

# Pragmatic Innovations in Post-Acute and Long-Term Care Medicine

Feasible new, practical products or approaches intended to improve outcomes or processes in post-acute or long-term care

## A Local COVID-19 Support Platform for Nursing Homes: Feedback and Perspectives



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### ABSTRACT

The COVID-19 pandemic has had a major impact on nursing homes (NHs), which were not prepared to manage infections among their at-risk patient populations. In order to comply with the French government's guidelines, we rapidly set up a local support platform (LSP) to help NHs manage their cases of COVID-19. The LSP comprised multidisciplinary decision support, a specialist phone hotline, mobile geriatric medicine teams, and videoconferences on COVID-19.

We first quantified the LSP's interventions in 63 local NHs since the start of the first wave of COVID-19 (March 2020): 9 instances of multidisciplinary decision support, 275 calls to the specialist phone hotline, 84 interventions by mobile geriatric medicine teams, and 16 videoconferences. The LSP had been used during and between the first and second waves of the epidemic, and all had evolved to meet the NHs' needs.

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**Keywords:** COVID-19, crisis management, decision support system, clinical health care quality improvement, nursing home

In an anonymous online survey, we gathered feedback on the LSP from the NHs to which support had been provided. This initial feedback was important because the platform's emergency implementation had prevented us from consulting the NHs about its design. The majority of the LSP's actions were popular with nursing home staff, and all respondents wanted the LSP to continue after the COVID-19 crisis.

The COVID-19 pandemic revealed a number of pre-existing problems related to nursing home–hospital collaboration but the LSP made it possible to address some of these issues satisfactorily. Subject to further cost-benefit evaluation, our model of NH-hospital collaboration might help to improve the care provided to NH residents.

### Problem and Significance

The COVID-19 pandemic has had a direct impact on nursing homes (NHs), which were not prepared to manage this health crisis within high-risk patient populations.<sup>1</sup> Between March 2020 and January 2021, a total of 153,219 cases of COVID-19 and 31,795 related deaths were reported by French NHs.<sup>2</sup>

### Innovation

As with the GERI-PaL program<sup>3</sup> and in order to comply with the French government's guidelines,<sup>4</sup> we rapidly set up a local support

platform (LSP) to help NHs to manage their cases of COVID-19. The LSP (described in detail elsewhere<sup>5</sup>) comprised multidisciplinary decision support (MDS, consisting of a geriatrician, an infectious disease specialist, and a palliative care physician), a specialist phone hotline, mobile geriatric medicine teams (with a nurse and a geriatrician) working with the 63 local NHs (in the county where our hospital is located), and "COVID-19 videoconferences" with all 346 NHs in the region (in 6 counties) to share information on COVID-19 (Figure 1).

Here, we summarize the local stakeholders' feedback on the LSP and outline perspectives for the platform once the COVID-19 pandemic has ended.

### Implementation

We first quantified the LSP's interventions since the start of the first wave of COVID-19 (March 2020).

Nine NHs (14%) needed therapeutic and ethical MDS for reviewing confirmed or suspected cases. The phone hotline received 275 calls and was used by 60 of the 63 local NHs (95%). The hotline was used during and between the two waves. The 346 NHs in the region were invited to participate in the "COVID-19 videoconferences." There were 16 "COVID-19 videoconferences" in total, with a median of 90 NHs (26%) per videoconference. The mobile geriatric medicine teams performed 84 interventions in 38 of the 63 local NHs (60%). The teams were initially deployed to assist with in situ screening but tended to become more involved in training in the use of personal protective equipment and other hygiene measures (Figure 1).

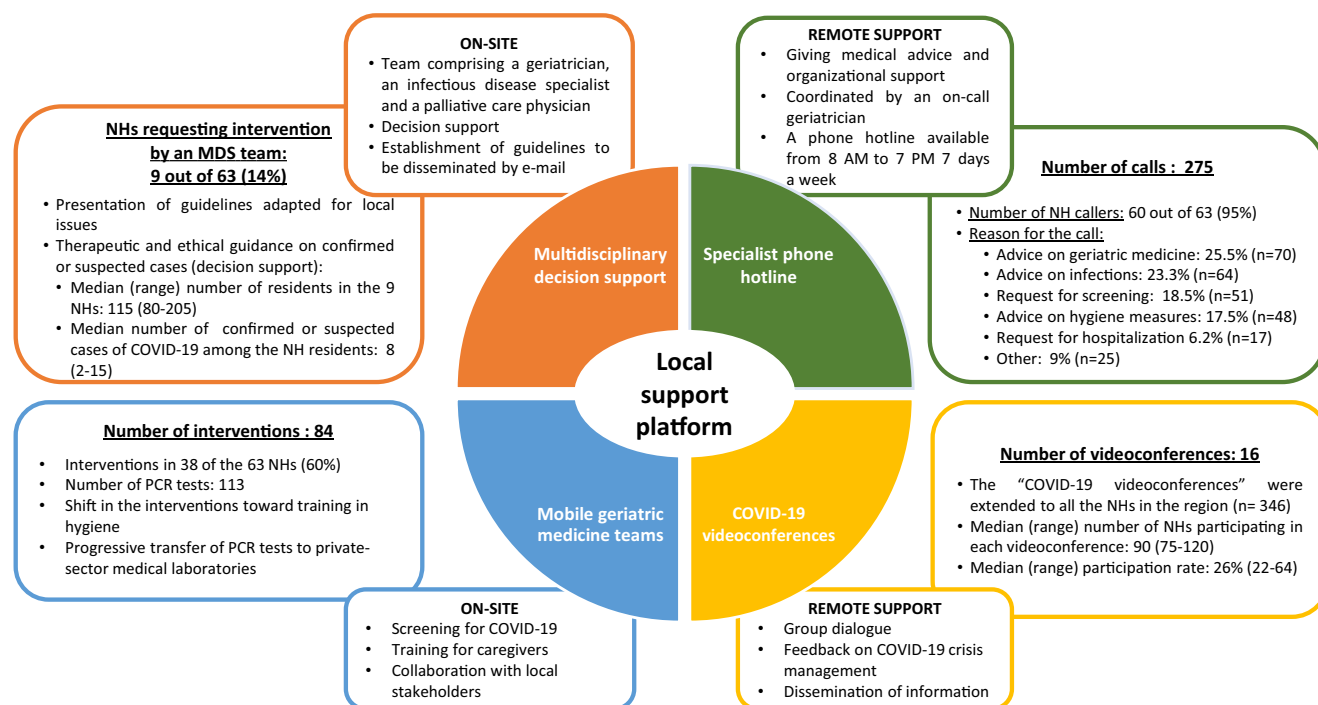
The authors declare no conflicts of interest.

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**Fig. 1.** Interventions carried by the local support platform (LSP) in the 63 nursing homes in the Indre-et-Loire county of France between March 2020 and January 2021. The LSP provided multidisciplinary decision support (MDS) (n = 9), a specialist phone hotline (n = 275), intervention by a mobile geriatric medicine team (n = 84), and “COVID-19 videoconferences” (n = 16). The COVID-19 videoconferences have been extended to all nursing homes (NHs) in the region (n = 346). Adapted with permission from Aidoud et al (2020).<sup>4</sup> A downloadable PDF of this form is available at [www.sciencedirect.com](http://www.sciencedirect.com).

## Evaluation

In an anonymous online survey (SphinxOnline, version 4.16, Le Sphinx, Chavanod, France), we then gathered feedback on the LSP from chief executives, coordinating physicians and coordinating nurses in the 63 NHs to which support had been provided. The online survey complied with the European Union’s General Data Protection Regulation and was made available between December 7, 2020, and January 16, 2021.

Twenty-seven staff members from 22 different NHs (35%) completed the online survey (for-profit NHs: n = 10; public sector NHs: n = 8; nonprofit NHs: n = 4). The majority of the respondents were NH directors (n = 13 of 27), followed by coordinating physicians (n = 8) and coordinating nurses (n = 6). Eighteen of the NHs concerned had received more than 1 intervention by the LSP.

All the respondents (n = 12) in NHs having hosted interventions by the MDS team stated that their questions about COVID-19 had been answered. The LSP’s interventions limited the feeling of isolation (according to 9 of the 12 respondents), provided solutions to individual problems (n = 10 of 12), and reassured the NH staff (n = 9 of 12). However, the interventions were reportedly less effective in improving the quality of life for residents (according to 6 of 10 respondents) or staff (n = 6 of 12) in NHs with a COVID-19 cluster. All 14 respondents with data approved of the guideline documents issued by the LSP.

The majority of calls to the specialist phone hotline concerned the management of cases of COVID-19 (n = 10 of 15) and for requests for in situ interventions by the mobile geriatric medicine teams (n = 8 of 15). The respondents who had used the phone hotline were generally satisfied with it (n = 13 of 15).

Thirteen of the respondents were satisfied with the mobile geriatric medicine team’s intervention for screening residents (n = 6 of

13), screening carers (n = 4 of 13), or evaluating problems in the NH (n = 3 of 13).

Thirteen respondents had participated in at least 1 “COVID-19 videoconference.” The median (range) number of participations was 4 (1-12). All 13 respondents were pleased to have been able to discuss the COVID-19 crisis with other NHs and wanted the videoconferences on other themes (eg, ethics, end-of-life support, the management of behavioral disorders, training for nurses and care assistants) to continue after the COVID-19 crisis.

Lastly, we asked our respondents about the accessibility of geriatric medicine specialists before and during the COVID-19 crisis, and about how they wanted the Medical Center to interact with NHs in the future.

Twelve of the 19 respondents with data considered that geriatric medicine specialists were sufficiently accessible before the COVID-19 crisis. Seven respondents were not satisfied [poor availability (n = 3), delayed hospital admissions (n = 2), or not knowing the right phone number (n = 2)]. Seventeen of the 18 respondents considered that the LSP was sufficiently accessible during the COVID-19 crisis. All 27 respondents stated that they wanted the LSP to continue after the COVID-19 crisis, so that the same types of intervention could be applied to other themes. Seventeen of the 27 also wanted to see an increase in the use of telemedicine consultations.

## Comment

The experience gained here should enable similar initiatives to be considered after the COVID-19 crisis.

The majority of the LSP’s actions were popular with the NH staff having replied to the online survey. The online survey was limited in scope but was important for obtaining initial feedback on this innovative platform—especially because the platform’s emergency

implementation prevented us from consulting NHs about its design. The results must be put into perspective because of the low questionnaire response rate and the low numbers of certain interventions. The MDS teams mainly intervened in NHs that were COVID-19 clusters at the start of the first wave. The dissemination of the MDS teams' guidelines and the availability of a specialist phone hotline helped to harmonize practice and reduce the need for an intervention. The low questionnaire response rate concerning the specialist phone hotline may be related to potential memory bias and/or the fact that the respondent was not necessarily the caller.

Some of these interventions had already proven to be effective in the past. In fact, differences in care strategies and a lack of communication between hospital physicians and NHs are primarily harmful for the residents.<sup>6</sup> A systematic review of interdisciplinary interventions in NHs revealed a positive overall effect in 19 of the 27 reviewed studies (66%)—particularly when the coordinating physician or referring pharmacist was involved.<sup>7</sup> The review also found that the availability of a specialist phone hotline was associated with shorter hospital stays after direct admissions, relative to admissions via the emergency department [median (95% confidence interval) time interval: 11.6 days (10.8–12.3) vs 14.1 days (13.5–14.7), respectively].<sup>8</sup> Systematic screening and collaboration with local hospitals have been implemented in 3 NHs in Michigan (USA), and enabled the identify of 29 cases of COVID-19 among the 215 residents.<sup>9</sup>

To our knowledge, only 1 videoconference between NHs had been organized in a neighboring area before the COVID-19 crisis. The videoconference addressed the management of neurocognitive disorders, which was the primary request among our respondents.

The LSP is a prime example of general NH-hospital collaboration. However, further evaluation is required to determine whether the LSP has a real positive impact to the resident's quality of care. Furthermore, the cost of this type of platform can be substantial (eg, with caregivers, in situ visits, equipment) and must be evaluated.

To conclude, the COVID-19 pandemic revealed a number of pre-existing problems related to NH-hospital collaboration, but the LSP made it possible to address some of these issues satisfactorily. Subject

to further cost-benefit evaluation, our model of NH-hospital collaboration might help to improve the care provided to NH residents.

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*The pragmatic innovation described in this article may need to be modified for use by others; in addition, strong evidence does not yet exist regarding efficacy or effectiveness. Therefore, successful implementation and outcomes cannot be assured. When necessary, administrative and legal review conducted with due diligence may be appropriate before implementing a pragmatic innovation.*