recognise. IPC practitioners will frequently need to carry out risk assessments to manage the risk of transmission through the air within the available facilities.[70]

Ventilation may be provided by natural or mechanical means, or a combination of both, depending on the nature of the healthcare service, and should be appropriate for the setting. If mechanical ventilation systems are in use, it must be ensured that these systems are fully serviced and operating at optimum capacity and that there is also the ability for fresh air to be provided.

Areas, such as corridors, that do not have windows that open, must have appropriate ventilation, with fresh air. Purge ventilation should be undertaken at regular intervals to air out rooms. Purge ventilation is the introduction of intermittent, rapid ventilation to a room, usually by opening all windows and doors, and therefore should be easily achieved in all existing settings. It may be better to do this when the room is unoccupied.

Effective ventilation is a factor of the operation, maintenance, and physical changes made to a building, as well as the occupancy, activity, and environmental conditions. Ventilation strategies for buildings should be reviewed to ensure they are being operated and managed to ensure adequate general ventilation.

It is recommended that designers integrate infection control requirements with respect to ventilation into computerised dynamic simulation design modelling tools to determine the most appropriate ventilation design solutions, taking account of energy, carbon footprint, sustainability, maintenance, and overall system life cycle costs. Smart system solutions and indoor air quality monitoring intelligent devices and reporting systems should be considered and integrated into the design solution, where possible.

Providers must ensure that the physical layout of a facility is designed correctly from the beginning so that residents, staff, and visitors alike are protected from infectious outbreaks. As an exemplar of good practice, providers should refer to the HSE's *Infection Control Guiding Principles for Buildings Acute Hospitals and Community Settings* (2023).[71]

Use of carbon dioxide (CO_2) monitors to assess ventilation:

The measurement of Carbon Dioxide (CO_2) levels can be used to indicate the adequacy of indoor ventilation. CO_2 measurements form the basis of building ventilation standards in many countries around the world.

Carbon Dioxide (CO_2) measurements can be used as a proxy to identify poorly ventilated areas. CO_2 monitors based on non-dispersive infrared (NDIR) technology are recommended. 'Equivalent CO_2' sensors or monitors that estimate concentrations based on measurements of other indoor pollutants are not recommended.

Measurements taken over several days or weeks can enable providers to become familiar with the impact of activities, occupancy levels, and outdoor weather conditions on ventilation. Such detailed investigations could be used to inform a strategy for improved ventilation.

[70] National Clinical Effectiveness Committee, "National Clinical Guideline No. 30 – Infection Prevention and Control," (Dublin: Department of Health, 2023).
[71] Health Service Executive, "Infection Control Guiding Principles for Buildings Acute Hospitals and Community Settings," (Dublin: HSE, 2023).

Further information can be found in the Health Safety Authority's *Code of Practice for Indoor Air Quality* (2023).[72]

Supplementary use of air filtration:

Air filtration has been used successfully for decades to remove contaminants from indoor air. This air cleaning technique is typically incorporated into heating, ventilation, and air conditioning (HVAC) systems within buildings but is also being increasingly used in stand-alone devices designed to improve indoor air quality at the local (room) level.

It is important to note that air cleaning devices are not a substitute for ventilation. They can play a supplementary role and should never be used as a reason to reduce ventilation in an enclosed space. Ventilation should be assessed, and if possible improved, before considering whether there is a need to use an air cleaner.

When appropriately selected, deployed, and maintained, single-space air cleaners with HEPA filters (either ceiling mounted or portable) can be effective in reducing/lowering concentrations of infectious particles in a single space. They may have a role in settings where ventilation is not adequate based on an institutional risk assessment.

It is important to note that airflow through HEPA filter devices can vary and users need to select a system that is appropriately sized for the area in which it is installed. The amount of noise created by the devices also needs to be considered and, in some cases, the deployment of several devices might be required to provide effective coverage.

Ventilation and Fire Safety:

The routing of any ventilation systems must not compromise the fire integrity of the building or room construction, and where possible, lead directly from the room to outside. Where systems pass through fire resisting construction, they must be appropriately fire stopped and certified.

A powered ventilation system may assist the spread of smoke unless it is designed to shut down automatically if fire is detected. Ventilation ducts may provide a pathway for the spread of fire and smoke between compartments or sub-compartments or into stairs. Where ventilation ducts penetrate the walls or floors of these enclosures, automatic smoke/fire dampers provided inside the ducts hold back fire and smoke. Dampers may need to be actuated by smoke detection.

Extractor and Exhaust fans:

If extractor fans are installed, they should be of a type that minimises noise, provides back draft protection, and where appropriate, have an adjustable timer, speed control, and humidity controls.

If exhaust fans are used, they must be installed so that the air is released directly outdoors. The number and technical specification of exhaust fans must take account of the size of the room and the desired ventilation rate. Positioning the exhaust fan should be done so that it is not close to a ventilation air intake.

[72] Health and Safety Authority, "Code of Practice for Indoor Air Quality," hsa.ie, November 20, 2023, https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/code_of_practice_for_indoor_air_quality.html.

6.5.2 Lighting:

A long-term residential care setting for older people should be designed to allow as much natural light as possible to enter the premises, should ensure that glare is controlled, that lighting can be reduced at night-time, and that residents can control lighting, reinforcing independence.

Well-designed natural and artificial lighting is important for older people, for people with dementia, and for people with visual difficulties. The level of lighting is very important as eyesight quality often reduces with age. Good lighting can help with task visibility, place recognition, and raise awareness of hazards through increased visibility. Where lighting is not high-quality, the risk of falls increases. Proper lighting design can also play a role in reducing sleep disturbances and thus reduce certain challenging behaviours, such as restlessness. Light also affects psychological wellbeing in terms of mood and behaviour.

Aspects of lighting that should be considered:

- Residents should be protected from the glare arising from sunlight.
- Artificial lighting and fittings should be used creatively and sensitively to enhance the use and experience of the interior and should avoid creating an institutional atmosphere.
- Avoid blue lighting as this can stimulate the brain and disrupt sleep.
- Light switches must be accessible and controllable in bedrooms. Two-way switches that can be operated from the doorway and the bedside improve the accessibility.
- Lights controlled by dimmer switches, or remotely by devices or voice, might benefit some residents. These can be preferable to the use of lighting controlled by motion sensors, which some people may find overstimulating.
- Sensory operated lighting may not be appropriate in all areas, for example, in bathrooms where the light may suddenly go off.
- The ability to dim lighting at night, rather than simply switching it off, can provide reassurance and reduce the risk of falls. This can be particularly useful in bedrooms to enable care tasks to be carried out with a greater level of comfort. Corridors must also not be in complete darkness. Strip lighting on handrails in corridors is recommended.
- Lighting provision for staff must be adequate within all working areas.
- Adequate emergency lighting must be provided for escape purposes in the event of fire.
- All engineering components and equipment that are regularly handled by residents, for example, light switches, should be capable of being wiped clean and disinfected or sterilised between resident use.

6.5.3 Heating:

Heating controls must be accessible and easy to operate for residents. Residents who cannot move quickly enough away from a heat source (for example, hot water pipes, radiators, or other forms of heating) can sustain serious burns and therefore heaters and pipe work must not have a hot surface. Consideration should also be given to the appropriate regulation of hotter seasonal temperatures.

Risks associated with heating systems should be assessed and managed by:

- Providing low-surface-temperature heat emitters, such as a cool wall.
- Covered heat emitters allow dust to build up beneath and inside the heat emitter grille. Where heat-emitter covers are used, regular planned cleaning should be undertaken to prevent dust

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accumulation. When installing heat emitters, it is recommended that there is sufficient space underneath the heat emitter to allow cleaning machinery to be used.

- Locating heat sources out of reach.
- Guarding heated areas, installing radiator covers, covering exposed pipework, or providing fireguards.
- Pipework should be contained in a smooth surfaced box that is easy to clean. Pipes and cables running through walls above suspended ceilings should be sealed as far as is practicable.
- Providing under-floor heating or heating incorporated into a skirting board.
- Internal heating systems should consider external temperatures and should be adjusted accordingly.

6.6 Medical gases supply and storage:

Medical gases should be considered, prescribed, and administered with the same precision and care as any other pharmaceutical products.

Resident safety is paramount in the design, installation, commissioning, and operation of medical gas systems. The basic principles of safety are achieved by ensuring quantity of supply, identity of supply, continuity of supply, and quality of supply.

Where oxygen is on site in a long-term residential care setting for older people, providers must take measures, including staff training, to ensure its safe use and storage. Providers must install appropriate signage to alert people in the residential care setting, and the fire service, to the presence of oxygen.

6.6.1 Storage of Medical Oxygen Cylinders:

High concentrations of oxygen can cause materials to burn extremely rapidly and can cause some materials to burn that are not normally combustible. It can also cause an explosion if in contact with certain materials, such as grease and oil. Therefore, the safe storage and use of oxygen must be specifically outlined in the fire procedures. Providers are also advised to review the Health and Safety Authority's 2019 revised safety alert on portable medical oxygen cylinders.[73]

Smoking, or the use of matches, cigarette lighters, or hob lighters, must not be allowed anywhere near to where oxygen is used or stored. The use of electrical equipment such as hairdryers, electric razors, and chargers, must be avoided near to where oxygen is stored or used. Equipment must not be left on charge in the vicinity of an oxygen cylinder.

The following needs be considered when storing medical oxygen cylinders in a long-term residential care setting for older people:

[73] Health and Safety Authority, "Use of Portable Medical Oxygen/Entonox (Integral Valve) Cylinders," has.ie, November 20, 2023, https://www.hsa.ie/eng/safety_alerts/2019/use_of_portable_medical_oxygen_entonox_integral_valve_cylinders/.

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- Store cylinders in a clean, well-ventilated, and dry conditioned area, not exposed to extremes of heat or cold.
- Oxygen cylinders must be stored securely in line with the manufacturer's guidance when not in use.
- Cylinders must not be stored in stairwells, escape corridors, or near any ignition or heat sources.
- Store cylinders vertically and secure them (with chains and other restraints) to prevent toppling.
- Store cylinders away from flammable material in a designated area where they can be kept separate from other medical and non-medical cylinders, with empty and full cylinders kept apart.
- Oxygen cylinders must be stored away from all other combustible materials, aerosols, or electrical switch gear.
- Segregate cylinders by the property classification of the gas (flammable, inert, oxidant, etc.).
- Ensure appropriate signage is used and is legible.
- Ensure that the storage area is accessible to staff and not accessible to residents.

6.6.2 Medical Gas Pipeline Systems:

Medical Gas Pipeline Systems (MGPS) deliver medical gases directly to the resident's bedside from either a liquid gas container or from large medical gas cylinders attached to a manifold in a remote part of the site.

If a provider is considering delivering medical gases directly to the resident's bedroom via MGPS it is important that this doesn't impact the homely environment of the residential care setting or restrict the living space available.

Where oxygen is distributed through fixed piping, the system must be adequately maintained in line with the manufacturer's instructions and must only be modified by a competent person. Staff must know the locations of all emergency shut-off devices for oxygen, and these devices must be easy to identify using clear signage.

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7. Additional Facilities

7. Additional Facilities:

All long-term residential care settings for older people should be able to meet the full range of care and support needs of their residents, in keeping with their aims and objectives as set out in the Statement of Purpose.

7.1 Assistive and Supportive Technologies:

Technology for communication and therapeutic reasons should be considered in long-term residential care settings for older people. Technology can assist in enabling residents to communicate with family, friends, and the wider community, while also enabling more efficient work practices for staff.

Providers should make provision at the planning stage for the potential installation of equipment that may be required in the future, including smart/assistive technology.

A long-term residential care setting for older people should:

- Ensure the building structure and materials facilitate Wi-Fi technologies. Internet access should be sufficient to enable residents to retain contact with family, friends, and the wider community, as well as for recreational means.
- Ensure technology is accessible and usable by all residents, including those with physical, sensory, or cognitive impairments.
- Provide technology that can be appropriately modified for residents' unique needs. For example, large screens with easy-to-use visuals, loud-speakers, or audio that connects directly to hearing aids.
- Where possible, encourage residents to use their own technologies (such as smart phones and tablets) that they are familiar with. These items should not be shared between residents.

7.2 Electrical Sockets:

Long-term residential care settings for older people must:

- Provide enough electrical sockets so that residents can choose to have the electrical devices they wish.
- Provide sockets for the use of medical equipment, if required.
- Ensure that sockets in bedrooms and other areas are at an accessible level for residents using the service.
- Ensure sockets are accessible when furniture is in position.
- Annual Portable Appliance Testing (PAT Testing) of electrical equipment must be in place.

Risk assessments must be undertaken for the use of any electrical equipment and appropriate risk management measures put in place for residents who use the service. Where any installation of sockets is proposed, or where any other changes that would cause a breach within the construction of rooms within the building are undertaken, an appropriate assessment must be taken to ensure that such breaches do not compromise the fire integrity of the structure. Modern methods of construction, such as timber framed buildings, require additional precautions to sockets that are fire rated to prevent any spread of fire behind the wall structure.

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7.3 Alarm Call Systems:

A suitable alarm call system is required in long-term residential care settings for older people. Residents must be able to reach and use the alarm system or call-pull when in their ensuite, bedroom, and in communal areas. The availability of pendant or wrist alarms should be considered, along with the use of assistive technology or alert systems, to ensure the safety of residents, as appropriate.

The alarm system installed should alert staff without disturbing other residents. Silent staff call systems can be utilised to reduce noise within settings.

7.4 Acoustics and Noise:

The effects of unwanted noise can be distressing for many residents in long-term residential care settings. Many older people have some degree of impaired hearing and may have hypersensitivity to some noises. The premises should be free from intrusive sounds and efforts should be made to improve the acoustic environment using strategies of noise elimination, noise separation, and noise absorption. A noisy environment can also impact on the ability of staff to accurately assess resident needs.

Things that should be considered:

- Noise associated with utility areas such as the laundry, kitchen, or dirty utility areas, extraction fans, plant room, as well the use of equipment such as televisions, ringing telephones, or music. These should be managed to minimise disruption for residents living in the service.
- How to avoid excess noise created during times of high activity, for example, during mealtimes, by using technology, insulation, or furnishings to reduce noise levels.
- The need for specialist communication equipment for those who may have sight and hearing impairments, or dementia.

7.5 Doors:

Door openings must meet fire safety standards and need to be wide enough for wheelchair access and for beds and furniture to be moved around. Bedroom doors and ensuites must have a lock that residents can use independently and should not require the use of a key. Staff must be able to gain access in an emergency.

Things providers need to consider:

- The use and movement of hoists or other large pieces of equipment, for example, equipment required for the bariatric care of residents, and food trolleys.
- Door handles should be recognisable and at an appropriate height. The colour and shape should be suitable for those with cognitive impairments, including dementia.
- Doors to public and living rooms should look different from doors to operational areas such as dirty utility rooms, medication rooms, and staff rooms.
- Bedroom doors should be individualised so that they are recognisable to the resident and have features to help residents recognise their own door, such as pictures or memory boxes.
- Bedroom doors should be offset so that they are not immediately opposite each other or directly opposite doorways to communal areas.
- Doors must satisfy fire safety objectives and any specifications required. Consideration should be given to swing-free devices for fire doors.

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- Doors must be cleanable, that is, smooth, wipeable, and have impermeable surfaces to ensure that surfaces will not be physically affected by detergents and disinfectants.

7.6 Lifts and Stairways:

Long-term residential care settings with more than one floor must be designed to be fully inclusive and accessible.

- The number of lifts will be dependent on the size of the residential care setting and the number of residents living there. There must be at least one general purpose lift and a separate service lift.
- Stairways or lifts must give direct access to each household without the need to pass through other households or other living areas of the home.
- Lifts and stairways must be designed to allow safe access.
- Any external escape stairways must be sufficiently wide enough for safe evacuation, including any evacuation of equipment that residents may need.
- Stairways must be fitted with guarding and handrails, as required by the relevant building regulations.
- Providers should consider the size of the lift you need, for example, a lift should be able to accommodate a resident on a trolley and an escort to facilitate ambulance transfers.
- A lift well can be a route for vertical fire spread. A lift well which is enclosed by walls with at least 60 minutes fire-resistance will be a barrier to fire spread. Where a lift well is not the full height of the building, the fire resistance of the floor and/or ceiling needs to be considered. Stairways forming part of an escape route must also be adequately protected from fire.
- The lift must have adequate lighting.
- The lift should be of a type that it is operated easily.
- Lifts, including stair lifts, must be inspected, tested, serviced, and maintained in accordance with the manufacturer's recommendations and relevant Irish standards at appropriate intervals, to ensure continuing safe operation.
- Unless the lift is specifically designed for use in a fire, it must not be part of the means of escape or evacuation strategy for the centre.

Further information is available in:

- The HIQA *Fire Safety Handbook: A guide for providers and staff of designated centres – version 1.1* (2023)[74]
- Department of Housing, Local Government and Heritage, *Technical Guidance Document M - Access and Use* (2022)[75]

7.7 Flooring:

The flooring used in long-term residential care settings for older people should be homely, appropriate to the area, and should meet residents' individual needs, health and safety requirements, and be easily

[74] Health Information and Quality Authority, "Fire Safety Handbook (version 1.1)," (Cork: HIQA, 2023).
[75] Department of Housing, Local Government and Heritage (DHLGH), "Technical Guidance Document M - Access and Use," (Dublin: DHLGH, 2022).

cleaned. A wide range of floor covering materials are used in residential care settings. These include, but are not limited to, ceramic tiling, linoleum, rubber textile floor covering, and vinyl. IPC considerations should be considered when selecting floor covering for residential care settings.

It is important to consider the particular issues related to dementia, cognitive impairment, and how to reduce the risk of falls and noise pollution associated with flooring. Providers should consider various features, such as contrasting colours between floors and walls, and light sensors. For all materials selected, but particularly for flooring, reduction of glare and reflectivity will generally make the space more usable. A consistent tone on floor finishes throughout the facility is also recommended. Floors with a strong tonal contrast with other areas are more difficult for older people with reduced vision to navigate.

Floor finishes should be of a material that is not physically affected or degraded by the detergents and disinfectants likely to be used. Flooring must be seamless, impermeable, slip-resistant, easily cleaned, and appropriately wear-resistant. Any joints should be welded or sealed to prevent accumulation of dirt and damage due to water ingress. Wood, tiles, and flooring with unsealed joints are difficult to keep clean and should be avoided.

In clinical areas and associated corridors, there should be a continuous return between the floor and the wall. For example, coved skirtings with a minimum height of 100mm allow for easy cleaning.

Carpeting should generally not be used in clinical areas. Exceptions may be appropriate in certain specific settings, for example, family rooms within clinical areas, or end of life settings if noise management and comfort are the priority. If carpeting is used, there should be a comprehensive maintenance and replacement programme in place as well as an IPC risk assessment. Manufacturer's recommendations need to be considered in the care and maintenance of floor covering.

Further information can be found in the UK *Health Building Note 00-10 Part A – Flooring*.[76]

7.8 Medication Storage:

Each residential care setting will need to consider whether medication should be centrally stored in the building, stored in a dedicated room in each household, or stored in resident's own bedrooms.
If the residential care setting provides secure medicine storage in a resident's bedroom, it is essential that, if the resident looks after and self-administers their own medicines, appropriate supervision is in place.

A medication storage room is for storing sterile supplies and consumables, including infusion fluids, and for storing and preparing medicines, including controlled drugs. There must be adequate storage space for all items. Medication and medical products must be stored in the correct environment and temperature to ensure their safety and quality. If medication is stored, the room temperature must not exceed 25°c, and there must be adequate ventilation. Medicines need to be stored in a designated cupboard or trolley that has sufficient space.

Medicines must be stored so that the products:

- Are not damaged by extremes of temperature, light, or dampness

[76] Department of Health (UK), "Health Building Note (HBN) 00-10, Part A – Flooring," (London: UK Department of Health, 2013).

- Cannot be stolen (i.e., have a good quality lock)
- Do not pose a risk to any residents
- Are in the appropriate environment as indicated on the label or packaging of the medicine or as advised by the pharmacist

Registered providers and persons in charge also need to have specific arrangements in place for the storage of the following, in line with the service they provide:

- Schedule 2 and 3 controlled drugs
- Nutritional supplements
- Medicines that need refrigeration
- Dressings, ostomy products, and catheters
- Medicines supplied in medicines administration compliance aids

Further information can be found in HIQA's *Medicines Management Guidance* (2015).[77]

The medication storage room should contain:

- Appropriate storage facilities for sterile supplies and sundries. Shelving should be off floor level with no items stored on the floor
- If medicine trolleys are in use, there should be sufficient space for secure storage of the trolleys
- Enough space for fridges for storing medicines and dietary supplements
- Adherence to legislative requirements for controlled drugs storage
- Access to a healthcare waste bin and sharps bin
- Both a general-purpose sink (for washing medical equipment) and a dedicated handwashing sink

7.9 Waste Storage Areas:

Healthcare workers must comply with all legislation that controls the management of healthcare risk waste (including sharps) and healthcare non risk waste. The *Green Healthcare* website[78] provides useful information on sustainable waste management.

Regardless of where waste is generated, the principles of determining whether it is to be treated as healthcare risk waste or non-risk waste remain the same. The practical management of Health Care Risk Waste (HCRW) may be very challenging when small quantities of HCRW are generated in the household or similar setting. In all cases, prompt effective containment of HCRW is vital to minimise potential exposure to the waste, until it is safely disposed.

Waste receptacles should be foot-operated only and should be easy to clean. External waste storage must be sited away from the building, particularly the main kitchen area and resident areas. The area

[77] Health Information and Quality Authority, "Medicines Management Guidance," (Cork: HIQA, 2015).
[78] Green Healthcare, "The Green Healthcare Programme," greenhealthcare.ie, January 9, 2022, https://greenhealthcare.ie/.

must be lockable, preventing access to non-authorised personnel. Storage areas need to be of a sufficient size to meet the needs of the number of different waste streams likely to be generated in the residential care facility. Storage capacity needs to match the proposed frequency of collection by a waste disposal contractor. The design of the facility must also take account of accessibility and the space needed for vehicles collecting waste. The storage area should be washable, secure, and animal proof. Only rigid lockable receptacles should be stored in external areas.

Long-term residential care settings for older people need to consider the following in the context of waste storage:

- Potential smells, nuisance, pests, and noise
- Security of storage area
- Recycling legislation
- Waste legislation
- Ensuring waste is not left, even temporarily, within escape routes
- Appropriate frequencies of uplifts and the potential spread of fire from waste to the building

For additional information on waste management, see the HSE's *Waste Management Handbook*.[79]

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[79] Health Service Executive, "Waste Management Handbook," (Dublin: HSE, 2014).

8. Staff Areas

8. Staff Areas:

Sufficient staff areas, including staff offices, should be available to ensure administrative tasks, meetings, and other activities do not impact on the homely living environment in a long-term residential care setting for older people. Staff areas should be of a suitable size, well-ventilated, naturally lit (in as far as possible), comfortable, and accessible to residents (only as appropriate). Access to staff-only areas, restricted clinical areas, and storage rooms, should be controlled via close-proximity card or similar. Consideration should be given to providing a dedicated private outdoor space for staff.

8.1 Administration Spaces:

Where a provider has office space within the care setting, this should not disturb or impact negatively on residents. There should be a reception area close to the main entrance where visitors can be welcomed and assisted, as required. It is recommended that administration spaces are open plan (with acoustic screens, as required), as this supports multidisciplinary working and provides greater flexibility and adaptability. Adequate workstations should be provided for desk-based staff. Practitioners requiring intermittent access to workstations for paperwork and other administrative activities should have a designated area provided for this purpose. Single-person offices may be provided where full-time access to workstations and constant privacy are required.

The IT system should enable any worker to log on at any workstation. Internet connections must be sufficient to allow staff to join training, participate in remote meetings, and access any electronic records.

Sufficient secure and appropriate storage must be available to store all documentation as prescribed by the relevant regulations. Consideration may be given to the electronic storage of archived documentation. Other information should be in a convenient location for staff who need access to it. There should be adequate space and facilities for staff to update records and information.

There should be a suitable area or room to hold meetings and internal training or make confidential calls that is separate to any communal space used by others. This room should be in the staff area. Seminar rooms, including with videoconferencing facilities, may be required for training purposes.

For further information on administration spaces, see UK *Health Building Note 00-03.*[80]

8.2 Staff Rest Rooms, Sleeping Areas, and Changing Areas:

Long-term residential care settings should have a separate rest area for the use of staff located away from the resident area. Good quality environments should be provided in staff rest areas to encourage their use and the resulting staff interaction that occurs. The rest area should be large enough and have sufficient chairs and tables for the number of employees likely to use them at any one time. There must be a suitable place for staff to eat. A room for pregnant women/nursing mothers to rest or lie down should be provided.

Staff must be provided with adequate changing, hygiene, and locker facilities. Separate male and female staff changing and showering areas should be provided in the staff area. Kitchen staff should have access to their own dedicated toilet and changing area. Staff toilets may be distributed around

[80] Department of Health (UK), "Core elements Health Building Note 00-03: Clinical and clinical support spaces," (London: UK Department of Health, 2013), 124.

the building, including within the staff area. There must be at least one suitably located designated staff toilet/changing facility (male and female) which should be situated near to an entrance to the care setting for staff to use when arriving at work and at the end of a shift. If staff are on-call and sleeping within the premises, there must be adequate and appropriate facilities.

For design guidance on staff changing areas and WC's, see UK *Health Building Note 00-02*.[81]

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