

## POINT OF VIEW

### THE EXPERIENCE OF MANAGING COVID-19 IN IRISH NURSING HOMES IN 2020

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#### Introduction

Age is the biggest single risk factor for poor outcomes associated with coronavirus disease 2019 (COVID-19). Nursing home residents, with a high prevalence of multi-morbidity are recognized as being particularly at risk from COVID-19 (1). Within three weeks of the first reported case of COVID-19 in Ireland, on February 29th 2020, the virus had spread throughout the country. On March 6th, all visiting to residential facilities was stopped (2). The government shut all schools, colleges, childcare facilities, cultural institutions and the St. Patrick's Day celebrations on March 17th were cancelled. All «non-essential» travel and contact with people outside one's home (including family and partners) was not permitted on March 27th. Older adults and those with certain health conditions were told to cocoon.

By 20th May, the Department of Health had confirmed 24,315 cases and 1,571 deaths, a rate of 4,931 cases per million and 319 deaths per million population (2). Over 90% of those who died were aged 65 or older, and most had underlying illnesses (2). The median age of those who died was 83 years, compared to the median age of 48 for all confirmed cases. This older age group accounted for more than 26% of all confirmed cases and 14% were aged 80 or more, despite only making up 3% of the population (2). Some 83% of patients in ICU had underlying conditions, whose median age was 60. By April 30th there were 369 clusters of the disease in residential care settings, including 219 in nursing homes (2).

On April 30th the Chief Medical Officer reported that residential care settings accounted for 4,363 cases of coronavirus cases, of whom 3,457 were in nursing homes. There were 697 deaths in residential care settings, of whom 547 were laboratory-confirmed cases of COVID-19 and 150 probable/suspected cases (2). In nursing homes alone, there were 593 deaths, with 458 laboratory-confirmed cases and 135 probable/suspected ones (2). Residential care settings accounted for 59 per cent of all COVID-19 deaths while nursing homes accounted for 50 per cent of deaths. Ireland is one of the few countries that collected and reported data from long-term residential care settings since the start of the pandemic. In addition, 7,708 (31%) of cases were Irish healthcare workers who had contracted the disease, placing additional pressure on stretched services (2).

#### Key issues managing COVID-19 in Irish residential care homes

In March, in Ireland there were shortages of Personal Protective Equipment (PPE) and testing was only available within limited criteria. Results were delayed as testing capacity was just starting to be increased and there were some shortages of testing reagents. The focus in early March was on the hospitals because of concern about a potential "surge" that could overwhelm acute services. By the middle of March, there was growing concern about the preparedness of residential homes to deal with outbreaks. Staff and residents were becoming symptomatic and the shortage of PPE and delays in testing was of growing concern. In our region, the South West of Ireland - Cork Kerry Community Healthcare (CKCH), approximately 40 homes were surveyed directly by phone in late March using a standardized questionnaire, to determine the issues in residential homes. They reported consistently that they felt isolated and were concerned about their ability to deal with outbreaks. First, although they had some PPE, they were concerned that if there was an outbreak, they would have PPE shortages. Second, they did not have access to rapid or universal testing. Testing was available but it was slow and results were not received fast enough. Finally, they were concerned that if there was an outbreak and staff had to go off because they contracted COVID-19 or self-isolate, they did not have replacements. Many of the directors of nursing reported that they felt anxious, isolated and ill prepared to deal with outbreaks.

#### Clinical Support Teams for residential care homes

The Health Service Executive (HSE), Ireland's healthcare provider, formed clinical support teams (CSTs) in each region to deal with residential care that became operational very quickly. In Ireland, community public health services are delivered by the HSE in nine regions. Our region, CKCH, serves about 700,000 people. In the first week of April, the HSE created three CSTs to support residential services including private nursing homes and religious organizations' homes.

There are more than 90 nursing home and residential care facilities in the CKCH area for older people of which

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64 are private. Residential Centers are subject to regulation by the healthcare regulator HIQA (Health Information and Quality Authority). The residential services run by religious organizations provide care in domiciliary settings for their retired members and are not regulated.

The CST's were set up to support residential homes, to address identified concerns and co-ordinate the response in the homes to outbreaks. First and foremost, residential homes in each region were informed that these teams were formed to provide education and support. Pathways were established to access PPE for suspect or confirmed cases, ordering oxygen and resident and staff testing. This information was communicated to residential homes. In addition, the HSE provided accommodation for healthcare staff in at risk situations e.g. living in direct provision. This communication alone was hugely reassuring to the residential care homes' staff. Residents and staff in residential care settings were recognised as a priority for testing and PPE supplies.

The CST teams were supported by public health, infection prevention and control, and provided education and training around testing and the use of PPE's, specialist consultant medical support (Geriatrician and Palliative Care specialists) and family doctors. A staff assignment hub was created to provide staff where all other options were exhausted. Geriatricians and Palliative care specialists provided an advisory service e.g. how to deal with COVID-19 positive patients with dementia and BPSD or those unsure how best to manage the needs and expectations of residents and families. Anticipatory care planning played a central role in this.

### **Private nursing homes and religious homes**

Private nursing homes and religious organizations do not normally fall under the remit of the HSE. When support was being organized for these homes, there was limited existing knowledge or experience of these services, and governance structures, as the operation of such services does not come under the direction of the HSE. A scoping exercise was performed to review contingency plans for the private nursing homes and identify obvious issues e.g. lack of staff contingency plans, multi-occupancy rooms, infection control awareness deficits, availability of oxygen and/or palliative care expertise. Private nursing homes were then assisted to address these concerns e.g. signposted to public health information about cohorting, infection prevention and control, development of a staff contingency plan, how to obtain and use PPE and complete advance care directives for residents.

The scoping exercise in the religious organizations used a preparedness questionnaire specifically designed for this purpose. These religious organizations had no history of regulation or involvement with public health or the HSE. As a result, they had a very different baseline in terms of prevention and control procedures due to their similarity to a home environment. Staffing levels were assessed to ensure

that there were sufficient resources to care for COVID-19 positive residents e.g. oxygen, regular temperature checks, oxygen saturation and symptom control, so residents could be monitored and managed appropriately.

Some larger religious homes had an 'infirmary', where frail and vulnerable residents were managed. But they were unable to respond to the increased nursing needs in the event of an outbreak. The CST advised about social distancing (e.g. during mealtimes and prayer times) and the general practitioners were linked with the nurse specialists in the CST.

In religious organizations, residents were 'cocooning', in accordance with the government regulations, so there was some reluctance to facilitate on-site visits. Where religious organizations were unable to access staff to meet the needs of COVID-19 positive residents, the HSE provided staff to make up for the shortfall. One key learning from our experience was the importance of on-site visits to the larger religious organizations to observe the practice of social distancing, assess the layout of the residences as well as cleaning and hygiene arrangements and staff training.

### **Solutions – General**

Members of the CSTs visited some services (27 at the time of writing). HSE infection control nurses worked with the CST to address specific issues. The relatively small number and shortage of trained, experienced, infection control nurses in the HSE presented challenges in relation to the amount of proactive work that could be completed.

In response, the CST received education from infection control and was given support and advice about visits and standard infection prevention and control (IPC). CST prioritized areas that required specialist IPC input and on-site visits based on risk assessments. Nurses who were trained in IPC and safe use of PPE in turn then trained healthcare assistants and nurses working in private nursing homes

Advice was provided by the CST on infection control, cohorting, creating isolation wards, preventing spread and managing positive cases, particularly in private nursing homes where there were shared or multi-occupancy bedrooms. Staff and residents were cohorted and regular temperature checks were initiated. Staff accommodation risks were identified, and they were provided with alternative accommodation by the HSE if required.

Residents who were COVID-19 positive remained in the residential setting, if this was consistent with their wishes and if adequate support was provided. PPE was issued by the National Procurement Team based on the number of suspected/confirmed COVID-19 cases while locally, emergency stocks were distributed as needed.

On Friday 18 April, the National Public Health Emergency Team announced a policy of universal testing in residential care homes to identify asymptomatic COVID-19 positive staff, which was an important development. An ICT infrastructure

was developed to facilitate early identification, monitoring and response to COVID-19 outbreaks. The number of suspect cases, staff cases, staff off duty due to COVID-19, pending results and a risk rating for each service was recorded. A senior manager was assigned to oversee the operation of the CST, facilitating access to key decision makers. A committee with senior management, public health, medical and infection control monitored the COVID-19 response across the region.

### Case Study: Outbreak in a Religious care Home

There was a significant outbreak of COVID-19 in a religious order residence that highlights the need to review these unregulated homes. This home, with 14 residents, aged 76 to 103 years, was staffed by the order with one health care assistant, one nurse on a day/night shift and domestic staff.

In mid-March, a resident was hospitalized for COVID-19 who subsequently died on 28th March. Within days, staff and other residents became symptomatic and the care system collapsed. A second patient was admitted to hospital with confirmed COVID-19 and died in hospital on 7th April. The CST became aware of this situation and within two days, with failing care supports after the second death and deterioration of a 3rd nun, seven nuns were transferred to two local hospitals, on 6th April. One patient who was moribund stayed in the convent where she died on 11th April. Three healthy nuns stayed in the home. Overall 12 of the 14 nuns tested positive for COVID-19, four died, three remained in the convent, and seven were transferred to a local HSE rehabilitation ward. Their average age was 93.5 years, their mean frailty index on the Clinical Frailty Score was 6.5, Charleston Comorbidity Index averaged 5.

### Lessons learned

We would recommend a number of critical actions to manage COVID-19 in residential care settings:

1. Clear and consistent communication by senior health care professionals, at a national level, accompanied by consistent media reporting to support key messages. Plan nationally and act locally.
2. CSTs operating locally with clear communication to the homes about their role, contact details with availability 24/7 and the range of supports provided e.g. universal testing, PPE's, training and access to specialist advice.
3. Clear communication in regard to Infection Prevention and Control led by senior health care professionals to enable consistent planning nationally, with timely local planning and implementation of necessary prevention and mitigation measures.
4. Adequate PPE's and training for staff in proper use, cohorting and isolation techniques.
5. Timely testing of staff and residents in the event of an

6. outbreak.
6. Cadre of staff e.g. nursing and health care aids replacements who are available to fill in gaps when staff are unable to work or there is a lack of clinical capacity in a service to deal with an outbreak.
7. Clear advance care directives in place before any future outbreak occurs that deals with cardio pulmonary resuscitation, tube feeding and transfer out to hospital with a defined level of care and care limits for both competent and incompetent residents.
8. Oversight to monitor progress with clear, regular communication to highlight issues and pathways in place to address issues promptly.
9. Need to review the need to bring religious and other unregulated homes under the guidance of regulatory authorities.
10. Adequate numbers of trained infection prevention & control nurses
11. Need for continued vigilance.

*Conflict of Interest:* There is no conflict of interest.

### References

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