



## Editorial

## Home Hospitalisation: A Polyhedric Approach to Healthcare in Acute Respiratory Patients



### Hospitalización a domicilio: un enfoque poliédrico de la asistencia sanitaria en pacientes con patología respiratoria aguda

Conventional hospital admissions constitute a substantial portion of healthcare expenditures,<sup>1</sup> prompting the exploration of alternative care delivery models. In this regard, home hospitalisation emerges as a viable modality, which, when compared to traditional inpatient care, is associated with a significant reduction in healthcare costs<sup>2–6</sup> and shortened lengths of stay in conventional hospital settings, resulting in decreased morbidity and mortality rates<sup>7–9</sup> as well as lower readmission rates<sup>9</sup> and higher perceived quality of care by both patients and caregivers.<sup>10</sup> Consequently, home hospitalisation is increasingly gaining traction, with a growing number of medical specialities integrating home hospitalisation programmes into caregiver's practices.

Furthermore, advances in technology have facilitated enhanced home-based care with information and communication technologies. This evolution has allowed home care to expand beyond the confines of hospitalisation, particularly for managing various respiratory conditions such as chronic obstructive pulmonary disease (COPD) and asthma, with the primary aim of reducing readmissions post-hospital discharge and improving long-term patient follow-up.<sup>11–13</sup> The study by Mínguez Clemente et al.<sup>14</sup> introduced an early discharge programme for patients experiencing COPD exacerbations, followed by a home hospitalisation protocol, comparing outcomes between patients who received telemonitoring and those who did not. Key clinical parameters were recorded twice per day, including electrocardiogram, oxygen saturation, heart rate, blood pressure, temperature and respiratory rate. Additionally, patients received regular telephone consultations from their doctors to assess their clinical status. The findings indicated that patients in the home hospitalisation cohort with communicating technologies support required fewer home visits than those without information and communication technologies, with no significant differences in the overall care costs between the two groups.

Despite the demonstrated benefits of home hospitalisation, it remains an underutilised practice in most pulmonology departments across Spain. One of the primary barriers to widespread adoption is the reluctance among healthcare professionals, who often perceive conventional hospital-based care as offering superior quality and safety.<sup>10</sup> Moreover, successfully implementing this care model requires patients to have a minimum level of family support, which is crucial for home hospitalisation. This dependency on

family support can negatively impact caregivers, who may view conventional hospitalisation as an opportunity for respite from their caregiving responsibilities. Additionally, the geographical dispersion of patients can pose logistical challenges to home-based care delivery. Importantly, patient autonomy and preference must be respected, as some individuals may have reservations about home hospitalisation, fearing a reduction in the quality of care or potential delays in receiving urgent medical attention. Saenger et al.<sup>15</sup> highlighted that the primary reasons patients cite for accepting home hospitalisation include greater comfort in their home environment, proximity to family, the ability to maintain an active lifestyle, avoidance of exposure to nosocomial infections and previous negative experiences with traditional hospital admissions.

Conversely, common reasons for rejecting home hospitalisation include a preference for the comprehensive care provided in conventional hospital settings, concerns about the adequacy of care and discomfort with having healthcare professionals in their homes. The study by Paulson et al.<sup>16</sup> further identified frequent reasons for declining home hospitalisation, including fears of delayed access to urgent medical care and inadequate training of healthcare providers offering home care, leading to either insufficient or inaccurate information being provided and, in some cases, home hospitalisation is completely omitted as a care option. There are also concerns about lack of confidence in self-administering intravenous medications.

The demographic profile of patients more inclined to accept home hospitalisation predominantly includes elderly individuals (mean age >77 years) and females.<sup>15</sup> The most commonly observed respiratory conditions managed via home hospitalisation include pneumonia, COPD and asthma.<sup>15</sup> However, patients with pulmonary diagnoses, particularly those requiring oxygen therapies, are more likely to reject home hospitalisation compared to those with other conditions, such as cellulitis or urinary tract infections.<sup>17</sup>

Successful implementation of the home hospitalisation model necessitates seamless coordination among multidisciplinary healthcare teams, with robust communication channels between nursing staff and all the medical services involved in patient care. Additionally, there must be accessible and efficient communication between patients, their families and healthcare providers. Investment in the training of healthcare professionals regarding

the intricacies of home hospitalisation, including its benefits and limitations, is essential. Equally important is the careful selection of patients most likely to benefit from this care model, ensuring the delivery of high-quality healthcare services.

In conclusion, with the ongoing advances in communication technologies and the improvement of transportation infrastructure, home hospitalisation is ready to serve as a safe and effective complement to conventional hospital care, provided that careful patient selection and appropriate resource allocation are ensured.

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## Authors' contributions

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## Conflicts of interest

Dr. Antia Ferreiro-Posse has nothing to disclose. Dr. Ignacio Novo-Veleiro reports personal fees for speaking at sponsored meetings, help assistance to meeting travel, act as a consultant or research projects from Bayer and Daiichi Sankyo. Dr. Placido Mayan-Conesa reports personal fees for speaking at sponsored meetings, help assistance to meeting travel, act as a consultant or research projects from GlaxoSmithKline, Pfizer and Roche. Dr Francisco-Javier Gonzalez-Barcalo reports personal fees for speaking at sponsored meetings, help assistance to meeting travel, act as a consultant or research projects from ALK, Astra-Zeneca, Bial, Chiesi, Gebro Pharma, GlaxoSmithKline, Menarini, Novartis, Rovi, Roxall, Sanofi, Stallergenes-Greer, Teva.

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