The role of hospital-at-home in the health crises management of high-need older populations: views from the ProPCC Programme in Catalonia

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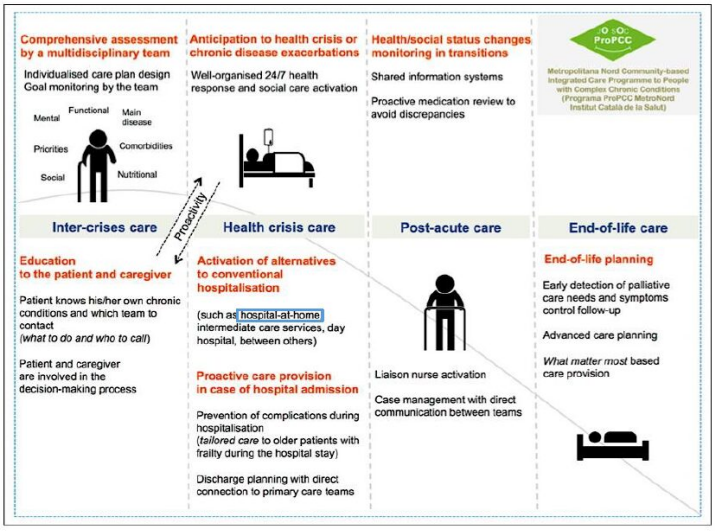
The health systems worldwide have a huge challenge for the next decades: due to recent advances in care we are facing a complex scenario where there are groups of high-need vulnerable populations that are living with frailty and multimorbidity. In these cases some authors urge to redesign services (1) in order to facilitate proactive integrated care responses in the community, where home-based multidisciplinary teams, such as hospital-at-home (2), reablement at home, or hospice-at-home, play an important role in the management of health crises (3).

In the North of Barcelona region, the Metropolitana Nord Chronic Care Management Team (4) at Institut Català de la Salut (ICS), have designed two projects for supporting integrated care to frail populations (ProFràgil project) and to high-need populations (ProPCC project). ICS (Catalan Health Institute) is the main public health provider in Catalonia, and in our area, it manages care for up to 1,4 M people from 71 municipalities, through 64 Primary Care Teams and the

Germans Trias i Pujol University Hospital.

Our team created in 2018, by leading a collaboration between clinicians, patients, and caregivers, the Community Based Integrated Care Programme for People with Complex Chronic Conditions (ProPCC Programme) (5). It was tailored to high-need high-cost individuals at high risk of hospital admission, by targeting complex chronic patients and advanced illnesses patients, and by providing them anticipatory care based on person-centred best practices for the whole care pathway, including end-of-life.

H@H as evidence-based practice identified for the ProPCC project



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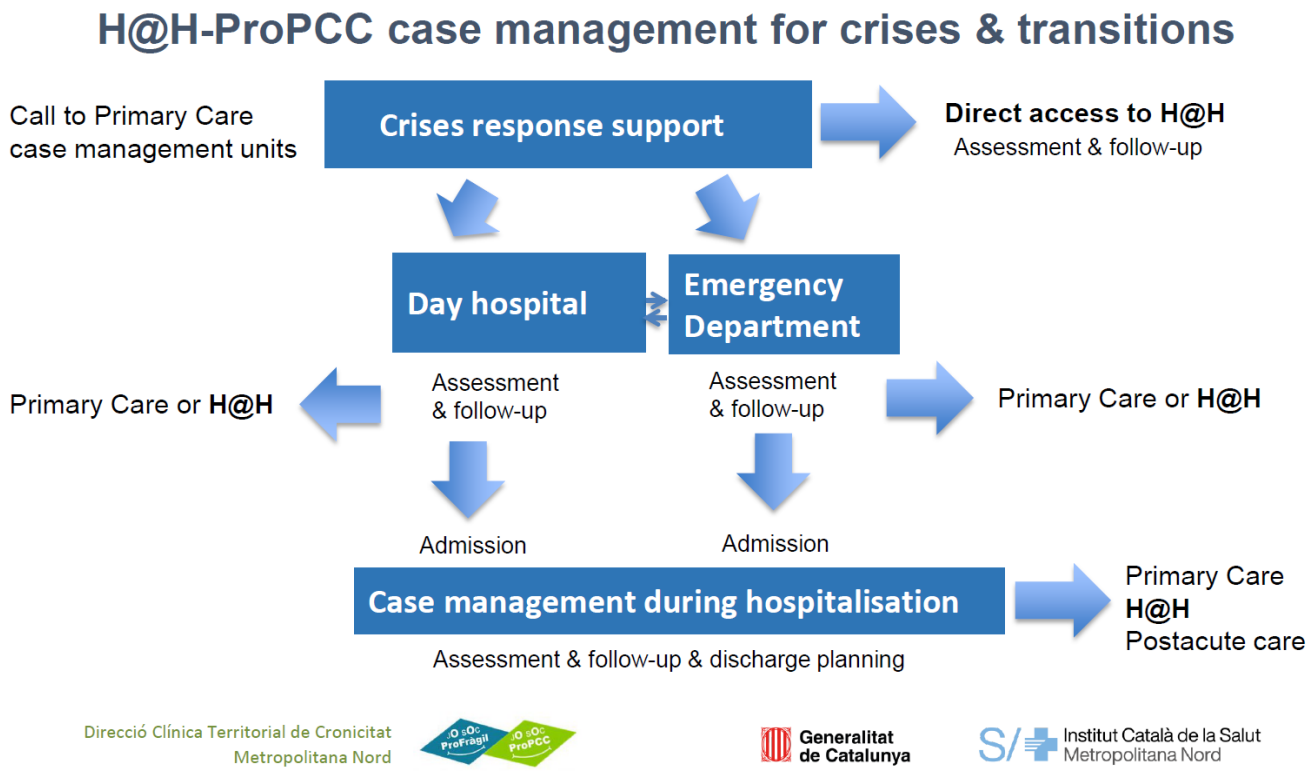
Evidence-based practices for the ProPCC Programme design

- ✓ Identified by leaders
- ✓ Assessed by clinicians
- ✓ Health & social approach
- ✓ Transformed into 63 clinical actions

The ProPCC programme implementation started in May 2018 by using a unique case management process for the whole region, shared by different multidisciplinary teams from primary and secondary care, with the objectives of increasing the time spent at home and improving the resource use adequacy.



In the WHAHC held in Barcelona in 2023, we presented a study that analysed preliminary results of the role of hospital-at-home in the health crisis management of the ProPCC Programme, based on health crises resolution, 30-day readmission and 30-day mortality. We focused on the Admission Avoidance pathway (46% of cases) due to the importance of managing health crises in the community without conventional hospital admission (notice that one of two Admission Avoidance cases were referred to hospital-at-home directly from primary care case management teams). Main trigger diagnosis were respiratory and urinary infections, followed by heart failure. We evidenced health crises resolution in 8 of 10 cases. On the other side, the profile of Early Supported Discharge cases was more heterogeneous and 30-day readmission was higher than in the Admission Avoidance pathway, in part due to complexity of postacute cases.

Abstract 179. ADMISSION AVOIDANCE HOSPITAL-AT-HOME IN THE CONTEXT OF THE PROPCC PROGRAMME: GOOD CRISES RESOLUTION WITH LOW READMISSION RATE

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Background and aims

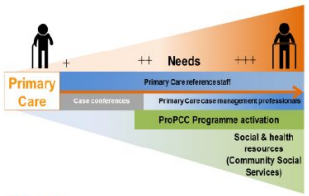
The collaboration between hospital-at-home (HaH) and primary care teams (PCT) is key for the management of crises in the community, especially in people living with frailty and multimorbidity (1).

In Catalonia, the Catalan Health Institute developed in 2018 the Community Based Integrated Care Programme for People with Complex Chronic Conditions (ProPCC Programme), tailored to high-need, high-cost individuals at high risk of hospital admission (2,3). Its objectives were increasing the time spent at home and resource use adequacy.

The aim of our study was to analyse the health crisis management led by our HaH unit in the context of the ProPCC Programme.

References

(1) *Bonet Farell M, et al. Acute care of patients with complex chronic conditions by a HaH unit in the context of a local integrated care program: is it effective? Presented at WHAHC 2019.*
(2) *Mas MÀ, et al. International Journal of Integrated Care 2021; 21(S1): 239.*
(3) *Mas MÀ, et al. International Journal of Integrated Care 2021;21(4):22.*



Methods

We performed a retrospective analysis of a cohort of complex chronic patients (CCP) and advanced disease patients (ADP) from the ProPCC Programme admitted to HaH for acute care, since 2018, in the territory of 16 PCT in the North Metropolitan area of Barcelona.

We described the characteristics of the attended population: age, gender and clinical complexity profile.

We analysed Admission Avoidance (AA) activity, compared to Early Supported Discharge (ESD): functional status, referral unit (PCT, Emergency Department (ED), outpatient/day hospital or hospital ward) and trigger diagnosis.

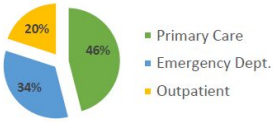
We compared AA and ESD activity in terms of health crises resolution, 30-day readmission and 30-day mortality.

Results

277 episodes attended by HaH with a length of HaH stay of 15.5 days.

Description of the whole population: age 80.5 years, 56.3% male, ½ were CCP and ½ were ADP.

AA activity was performed in 127 (46%) of cases after referral from several units:



Clinical profile	AA	ESD	p value
CCP ADP	48% 52%	57% 43%	0.122 0.157
Number of chronic health problems	17	19.5	<0.01
Barthel Index	47/100	57/100	0.04
ED visits last 6 months	1.7	2.7	<0.01

Trigger diagnosis	AA	ESD	p value
Respiratory infections	35%	35%	0.01
Urinary infections	29%	13%	
Heart failure	19%	19%	
Covid-19	2%	9%	
Other	15%	24%	

Outcomes	AA	ESD	p value
Health crisis resolution	81%	76%	0.381
30-day readmission	11%	32%	<0.01
30-day mortality	11%	10%	0.781

Conclusions

In high-need high-cost patients, access to HaH from PCT/ED/outpatient seems a safe and effective way as alternative to convectional hospitalisation.
Compared to ESD, AA registered lower 30-day readmission, with no differences in health crises resolution and in 30-day mortality.

The results of our preliminary approach suggest that hospital-at-home services are a key element for the care of high-need populations due to their ability to respond to heath crises management in the community, by using a collaborative methodology shared with other services involved in the integrated care strategy.

ABOUT THE AUTHOR

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on behalf of all the participants in the ProPCC project

Dr. Mas is a geriatrician and clinical researcher in geriatrics and ageing, with expertise in translational health services research to support integrated care to older adults.

He is based in the North Barcelona region, where his ongoing integrated care projects for older individuals with frailty and multimorbidity are:
– ProPCC project: To design and evaluate a community-based integrated care programme for People with Complex Chronic Conditions.
– ProFràgil project: To design and evaluate a comprehensive strategy for the prevention, detection and management of older people with frailty in the community (linked to the Aptitude project) and during hospital care (Department of Geriatrics Hospital Universitari Germans Trias i Pujol.)

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