World Health Organization

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Primary health care policy paper series

Primary health care transformation in Spain: current challenges and opportunities

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Abstract

In Spain, primary health care (PHC) has played an important role in achieving good health outcomes among the population. Since the turn of the 21st century, PHC has shown signs of fragility. In the aftermath of the coronavirus disease (COVID-19) pandemic, the PHC system in Spain is at a crossroads, also driven by changes in demography, population health-care needs and expectations and innovation. This case study has two overarching aims. First, to inform and support the dialogue among actors in Spain's health-care system about how to move forward and strengthen PHC; and second, to provide a snapshot of the PHC model of care in Spain to an international audience. To achieve these aims, this case study focuses on providing a comprehensive analysis of the current state of the PHC system, how it is performing and how the providers and decision-makers perceive the key challenges and opportunities. The case study concludes with a set of recommendations to enhance the development and sustainability of PHC in the broader health-care system in Spain.

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CORRIGENDUM

Primary health care transformation in Spain: current challenges and opportunities

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- "2021" replaced by "2022". Page 9.

- "€49" replaced by "€44". Page 9.

- Last paragraph in Box 4 on p. 16 that read:
  "As an addition to the action plan leading the implementation of the 2019 Strategic Framework for Primary and Community Care, the Ministry of Health has allocated specific funds to bolster PHC. This funding is sourced from three entities: the Directorate-General for Public Health, the Directorate-General for Portfolio and the Directorate-General for Digital Health. In 2022, the Directorate-General for Public Health distributed €172 million to the autonomous communities and cities, a commitment set to be repeated in 2023. An additional €406 million will be allocated towards improving PHC infrastructure and equipment."

  is replaced with the following paragraph:
  "As an addition to the action plan leading the implementation of the 2019 Strategic Framework for Primary and Community Care, the Ministry of Health has allocated more than €1000 million during 2022–2023 to bolster PHC. The majority of this funding was allocated to autonomous communities and cities, originating from three distinct entities: the Directorate-General for Public Health, the Directorate-General for Portfolio and the Directorate-General for Digital Health. In 2022, the Directorate-General for Public Health distributed €172 million to the autonomous communities and cities, a commitment set to be repeated in 2023. An additional €406 million will be allocated towards improving PHC infrastructure and equipment. Also in 2022, the Directorate-General for Portfolio transferred €44 million with the aim of expanding oral health services; a supplementary contribution of €68 million is projected for 2023. Furthermore, the Directorate-General for Digital Health allocated €70 million in 2022 to facilitate the digital transformation plan of PHC; this funding is set to increase by €160 million in 2023."

- First sentence, second paragraph, page 18, that read:
  "Based on population and demographic parameters, the central government transfers funds to the autonomous communities and cities, and each autonomous parliament or assembly decides where and how to allocate those funds (except for the Basque Country and Navarre)."

  is edited:
  "Based on population and demographic parameters, the General State Budget earmarks funds for transfer to the autonomous communities and cities, and each autonomous parliament or assembly decides where and how to allocate those funds (except for the Basque Country and Navarre)."

- The following sentence added to the second paragraph on page 18: "In addition, funds from the Recovery and Resilience Facility provided by the European Commission have been transferred to the autonomous communities and cities to implement the digital transformation plan of PHC (Box 7)."

- On p. 25 "€961 million" replaced by "€969 million".

- On p. 34 the title of Box 12 was deleted, and text previously included in the box is now included as a regular paragraph.

- On page 34 the last sentence of the second paragraph which read "However, over the past decade, the core dimensions of job stability, flexibility and salary that strengthen the PHC workforce have gradually deteriorated, contributing to aggravating retention and recruitment concerns, including the emigration of professionals trained in Spain (Box 12)." is now edited and read: "However, over the past decade, the core dimensions of job stability, flexibility and salary that strengthen the PHC workforce have gradually deteriorated, contributing to aggravating retention and recruitment concerns, including the emigration, although negligible in overall terms, of professionals trained in Spain."

- On page 34 the third paragraph that read: " PHC personnel must pass a competitive examination announced by the regional government of the autonomous community or city where they intend to work to obtain tenure (see Chapter 3). However, in many autonomous communities and cities, these examinations have not been announced or awarded swiftly enough, resulting in an increasing number of PHC personnel with temporary contracts. In addition, an increasing number of tenured positions created by regional health authorities are linked to health areas instead of patient lists, which implies that health-care professionals are expected to work across health centres depending on the service requirements."

  is replaced by
  "PHC personnel must pass a competitive examination announced by the regional government of the autonomous community or city where they intend to work to obtain tenure (see Chapter 3). However, in many autonomous communities and cities, these examinations have not been announced or awarded swiftly enough, resulting in an increasing number of PHC personnel with temporary contracts. In addition,

an increasing number of tenured positions created by regional health authorities are linked to health areas instead of patient lists, which implies that health-care professionals are expected to work across health centres depending on the service requirements."

- The following sentence is added to the first paragraph on page 35: "Royal Decree-Law 12/2022 aims to address this issue with a commitment to reducing temporary employment to below 8%."

- In table 2 on p. 39, the first recommended policy action "Promote the adoption of a national agreement on PHC with the representation of all key stakeholders in the NHS." is replaced with the following "Guarantee the implementation of the national agreements on PHC and extend the participation of all key stakeholders in the NHS."

- In table on p. 40 and 41 title and paragraphs of first recommended policy action that read: "Governance and funding
Promote the adoption of a national agreement on PHC with the representation of all key stakeholders in the NHS
The national agreement must be founded on the principles of trust, transparency and accountability. From its inception, the agreement must adopt a participatory approach by involving all key stakeholders in the decision-making processes. These stakeholders include, but are not limited to, the Ministry of Health of Spain, autonomous communities and cities, political parties, scientific societies, trade unions, research institutions, patient associations and citizens. The primary objective of the national agreement should be to reaffirm the value of PHC and establish a set of minimum criteria to ensure its sustainability and resilience as the backbone of the NHS. To achieve this goal, the national agreement must strive to secure a commitment to increasing public spending on PHC, establishing an earmarked budget at both the central and regional levels with an agreed-on annual growth rate. In addition, a communication strategy must be developed at both the national and regional levels to emphasize to the population the importance of PHC in maintaining good health among citizens."

are replaced with the following:
Guarantee the implementation of the national agreements on PHC and extend the participation of all key stakeholders in the NHS
The Strategic Framework for PHC approved by the Interterritorial Health Council on April 10, 2019, was developed by the health authorities (Ministry of Health and Health Regional Ministries), with the participation of different stakeholders (professionals, patients, citizens, unions and business organizations and the Spanish Federation of Municipalities and
Provinces). Conversely, the Primary and Community Healthcare Action Plan, which prioritizes the measures to be developed in the period 2022–2023, provides the Autonomous Communities with a budget and indicators for monitoring their execution. This Plan was also approved by the Ministry and Regional Health Governments within the Interterritorial Health Council. In addition, the Interterritorial Health Council Advisory Committee, a body comprised of representatives of trade unions, business organizations and the local administration (through the Spanish Federation of Municipalities and Provinces) is informed of the results of the interim evaluations of this plan.
It is necessary to promote these agreements and extend them to other potential stakeholders.
The national agreements must follow the principles of trust, transparency and accountability. In addition to having a participatory approach by involving all key stakeholders in the decision-making processes, it is essential that such agreements are accountable to all citizens, which can only be met by reaffirming the value of PHC and establishing a set of minimum criteria to ensure its sustainability and resilience as the backbone
Table 2. contd.
of the NHS. To achieve this goal, the national agreements must strive to secure a commitment to increasing public spending on PHC, establishing an earmarked budget at both the central and regional levels with an agreed-on annual growth rate. In addition, a communication strategy must be developed at both the national and regional levels to emphasize to the population the importance of PHC in maintaining good health among citizens."

These corrections were incorporated into the electronic file on 9 November, 2023.

Contents

Acknowledgements

Abbreviations

COVID-19	coronavirus disease
EU	European Union
GDP	gross domestic product
HbA1c	glycated haemoglobin
INSALUD	National Health Institute
NHS	National Health System
OECD	Organisation for Economic Co-operation and Development
PHC	primary health care

Country codes

AUT	Austria
BEL	Belgium
BUL	Bulgaria
CRO	Croatia
CYP	Cyprus
CZH	Czechia
DEN	Denmark
DEU	Germany
EST	Estonia
FIN	Finland
FRA	France
GRE	Greece
HUN	Hungary
IRE	Ireland
ITA	Italy
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
MAT	Malta
POL	Poland
POR	Portugal
ROM	Romania
SPA	Spain
SVK	Slovakia
SVN	Slovenia
SWE	Sweden
UNK	United Kingdom

Executive summary

Primary health care (PHC) is an essential component of any robust health-care system. In 2022, in the aftermath of the coronavirus disease (COVID-19) pandemic, several challenges to Spain's PHC system were exposed and exacerbated, leading to a complex and multifaceted dialogue among actors in the health-care system. This dialogue focuses on maintaining high performance levels in the PHC system while simultaneously enhancing efficiency and strengthening resilience. This case study aims to comprehensively analyse the current state of the PHC system in Spain by focusing on three objectives:

- to examine the development of PHC in Spain, evaluate its performance within the European context and inform an international audience about the pivotal events that contributed to achieve this performance;

- to identify key challenges faced by providers and decision-makers and opportunities for improvement inspired by selected good PHC practices in Spain; and

- to develop policy recommendations to enhance the development, sustainability and resilience of PHC in Spain.

This case study used a three-phase exploratory qualitative design. The first phase comprised desk research to obtain insight into the historical and policy contexts of Spain's PHC system. The second phase run in two stages. First, during 23–27 January 2023, key stakeholders were engaged through meetings, interviews and focus groups during a mission to Spain at Spain's Ministry of Health in Madrid. This mission included field visits to the Autonomous Communities of Aragon and Castile-La Mancha. Second, during February–May 2023, semistructured interviews with the remaining autonomous communities and cities occurred online. The third phase involved synthesizing results, selecting good practices and developing policy recommendations in collaboration with the WHO European Centre for Primary Health Care and the Ministry of Health of Spain.

Based on the in-depth analysis, a set of recommended policy actions was prepared to address the various challenges facing the PHC system in Spain. These recommended policy actions encompass governance and funding, human resources for health, services delivery and digital health. The future success of Spain's PHC system relies on robust governance at the national and regional levels underpinned by a national performance framework. Balancing regional autonomy in health policy decision-making with national quality standards, fostering integrated management and ensuring adequate financial support are crucial to realize the PHC system envisioned by decision-makers and the public. Giving priority to human resources for health and workforce capacity and elevating the prestige of PHC will ensure the delivery of high care quality by attracting and retaining top talent. Optimizing services delivery through PHC networks, improving accessibility and longitudinality and focusing on vulnerable populations and groups at risk will create a more equitable health-care system. Embracing PHC-oriented research, digital innovation and standardized and interoperable electronic health records will enhance services delivery and improve efficiency. Implementing these strategies will contribute to building a resilient, sustainable and effective PHC system, addressing the health needs of Spain's population and contributing to improved overall health status and outcomes.

1 Introduction

Context, purpose and objectives

Primary health care (PHC) models in the WHO European Region and other large parts of the world are facing challenges because of longstanding issues (such as limited funding and poor coordination) and incomplete transformation initiatives, coupled with new tensions (such as shortages and retention of health-care professionals) brought about by the coronavirus disease (COVID-19) pandemic *(1)*. This has placed significant pressure on countries with well-established PHC models such as in Spain, which was previously recognized as one of the best performing PHC systems in Europe *(2)*. In Spain, PHC has existed as a cornerstone of universal health coverage for over 40 years. However, since 2000, the PHC system has revealed signs and symptoms of fragility, mostly in relation to its governance and financing, human resources for health policy, services delivery models and opportunities for innovation. This case study aims to comprehensively analyse the current state of the PHC system in Spain and highlight the main challenges and opportunities to PHC systems across the autonomous communities and cities[1] of Spain, especially in the context of recovering from the shocks caused by the COVID-19 pandemic.

Before the COVID-19 pandemic, the situation of PHC in Spain was already a subject of public debate, owing to the country's ageing population, the increasing prevalence of chronic conditions and multimorbidity among the population, growing health and social inequalities, tensions related to the distribution and retention of the health workforce and the underfunding of PHC relative to hospital care *(3)*. The COVID-19 pandemic further exacerbated the situation and put on hold the implementation of the 2019 Strategic Framework for Primary and Community Care, which was developed in collaboration with professionals, scientific societies, trade unions and regional decision-makers to strengthen PHC (see Chapter 2). The Ministry of Health of Spain subsequently expressed a desire to strengthen PHC as a fundamental pillar of the health-care system. Working in collaboration with the autonomous communities and cities, the Ministry of Health developed the Action Plan for Primary and Community Care, which was approved by the Interterritorial Health Council in December 2021. This action plan envisions effectively implementing during 2022 and 2023 the priority actions outlined in the 2019 Strategic Framework for Primary and Community Care and thus contribute to strengthening the resilience of PHC and ensuring that it is accessible, comprehensive, of high quality and community-oriented.

This case study seeks to recommend policy actions for addressing the present challenges and support the positioning of PHC as the cornerstone of Spain's health-care system. The specific objectives of this case study are:

- to examine the development of PHC in Spain, evaluate its performance within the European context and inform an international audience about the pivotal events that contributed to achieve this performance;

- to identify key challenges faced by providers and decision-makers and opportunities for improvement inspired by selected good PHC practices in Spain; and

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1 The terms "autonomous communities and cities", "autonomous communities" and "regions" are used interchangeably to refer to the 17 autonomous communities and the two autonomous cities of Spain.

- to recommend policy actions to enhance the development, sustainability and resilience of PHC in Spain.

Methodological approach

To pursue the objectives of this case study, an exploratory qualitative design was used in three phases. In the first phase, desk research was conducted to support sufficient historical and policy embedding on the evolution of Spain's PHC system in terms of its organization and performance, notably by consulting information from national and regional health strategies and plans and scientific literature.

In the second phase, several meetings and interviews with key stakeholders occurred to ensure that multiple voices could be represented when analysing the current situation and future of PHC in Spain (Box 1). In a first stage, meetings with policy-makers from the national and regional levels, health system experts and other actors in the system occurred during a mission on 23–27 January 2023 to the Ministry of Health of Spain in Madrid to understand the current political and social contexts of PHC. During this mission, focus groups with actors in the system and field visits to two autonomous communities occurred. In a second stage, from February 2023 to May 2023, the policy dialogue continued by engaging with the remaining autonomous communities and cities (except the Basque Country) in online semistructured interviews.

The third phase focused on synthesizing findings, identifying good PHC practices across autonomous communities and cities and producing a set of recommended policy actions. This was done iteratively by the researchers from Amsterdam University Medical Centers, the WHO European Centre for Primary Health Care and the Health Workforce and Service Delivery Unit of the WHO Regional Office for Europe. Thereafter, iterative discussions followed with representatives from Spain's Ministry of Health to reach agreement on the findings and recommendations, and all autonomous communities and cities were engaged in providing feedback to a preliminary final version of the case study.

Box 1. A dialogic and participatory approach led the design of the case study on PHC in Spain from the outset

To ensure trust in and a sense of ownership of the findings reported in this case study about PHC in Spain, a participatory approach was pursued from the onset. This is noticeable across the various phases of the work done, notably the convening of focus groups during the mission to the Ministry of Health of Spain and field visits and interviews with autonomous communities and cities.

During the mission to the Ministry of Health in Madrid, the research team conducted focus groups comprising several stakeholders, notably:

Box 1. contd.

- Scientific societies and associations
  - Community Nursing Association [*Asociación de Enfermería Comunitaria*]
  - Federation of Family and Community Nursing Associations [*Federación de Asociaciones de Enfermería Familiar y Comunitaria*]
  - Spanish Association of Paediatric Nursing [*Asociación Española de Enfermería Pediátrica*]
  - Spanish Association of Primary Care Paediatricians [*Asociación Española de Pediatría de Atención Primaria*]
  - Spanish Scientific Society of Health Social Workers [*Sociedad Científica Española de Trabajo Social Sanitario*]
  - Spanish Society of Family and Community Medicine [*Sociedad Española de Medicina de Familia y Comunitaria*]
  - Spanish Society of General and Family Doctors [*Sociedad Española de Médicos Generales y de Familia*]
  - Spanish Society of Primary Care Physicians [*Sociedad Española de Médicos de Atención Primaria*]
- Trade unions
  - General Union of Workers [*Unión General de Trabajadores*]
  - Trade Union Confederation of Workers' Commissions [*Confederación Sindical de Comisiones Obreras*]
  - Union of Nurses [*Sindicato de Enfermería*]
- Patient organizations
  - Platform of Patient Organizations [*Plataforma de Organizaciones de Pacientes*]
  - Spanish Patients' Forum [*Foro Español de Pacientes*]

The aim of the focus groups was to understand the context and performance of PHC through the lenses of stakeholders and how they envision the future of PHC in Spain. A set of explorative questions (Annex 1) was prepared ahead of these meetings to ensure, to the extent possible, triangulation of their views on the topics explored. Also, during the mission to Spain in January 2023, field visits to Toledo (Castile-La Mancha) and Zaragoza and Huesca (Aragon) occurred. These visits included meetings with the regional ministry of health and with the regional health service at the department of health and contributed to identifying good PHC practices and innovative projects in the regions. Visits to PHC facilities in these regions were held focusing on retrieving first-hand experiences from PHC professionals within multidisciplinary PHC teams.

After the mission in Spain, and in accordance with the participatory design of the case study, a series of semistructured (online) interviews with representatives of the remaining autonomous communities and cities followed (except the Basque Country). Each meeting lasted, on average, one hour. It started with a presentation by the representative of the region about their PHC model of care followed by a round of questions by the participants from the research team. The guiding questions sough to gain an accurate overview of the organization of PHC in the region and the strengths of and pressing challenges to PHC and to map good practices and innovative approaches of care delivery at the PHC level.

Based on the field visits to and interviews with autonomous communities and cities and informed by their presentations in the International Conference on Primary and Community Care occurred during 28–29 November 2022 in Madrid, the research team proceeded with selecting good practices (Annex 2) that could serve as illustrations of approaches autonomous communities and cities can consider adapting to their context to address some of the challenges outlined in this case study.

2

Performance of primary health care in Spain

According to the Health Barometer 2022, some 57% of citizens aged 18 years and older are satisfied or very satisfied with the overall functioning of the health-care system, yet 42% signal a need for improvements *(4)*. In particular, the PHC system in Spain has consistently been recognized for its efficiency and effectiveness, with a strong focus on accessibility, prevention and longitudinality *(2)*. For example, overall satisfaction with PHC appointments is positive but decreased relative to previous years to 6.23 (on a scale of 1 = very unsatisfied to 10 = totally satisfied) *(4)*. Almost three quarters (74%) of the respondents to the Health Barometer had a PHC appointment in 2022; and 72% of people had at least one appointment via telephone *(4)*. Although PHC performance differs among autonomous communities and cities – partly driven by features of the regions (such as territorial dispersion and the demographic distribution of the population) – Chapter 2 aims to present a general overview of the performance of PHC in Spain and how it compares with other European Union (EU) countries. This chapter summarizes the performance of PHC with respect to its effectiveness, accessibility and resilience. Specific key performance indicators may not exclusively represent the influence of PHC but rather that of the entire health-care system, in which PHC is intended to serve as the foundation in Spain.

Effectiveness

Life expectancy at birth increasing above the EU average

As of 2021, the life expectancy at birth reached 83.1 years in Spain, showing an increase of 0.7 years compared with 2020 and exceeding the EU27 average of 80.1 years *(5)*. The highest life expectancy was recorded in the Autonomous Communities of Madrid (84.6 years), Navarre (84.3 years) and Castile and León (83.9 years) *(5)*. Overall, women have higher life expectancy at birth than men, with provisional figures for 2021 showing 85.8 years for women and 80.2 years for men *(5)*. In recent decades, life expectancy has increased among older people. For instance, in 2008, the life expectancy for people aged 70 years old was 16 years, which increased to 17.5 years in 2019 *(5)*. This trend was disrupted in 2020 in the context of the COVID-19 pandemic when life expectancy decreased across all age groups, with a more relevant decline among older people *(5)*.

Cardiovascular diseases, cancer and infectious diseases are the main causes of mortality

Among EU countries, Spain is among those with the lowest mortality rates resulting from preventable causes; the age-standardized mortality rate was 110 deaths per million population, which is well below the EU27 average of 176 deaths per million population (2019 data) *(6)*. Similarly, the rate of treatable cases resulting in death was 64 deaths per million population, which is also below the EU27 average of 104 deaths per million population *(6)*. In 2021, cardiovascular diseases retained their leading position as the primary cause of death in the country, accounting for 26.4% of all deaths, with a mortality rate of almost 252 deaths per 100 000 population *(7)*. Cancer followed closely behind, accounting for 25.2% of all deaths with a mortality rate of 240 deaths per 100 000 population *(7)*. Infectious diseases,

including COVID-19, were the third leading cause of death, comprising 10.2% of all deaths (97 deaths per 100 000 population) *(7)*. Nevertheless, in all cases, mortality rates remained below the EU27 average.

Low rates of admission for ambulatory care–sensitive conditions relative to the EU, but noticeable variation among regions

A robust PHC system can prevent the acute deterioration of individuals with long-term conditions, such as asthma, chronic obstructive pulmonary disease, heart failure and diabetes, leading to improved health outcomes and cost savings by avoiding unnecessary hospital admissions. The admission rates for asthma and chronic obstructive pulmonary disease in 2020 stood at 211 per million population, close to the EU27 average of 210 admissions per million population *(6)*. Although Spain has one of the lowest admission rates for diabetes in Europe, there has been a gradual increase in recent years *(6)*. Spain is one of the EU countries with the lowest age-standardized admission rates for heart failure, with only 157 admissions per million population, which is well below the EU20 average (277 admissions per million population) (2020 data) *(6)*. From 2017 to 2020, hospitalization admission rates for diabetes increased from 1.3 to 1.7 per 1000 admissions in Spain, varying from 1.1 admissions for diabetes per 1000 admissions in Andalusia to 2.6 per 1000 admissions in La Rioja *(8)*. In 2021, the share of people with diabetes and glycated haemoglobin (HbA$_{1c}$) below 7.5% in PHC was 73% in Spain, ranging from 68% in Castile-La Mancha to almost 77% in the Valencian Community *(8)*.

Levels of poor mental health were exacerbated during the pandemic, leading to high consumption of certain medicines

The COVID-19 pandemic intensified numerous risk factors associated with deteriorating mental health while simultaneously reducing some protective factors, resulting in an unparalleled decline in mental health among the population. In early 2020, 21.6% of adults reported symptoms of anxiety in Spain *(6)*. Recent data from the Eurofound survey indicate that the proportion of adults in Spain at risk of depression slightly decreased from 52% in spring 2020 to 49% in spring 2022, which is below the EU average (55%) *(6)*. Aggregated data show that benzodiazepine consumption among adults in Spain ranks among the highest in Europe. For example, the percentage of people aged 65 years and older who have been prescribed benzodiazepines increased from almost 10% in 2017 to 13% in 2021 *(8)*. In 2021, the prescription rates of benzodiazepines among people aged 65 years or older were lowest in the Basque Country (six per 100 population) and highest in Andalusia (18 per 100 population) *(8)*. Similarly, there has been an increase in the prescription of antidepressants in recent years, from almost 78 defined daily doses per 1000 population per year in 2017 to almost 93 in 2021 *(8)*. A strong community-based mental health strategy can support initiatives in decreasing unnecessary reliance on pharmaceutical interventions. To achieve this ambition, the 2021–2024 Mental Health and COVID-19 Action Plan, which complements the Mental Health Strategy adopted in 2006, was launched and will have a budget of €100 million to address the impact of the COVID-19 pandemic on mental health.

Addressing behavioural risk factors remains a challenge, especially among those with lower socioeconomic status

In 2020, 20% of Spain's population aged 15 years and older were smokers, above the EU27 average of 19% *(6)*. Smoking prevalence was higher among men (23%) than among women (16%). Among regions, smoking prevalence ranged from 15% in the Autonomous City of Melilla to 25% in the region of Extremadura *(8)*. Alcohol consumption is also a major concern, with 1.3% of the population aged 15 years and older reporting harmful consumption levels in 2020 according to national data. Men were more affected than women, at rates of 1.5% and 1%, respectively, with Navarre having the highest harmful alcohol consumption rate of 2.6% *(8)*. Nevertheless, alcohol consumption among the population aged 15 years and older was 7.8 litres – the fifth lowest among EU countries – and below the EU27 average (9.8 litres) *(6)*.

In 2020, one in six adults in Spain could be categorized as obese, which is on par with the EU27 average *(6)*. Men had a slightly higher prevalence rate than women, with 16% and 15%, respectively *(8)*. Melilla had the lowest prevalence of obesity (almost 7%), whereas Andalusia had the highest prevalence at 19.7% *(8)*. Spain accounts for the fourth highest prevalence of obesity among children aged between seven and nine years old (16%) in the WHO European Region; the prevalence is higher among boys (18%) than girls (14%) *(6,9)*. Individuals of lower socioeconomic status are disproportionately affected by behavioural risk factors, in accordance with international statistics and literature *(6)*.

Self-perceived health is lower among women, individuals with low educational attainment and socioeconomically deprived people

In 2021, most individuals aged 16 years and over (71%) reported their health as very good or good, exceeding the EU average (69%) *(10)*. Nevertheless, perceived health status varied across regions, with the Balearic Islands showing the highest proportion of people reporting very good health (23%) and Galicia showing the lowest (8%) *(6)*. Men self-reported better health than women (74% versus 69%). Only about 6% of those aged 65 years and older reported very good health *(6)*. People with higher versus lower incomes (23% versus 15%) and with higher versus lower education levels (23% versus 10%) self-reported very good health *(10)*.

Care experiences and satisfaction with PHC services have declined in recent years

Among the population, the acceptability of PHC services remains high but has decreased slightly in recent years, a trend visible in many other European countries *(6,11)*. In 2022, the quality and adequacy of the information received by family doctors was rated highest in Navarre (7.9 of 10) and lowest in Melilla (6.7 of 10), with a national average of 7.8 *(8)*. Four fifths of the population (80%) reported the care provided by their family doctor as very good or good versus 87% in 2019 *(8)*. This is the lowest share from the past decade. Satisfaction levels were highest in Ceuta (90%) and lowest in Galicia (75%) *(8)*. Also, the percentage of people feeling involved in shared decision-making in PHC decreased from 85% in 2019 to 76% in 2022 *(8)*.

Accessibility

Increasing number of PHC consultations, most notably nursing consultations

In recent years, the average frequency of medical and nursing consultations in PHC has shown a slight increase, which has been more marked for nursing consultations. This increase could be somewhat driven by the COVID-19 pandemic. In addition, the increase for nursing consultations could be partly explained by the evolution of task sharing at the PHC level. The average number of medical consultations per person per year was 5.6 in 2021 versus 5.1 in 2019, consistent with data from many EU countries, whose average number of medical consultations ranged between four and 7.3 *(6)*. Nevertheless, autonomous communities and cities differ markedly, partly explained by their specific context. For example, Castile-La Mancha accounts for the highest number of medical consultations (7.5 per person per year) (Fig. 1). The average number of nursing consultations per person per year in Spain was 4.1 in 2021 versus 2.9 in 2019 and 2020. The region with the highest nursing consultation rate was Castile-La Mancha (6.2 per person per year), while the Regions of Murcia, Ceuta and Aragon showed the lowest, with 2.2, 2.6 and 2.7 nursing consultations per person per year, respectively *(8)*.

Fig. 1. Average number of medical and nursing consultations in PHC in 2021
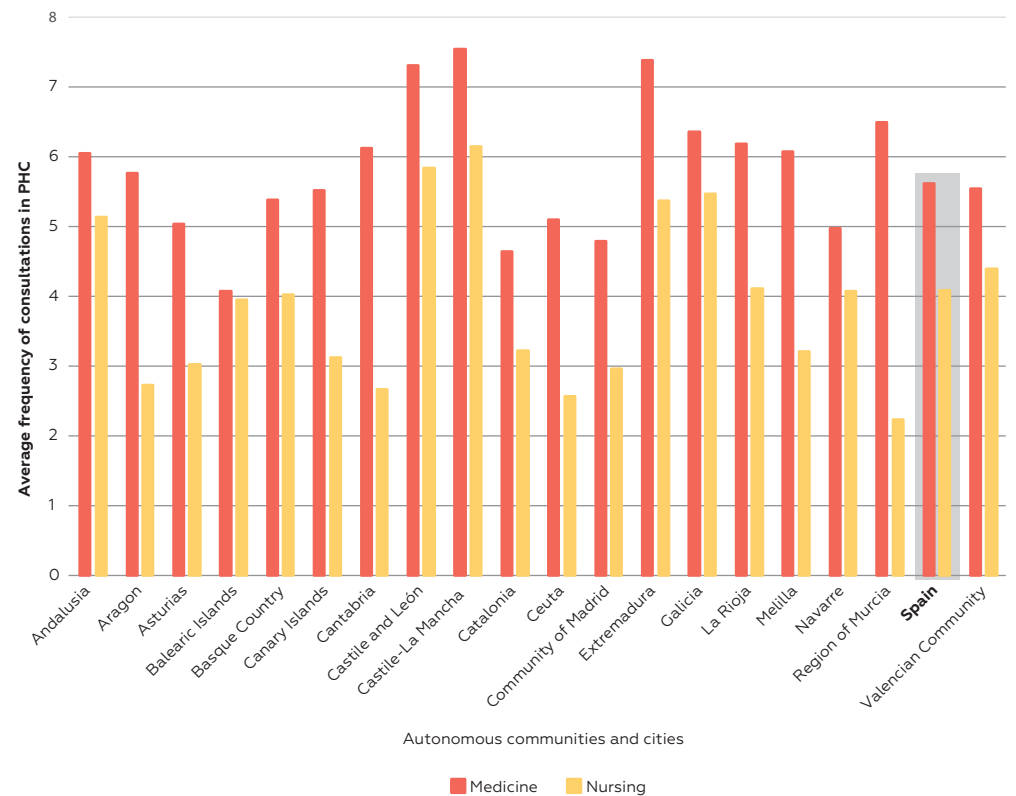
Source: Key indicators: national health system [online database] *(8)*.

Waiting times have markedly increased over the past five years

The average waiting time to see a physician in PHC in Spain has doubled in the last five years, reaching almost nine days on average in 2022 *(4)*. The percentage of people who accessed PHC 24–48 hours after requesting an

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appointment decreased from almost 48% in 2018 to 27% in 2022. This share was highest in Navarre (58%) and lowest in Ceuta (10%) *(4,8)*. This might contribute to explaining the increase in the number of emergency consultations in PHC out-of-hours settings from almost 530 consultations per 1000 people in 2020 to 636 consultations per 1000 people in 2021 *(8)*.

Spain has one of the lowest incidences of catastrophic health spending in Europe despite the long-lasting reliance on out-of-pocket payments

Spain's health system shows remarkable strength in providing financial protection, despite a relatively heavy reliance on out-of-pocket payments. In 2020, the average out-of-pocket per capita spending on health goods and services was €402, ranging from €294 in Melilla to €626 in Navarre *(8)*. This represented 3.7% of the total household spending, above the EU27 average of 3.3% *(6)*. Nevertheless, the incidence of catastrophic health spending in Spain is among the lowest in Europe (Fig. 2), which can be explained by a strong design of the National Health System (NHS) coverage policy *(12)*: 1) entitlement to the NHS is based on residence, and undocumented migrants are formally entitled to the same coverage as residents; 2) the NHS benefits package covers a wide range of health services, and there is very little regional variation in benefits; 3) co-payments apply only to outpatient prescribed medicines and ortho-prosthetic devices; 4) there are multiple protection mechanisms from co-payments, including exemptions for people on lower incomes and other disadvantaged groups (which have been expanded since 2020), reduced co-payments and a cap per prescription item for most outpatient prescribed medicines for chronic conditions, and an income-based cap on co-payments for outpatient prescribed medicines for most pensioners.

Fig. 2. Share of households with catastrophic health spending, latest available year, Spain and other European countries
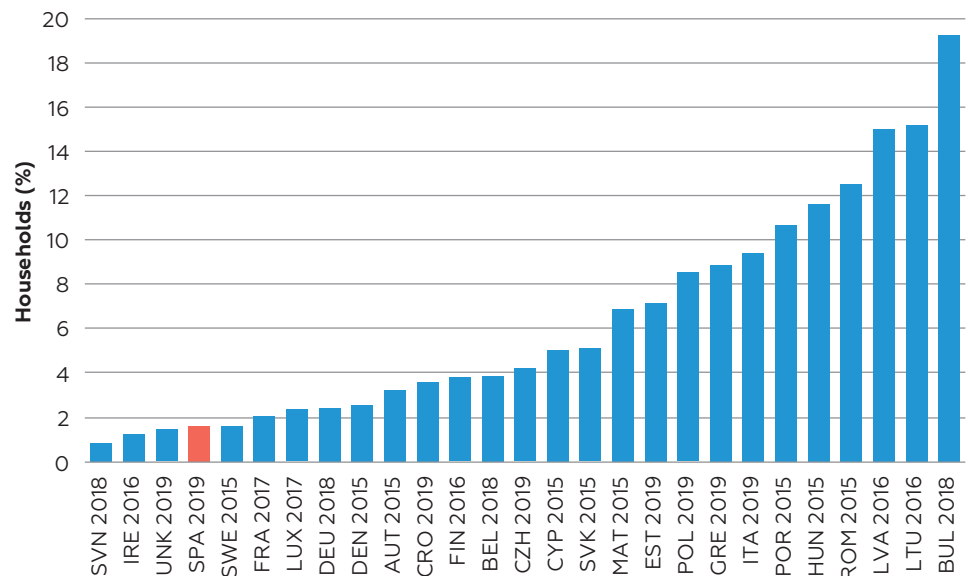
Source: Can people afford to pay for health care? Updated evidence on financial protection in Europe *(13)*.

Whereas unmet need for health care is very low in Spain and below the EU average, unmet need for dental care grew sharply during the 2008 economic crisis and shows substantial socioeconomic inequalities *(12)*. For example, some 9% of the population reported experiencing difficulties in accessing

dental care because of financial constraints, a figure that increases to 17% among people with lower socioeconomic status *(8)*. Similarly, 3% of people faced difficulties in obtaining prescription drugs due to financial constraints *(8)*. In Spain, financial hardship is driven, on average, by out-of-pocket payments for dental care and medical products. This phenomenon can be attributed to the limited coverage of dental and optical care (particularly for the treatment of eyesight problems) for adults, within the NHS. In the poorest quintile, catastrophic spending is also driven by spending on outpatient medicines *(12)*. In the scope of the Action Plan for Primary and Community Care, in 2022 the Government allocated €44 million to the autonomous communities and cities to expand dental care coverage, in addition to the robust coverage for oral health in PHC.

The role of voluntary health insurance in access to health care may be aggravating inequalities

About 21% of Spain's population has voluntary health insurance, which offers predominantly faster access to outpatient specialist care, inpatient care and diagnostic tests *(14)*. This share has been growing steadily over the last decade, which may be explained by the progressive increase in waiting times for specialist consultations and some types of surgery *(12)*. The share of the population with voluntary health insurance varies widely across regions, with Madrid, Catalonia and the Balearic Islands having the highest rates of voluntary health insurance coverage *(15)*. Unlike many other EU countries, Spain still has tax incentives to purchase voluntary health insurance. Voluntary health insurance may be playing a role in exacerbating inequalities in access to health care, since those who can afford to purchase a voluntary health insurance premium may enjoy reduced waiting times. Moreover, voluntary health insurance enables people to bypass PHC and access specialist care without a family doctor referral.

There is room for improvement in the care continuity and coordination between PHC and other levels of care

The proportion of people who perceive that coordination between levels of care is good or very good has decreased in recent years, from 57% in 2019 to 43% in 2022 *(8)*. On average, women showed poorer experiences of care coordination (38%) relative to men (48%). Across autonomous communities and cities, positive experiences of care coordination varied greatly, from 23% in Melilla to 63% in Navarre *(8)*. Like other European countries, continuity of care in Spain is organized through a patient list system, whereby people (and usually their household members) are ascribed to specific family doctors and nurses (Box 2). Access to individuals' electronic health record is typically available to all PHC providers involved in the care trajectory, promoting informational continuity of care. Although family doctors in most regions can exchange information with hospitals and social services, the degree of integration varies across autonomous communities and cities. Over half the regions reported requiring improvements to sharing information effectively with secondary care, with the situation being especially challenging in the Canary Islands and Valencian Community *(16)*. The integration of electronic records with social services has some variability, but the level of integration is generally agreed to be insufficient, especially in La Rioja and the Balearic Islands *(4)*.

Designed to meet the growing needs of people with a chronic condition, Spain's chronic care strategy outlines a new vision for Spain's health-care system.

At its heart, it focuses on reshaping hospital resources to cater to the specific needs of people with a chronic condition and bolstering PHC to facilitate more effective care. The strategy underscores the importance of seamless care pathways, enabled through enhanced longitudinality, including social care. Finally, it fosters a health-empowered society by encouraging patients and caregivers to actively participate in producing good health *(17)*.

Resilience

The COVID-19 pandemic led to changes in PHC functioning to address changes in demand and population needs

During the initial phases of the pandemic in 2020, PHC centres experienced a noteworthy shift in their operations when they managed about 90% of all COVID-19 cases *(18)*. From the onset of the pandemic until 30 September 2021, PHC centres performed or prepared 24 million COVID-19 diagnostic tests (representing 40% of all tests conducted in Spain), cared for 2.3 million individuals diagnosed with COVID-19 and conducted 5.3 million follow-up contacts. Exceptionally, prophylactic isolation or COVID-19 infection periods for workers were considered equivalent to workplace accidents. Consequently, PHC family doctors faced a noticeable workload, managing 4 million COVID-19-related temporary incapacity processes in 2020 and an additional 2.8 million in 2021 *(19)*.

During the pandemic, multidisciplinary PHC teams carried out an agile response to emerging needs through swift reconfiguration based on task-sharing, role expansion and including new team members. This reconfiguration involved augmenting the role of administrative personnel in demand management, triage and bureaucratic procedures. There was also expansion of nurses' roles and autonomy, especially concerning COVID-19 surveillance, contact tracing, follow-up of people with chronic conditions, coordination with nursing homes and oversight of COVID-19 vaccination services. PHC teams also incorporated new personnel, including COVID-19 case managers and an increased number of social workers. Lastly, the PHC response was optimized by leveraging digital solutions to facilitate multiplatform services delivery, thus enhancing access to care *(20)*. Teleconsultation services expanded, resulting in a reduction of face-to-face consultations and, in some instances, modifications to centre opening hours and referrals to designated health centres *(21,22)*. In urban areas, PHC

professionals were temporarily reassigned to alternative health-care facilities such as field hospitals or medicalized hotels in tandem with greater reliance on nursing consultations in PHC. In rural areas, some local clinics experienced temporary closures, centralizing care to main health centres. Throughout the pandemic, PHC emergency centres maintained their usual activity in most autonomous communities and cities, although some experienced temporary closures. PHC was key during the COVID-19 pandemic to reinforce home care and to facilitate early detection through testing and contact tracing and in monitoring people with COVID-19 and implementing the vaccination strategy. The competence of PHC in adapting to changes in demand shows its resolutive capacity, which remained prominent throughout the various waves of the pandemic. This will continue to be nurtured via the Recovery and Resilience Plan (Box 7), which envisages full implementation of the 2019 Strategy on Primary and Community Care.

Throughout the pandemic, PHC maintained a high level of activity, providing 379 million consultations in 2020, 3% more than in 2019 *(19)*. The overall frequency of visits per person per year increased in 2020 for family doctor consultations (5.4 visits) and remained stable for nursing consultations (2.9 visits) while decreasing slightly in paediatrics (4.4 visits) *(19)*. Teleconsultations increased by 600% to 127 million, and home visits rose by 4% to 13.5 million. In addition, there was a substantial increase in influenza (48%) and pneumococcal (21%) vaccination activities *(19)*. In 2021, 26% of people who scheduled appointments with their family doctor were seen on the same or the next day, and the rest experienced an average wait time of 10.8 days *(19)*. Comparatively, in 2019, 42% of people received same-day or next-day appointments, and the average wait time was 5.9 days *(19)*.

3

Primary health care in Spain

A brief overview of Spain's National Health System

Spain is an EU country located in southwestern Europe, whose capital is Madrid. As of 1 January 2022, the population of Spain was 47.4 million, the ageing index was 133%[2] and the age dependency ratio was 54%[3] (56% in the EU as a whole) *(23)*. Spain has one of the largest economies in the world; in 2020, the gross domestic product (GDP) per capita was €25 611, which was below the EU average (€29 801)[4] *(24,25)*. Politically, Spain is a democracy with a parliamentary government operating under a constitutional monarchy. The country is organized into 17 autonomous communities and two autonomous cities, each of which hold extensive legislative and executive autonomy via their parliaments and governments.

Currently, Spain's health-care system encompasses three statutory subsystems. First, the NHS offers health-care services to all residents, regardless of their social or economic status. Second, there are mutual funds for civil servants: the Mutual Fund for State Civil Servants [*Mutualidad General de Funcionarios Civiles del Estado*], the Social Institute for the Armed Forces [*Instituto Social de las Fuerzas Armadas*] and the General Justice Mutual Fund [*Mutualidad General Judicial*]. Employees in these sectors can join a private insurance system financed by public funds, which grants them direct access to secondary care specialists. Lastly, collaborating mutualities with Social Security for accidents and occupational diseases offer coverage for work-related injuries and illnesses and ensure that workers receive the necessary care and compensation in the event of a workplace accident or illness *(24,25)*.

The Constitution of 1978 laid the foundation for establishing and developing Spain's NHS (Table 1). This pivotal document enshrined the right to health protection and access to health-care services as fundamental rights for all Spanish citizens. Since then, Spain's health system has evolved gradually towards providing universal coverage and comprehensive care to Spain's population. One of the key milestones in the development of the NHS was the 1986 General Health Act, which further defined the structure and organization of the NHS (Box 3). The NHS has been built on the principles of decentralization and national coordination, a process that occurred during the 1980s and 1990s. The process of decentralizing health care to all regions was completed in 2002. It was intended to enhance the capacity of regional governments to manage and plan their health-care services according to their context, the specific care needs of the population and the availability of resources *(24,25)*.

In Spain's quasi-federal health model, the autonomous communities and cities hold notable competencies, far beyond mere decentralization. This model grants the autonomous communities comprehensive authority over health planning, financing, procurement and provision of care, except for Ceuta and Melilla. This devolved responsibility is integral to the PHC model, since it affords the autonomous communities and cities considerable latitude in innovation and priority-setting.

2 For every 100 people younger than 16 years, Spain has 133 people older than 64 years.
3 For every 100 potentially active people (16–64 years old), Spain has 54 potentially inactive people younger than 16 years or older than 64 years.
4 Gross domestic product per capita is adjusted for differences in purchasing power, which accounts for a currency conversion that equalizes the purchasing power of different currencies by eliminating the differences in price levels between countries.

Table 1. Key dates in the evolution of Spain's national health system.

Year	Policy milestone
1978	• Spain ratifies the WHO Declaration of Alma-Ata, initiating changes in PHC based on the declaration's guiding principles *(26)* • Establishment of the family and community medicine speciality
1981	• Devolution process in the health sector begins with Catalonia
1984	• Andalusia's health services are transferred and reorganized around PHC
1986	• The General Health Act defines the main pillars of PHC
1987	• Basque Country sees its health services transferred
1997	• Law 15/1997 introduces new forms of management in the NHS, including public–private partnerships *(27)*
2001	• The National Health Institute (INSALUD) manages health-care services in 10 autonomous communities and cities; the central government devolves responsibility for health-care networks
2002	• Transfer of the main social security health-care network to autonomous communities and cities is completed
2003	• Law 16/2003 reinforced better institutional integration, coordination, and cohesion of the NHS • Law 44/2003 regulates the different types, roles, training and careers of health professionals in the public and private sectors as well as continuous professional development • The Framework Statute for Health Care Workers [*Estatuto Marco*] is approved by Law 55/2003 *(28)*
2010	• Order SAS/1729/2010 of 17 June approved the training programme of the specialty of family and community nursing *(29)*
2012	• Royal Decree-Law 12/2012 changed entitlement from residence to "being insured" based on social security status, which excluded certain population groups from the right to health care, including undocumented migrants *(30)*
2018	• Royal Decree-Law 7/2018 re-established residence as the basis for entitlement to services provided by the NHS and strengthens the universal access to the NHS
2019	• The Ministry of Health approves the Strategic Framework for Primary and Community Care, aimed at strengthening PHC provision nationwide *(31)*
2021	• The Ministry of Health approves the Action Plan for Primary and Community Care to effectively implement the priorities identified by the 2019 Strategic Framework for Primary and Community Care *(32)*
2022	• Royal Decree-Law 12/2022 modifies the 2003 Framework Statue for Health Care Workers to regulate temporary employment

At the national level, the Interterritorial Council of the NHS aims to ensure the coordination, cooperation, communication and information on health services. While the Ministry of Health is responsible for producing national laws and plans – and thus plays a key role in setting a common ground for equitable PHC delivery nationwide – in each region, the respective department of health is responsible for the local implementation of these plans, regional regulation and policies and delivering health services *(24,25,33)*. The departments of health are supported by specialized agencies, including health technology assessment agencies in some regions.

Historical, political and cultural contexts

The development of PHC in Spain is an ongoing process that spans more than five decades, which started with Spain being among the first countries to ratify the Declaration of Alma-Ata in 1978. This was followed by the establishment of the medical speciality of family and community medicine, which provided further impetus for profound changes in PHC. These initial achievements were pivotal in leading Spain's health-care system to evolve from a charity-based system inspired in models traditionally categorized as Bismarck to an NHS comprising several regional subsystems under the autonomous communities and cities of Spain's quasi-federal state funded by general taxation. This was followed by a progressive devolution of health competencies to autonomous communities and cities starting in the 1980s, which enabled them to approve legislation to reorganize their health systems around PHC and aligned to specific contextual factors. Other pivotal moments contributed to how Spain's health-care system is now designed, the guiding principles and values and the evolution of its performance (Box 3). For example, in 1984 after several autonomous communities and cities had their health services transferred, they were able to develop new legislation to reorganize health services around PHC in their region. The devolution process in the health sector occurred in different stages, starting with Catalonia in 1981 and followed by Andalusia in 1984 and the Basque Country in 1987. In addition to the autonomous communities and cities mentioned, until 2001 the central government had only devolved responsibility for the health-care network to the Canary Islands, Galicia, Navarre and Valencian Community, which together cover about two thirds of Spain's population *(34)*. A central institution, INSALUD, effectively managed most health-care services in the other 10 autonomous communities and cities. The transfer of the main social security health-care network took considerable time and was only completed in 2002.

In 2019, the Ministry of Health approved a Strategic Framework for Primary and Community Care to tackle pressing challenges and strengthen

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Box 3. Pivotal moments in the history of Spain's PHC system

Establishment of the specialities of family and community medicine and nursing
In 1979, the establishment of the family and community medicine specialty marked the beginning of a comprehensive PHC reform, emphasizing the important role of family doctors within their communities. In 2010, recognizing the pivotal role of nurses in family and community health, the family and community nursing specialty was established.

Box 3. contd.

Decentralization of health competencies to the autonomous communities and cities
The transfer of health services to autonomous communities and cities led to diverse PHC models across Spain anchored in the principles of the General Health Act, where the essential pillars of PHC were laid out. The decentralization allowed the autonomous communities and cities to approve legislation to reorganize the region's health system around PHC in a context-specific manner.

Approval of the General Health Act
In 1986, two years after the process of health-care decentralization to autonomous communities and cities began, this legislative cornerstone defined nationally the pillars of PHC, including universality, free access, multidisciplinary team-based delivery organized in health centres and a referral system *(35)*. It also defined broadly the scope of PHC, including disease prevention and health promotion, acute and chronic care, home care and community health.

Embedding citizen participation in health policy
Since 1986, mandated by the General Health Act, health councils were established in the autonomous communities and cities to nurture democratic governance and ensure the health system's responsiveness to citizens' needs, preferences and expectations.

Placing the health-care system at the forefront of the political agenda
Following the completion of the decentralization process in 2002, there was widespread agreement that measures were needed to ensure the cohesion and coordination of the NHS. This led to a dialogue across national and regional actors in the NHS, and in 2003, the Law on Cohesion and Quality of the NHS was enacted. Nevertheless, the law was not successful in guaranteeing health cohesion across autonomous communities and cities. Consequently, in the following years, health care has become a prominent issue on the political agenda, enabling unique initiatives and strategies within autonomous communities and cities to address modern challenges and adapt available innovations to their context.

Bolster the use of telemedicine as a means of delivering health care
In 2000, the INSALUD Telemedicine Plan *(36)* described the actions being carried out by this institution to implement telemedicine across the NHS, including tools that facilitate collaborative work among health-care professionals. Recently, the 2021 digital health strategy continues to further develop digital health services for people, organizations and processes in the NHS, strengthen the interoperability of health information and spur the use of big data and data analytics to achieve better health outcomes among the population.

Introduction of regulation on minimum data set for clinical reports
In 2010, legislation was approved on the minimum data set for clinical reports in the NHS *(37)*. The autonomous communities and cities may establish their respective clinical document models, incorporating other variables as they deem appropriate, but these models must include all the variables that make up the minimum data set.

Strategic Framework and Action Plan for Primary and Community Care
In 2019, the Ministry of Health spearheaded the approval of two pivotal documents, the Strategic Framework for Primary and Community Care and the Action Plan for Primary and Community Care, following extensive involvement from regional and stakeholder groups. These documents serve as a guide for fortifying PHC, enabling it to address long-lasting issues more effectively as well as those that arose during or were exacerbated by the pandemic.

nationwide delivery of PHC (Box 4). The framework was developed through a participatory process involving autonomous communities and cities, scientific societies, professional associations, patient associations and citizens. The COVID-19 pandemic delayed its execution, which was resumed in 2021–2022 following the approval of an Action Plan for Primary and Community Care (32). The Plan established targets and timelines for the effective implementation of the priorities identified in the 2019 Strategic Framework for Primary and Community Care.

Box 4. An ambitious strategic plan was outlined to reposition PHC as the backbone of the NHS

The 2019 Strategic Framework for Primary and Community Care is committed to quality, including not only scientific and technical components but also those related to accessibility, resources, organization and participation in such a way that citizens perceive to be at the centre of the system (31). The Plan is divided into six strategic lines:

- reinforce the commitment of the Interterritorial Board of the NHS to the leadership of PHC;
- consolidate a budgetary and human resources policy that guarantees the effectiveness and quality of PHC;
- improve the quality of care and coordination with other areas of care, services and institutions;
- strengthen community orientation, health promotion and disease prevention in PHC;
- promote the use of information and communication technologies; and
- promote training and research in PHC.

This strategy highlights two core principles that form the backbone of Spain's NHS:

- PHC provides comprehensive and continuous care to individuals, families and communities, ensuring that the entire population, regardless of socioeconomic status, can access effective health care; and
- PHC emphasizes accessible health care with the capacity to resolve health issues while also promoting health promotion, disease prevention, rehabilitation and resilient health-care activities.

As an addition to the action plan leading the implementation of the 2019 Strategic Framework for Primary and Community Care, the Ministry of Health has allocated more than €1000 million during 2022–2023 to bolster PHC. The majority of this funding was allocated to autonomous communities and cities, originating from three distinct entities: the Directorate-General for Public Health, the Directorate-General for Portfolio and the Directorate-General for Digital Health. In 2022, the Directorate-General for Public Health distributed €172 million to the autonomous communities and cities, a commitment set to be repeated in 2023. An additional €406 million will be allocated towards improving PHC infrastructure and equipment. Also in 2022, the Directorate-General for Portfolio transferred €44 million with the aim of expanding oral health services; a supplementary contribution of €68 million is projected for 2023. Furthermore, the Directorate-General for Digital Health allocated €70 million in 2022 to facilitate the digital transformation plan of PHC; this funding is set to increase by €160 million in 2023.

Governance and funding

PHC governance in Spain is a complex multi-level function that involves various stakeholders and authorities (Box 5). While national planning and regulation remain the responsibility of the Ministry of Health of Spain,

health competencies and primary jurisdiction over operational planning at the regional level, resource allocation, purchasing and provision are devolved to the regional health authorities *(24,25,38,39)*. The multi-level PHC governance structure allows autonomy and customization at the regional level in tandem with overall coordination through the Ministry of Health and the Interterritorial Council of the NHS. This approach provides a unique opportunity to foster principles and values of learning health systems since it encourages autonomous communities and cities to experiment with different strategies and share their experiences, ultimately leading to improving PHC performance across Spain.

Box 5. PHC governance involves national and regional authorities as well as individual health centres

Ministry of Health: The governance of PHC in the Ministry of Health of Spain is led by the Secretary of State for Health, upon which the Directorates General with competencies in areas related to PHC depend. Within these, the Directorate-General for Public Health through the Sub-Directorate-General for Quality of Care assumes the technical coordination of the Office of the Strategic Framework, which includes technical representation of the following directorates and subdirectorates: Sub-Directorate-General for Health Promotion and Disease Prevention, Directorate-General for Health Workforce, Directorate-General for the Benefit Package, Directorate-General for Digital Health and Sub-Directorate-General for Health Information. The digitization of PHC is promoted and monitored through the Secretary of Digital Health.

Interterritorial Council: This Council is composed of the national Minister of Health and the regional health ministers. Its main responsibility is to coordinate and facilitate high-level cooperation among the regional health systems. This includes sharing good practices and promoting cohesion across the various regional health-care systems in Spain *(25,40)*.

Regional authorities: The regional health authorities have primary jurisdiction over operational planning, resource allocation, purchasing and provision at the regional level. The regional authorities are responsible for budgeting, health workforce contracting, managing regional health services and ensuring the provision of quality care within their territories. In some autonomous communities and cities, the governance of PHC and secondary care may be integrated in a single unit, while in others, they may be separate *(25,40)*.

Health areas and zones: Health service provision within autonomous communities and cities is structured around health areas and zones, representing subregional governance frameworks. Each health area consists of multiple health zones, which serve as reference points for planning and organizing individual PHC teams. To ensure an equitable distribution of resources across the regions, the territorial alignment (health map) is designed in accordance with the size, composition and specific characteristics of each area's population, as mandated by Law 14/1986.

Health centres: Health centres are commonly led by a clinical director responsible for overseeing the day-to-day operations of these facilities. Although the clinical director is often a family doctor, nurses can also take this role in many regions. The selection process for clinical director varies by region but generally involves a competitive application process. The scope of competence for health centre director is relatively limited and must comply with the guidelines and regulations set forth by the regional health authorities and the Ministry of Health of Spain *(25)*.

During the COVID-19 pandemic, the response was coordinated through a concerted effort between the central government and the autonomous communities and cities. To address the crisis, a state of alarm was declared on 14 March 2020 via a Royal Decree, which strengthened the coordination between the Ministry of Health of Spain and autonomous communities and cities *(24)*. This measure aimed to ensure consistency and equity in the provision of health-care services throughout the country and placed all publicly funded health authorities under the direct orders of the Ministry of Health. In addition, a new national-level Secretary of State for Health was created to streamline the communication of national health strategies and enhance coordination among regional health administrations and international organizations. The Interterritorial Council of the NHS also played a key role in facilitating discussions and decision-making related to the COVID-19 response. After the state of alarm expired, the decision-making capacity for the COVID-19 response was transferred back to the autonomous communities and cities, although the Ministry of Health and the Interterritorial Council remained involved in decision-making processes *(24)*.

Based on population and demographic parameters, the General State Budget earmarks funds for transfer to the autonomous communities and cities, and each autonomous parliament or assembly decides where and how to allocate those funds (except for the Basque Country and Navarre). In addition, funds from the Recovery and Resilience Facility provided by the European Commission have been transferred to the autonomous communities and cities to implement the digital transformation plan of PHC (Box 7). Across regions, the health budget is typically directed to the regional health service provider – a major public provider responsible for delivering primary and specialized health care (which can maintain independence from the regional department of health in some regions such as in Catalonia). In some autonomous communities and cities, health authorities may also enter into partnerships with either for-profit or not-for-profit private entities through outsourcing, such as professional societies, cooperatives or private companies *(16,41)*. Nevertheless, the involvement of private for-profit providers in PHC is negligible.

Between 2011 and 2019, the total public health-care expenditure as a share of GDP was somewhat stable, varying from 6.9% in 2011 to 6.6% in 2019. In 2020, during the COVID-19 pandemic, public investment in health care increased to almost 8% of the GDP, although remaining below the EU27 average (almost 10%) *(42)*. This represented a health expenditure per capita of €2588 (adjusted for purchasing power), 30% below the EU27 average (€3159) (Fig. 3) *(6)*.

PHC expenditure amounted to almost €11 500 million in 2021, comprising slightly more 14% of the total health expenditure, which represented an increase of 7.4% relative to the previous year *(6)*. In 2020, the spending on PHC services as a share of current health expenditure was similar to the EU22 average (13%) *(6)*. Expenditure on PHC services as share of total health expenditure varied significantly across autonomous communities and cities, being lowest in Madrid (10.7%) and highest in Andalusia (17.7%) (Fig. 4) *(43)*. The total expenditure on private health care outsourcing arrangements has remained stable over the past decade, representing 8% of the total expenditure in 2020. The percentage of private spending varied substantially across autonomous communities and cities, being lowest in Castile and León (3%) and highest in Catalonia (24%) *(8)*.

Fig. 3. Health expenditure per capita, 2020 (or nearest year), Spain and EU countries
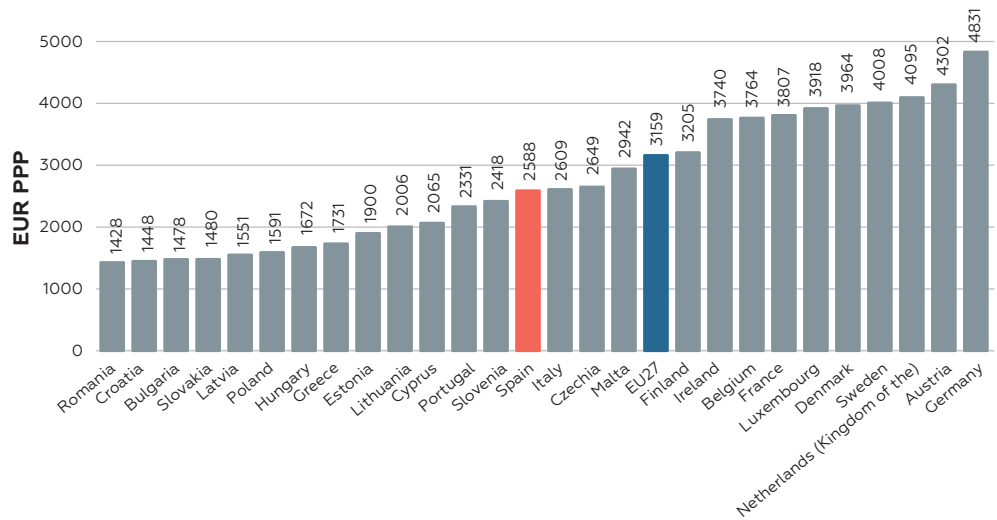
Note: The EU average is weighted. PPP: purchasing power parity.
Sources: Eurostat database and WHO Global Health Expenditure Database.

Fig. 4. Expenditure on PHC as a share of total health expenditure, Spain (average) and autonomous communities and cities

Autonomous communities and cities
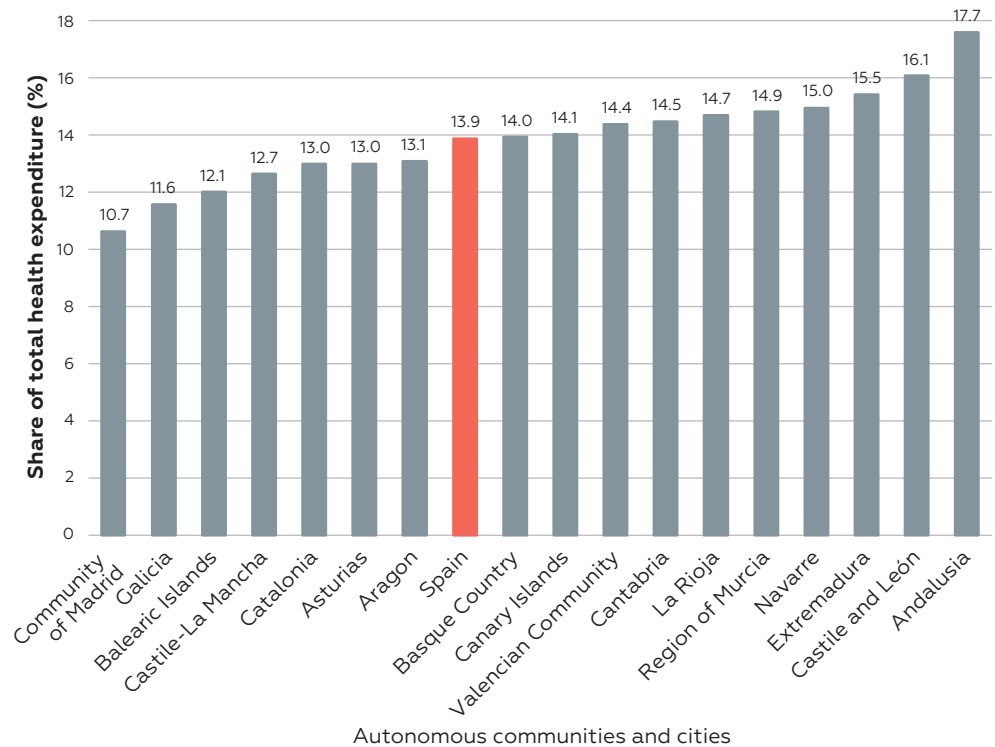
Source: Key indicators: national health system [online database] *(8).*

Services delivery

The NHS basket of services is one of the broadest in the EU (including preventive, curative and palliative care and rehabilitation) and is free of user charges, except for outpatient prescription medicines and ortho-prosthetic devices, which may involve an income-based co-payment *(44).* The most

important gaps in coverage are dental care (mostly caries prevention, preventive services for pregnant women and children, extractions and treatment of infections or inflammatory processes are covered) and medical products (optical care for eyesight problems and hearing aids are excluded from co-payments). This can lead to both unmet needs and financial hardship *(12,45)*. To minimize this, the Directorate-General for Portfolio seeks to expand coverage for dental care services. Nevertheless, some autonomous communities and cities have already started to broaden the basket of oral health services in the NHS beyond those included in the basic package. For example, in some regions, the Plan for Dental Care in Childhood covers some endodontic and orthodontic treatments as well as emergency care for children up to 15 years old. In addition, since 2015, the NHS covers dental implants for people with a history of cancer or congenital malformations. All other dental services must be paid for fully out-of-pocket or through voluntary health insurance.

The overall provision of health services in autonomous communities and cities is organized in health areas and health zones. Each health area includes several health zones. To ensure an equitable distribution of resources, this territorial framework (known as the health map) is designed according to the population size, composition and characteristics of each area. Each health area has a sphere of influence between 200 000 and 250 000 people, and each basic health zone covers a population between 5000 and 25 000 people. For each health area, there must be at least one general hospital. The basic health zone serves as a reference for planning and organizing the work of each PHC team. In accordance with international efforts towards building health systems that are more people-centred, Spain is also increasing attention to community-based approaches in PHC, notably related to health promotion (where a national guideline has been recently formalized *(46)*) and adopting innovative initiatives by several autonomous communities and cities (see Chapter 4).

PHC services are provided at health centres [*centros de salud*] and local clinics [*consultorios locales*], and secondary care is provided at specialized centres and hospitals. People are free to visit the PHC centre in which they have registered (on most occasions, within the basic health zone where they live) but require a referral to access secondary care, except for emergencies. In 2020, the NHS comprised a network of 468 hospitals, of which 321 were for acute care and 147 were for long-stay care. These hospitals dealt with 83 million outpatient consultations, 24 million emergencies and 4 million admissions. PHC had a network of 3055 health centres, 2036 out-of-hours centres [*puntos de atención continuada*] to cover non-life-threatening emergencies outside health centre opening hours and 10 067 rural clinics [*consultorios*], where a cumulative total of 365 million ordinary consultations, 31 million out-of-hours consultations and 13 million home visits were recorded. The number of health centres and rural clinics per 100 000 inhabitants varied substantially across autonomous communities and cities, which is mostly explained by specific territorial characteristics. The number of centres and rural clinics was highest in Castile and León (161) and lowest in Ceuta and Melilla (4) (Fig. 5) *(47)*.

Fig. 5. Availability of PHC health centres and rural clinics in autonomous communities and cities in 2020
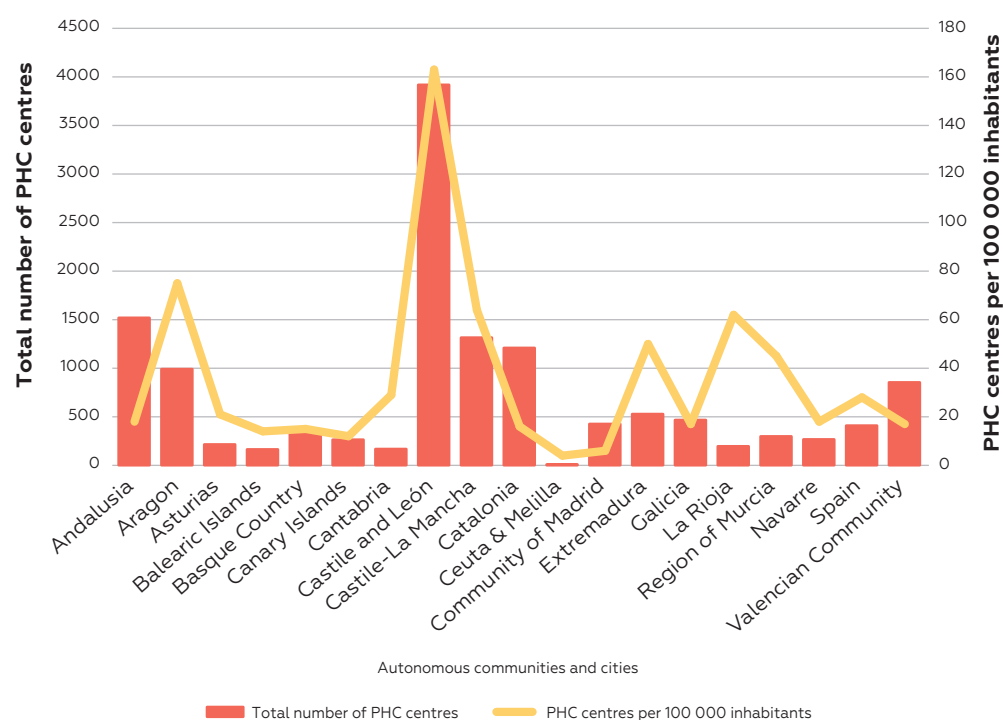
Source: Key indicators: national health system [online database] *(8)*.

Human resources for health

PHC teams in Spain are multidisciplinary, comprising various professionals working together to deliver comprehensive care. These teams may include family doctors, paediatricians, nurses, midwives, health-care assistants, social workers, administrative personnel, physiotherapists, dentists and others. Social workers can be either based within PHC settings or operate externally. In recent years, some autonomous communities and cities are progressively including other professional categories as part of PHC teams, such as psychologists (such as Canary Islands) or pharmacists and nutritionists (such as Catalonia). Overall, Spain exhibits distinct patterns in its health-care workforce density: 32.4 physicians, 43.2 nurses, 1.4 midwives, 5.9 dentists, 9.3 pharmacists and 7.6 physiotherapists per 10 000 population *(48)*.

In 2020, the NHS had a workforce of 158 129 physicians and 196 944 nurses, of which 42 774 (27%) family doctors and 38 016 (19%) nurses were employed in PHC. Almost 85% (36 239) of physicians working in PHC were part of a PHC team, whereas the rest (6500 physicians) worked in out-of-hours care or home support teams or as paediatricians. Most of the physicians in PHC teams were family doctors (82%) and the rest were paediatricians (6502). Together, they accounted for a rate of 0.8 physicians per 1000 population, of which 60% were women. Since 2010, the number of physicians (including family doctors and paediatricians) in PHC has grown by 3%, although the rate has remained stable at 0.8 per 1000 population *(49)*. The rates vary somewhat across autonomous communities and cities, being lowest in Ceuta, Melilla and Balearic Islands (0.6) and highest in Castile and León (1.1)

(Fig. 6). During the same period, the number of physicians in private and public hospitals increased by 30% and 15%, respectively.

Fig. 6. Distribution of physicians across the autonomous communities and cities

Family doctors and paediatricians   Per 1000 inhabitants
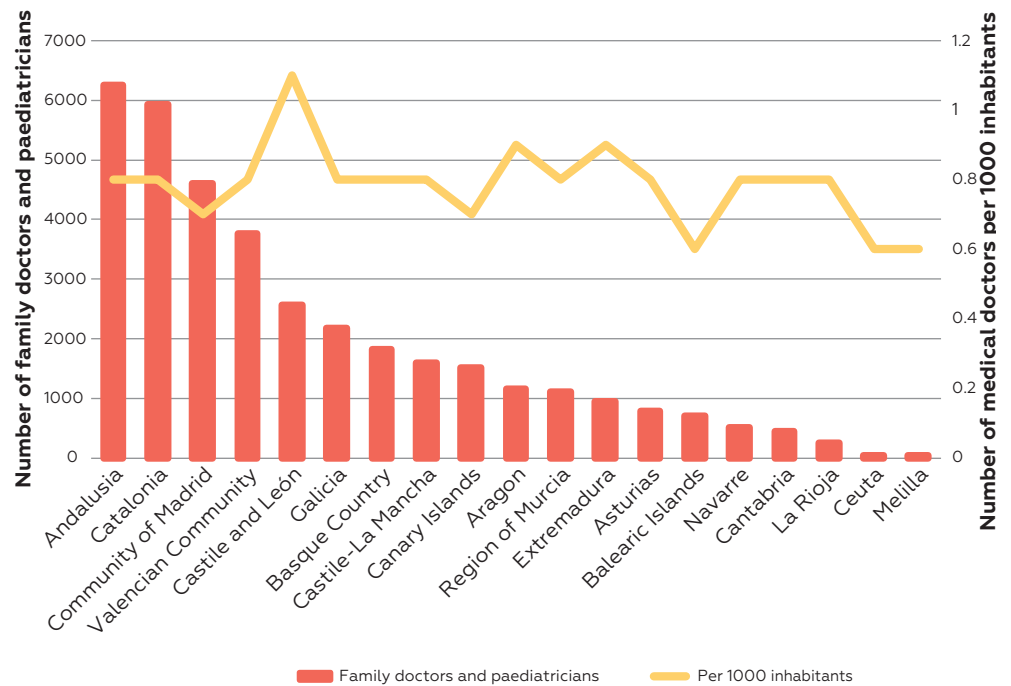
Source: Key indicators: national health system [online database] *(8).*

The Ministry of Health predicts a substantial shortage of about 9000 family doctors by 2028 for two key reasons *(50).* First, the age structure of the current workforce: 60% of family doctors are older than 50 years. Second, the working conditions are perceived as challenging and unattractive. To mitigate the effects of this predicted shortage, solutions are in the pipeline, such as expanding family and community medicine residency vacancies, fostering flexibility of the retirement age and promoting the recruitment of foreign-trained doctors. Despite an increase in the number of available positions for family and community medicine, these vacancies have not been filled in the past two years. Spain is a net importer of physicians. In 2021, 4293 foreign medical degrees were validated in Spain, and the number of Spanish physicians migrating overseas was comparatively lower. Despite the qualitative importance of physician emigration from Spain, its quantitative impact remains limited relative to the annual number of medical graduates *(51).*

In 2020, of the 38 106 nursing professionals working in PHC, 80% (30 537) were linked to PHC teams and the rest had other roles, such as midwives or working in out-of-hours care or home support teams. Since 2020, the number of nursing professionals in PHC has grown by 5.4%, although their rate remained close to 0.7 per 1000 population during this period. The rates per 1000 population vary between autonomous communities and cities, being lowest in Madrid, Ceuta and Balearic Islands (0.5) and highest in Extremadura, Castile and León and La Rioja (0.9) (Fig. 7). Spain surpasses the European average in terms of physician density but lags in nurse density *(48).* Nevertheless, this indicator should be interpreted with caution since Spain only reports figures on registered nurses and does not account for

associate nurses.[5] To optimize the strategic planning of nurses' roles in PHC, especially regarding working conditions, the delegation of responsibilities and education, some regions have implemented the position of regional government chief nurse *(52)*.

Fig. 7. Distribution of nurses across the autonomous communities and cities
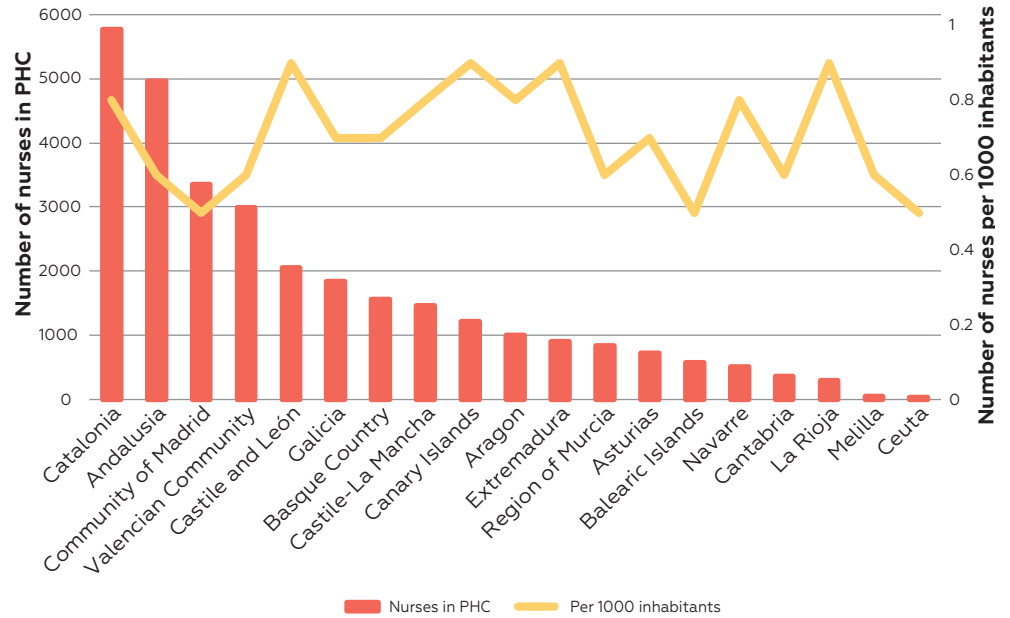
Source: Key indicators: national health system [online database] *(8)*.

Apart from medical and nursing professionals, the NHS has an additional workforce of almost 330 000 professionals, of which almost 11% work in PHC. The most noteworthy professional categories are administrative personnel (16 650), health-care assistants (4 664), physiotherapists (1 714), social workers (1 562) and dentists (1 320) *(53)*. PHC workers are employed by regional health services and may hold varying types of contracts that provide different working conditions and entitlements. The PHC professionals who pass a competitive examination announced by the regional government secure a permanent post in PHC, typically linked to a patient list (Box 6). The remaining professionals are recruited as temporary personnel. In 2019, an estimated 37% of NHS physicians were employed temporarily, and of these, almost 41% were 40–60 years old *(54)*. Royal Decree-Law 12/2022 aims to address this issue with a commitment to reducing temporary employment to below 8%.

Family doctors and nurses receive specialized training in their respective fields (four years of specialist training for family doctors and two years for family and community nurses). The content and assessment criteria for the training programmes are determined and approved by a national specialist committee. The training takes place at PHC multiprofessional teaching units located in each health area. During their training, trainees are assigned a PHC trainer and centre. However, hospital placements are often more expressive in terms of both quantity and duration than PHC placements, with considerable variation across regions *(55)*.

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5 Associate nurses have a lower level of qualification than registered nurses.

Box 6. A competitive examination is in place for tenured positions in the NHS at the regional level

The Public Examination System [*Sistema de Oposiciones*] is a system of competitive examinations whereby PHC professionals can apply for a tenured position in the NHS. This examination assesses a candidates' knowledge, skills and competencies to ensure that qualified professionals are appointed to available positions. Candidates who pass the examination can apply for a permanent post typically linked to a patient list. Regional governments have the legal responsibility to announce these competitive examinations regularly. The Framework Statute for Health Care Workers [*Estatuto Marco*] is the legal framework that regulates the rights and duties of health-care professionals working in the NHS with a tenured contract *(28)*. It defines the conditions of employment, including aspects such as job security, stability and working conditions.

Further, specialization in family medicine is required for physicians in PHC but not always for nurses in all autonomous communities and cities. The Action Plan for Primary and Community Care seeks to institutionalize the professional category of specialist in family and community nursing, thereby giving priority to recruiting specialized nurses *(32)*. Other professionals within PHC teams, such as health-care assistants, administrative personnel and social workers, do not have specific PHC specializations or training requirements.

Digital health

The digital health landscape has rapidly evolved in recent years. Each autonomous community or city has its own electronic health-care system, but several strategies have been developed to facilitate the exchange of relevant information across regions and improve the continuity of care. For example, every person is identified through a unique personal identification code (CIP-SNS) (linked to their individual health card), which enables electronic management of clinical information with reliability and security protocols across Spain. The NHS digital electronic health record grants access to health service users' essential health data from different autonomous communities and cities, yet some hindrances to access data in a timely manner may still occur in specific cases. Similarly, the national electronic prescription system enables health service users to collect their prescriptions from any pharmacy in the country, regardless of where it was initially prescribed. Health centres, services and establishments have a unified coding system, and standardized classifications of diseases and diagnostic and therapeutic procedures are extensively employed. These measures aid in the seamless transfer and use of essential information for care provision, monitoring and epidemiological purposes.

The integration and interoperability of electronic health records between PHC and secondary care vary across autonomous communities and cities. In some regions, they are fully integrated, forming a single electronic record, while in others PHC has its own development, which communicates with secondary care electronic health records through common interfaces or modules *(16)*. The degree of integration between electronic health records and social care records also varies among autonomous communities and cities, but overall it needs to be further developed in all regions *(56)*.

The digital health landscape is anticipated to make further progress and continue evolving from 2021 to 2026, supported by the NHS Digital Health Strategy *(57)*. The strategy provides a framework for various initiatives and actions undertaken by health administrations and promotes a harmonious and coordinated digital transformation of the NHS. It focuses on four strategic objectives: 1) empowering people in their care trajectories; 2) maximizing process value; 3) developing and adopting data management policies; and 4) nurturing the responsiveness of the system to changes in demand via innovative approaches and policies. This strategy is led by the Secretary of Digital Health and is closely tied to funds from Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU) (Box 7). It also emphasizes coordination and potential participation of Spain in other EU programmes such as Horizon Europe, Digital Europe and Europe4Health, in which PHC has been given priority.

Box 7. Rollout of the Recovery, Transformation and Resilience Plan will support improvements in PHC

The Recovery, Transformation and Resilience Plan is a crucial instrument for using the Next Generation EU recovery funds, representing a significant economic boost for Spain *(58)*. Focusing on the 2021–2023 implementation phase, the plan mobilizes nearly €70 billion from the Recovery and Resilience Mechanism to facilitate recovery and countercyclical impact. The plan aims to modernize Spain's economy, stimulate economic growth, create jobs and prepare Spain to tackle future challenges. The plan is structured around four key areas: 1) green Spain; 2) digital transition; 3) gender equality; and 4) social and territorial cohesion. These areas are further divided into 10 lever policies and 30 components, with one lever policy focusing on strengthening the NHS. The Ministry of Health of Spain manages actions within three components of the Recovery, Transformation and Resilience Plan.

Modernization of the public administration. With a budget of €400 million, this action aims to digitalize the general state administration in health and promote digital transformation in PHC. The funds will be used for applications, information systems, data analytics, digital services and interoperability.

Renewing and expanding the capacity of the NHS. With a budget of €969 million, this action aims to fund investment in high-tech equipment, disease prevention, health promotion, crisis response, professional training and pharmaceutical sustainability.

National Digital Skills Plan. With a budget of €3 million, this action aims to support digital training for health professionals under the National Digital Skills Plan (part of the Digital Spain Agenda 2025 *(59)*).

4

Pressing challenges and opportunities in primary health care in Spain

PHC in Spain is underpinned by robust foundations, such as access at the point of care free of user charges, the quality of the training of health-care professionals, comprehensive service coverage and multidisciplinary teams. This is revealed by its comparatively high performance and resolutive capacity. However, the sector is facing challenges, as revealed by increasing workforce attraction and retention issues, weakening of core PHC dimensions (including service continuity and accessibility) as well as decreasing satisfaction among health service users and PHC personnel. Several stress points could be addressed to avoid tensions in the system in key areas such as services delivery, governance and funding, human resources and digital health. In each category, selected examples of good practices in regions addressing some of the key challenges in PHC are shared (Annex 2 provides a detailed version of these good practices).

Services delivery

Building the trust of citizens and communities in the PHC system by nurturing their engagement and strengthening the accountability of actors is key

Citizens, in their various roles and capacities, are at the centre of PHC systems, and thus ensuring their trust in the health system is crucial. One approach to building the trust of citizens and communities is by nurturing a culture of co-creation and engagement at all levels of the health-care system, in which citizens and communities have the mechanisms, tools and agency to use their voice to shape health policy-making, including the performance of the system (Box 8).

Box 8. Strengthening the community orientation of PHC can contribute to building citizens' and communities' trust in the PHC system

There are many examples of how autonomous communities and cities are further institutionalizing citizen engagement in health policy-making. A few examples are briefly described below.

Aragon: The Aragon Community Care Strategy aims to improve the well-being of the Aragonese people and the community orientation of PHC in the region. Launched in 2016, the Strategy emphasizes participatory training, intersectoral collaboration, flexibility and networking. Currently, 70% of PHC teams have a community agenda, and 80% have a community care project linked to their management agreement.

Asturias: The Asturias Health Plan 2019–2030 was drawn up with a high level of citizen participation and presents an ambitious framework for the health of Asturians for more than a decade.

Satisfaction levels with PHC services is generally high in Spain *(4)*. Nevertheless, satisfaction measures have been pointed out as proving limited insight into the care experiences and outcomes the PHC system is providing. For example, these data are often collected via surveys of citizens such as the Health Barometer[6] but have poor actionability. Thus, ensuring mechanisms that can capture health service users' voice about care experiences and outcomes by strengthening data collection of patient-reported outcome measures and patient-reported experience measures in a more systematic and timely manner and ensuring that these data are fit for purpose and use are key *(60,61)*. However, strategies to embed these data in PHC health information systems and make them actionable to be used in quality improvement cycles have not yet been fully implemented across autonomous communities and cities. The continuing commitment of Spain to the Organisation for Economic Co-operation and Development (OECD) Patient-Reported Indicator Surveys (PaRIS) project will contribute to developing people-centred health policies and practices in the coming years *(62)*.

Unlocking the potential of multidisciplinary teams is key to effectively addressing the increasing workload

The workload in PHC is increasing gradually, as indicated by the rising consultation rates. An estimated 35% of family doctors consult between 36 and 45 health service users daily, spending less time with each one of them relative to other European countries *(63,64)*. A substantial amount of this workload comprises administrative duties that provide limited clinical value and job fulfilment and could be efficiently handled by administrative personnel. However, low ratios of PHC administrative personnel and lack of specific training and career pathways limit their opportunities to assume

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6 The Health Barometer is a continual study of the opinion of the population (users and non-users of health-care services) in three waves throughout each year that explores expectations and opinion about health-care services. The Health Barometers have data on the past 28 years.

additional responsibilities. Micro-teams are a pioneering initiative developed in some PHC centres that include an administrative staff member, a nurse and a family doctor per shared patient list, enabling meaningful task sharing while preserving seamless continuity of care (Box 9).

Box 9. Family Care Units [*Unidades de Atención Familiar*] at La Chana Primary Health Centre: a good practice in streamlined care provision through micro-teams

La Chana PHC in Granada stands as an illustration of the transformative power of micro-teams in enhancing care quality. Each micro-team (i.e., Family Care Units) consists of a general practitioner, a nurse and an administrative staff member *(65)*. The micro-team is responsible for a shared patient list. The clear allocation of responsibilities facilitates a dignified, rapid and sensible response to health service users' problems, since they know precisely which professional can address their specific concerns. This efficient approach has not only reduced bureaucracy and inefficiency but also demonstrated exceptional levels of satisfaction for both health service users and PHC professionals.

The role of PHC nurses is increasingly important, with the development of the speciality defining a comprehensive portfolio and area of expertise. Nurses are playing an increasing role in managing people with chronic conditions and in managing more independently acute demand in some autonomous communities and cities. Some autonomous communities and cities allow nurse prescribing under certain conditions, improving access for and management of people with chronic conditions *(66)*. Nurse prescribing has become a well-established aspect of advanced clinical practice working alongside key NHS principles and drivers to address the increasing complexities in patient care and the demands on the health service. Uptake of nurse prescribing has also been expanding in other countries *(67)*. However, a national strategy to fairly give priority to recruiting, retaining and optimizing specialist nurses in PHC has not yet been agreed upon. Various autonomous communities and cities envision giving specialist nurses a greater role in leading the design and implementation of community health activities in collaboration with other team members such as social workers. The progressive incorporation of specialist nurses into PHC teams offers a great opportunity for strengthening PHC and further nurse-led reforms.

Social workers, in collaboration with other members of the team, also play a key role in providing tailored, personalized support to health service users experiencing major health and social vulnerabilities in a context of rising health inequalities and health-care demand. They can help service users in navigating through the system and connect them to other sectors and community resources. Social workers are instrumental in developing community-based health promotion initiatives, including social prescribing [*recomendación de activos en salud*]. Nevertheless, not all PHC teams have a nominated health social worker, and their role in PHC is not recognized as a speciality, hindering their professional growth. Moreover, many social workers are designated to cover entire health zones instead of single medical centres, which increases their workload and limits their opportunities to fully integrate into PHC teams. For example, the Valencian Community has a good tradition of integrating social workers in the core PHC team (one or two per team), and they play an important role in preventing and addressing gender violence and in working with people with chronic conditions and caregivers. A new basket

of services for social workers in the Valencian Community is currently being developed. The uptake of social prescribing is also becoming established in Asturias, where the Health Observatory of the Principality of Asturias maintains a database of health assets in the community linked to all PHC teams to facilitate timely and effective social prescribing.

Autonomous communities and cities are moving towards expanding the roles and numbers of traditional team members and/or supporting the core team by expanding teams with new professional roles based on their own context-specific needs and preferences. Regarding the former, some autonomous communities and cities such as the Canary Islands are increasing the staffing positions and responsibilities of physiotherapists promoting their involvement in group activities for patients with some well-defined conditions (such as arthrosis). Clinical processes were very clearly defined through newly developed guidelines, focusing on the most common conditions and granting access to physiotherapists through family doctor referral. Regarding the latter, some autonomous communities and cities are incorporating new roles including psychologists (such as Catalonia and Canary Islands), dietitians or nutritionists and pharmacists (such as Catalonia). Other professions being considered by autonomous communities and cities include occupational therapists and podiatrists. The aim is to improve the resolutive capacity of PHC teams to better address growing population needs and expectations and improving the focus on community health.

Sharing responsibilities and upskilling multidisciplinary team members are essential strategies for strengthening the overall capacity of health-care teams. This approach not only improves the efficient distribution of the workload but also increases resilience, maximizes contributions and improves the overall capacity of PHC teams. It is, however, key that such processes respond to the specific needs and characteristics of each population and are implemented in a way that promotes longitudinality and active engagement of other PHC workers in defining and monitoring how to optimize their contributions.

Strengthening community health assets to enhance holistic and community-oriented PHC provision is gaining traction across autonomous communities and cities

Strengthened collaboration with community health assets and stakeholders can also contribute to enhancing the overall capacity of PHC by working closer and together with communities where people live, promoting their active participation and increasing the attention to the social determinants of health from a vision of collective health and well-being. It also offers opportunities for providing person-centred care. The Ministry of Health has given priority to community health approaches in recent years, with explicit mentions in relevant policy strategies (including the 2019 Strategic Framework for Primary and Community Care, the Primary Care Action Plan 2022–2023 and the recommendations for the design of community health strategies in primary care at the regional level *(68)*) among other guidelines and training materials. This has facilitated the uptake and development of innovative community health initiatives by numerous autonomous communities and cities. These encompass: 1) a biopsychosocial approach to care by systematically considering patients' and families' wider social concerns during routine PHC consultations and improving their access to non-medical, community-based sources of support (social prescribing or

health-asset recommendations); 2) group activities in PHC to improve critical health literacy with a particular emphasis on the wider social determinants of health; and 3) intersectoral community development initiatives to promote participation in identifying and giving priority to strategies to improve health equity and community well-being *(69)*. These initiatives have the potential to offer more acceptable, culturally appropriate and effective ways to address the risks to health that communities face (including behavioural risk factors and mental health concerns) while improving social cohesion and critical health literacy among populations with the greatest health and social vulnerability *(68–70)*.

However, several barriers have been identified to fully implementing and scaling up community health activities in general and social prescribing in particular. Lack of time and working stability hampers PHC professionals' ability to engage in community health initiatives and establish lasting relationships with and acquire in-depth knowledge of the communities in which they work. Poor control over their own agenda and resources may also constitute a barrier. Moreover, health professionals require dedicated training on community-based health promotion approaches and easy access to updated lists of available community health assets from their practices. Although some autonomous communities and cities have made significant progress in linking health-asset maps to health service users' electronic health records, such as Aragon, this is still unavailable in most autonomous communities and cities. Community-based health promotion and social prescribing initiatives depend on having robust and varied voluntary and community sector organizations and resources that are rooted in the local community. Lack of targeted funding for these organizations puts the continuity of community-based health promotion initiatives at risk and undermines their ability to provide ongoing support to patients with the most pressing health and social needs (Box 10).

Box 10. Selected good practices in regions on services delivery

Andalusia: proactive monitoring of people with complex chronic conditions
This project aims to reduce preventable hospitalizations, improve health outcomes and optimize health care resources. Using digital tools, PHC teams monitor almost 73 000 people with complex care needs. A pilot project ensures continuity of monitoring through emergency and urgent care services.

Balearic Islands: InfoSalut Connecta
InfoSalut Connecta aims to improve the accessibility and quality of care through a multichannel telematic service managed by specialized health-care professionals. The service has handled more than 1.1 million calls and managed 610 000 appointments, which helped to reduce in-person appointments at health centres. The evaluation process includes identifying areas for improvement and assessing user experience and impact on demand management and debureaucratization in PHC.

Cantabria: nurse indication in electronic prescription
This study aims to design and implement nurse indication in electronic prescriptions, enhancing coordination among different professional roles, reinforcing unique pharmacotherapeutic history and optimizing PHC professionals' activities. This solution has received positive feedback and presents an opportunity for improved continuity of care.

Box 10. contd.

Castile-La Mancha: DERCAM teledermatology
Castile-La Mancha has substantially improved the diagnosis and treatment of malignant skin lesions through the DERCAM telemedicine initiative, a comprehensive teledermatology programme. Fully implemented in June 2020, the programme reduced the average response time for teleconsultations from 60 days to under a week, and the volume of consultations increased 14-fold. The initiative enables family doctors to consult dermatologists remotely by capturing and sending images of skin lesions along with essential clinical data. To further support this model, investment in new dermatoscopes, the development of a secure image-capturing application and ongoing professional training have been key components.

Castile and León: Health Areas Administrative Activity Tool
The Regional Ministry's strategic approach to modernizing PHC includes the establishment of administrative units via the Health Areas Administrative Activity Tool (HADAS) project. This project aims to address imbalances in staff roles, improve system efficiency and enhance service quality. The HADAS units, under an appointed manager, will streamline agenda harmonization, appointment management, administrative tasks, health card processing, information gathering and staff training, ultimately improving patient service by improving resource allocation.

Catalonia: managing nursing demand
This initiative focuses on enhancing primary and community care nursing competencies, strengthening auxiliary nursing care technicians' roles and standardizing care plans. The results show increased proportions of the population with care plans and better control of hypertension, physical activity levels and weight reduction.

Ceuta: continuous glucose monitoring among people with type 2 diabetes
A pilot programme evaluates the improvement of metabolic control in people with type 2 diabetes using continuous glucose monitoring. With 92 people participating, preliminary results show improved patient involvement, empowerment and reduction of HbA_{1c} levels, significantly reducing hyper- and hypoglycaemia and the risk of complications in a short period.

Murcia: Mental Health Improvement Strategy 2023
This strategy recognizes the pivotal role of PHC in coordinating and integrating services. Through its 17 strategic lines and 123 actions, it focuses on diverse issues such as preventing suicide and managing addictive behaviour. It underlines substantial investment in the mental health network and a commitment to interdepartmental collaboration. Nevertheless, at its core, the strategy underscores PHC's crucial functions, ensuring seamless service integration, coordinating comprehensive case assessments and facilitating access to appropriate resources, thereby enhancing overall care.

Navarre: reinventing the primary care team
This initiative aims to improve accessibility, revitalize care programmes, strengthen self-care and maximize team members' skills by focusing on sharing responsibilities and rethinking the roles of PHC professionals. A three-stage programme includes 110 nurses, focusing on acute processes, chronic care management and community intervention. This initiative seems to be promoting the empowerment of people and communities and the efficient use of public resources in the region.

There is also great potential in strengthening the collaboration with and scope of competencies of additional community stakeholders, such as community pharmacies. Cutting-edge initiatives have emerged in which community pharmacies have taken the lead in developing community health promotion and social prescribing initiatives *(71)*. However, in general, there are no specific plans or strategies to strengthen the links and collaboration between PHC teams and community pharmacists, therefore depending on voluntarism and willingness of both PHC teams and community pharmacists. Collaboration tends to be stronger in rural areas. Their role in identifying and reporting situations of great vulnerability (such as pharmaceutical poverty and social isolation), participating in mapping community resources and co-designing community health education campaigns with PHC teams is yet to be further explored.

Governance and funding

Opportunities for enhancing collaborative governance across the national, regional and local levels

PHC governance in Spain is shared and decentralized, which increases the participation and accommodation of regional and local characteristics. However, the scope of decision-making as well as the roles and responsibilities of each stakeholder are sometimes unclear or not exercised in full. Central government plays a fundamental role in budgeting to ensure that all regions receive adequate funding based on their needs, although the regional parliament decides the share of funding allocated to health at the regional level. However, its capacity to regulate and ensure that regions uphold national standards is less developed, as evidenced by the significant differences in structural and performance indicators across autonomous communities and cities. Although the activity of the Interregional Council has been strengthened, its role remains mainly advisory (Box 11).

> **Box 11. Good practices on governance and funding at the regional level**
>
> The Valencian Community developed the Strategic Framework for Primary and Community Care to address the challenges of an ageing population, chronic care dependence, health-care demand and resource scarcity. This framework was created through extensive input from institutions, professionals and the public and was guided by various regional plans, initiatives and stakeholder contributions. Five strategic lines for change were identified: 1) primary care as the backbone of the health-care system; 2) enhancing person-centred care; 3) strengthening primary care; 4) enhancing the use of information and communication technologies; and 5) promoting education, innovation and research.

Regional governments are responsible for organizing and planning services provided within their territory, and they mostly do this through regional health authorities and health ministries. Organizational structures for PHC management vary between regions, ranging from independent management in single units (such as Cantabria) to shared management with hospital care (such as Aragon) (see Chapter 3). Although shared management is expected to improve coordination and integration across levels, it often involves having less capacity to give priority to and protect PHC strategies and budgets. This is particularly critical in urban health areas in which several PHC centres are not able to compete effectively for resources with larger urban hospitals they are managed together with. As a result, PHC remains

underfunded and given inadequate priority. The reorganization of regional governance structures has seldom been accompanied by evaluation strategies. This lack of evaluation impedes the comprehension of the functionality of various models and the identification of good practices. Similarly, regions vary in their reliance on private for-profit providers to deliver essential PHC services. Although this approach appears to be rising in some regions, this privatization model in PHC in Spain is limited and there is no trend towards its expansion, partly because of the values underpinning the PHC system and the poor evidence about the efficiency and quality of care provided by these arrangements.

At the local level, PHC teams are expected to work collaboratively to provide a comprehensive range of services that meet the evolving needs of their populations. However, limited opportunities for self-organization often hinders their ability to deliver and customize services in the best interests of both health service users and providers. In some cases, providers' capacity to decide on their patient and work schedules is limited by regional regulations. In addition, the role of health centre directors is not fully enhanced, primarily because of poor financial incentives, training, and partial release from clinical duties. These challenges are compounded by the lack of professionalization and standardized mechanisms for their appointment. There are also limited accountability mechanisms in place to guarantee that health centre management is in accordance with the needs and concerns of both health service users and health-care providers.

To address these issues, delineating clearer operational boundaries for stakeholders, enhancing the regulatory role of central government, improving evaluation strategies for regional governance reorganization and strengthening accountability mechanisms are essential. More so, fostering leadership and management at the local level is critical for achieving optimal PHC services delivery.

Adequately funding PHC systems is key to ensuring high-quality care and health gains in the population

The funds allocated to PHC have been declining, which has resulted in a widening gap between PHC and hospital expenditure, with a loss of specific weight of the former over the past 15 years. There are significant disparities in PHC expenditure across regions, which do not seem to respond to locally adjusted financing plans to accommodate existing and anticipated health-care needs. These disparities persist, in part, because of poor accountability and oversight mechanisms from the national government, since individual regions are granted the autonomy to determine their PHC funding allocation from the overall revenue, thereby creating inequitable access to health-care opportunities throughout the country.

The effects of PHC underinvestment are already visible in the rise of workforce recruitment and retention issues and deficiencies in equipment and infrastructure (16). Tensions will likely persist in which frontline workers struggle to meet health service users' growing care needs within increasingly constrained services. Critically, the capacity of the system to adapt to new challenges and co-create solutions will also be limited if sufficient resources are not ensured. To foster innovation within large organizations, resources should be available that can be directed towards new initiatives and ideas beyond the basic requirements needed to sustain daily operations.

Human resources for health

Addressing shortages of family doctors in the next five years is key

There seems to be wide agreement on the current shortages of specific professionals in PHC such as family doctors, which is likely to be exacerbated in rural areas and locations that are challenging to staff. In addition, the results of the competitive process through which medical graduates in Spain choose their medical specialties and training hospitals indicate a dwindling interest in family medicine although the national Ministry of Health strategically increased the number of family medicine positions in the past two years. Nevertheless, in the last two extraordinary calls (2022 and 2023), slightly more than 220 family medicine vacancies were not filled (93 in the 2022 call and 131 in 2023), signalling diminishing interest in family medicine by medical students, who do not find a family and community medicine career sufficiently attractive. In addition, since the specialist training period spans four years, these family medicine specialists will only enter the labour market after this period, implying a temporal lag in solving the current shortage.

Addressing job satisfaction and working conditions at a time of scarcity is key

Ensuring staff retention for high-quality PHC relies heavily on the employment status and working conditions of its workforce. However, over the past decade, the core dimensions of job stability, flexibility and salary that strengthen the PHC workforce have gradually deteriorated, contributing to aggravating retention and recruitment concerns, including the emigration, although negligible in overall terms, of professionals trained in Spain.

A recent mixed-methods study identified key reasons for family doctors trained in Spain who, although in negligible numbers, left the country to enhance the retention and recruitment of family doctors in Spain's PHC system (51). Based on 158 responses of family doctors to a survey, this study revealed relative pay, employment insecurity and temporality, excessive workload, poor primary care governance, lack of flexibility in the workplace and personal reasons as main contributors for family doctors trained in Spain leave the country. Importantly, almost half the respondents would consider returning to Spain if their professional demands were met. Interviews and focus groups with a sample of 24 family doctors indicated the need to improve the quality of employment contracts, working conditions, opportunities for professional development (including research) and governance in PHC for effective retention and recruitment.

PHC personnel must pass a competitive examination announced by the regional government of the autonomous community or city where they intend to work to obtain tenure (see Chapter 3). However, in many autonomous communities and cities, these examinations have not been announced or awarded swiftly enough, resulting in an increasing number of PHC personnel with temporary contracts. In addition, an increasing number of tenured positions created by regional health authorities are linked to health areas instead of patient lists, which implies that health-care professionals are expected to work across health centres depending on the service requirements. This situation has harmed longitudinality and job satisfaction

and the ability for local health centres to consolidate and develop long-term initiatives because the composition of their teams change frequently and suddenly. Royal Decree-Law 12/2022 aims to address this issue with a commitment to reducing temporary employment to below 8%.

In addition to job security, there is also concern about the limited ability of PHC workers to select and negotiate their working conditions or their career progression. Typically, the work contracts offered by regional authorities provide little room for PHC personnel to modify their working schedules to suit their personal and professional preferences. This limited flexibility has further eroded job satisfaction and created difficulty for PHC personnel to balance clinical activities with other professional roles, such as teaching, research or management *(72)*. Regarding the compensation of PHC workers, the salary of family doctors in Spain (adjusted by purchasing power) is below the EU19 average and shows a small margin for growth with additional professional responsibilities, financial incentives or seniority *(63)*. Meanwhile, although the salary in 2020 for nurses adjusted for purchasing power parity was higher in Spain than the EU20 average (€40 700 versus €35 300), there are marked discrepancies among autonomous communities and cities, which exacerbate job dissatisfaction and retention concerns *(6)*.

Professional development and research opportunities are key to ensuring recruitment, retention and job satisfaction in PHC

University family medicine and primary care programmes are key to attracting and training future professionals and ensuring the sustainability of the PHC workforce. Nevertheless, undergraduate education has primarily focused on secondary and tertiary care, with hospital specialists teaching almost all clinical subjects and creating difficulty in securing practical training in PHC. This restricts students' access to resources and opportunities to develop an interest in PHC and prevents PHC clinicians from pursuing a teaching career. Besides, almost half the doctors in Spain do not receive any additional remuneration or workload adjustment for training students or trainees, which further contributes to limiting their involvement *(63)*.

Although specialization programmes for family doctors and PHC nurses are highly comprehensive, there are concerns about excessive focus on hospital-based placements and limited opportunities for training in community health *(55,73)*. The professional portfolio of social workers and administrative personnel is drastically less developed, which may contribute to limiting their professional advancement and involvement in PHC. Beyond formal training opportunities, building partnerships with neighbouring health centres and colleagues is key to reflecting on shared challenges and learning from mutual expertise. Although some inter-practice networks exist, there are currently no formal schemes to connect local health centres and facilitate the exchange of knowledge in upscaling good practices. The absence of regular appraisals and revalidation programmes also contributes to limiting opportunities to identify areas of improvement and share evidence-informed practice (Box 12).

Research also plays a critical role in developing knowledge and innovations relevant to PHC and promoting evidence-informed care. This is reflected in the Action Plan for Primary and Community Care, which aims to foster research in PHC and facilitate learning exchange across levels of care in the NHS.

Box 12. Selected good practices in human resources for health in regions

Principality of Asturias: chain of favours training programme
This programme encourages collaboration and participation among tutors, residents and teaching teams in family and community care. Using virtual sessions, the programme fosters a sense of belonging and networking, covering clinical practice, research, community health and teaching tools. The programme showcases the potential of virtual learning and the importance of support and resources for effective teaching.

Canary Islands: nurture the key role of tutors in family medicine and nursing training
The Canary Islands have reshaped their tutoring system for family medicine and nursing trainees by introducing strategic changes. Primary and secondary tutors are legally recognized, with their roles distinctly defined, and their patient contact hours are reduced to focus on education. This restructuring is complemented by a financial incentive scheme. Moreover, the creation of university PHC centres rewards tutoring excellence with official recognition, while a nursing mentorship programme further enhances the educational framework. These initiatives collectively work to elevate health-care education in the region.

Castile-La Mancha: Erasmus rural initiative
The University of Castile-La Mancha developed a rural initiative to address depopulation and talent retention challenges. By offering internships for medicine, nursing and physiotherapy students in small municipalities, the initiative promotes employment and exposes young professionals to rural settings. Continued collaboration between university programmes and the Specialized Health-care Services of Castile-La Mancha is crucial for sustained success.

Community of Madrid: organizational flexibility and attractive benefits package to attract health-care professionals
The Community of Madrid's Primary Care Management devised a strategic plan to tackle the shortage of PHC professionals and to improve overall health-care quality. The plan focused on enhancing organizational flexibility, increasing the number of health-care professionals, introducing attractive remuneration packages and providing individualized care maps to streamline the service. The implementation of this strategic plan resulted in improved care coverage and accessibility.

La Rioja: nursing talent retention and contract plan
This plan aims to develop a competitive and sustainable human resources retention proposal tailored to PHC. Initiatives include engaging nursing students, promoting loyalty and job stability and fostering research. In 2022, the plan resulted in hiring more than 50 nursing professionals, representing a 20% increase in personnel, highlighting its effectiveness in attracting and retaining talent.

Nevertheless, most medical universities do not have PHC departments, and no specific research funding streams target PHC clinicians or personnel. Nursing is also not sufficiently well positioned to take the lead in initiating research that could contribute to pivotal findings in the field *(74)*. The absence of defined academic career pathways and lack of flexibility to combine academic and clinical roles further limits the involvement of PHC personnel in research. Critically, this exacerbates the problem of personnel retention in PHC, since individuals who are keen on pursuing a research career may choose to move to countries where academic prospects are more advanced. To this regard, the Carlos III Health Institute seeks to strengthen

the research, development and innovation agenda in PHC that, ultimately, will offer visibility and recognition to the consolidated research groups in PHC. However, it is not just the shortage of research opportunities that is exacerbating the challenge of retaining human resources for health but, more holistically, systemic issues within PHC, both for professionals contemplating an overseas move or those intending to stay in Spain. Retention issues are also deeply linked with professionals who remain domestically but choose to exit PHC in favour of other levels of care.

Digital health

Information and communication technologies can be used as a lever for harnessing coordination and multidisciplinarity in PHC

PHC delivery relies strongly on information and communication technologies, which provide crucial support to improve care quality and streamline communication among citizens, health service users and care providers. Relevant initiatives use information and communication technologies to foster coordination with local community organizations, share information on available community-based health assets and monitor their use in PHC. Efforts in information and communication technologies should build on the knowledge generated by these initiatives to roll out nationwide health promotion programmes, including social prescribing, especially in a context characterized by increasing health needs.

Information and communication technologies also have a crucial role in facilitating PHC coordination with secondary and social care, where timely exchange of information is key to ensuring appropriate decision-making and integrated care. Collaboration among PHC, hospital care and social care services, including data exchanges underpinned by interoperable health information systems, is essential for continuity of care and care coordination (Box 13). However, despite the significant progress made in recent years, access to secondary care and social services care records is not available in all regions. Information and communication technology systems for timely and bidirectional communication with secondary care clinicians and, to some extent, social workers are not consistently developed either. This jeopardizes data sharing, limits capacity to coordinate services and substantially aggravates administrative workload.

Box 13. Selected good practices in regions on digital health

Canary Islands: RETISALUD diabetic retinopathy screening programme in PHC
RETISALUD is a telemedicine project in the Canary Islands targeting early detection of diabetic retinopathy to reduce blindness caused by this condition. Serving almost 133 000 people, RETISALUD uses 92 non-mydriatic retinographies in health centres. Pathological or doubtful retinographies are electronically referred for further evaluation, enabling longitudinal follow-up and care. Technical improvements encompass enhanced data storage, increased capacity and artificial intelligence integration for early detection. Since 2008, about 600 000 retinographies have been performed, and the program was recognized as a good practice within the National Health System's Diabetes Strategy in 2007. RETISALUD has proven effective in screening for diabetic retinopathy, increasing diagnoses in earlier stages. A specific dashboard for RETISALUD has been developed, facilitating quick and agile analysis of information.

Using information and communication technologies for advanced purposes such as risk stratification is also key. A very sophisticated nationwide risk stratification system that accounts for multimorbidity (the adjusted morbidity groups) is integrated into the electronic health records of PHC providers. The use of adjusted morbidity groups in PHC varies across autonomous communities and cities. It supports case finding to include patients in specific health programmes based on their health needs (with validation by family doctors), priority setting for influenza vaccination and equity-sensitive health workforce planning and resource allocation. However, there remains untapped potential in ensuring that these data are used in an effective and meaningful fashion and support the creation of actionable indicators towards informing decision-making to further improve population health outcomes (75). For instance, they could be further used to support demand management, decisions about the most appropriate services delivery platform for individuals or groups of people or whether to include patients in health-asset recommendation programmes.

Moreover, there is also potential for using electronic medical records in advanced applications such as epidemiological surveillance, public health activities and PHC management and monitoring purposes such as real-time dashboards on care delivery and utilization trends. This could enhance the capacity of health centres to identify areas of improvement, develop innovative solutions and self-organize according to the unique and changing needs of their populations. Further, benchmarking the clinical results of PHC delivery across regions requires a comprehensive, comparable, transparent and accessible information system for citizens, professionals and institutions. However, according to a recent national study, three quarters of PHC professionals reported that the technological infrastructure of PHC centres was not in good condition and required adjustments to meet present and future challenges (16). In most regions, the technological equipment is not adequate to provide services in accordance with the standards set out in the Common Portfolio of Primary Care Services and is especially affecting family doctors and paediatricians (16).

5

Table 2. Key recommended policy actions to strengthen PHC in Spain

Recommended policy actions

This final chapter provides a set of recommended policy actions to enhance the development, sustainability and resilience of PHC in Spain's broader health-care system (Table 2). These recommendations are based on the analysis of the pressing challenges and opportunities in PHC outlined in Chapter 4. The recommendations are grouped into four categories: governance and funding, human resources for health, services delivery and digital health.

Governance and funding

- Guarantee the implementation of the national agreements on PHC and extend the participation of all key stakeholders in the NHS.
- Establish a dedicated PHC unit in the Ministry of Health to oversee and evaluate PHC quality standards and coordinate knowledge and information exchange across the NHS.
- Funding for PHC should be increased and protected according to the current and projected PHC needs.
- Regional-level PHC governance should be strengthened with sufficient infrastructure and budget to enable the development of tailored. policies that meet local needs and priorities.
- The autonomy and decision-making capacity of PHC health centres should be progressively strengthened to ensure an effective response to the unique needs of their respective workforces and populations.

Human resources for health

- Workforce resource planning should be streamlined at the national level and follow a participatory approach by engaging multiple stakeholders and all professional categories to ensure that personnel levels align with the projected needs.
- Improving the working conditions of PHC professionals, including ensuring an adequate workload, job stability and flexibility, can lead to greater recruitment rates and better personnel retention within PHC.
- Continuing professional development should be encouraged and promoted through access to mentoring, peer-led networks, attractive career prospects and revalidation.
- Undergraduate education should be aligned with service requirements by increasing the involvement of PHC professionals in universities in Spain.
- An academic PHC portfolio should be developed with specific funding schemes, PHC departments in universities and training opportunities.
- The training programme for family and community medicine should strive for a balanced and consistent distribution of placements in both PHC and hospital settings, providing ample opportunities for training in community health.
- The family and community nursing specialty should be gradually implemented as an obligatory prerequisite for practising in PHC.

Table 2. contd.

Services delivery
- Demand and bureaucracy should be efficiently managed by ensuring adequate skills of personnel in managerial positions and enhancing the role of administrative personnel.   - PHC resolutive capacity and accessibility should be enhanced by unlocking the potential of multidisciplinary teams.   - Optimizing PHC networks is recommended to strengthen collaborative work and PHC comprehensiveness.   - Coordination with secondary, tertiary and social care should be strengthened as a means of enhancing the quality of care in PHC.   - Collaboration with community health assets and stakeholders should be strengthened to enhance the overall resolutive capacity of PHC.

Digital health
- Interoperable and coordinated electronic health record databases for public health research and data-driven health policies should be strengthened.   - Interoperable health information systems should be used for data exchanges among PHC, secondary care, social care and community stakeholders, facilitating two-way communication across care providers.   - The use of information and communication technologies in PHC should leverage health service users' voice while contributing to quality improvement cycles.

Governance and funding

Guarantee the implementation of the national agreements on PHC and extend the participation of all key stakeholders in the NHS

The Strategic Framework for PHC approved by the Interterritorial Health Council on April 10, 2019, was developed by the health authorities (Ministry of Health and Health Regional Ministries), with the participation of different stakeholders (professionals, patients, citizens, unions and business organizations and the Spanish Federation of Municipalities and Provinces). Conversely, the Primary and Community Healthcare Action Plan, which prioritizes the measures to be developed in the period 2022–2023, provides the Autonomous Communities with a budget and indicators for monitoring their execution. This Plan was also approved by the Ministry and Regional Health Governments within the Interterritorial Health Council. In addition, the Interterritorial Health Council Advisory Committee, a body comprised of representatives of trade unions, business organizations and the local administration (through the Spanish Federation of Municipalities and Provinces) is informed of the results of the interim evaluations of this plan. It is necessary to promote these agreements and extend them to other potential stakeholders.

The national agreements must follow the principles of trust, transparency and accountability. In addition to having a participatory approach by involving all key stakeholders in the decision-making processes, it is essential that such agreements are accountable to all citizens, which can only be met by reaffirming the value of PHC and establishing a set of minimum criteria to ensure its sustainability and resilience as the backbone

of the NHS. To achieve this goal, the national agreements must strive to secure a commitment to increasing public spending on PHC, establishing an earmarked budget at both the central and regional levels with an agreed-on annual growth rate. In addition, a communication strategy must be developed at both the national and regional levels to emphasize to the population the importance of PHC in maintaining good health among citizens.

Establish a dedicated PHC unit in the Ministry of Health to oversee and evaluate PHC quality standards and coordinate knowledge and information exchange across the NHS

This PHC unit should be equipped with sufficient personnel and resources. It should play a pivotal role in developing national PHC policy and regulation, implementing accountability mechanisms to ensure that regional authorities have access to the necessary resources to meet national PHC standards and promoting cross-regional learning, knowledge exchange and scaling up of successful practices.

Funding for PHC should be increased and protected according to the current and projected PHC needs

The allocation of funding for PHC has exhibited a declining trend and high variability across regions, which poses a risk to the quality and sustainability of PHC services and creates inequitable access to health care throughout the country. To address this, regional governments are recommended to implement locally adjusted financing plans to secure appropriate and sufficient funding for existing and anticipated PHC needs. Further, the distribution of resources between PHC and secondary health care should be balanced to ensure proportionate allocation of funding.

Regional-level PHC governance should be strengthened with sufficient infrastructure and budget to enable the development of tailored policies that meet local needs and priorities

Regional health authorities play a key role in developing region-specific health policies that cater to the needs and priorities of their workforce and populations. However, their capacity to give priority to and safeguard PHC strategies and budget is often compromised, especially when integrated PHC and secondary care governance units exist. It is recommended to monitor the effectiveness of these integrated units and to give priority to governance arrangements that effectively protect and leverage PHC policy. Autonomous communities and cities must give priority to PHC spending while relying on subregional governance structures to effectively protect existing budget and resources.

The autonomy and decision-making capacity of PHC health centres should be progressively strengthened to ensure an effective response to the unique needs of their respective workforces and populations

Limited opportunities for self-organization often hinder the ability of PHC workers to deliver optimal care. To address this, strengthening the decision-making capacity of health centres is essential, especially about demand management and working schedules. The granting of autonomy to health centres must be accompanied by the implementation of accountability

mechanisms to ensure that management aligns with the needs and concerns of both health service users and providers. A key initiative in this regard is enhancing the managerial responsibility of health centre directors by providing adequate financial incentives, training and partial release from clinical duties. Professionalizing the selection process for health managers using standardized procedures and strengthening formal training in leadership and management are also encouraged.

Human resources for health

Workforce resource planning should be streamlined at the national level and follow a participatory approach by engaging multiple stakeholders and all professional categories to ensure that personnel levels align with projected needs

The National Human Resources for Health registry needs to be upgraded to fully encompass data on both the public and private health workforces while explicitly incorporating the needs of nursing and other professionals into regular physician supply and demand forecasting. Scenario planning to project the demand for PHC services and workforce requirements, considering all professional categories within PHC teams, is essential. By considering factors such as population growth, demographic changes and health trends, Spain must develop targeted strategies to address potential workforce imbalances. Regularly reviewing and updating resource allocation models will ensure the equitable distribution of health-care professionals and services, contributing to a more resilient and responsive health-care system.

Improving the working conditions of PHC professionals, including ensuring an adequate workload, job stability and flexibility, can lead to greater recruitment rates and better personnel retention within PHC

Job stability is essential in ensuring longitudinality and the development of resilient PHC teams. To achieve this, it is recommended to establish a national strategy that directs regional governments to regularly and promptly announce and allocate permanent positions based on patient lists rather than health areas. The implementation of flexible working contracts that can accommodate the changing professional and personal circumstances of PHC workers is also crucial. Competitive salaries that are commensurate with additional professional responsibilities, such as teaching, the delivery of specific techniques and participation in research programmes, should be pursued as a key recruitment and retention incentive.

Measures such as enhancing working conditions, the incentivized extension of the retirement age and the rational expansion of medical intern resident positions dedicated to family medicine should be considered. In addition, financial and non-financial incentives should be offered to family medicine and family nursing tutors to foster their commitment and attract and retain health-care workers in rural, underserved and hard-to-reach areas. To facilitate these initiatives, health centre managers should be well trained in improvement and personnel management to create positive working environments.

Continuing professional development should be encouraged and promoted through access to mentoring, peer-led networks, attractive career prospects and revalidation

Social workers, therapy and administrative personnel working in PHC require specialized training to effectively function as part of multidisciplinary teams. This training is also important for their recognition by health service users and other professionals and can enhance their professional development and improve personnel recruitment and retention. Continuing training opportunities are essential to effectively address emergent challenges and care needs. The establishment of inter-practice networks can provide opportunities for reflection on common concerns and facilitate the exchange of knowledge for scaling up good practices. Regular appraisal and revalidation programmes are also crucial in identifying areas for improvement and sharing evidence-informed practices.

Undergraduate education should be aligned with service requirements by increasing the involvement of PHC professionals in universities in Spain

University PHC programmes are essential in attracting and training future professionals and ensuring the long-term sustainability of the PHC workforce. It is recommended that family doctors and PHC nurses be involved in teaching fundamental clinical skills as a means of providing students with access to resources and opportunities to develop an interest in PHC. The facilitation of the accreditation of PHC physicians as university professors is also crucial in ensuring an adequate number of university personnel and opportunities to combine teaching with clinical duties.

An academic PHC portfolio should be developed with specific funding schemes, PHC departments in universities and training opportunities

Research plays a pivotal role in developing knowledge and innovations relevant to PHC and promoting evidence-informed care. To stimulate research on PHC, it is recommended that PHC departments, professorial positions and specific research funding streams be created for PHC personnel. Academic career pathways for PHC physicians should be developed to enhance interest and retain top talent. Ensuring research is recognized as part of daily working hours and remunerating accordingly is also crucial in encouraging engagement and effectively balancing academic and clinical work. Specific PHC research areas should also be included in national and regional research programmes.

The training programme for family and community medicine should strive for a balanced and consistent distribution of placements in both PHC and hospital settings, providing ample opportunities for training in community health

Although specialization programmes are highly comprehensive, concerns have been raised about an excessive focus on hospital-based placements, limited opportunities for training in community health and poor standardization of distribution processes among regions. To address these issues, it is recommended that a balanced and consistent distribution of PHC and hospital-based placements be implemented to ensure that trainees are sufficiently exposed to and integrated within PHC teams and have access to relevant training opportunities. To ensure compliance with

the recommendations of the national specialty programme, PHC multiprofessional teaching units must be strengthened in terms of resources, autonomy and accountability mechanisms. This will enable them to provide rigorous, independent and equitable training opportunities that are customized to the individual interests and aspirations of each PHC trainee.

The family and community nursing specialty should be gradually implemented as an obligatory prerequisite for practising in PHC

Holding the family and community nursing specialty should be a mandatory requirement for practising in PHC, like the requirement for family doctors. The introduction of this requirement should be implemented gradually, with a clearly defined timeline to ensure its enforcement and successful implementation.

Services delivery

Demand and bureaucracy should be efficiently managed by ensuring adequate skills of personnel in managerial positions and enhancing the role of administrative personnel

A considerable proportion of the workload in PHC comprises administrative tasks that provide limited clinical value and job satisfaction. Administrative personnel could efficiently manage these tasks. It is recommended to enhance the recruitment of administrative personnel associated with individual patient lists in PHC. The role of administrative personnel should be further expanded by offering relevant training and specialization opportunities in PHC and commensurate financial incentives.

PHC resolutive capacity and accessibility should be enhanced by unlocking the potential of multidisciplinary teams

Sharing responsibilities and enhancing the skills of multidisciplinary team members are crucial strategies for fortifying the overall capacity of PHC teams. To accomplish this, it is recommended to give priority to recruiting nurses with the family and community nursing specialty, assigning social workers to PHC teams and expanding teams to address context-specific population needs with additional positions of existing roles (such as physiotherapists) or by incorporating new professional roles as required. It is imperative that these processes be tailored to the needs and characteristics of each population and be implemented in a manner that promotes longitudinality and the active participation of other PHC workers in determining how to optimize the contributions of the multidisciplinary team.

Optimizing PHC networks is recommended to strengthen collaborative work and PHC comprehensiveness

PHC networks can offer a range of relevant advantages for PHC providers and health service users, such as expanding and scaling up service offerings, sharing resources and good practices, participating in multidisciplinary research that enhances the potential to engage family nurses as leaders and overcoming professional isolation. It is recommended to explore establishing or strengthening existing PHC networks within health areas in close coordination with secondary health care – and social care, if possible – by agreeing on common performance indicators and ensuring opportunities for collaborative work and partnership.

Coordination with secondary, tertiary and social care should be strengthened as a means of enhancing the quality of care in PHC

Enhanced integration and care coordination between primary, secondary and tertiary care are crucial for providing seamless, safe and effective health care anchored in person-centred value-based care. This can be accomplished by scaling up explicit referral protocols, care pathways, implementing advice and guidance systems with secondary and tertiary care. In addition, opportunities for bidirectional communication and informal case discussions should be established to improve partnership and facilitate timely and effective care. The implementation of telemedicine and community outreach programmes, alongside PHC operating hours responsive to community needs leveraging from the existing PHC network, will ensure that health-care services remain accessible and convenient for all citizens.

Collaboration with community health assets and stakeholders should be strengthened to enhance the overall resolutive capacity of PHC

Community-driven health promotion programmes, such as social prescribing, have the potential to address health risks faced by communities in a culturally sensitive and effective manner. This includes addressing concerns related to mental health and behavioural risk factors. To optimize the effectiveness of social prescribing, it is essential to provide adequate training to PHC professionals, ensure access to updated lists of community health assets from PHC and allocate targeted funding for community health initiatives.

Digital health

Interoperable and coordinated electronic health record databases for public health research and data-driven health policies should be strengthened

The NHS boasts substantial databases that encapsulate a wealth of data that can be unleashed to improve health outcomes, for example, by using state-of-the-art technology such as cloud-based systems and leveraging the use of artificial intelligence algorithms. It is imperative that these databases be coordinated, interoperable and made accessible to public health and PHC researchers to support the formulation of evidence-informed and data-driven health policies. This is somewhat already supported by the provisions in Chapter V of Law 16/2003 and realized via the INCLASNS platform, where citizens' opinions and expectations are aggregated through several sources, one of which is the annual Health Barometer. Further, it is essential that PHC centres have the capacity to exploit and analyse routinely collected electronic health record data for auditing purposes. This will enable them to identify areas for improvement, develop data-driven innovative solutions and organize PHC service planning according to the unique and evolving needs of their populations. Further, using General Data Protection Regulation-compliant data from these sources and supporting individual-level links to other databases for research purposes are encouraged.

Interoperable health information systems should be used for data exchanges among PHC, secondary care, social care and community stakeholders, facilitating two-way communication across care providers

Information and communication technologies are key to enhancing communication and coordination among care providers, including secondary care, social care and community stakeholders. Interoperable health information systems should be used for data exchanges, enabling timely and bidirectional communication across services, including in cases where patients cross regional boundaries for treatment. As part of the NHS Digital Health Strategy, the Plan for the Digital Transformation of Primary and Community Care – funded with €230 million from the European Recovery and Resilience Facility – includes a working group tasked with facilitating the exchange of selected information between social and health services, even though the Ministry of Health does not have jurisdiction over social services.

The use of information and communication technologies in PHC should leverage health service users' voice while contributing to quality improvement cycles

Information and communication technologies can efficiently capture health service users' feedback on care experiences and outcomes in a timely manner by strengthening the collection of patient-reported outcome measures and patient-reported experience measures. Embedding these data in PHC information systems in a routinely and timely manner and ensuring that these data are fit for purpose and use are key to strengthening PHC's responsiveness. The continuing commitment of Spain to the OECD PaRIS project is highly encouraged as well as national-led research initiatives on how to best use these data to spur PHC progress.

6

Conclusion

Thus far, the PHC system in Spain has been successful in achieving good health outputs and outcomes because of a combination of robust governance, comprehensive national frameworks and targeted regional implementation. However, the PHC system is currently at a crossroads and requires transformation. The increasing complexity of health needs and citizens' preferences and expectations, coupled with technological advancements and demographic changes, calls for reorienting Spain's PHC towards a more sustainable, modern and effective system. The focal point of this transformation lies in adopting strategies that enhance resilience, foster integration, improve access and exploit digital solutions.

By balancing autonomy with a robust national backbone, fostering integrated management and ensuring financial commitment, Spain can create a resilient and responsive health-care system that meets the diverse needs of its population. It is critical to strike a balance between granting regional health systems sufficient autonomy to address local needs while maintaining a strong national governance framework that ensures consistency in quality and services delivery. Further, integrated management across health-care levels can improve longitudinality and enhance care experiences and health outcomes. In addition, adequate and sustainable financial backing is crucial to facilitate health system operations and cater for necessary innovations and upgrades.

Moreover, giving priority to human resources for health and workforce development as well as elevating public trust and the prestige and value of PHC form another pivotal part of the equation. The health workforce is the backbone of the health-care system; thus, investing in their education, training and working environment can lead to increased productivity and improved care delivery. It is also paramount to ensure that PHC remain attractive to top talent through competitive remuneration and career progression opportunities and by fostering a culture that values the crucial role of PHC. Trust and public confidence in the health system are indispensable for health system performance. Enhancing transparency, engaging patients in decision-making processes and demonstrating the effectiveness of PHC can elevate its prestige and perceived value.

The transformation of Spain's PHC system will be multifaceted, requiring concerted efforts on several fronts. By adopting strategies that address governance and funding, human resources for health, services delivery and digital health, Spain can build a resilient, efficient and effective PHC system capable of meeting the evolving health needs of its population.

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Annex 1. Interview guides

Guiding questions during the meetings with stakeholders (scientific societies and associations, trade unions and patient organizations)

Block 1 – Understanding the context through the lens of stakeholders

- How does the public perceive the role of (doctors, nurses, social workers and patients) in PHC in Spain?

- Does your organization perceive PHC as being an important topic in the political agenda?

- What *threats* to the sustainability of PHC in Spain has your organization identified?

- Has your organization identified or perhaps even implemented or tested solutions to some of these threats?

- What *opportunities* to strengthen the sustainability of PHC has your organization identified?

- What role could your organization and members play to support the sustainability of PHC?

Block 2 – Understanding the performance of PHC through the lens of stakeholders

- Which word would you use to describe the performance of PHC in Spain?

- How does your organization perceive the performance of PHC in Spain?

- How have you been contributing to strengthening the performance of PHC, and how would you like to contribute going forward?

- What aspects of PHC are working well for your members?

- What aspects are not working well for your members?

- What solutions have you presented and discussed with health authorities?

- Which obstacles have you faced toward implementing these solutions?

- How have your members experienced the impact of COVID-19 on PHC, and how have you translated their voice into policy-making cycles?

Block 3 – The future of PHC in Spain

- How does your organization envision the future of PHC in Spain?

- How can your organization contribute to improving the system and strengthening the voice of your members in decision-making cycles?

Guiding questions during the virtual calls with autonomous communities and cities

- Can you briefly present the organization of PHC in your autonomous community or city and focus on distinctive elements compared with other autonomous communities and cities?

- What are the strengths of the PHC care model in your autonomous community or city and distinctive features compared with other autonomous communities and cities?

- What are the most pressing challenges in PHC in your autonomous community or city? Have solutions been tried to address those challenges?

- Can you describe an innovative element or initiative in PHC in your autonomous community or city?

Guiding questions during the field visits to autonomous communities and cities

The following table is a comprehensive list of questions that should be addressed during visits to autonomous communities and cities. Although the list is not exhaustive, it is intended to serve as a guide and may be adapted as necessary. It is recommended that, whenever possible, the experiences of both health service users and PHC professionals be obtained first hand.

	Questions
Governance	• What are the current objectives for PHC in your region? • What are the key challenges for meeting the objectives set for PHC in your region? • Is there a mechanism to streamline strategic coordination with other (neighbouring) regions? • Which factors are considered when preparing and distributing lists of patients among family doctors? • To what extent are decision-making processes inclusive by incorporating the feedback of key stakeholders (such as community members, patient advocacy groups and scientific and professional associations)? • Are formal or informal knowledge generation processes embedded in daily practice to improve health care?
Financing	• What percentage of your region's health budget is allocated to PHC? • Which areas of PHC do you perceive to be underfunded? • What are the current and future challenges to the economic sustainability of PHC in your community?

Questions

Workforce

- What is the current situation in your region regarding the number of health professionals working in PHC?
- What strategies are you currently implementing (or you would like to be implemented) to address the shortages of doctors and nurses?
- What retention strategies do you have in place to retain medical and nursing residency graduates?
- Are there any specific continuing education or professional development programmes suggested by the regional health ministry or implemented in your practice?
- To what extent are professionals (family doctors and nurses) involved in research and undergraduate teaching?
- How do you monitor health-care workers' job experiences and satisfaction?
- Are there any programmes toward enhancing personnel well-being?

Access

- Is the way the PHC workforce is distributed in your autonomous community adequate to reduce potential geographical inequalities (urban versus rural)?
- How are you tackling depopulation and dispersion in rural areas to ensure timely access to health care?
- Are you able to monitor forgone care in both urban and rural areas?
- How long does it take to see a family doctor from the time one requests an appointment in your region?
- How do 24-hour on-call shifts in primary care work in urban and rural areas?

Coverage

- How do you ensure that the demand for health care is met by the right professional within the health centre?
- Are there any medical procedures not currently available for PHC that you would want to be part of the portfolio of services in the health centres of your region?
- How is disease management approached in your region (such as multidisciplinary teams), particularly for chronic conditions?
- How has COVID-19 affected the delivery of essential health services in your region?
- How are health promotion and disease prevention integrated into the scope of the PHC mission in the region?
- Are there any innovative digital solutions that have recently been successfully implemented?

	Questions
Continuity and coordination of care	• What strategies are you following to guarantee continuity of care in the context of shortage and mobility transfers of doctors and nurses? • To what extent can you ensure that patients are seen over time by the same doctor? Are there joint patient lists? • How is the coordination with the secondary and tertiary levels? • How are social services integrated with PHC services in your community? • How do you integrate PHC services and public health services? • How is the coordination between primary care and hospital emergency departments?
Efficiency	• How many patients per day do family doctors currently see daily? What is the average time per patient for a family doctor consultation? • To what extent has telehealth been adopted in your region? • What is the current state of digital health within your primary care system? Which solutions have you introduced so far and what do you plan to introduce soon? • What is the current use of electronic health records in PHC in your region? • Are practices of data flow and sharing explored within and across PHC practices in your region?
Quality of care	• What are key policies introduced to ensure patient safety across care trajectories? • Access to evidence-informed guidelines: are they readily available to clinicians? • How do you monitor the quality of care? What indicators do you record? (Particularly, explore the use of people-reported experience and outcome indicators) • How do you perceive PHC resolutive capacity to be in your region? • Is there a strategy in place to enhance clinicians' access to diagnostics? • How do you manage noncommunicable diseases in PHC? • How do you manage maternal and child health in primary care? • How do you manage preventive care in primary care? • What adaptation was needed during COVID-19 that might have negatively affected the quality of care? Was this monitored? • How would you define the post-COVID-19 PHC situation and how it affects the quality of care?

Annex 2. Selected good practices in autonomous communities and cities

Andalusia

Monitoring people with complex chronic conditions

The proactive monitoring project in Andalusia aims to reduce preventable hospitalizations and admissions, improve health outcomes, optimize health-care resource use and involve patients and families in decision-making for patients with complex chronic conditions. By implementing measures to improve accessibility to health-care professionals, the project focuses on anticipating health problems, managing medication adherence and providing support to caregivers. The target population consists of patients with complex chronic conditions, with priority given to those with heart failure, chronic obstructive pulmonary disease and concomitant diabetes.

The project involves primary care teams using digital tools integrated into the digital health record for monitoring, as well as a patient mobile app. It is coordinated by centre directors and a network of case management nurses across 411 health centres. Currently, 72 757 people are being monitored by primary care nurses, and a pilot project is underway to provide continuity of monitoring through emergency and urgent care services. The pilot project has included 27 159 people, with 1800 followed from March to August 2022, using a 24/365 service for patients to call the 061 coordination room if needed, where a nurse coordinates urgent care with the help of a coordination room physician if necessary.

Aragon

Aragon Community Care Strategy

The Aragon Community Care Strategy is an initiative aimed at improving the well-being of the people in Aragon and the community orientation of Aragonese primary care. Launched in 2016, the strategy focuses on participatory training, intersectoral collaboration, flexibility and networking. The Strategy is built on three action pathways: creating a community agenda, developing and evaluating community projects linked to the management agreement of the primary care team and implementing community care based on assets. Currently, 70% of primary care teams have a community agenda, and 80% have a community care project linked to the management agreement.

Principality of Asturias

Chain of favours

The chain of favours training programme, designed by the Multiprofessional Teaching Unit of Family and Community Care in Asturias, aims to promote collaboration and participation among tutors, residents and teaching teams. Inspired by the movie of the same name, the programme encourages debate, reflection and collaborative learning through virtual sessions. It has successfully connected professionals from various areas, fostering a sense of belonging to primary care and creating networks between teaching centres and within the same regions.

Structured into four blocks – clinical practice, research, community health and teaching tools – the programme uses the TEAMS platform for presentations and debates. Despite challenges such as internet connectivity issues and time constraints, the chain of favours programme has demonstrated the potential for virtual learning and collaboration. The programme's success highlights the importance of support and resources for making family and community care teaching attractive and effective while exemplifying how connecting people can lead to change and foster a sense of belonging within primary care.

Balearic Islands

InfoSalut Connecta

The Balearic Islands Health Service aims to improve accessibility and quality of care for its users through InfoSalut Connecta. This is a multichannel telematic service that is being provided by physicians who were retired and accepted the opportunity to rejoin the Balearic Islands Health Service. The objective is to ensure diligent management of health-care demand, reducing waiting times and facilitating accessibility with expert care. To implement this service, a multidisciplinary team of health-care and non-health-care professionals was created, working in collaboration with various support units and primary care team members. Key tools developed included a pilot phase involving 10 health centres, centralizing telephone assistance through a single number and creating a shared workspace for constant flow of information.

From May to October 2022, InfoSalut Connecta handled 1 106 787 calls and managed 610 000 appointments according to PHC protocol. The management of in-person appointments at health centre counters was reduced from 80% to 65%. In addition, 3100 appointments that would have been handled by primary care physicians were redirected to hospitals following debureaucratization guidelines. The evaluation of the service includes an initial phase of collecting and sharing incident records to identify areas for improvement and a second phase assessing user experience and how InfoSalut Connecta affects demand management and debureaucratization in PHC.

Canary Islands

RETISALUD diabetic retinopathy screening programme in primary care

RETISALUD is a telemedicine project in the Canary Islands aimed at early detection of diabetic retinopathy among people diagnosed with diabetes and newly detected cases to decrease the incidence of blindness from diabetic retinopathy. The programme serves a target population of 132 622 people and uses 92 non-mydriatic retinographs located in health centres. The care process involves a training programme and a telemedicine care process in which eye examinations are evaluated by professionals without the patient being present. Pathological or doubtful retinographies are referred electronically for a second diagnostic evaluation by the reference ophthalmologist, enabling longitudinal follow-up and care at different care levels. Technical improvements include better data storage, increased storage capacity and the integration of artificial intelligence for early detection of diabetic retinopathy.

Since 2008, about 600 000 retinographies have been performed, and the RETISALUD programme was recognized as a good practice within the

National Health System's Diabetes Strategy in 2007. The programme has proven effective in screening for diabetic retinopathy, increasing the percentage of diagnoses in earlier stages of the disease. Indicators are analysed through Oracle Business Intelligence, using the information recorded in the DRAGO-AP electronic health record, and a specific dashboard for RETISALUD has been developed, enabling quick and agile analysis of all the information.

Recognition of family medicine and family nursing tutors

In the Canary Islands, an innovative and strategic approach has been adopted to recognize and uplift the role of tutors in the realms of family medicine and nursing education. The regional authorities have legally recognized both primary and secondary tutors, with their roles and functions meticulously defined under a newly drafted set of regulations. This legislative recognition underscores the paramount importance and responsibility placed on these critical actors in health-care education. In addition, the working conditions of the tutors have been modified. Tutors are afforded more time to mentor students by consciously reducing their patient contact hours. This meticulous readjustment of workload enables tutors to focus more intently on their educational responsibilities, enhancing the quality of instruction delivered to trainees.

Further, the Canary Islands' approach has been distinguished by two pioneering initiatives aimed at encouraging excellence in tutoring. The first is the establishment of university PHC centres. Drawing inspiration from the model of university hospitals, these centres offer an officially recognized platform for top-notch tutoring for both undergraduate and postgraduate students in medicine and nursing, contingent on meeting a set of standardized performance indicators. The second initiative is the provision of a comprehensive mentorship programme through the primary care network, a move that acknowledges the significant role of nurses in the health-care landscape. In addition to these, the Canary Islands has implemented a financial incentive scheme to attract and retain competent tutors, thereby ensuring the continuity and enhancement of this vital educational framework. Through this multifaceted approach, the Canary Islands has not only succeeded in validating the tutors' significant contributions but also in elevating the overall quality of health-care education.

Cantabria

Nurse indication in electronic prescribing

The primary objective of this study is to design and implement nurse indication in electronic prescribing in Cantabria, integrating it into a single patient treatment sheet and creating a multidisciplinary virtual workspace. Secondary objectives include enhancing coordination among professional roles, reinforcing a unique pharmacotherapeutic history and optimizing PHC professionals' activities. The study consists of five phases, with the premise of functional and technological integration at the patient level, accommodating two levels of use: pharmaceutical products with and without protocol.

The design of the technological solution began in November 2019, and after overcoming pandemic-related delays, it was completed by May 2022. The pilot phase was implemented in the Altamira Health Zone and Sierrallana

Hospital's Department of Surgery, and the final expansion phase is nearing completion across Cantabria. Health professionals have given positive feedback, emphasizing the importance of centring the indication and prescribing process around the patient. A total of 630 nursing indications have been made so far, with the introduction of nurse indication presenting an opportunity for improved continuity of care and an integrated solution with physicians' prescriptions, considering the growing demand for care and services.

Castile and León

Community Care Training Plan

The Castile and León Community Care Training Plan aims to increase awareness, training and implementation of community health projects in the region. The plan seeks to motivate and provide methodological tools to primary care teams for developing high-quality, evidence-informed health education and community interventions. Two training tracks were developed: affective-sexual education in educational centres and community health training with the PROCC method. From 2020 to June 2022, 1072 professionals were trained in community care, with an estimated 1400 to be trained by the end of 2022.

Although a complete evaluation of community projects is not yet possible, several activities have been carried out, including groups for caregivers, affective-sexual education workshops in new educational centres, a rural parents' school in Ávila and health promotion groups for women with a gender perspective. Future perspectives include continuing the Community Care Training Plan, developing the Castile and León Community Health Strategy, creating a community health subportal, support tools for health councils, project development and evaluation and establishing networks with public health institutions, entities, associations and citizens.

HADAS Project

The Regional Ministry is committed to advancing primary care by transforming its organizational model that has remained stagnant for more than 35 years. This transformation underscores the expansion of administrative roles within primary care units and remedying the significant imbalance in personnel distribution, currently dominated by doctors and underrepresented administrative personnel. The outdated model has proven inefficient, with tasks often assigned to inappropriate professionals, leading to frustration and underutilization of trained personnel. In response, the Ministry aims to establish clear roles for administrative personnel and provide necessary training, aiming to streamline demand, appointment organization, agenda harmonization and standardization of administrative tasks. A critical component of this transformation is the Health Areas Administrative Activity Tool (HADAS) project. HADAS entails establishing administrative units in each primary care or health care management department to handle tasks within their competence. These units, under the direction of an appointed manager, will work on six key areas: agendas, appointments, primary care administrative tasks, insurance, information and training.

The HADAS project represents a standardized and systematized plan for redefining and expanding the role of administrative personnel in primary care. Each HADAS unit will work on homogenizing types of appointments

and agendas, managing appointments through multiple channels, resolving administrative tasks specific to primary care, processing health cards, collecting necessary information to improve patient service and facilitating training for administrative personnel. The project aims to reorganize the care delivery of PHC teams to relieve the pressure on surgeries, make the system more efficient, improve the service provided to the population and ensure the appropriate channelling of the population's demand to the most suitable professional. Ultimately, the HADAS project, through its person in charge and professionals, will be pivotal in providing training, updating administrative assistants and supporting the transformation of the organizational model of primary care.

Castile-La Mancha

Erasmus rural

The context of depopulation, difficulty retaining talent and a global perspective on professional development has led to the implementation of Law 2/2021 and the Regional Strategy against Depopulation, which include specific measures for training. In response, the University of Castile-La Mancha has developed a rural initiative to introduce young people to the rural world, promote employment and combat depopulation. This initiative focuses on permanence and transversality, offering internships in small municipalities for medicine, nursing and physiotherapy students during the summer months.

The rural initiative has been well received by students and the health-care community, reflecting a long-term, sustainable commitment aligned with key public policy strategies. To ensure continued success, it is essential to maintain continuity in university programmes and the Specialized Healthcare Services of Castile-La Mancha to support the ongoing development of health-care professionals and address the challenges of depopulation and talent retention in rural areas.

DERCAM Telemedicine

The Castile-La Mancha region has markedly enhanced its diagnostic and therapeutic capacity for malignant skin conditions by deploying the DERCAM telemedicine initiative, a pioneering comprehensive teledermatology programme in Spain. Implemented fully by the regional government in June 2020, the programme has significantly improved the accessibility, equity and quality of dermatological care in the region. Spearheaded by primary care and dermatology professionals, the programme has slashed the average response time for teleconsultations from 60 days to under a week. Notably, the transformative modification of the patient access route to dermatological services has culminated in almost 14 times the volume of consultations conducted since the model's adaptation in 2020.

The programme's innovative approach circumvents the need for patients to physically travel to the hospital by enabling dermatological consultations directly from the primary care's health centre by capturing and sending images of skin lesions alongside essential clinical data. To bolster the functionality of this model, the programme has seen an investment in new dermatoscopes, the development of a secure image-capturing application (Clinicam) and an ongoing focus on professional development and training. In particular, the programme's commitment to continual training for

professionals underscores the effort to improve early diagnostic capacity for malignant skin lesions. In addition, the DERCAM tool incorporates a dermatological atlas with more than 1.6 million images, organized by pathology, to serve as a learning resource and aid in diagnosis for family and community care professionals.

Catalonia

Nursing demand management

The objective of the nursing demand management initiative is to enhance the full development of primary and community care nursing competencies to provide an appropriate care response to the population's health needs across various settings. This initiative also aims to strengthen the roles of auxiliary nursing care technicians and administrative health personnel. The programme encourages nursing professionals to train in the standardization of care programme in primary care, which minimizes variability in nursing practice, facilitates decision-making in nursing demand management and creates standardized care plans.

The results of this initiative show a 54% increase in the proportion of the population with a care plan, with 89% of individuals having good control of hypertension, 57% maintaining good control of physical activity and 16% experiencing weight reduction. To monitor and evaluate nursing demand management, a project governance team is created at the macro, meso and micro levels.

The master plan for the Catalan Information Systems

Like other advanced global health-care systems, the Integrated Public Healthcare System of Catalonia (SISCAT) faces significant challenges stemming from population ageing, escalating public health-care costs, incorporation of new technologies and medical treatments and heightened citizen knowledge and demands. These issues have led to a growing realization of the critical transformative role of data management and information technologies. In fact, health care is considered a sector ripe for intelligent data use, offering significant benefits at the operational, managerial and analytical levels. Data use can streamline information sharing across the health-care spectrum, facilitate transparency, enable comparative studies to reduce variability in care practices and foster innovation in treatments, services and products while advocating for personalized and predictive medicine. This paradigm shift is taking place with patients gaining increasing access to their own data and information, signifying the vital role of information and knowledge in health care.

In Catalonia, the Healthcare Plan is an instrumental strategic, interdisciplinary, and collaborative framework guiding all SISCAT stakeholders towards improving population well-being, enhancing health services access and performance and achieving overall system efficiency and sustainability. The Plan emphasizes digital health or eHealth and advocates for information systems to facilitate health-care model transformation and system improvement, in accordance with the Plan's purposes and strategies. The master plan for the Catalan Information Systems has been designed to meet these goals. This plan is not just a technological upgrade; it represents a blueprint for data management and information systems architecture, preparing for and even leading changes in the health-care model, professional interactions and patient relationship with the health-care

system. Moreover, it promotes collaboration among stakeholders, defines semantic and technical standards, and fosters technological innovation. In designing this Plan, a wide range of stakeholders have been involved, including information systems managers, health service providers, health-care delivery professionals, health management experts and health planners, under the sponsorship of the Catalan Health Service, making it a comprehensive initiative.

Ceuta

Continuous glucose monitoring for people with type 2 diabetes

In Ceuta, an autonomous city with a high prevalence of diabetes and a unique health-care structure, a pilot project was initiated in September 2021 to evaluate the improvement of metabolic control of people with type 2 diabetes through continuous glucose monitoring. The city has one of the highest national mortality rates from diabetes and life expectancy three years lower than the national average. The project, led by primary care, uses a flash sensor for people with type 2 diabetes with specific inclusion criteria, such as newly diagnosed diabetes requiring intensive therapy, poor metabolic control on multiple drugs and significant functional disabilities.

Since September 2021, 92 people with type 2 diabetes with poor metabolic control, more than 10 years of disease development and comorbidity have been monitored. Preliminary results show excellent patient involvement and empowerment regarding their disease and a reduction of glycated haemoglobin (HbA$_{1c}$) levels to between 7 and 8. In a sample of 31 of the 92 patients, after using continuous monitoring, 48% achieved an HbA$_{1c}$ below 8, with 68% having a coefficient of variability below 36, and 55% having a time in range above 70. This improvement in metabolic control significantly reduced hyper- and hypoglycaemia and the risk of cardiovascular and microvascular complications in a short period.

Extremadura

Extremadura's Community Health Strategy

The Extremadura Community Health Strategy aims to promote community health in the health zones of Extremadura through primary care teams. This strategy is based on the community intervention method of Marco Marchioni, drawing on previous local experiences (Project Progress CS El Progreso) and health area experiences (Badajoz Health Area). Key elements of the Strategy include community health coordination, participatory research, priority-setting methods for needs and problems, community activity and intervention programmes, outcome evaluation and continuous dissemination.

Extremadura's Community Health Strategy was published after adapting successful previous local and health area experiences to the current context and conditions of primary and community care. The Strategy was presented on 29 November 2022, and is pending implementation. Lessons learned from previous experiences include the importance of institutional support, readiness of primary care teams, local administration involvement, valuing existing community activities and training professionals in community methods to drive community actions.

Galicia

Telemonitoring in primary care: a five-year implementation experience

The Galician Health Service developed a telemonitoring tool called TELEA in response to the need for improved telemedicine tools during the COVID-19 pandemic. Initially implemented in 2017, TELEA is available to the entire Galician population and has been integrated into both primary care and hospital settings. The tool enables health-care professionals to access clinical data from telemedicine patients, which is included in the single electronic health record system for all of Galicia. TELEA's colour-coding system facilitates intervention by health-care professionals while synchronous and asynchronous communication methods enhance communication between professionals and patients.

Over its five-year implementation, TELEA has improved the quality of life for 85% of control group patients, reduced caregiver burden by 8%, decreased face-to-face primary care consultations by 31% and made other improvements. In 2021, the European Commission recognized TELEA as a best practice in primary care, and the Galician Health Service will lead the transfer of best practices in primary care to other European Union (EU) countries through the Joint Action on Transfer of Best Practices in Primary Care (CIRCE-JA). TELEA has not only provided better control and increased awareness of patients' conditions but has also enabled the establishment of new management models for patients with chronic and acute conditions.

La Rioja

Nursing talent retention and contract plan: from university to national health system

The Nursing Talent Retention and Contract Plan aims to develop a competitive and sustainable proposal for human resources retention tailored to the needs of primary care, shifting the focus from a results-oriented approach to a people-centred management approach. The challenge for the NHS is to efficiently manage its talents to generate sustainable competitive advantages. Key initiatives include engaging with nursing students, improving uniform provisions, promoting loyalty and job stability with longer contracts, fostering the development of specific programmes and encouraging research by creating a multiprofessional primary care research unit.

In 2022, the Plan resulted in hiring more than 50 nursing professionals, representing a 20% increase in personnel to reinforce the basic health zones. Ten nurses from the latest graduating class of the University of La Rioja were recruited, along with three midwives and two specialists in family and community nursing, demonstrating the Plan's effectiveness in attracting and retaining talent within the health-care sector.

Community of Madrid

Organizational flexibility and care model

PHC in Madrid faces a substantial challenge of care coverage driven by the shortage of physicians, particularly family doctors and paediatricians, in highly demanding health centres and those distanced from large population clusters. This care deficit, further complicated by leave and absences associated with different career stages, contributes to an increased workload and difficulties in care accessibility. This predicament is

compounded by the need for generational transition within the profession. In response, the Community of Madrid's Primary Care Healthcare Management has employed strategic planning to address the shortage by optimizing human resources and enhancing professional availability. Their approach involves refining accessibility, reorganizing care and cultivating an organizational flexibility built on the principles of the care model. Initial results demonstrate a marked improvement in care coverage and accessibility, along with health centres successfully establishing personalized care maps tailored to their specific demographic.

The strategy's main objectives involve enhancing health-care capacity, aligning it with the evolving demands of the population and workforce. This includes increasing the number of professionals in primary care, implementing attractive remuneration schemes and improving care coverage, especially in the domains most affected by shortages. Efforts also extend to improving accessibility and developing individualized health-care maps for each centre based on their demographic profile. Starting in 2019, the Primary Care Healthcare Management of the Madrid Health Service initiated strategic planning for 2020–2024, which got disrupted by the COVID-19 pandemic but resumed after the first wave. The operational plan developed considers the workforce size and adaptation, health-care reorganization and managing health centre accessibility. Multidisciplinary teams were established to develop each line of work, yielding significant improvements in professional availability, accessibility and care organization. The project's innovative approach and resultant quality improvements underline its potential replicability in other centres and organizations facing similar challenges.

Primary Care Community Health Strategy of the Madrid Health Service
The Madrid Health Service's Primary Care Community Health Strategy focuses on incorporating community-based health-care services into primary care to optimize the health and quality of life for individuals and communities. This strategy aligns with the 2022–2023 Primary and Community Care Action Plan and the Recovery, Transformation and Resilience Plan. Spanning 2022–2026, the community-based approach consists of three levels: individual and family, group and collective. The strategy aims to enhance and strengthen community orientation at all three levels of health care provided by health centres, focusing on disease prevention, health promotion and interdisciplinary and intersectoral collaboration.

The strategy is built on the three Is (interdisciplinary, intersectoral and interoperability) and the three Cs (coordination, collaboration and commitment to intersectoral cooperation), with nine strategic axes addressing various development objectives. These include information dissemination, management reform, integration of normative frameworks, equal access to health care, digital ecosystem creation, professional training, research promotion, financial strategy, and ensuring control, monitoring and improvement in accordance with the transparency requirements of the EU funds.

Murcia

Mental Health Improvement Strategy 2023

The Murcia Region's Mental Health Improvement Strategy 2023 has been devised with a focus on a holistic and collaborative approach to mental health care, employing five major areas of action: mental health promotion and prevention of mental disorders, structured care programmes, ensuring continuity of care through socio-sanitary and interdepartmental coordination, combating societal stigma and preserving patient rights and fostering a culture of information management, quality, knowledge and innovation. The structure has been created through a multistakeholder dialogue, incorporating professionals from various areas of the community, user associations and relatives of people with mental health issues.

The Strategy comprises 17 strategic lines of action, unfolding into 123 distinct actions aimed at issues such as suicide prevention, managing addiction behaviour and combating stigma associated with mental health conditions. Crucially, this includes a commitment to the coordination with primary care services to ensure an integrated approach. The document also details substantial infrastructural improvements, envisioning investments totalling €18.8 million for enhancing and expanding the region's outpatient mental health network. The programme aims to promote community intervention programmes, with specific efforts to prevent addictive behaviour among young people and initiatives for early diagnosis of eating disorders. Moreover, it seeks to foster interdepartmental coordination to guarantee comprehensive case assessments, facilitating access to the most suitable resources for patients and their families.

Navarre

Reinventing the primary care team

The objective of reinventing the primary care team is to improve accessibility, revitalize care programmes for chronic and multimorbid patients, strengthen self-care through education and community actions and optimize the skills of team members. This involves rethinking the roles of administrative personnel, nursing professionals, physicians, nursing assistants, social workers, psychologists and physiotherapists and retaining professionals through personal interviews with medical residents completing their residency period. A programme to incorporate 110 nurses in three stages has been launched, with different competencies developed at each stage, as part of the primary care challenge framework.

The first stage focuses on advanced practice consultation for acute processes, aiming to improve accessibility, increase resolutive capacity and promote self-care education. The second stage addresses advanced practice nursing in chronic care management, aiming to drive and guarantee integrated care for people with multimorbidity. The third stage involves a community action—driving nurse, with the goal of promoting community intervention as a participatory and transformative process. By reinventing the primary care team, the intention is to encourage and empower patients in their health care while efficiently using public resources to offer the most appropriate service for each need.

Valencian Community

Strategic Framework and Action Plan for Primary and Community Care diffusion in the Valencian Community

The objective of raising awareness for the changes in the primary and community care model in the Valencian Community was approached through the design of the Strategic Framework for Primary and Community Care. The process involved extensive input from professionals, citizens and institutions and was guided by the IV Health Plan of the Valencian Community, reviews of related initiatives, analysis of the region's situation and contributions from various stakeholders. A group of primary care experts addressed the challenges of an ageing population, chronic care dependence, health-care demand and resource scarcity by developing a SWOT analysis and outlining five strategic lines for change: primary care as the health-care system's backbone, person-centred care, strengthening primary care, enhancing the use of information and communication technologies and promoting education, innovation and research.

To implement these strategic changes, five key actions were identified: funding, human resources, new technologies, care scope and a new management model. A diffusion strategy was designed to present the Strategic Framework and Action Plan to stakeholders, including scientific societies, professional colleges, unions, neighbourhood associations and management teams. Eighteen meetings have been held so far, attended by 600 professionals, with three more planned to cover the entire Valencian Community territory. Further, 700 people have volunteered for participation, leading to the creation of 15 working groups that operate autonomously while being supported by the Conselleria's administrative resources.

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania	Lithuania
Andorra	Luxembourg
Armenia	Malta
Austria	Monaco
Azerbaijan	Montenegro
Belarus	Netherlands (Kingdom of the)
Belgium	North Macedonia
Bosnia and Herzegovina	Norway
Bulgaria	Poland
Croatia	Portugal
Cyprus	Republic of Moldova
Czechia	Romania
Denmark	Russian Federation
Estonia	San Marino
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