Generalitat de Catalunya
Consell Assessor de Salut

STRATEGIC RECOMMENDATIONS FOR THE SPECIALISED HEALTHCARE MODEL

Health Advisory Council

December 2020

Generalitat de Catalunya
Consell Assessor de Salut

Coordination:

Secretaria tècnica del Consell Assessor de Salut. Departament de Salut, Generalitat de Catalunya

Authors:

Carme Planas-Campmany. Secretaria Tècnica, Consell Assessor de Salut (CAS), Departament de Salut, Generalitat de Catalunya.

Iria Caamiña-Cabo. Secretaria Tècnica, Consell Assessor de Salut (CAS), Departament de Salut, Generalitat de Catalunya.

Elena Calvo-Valencia. Secretaria Tècnica, Consell Assessor de Salut (CAS), Departament de Salut, Generalitat de Catalunya.

First edition:

Barcelona, December 2020.

Linguistic advice:

Servei de Planificació Lingüística del Departament de Salut

URL: https://scientiasalut.gencat.cat/handle/11351/5614

The Health Advisory Council's mission

The Council's role is to rethink and reshape the model we want in the future, aligning it with the social, demographic and technological needs and changes that will emerge in the next 20 years.

The Council shall provide a forum for calm reflection, removed from the Ministry's day-to-day affairs, and, as such, become a tool that can help us, as a country, to build a better designed and better planned future for our health.

Alba Vergés

Minister for Health

The Health Advisory Council's vision

The Council's work will be centred on drafting recommendations that will guide the specialised healthcare model, viewed as an essential part of a patient-centred model, that can give a comprehensive, integrated response to people's needs, with unlimited possibilities but limited resources.

Manel Balcells

Chair of the Health Advisory Council

Contents

1. Introduction

Long before the COVID-19 pandemic, there was already a strong pressure to transform the health and welfare systems and consolidate more equitable and viable people- and community-centred care models.(1,2) For this transformation to happen, it will be necessary to define strategies and reconfigurations that have become increasingly necessary, in an environment characterised by uncertainty, in which all stakeholders' health and welfare needs, preferences and expectations are changing. At the same time, changes are taking place in the demand pattern in aspects related to the economy, policies and culture.(3)

In this context, there is a demand for care models designed with a more holistic, community-centred vision , that go beyond the walls of the hospitals and integrate the contributions of social and primary, community and specialised health care organisations.(4) Care models are needed that guarantee a more efficient distribution of services, ensuring that people receive the right care in the right place at the right time.(5)

The Health Advisory Council (HAC) shares this need to transform the model. Accordingly, this document offers proposals related to the strategic issues that must be considered in specialised care (SC).

High-income countries with developed health systems face a growing demand for specialised, intensive, predictive, preventive and personalised healthcare (6,7) that offers an equitable, high-quality response to people with complex health needs who want to make decisions about their health.

The Council considers that it is essential to find a sustainable balance between community-based and specialised care (SC), with the baseline premise that SC concentrates a significant part of the innovation required to maintain cutting-edge clinical practice. In Catalonia, the financial challenge this entails is enormous.

In a report published in 2016, the National Health Service (NHS) England Specialised Services Commission (SSC) (8) provided a global vision of the future of SC in which it identified challenges that have provided the basis for the Council's areas of discussion: governance, funding, the role of providers, the concentration of expertise and technology with more service capillarity, reimbursement systems, information systems, transparency and accountability. In its reflections on these areas, the Council has been assisted by experts invited to share their points of view with the Council.

In fulfilment of the task for which it was created, the Council has drawn up this document, in which it proposes a distinctive definition of SC, albeit drawn from the definitions of neighbouring European countries, and puts forward 12 recommendations for developing the specialised healthcare model.

2. The present situation of specialised healthcare

Specialised care (SC) is often conditioned by definitions based on the services it delivers.(8–11)

One of the mostly widely cited definitions is that of the National Health Service England, which describes its specialised services as those that deliver innovation-catalysing, cutting-edge care. This care is usually provided at times when people have most needs.(10,11) Effort has also been made to differentiate between levels, ranging from superspecialised services that target very small groups of people to specialised services that are relatively common. However, all of them are associated with a high cost.(8)

In Catalonia, the accepted definition of SC offers a cross-disciplinary vision. It is described as *social or health care delivered to people with complex needs by services specialised in this type of care.*(12)

2.1. Specialised healthcare in the comprehensive, integrated care model

The present and projected models are moving toward an integrated system of care in which specialised care (SC) expertise permeates all parts of the network to ensure a universal reach.(13)

The essential domains and attributes for developing integrated care networks define the highest level of integration as being that in which delivery of specialised services preferably takes place outside of the hospitals.(13) Specifically, the King's Fund experts recommend concentrating SC to respond to health situations or problems for which robust evidence is available, moving forward in the concentration of services while at the same time developing SC networks with a

broader coverage to guarantee the uniform delivery of quality care in all parts of the territory.(5,14)

When categorising services within a certain level of specialisation, there are authors who say that this should be based on an overall assessment of certain dynamic criteria (complexity, incidence, prevalence and resource consumption) and consider that the higher levels of specialisation correspond to more complex, rare and resource-intensive services.(14) They also describe that the planning of specialised hospital services is dependent to a considerable degree on health professionals' level of knowledge and experience.(14)

The international evidence shows a contentious impact on the association between healthcare concentration and quality, unit cost (per person) and healthcare integration.(15) Certain economic evaluations of the concentration or centralisation of SC services show that decision-makers may be misled by confusing, biased information produced by studies that do not use standardised methods.(16) It is important to improve the economic evaluations' methodology and conclusions and give greater weight to healthcare concentration-related parameters other than cost, such as health outcomes.

One of the referenced studies that comes closest to a global, cross-disciplinary, forward-looking concept of SC is that led by the Specialised Services Commission (SSC) in 2016 in the United Kingdom. When working on the document, the Commission made an open appeal to the system's stakeholders to contribute to developing a forward-looking proposal for the specialised care provided by the National Health Service (NHS).(8) The SSC was formed as a limited-duration, independent working group whose mission was to formulate recommendations to the Government, NHS England and other health organisations on the future budget assignment of more than 15 billion pounds to specialised services. The first step taken by the SSC in its work was to define a number of patient-centred principles (Table 1) on which it would subsequently base its report and make its recommendations (Table 2).

Table 1. The principles of patient-centred care that shaped the Specialised Services Commission's deliberations (8)

The principles of patient-centred care that shaped the Specialised Services Commission's deliberations (8)
• Specialised care should be equitable, leaving no-one behind. • Patients should be assured of appropriate specialist involvement in their care. • Systems and processes should be focused on maximising patient outcomes • Specialised care should be delivered as close to patients' homes as possible. • Patients should be involved in decisions about their care, including future service development • Patients and the public should be able to hold the NHS to account for the quality of specialised care.

Source: Report of the Specialised Services Commission chairman: Lord Warner. 2016.(8)

Table 2. Recommendations for specialised care. Specialised Services Commission, NHS England, 2016 (8)

Recommendations for specialised care. Specialised Services Commission, NHS England, 2016 (8)
1. Specialised services should be defined in terms of the population level at which it makes sense to share financial risk, consistent with the best interests of patients , ensuring that services get appropriate funding to deliver best care (recommendation addressed to the Governmentand NHS England). 2. The management of many specialised services should be delegated to regional and local levels, with national management retained primarily for complex specialised services and highly specialised services (recommendation addressed to the Government and NHS England). 3. Mandatory national standards should be retained and developed as the basis for the proposed, more innovative approach to the management and delivery of specialised care (recommendation addressed to NHS England). 4. The relationship between commissioners and providers should shift towards networks of providers being given responsibility to deliver an end-to-end service for patients (recommendation addressed to NHS England, NHS Improvement and Providers). 5. Contracts for networked specialised care should reflect the total cost of care for patients, thereby incentivising efficient provision in and close to people's homes, supported by nominated care coordinators using care plans agreed with patients (recommendation addressed to NHS England and NHS Improvement). 6. Reimbursement models should be amended to reflect and encourage the development of specialised care networks, moving towards annual targeted funding for specific long term conditions, linked more closely to outcomes (recommendation addressed to NHS England andNHS Improvement). 7. Comprehensive cost and key outcomes performance data must form an integral part of these changes, for example by recognising the importance of databases in monitoring and driving performance (recommendation addressed to NHS England and NHS Improvement). 8. Where responsibility for managing services is delegated to a more local level, NHS England must be assured that data on patient outcomes and service costs will be recorded, published and used to ensure equity of service access and quality across the country (recommendation addressed to NHS England). 9. In the future, there should be clear-cut, annual accountability to Parliament and the public for the large sum of public money spent on specialised services, covering past performance and future priorities (recommendation addressed to the UK Department of Health and NHS England).

Source: Report of the Specialised Services Commission chairman: Lord Warner. 2016.(8)

In this context, in order to ensure effective performance of the undertaking to deliver care locally, take care and management closer to people's homes as resources allow, and foster a person-focused, provider-driven, networked specialised services model, supported by a robust financial and clinical governance, the SSC made the following recommendations:

- Use care coordinators who would work across organisational borders.
- Put in place a series of national standards that are formalised in contracts and establish nationwide accountability for all specialised services, with improved availability of information about specialised services and more transparency in delivery.
- Retain national management primarily for complex specialised services and highly specialised services.
- Propose innovative approaches to reimbursement and balance limited funding with the rapid growth in demand.
- Maximise efficiency and improve the quality of the patient's care and experience.
- Implement new technologies, put people at the core of care and reduce the emphasis on physical infrastructures.(8)

2.2. Key components of the reconfiguration of specialised care services

The studies performed by the King's Fund between 2011 and 2014 identified a series of interrelated factors that were considered decisive in reconfiguring specialised care services: workforce, quality, cost and access.(5,17) The challenge is to arrive at a configuration that optimises these components at different levels of clinical risk and complexity.(5) It was concluded that cost and workforce amply surpassed the other two as determinant factors in any such reconfiguration and also, albeit rarely mentioned as a driver of service reconfiguration, technology was a significant component of the experiences analysed and was added as a fifth key factor to be taken into account when considering a change in a clinical service. However, the weight of individual factors may vary depending on the system's evolution and also on each stakeholder's viewpoint. Imision *et al.* synthesise the available evidence in the same study:

- They question the assumptions that suggest that the reconfiguration will bring substantial savings.
- They show that it is possible to achieve more significant quality gains with improvement strategies than with reconfigurations.

- They point out the need for joint planning of professionals and services that fosters the workforce development for the new care models.
- They identify the opportunities offered by technology for maintaining locally delivered care.(5)

Evolution of the specialised care model and reconfiguration of its services must be evidence-based. Decision-making is complex and it must be able to bring greater benefit both to the people who receive the care and to the taxpayers. In this respect, it must be guaranteed that the care is affordable and cost-effective, and that the decisions made are fair and transparent.(11)

2.2.1. Putting people at the centre of specialised care

In any reconfiguration of specialised care services, people must be placed at the centre, as recipients of the care given. The balance between the reconfiguration's drivers (workforce, access, quality, cost and technology) will vary depending on the individual levels of clinical risk and complexity.(5)

The growing numbers of people with chronic health conditions and the ageing population imply greater levels of dependency with growing care and support needs. At the same time, people and communities are exposed to emerging and re-emerging infectious diseases and acute health problems which must be given immediate, intensive and personalised care. This in turn requires the involvement of multiple, often highly specialised resources at community, hospital, and social healthcare level.(18) It has also been described that the ageing population and technological progress, have a major impact on SC and increase the demand for such services.(11)

The population is also more diverse, with better informed people who will take ownership of their health information and will make decisions on how they use the services, with more decision-making capacity and higher levels of demand, autonomy and self-reliance. (9,18–20) People will take on the role of partners in caring for their health.(21)

However, despite the diversity, a number of common priorities have been identified, in the form of principles and values, to guarantee the provision of patient-centred care (Table 3). (22) People's interaction with service delivery will take place in a context characterised by the availability of large amounts of data and interfacing with technology platforms (18) whose interoperability will empower and allow more active participation by a larger proportion of the

population,(20) in spite of the digital divide. People will perhaps only want to share this information with organisations that contribute value and which they trust,(20) and which offer results related to the quality and cost of care that they will increasingly be able to interpret more clearly.(23,24)

Table 3. The International Alliance of Patients' Organizations (IAPO) principles and values for patient-centred healthcare, 2016 (22)

The International Alliance of Patients' Organizations (IAPO) Declaration on patient-centred healthcare, 2016 (22)
1. Respect for patients' needs, preferences and values, as well as their autonomy and independence.
2. Right to choose and responsibility to participate, to the level of their ability and preference, as partners in making healthcare decisions that affect their lives.
3. Patient involvement in health policy to ensure that it is designed with the patient at the centre.
4. Access and support, including access to safe, quality and appropriate services, treatments, preventive care and health promotion activities.
5. Information to make informed decisions about treatment and living with their condition.

Source: International Alliance of Patients' Organizations (IAPO), 2016.(22)

2.2.2. Professionals and specialisations

The challenge of developing, organising and planning healthcare professionals in Europe is encompassed within a global context that augurs challenges related to demographic and social changes.(25) Thus, the number of workers in the job market is expected to decrease, leading to a corresponding increase in the ratio of elderly people per active worker. Another factor will be the impact of the younger generations' gender dynamics, lifestyles, preferences and attitudes.(25) In this context, the increased demand for care, the problems of waiting lists, financial pressure, the prospects of staff shortages and constant technological change are challenging the present organisation and management of specialised services and their professionals and workers.

The professionals working in SC will benefit from the progress in knowledge and the innovations in treatment, care models and service delivery.(18) In developing health workers' skills, SC provides a valuable training in which the specialisation brings benefits to learning and research and vice-versa.(8)

There is a general consensus that specialisation in all health professions is inevitable. Specialisation is essential for improving competitiveness and innovativeness, prolonging life expectancy and exploring science and knowledge. At the same time, authors and experts advise us to remember that cooperation is necessary between more generalist profiles and other more specialised profiles, organised around and for people's health needs.(23)

In general, professionals will spend more time working in networked, inter-, multi- and transdisciplinary teams, connected to each other by information and communication technologies, with care delivery taking place without the need for enclosed physical structures. Healthcare professionals will also be expected to make the best possible use of data and technology and to acquire knowledge and skills to exploit the opportunities offered by information.(26) In order to carry out this process, the development of professional roles and task shifting have been described as the primary strategy for addressing the expected staff shortages and the growing demand for health services. However, little is known about the implementability of task shifting in specialised healthcare.(7)

2.2.3. Specialised care organisations and services: quality, cost and access

Organisations in general, including specialised care organisations, are exposed to a constantly changing environment which forces them to become flexible organisations that pull together resources and function as a public good.(27) Specifically, according to a report released by the Catalan Union of Hospitals in 2018, healthcare organisations must operate within a context of tensions and flows caused by the funding system; the evolution of recruitment, payment and assessment systems; the politicisation of the care model; the polarisation of society; the creation of alliances; the focus on results; the realignment of the teams' corporate and management culture; and the development of information systems and technologies.(18)

Specialised organisations and services are not available at all points of local care because they must provide specialised multiprofessional teams that have the necessary skills and experience.(8) In the Catalan context, where there is a growing tendency to create specialised, multidisciplinary units that integrate knowledge and expertise, difficulties are encountered in balancing this concentration of services with the local delivery of care.(18)

The available evidence on the reconfiguration of SC services identifies a number of good quality improvement arguments in favour of concentrating specialised services, but also

identifies other arguments in favour of a networked delivery.(5) For some years now, experts have been advocating the need to deliver specialised services at the most appropriate locations for people, preferably in non-hospital settings, urging the development of an extensive network of services that reach out to where the people are.(28) Warner *et al.* argue that a networked approach to care delivery offers a potential solution to the dichotomy between quality and accessibility, where the main challenge continues to be the implementation of this networked care.(8)

The new technologies open up the prospect of facilitating local delivery of the best care, in a way that is most convenient and accessible for the person.(8) The hospitals of the future see themselves operating as part of a decentralised service delivery environment, with digitally enabled health professionals who will be able to offer a more integrative patient experience, continuously innovating in care delivery and improving results (19) with the support of technology.(20)

The evidence suggests that active participation in clinical networks helps guarantee the best quality care available while at the same time lifting pressure on the professionals.(5) It also indicates that results improve with higher volumes of care.(5)

In this context, in order to guarantee equity in the delivery of specialised care, for example, NHS England recommends fostering service transformation, establishing nationwide quality and access standards, and guaranteeing cost-effectiveness.(10)

2.2.4. Technological progress and digital transformation

Technology is considered an unquestionable change driver for health systems.(5,17,20) It is hoped that it will reduce inequality and improve access to health services for vulnerable people.(26)

Digital transformation, based on emerging technology, will play a key role in developing a model in which care provision is organised around the person instead of around the institutions.(20) Furthermore, opportunities have been identified in the progress achieved in adopting new technologies and developing innovative solutions for people's care within the context of a health emergency such as COVID-19.

By its very nature, SC stands at the cutting edge of science and is pioneering the use of technology and innovative solutions, which must be integrated in clinical practice in

accordance with prioritisation criteria and managed with care. And, depending on the results of the assessment, they can be rolled out to the rest of the system at a later date.(8)

The evidence shows that technology empowers people, providers, governments and other stakeholders, making available information and tools that can improve health outcomes.(29) However, the results concerning the impact of technology on the cost-quality equation are inconsistent.(5)

Artificial intelligence (AI) is becoming increasingly more sophisticated, faster and more efficient. Both AI and robotics show considerable potential in the health field and offer benefits for staying healthy, detecting early, diagnosing, making decisions, treating and providing end-of-life care.(30) Health data, combined with other data and protocols, will help determine each patient's profile and move forward in microinterventions aimed at maintaining health effectively, proactively and with a significant reduction in health expenditure, with more precise, less complex, less invasive and cheaper interventions and treatments.(20)

It has also been described that the system will evolve in line with the development of new professions, roles and functions. In the specific field of specialised care, diagnostic specialties will be replaced by artificial intelligence.(18) In addition, the availability of sophisticated tools and tests may enable most diagnoses (and care) to take place in the patients' homes and communities.(18,20)

Nevertheless, problems have been described related to the fragmentation, lack of interoperability and security of technological systems in the health field, leading to suboptimal care delivery and frustration for health professionals, who perceive that part of the outlay in technology could have been invested in other care-focused resources.(31)

In an analysis of the future of the UK Government's digital vision, the authors described the four principles that should guide the digital transformation in health. These principles were based on the design of secure, ethical and effective technologies, aligned with society's values and interests and using systems that enable competition between providers, who would be rewarded for their quality: the user's needs; privacy and security; interoperability and open access; and inclusion. They also identified four priority areas in which measures needed to be taken: infrastructure, digital services, innovation and skills, and work culture.(31)

2.3. Specialised healthcare in Catalonia

In Catalonia, the model has been shaped in the last 30 years to adapt to the demographic, epidemiological and socio-economic reality and structures have been developed that are centred on the funding model and leveraging delivery diversification. Various components of the model have also been refocused to attain a more embracing, inclusive vision of health, including its social determinants.

In this context, specialised healthcare (SC) faces diversity-related challenges which it must address in line with people's needs, preferences and expectations. And it must do this within a framework of financial restraint that renders it increasingly necessary to rethink the model with a global view if it is to maintain its equity, quality and efficiency.

Furthermore, the growing health needs in SC, determined to a great extent by an increasingly older population, the ongoing uptake of technological progress, and the impact of COVID-19 will continue to put pressure on the system and generate budget tensions.

The present Catalan health model derives from the Catalan Health Organisation Law (LOSC), enacted in 1990.(32) In this context, Catalonia has a network of specialised care services (SC) which are present at all levels of healthcare.

SC refers to the provision of services aimed at meeting very specific needs and includes the system's most complex and expensive diagnostic and treatment resources. This is one of the main reasons why expenditure is always above 50% of the total. In addition, in Catalonia, the delivery of public SC has coexisted since the beginning with private SC, to which 25% of the population have access through private health insurance.

SC is delivered through the public health network, which has been rolled out to all parts of Catalonia: hospitals, specialised care centres (dialysis, rehabilitation, oncology, mental health and social healthcare).(9) These services comprise the basic common portfolio, which consists of the care services fully covered by public funding.(9)

In the LOSC, the law that is applicable to the SC included in the Catalan public health system,(32) SC is presented as part of a comprehensive, integrated care model, characterised by a balanced distribution in the territory and present in each of the health regions. Later on, in 1993, the reform of specialised care (RSC) was begun in Catalonia, focused on the reorganisation of SC as one of the objectives identified by CatSalut to improve the population's access to healthcare and the quality of

the care received. This reform was based on the organic and functional integration of SC in the public hospital network. This network was consolidated formally in 2010 as part of the Catalan general public health network (SISCAT),(33) with the ultimate goal of guaranteeing universal health coverage.(34)

The Spanish National Health System's health services are regulated by the service portfolio described in Law 16/2003 (35) and Royal Decree 1030/2006,(36) in accordance with the basic principles set forth in the General Health Law 14/1986.(37) The National Health System's common portfolio of services (36,38) determines that the portfolio of common specialised care services includes specialised care in outpatient clinics and day hospitals (medical and surgical), in-patient hospitalisation, primary care support in early hospital discharge and, if applicable, home hospitalisation, indication or prescription and performance, if applicable, of diagnostic and treatment procedures, palliative care, mental health care, and the rehabilitation of people with a recoverable functional deficit. As regards the accessibility of specialised care, it is stipulated that the care is delivered, whenever the patient's condition allows this, in outpatient clinics and day hospitals.

In Catalonia, specialised and hospital care is provided by means of in-hospital and community resources through the SISCAT, which has been rolled out to all parts of Catalonia: hospitals and specialised care centres (dialysis, rehabilitation, oncology, mental health and social healthcare).(9) The services include those offered by acute care hospitals (Table 4), such as outpatient specialised care (outpatient clinics), hospital admission, emergencies, day hospital, treatments, surgery with or without hospital admission, and diagnostic tests.(9)

Recently, the Catalan Health Service (CHS) has presented the Model for organising home hospitalisation in Catalonia.(39)

Table 4. Types of public hospitals (9)

Types of public hospitals, CatSalut, 2019
1. Basic general hospitals. These provide a full response to the population's usual requirements. These hospitals have the necessary care technology to treat conditions that do not require a significant degree of specialisation. When the level of complexity cannot be covered by the first-tier hospital, the patient is referred to a reference or high technology hospital.
2. Reference hospitals. These handle virtually all the health problems that can be cured and improved, except for those that require high-level technological resources or a highly specialised practice.
3. High technology hospitals. These have the so-called superspecialties and the latest diagnostic and treatment technologies. They handle patients who cannot be treated in the reference hospitals.
4. Light hospitals. Health centres that take specialist and emergency care to the population, expediting processes and fostering integration in the primary healthcare system. The light hospitals, without hospital admission, can offer specialised care clinics, day hospital, outpatient surgery, emergencies, diagnostic imaging and complementary tests.

Source: Types of public hospitals, CatSalut, 2020. Available at: https://catsalut.gencat.cat/ca/serveis-sanitaris/atencio-especialitzada-hospitalaria-aguts/

2.4. Specialised care professionals

According to the situation analysis performed in 2018 by the Catalan Ministry of Health,(40) the distribution of the healthcare professionals registered in Catalonia, consisting mostly of nurses and physicians, is such that almost 60% of health professionals are concentrated in acute care hospitals, 3.6% in mental health care and 6.2% in social healthcare (the remaining 27% work in primary health care).

As regards medical specialties, over half of the specialists are concentrated in eight specialties: family and community medicine (21%), internal medicine (5%), anaesthesiology and resuscitation (4%), orthopaedic surgery and traumatology (4%), obstetrics and gynaecology (4%), psychiatry (4%), general and gastrointestinal surgery (3%), and paediatrics and specific areas (3%). In the case of nursing specialties, about 90% of nurses do not have any recognised specialty. The delay in deploying and implementing nursing specialties has a negative impact on their recruitment and retention, and on the development of the new roles that they could perform.

The main messages transmitted by the Ministry of Health concerning the diagnosis of healthcare professionals' needs were the following:(40)

1. The Catalan Register of Health Professions (RPSC) must be the main source of information.
2. We cannot say that generational renewal in the health professions is guaranteed.
3. The sufficiency and suitability of the staffing levels in the different care lines must be reviewed in order to guarantee availability of the care model for all of Catalonia's population.
4. The present number of nurses is insufficient to ensure adequate coverage of the needs of the new care models.
5. In order to enhance the centrality of primary care in our public health system, it is necessary to increase the number of specialists in primary care, together with the implementation of other complementary measures.

Subsequently, the Professional Dialogue Forum, centred on the healthcare perspective and framed within Law 44/2003, of 21 November (LOPS) regulating the Health Professions,(41) identified in its conclusions a number of present and future challenges,(42) including:

- Retaining professional talent and the commitment to research and innovation.
- Defining the job titles related to nursing specialties.
- Establishing cross-disciplinary teaching units beyond the hospital environment.
- Adding the vision of expert professionals in the field of bioethics.

- Including an aptitude test in the selection of students who wish to study for bachelor's degrees in health-related professions.
- Developing and empowering the nursing profession.
- Implementing planning- and organisation-centred professional development policies that align with people's real health needs.
- Advance in the accreditation requirements for teaching staff.

3. Rationale

As a general rule, when exploring the present and future of health and welfare systems, the models focus on individuals and communities and give priority to the local delivery of care within a comprehensive, integrated care system. The intention is to build and preserve more resilient health and welfare systems that are capable of providing universal coverage, focusing on individuals' and communities' needs, preferences and expectations instead of being organised around the services.

From a theoretical standpoint, nobody questions the fact that the beneficiaries of the reforms must be the person and the professionals and not the services, hospitals or technology. It should be considered that advanced healthcare is particularly demanding in terms of expertise, in the form of well-trained, experienced professionals, and in terms of resources, particularly as regards the availability of advanced technology and innovation.

In this context, it is extremely complex to determine the approach that should be given to the specialised care (SC) model in the future, from a strategic, cross-cutting perspective.

The literature talks of the need for the new SC care models to go beyond the hospital building; to integrate the contribution made by primary care, non-hospital specialised care and social care; to move beyond the traditional definition; and progress toward flexible, agile organisations that agglutinate knowledge and expertise by pooling essential resources. Thus, experiences are identified that segment SC on the basis of evidence and then, at a later point, concentrate services and develop extensive care and service delivery networks. The literature also identifies five key elements as drivers of the transformations of SC: access to the system, workforce, quality, technology and the costs that all this entails. In spite of the availability of evidence, the world lacks a global, comprehensive, consensual, forward-looking vision in the field of SC.

No clear, encompassing proposals are seen in Catalonia either for the cross-cutting transformation of SC, in spite of the effort made by some organisations to analyse the system's needs and trends

that should be taken into account for the field of SC. In order to continue moving forward, the Health Advisory Council's reflection and positioning on the future direction of SC in health has been focused on considering SC as part of a comprehensive, integrated care model and taking into account the scope and complexity of this area of responsibility within the Catalan Ministry of Health. Specifically, the Council considers that SC needs strategies that enable it to evolve in:

- Regulation, within an appropriate legal framework.
- Professionals, by facilitating their development and recognition.
- Funding, which must be sufficient and aligned with health planning.
- The reimbursement systems, which must be fair and act as a tool for rewarding providers' response to health objectives.
- The delivery of accessible, quality, safe, efficient services.
- Technology and innovation, which must be assessed and implemented systemically in line with the nationwide planning put in place by the appropriate authority.

Work on this document had to be halted due to the pandemic. The Council centred efforts on reflecting on the ensuing crisis and made proposals in the form of strategic recommendations on the health system after the COVID-19 crisis.(1) Focused again on the model for SC and with the lessons learned from the first wave of the pandemic, the Council maintains its positioning and considers that the transformation of SC is more justified and urgent than ever.

4. Objective pursued by the document

To formulate strategic recommendations that provide guidance for the specialised care model, within a comprehensive, integrated healthcare model that cares for people, provides a suitable environment for professionals, gives priority to the local delivery of care, and is fair, high quality and sustainable.

5. Methodology

Work and discussion meetings among the Health Advisory Council's members, both face-to-face and online, with the use of collaborative work tools, report and literature reviews, and contributions by guest experts, who have shared their vision applied to the field of specialised care.

6. The deliberation process

In this term of office, the Health Advisory Council has concentrated on analysing and drafting strategic recommendations for the Catalan health system as a whole, specifically addressing each of the areas in which it is organised, and it has done this with a global, integrative vision.

In 2019, the debate was focused on primary and community healthcare (PCH) (43) and care delivery to people with social and health needs.(44) The outcome of this debate were two documents that highlight the importance of taking measures based on a global perspective of the health system. In 2020, the Council centred, first of all, on drafting and developing strategic recommendations focused on the health system after the COVID-19 crisis (1) and then on the present guidance and positioning paper for the specialised healthcare (SC) model.

In the latter case, deliberation centred on reviewing the status of SC, arriving at a definition of specialised healthcare and identifying the main areas for action and the priority aspects: people, workforce, regulations, service delivery, funding and the reimbursement system, knowledge, and technological progress and innovation.

Due to the scope and complexity of the specialised care model and the insufficient availability of studies offering a comprehensive, global vision of the SC model required to meet people's health needs, the commission received from the Health Ministry posed considerable challenges. To help us address these challenges, we were assisted by nine external experts who generously shared their vision of specialised care with us.

The Council took the position that it was not possible to reform, reorganise or transform the healthsystem without transforming specialised care, primary and community care, and social care, at the very least.

The key players of the reform, framed within a person-centred care model, are the people, their caregivers and their families. Their engagement is necessary, their expertise must be recognised and their opinion on how they would do it must be heard.

Health professionals are also key players; they must be given decision-making capacity and their roles must be adapted to the changing reality, putting emphasis on knowledge, training and research.

The new models must go beyond the hospital building, integrate the contributions of primary care, specialised care and social care, overcome traditional definitions and evolve toward flexible organisations that pool and accumulate sufficient resources for the delivery of SC.

Strategic answers are needed for regulation, service provision, funding, resource allocation, professionals and the integration of technological progress and innovation, among others. It was stated that the key is how to obtain a configuration that optimises interrelated key factors, such as the health professionals' contribution, care quality and access, the cost of technology and its uptake, taking into account the different levels of clinical risk and complexity.

Based on the discussions held during the meetings, the Council agreed that work should be focused on drafting a series of recommendations that would guide the specialised healthcare model, viewed as an essential part of a person-centred model that must give a comprehensive, integrated response to patients' needs, with unlimited possibilities but limited resources.

7. The Council's definition of specialised care

The Health Advisory Council’s definition of specialised healthcare, 2020

Specialised care consists of the material and human resources within the health system that are characterised by a body of constantly evolving specialised knowledge, these resources being organised in a collaborative network and having the necessary adaptability, organisational flexibility and agility to address more complex* health issues and problems as close as possible to where the person lives.

*Complexity can be determined by the severity and suffering of people, organizational difficulties or technological needs, and the demands of specific scientific knowledge.

8. The Council's vision

The Council has examined a number of points in defining its vision, highlighting key concepts such as flexibility, concentration, proximity and network of networks.

The Council considers that the healthcare system is plastic and has been reformed and reorganised repeatedly, stretching it and often exceeding the limit of its elasticity. This has resulted in some almost irreversible changes.

In this context, during the first wave of the pandemic, hospital-based specialised care (SC), the area that consumes most financial resources, provides the laboratory for high-technology trials and drives innovation, has shown a previously unimaginable capacity for transformation and adaptation, led to a considerable degree by its professionals.

However, given the tensions to which it is subjected, particularly in the form of financial constraints, and the scarcity of certain professional profiles, it has become necessary to identify, test, implement and assess formulas that can assure continued use and sustainability of its elasticity. It must also be remembered that the powerful SC and its most powerful centre of operations, the high specialty hospital, consume resources that are limited.

The challenge of SC is to deliver a specialised, predictive, personalised,(6) shared(21,45) response that is also equitable, quality, safe and efficient in its response to people with complex health needs. To achieve this, particularly the supply of professionals, services and technology has been configured and reconfigured, and it has been focused on results, with the fourfold goal of improving the population's health, the care experience of patients, the system's efficiency, and the professionals' work environment.(46)

In an age of continuous growth of knowledge, multiple treatment options and limited resources, the Council spotlights the reinstating of humanist values in SC. It also highlights the need to formally include the use of living wills in routine practice and avoid overdiagnosis and overtreatment in all stages of life.

One of the ongoing debates in specialised care (SC) centres on the search for a balance between the more or less hierarchised central elements and the matrix elements.

In this context, the Council advocates a SC that combines concentration and proximity through the development of interconnected networks and co-responsibility by all of the system's agents. Achieving this will require help from tools such as digitisation and mobility, particularly due to the new dimension that health transfers of both people and equipment are acquiring. Proximity and

centralisation are not contradictory but complementary; the combination of the two must guarantee equity in access and outcomes and foster work in an interconnected network.

The networks must be articulated co-responsibly between providers, in accordance with the principles of capillarity and subsidiarity, either taking the SC to the person's environment or taking the person to the SC services, depending on the complexity and intensity of care. Delivering the right care to the right place requires organisational flexibility, adjusted to the level of complexity, incidence and resource consumption, and determining whether it meets people's needs, preferences and expectations. Working in interconnected networks enables complementation, avoids duplicating administration or care delivery, and improves resource distribution.

Health professionals have a key role to play in the continuum between SC concentration and proximity. Primary and community care, and the community it serves, must be guaranteed access to nominated specialised care teams when more complex or intensive interventions are needed. This requires the SC teams to work together and in coordination with the primary and community care teams, sharing knowledge of the person's life history. This in turn improves people's care and experience and health professionals' satisfaction.

The Council visualises a specialised care (SC) model that restores the values of humanism, centres on the patient and is elastic, flexible and adaptable. This model requires an organisation composed of interconnected networks and must seek a balance between service concentration and care proximity, both being conditioned by the inevitable constraints in the availability of resources.

9. Strategic recommendations

The Health Advisory Council has centred the discussion on the key stakeholders, namely, individuals, communities and society in general. In addition, this discussion has been based on five key elements identified in the literature as drivers of the transformation of specialised care: quality, workforce, access to the system, technology, and the costs that all this entails.

It has explored in greater depth certain aspects that are more important, such as values in general and empathy and active listening in particular. It has also considered the key role played by health professionals, the difficulty in attracting and retaining certain specific profiles, leadership, networks and networks of networks, collaborative environments, decision-making, care delivery with less face-to-face interaction, the intensification of home care, and the integration of artificial intelligence in decision-making, among other things.

In this document, the Council's strategic recommendations for the future direction of the specialised care model have been developed and ordered in accordance with the main themes, key points and important aspects studied during the reflection process (Table 5).

Table 5. Definition of the themes comprising the recommendations' focus areas. Health Advisory Council, 2020

Main areas identified	Key elements, transformation drivers	Strategic SC recommendations
• People and their environment • Professionals • Regulation • Service provision • Funding and reimbursement system • Knowledge • Technological progress/innovation	Taking into account the different levels of clinical risk and complexity, the system must be configured with the goal of optimising: • Professionals • Accessibility • Quality • Cost • Technology	1. People 2. Professional values 3. Professional practice 4. Knowledge, teaching and research 5. Governance 6. Regulation 7. Equity and accessibility 8. Quality and safety 9. Organisations and delivery 10. Funding and reimbursement system 11. Innovation and technology 12. Transparency and accountability

Source: Own data.

The SC model used as our baseline has substantial room for improvement as regards the holistic and humanistic vision of care. More must be done to reduce territorial inequalities, making better use of existing structures and giving greater preference to the practices that offer the highest value.

Any health model improvement proposal must include strategies that encourage and facilitate patients' involvement and engagement with their own care and also the engagement of the health

professionals, teachers, researchers, managers, planners and decision-makers to ensure successful implementation of the measures.

In order to contextualise the Council's recommendations for SC, knowledge of the Council's prior documents would be useful in that they define elements for configuring the basic lines of the future care model.(1,43,44) These documents have identified a series of values and principles that should permeate the health care model (Annex 1) and proposed a series of strategic recommendations on which the health care model can be built (Annex 2).

In its reflections, since the beginning of the legislature, the Council has thought in terms of a comprehensive, integrated care model that puts people at the centre of its interventions and facilitates access to nominated professionals who organise themselves so that the patient does not have to travel the length and breadth of the system. This model forces providers and, therefore, professionals too to interrelate on an ongoing basis, with the different care levels working together and pooling the teams' different decision-making capacities.

In this paradigm, it is clear that each proposed recommendation, both in the documents published previously and in this document, addresses all the areas of care in which the system is organised and, therefore, encompasses the system in its entirety. In the document on SC, recommendations directly addressing specialisation are proposed. This document closes the Council's tetralogy, which together offers a global vision of the system (see the Council's documents).

In view of the recommendations made by the Council in the different documents, the general conclusion would be that the future Catalan health model must maintain universal coverage and be well governed, with a strong leadership and a clear separation of functions. The model must guarantee equity in accessibility, quality, safety, efficiency, transparency, accountability and democratic public engagement and, to do this, it must be endowed with territorial governance structures.

Specialised care must make the effort to put people at the centre once and for all. Given the nature of this type of care and the manner in which care is currently delivered, it is easy to lose sight of the fact that treating a very specific health problem also requires a holistic, empathetic approach to the patient and that the patient should be an active participant in the process, having been informed of the different alternatives available to solve his or her problems, and be able to take part in the decisions.

It is essential for health professionals to work collaboratively or, at least, coordinate effectively their care delivery. Along these lines, providers must have access to instruments that facilitate and support organisation of the transdisciplinary work performed by the territorial teams, which must be coordinated with that of the supraterritorial teams and feed back to primary care as the core function.

This model requires capitative funding, which guarantees fairness in the distribution of resources and integrates both health and social care. This capitative funding, already applied in primary and community care, must be extended to specialised care and social healthcare. Innovative solutions must be developed to guarantee longitudinality and offer locally delivered care whenever possible.

A new body of regulations must be drafted that facilitates the elasticity, agility and flexibility of the system as a whole and of each of its component parts, and which guarantees legal security for its stakeholders, given the serious shortcomings of present legislation in this respect.

9.1. The strategic recommendations for specialised care

In the following section, we define more specific recommendations for the area of SC, which complement the recommendations given for primary and community care (PCC), the recommendations for the care of people with social and health needs, and the general recommendations for the post-COVID-19 situation drafted by the Council.

9.1.1. SC recommendation 1. People

Guarantee people's participation in the decisions that affect their health, from an attitude of respect, empathy and active listening to their needs, preferences and expectations. To facilitate this participation, patients must be provided with clinical information about their situation in readily understandable terms, particularly with respect to the possibilities of highly specialised care.

People and their families are at the centre of today's healthcare systems; so they should also be at the centre of specialised healthcare. They possess unique knowledge, viewpoints and experiences that contribute an essential perspective to decision-making about their health process and about the health system in general.

The present and future are posed with diverse people, some of them more informed, demanding and autonomous, and others with a greater need for care, information and support, each one of whom requires different intensities of specialised care and different levels of personal preparation. But within this diversity, all of them perceive health and illness from their own values and their own experience and have expressed shortcomings in the health

professional-patient relationship in terms of the humaneness and comfort expected in the care, particularly in superspecialised, high-tech environments.

On the one hand, an effort must be made to encourage empathy and active listening in increasingly digitised environments, taking into account the different patient profiles treated and facilitating their participation, co-ownership and self-care. In putting this in place, it must be integrated and systematised in professional practice, allowing people to express their wishes from a better understanding of their condition and with more control of their care, respecting their autonomy and abiding by the terms of Law 21/2000, of 29 December, on information rights concerning patients' health and autonomy, and the clinical documentation. Even greater effort must be made in the case of people with multiple pathologies or chronic illnesses who are managed in primary and community care (PCC) but with the indispensable coordination of specialised care. In the Shared Clinical Record of Catalonia, it is necessary to foster use of advance decision planning, given that it already provides the health professional with a lot of information, has been drawn up by the patient with the PCC team and is particularly useful in the event of acute exacerbations because it provides criteria for care in critical situations. On the other, people must be made a part of the design and delivery of all types of service.

To facilitate patients' engagement, health professionals must be given tools for providing clinical information and also information on the appropriate use of resources, circuits and devices, based on the principle of the responsible use of public resources. It is also recommended to provide information on the cost, especially in certain treatments and interventions in which cost may be a relevant factor that patients and their family must consider. This information must be given in terms that are easy to understand, particularly as regards the possibilities of specialised care, and must be sufficient to allow the patient to decide independently, assessing risks and benefits within the context of the system. This requires guaranteeing the availability of a nominated specialised care team, who can support the patient through the process and provide appropriate information, impart the necessary education, settle doubts and advocate the patient's interests and preferences in coordination with the other professionals, levels and sectors involved in the comprehensive, integrated care of the person's health.

Patients must be able to exercise their right to make informed decisions about their health in a context of almost unlimited options but limited resources.

9.1.2. SC recommendation 2. Professional values

Establish a specialised care model based on expert, up-to-date technical knowledge and also on ethics and humanism. The model must foster professional autonomy, centred on positive clinical practice, and foster professionals' social and professional recognition and satisfaction.

Professionals, the most valuable component of high-tech specialised care (SC), are experts in their field of knowledge. They are required to constantly update and master the technique that allows them to refine a diagnosis or recommend and apply a complex treatment. These are essential values of commitment to knowledge that are inherent in high quality SC legitimized by the population served.

Nevertheless, in line with what has been said in other recommendations, patients have occasionally perceived a lack of treatment and comfort due to a feeling of distance and lack of information and good communication in the care received. If these circumstances occur, the asymmetry between the professional and the person being cared for, vulnerable due to their health situation, increases. This is a reality that some people perceive particularly in superspecialised, high-tech environments.

In this respect, it becomes important to promote a model that values not only rigorous and up-to-date expertise and knowledge, but also and inseparably, empathy and active listening and focuses on citizenship (sick and healthy), to which health system professionals are due and need to be addressed. In addition, the model should promote professional autonomy, oriented towards valuable clinical practice, and encourage professional and social recognition and professional satisfaction.

Furthermore, the shortage of specialists, generational renewal, new roles, team work and clinical leadership, along with difficulties in coordination and the need to promote accessibility, make it imperative that professionals incorporate essential values such as adaptability, flexibility and mobility. At the same time, this effort needs to be measured and compensated when required.

An attempt should be made to take the solution as close as possible to the need. That is why professionals, breaking with more traditional schemes of acquired rights and immobility, must always keep in mind the possibility of travelling where it is found that travel has an affordable cost-effectiveness and adds value. And that, which should be part of the professional project, should help retain talent.

9.1.3. SC recommendation 3. Professional practice

Implement policies based on criteria that acknowledge the competence, commitment and results of the professionals who work in specialised care. Compensation and incentives must be aligned with productivity and performance, taking into account the environment and the conditions in which professionals work.

Planning, organisation, the conditions of the environment in which professional practice takes place and the terms of employment and recruitment of the SC professionals are fundamentally important and must be based on evidence. The professionals are the people who provide the indispensable knowledge and experience for improving patients' and communities' health outcomes.

Often, for a significant number of health professionals, while personal and professional growth is excellent, this does not always translate into a good career growth. For example, there is an increasingly clear consensus on the desirability of making a change and giving more authority and new management responsibilities to nurses. This is supported by their stated interest in developing these roles, given their knowledge, their comprehensive vision of the system and, above all, their holistic outlook, which is a historically characteristic trait of this professional group.

In the light of the ongoing debate on whether resources should be allocated to recruiting more staff or increasing salaries, it is essential to address issues related to the employment system, integrate the productivity requirement and define the consequences for both performance and non-performance in terms of expected results. This will require establishing criteria and making decisions to move forward in the issues related to roles, staffing levels, productivity and compensation, both in terms of salary and incentives, finding a balance between boosting staff provision and adjusting salaries and incentives. It is also necessary to reduce the high proportion of temporary contracts and reappraise the system governing the incompatible activities and compensations of personnel working in the public health system.

The regulations applied to public bodies should be re-examined with the goal of facilitating the design and implementation of a transformative human resources policy aligned with SC development strategies. These strategies should incentivise continuing training, the acquisition of digitisation skills, assessment, research and innovation, as well as developing specific measures to gauge their implementation. Health professionals' interventions must be based on the best scientific evidence available, with explicit quality criteria that also

incorporate ethical aspects, including good information and communication with the person served.

9.1.4. SC recommendation 4. Knowledge, teaching and research

Foster and implement collaborative, results-oriented environments, based on interconnected knowledge networks. Facilities should be provided for personal and professional development, fostering learning opportunities that guarantee the delivery of quality specialised care to all parts of Catalonia.

The definition of SC given by the Council in this document underscores the idea that it is based on a constantly evolving body of knowledge that is becoming increasingly superspecialised.

Specialisation is an irreversible trend that is taking place in all health-related professions, given the magnitude and growing complexity of this knowledge. In fact, specialisation is essential for improving competitiveness, innovativeness and knowledge. SC has a long tradition of creating evidence-based knowledge, and Catalonia has played a leading role in the development of health specialties. This role must be given greater prominence in the future so that it can continue to lead development in this field.

Investments made in these centres and networks must give a return in the form of improved health outcomes for patients and increased development and satisfaction for professionals. This in turn fosters account-giving and analysis of the impacts achieved with the resources invested, preventing dilution of the research clauses embedded in the centres' funding. In this respect, the research funding provided by the programmes financed by the Catalan Health Service (CHS) in the field of SC should be linked to competitive fundraising mechanisms within the framework of the Strategic Plan for Health Research and Innovation (PERIS). The research programmes contracted by the CHS must cease to be treated as an addendum, with considerable leeway in its interpretation, included in the contracts that the CHS signs with the SC centres. Furthermore, closer attention must be paid to real-time comparisons of results, strengthening the role of the Agency for Health Quality and Assessment (AQuAS) as an intelligence and assessment hub in the field of health.

At the same time, steps must be taken to foster the centres' excellence and competence, increase their capacity for attracting international competitive funds and endow them with instruments for managing these funds.

Collaborative environments must be consolidated that facilitate working in interconnected, results-oriented, co-responsible knowledge networks (for health care, research and innovation, and teaching). This requires investing time and resources in developing the professions, going beyond the frontiers of present practice and creating new learning opportunities for transdisciplinary work. These knowledge networks must foster ongoing collaboration and knowledge-sharing with the universities and the regional, national and international research centres. Regulations and organisational systems must evolve to streamline these processes and make them more efficient.

Professionals and organisations must be competent and, so that this can happen, the teaching areas must have the necessary financial resources to put in place strategies that empower professionals to take on the roles required to respond to a constantly changing reality. Developing these competencies will require a mutually supportive teaching system and research network.

The contracts signed between the CHS and the providers of SC must clearly specify what results are expected as regards its three main missions: care, teaching and research. Provider organisations must clearly agree with their professional teams what products or results must be achieved in the performance of the three main functions. Accordingly, the team must have tools and sufficient time to ensure that tasks are distributed among the professionals in accordance with their abilities and preferences. The final result must aggregate the individual results in care, teaching and research and fulfil the agreed undertakings. Each of the team's professionals will be recognised or penalised in accordance with the individual results achieved.

The present academic model does not meet all of the professionals' learning needs. The system's learning needs must be endowed and defined, particularly as regards the different professional groups' levels of specialisation, with particular priority being given to nursing. A need has been identified to improve the alignment of recruitment and training systems, paying particular attention to aspects such as end-of-life care, communication, digitisation, culture change, or transdisciplinary work, among others.

9.1.5. SC recommendation 5. Governance

Strengthen the institutions' good governance so that they can lead the transformation of the specialised care model. This requires giving prominence to the values and principles of a comprehensive care model at the service of the population's health and welfare, with both the general public and professionals playing a greater role in decision-making processes.

The separation of functions established by the model has become increasingly blurred over time and has particularly weakened SC.

The Ministry of Health must plan a series of SC health objectives that meet the needs, preferences and expectations of the people cared for by the specialised services. In order to achieve these goals, it must establish the strategic imperatives, plan service provision and determine the service portfolio, promoting networking between care levels in line with a territorialised planning process.

The Catalan Health Service (CHS) must operationalise SC services in compliance with the strategic imperatives and health goals established by the Ministry of Health. In its contracts with providers, the CHS must determine the plans and programmes that must be developed in order to achieve the goals defined by the Ministry of Health. The contracts must clearly state each provider's service portfolio, the health outcomes that it is expected to obtain, and the financial compensation that providers will receive based on the degree of compliance. As well as being public and transparent, these contracts must be understandable and readily accessible in a digital format that includes and allows consultation of the assessments of the clauses.

The SC provider organisations contracted by the CHS need to make sweeping changes in their governance. The main task of these bodies must be focused on monitoring and enforcing the service procurement contracts signed with the CHS, thereby guaranteeing that they comply with the Ministry of Health's predetermined strategic lines and health goals. The governing bodies must recruit people with the capacity to work from a profound knowledge of the subject matter to be governed. In addition, the people who form part of the governing bodies must give account of the results achieved in the exercise of their responsibilities and of the undertakings made, basically through the service procurement contract, both individually and collectively.

Confusions in the functions of the SC providers' governing bodies must be avoided. Consequently, anyone holding a position of responsibility in the Ministry of Health or the CHS cannot be a member of the providers' governing bodies. Fair representation of the population, especially of the groups considered vulnerable, and health professionals in the SC providers' governing bodies must be guaranteed. Within this framework, mechanisms must be established to ensure that the people who act as representatives protect common interests above personal interests.

Territorial strategic alliances should be fostered between specialised care providers, as in the other areas. Throughout this document, we refer to a specialised care model coordinated with primary and community care, there must be a territorial structure that is designed in accordance with interconnected network strategies to guarantee that territorial organisation and distribution follow the same lines.

9.1.6. SC recommendation 6. Regulation

Determine the functions and competencies of specialised care agents, clearly establishing limits and responsibilities to guarantee equitable, quality, safe, efficient specialised care.

The present Catalan health model derives from the Catalan Health Organisation Law (LOSC), enacted in 1990.(32) Since then, a series of health reforms have been undertaken through different regulations drafted within the legal framework of the LOSC. The new challenges raised by the new needs that have emerged from this reality are very different from those that were perceived at the time of drafting the LOSC. Given this reality, a new legislative framework is needed that provides the necessary legal security to protect the agents involved in the delivery of SC.

The new legislative framework should facilitate integrated work and shared responsibilities between interdisciplinary teams. At the same time, it must clarify which issues correspond to the field of SC, assigning them on the basis of the different decision-making capacities set forth in the service portfolio defined by the Ministry of Health.

It is also recommended to advance in the deployment of Law 8/2007, of 30 July, concerning the Catalan Health Institute (ICS) so that SC can not only work in coordination with primary and community care but also integrated and organised in transdisciplinary teams.

9.1.7. SC recommendation 7. Equity and accessibility

Guarantee fair service access and provision for everyone based on specific specialised care standards. These standards must be grounded on clinical and scientific evidence and also on other criteria, such as social criteria, that are relevant for prioritising access.

The Catalan model must maintain the principle of universal health coverage, preserving equity and accessibility as its central values. In the case of SC, these values take on particular importance due to the nature and requirements of some of the types of specialisation, particularly high specialisation services.

Robust standards must be established for SC that guarantee equity and accessibility, while also ensuring efficient allocation of resources, maintaining the person at the centre of the process. These standards must stimulate the development of specialised knowledge and also the development of SC professionals. In this respect, health planning must establish common criteria for all SC areas, based on the best practices and recommendations, proposed and regularly reviewed by specialists and superspecialists from each area.

Particular emphasis must be placed on health inequalities and outcomes, as key elements for making considerations on equal access from the territorial viewpoint. Service planning and delivery strategies must minimise territorial variability and access inequalities, taking the specialised services as close as possible to where the patients live without jeopardising the system's viability.

Agility must be assured in the provision of public healthcare. Waiting lists must be reduced to offset the inequalities that may arise in access to non-hospital SC as a result of the possibilities for faster diagnosis offered by access of a significant proportion of the population to private services. Shifting the demand driven by this part of the population to the private sector would accelerate the deterioration of public services.

On a more operational level, sufficient capacity in SC must be guaranteed so that, jointly with PCC and the rest of the system's teams, it is able to cope with any situation or emergency. In this respect, availability of SC must be guaranteed so that it can deliver services wherever they are needed, overcoming the mismatches that may arise between locally delivered care and specialisation.

9.1.8. SC recommendation 8. Quality and safety

Establish measures that assure the delivery of quality, safe, cost-effective, evidence-based clinical practices. These practices must add value to specialised care in terms of health outcomes and satisfaction, ensure respect for the preferences of duly informed patients and weigh with them the pros and cons of each intervention.

The World Health Organisation (WHO), the Organisation for Economic Cooperation and Development (OECD) and the World Bank define quality care as care that is safe, effective, patient-centred, timely, equitable, integrated and efficient, improves health outcomes and reduces waste.(4)

Particularly in the areas of specialisation and superspecialisation, it must be guaranteed that any intervention is, first of all, of good quality and, therefore, safe and effective. Whenever necessary, effectiveness and equity must always take precedence over efficiency in the treatment of certain patients, for example, in the care of people with rare diseases.

In any case, it must be guaranteed that clinical practices will add value and are safe, underscoring bioethical principles such as beneficence and non-maleficence in pateint care, while at the same time fostering a culture of quality improvement. Systematically and periodically and with the consensus of the specialists in each area, the Ministry of Health will establish and review guides and protocols for applying the best practices that guarantee optimal quality and safety levels and assure their applicability and the assessment of their impact in terms of results.

It must be guaranteed that measuring quality and safety not only improves health outcomes but also improves satisfaction in patients' access and experience, respecting at all times their autonomy and preferences. Accordingly, they must be duly informed, weighing with them the pros and cons of each intervention, engaging them actively in their own safety and in the quality of the care received.

And, in more general terms, it must be stressed that it is important to know, assess and share the information about quality and safety but, above all, it must be made more transparent and easier to understand for the general public, fostering their active engagement and demand for optimal quality and safety levels.

9.1.9. SC recommendation 9. Organisations and service delivery

Make the verticality and hierarchisation of specialised care more flexible, endowing it with transversal services provided by interdisciplinary teams. The teams must be composed of diverse profiles of professionals, working together with specialized medical and nursing professionals, and incorporating the collaboration of superspecialists when superspecialized interventions are required.

Before the COVID-19 crisis, the need was already foreseen to rethink and relax the health system's structures through mobility and digitisation and to prioritise locally delivered care whenever possible. In the context of a health emergency such as the pandemic, organisations have broken down stereotypes. They have become more flexible in record time, out of sheer necessity, they have implemented new matrix organisation formulas and less face-to-face care and have intensified home care.

To enable them to move forward in this flexibilization, the organisations that offer SC must be given more management autonomy. Likewise, providers must be given and required to show co-responsibility in implementation of the programmes, plans and protocols determined by the Ministry of Health, and they will be assessed on the basis of the degree of attainment of the objectives defined in the contracts. Suitable mechanisms and tools must be defined for applying a management model able to adapt and respond rapidly in a context of constant change.

Specialised care must be organised in interconnected comprehensive care networks that deliver services wherever is most appropriate. New care models are needed that go beyond the hospital building and integrate the contributions made by primary and community care, specialised care and social care. We must go beyond the traditional definition and move toward flexible organisations that agglutinate knowledge and expertise, pooling sufficient resources to serve the entire territory.

Primary and community care must be able to handle the less intensive but more prevalent processes. This will require identifying and organising the SC processes that, by virtue of their prevalence and resource intensity, can be moved down to primary and community care, providing the necessary training and resources to perform them.

From the territorial viewpoint, high specialisation teams must be linked with other SC teams with a more generalist profile in order to assure continuity and longitudinality. The aim is for them to complement each other, avoiding duplication in care delivery and administration and

improve cost-effectiveness in the distribution of resources. This requires management agreements between providers and contracts with the CHS which assure compliance with standards based on the best practices determined by the Ministry of Health. Providers must also be required to render account, with a clear translation in terms of the cost-effectiveness of the specialised services.

In view of the SC organisations' three-fold mission to provide care, impart teaching and perform research, with ongoing implementation of innovation, it is necessary to foster not only care networks but also teaching and research and innovation networks. To help SC providers act appropriately in their interventions, the CHS must clearly specify in the contracts the service portfolio, the plans and the programmes that are to be applied, both in care and in teaching and research, and the objectives to be attained that will form the basis of their assessment and financial compensation.

Organisations must have committed professionals, rewarded with commensurate recognition and compensation, who provide clinical leadership and take part in decision-making. Their engagement is essential for driving change toward a work culture in a network of networks based on the balance between local delivery and concentration of SC.

9.1.10. SC recommendation 10. Funding and reimbursement system

Articulate a transparent funding model and reimbursement system for specialised care. An adequate capitative allocation is necessary that stimulates improvement in health outcomes, incentivises efficiency and adequately compensates the expense incurred by the specialisation.

In Catalonia, specialised and superspecialised care, with a level of expenditure that has always been above 50% of the total, often shows a tendency to increase at the cost of investments in the necessary innovation to maintain a cutting-edge clinical practice.(8)

The reimbursement model must be transformed, moving away from the compartmented model and, through joint payment, take the care model beyond fragmentation toward comprehensive, integrated care. Territory-based capitative funding should be defined for all of specialised care, including care for people's social and health needs.

Implementation of a capitative funding model, with incentives tied to decision-making capacity, connects with the necessary territorial strategic alliances and other alliances for coordination

and cooperation between levels. This will require making the adjustments in the capitation that may be determined by tertiary care and high specialisation, which need differentiated funding. However, in order to apply this, it will be necessary to overcome the difficulties in effective design and implementation through the creation of care areas that encompass all the services, after having studied and determined the optimal dimensions in terms of territorial reach and assigned population.

Investments also require differentiated funding. If we analyse the current map of funding for the major investments in hospital infrastructures, it is seen that it is extremely unequal and distorts the reimbursement system. In some cases, the CHS pays for investments and in others it does not, but it does not take this parameter into account when establishing the budget allocation for providers.

Consequently, a system is proposed for harmonising innovation and large-scale technology investments. This is being done in the area of medicines but it is not being done in other areas that also have a very high budget impact. This has territorially differentiated consequences for equity and access to innovation and technology. Harmonising the investment in technologies is even more justified if a capitation is established for the other specialised services, where investment is often conditioned by the purchaser's payment capacity and terms. Therefore, superspecialised and tertiary care must be allocated specific funding for investments, including technology and major innovation technology. This funding must be associated with certain incentives, especially as regards decision-making capacity and the capacity for integrated service delivery, offering comprehensive care to patients.

The reimbursement system must have clear features in order to be agile, align with the cost structure and not end up becoming a system that disincentivises more than it incentivises. The CHS must define and demand an analytic accounting for establishing the contracts with the providers and implement a simple, transparent reimbursement system. This system must ensure adequate compensation for expenses, provide information about operating expenses and generate suitable stimuli to improve care outcomes and efficiency. It must also allocate the financial risk adequately, that is, it must transfer the risk to who is able to manage it, considering, on one hand, that too much risk acts as a disincentive and creates a risk of perverse behaviour while, on the other hand, too little risk may give rise to inefficient management. When providers and professionals do not bear the financial risk and, therefore, do not accept liability for the consequences of bad resource management, it ends up being borne by the people and communities they serve, with the resulting loss of quality and territorial equity. If the health authority ultimately makes up for this with a "financial bailout", it may lead to undesirable effects in the practice of good financial management.

The reimbursement system, which must be specified in the contract, is an important but not the only means for ensuring that providers work to meet the health needs of the population they must serve.

The general public must also participate and understand the financial decision-making process. Means must be provided that enable such participation, making available the health system's financial and efficiency-related information in language that is attractive and easy to understand.

9.1.11. SC recommendation 11. Innovation and technology

Encourage, test and evaluate technologies and innovations and guarantee that they are implemented ethically, equitably and cost-effectively, preserving the system's sustainability and improving the quality of care.

Innovation and technology are revolutionising care, management, research and teaching, with possibilities for almost infinite gains but with limited resources. Knowledge is growing at exponential rates in huge quantities. When this knowledge is combined with scientific and technological progress, particularly that which impacts most on SC, the result is an irreversible trend toward increased specialisation of professionals and improved treatments and procedures.

Technology and innovation have been crucially important during the COVID-19 health crisis; they have catalysed progress and effective collaborations, and made care delivery less dependent on face-to-face interaction to an extent never seen before. Now, patients can be monitored and seen remotely but at the cost of an even greater risk of dehumanising care.

Technology and innovation must contribute to guaranteeing equal access and health outcomes for the population by reducing inequalities and favouring progress in design, planning, implementation, policy follow-up and assessment, actions and interventions by the health authorities; in organisations' accessibility, quality, safety and efficiency, and, most particularly, in the health professionals' development, training, work environment and experience.

However, it should be remembered that personalised medicine, the new treatments, digitisation, artificial intelligence, big data, telemedicine, etc. have a high cost. Consequently, it is vital that innovation be incentivised, detected and assessed, and that the investments in

innovation give a return to the system, translated into health outcomes. It is also necessary to foster transparent collaboration mechanisms with the industry that guarantee technology and innovation transfer, disclosing conflicts of interest, within the framework of the Catalan ecosystem, boosted by Biocat.

On the basis of all that has been recommended, it is absolutely necessary to perform rigorous assessments of the technologies applied in the field of people's health. The focus must be placed again on restoring the role of the Agency for Health Quality and Assessment of Catalonia (AQuAS) as an independent agency with two main spheres of action: one devoted to guides, protocols, good practices and the assessment of health outcomes and new organisational approaches, and another that includes the assessment of technologies and innovation and provides direction for improving the quality of care, recommending the adoption of the best technologies and innovations. Technologies must be adopted after thorough examination, following a systemic approach and taking into account the ethical aspects, particularly in the management of personal information.

The integration of care requires sharing information and working in coordination in networks (care, research and innovation, and teaching). This in turn requires assuring effective development and maintenance of a comprehensive, integrated information system as an essential SC tool for ensuring that all of the system's players work in cohesion.

As was said in the recommendation concerning the funding of SC, the development and implementation of technology and innovation has a high budget impact, which in turn has repercussions on equity and accessibility of technological progress and causes territorial variability. The adoption of technological progress must not only abide by ethical criteria but also equality and cost-effectiveness criteria. In other words, it must reach all the population while at the same time steps must be taken to assure the system's sustainability and improvement of the quality of care.

9.1.12. SC recommendation 12. Transparency and accountability

Guarantee the transparency and accountability of specialised care through clear, transparent public contracts. The contracts must specify the services in detail and their remuneration, the objectives and the assessment of the service's delivery, centred on the patients' needs.

Transparency and accountability must provide information in a form that is useful and understandable by the general public. Their confidence in specialised services depends, to a great extent, on a clear understanding of the benefits they provide (and what they cost), and on the conditions in which professionals work, in terms of quality and safety. This is particularly relevant for SC, being the care area that generates most expense, in order to ensure that the care given meets the population's needs, preferences and expectations adequately and equitably.

In line with what has been stated in other recommendations, both in this document and in the previous documents, easy-to-understand, up-to-date, transparent information must be provided about different important aspects of SC to align its design, planning, implementation, follow-up and assessment. This must be based on the objectives and standards that have been predetermined in the specialised care strategies, programmes, plans and services, encouraging the public's participation in all stages of the process. This guarantees accountability and analysis of the impacts of the resources allocated to SC as a whole (care, research, etc.). It also fosters citizen engagement to demand optimal levels of accessibility, quality, safety and efficiency.

Likewise, all the tools and mechanisms used for interaction and collaboration between the health authority and the system's stakeholders must also be public, disclosing, if necessary, any conflicts of interest. For example, budget management agreements are proposed in which management autonomy and, therefore, decision-making capacity are only possible if they are accompanied by responsibility. In other words, account must be given of what is done and how it is done, bearing responsibility for the consequences.

10. References

1. Consell Assessor de Salut. El sistema de salut. Postcrisi de la COVID-19 [Internet]. Barcelona; 2020 [cited 2020 Sep 13]. Available from: https://canalsalut.gencat.cat/web/.content/_Professionals/Consells_comissions/consells_assessor_de_sanitat/cas-sistema-postcrisi-covid.pdf
2. World Economic Forum. Global Future Council on Health and Healthcare 2018-2019 A Vision for the Future: Transforming Health Systems [Internet]. Geneva; 2019 [cited 2020 Mar 31]. Available from: https://www.weforum.org/whitepapers/global-future-council-on-health-and-healthcare-2018-2019-a-vision-for-the-future-transforming-health-systems
3. Harari YN. Yuval Noah Harari: the world after coronavirus | Financial Times. Financial Times [Internet]. 2020;1–16. Available from: https://www.ft.com/content/19d90308-6858-11ea-a3c9-1fe6fedcca75
4. World Health Organization, World Bank, Organization for Economic Co-operation and Development. Delivering Quality Health Services: A Global Imperative [Internet]. Geneva: IGOWHO; 2018. 100 p. Available from: https://www.worldbank.org/en/topic/universalhealthcoverage/publication/delivering-quality-health-services-a-global-imperative-for-universal-health-coverage
5. Imison C, Sonola L, Honeyman M, Ross S. The reconfiguration of clinical services: what is the evidence? Kings Fund [Internet]. 2014;(November):134. Available from: https://www.kingsfund.org.uk/publications/reconfiguration-clinical-services
6. Weston AD, Hood L. Systems Biology, Proteomics, and the Future of Health Care: Toward Predictive, Preventative, and Personalized Medicine. J Proteome Res. 2004;3(2):179–96.
7. Feiring E, Lie AE. Factors perceived to influence implementation of task shifting in highly specialised healthcare: A theory-based qualitative approach. BMC Health Serv Res. 2018;18(1):1–10.
8. Warner, Lord. Report of the Specialised Services Commission. 2016;
9. CatSalut. Atenció especialitzada i hospitalària. CatSalut. Servei Català de la Salut [Internet]. 2020 [cited 2019 Oct 21]. Available from: https://catsalut.gencat.cat/ca/coneix-catsalut/acces-sistema-salut/guiadus/canals/atencio-especialitzada/
10. NHS England. Spotlight on specialised services [Internet]. NHS England. 2017. Available from: https://www.england.nhs.uk/wp-content/uploads/2017/09/spotlight-on-specialised-services.pdf
11. NHS England. NHS commissioning-specialised services [Internet]. 2018 [cited 2019 Oct 22]. Available from: https://www.england.nhs.uk/commissioning/spec-services/
12. TERMCAT. Atenció especialitzada. TERMCAT [Internet]. 2020 [cited 2019 Nov 26]. Available from: https://www.termcat.cat/ca/diccionaris-en-linia/230/search/atenció especialitzada?type=basic&language=&condition=match
13. World Health Organization Regional Office for Europe. Integrated care models: an overview [Internet]. 2016 [cited 2019 Apr 2]. Available from: http://www.euro.who.int/pubrequest
14. Sundhedsstyrelsen. Specialised hospital services. Principles of national planing in Denmark [Internet]. 2015 [cited 2020 Mar 30]. Available from: https://www.sst.dk/da/planlaegning/specialeplanlaegning/~/media/3499BD6FE4894BF1B75A27CAD2

A3AB29.ashx

15. Sheiman I, Shevsky V. Concentration of health care providers: Does it contribute to integration of service delivery? Risk Manag Healthc Policy. 2019;12:153–66.
16. Bhattarai N, McMeekin P, Price C, Vale L. Economic evaluations on centralisation of specialised healthcare services: A systematic review of methods. Vol. 6, BMJ Open. BMJ Publishing Group; 2016. p. e011214.
17. Imison C. Imison C. Briefing: reconfiguring hospital services [Internet]. London; 2011. Available from: https://www.kingsfund.org.uk/sites/default/files/Briefing-on-Reconfiguring-hospital-services-Candace-Imison-Kings-Fund-September-20111.pdf
18. Unió Catalana d'Hospitals. Projecte +Futur: Escenari de tendències i àrees d 'acció prioritàries. Barcelona; 2018.
19. Chen B, Baur A, Stepniak M, Wang J. Finding the future of care provision: The role of smart hospitals | McKinsey [Internet]. 2019 [cited 2020 Mar 25]. Available from: https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/finding-the-future-of-care-provision-the-role-of-smart-hospitals
20. The Deloitte Center for Health Solutions. Forces of change: the future of health [Internet]. 2019 [cited 2020 Mar 25]. Available from: https://www2.deloitte.com/us/en/insights/industry/health-care/forces-of-change-health-care.html
21. Hood L, Friend SH. Predictive, personalized, preventive, participatory (P4) cancer medicine. Nat Rev Clin Oncol. 2011;8(3):184–7.
22. International Alliance of Patients' Organizations. Declaration on: Patient-Centred Healthcare [Internet]. 2016. Available from: https://www.iapo.org.uk/sites/default/files/files/IAPO_declaration_ENG_2016.pdf
23. Britnell M. The role of the "specialist" in healthcare. Clin Med J R Coll Physicians London. 2011;11(4):329–31.
24. Porter ME, Thomas LH. The Strategy That Will Fix Health Care. Harv Bus Rev [Internet]. 2013;1277(October):1–18. Available from: file:///T:/Consell Assessor del Departament de Salut/Doc3_CAS_2019/Bib/Porter-Lee-Strategy-that-will-fix-healthcare-2013.pdf
25. European Commission. The Knowledge Future : Intelligent policy choices for Europe 2050 [Internet]. 2015. 64 p. Available from: https://ec.europa.eu/research/pdf/publications/knowledge_future_2050.pdf
26. National Information Board. Personalised Health and Care 2020 Using Data and Technology to Transform Outcomes for Patients and Citizens A Framework for Action. 2014.
27. World Health Organization. The transformative role of hospitals in the future of primary health care. 2018; Available from: https://apps.who.int/iris/bitstream/handle/10665/326296/WHO-HIS-SDS-2018.45-eng.pdf?sequence=1&isAllowed=y
28. Pan American Health Organization. Integrated Health Service Delivery Networks Concepts, Policy Options and a Road Map for Implementation in the Americas Area of Health Systems Based on Primary Health Care (HSS) Integrated Health Services Project [Internet]. Washington, D.C.: HSS/IS; 2011 [cited 2019 Jul 25]. Available from: http://new.paho.org/hq/dmdocuments/2011/PHC_IHSD-2011Serie4.pdf
29. Thimbleby H. Technology and the future of healthcare. J Public health Res. 2013;2(3):160–7.
30. PricewaterhouseCoopers. What doctor? [Internet]. 2017 [cited 2020 Mar 25]. Available from:

https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/ai-robotics-new-health.pdf

31. UK Government. The future of healthcare: our vision for digital, data and technology in health and care. Public policy [Internet]. 2018 [cited 2020 Mar 26]. Available from: https://www.gov.uk/government/publications/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care
32. Diari Oficial de la Generalitat de Catalunya. LLEI 15/1990, de 9 de juliol, d'ordenació sanitària de Catalunya [Internet]. 1990 [cited 2019 Mar 27]. Available from: https://portaldogc.gencat.cat/utilsEADOP/PDF/1324/1603354.pdf
33. Diari Oficial de la Generalitat de Catalunya. DECRET 196/2010, de 14 de desembre, del sistema sanitari integral d'utilització pública de Catalunya (SISCAT). Barcelona: Parlament de Catalunya; 2010.
34. Diari Oficial de la Generalitat de Catalunya. LLEI 13/2014, del 30 d'octubre, d'accessibilitat. Barcelona; 2014 p. 1–49.
35. Boletín Oficial del Estado. Ley 16/2003, de 28 de mayo, de cohesión y calidad del Sistema Saniconal de Salud. Boletín Oficial del Estado, número 128, de 29-05-2003. 2003 p. 1–46.
36. Boletín Oficial del Estado. Real Decreto 1030 / 2006 , de 15 de septiembre, por el que se establece la cartera de servicios comunes del Sistema Nacional de Salud y el procedimiento para su actualización. 2006 p. 1–74.
37. Boletín Oficial del Estado. Ley 14/1986 de 25 de abril, General de Sanidad. Boletín Oficial del Estado, número 102, de 29-04-1986. [Internet]. Boletin Oficial del Estado 1986 p. 1–24. Available from: https://www.boe.es/buscar/pdf/1986/BOE-A-1986-10499-consolidado.pdf
38. Boletín Oficial del Estado. Real Decreto Ley 16/2012 de medidas urgentes para garantizar la sostenibilidad del Sistema Nacional de Salud y mejorar la calidad y seguridad de sus prestaciones. Bol Of Del Estado 98 [Internet]. 2012;31278–312. Available from: http://www.boe.es/boe/dias/2012/04/24/pdfs/BOE-A-2012-5403.pdf
39. Servei Català de la Salut. Model organitzatiu d'hospitalització a domicili de Catalunya Alternativa a l'hospitalització convencional Servei Català de la Salut. 2020.
40. Departament de Salut. Situació actual i diagnòstic de necessitats dels professionals de la salut. Proposta de marc comú per a l'anàlisi de la demografia professional i dels criteris de planificació. Generalitat de Catalunya. 2018.
41. Boletín Oficial del Estado. Ley 44/2003, de 21 de noviembre, de ordenación de las profesiones sanitarias [Internet]. Madrid: Boletín Oficial del Estado; Nov 23, 2003. Available from: https://www.boe.es/buscar/act.php?id=BOE-A-2003-21340&p=20130725&tn=2
42. Direcció General de Professionals de la Salut. Fòrum de diàleg de professionals. Conclusions. [Internet]. Barcelona; 2019. Available from: http://salutweb.gencat.cat/web/.content/_departament/lineas-estrategiques/1r_forum_dialeg_professional/documents/conclusions-forum-dialeg-professional.pdf
43. Consell Assessor de Salut. Recomanacions estratègiques sobre el model assistencial d'atenció primària i comunitària [Internet]. Barcelona; 2019 [cited 2020 Jun 18]. Available from:

https://canalsalut.gencat.cat/web/.content/_Professionals/Consells_comissions/consells_assessor_de_sanitat/cas-apic.pdf

44. Consell Assessor de Salut. Orientacions sobre el model d'atenció a les persones amb necessitats socials i sanitàries [Internet]. Barcelona; 2019 [cited 2020 May 28]. Available from: https://canalsalut.gencat.cat/web/.content/_Professionals/Consells_comissions/consells_assessor_de_sanitat/cas-necessitats-socials-i-sanitaries.pdf
45. Auffray C, Charron D, Hood L. Predictive, preventive, personalized and participatory medicine: back to the future. Genome Med. 2010;2(8):57.
46. Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. Ann Fam Med [Internet]. 2014 [cited 2019 Jul 22];12(6):573–6. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25384822

11. Annexes

11.1. Appendix 1. Principles and values in the care of patients with social and health needs. Health Advisory Council, 2019

The organisation and performance of actions related to the care of people with social and health needs must include the field's intrinsic principles and values. The vision will be truly shared when it is grounded on certain common principles and values based on respect for the individual's personal autonomy and dignity. These principles and values are described below in alphabetical order.

Principles and values in the care of patients with social and health needs. Health Advisory Council, 2019 (44)
1. **Agility, flexibility and transparency. An agile, flexible executive organisation, with capacity for mobilising local, supralocal and government-level health and social resources.**
2. **Empathy and respect for diversity. An inclusive organisation that guarantees personalised, locally-delivered care and takes into account each individual's wishes, preferences and experiences.**
3. **Equity. Equity and overcoming social, gender and territorial inequalities.**
4. **Knowledge, research and innovation. Agglutinate, generate and disseminate knowledge and innovation capacity with respect to the care of people with social and health needs.**
5. **Participation. Effective participation at both individual and group level, to give voice to people and respond to their needs from a global perspective.**
6. **Proactivity. A proactive attitude in the approach to the care of people with social and health needs, focused on promoting health and autonomy, preventing disease and dependence, and delivering care to people.**
7. **Proximity and decentralisation. The need to meet the population's needs as close as possible to their community, from an organisation that has the capacity for decentralised action.**
8. **Quality and sustainability. Rationalisation, efficacy, effectiveness, efficiency and sustainability within the organisation, promoting and improving quality and safety, assessing the actions performed and implementing the best evidence available.**
9. **Shared governance. Governance founded on a comprehensive, integrated, interdisciplinary conception to deliver better care based on patients' preferences and with an impact on their health and autonomy.**
10. **Universalisation. Guaranteed, universal care delivery to people with social and health needs, as an individual and societal right.**

Source: Guidance on the care model for people with social and health needs. Health Advisory Council, 2019. Available at: https://canalsalut.gencat.cat/ca/professionals/consells_i_comissions/consells_assessor_de_sanitat/

11.2. Annex 2. Strategic recommendations for the guidance of primary and community care, the care of people with health and social needs, and the post-COVID-19 model. Health Advisory Council, 2019 and 2020

Recommendations with respect to the primary and community care model. Health Advisory Council, 2019 (43)	
R1.	Reform primary and community care so that it comes a veritable cornerstone of the Catalan health system's primary and community care model and guarantees its viability.
R2.	Identify the national primary and community care strategy as the necessary, appropriate and ambitious tool for achieving the goals inherent in primary and community care.
R3.	Take measures to improve community health, defining and funding the interventions that must be undertaken in this area.
R4.	Nurture a trust-based relationship between the public, health professionals and institutions.
R5.	Create spaces for ongoing dialogue between the different stakeholders.
R6.	Gather and integrate the values and expectations expressed by the public concerning primary and community care and educate them to take co-ownership of their health.
R7.	Gather and integrate the values and the expectations expressed by health professionals concerning primary and community care.
R8.	Redefine the professional roles and provide training to enable them to respond to people's needs within flexible organisations.
R9.	Evolve toward more flexible organisations with organisational capacity and autonomy to adapt to changing needs and realities.
R10.	Consider the social determinants of health and health and care inequalities, particularly for people in vulnerable situations.
R11.	Integrate the necessary ingredients and tools to meet people's needs, guaranteeing the accessibility, across the board and at all levels of the primary and community care model.
R12.	Put in place the necessary reforms in specialised care within the framework of the transformation of primary and community care.
R13.	Improve the integration of public health with primary and community care.
R14.	Integrate social needs based on the patient-centred primary and community care model.
R15.	Define the service portfolio corresponding to primary and community care with the goal of improving its decision-making capacity.
R16.	Guarantee that the funding for primary and community care will be on a level consistent with the responsibilities assigned to it, with particular sensitivity to territorial balance and financial inequalities.
R17.	Assess primary and community care, give visibility to the process and disseminate the results, adapting to different audiences (general population, patients, professionals and organisations).
R18.	Acknowledge and highlight the importance of primary and community care in teaching.
R19.	Guarantee that research is one of the transformative pillars of primary and community care.
R20.	Give greater support to innovation in primary and community care as an improvement strategy and tool.
R21.	Promote the information and communication technologies, applying consistent efficiency criteria as an indispensable tool in the model's reform, implementation and assessment.

Source: Strategic recommendations about primary and community health care model. Health Advisory Council, 2019.
https://scientiasalut.gencat.cat/bitstream/handle/11351/5592/recomanacions_estrategiques_model_assistencial_atencio_primaria_comunitaria_2019_ang.pdf?sequence=8

Definition of the fundamental features of the public body, areas of activity and actions. Health Advisory Council, 2019 (44)

1. Creation of the public body for the development (governance and management) of care for people with social and health needs in Catalonia

   1.1. Determine the medium and long-term strategy by consensus.
   1.2. Define the body's features.
   1.3. Draft and approve the regulations for creating and regulating the body.

2. The body's areas of activity.

   2.1. Primary and community health care and primary care for basic social services.
   2.2. Home environment.
   2.3. Day centres.
   2.4. Long-term care.
   2.5. Nursing homes.
   2.6. Information systems.
   2.7. Early childhood with disability, mental disorders and rare diseases.
   2.8. Women in vulnerable situations.
   2.9. Promotion of personal autonomy and prevention of institutionalisation.
   2.10. Mental health and addictions.

3. Operational actions that must be prioritised.

   3.1. Create spaces for participation by the public and professionals.
   3.2. Foster social networks and volunteering.
   3.3. Endow citizens and professionals with the tools for shared decision-making.
   3.4. Redefine professional roles in the field of health and social care.
   3.5. Open a dialogue with the Public Administration, institutions, worker representatives and professionals in both sectors to explore possibilities for rapprochement, starting with work conditions.
   3.6. Support research and innovation to transform care delivery and improve the accessibility, quality and efficiency of the social and health care system.
   3.7. Assess the impact of actions aimed at improving the health and autonomy of people with social and health needs.
   3.8. Study different reimbursement systems, procurement and accountability mechanisms.
   3.9. Unify the basic social and health areas at territorial level.

Source: Guidance on the care model for people with social and health needs. Health Advisory Council, 2019. https://canalsalut.gencat.cat/web/.content/_Professionals/Consells_comissions/consells_assessor_de_sanitat/cas-necessitats-socials-i-sanitaries.pdf

Recommendations for the guidance of the health system in the post-COVID-19 period, Health Advisory Council, 2020 (1)

Response to the immediate impact

R1. Draw up a care plan for the population, integrated and consistent with the other strategies that have been defined in mental health, whose aim is to address the crisis' consequences for people's mental health, and, specifically, for the more vulnerable population groups.

R2. Draw up a care plan for professionals to palliate the consequences of the emotional and physical impact of the care they have provided to people and communities during COVID-19.

R3. Draw up and add explicit, transparent common criteria to the guidelines that must be given to health centres and health professionals, and prioritise the care (postponed and new).

R4. Maintain the availability of necessary health and social structures, resources and circuits so that they are ready to respond in the event of new outbreaks.

R5. Identify and document the innovations that have been developed in the course of the crisis that have contributed (and may continue to contribute) value to the health system, evaluate and select those that are scalable, and draw up a feasible implementation plan.

General public

R6. Define and prioritise the deployment of social and health protection strategies targeting the care given to people in situations of vulnerability.

R7. Acknowledge and leverage the capacity for co-responsibility shown by the population, including it in the processes for identifying the aspects of the system that need to be improved.

Professionals

R8. Using specific structural measures, recognise the calibre and commitment shown and the work performed by all the health and social system professionals involved in the delivery, management and planning of the response to the COVID-19 crisis.

R9. Reformulate training, taking into account attitude-related aspects based on humanist values and critical thinking, collaboration with other disciplines, adaptability and resilience, with the goal of acquiring skills that will enable professionals to respond to the population's needs.

Organisations

R10. Ensure that the health and social care system's structures and professionals are adequately sized to prevent systematic and continuous pressure on care resources, so that response capacity is available in the event of emergency situations.

R11. Consolidate the flexibility shown by the system during the crisis with the implementation of measures for overcoming barriers (administrative, cultural and attitudinal) and the development and alignment of professional and organisational roles.

R12. Create structured epidemiological and clinical information systems that harness all the potential offered by the new technologies, maintaining utmost respect for confidentiality and people's rights and avoiding any measures that may be discriminatory or exclusionary.

R13. Design and roll out a balanced scorecard of the health system, reviewing and adapting the Action Plan beforehand to the new reality, endowing it with useful, clearly understandable information for knowing and monitoring health and social care facilities and resources, and facilitating alignment of the system's agents, decision-making, assessment and transparency.

R14. Promote the deployment of technology aimed at facilitating the delivery of remote care, leveraging the adaptability shown by professionals and the public, especially in primary care, and proportionately to the needs for physical interaction.

R15. Accelerate the deployment of home care as an alternative care model to hospitalisation or institutionalisation, drawing from the experience acquired during the crisis. The deployment's quality should be monitored, assessing this care model's impact on family groups.

R16. Draw up a crisis management plan in which the process experienced during the crisis is recorded extensively and in detail, documenting and analysing the experiences and subsequently protocolising them, guided by the results obtained.

Recommendations for the guidance of the health system in the post-COVID-19 period, Health Advisory Council, 2020 (1)

R17. Form a plural crisis advisory committee whose members are acknowledged experts in the subject, with the mandate of proposing substantiated recommendations agreed by consensus. From among this committee's members, a single person should be selected to act as expert spokesperson, who will transmit the scientific and technical knowledge that the health authority will use as the basis for its decisions, thus avoiding the transmission of conflicting opinions to the system and to the public.

System

R18. Bolster governance and leadership by the health authority in order to facilitate the alignment, coordination and/or collaboration of the health institutions and the health system's resources.

R19. Bolster interdepartmental strategies in a context of crisis, particularly in areas related to education, social services, employment or economy.

R20. Increase funding for health, to the extent necessary, to attain explicit and assessable improvement objectives in the areas of equity, quality and safety, coordination and efficiency, and prioritise actions and services in accordance with their added value.

R21. Bolster public health by identifying and addressing weaknesses, particularly as regards resource sufficiency, in order to improve the fit in the health system and give more voice to the community.

R22. Include the global health issues that may have an impact on people's health in the health policies' agenda.

R23. Guide the primary and community care model proposed by the Council, taking into account the balance between patient-centred care and community-centred care.

R24. Adjust the new care model to the social and health needs proposed by the Council, balancing the patient-centred care model with the necessary vision of community-centred care, which was shown to be particularly appropriate during the pandemic.

R25. Address the weaknesses of the nursing home care model, balancing management between the departments with jurisdiction in health and social welfare, providing sufficient budget and human and material resources, and taking into account health needs but avoiding the use of health-based responses to answer social needs.

R26. Draw up protocols and guidelines with explicit, unambiguous instructions that include ethical criteria for care in the context of a health crisis and take into account the fact that, in a context with limited resources, prioritisation and, if necessary, rationing must guarantee fairness and avoid conflicting criteria.

R27. Create a space for reflection and ethical debate to formulate recommendations that can provide a model and guide for supporting institutionalised people, particularly in the closing stages of life, in an emergency context. The recommendations should guarantee equity and be based on humanist criteria for death with dignity.

R28. Within the framework of the Catalan Bioethics Committee, form a group whose mission will be to enforce ethical standards in the processing of confidential data and information.

R29. Create spaces or groups for debate, decision-making or drafting recommendations, with inclusion of all the stakeholders, particularly in a context of crisis, focused on the limits of health intervention and the possible conflicts between individual rights and the population's common good or health.

R30. Accelerate implementation of the system transformation strategies that have been defined but are pending application, reviewing and adding beforehand the experience acquired during the crisis, and avoiding duplication of effort.

R31. Develop, study and implement tools and technological alternatives that may assist in taking governance, planning, management and care-related decisions.

R32. Draw up a framework for guiding and structuring research and innovation for an emergency context with the goal of determining which needs must receive a response, how this response will be given and how it will be funded.

R33. Boost and support production capacity, simultaneously with advance public procurement and provisioning, in order to guarantee availability of material and medicines at all times, and create bodies authorised to validate such supplies.

Source: The health system in the post-COVID-19 crisis era. Health Advisory Council, 2020.
https://scientiasalut.gencat.cat/bitstream/handle/11351/5613/sistema_salut_postcrisi_covid19_2020_ang.pdf?sequence=11

12. Experts invited to the meetings of the Health Advisory Council

- Xènia Acebes, director of Health Care, Catalan Health Service.
- Anna Aran, manager of the Barcelona Health Region, North Metropolitan Area, Catalan Health Service.
- Manel del Castillo, CEO of Sant Joan de Déu Hospital.
- Marga Esteve, nursing director at the Santa Creu i Sant Pau Hospital and president of the Catalan Association of Nursing Managers (ACDI).
- Montserrat Figuerola, territorial manager of the Catalan Health Institute's South Metropolitan Area.
- Guillem López Casasnovas, professor of Economics at the Pompeu Fabra University.
- Diego Palao, executive director of Mental Health at the Parc Taulí Health Corporation Consortium.
- Ivan Planas, director of the Catalan Health Service's Economic Resources Department.
- Pere Vallribera, manager of the Catalan Reference Laboratory (LRC) and Intercentre Medical Imaging (IMI) and president of the Catalan Society of Health Management.

13. Members of the Health Advisory Council

Health Advisory Council

- Manel Balcells Diaz, president
- Xavier Bonfill Cosp
- Joan Lluís Borràs Balada
- Carme Borrell Thió
- Pere-Joan Cardona Iglesias
- David Elvira Martínez
- Pilar Espelt Aluja
- Alícia Granados Navarrete
- M. Cristina Martínez Bueno
- Ramon Pujol Farriols
- Núria Terribas Sala

Technical Secretariat and document drafting

- Iria Caamiña Cabo
- Elena M. Calvo Valencia
- Carme Planas Campmany