













RESEARCH LETTER

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Follow-up of resident's in nursing home after intervention of a geriatric mobile team: Longitudinal study at 1 year after the start of the COVID-19 pandemic

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INTRODUCTION

The COVID-19 pandemic has shown the need for a better organization of the city-hospital link in the management of patients.¹ The saturation of intensive care and emergency services and the excess mortality observed, especially in nursing homes have led the authorities to propose new guidelines which aim to better take care of the elderly in their living space and avoid hospital tensions.² The fragility of residents hospitalized with COVID-19 has an impact on morbidity, length of hospital stay, and on quality of life.³ In a recent study, Aïdoud described the organization they put in place to help nursing homes manage the COVID-19 crisis.⁴ One year after the beginning of the epidemic, studies have shown that the epidemic crisis has profoundly modified the care schedule in nursing home as well as the pathway of residents requiring complex medical care.^{5,6} In a previous work, we described the organization set up by our team to respond to the COVID-19 pandemic and their consequences on the health system especially on the city-hospital link in the St-Etienne metropolitan area.⁷

The objective is to describe the coordination between the geriatric mobile team and the hotline COVID-19 since the beginning of this pandemic and to presents data of this organization after 1 year of its existence.

In the context of the COVID-19 epidemic, face-to-face interventions have been suspended and replaced by a COVID mobile team.⁸ A “COVID” hotline was set up to advise professionals in nursing homes on the management of their residents and, if necessary, to organize the intervention of the mobile team in complex situations,⁴ to assess and assist in the management of residents in these structures.⁵ The coordination between the “COVID” hotline and the mobile geriatric teams has made it possible to offer direct and rapid hospital care by avoiding a visit to the emergency services.⁷ Referral was facilitated by direct access to dedicated COVID beds and also thanks to consultation between all the professionals: the palliative care teams, the hygiene teams, and the home hospitalization teams. Three types of management could be proposed: hospitalization, curative, or palliative management in a nursing home.

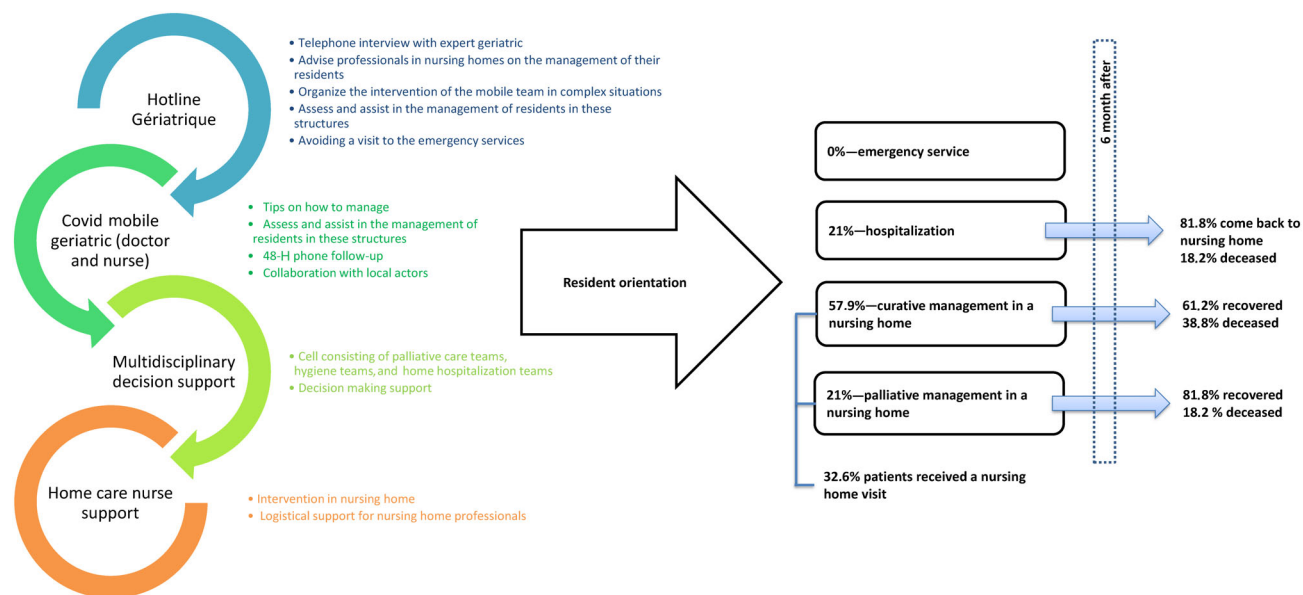


FIGURE 1 Organization and follow-up of the intervention of a mobile team in nursing home following the geriatric hotline call

METHODS

The action of the COVID-19 mobile unit concerns its interventions in 16 nursing homes in Loire, France, in 2020. All 16 nursing homes in which the mobile team intervened were contacted with an information notice. Data concerning the follow-up during 6 months of the care of 253 patients who were managed by the COVID-19 mobile team.

RESULTS

The sample of participants includes a majority of women (71%) with average age of 88 years. The geriatric mobile team was mobilized via the COVID hotline by the nursing home facility following the appearance of symptoms suggestive of COVID-19, the presence of fever (47%), an altered general state (59%), and to a lesser extent the presence of cough (28%) and diarrhea (14%).

The system enables residents to be oriented effectively and avoids hospitalizations with a hospitalization rate of 21% following the COVID mobile team's call. It should be noted that there was a low rate of refusal of hospitalization (2.3%). Nearly 79% of residents receive acute care (57.9%) or palliative care (21%) directly in their residence (Figure 1). In addition to the geriatric expertise of the mobile team, assisting with medicalization in the nursing homes was deployed with support from town medicine and the intervention of home care nurses. This organization facilitates care, enables the management of available beds (bed management), avoids the need to go to emergency, and unnecessary hospitalizations by proposing a care protocol adapted to the structures. Concerning the follow-up of patients at

6 months, 39% of patients died, mostly in the residential facility (82.4%). No resident was taken into intensive care.

DISCUSSION

The mobilization of the mobile team for the identification of patients with very strong suspicions of COVID-19 made it possible to optimize the targeting of these patients and to allow for the most appropriate referral and management possible.⁹ This finding confirms the scientific data describing the different clinical pictures of COVID-19 specific to the elderly (pulmonary infection with fever, cough and desaturation, diarrhea, falls, and sudden alteration of the general state).¹⁰ This organization by separating flows, reinforced by home care nurses in the establishment, demonstrates an efficient link with the urban health services for the well-being of the residents. That avoids patient transfers and emergency room visits, limit contamination and nosocomial cases, and provides care adapted to the situation.

CONFLICT OF INTEREST

The authors report no potential conflicts of interest. No special circumstances for the submission of this article. We certify that this work is a novel clinical research. Article not presented before.

AUTHOR CONTRIBUTIONS

Nathalie Barth: substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; drafting the article or revising it critically for important intellectual content, final approval

of the version to be published. Pauline Gouttefarde and Salomé Vignon: substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data. Ludovic Lafaie and Luc Goethals: drafting the article or revising it critically for important intellectual content. Bienvenu Bongué: drafting the article or revising it critically for important intellectual content, final approval of the version to be published. Thomas Celarier: drafting the article or revising it critically for important intellectual content; final approval of the version to be published.

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REFERENCES

1. Lynch MA, Pusey-Murray A. The effects of Covid-19 in the healthcare system. *Public Health Res.* 2021;11(1):15-18. doi:10.5923/j.phr.20211101.02

2. Données relatives à l'épidémie de COVID-19 en France: Vue d'ensemble. data.gouv.fr; 2020. Consulté le oct. 04, 2020. <https://www.gouvernement.fr/info-coronavirus/carte-et-donnees>
3. Hewitt J, Carter B, Vilches-Moraga A, et al. The effect of frailty on survival in patients with COVID-19 (COPE): a multicentre, European, observational cohort study. *Lancet Public Health.* 2020;5(8):e444-e451. doi:10.1016/S2468-2667(20)30146-8
4. Aïdoud A, Poupin P, Gana W, et al. Helping nursing homes to manage the COVID-19 crisis: an illustrative example from France. *J Am Geriatr Soc.* 2020;68(11):2475-2477. doi:10.1111/jgs.16780
5. Martinez L, Lacour N, Gonthier R, et al. Impact of geriatric hotlines on health care pathways and health status in patients aged 75 years and older: protocol for a French multicenter observational study. *JMIR Res Protoc.* 2020;9:e15423. doi:10.2196/15423
6. Bidar B, Cano P, Henry C, Philippe J-M. *Phase épidémique Covid-19.* Ministère des solidarités et de la santé, Guide Méthodologique; 2020.
7. Celarier T, Lafaie L, Goethals L, et al. Covid-19: adapting the geriatric organisations to respond to the pandemic. *Respir Med Res.* 2020;78:100774. doi:10.1016/j.resmer.2020.100774
8. Chaussinand M, Lafaie L, Goethals L, Bongue B, Celarier T. La hotline gériatrique, enquête auprès des médecins généralistes du bassin stéphanois. *Soins Gérontologie.* 2021;16(12):S126860342100044X. doi:10.1016/j.sger.2021.03.009
9. Briggs R, Robinson S, Martin F, O'Neill D. Standards of medical care for nursing home residents in Europe. *Eur Geriatr Med.* 2012;3:365-367. doi:10.1016/j.eurger.2012.07.455
10. Annweiler C, Sacco G, Salles N, et al. National French Survey of Coronavirus Disease (COVID-19) symptoms in people aged 70 and over. *Clin Infect Dis.* 2020;72(3):490-494. doi:10.1093/cid/ciaa792

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