The journey of the ProPCC Programme in Catalonia

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Direcció Clínica Territorial de Cronicitat

Germans Trias i Pujol Hospital

Institut Català de la Salut

Generalitat de Catalunya

Institut Català de la Salut at Metropolitana Nord Barcelona area

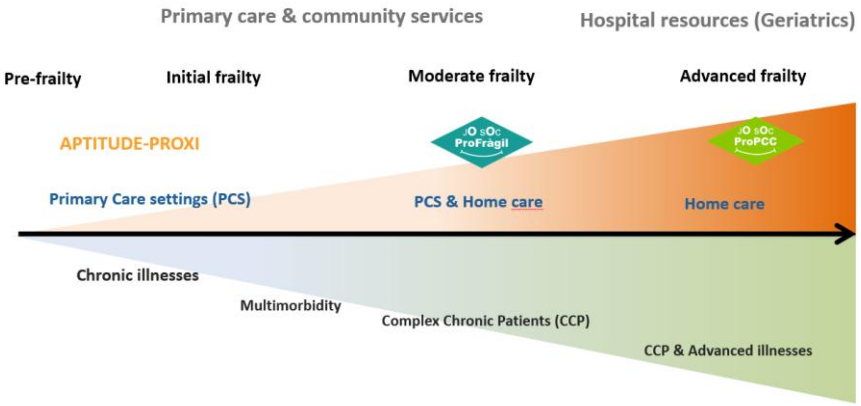
Universal public health & social care
Divided in Integrated regions (AIS)
Services:

- **Primary Care**
- **Bed-based Intermediate Care**
- **Acute hospital care**

Integrated care strategy by the Government of Catalonia at macro-level:

- ✓ Stratification of people with multimorbidity (based on the GMA tool)
- ✓ Identification of frail populations
- ✓ **Identification of Complex Chronic Patients**
- ✓ **Identification of People with Advanced Illness**

550 beds tertiary acute hospital (high technology)



Integrated Care Model by the Catalan Heath Institute at meso level

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Our journey creating and evaluating the ProPCC Programme (2018-2026)

The challenge of building an integrated care model:
the **North-Metropolitan Barcelona Community-based Integrated Care Programme to People with complex Chronic Conditions (ProPCC)**

Tailored to high social & health needs (*high-need, high cost*) populations:

- ✓ **Complex Chronic Patients**
- ✓ **People with Advanced Illnessess**

Mas et al. International Journal of Integrated Care DOI: 10.5334/ijic.5653

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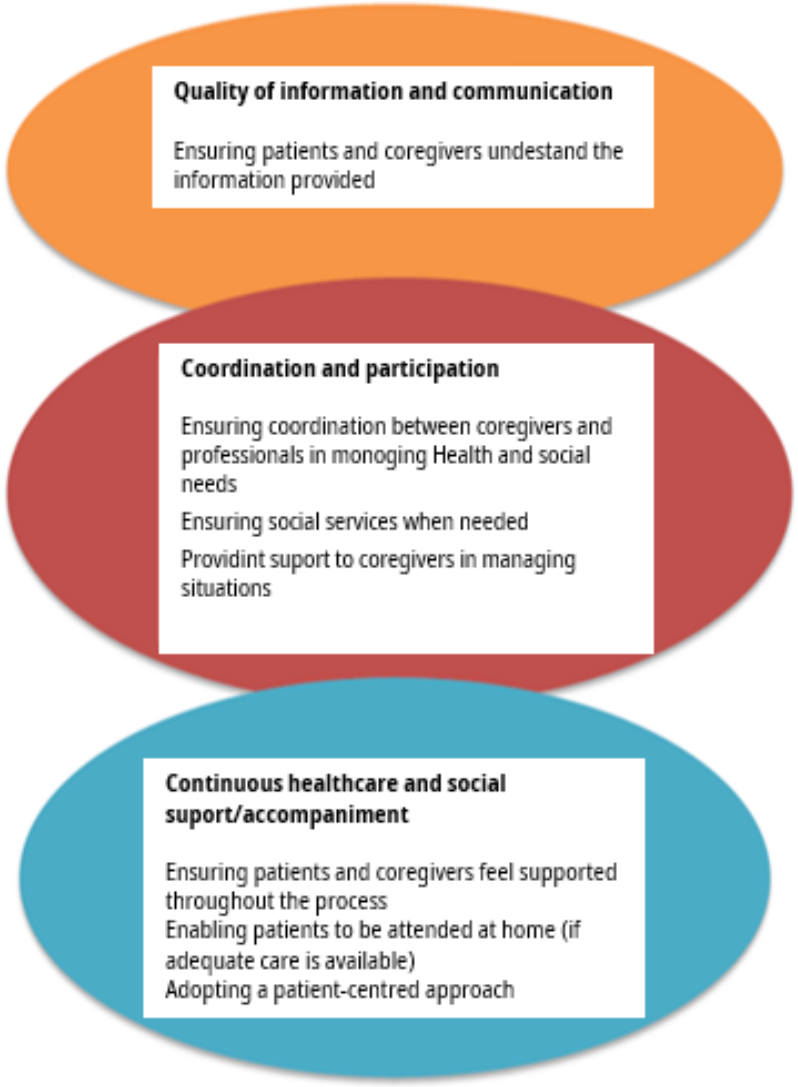
ProPCC Programme creation with inputs from people involved (2018)

Designing a Person-Centred Integrated Care Programme for People with Complex Chronic Conditions: A Case Study from Catalonia

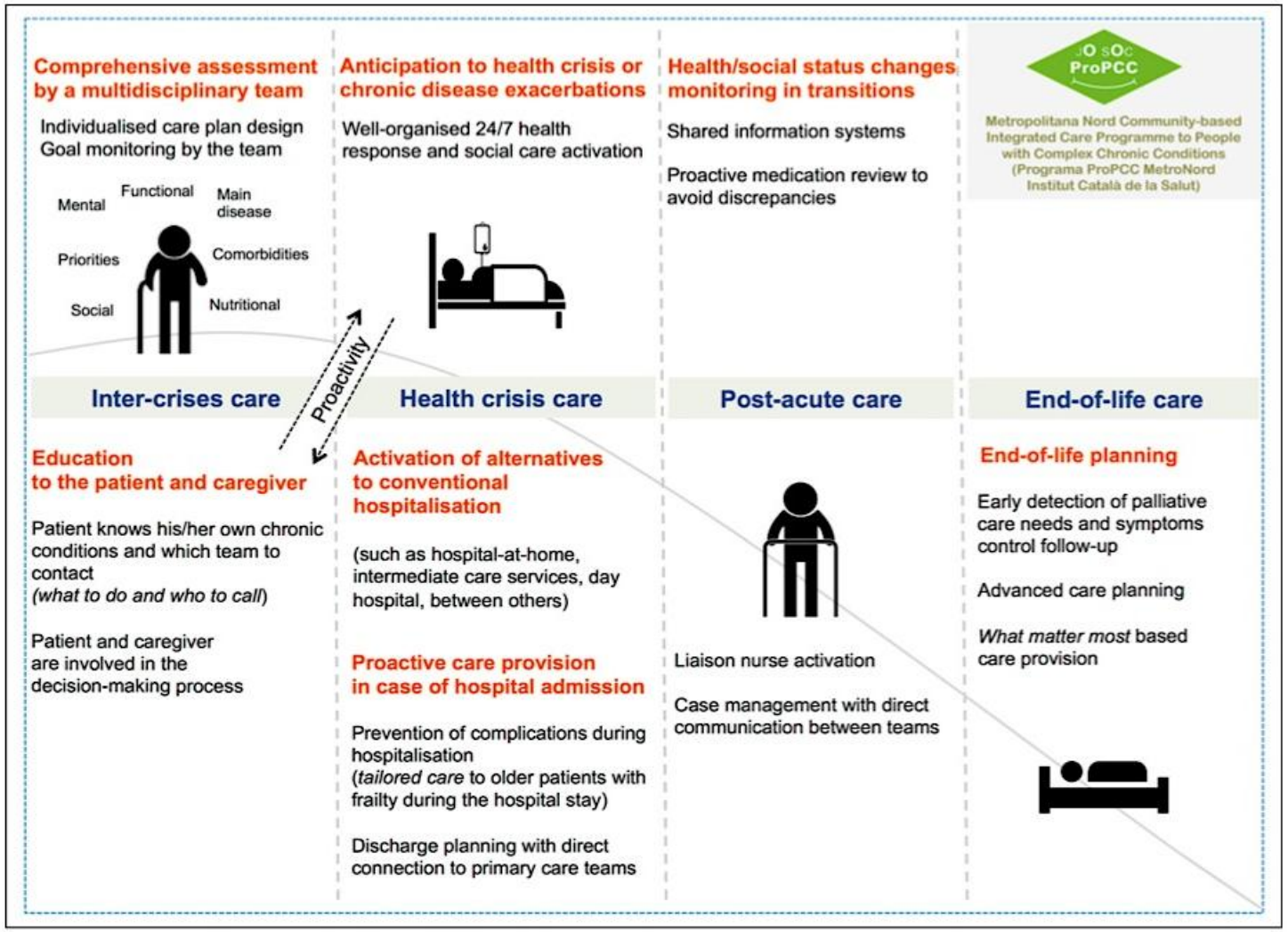
Mas et al. Int J Integr Care 2021;21(4):22. doi: 10.5334/ijic.5653

Asking people involved in care
- ✓ People living with chronic conditions
- ✓ Caregivers

(a) focus groups (one for complex chronic patients and another for their caregivers).
(b) semi-structured interviews with 19 patients and caregivers (including patients with advanced illness, their caregivers – often interviewed alongside the patients –, and caregivers of patients who had died recently).
(c) in-depth interviews with representatives of 3 associations supporting patients with progressive disease (amyotrophic lateral sclerosis, dementia, and cancer).



Evidence-based practices identified for the ProPCC Programme



Evidence-based practices for the ProPCC Programme design

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

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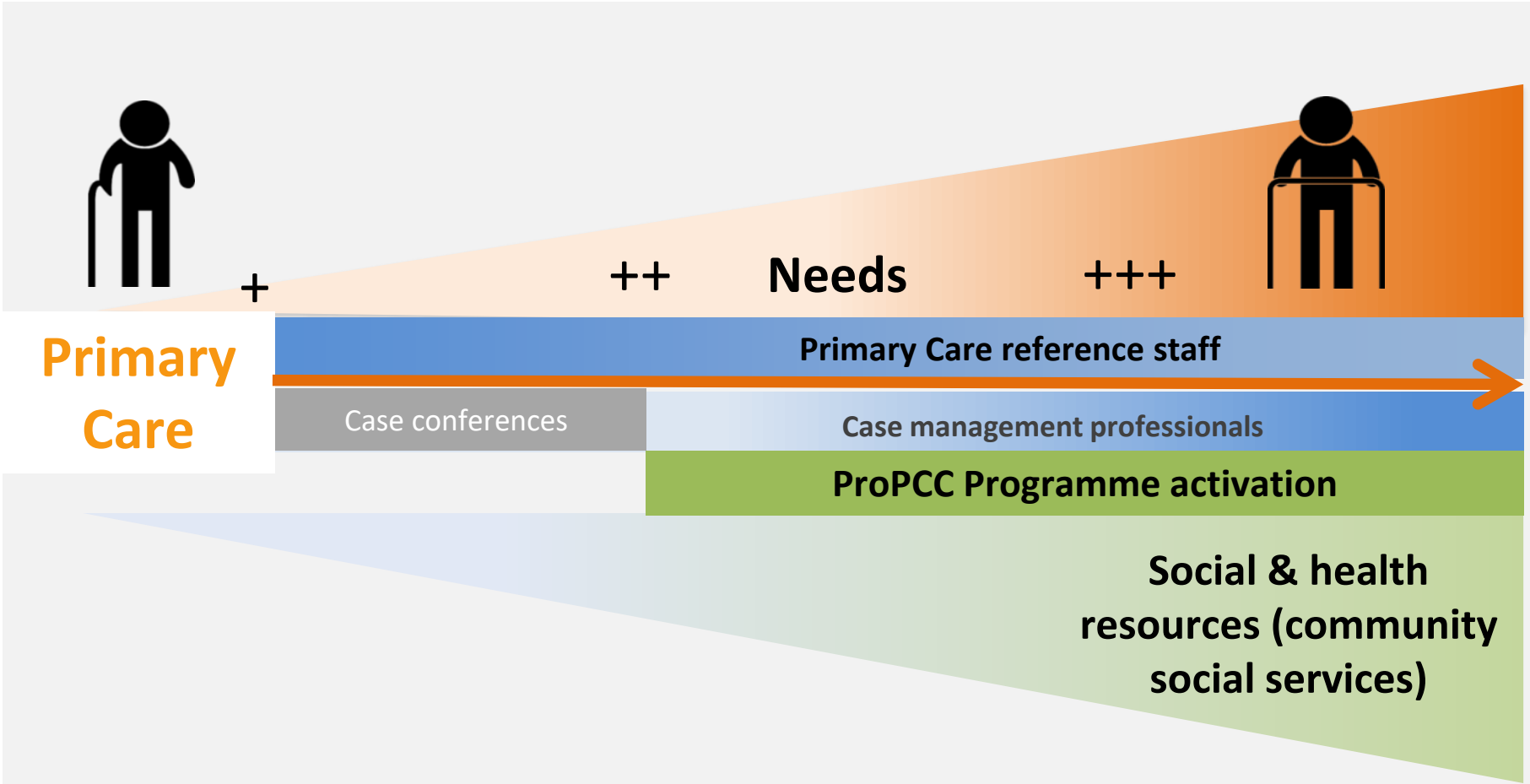
ProPCC case management model: multidisciplinary collaboration



CASE CONFERENCE CONS 1

Who: professionals from Primary Care (PC) teams
What: identifying people with high social & health needs
Where: PC centres Badalona & Santa Coloma
When: weekly

CASE CONFERENCE CONS 2

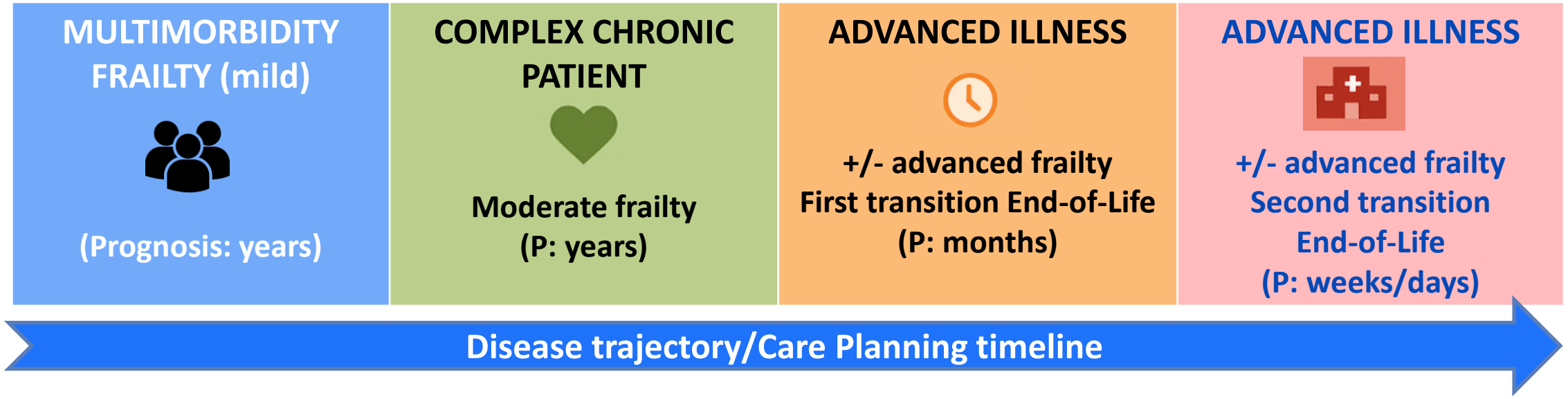
Who: PC case management unit + home-based rehabilitation team + H@H teams + home-based Palliative Care
What: tailoring care plans in complex cases
Where: PC centres Badalona & Santa Coloma
When: every two weeks

CASE CONFERENCE CONS 3

Who: PC case management units + hospital-based case management unit + professionals from different medical specialties
What: suport to complex decisions
Where: Germans Trias i Esperit Sant hospitals
When: every two weeks

✓ **Collaborative care planning** lead by Primary Care teams with community teams and hospital-based teams (Geriatrics and other teams)

Anticipatory Care Planning & Care objectives in the ProPCC



WHO: Primary Care + home teams
WHAT: tailoring care plans in complex cases
WHERE: *Primary Care centres*

Transitional care & Improving functional status

End-of-life care

Survival & Risk control

Minimising complications/ Functionality

Symptoms control

Adapted from Amblàs-Novellas et al. BMJ Open. 2016;6(9):e012340

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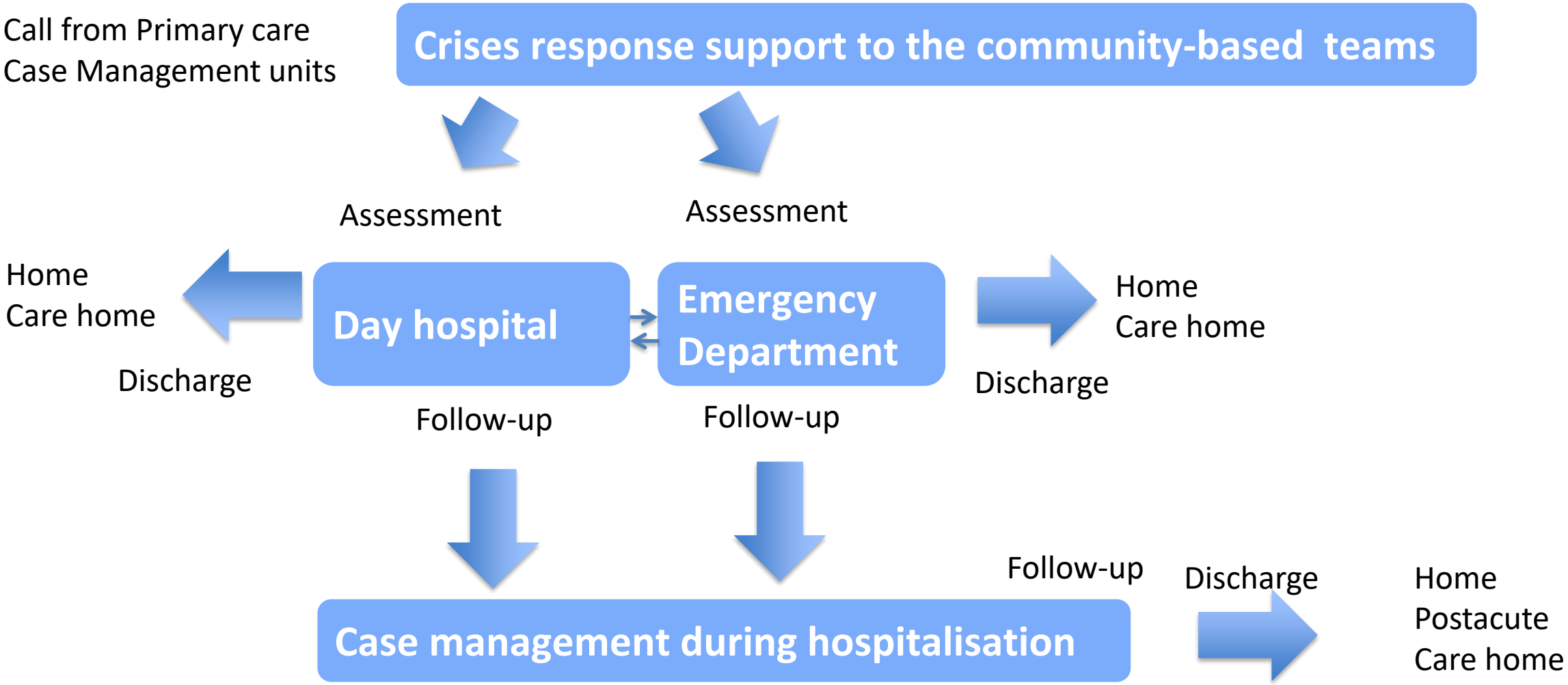
ProPCC tailored case management for crises & transitions



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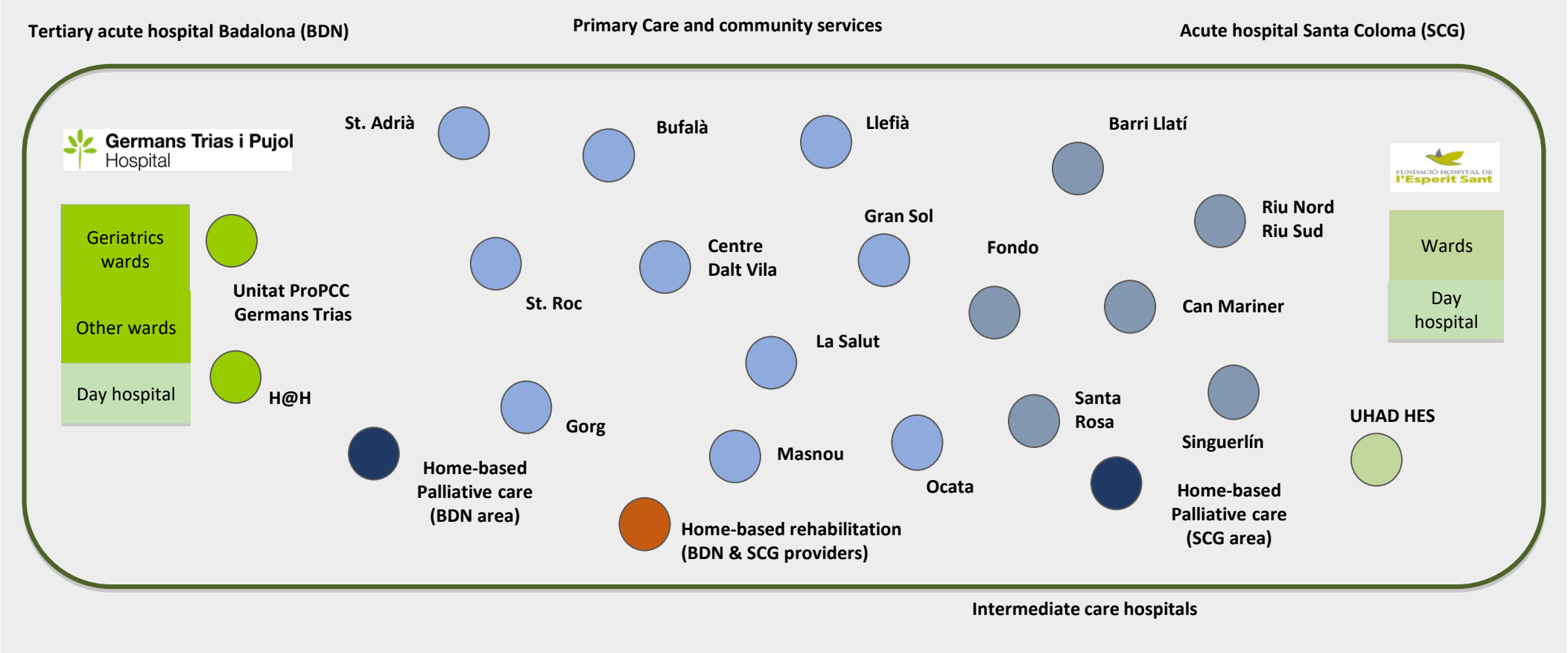
ProPCC: Description of the care practice
Badalona and Santa Coloma de Gramenet pilot site 16 Primary Care teams



- ✓ **Collaborative work with community teams and services**
  (hospital-at-home, reablement, palliative care at home, and services from the municipalities)

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Evaluating the ProPCC: impact on costs (2023)

Evaluating Person-Centred Integrated Care to People with Complex Chronic Conditions: Early Implementation Results of the ProPCC Programme

- ✓ Increasing Primary care proactivity leads to reducing hospital use (up to 40%)

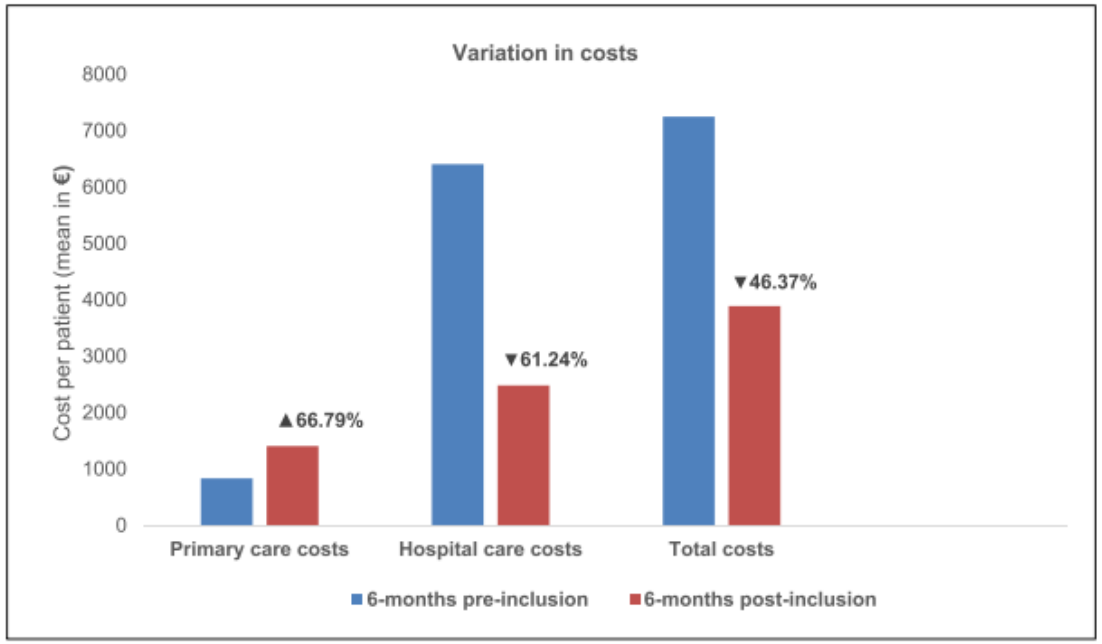

Figure 1 Variation in healthcare resources costs six months before and after inclusion in the programme, per patient.

WHOLE SAMPLE (N = 264)	RESOURCE	6-MONTHS PRE-INTERVENTION*	6-MONTHS POST-INTERVENTION*	MEAN VARIATION	P VALUE
Primary care visits	Physician	8.22 (8.28)	11.45 (13.39)	39.88%	**<0.05**
	Nurse	9.33 (11.90)	19.85 (19.34)	111.84%	**<0.05**
	Social worker	0.99 (2.74)	2.06 (3.65)	107.76%	**<0.05**
	Continuous/urgent care	0.71 (3.67)	0.72 (2.98)	1.12%	0.97
Hospital care use	Emergency department visits	1.39 (1.69)	0.87 (1.42)	-37.23%	**<0.05**
	Hospital admissions	0.70 (1.05)	0.49 (0.83)	-29.24%	**<0.05**
Hospital Stay	Hospital days	12.77 (21.63)	7.85 (14.75)	-38.29%	**<0.05**
SURVIVORS (N = 206)	**RESOURCE**	**6-MONTHS PRE-INTERVENTION***	**6-MONTHS POST-INTERVENTION***	**MEAN VARIATION**	**P VALUE**
Primary care visits*	Physician	7.77 (8.65)	12.19 (14.1)	56.89%	**<0.05**
	Nurse	8.54 (12.03)	21.25 (20.11)	148.83%	**<0.05**
	Social worker	0.65 (1.77)	2.14 (3.57)	229%	**<0.05**
	Continuous/urgent care	0.65 (4)	0.68 (3.3)	3.75%	0.97
Hospital care use	Emergency department visits	1.29 (1.6)	0.79 (1.39)	-38.76%	**<0.05**
	Hospital admissions	0.62 (0.96)	0.38 (0.75)	-39.3%	**<0.05**
Hospital Stay	Hospital days	10.85 (19.84)	6.47 (13.94)	-40.39%	**<0.05**
NON-SURVIVORS (N = 58)	**RESOURCE**	**6-MONTHS PRE-INTERVENTION***	**6-MONTHS POST-INTERVENTION***	**MEAN VARIATION**	**P VALUE**
Primary care visits*	Physician	9.81 (6.64)	8.85 (10.22)	-9.79%	**0.54**
	Nurse	12.16 (11.12)	14.91 (15.49)	22.62%	**0.27**
	Social worker	2.21 (4.63)	1.79 (3.97)	-19%	**0.61**
	Continuous/urgent care	0.88 (1.34)	0.87 (1.34)	1.14%	**1**
Hospital care use	Emergency department visits	1.78 (1.96)	1.17 (1.52)	-34.27%	**0.06**
	Hospital admissions	0.97 (1.3)	0.91 (0.98)	-6.19%	**0.81**
Hospital Stay	Hospital days	19.59 (26.1)	12.79 (16.56)	-34.71%	**0.09**

Table 4 Variations in the use of healthcare resources 6 months before and after the inclusion in the programme, for the whole sample and after a segment-by-segment analysis based on survival.

*Variables are mean (standard deviation).

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Mas et al. International Journal of Integrated Care DOI: 10.5334/ijic.7585

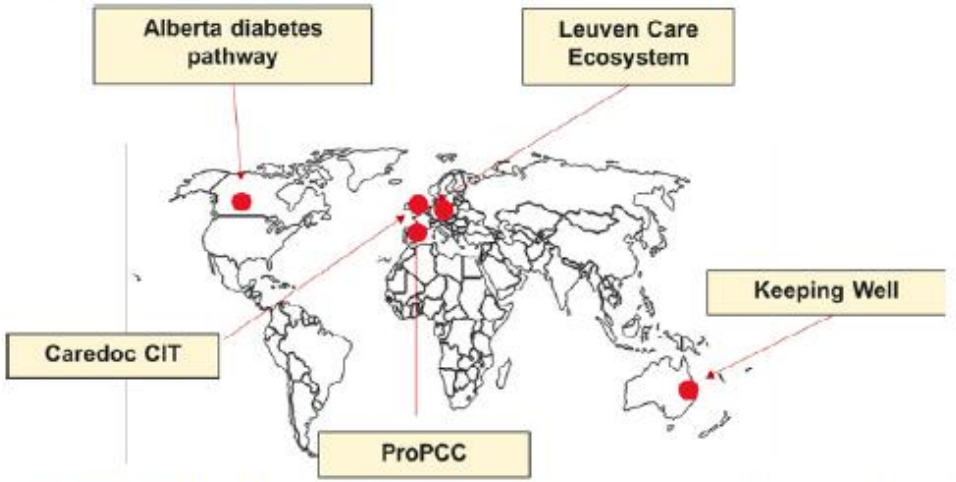
The ProPCC as a reference model of vertical integration in chronic care

INTEGRATED CARE SOLUTIONS 2025

Across the Great Divide

International case studies of integrated models of chronic disease care at the primary-secondary care interface

Figure 5. Selected care studies



- **ProPCC:** The North-Metropolitan Barcelona Community-based Integrated Care Programme to People with Complex Chronic Conditions (ProPCC) targets people with complex chronic conditions and high health and social care needs ("High needs, high costs" patients) to provide services at home and nursing homes. ProPCC teams are formed in both primary care and the hospital, interacting in multidisciplinary case conferences.

https://integratedcarefoundation.org/wp-content/uploads/2025/05/IFIC3771-ICS-THF-Intern-Case-Studies-v2.pdf

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Next steps: horizontal integration & people experience evaluation

Atenció integrada social i sanitària

24 July 2025

El Govern impulsa sis noves proves pilot de salut i serveis socials per atendre persones amb necessitats complexes al domicili

- Es desplegaran a l'Alt Empordà, l'Hospitalet, Mataró, Sant Andreu de la Barca, Sant Boi i Santa Coloma de Gramenet

Les conselleres de Drets Socials i Inclusió, Mònica Martínez Bravo, i de Salut, Olga Pané i Mena, han mantingut una trobada amb les referents del projecte de Santa Coloma i professionals de salut i serveis socials.

Evaluation methodology of the ProPCC implementation: future design

Prospective controlled study
ProPCC_EXP ad-hoc questionnaire (based on people inputs from 2018)

PROGRAMA PROPCC METRONORD INSTITUT CATALÀ DE LA SALUT
Ensuring patients and caregivers understand the information provided
Ensuring coordination between caregivers and professionals in managing health and social needs Ensuring social services when needed Providing support to caregivers in managing situations
Ensuring patients and caregivers feel supported throughout the process Enabling patients to be attended at home (if adequate care is available) Adopting a patient-centred approach

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Conclusions (ProPCC Catalonia)

- ✓ Development of an integrated care model tailored to people with high needs (health & social)
- ✓ Implementation of a multidisciplinary case management approach based on a shared clinical programme
- ✓ Implemented under the umbrella of macro-level Catalan Government Integrated Care strategy
- ✓ Strong clinical leadership at meso level (vertical + horizontal integration)
- ✓ Intense collaboration between Primary Care teams, community services and hospital teams (Geriatrics)
- ✓ Difficulties: lack of professionals, governance and complexity of relationships between providers
- ✓ Economic evaluation supported the implementation
- ✓ Person-centred evaluation (people experience) needed

Thanks!

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