

# Relocating within and between nursing homes during infectious disease outbreaks: A focus group study

## 1 | INTRODUCTION

Relocation of residents within and between nursing homes occurs for a variety of reasons, ranging from changing healthcare needs to closure or renovation of nursing homes.<sup>1-4</sup> Organizing such relocation processes is inherently complex as many technical, cultural, and social challenges have to be overcome while taking into account the needs and interests of many different stakeholders (e.g., managers, healthcare professionals, support staff, residents, family).<sup>1-4</sup> Relocation processes become even more complex during infectious disease outbreaks (e.g., norovirus, rhinovirus, RS-virus, COVID-19 virus) as a multitude of national regulations and organizational safety measures need to be considered (e.g., social distancing, group size limitations, lockdowns, cohort isolation, visiting restrictions, enhanced ventilation, personal protective equipment).<sup>5,6</sup> Nevertheless, the specific ways in which infectious disease outbreaks might affect relocations of residents within and between nursing homes have not yet been described. Therefore, this study elucidates the ways in which infectious disease outbreaks, in particular the recent COVID-19 pandemic, affected relocations of residents within or between nursing homes. The findings of this study may help nursing homes navigate the risks and restraints resulting from infectious disease outbreaks during relocations within and between nursing homes.

## 2 | METHODS

Seven Dutch nursing homes with recent relocation experience (<4 years) were recruited for this study using the partnerships within six academic collaborative networks in care for older adults.<sup>7,8</sup> In these nursing homes, eight semistructured focus groups were conducted with two to six participants ( $N = 37$ ) as has been suggested in scientific literature.<sup>9</sup> These participants were all actively involved in relocation processes in different roles, such as managers, healthcare professionals, support staff, client council members, residents and family (Table 1).<sup>10-12</sup>

For the focus groups, a predefined topic list was formulated including questions about the impact of COVID-19 on different

stakeholders and phases in the relocation process. All participants provided the researchers with written consent before the focus groups started. Each focus group lasted approximately 60 min, was audio recorded and transcribed verbatim. After eight focus groups, the researchers concluded that data saturation was achieved. Transcripts were pseudonymized by withholding personal details from the transcripts. The transcripts were analyzed using thematic coding.<sup>13-15</sup> A set of predetermined codes was developed and applied to the transcripts. These codes were explicated in subcodes and expanded if new codes emerged. The coding process was conducted by two independent researchers and differing opinions were discussed until consensus was reached. If no consensus could be reached, a third independent researcher was consulted. The coding process was performed using software package Atlas.ti 22.<sup>16</sup> This study adheres to the SRQR reporting guidelines.<sup>17</sup>

## 3 | RESULTS

Respondents stated that the COVID-19 pandemic negatively affected four main elements of relocation processes: communication, orientation, coordination, and transportation.

### 3.1 | Communication

Respondents indicated that the COVID-19 pandemic and regulations prevented them from effectively communicating with residents, family, and staff about the relocation process as information meetings and workgroups were difficult to organize due to social distancing and group size regulation. They also stated that, despite these barriers, nursing homes attempted to maintain normal communication and information exchange using online meetings and newsletters.

Family often wants - that's also what happens during these carer evenings - to have contact with each other, because they are in the same situation. That simply was not possible at the time. (Nurse)

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**TABLE 1** Participants included in the study.

Participants	Number
Managers	10
Healthcare professionals	10
Support staff	9
Client council members	4
Residents and family	4

We had a staff meeting at one point. That was all very complicated because it was during COVID and so we ended up renting the church in [...] because that was a big space, we could all sit at the appropriate distance from each other. So then we were allowed to get together like that. (Location manager)

### 3.2 | Orientation

Respondents subsequently argued that the COVID-19 pandemic and regulations complicated any attempts to facilitate the spatial orientation of residents, family, and staff throughout the relocation process as introductory viewing days and guided tours were impeded. They further stated that, due to these restrictions, nursing homes substituted orientation activities with multiple visualization methods including vlogs, instruction videos, illustrations, mood-boards, and floor plans.

It was during COVID, which meant that some plans, ambitions, schedules and had to be postponed. This affected how we were able to provide information. We had schedules that we had to postpone, which created restrictions, especially for family. So we'd have viewing days, but we couldn't organize those viewing days because of COVID. (Location manager)

The staff were diverted, the residents too, at one point- Residents came into the residential care group and due to COVID measures, they were only allowed in the garden or in their own rooms with their own family members, so you didn't have a common living room. (Facility officer)

### 3.3 | Coordination

Respondents also stated that the COVID-19 pandemic and regulations made it difficult to establish reliable project planning as symptoms and infection among residents or staff could emerge at any time and national regulations may change during the relocation process. They subsequently expressed that different strategies and scenarios were developed to adequately respond to these unforeseen circumstances.

But you can prepare all you want, 2 days before the move you have x number of COVID infections, so then your whole schedule is turned upside down. (Regional manager)

At one point, when we were dealing with the COVID situation, it even went so far that we- You have plan A, move. But you also had a plan B; we always tried to stick to the schedule during the move, but if, theoretically, a particular residential care group is or was in quarantine, for example, then you have to adjust your plan. (Regional manager)

### 3.4 | Transportation

Respondents further argued that the COVID-19 pandemic and regulations impeded the transportation of residents to the new residence, as not many transport companies were willing to transfer infected residents. They additionally mentioned that, due to this reluctance, it was paramount to continue negotiating with transport companies to reassure them and secure their cooperation.

And it wasn't like there was a transport company that was ready and excited like, well, I'm just going to transport five residents with COVID in a van. They had conditions. At a certain point they understood that we were really ready to move. But it was quite a puzzle. (Location manager)

Yes, in terms of transportation it meant that all of a sudden we also had to arrange new transportation, to keep things separate. It was quite tricky to find another transport company willing to transport with COVID. (Location manager)

## 4 | DISCUSSION

This study shows that infectious disease outbreaks, in particular the recent COVID-19 pandemic, affected four main elements of relocation processes within or between nursing homes: communication, orientation, coordination, and transportation. Our findings suggest that personal communication with residents, family, and staff about the relocation was difficult due to social distancing and group size regulation. This is confirmed by previous studies indicating that infectious disease outbreaks are likely to disturb normal communication channels and structures.<sup>18</sup> Nevertheless, nursing homes attempted to simulate normal communication using online meetings and newsletters. Our results also suggest that spatial orientation among residents, family, and staff was difficult due to risk of contamination. This is corroborated by previous research indicating that infectious disease outbreaks may severely limit freedom of

movement.<sup>19</sup> To overcome this barrier nursing homes implemented multiple visualization methods including vlogs, instruction videos, illustrations, mood-boards, and floorplans. Our findings furthermore show that coordination of relocation processes was complicated by continuous regulatory changes and new outbreaks among residents or staff. This is confirmed by other studies indicating that the uncertainty generated by infectious disease outbreaks could complicate planning and strategizing efforts.<sup>20,21</sup> Nursing homes responded to this uncertainty by establishing flexible scenarios that allow them to execute relocation processes under changeable conditions. In addition to earlier research,<sup>18-22</sup> this study also reveals that transportation was problematic due to the reluctance of transport companies to transfer high-risk residents. Due to this reluctance, it was crucial for nursing homes to continue negotiating with transport companies to secure their cooperation. Finally, it should be remarked that the COVID-19 pandemic examined in this study is somewhat different from other infectious disease outbreaks as strict and far-reaching COVID-19 pandemic regulations had to be observed instead of broad national recommendations and guidelines.<sup>23</sup> These constantly changing regulations were externally enforced by national governments and went beyond the control of nursing homes. This introduced additional risk, uncertainty, and confusion into the process of relocating residents within and between nursing homes, making these relocation processes even more difficult.

#### 4.1 | Strengths and limitations

The most important strength of this study is that a broad spectrum of stakeholders was included generating comprehensive findings. The most important limitation of this study might be that relatively few residents and family members were included in the focus groups resulting in possible underrepresentation. To address this limitation current data collection could be expanded or other additional research (e.g., Delphi study) could be conducted in the future.

## 5 | CONCLUSION

This study shows that the COVID-19 pandemic considerably affected the communication, orientation, coordination, and transportation pertaining to the relocation processes of participating nursing homes. Therefore, it may be prudent for nursing homes to anticipate infectious disease outbreaks when organizing relocations within and between nursing homes. This can be realized by utilizing alternative communication channels, developing possibilities for virtual orientation, implementing multiple agile planning scenarios, and negotiating with transport companies.

#### KEYWORDS

COVID-19, epidemics, infectious disease outbreaks, pandemics, relocations

#### AUTHOR CONTRIBUTIONS

**Damien S. E. Broekharst:** Conceptualization; investigation; writing—original draft; formal analysis; methodology; data curation; software. **Annerieke Stoop:** Conceptualization; methodology; project administration; supervision; funding acquisition; writing—review and editing; resources. **Monique A. A. Caljouw:** Supervision; project administration; writing—review and editing; methodology; conceptualization; funding acquisition; resources. **Wilco P. Achterberg:** Conceptualization; funding acquisition; methodology; writing—review and editing; project administration; supervision; resources.

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#### THE RELOCARE CONSORTIUM

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#### CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

#### ETHICS STATEMENT

The Dutch Medical Research Involving Human Subjects Act (WMO) does not apply to the study. Therefore, it is approved for exemption from review by the Medical Research Ethics Committee Leiden Den Haag Delft (N22.033). Written informed consent was obtained from all participants. All methods were carried out in accordance with relevant guidelines and regulations.

## TRANSPARENCY STATEMENT

The lead author Damien S. E. Broekharst affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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