

The impact of AQuAS products on decision-making (2019-2020)

**REPORT
04/2022**

The Agency for Health Quality and Assessment of Catalonia (AQuAS) is a public body affiliated to the Catalan Health Ministry. Its mission is to generate relevant data and knowledge to guide decision-making in the area of public health and to promote the sustainability of the Catalan Health Care System. AQuAS is a founding member of the International Network of Agencies of Health Technology Assessment (INAHTA) and OF the International School on Research Impact Assessment (ISRIA). It is a corporative member of Health Technology Assessment International (HTAi), of the CIBER group (Networked Biomedical Research Centres) in Epidemiology and Public Health, of REDISSEC (the Spanish Research Network on Health Care in Chronic Diseases), and the Research Network on Chronicity, Primary Health Care and Health promotion (RICAPPS) and it is also an associated unit of the INGENIO research centre at CSIC-UPV. In 2019, AQuAS was awarded the Josep Trueta medal for services to health care by the Catalan government.

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The impact of AQuAS products on decision-making (2019-2020)

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Declaration of conflicts of interest

The authors have no conflicts of interest to declare in relation to this document.

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Executive summary

Through the evaluation and analysis of health data, AQuAS carries out one of its key missions – namely, the generation of evidence for use in guiding decision-making at various levels of the health system. Successfully achieving this objective (or even a part of it) by providing evidence of significant, measurable impacts attributable to the results of the agency’s activities is a crucial step on the way to improving the health of the population of Catalonia and enhancing the sustainability of its health system.

The present document assesses the extent to which the recommendations contained in the reports of AQuAS products published between June 2019 and December 2020 have been implemented. The study was carried out through an ad hoc questionnaire designed to record the impact of these products, based on the opinions of the people who had requested their implementation or, failing that, of decision-makers who were subsequently able to use the evidence generated. In the second part of the study, detailed descriptions of the impacts of three specific products are presented in the form of “impact snapshots”, and the factors associated with the impacts are discussed.

The impacts on decision-making of the products assessed in this study can be classified under four headings: 1) their influence on policy creation, 2) their implementation in the planning and management of services, 3) their effect on interaction activities with end users, and 4) their influence on the creation of materials for training and dissemination. Unexpected impacts, such as their effect on the development of know-how among health staff, should also be considered.

This report focuses on the assessment of the impacts of these products on decision-making. The analysis is more illustrative than detailed, but it provides examples of successful AQuAS products that have achieved a real and diverse impact on decision-making. In addition, certain lessons can be drawn from this experience to help to evaluate the impacts of AQuAS products:

The products selected and analysed show a diverse range of **impacts on decision-making**.



The **interaction with the decision maker** and relationships of trust favour the creation of impacts.

The **evidence** must be relevant, useful and accessible.



Access to good quality evidence represents an opportunity for decision-make

The real impacts of AQuAS products between June 2019 and December 2020

Influence on policy-making processes

- Update of the National Health System's Diabetes Strategy
- Establishment of a conceptual framework to bring together plans for the evaluation of patients' experiences of the different health care areas
- Reorientation of the current Strategic Research Plan to apply criteria for reversing the current gender gap
- Preparation of a system contingency plan to deal with successive waves of epidemics
- Incorporation of results in the Health Care
- Model for women who have experienced gender-based violence and for their children
- Incorporation of specific measures and actions that help reverse the currently existing gender inequalities
- Creation of a stable working group for finding solutions and for preparing a document of recommendations
- Incorporation of new criteria in calls for applications for grants and definition of new equality policies in the future Strategic Plan document

Influence on the development of training material and dissemination

- Influence on the development of training material and dissemination
- Preparation of training material on diabetic foot care
- Preparation of dissemination material for the general public and for professionals

Other impacts: developing know-how

- New assignment for defining criteria and indicators for the follow-up of surgery for movement disorders

Implementation in service planning and management

- Creation of a consensus document on community foot care for people with diabetes
- Preparation of a questionnaire on the internal organization of hospital care for people with diabetic foot
- Reorganization of the pediatric oncology department of a hospital and identification of the reference centre
- Inclusion in the portfolio and in the financing system of the criteria for indicating the cochlear implants
- Reorganization of the level of complexity of pain units
- Design of a specific protection plan for population groups at high risk of developing complications from SARS-Cov-2,
- The proposal has been rejected, and work has begun on alternatives

Interaction activities for end users

- An increase in requests for information regarding the diabetic foot care model
- Plans for incorporating recommendations for nurse demand management

Introduction

Contributing to improving the health of the population of Catalonia and promoting the sustainability of the Catalan health system are among AQuAS's main objectives, as laid out in its 2017-2020 Strategic Plan.^a The agency's activities are geared towards meeting these broad aims but there is also one specific area in which they have a direct impact – namely, decision-making. AQuAS products evaluate and analyse data in order to generate the knowledge needed to make sound decisions. Successfully achieving this objective (or even a part of it) by providing evidence of significant, measurable impacts of its evaluations is a key step on the way to achieving impacts of a greater dimension.

Defining the concept of “the impact on decision-making”

In our health context, the objective of being able to make informed decisions on health care depends to a great extent on the ability of a specific organization, or of the public at large, to adopt and use the information available and thus create impacts on health.^b In the context of assessment of medical technology, impact is related to the effectiveness of the assessments, that is, to the effect that the information published has on decision-making^c. Therefore, the process includes those activities that involve the end users in the application of the evidence in new or modified policies, practices, products or behaviours that serve as ways to improve the health and well-being of the general public. In our setting, the impact on decision-making includes the results or recommendations of AQuAS's products that have influenced decisions related to planning, financing, coverage, and the use of health-related technologies. There may be several decision-makers at different levels, and the benefits derived from the decisions may also vary: for instance, they may increase effectiveness, or prevent harm. Decisions are made on the basis of a large number of influences and it is often difficult to identify the main factors in the decision-making process – even for the person making the decision. For all these reasons, the way in which evidence informs decisions is inherently difficult to measure.^d Ideally we would like to establish a causal relationship between an input and an output, but it is very hard to attribute the impact on decision-making to a single

^a https://aquas.gencat.cat/web/.content/minisite/aquas/sobre_aquas/estrategia/pla_estrategic_aquas_2017-2020.pdf

^b [Panel on the return on investments in health research: Making and impact. A preferred framework and indicators to measure returns on investment in health research](#). Ottawa, ON (Canada): Canadian Academy of Health Science (CAHS); 2009.

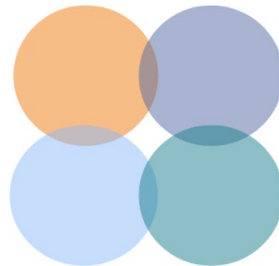
^c Hailey D, Werkö S, Rosén M, et al. Influence of health technology assessment and its measurement. *Int J Technol Assess Health Care*. 2016 Jan; 32(6):376-384. doi: 10.1017/S0266462316000611. PMID: 28124969.

^d Hailey D, Werkö S, Rosén M, et al. Influence of health technology assessment and its measurement. *Int J Technol Assess Health Care*. 2016 Jan;32(6):376-384. doi: 10.1017/S0266462316000611. PMID: 28124969.

product^e. Therefore, in an attempt to encompass a broader definition of what decision-making is, it has been subdivided into four ways in which an impact can be created:^f

Reporting the evidence generated through discussions, debates, and the findings of consultancies and committees with a bearing on decision-making processes.

Implementing designs, planning, prioritizing, creating standards, and managing services.



Reporting evidence of the formulation of standards, guidelines, policy initiatives, and recommendations made by government agencies or other regulators.

Influencing the behaviour of professionals and other actors.

The rationale for measuring the impact of AQuAS products

A public entity like AQuAS has a direct responsibility towards the general public and their representatives and also towards government bodies. So it is important to evaluate the agency's results in relation to its mission: that is, to assess the impact of its activities on decision-making. In this study we aim to increase public awareness of the role of AQuAS by describing some of its activities and assessing the impact of the products it has developed,

This study is an initial step towards formalizing the monitoring and assessment of the impact of all the products generated by AQuAS. We discuss the factors that can help to create impacts and also identify cases where the desired effect has not been achieved.

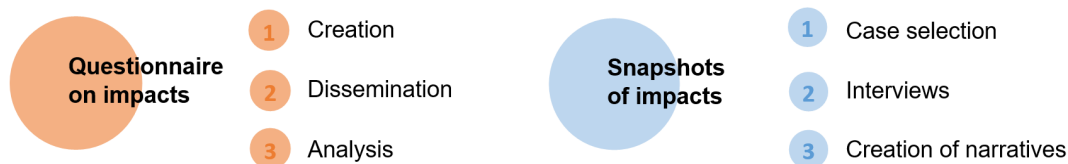
Our specific objective is, therefore, to evaluate the level of implementation of the recommendations proposed in AQuAS products. The assessment is based on the opinions of the persons who requested the specific products or, failing that, of decision-makers who have been in a position to use the evidence.

^e Adam P et al. ISRIA statement: ten-point guidelines for an effective process of research impact assessment. *Health Res Policy Syst.* 2018; 16: 8. doi: 10.1186/s12961-018-0281-5.

^f Panel on the return on investments in health research: Making and impact. A preferred framework and indicators to measure returns on investment in health research. Ottawa, ON (Canada): Canadian Academy of Health Science (CAHS); 2009. [http:// www.cahs-css.ca/wp-content/uploads/2011/09/ROI_FullReport.pdf](http://www.cahs-css.ca/wp-content/uploads/2011/09/ROI_FullReport.pdf)

Methods

This study was carried out by a group specifically created for the purpose, comprising experts from various areas of knowledge in which AQuAS is active: namely, research impact assessment, scientific evidence and data, communication, and strategic vision.






For this first phase of the implementation, a sample was selected of the products completed from June 2019 to December 2020. The sample comprised 67% of the AQuAS reports, AQuAS rapid reports and SARIS monographs published in the time period. All the products had been commissioned by the Department of Health or CatSalut, or were products which, given their potential impact, were considered particularly relevant to AQuAS's strategic activity. The rest of the products were excluded from this first phase.

In order to standardize the phase of monitoring the impacts, a questionnaire (included in the appendix) was created to be sent out to the persons who had requested the products or, failing that, to decision-makers who might use the evidence generated. The process was carried out under the guidance of the researchers and technical staff in charge of preparing the report.

First of all, to be sure that the questionnaire was applicable and relevant in our context, a pilot test was carried out with one of the reports published in 2019. The results of the pilot test enabled us to introduce improvements in the questionnaire used in this phase, incorporating minor changes in the formulation of certain questions or describing in greater detail the section referring to the level and the agents involved in decision-making. The pilot product was analysed with the rest of the cases.

The questionnaire was divided into three parts. In the first part, the person who had requested the product provided details such as the title and a brief executive summary, which placed particular emphasis on the recommendations and conclusions of the report. The second section was composed of questions regarding the concept of "impact on decision-making". The third part comprised three questions regarding the impact: the first two were closed questions and an open field for comments, and the third was an open question.

The questions were related to the following aspects:

-  The real impact at the time the questionnaire was administered and the level and agents involved.
-  The potential impact in the future and the level and agents involved.
-  If no real impact was created, a discussion of the reasons and the difficulties encountered.

This pilot questionnaire was sent out in March 2020. For the rest of the proposals, the questionnaire was administered at three different time points: July 2020 (for reports published in 2019), December 2020 (for reports published in the first semester of 2020), and June 2021 (for reports published in the second half of 2021).

The analysis of the quantitative results was merely descriptive. From the answers to the open questions in the questionnaire, a content analysis was carried out to classify the findings into categories or subcategories, if applicable.

Based on the results of the questionnaire, a selection of cases was made in order to provide a detailed narrative description of the impacts achieved and the factors associated with these impacts. The cases were selected by the group's technical staff on the basis of the impacts reported in the answers to the questionnaire and the diversity of the themes mentioned, and semi-structured interviews were conducted with the key informants who had answered the questionnaire. The interviews were carried out between December 2021 and January 2022 by the same researcher using a pre-established script, and lasted between 15 and 30 minutes. Respondents who agreed to participate were asked for permission to record the interviews, and their confidentiality was guaranteed.

Description of the impacts

This section describes the products analysed and their impacts, mainly arising from the responses to the questionnaire.

During the pilot phase, the questionnaire was sent to one decision-maker for preliminary testing. In the implementation phase, 22 products published between June 2019 and December 2020 were selected for inclusion in the questionnaire, which was then sent to 29 decision-makers. Twelve of these decision-makers were chosen because of the potential impact of the product, not because they were the person who had requested it. In the analysis phase, 23 cases were selected (one from the pilot phase and 22 from the implementation phase).

Nineteen participants answered the questionnaire, and so responses were available for all the reports but three. The table below displays the products selected. Each product is assigned a letter (Id.) for ease of identification throughout the text.

Table 1. Description of the products selected (n=22)

Id.	Title
A	Proposal and review of a diabetic foot care model in Catalonia ^P
B	The concentration of pediatric oncology services
C	Indication criteria for cochlear implants in children
D	Values-focused health care in Catalonia
E	Good practices: nurse demand management
F	Neonatal screening for spinal muscular atrophy
G	Conventional spinal cord stimulation in the treatment of refractory neuropathic pain and ischemic pain
H	HIFU (high-intensity focused ultrasound) for the treatment of essential tremor
I	Report on the sociodemographic and clinical characteristics and prognostic factors of patients diagnosed with COVID-19 in Catalonia
J	Mechanical ventilators and other health devices for the COVID-19 crisis: initiatives, regulation and recommendations
K	COVID-19: socioeconomic inequalities with regard to the number of cases and mortality in Catalonia
L	Key elements influencing the patient's experience
M	Research Results Centre. Institutes and Centres. Data 2016-2017
N	Risk posed by the second wave of SARS-CoV-2: review of the literature and discussion of the available evidence
O	Analysis of observed and expected deaths during the COVID-19 epidemic in Catalonia
P	Evaluation of the protocol for addressing gender-based violence in the health care field in Catalonia


Id.	Title
Q	Women's advancement and leadership in the biomedical research centres of Catalonia. The vicious cycle of gender inequality
R	Long-lasting or persistent symptoms in patients with mild-moderate SARS-CoV-2 (COVID-19) infection: rapid review of the literature and discussion of the available evidence
S	Women's advancement and leadership in the biomedical research centres of Catalonia. Bringing about change
T	Socioeconomic inequalities in children's health
U	Technological innovation in health due to the COVID-19 crisis
V	Support tool for shared decision-making on contraception


^P Included in the pilot study


Of the 19 products for which responses were received, 15 (A, B, C, E, G, H, I, J, L, M, N, P, Q, R and S) were reported to have had a real impact (79%), and in four of them (D, I, L and M) potential impacts were reported depending on other circumstances. In two cases (A and R) more than one real impact was reported. In most cases, the impacts reported were direct, while three (E, G and L) were reported to be indirect (i.e., they occurred via intermediaries). It should be noted that most of the impacts were related to decision-making; in one case, however, (H), the impact was related to the professional development of AQUAS technical staff, since it involved the performance of a new test.

In the cases with real impact, the time elapsed between the publication of the product report and the administration of the questionnaire ranged between 6 and 18 months. After the questionnaire had been sent out twice (March and July 2020), it was decided that periods of six or seven months were sufficient to assess the impact and, therefore, this time cycle was standardized. In the cases in which no impact was achieved, the reason was not to do with the time cycle.

Of the 15 cases with real impact, only four were not reported by the person who had commissioned or requested the product directly (L, M, Q and S). Of the four products that had no real impact, in two of them the respondent was the person who had requested the product (K and O). The following reasons for not achieving an impact were highlighted:

 The recommendations of the report were addressed exclusively to a single end **user** (the person who requested the product).

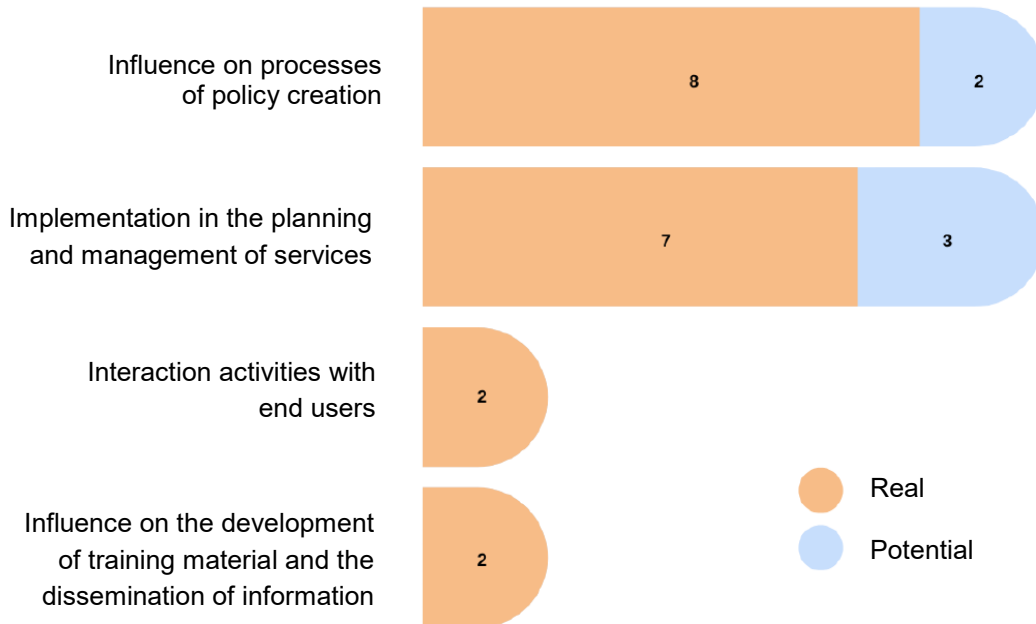
 No specific operational **actions** were indicated.

 While finding the product useful, the person requesting it has not been able to **participate** in the related decision-making process.

In eight cases, the real impacts were related to the processes of policy creation (A, L, M, N, P, Q, R and S); in six, to the implementation in the planning and management of services (A, B, C, G, I and J); in two, to carrying out interaction activities with end users (A and E), and in two, to the development of training materials and dissemination of information (A and R). Of the cases with potential impacts, two were related to planning and management of services

(D and I) and two to processes of policy creation (L and M) (figure 1). (We stress that when we say that a product has achieved an impact, we mean that it has contributed to this impact – we are not claiming that it is the only cause).

Figure 1. Impacts achieved on decision-making: real and potential (n=15)*



* The number of impacts is greater than the number of products, because some products have more than one impact

A summary of all the impacts achieved is presented in Table 2.

Table 2. Summary of the impacts achieved by AQuAS products (2019-2020) (n=16)

Impact		Impact on decision-making				Other impacts: development of knowhow
		Influence on processes of policy creation	Implementation in services planning and management	Interaction activities with end users	Influence on the development of training and dissemination of information	
Id.						
A	Update of the National Health System Diabetes Strategy (Int)	●				
	Creation of a consensus document on community foot care for people with diabetes		●			
	Preparation of a questionnaire on the internal organizational system of hospital care for people with diabetic foot		●			
	Increase in requests from health care professionals for information on the diabetic foot care model			●		
	Preparation of training material on diabetic foot care (Int)				●	
B	Reorganization of hospital pediatric oncology and identification of the reference centre		●			
C	Inclusion in the portfolio and in the financing system of the indication criteria for cochlear implants		●			

Impact		Impact on decision-making				Other impacts: development of knowhow
		Influence on processes of policy creation	Implementation in services planning and management	Interaction activities with end users	Influence on the development of training and dissemination of information	
Id.						
D	Implementation in planning (indicators)		●			
	Implementation in service management (incorporation of the patient in care processes)		●			
E	Plans prepared with local heads for the incorporation of the recommendations			●		
G	Reorganization of the level of complexity of pain units		●			
H	Definition of criteria and indicators for monitoring movement disorder surgery					●
I	Design of a specific protection plan for population groups at high risk of developing complications from SARS-CoV-2		●			
	For use in guiding vaccination strategies		●			

Impact		Impact on decision-making				Other impacts: development of knowhow
		Influence on processes of policy creation	Implementation in services planning and management	Interaction activities with end users	Influence on the development of training and dissemination of information	
Id.						
J	Proposal rejected: work underway on finding alternatives		●			
L	Establishment of a conceptual framework for aligning the different criteria applied in the evaluation of the patient experience in the different health care areas	●				
	The cardiovascular disease plan aims to initiate a process similar to that carried out with chronic obstructive pulmonary disease (COPD) for chronic heart disease	●				
M	Reorientation of the current Strategic Health Research Plan in the application of criteria for reducing the current gender gap	●				
	Preparation of the new Strategic Health Research Plan, its strategic lines, and its financing instruments	●				
N	Preparation of a system contingency plan to deal with successive epidemic waves	●				
P	Incorporation of results into the health care model for women who have experienced gender-based violence, and for their children	●				

Impact		Impact on decision-making				Other impacts: development of knowhow
		Influence on processes of policy creation	Implementation in services planning and management	Interaction activities with end users	Influence on the development of training and dissemination of information	
Id.						
Q	Incorporation of concrete measures and actions that help reverse existing gender inequalities	●				
R	Creation of a stable working group to find solutions and the preparation of a document of recommendations	●				
	Preparation and dissemination of information for the general public and for professionals				●	
S	Incorporation of new criteria into calls for Applications, and definition of new equality policies in the future strategic plan document	●				




● Real impacts ● Potential impacts

(int) Impact recorded in interviews






Snapshots of the impacts

This section reports the impacts of AQuAS products in the form of snapshots providing detailed examples. It presents the key contributions of these products to the generation of evidence that may have an impact on decision-making and thus benefit the general public, both in terms of their health and in terms of social and economic dimensions. The relevance of the products is highlighted and their main results described, as well as the processes through which decisions are made and the final impact on the various beneficiaries. In this way, the snapshots provide more detail on the impacts achieved and also provide data on the factors associated with the process.

Of the 15 products with real impacts on decision-making, three have been singled out for detailed study due to their high impact and the diversity of the issues they cover:

-  A new proposal for the diabetic foot care model in Catalonia (A)
-  Inclusion of bilateral cochlear implants for children among the complementary services offered by the public health system (C).
-  A care model for women who have experienced situations of gender-based violence and their children (P).

The factors favouring impact discussed in the interviews were:

-  The opportunity for decision-makers to have access to good quality evidence.
-  The decision-makers' capacity and motivation to incorporate evidence into the decision-making process.
-  The cooperation between technical staff and decision-makers in applying the evidence to the needs of the system.
-  The creation of long-term relationships of trust between technical staff and decision-makers.
-  The ability to make rapid, timely responses.

AQuAS Impact Snapshots

A NEW PROPOSAL FOR THE DIABETIC FOOT CARE MODEL IN CATALONIA



What you need to know:

Determining the risk of complications associated with diabetic foot in patients with diabetes mellitus allows the provision of a more personalized, tailored care.



What is the challenge?

In Catalonia, diabetes mellitus 1 and 2 is one of the most frequent chronic diseases and its prevalence is rising progressively year after year. Diabetic foot is the most common cause of complications and hospitalizations in the diabetic population, and is directly associated with risk of amputation. Diabetic foot sufferers have poor quality of life, and the direct and indirect health care costs are high.

The management offices of the Catalan Health Service (CatSalut) set up a multidisciplinary group for the purpose of reviewing the community foot care provided to the population with diabetes, as well as diabetic foot hospital services. AQuAS also reviewed the available evidence regarding the detection, diagnosis and treatment of diabetic foot.



What evidence was found?

The main recommendations of the report propose ways of preventing the development of the disease, improving patients' overall state of health, and avoiding future complications:

✓ There is a need to **define and establish an integrated and multidisciplinary care** circuit for patients diagnosed with diabetes mellitus so as to prevent the appearance of problems associated with diabetic foot. It is proposed that this circuit should comprise (at least) two levels of care which should work together in a coordinated fashion and communicate fluidly with each other.

✓ **The first basic level of care should comprise primary care and community podiatric care services.** At this level, it is necessary to review and improve the screening protocol so as to assess the risk of complications associated with diabetic foot in all patients diagnosed with diabetes mellitus.

✓ **A second more advanced level of hospital care** should comprise multidisciplinary units for complex cases of diabetic foot. These units should be formed by a team of multidisciplinary professionals equipped with the essential material.

The report had a notable impact among primary care and hospital staff and was presented at the Conference on the treatment of diabetic foot held at Bellvitge Hospital in February 2020. The document was downloaded more than 100 times.





What was the impact on decision-making?

The AQuAS report provided the evidence for the preparation of the consensus document "Community care for people with diabetes".

✓ The main modifications were: 1) changing from the schedule of three annual visits at the podiatric care unit to a **variable number of visits** depending on the patient's level of risk; 2) modifying the connectivity between centres and the **coordination in the follow-up and care** of these patients at primary care services and community foot care services.

✓ At the advanced hospital care level, a **description of the internal organization system** necessary to provide complex foot care at the SISCAT hospital centres was presented.

The report is also being used (and will be referenced) in the training material on diabetic foot care for professionals currently being prepared by CatSalut and the Public Health Agency of Catalonia, scheduled to begin in 2022.

Finally, the report is also being used throughout Spain as a reference for the updating of the National Health System's Diabetes Strategy. This document is pending publication.



How will the public benefit?

A major benefit is expected for patients with diabetes, through the provision of a **system of care more closely adjusted to their needs**, and the reduction of the incidence of more complex diabetic foot disorders. This will not only impact the economic and social burden associated with diabetes mellitus, but will also represent a significant improvement in the quality of life of patients with diabetes.

As regards health care professionals, the improvement in coordination is expected to have an impact on the quality of care.



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Servei Català de la Salut. Atenció podològica comunitària a persones amb diabetis. Prestació complementària del Sistema Nacional de Salut de Catalunya. Generalitat de Catalunya, 2021 https://catsalut.gencat.cat/web/.content/minisite/catsalut/ciutadania/serveis_atencio_salut/quins_serveis_ofereix_catsalut/prestacions-complementaries/Atencio-Podologica-Comunitaria.pdf

News: Aposta per establir nou canals de comunicació i coordinació en l'atenció podològica comunitària a persones amb diabetis, juny 2021 <https://catsalut.gencat.cat/ca/detalls/noticies/2021-06-15-nous-canals-comuncacio-atencio-podologica-comunitaria>

AQuAS Impact Snapshots

INCLUSION OF BILATERAL COCHLEAR IMPLANTS FOR CHILDREN AMONG THE COMPLEMENTARY SERVICES OFFERED BY THE PUBLIC HEALTH SYSTEM



What you need to know:

Based on the evidence generated, the decision was made to include bilateral cochlear implants for children in the portfolio of complementary publicly-financed health services in Catalonia.



What is the challenge?

In Catalonia, each year the neonatal hearing screening system applied in all maternity hospitals (both public and private) identifies around 60 children born with severe or profound hearing loss. This screening makes it possible to identify newborns who have a hearing loss of 40 dB or greater and to apply appropriate treatment and follow-up. Most childhood hearing loss appears in the first year of life, and between 35% and 50% of cases are congenital.

Cochlear implants are electronic devices that transform acoustic signals into electrical signals that stimulate the auditory nerve. They comprise a set of internal components that are inserted surgically (the receiver-stimulator and electrodes) and an external processor that is fitted approximately one month after surgery and is individually supervised by an expert in clinical programming.



What evidence was found?

L'AQuAS was commissioned by CatSalut to update the available evidence related to the indication criteria for cochlear implants in children.

The new evidence generated by the study modified the indication criteria for **cochlear implants** in children, in relation to certain important considerations:

- 1) If the five indication criteria for cochlear implants are met, a bilateral cochlear implant is inserted rather than a unilateral one.
- 2) The implants are inserted **simultaneously** or with a minimal period between implants.





What was the impact on decision-making?

The evidence provided arguments for including bilateral cochlear implants for children with severe or profound hearing loss in the portfolio of complementary services funded by the public health system.

The report highlighted the clinical importance of these implants and, following its recommendations, the decision was taken to include them inside the services provided and funded by the public health system. This new economic regulation was made retroactive for parents or legal guardians of children who had received a bilateral cochlear implant over the previous five years.



How will the public benefit?

The insertion of bilateral cochlear implants can be transformational for children, due to the devices' ability to **facilitate learning and cognitive development**. Among their most notable benefits, they enable children to hear in situations of ambient noise (for example, at school), to locate the sound, and to hear sound coming from both sides without having to turn their head.

Arguments against bilateral implantation are (1) the high risk involved in anaesthesia and surgery, (2) the risk of residual hearing loss, and (3) the fact that unilateral implantation allows one ear to be preserved for treatment with technologies that may be developed in the future.

The incorporation of these implants into the public financing system has a positive economic impact for families, who previously had to cover the cost of the second implant in full. In the past, families with limited economic means could not afford this treatment.



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AQuAS Impact Snapshots

A CARE MODEL FOR WOMEN WHO HAVE EXPERIENCED SITUATIONS OF GENDER-BASED VIOLENCE, AND THEIR CHILDREN



What you need to know:

The link with the care professional is a basic priority tool for helping women during their recovery process.



What is the challenge?

Gender-based violence – the form of violence that women suffer for the mere fact of being women – is a multidimensional social phenomenon acknowledged by the World Health Organization as a major public health problem. In 2016, in Catalonia, 51.3% of women declared having suffered gender-based violence at some time in their lives, and 27.4% had suffered some type of severe aggression.

Physical, sexual, psychological and social violence has serious repercussions for the health of sufferers and their children.

The health system, and especially primary care as the gateway to health care, is a particularly important setting for addressing the problem of gender-based violence. Health care professionals have a fundamental role to play in the detection and prevention of gender-based violence and in the care of women recovering from this form of abuse.



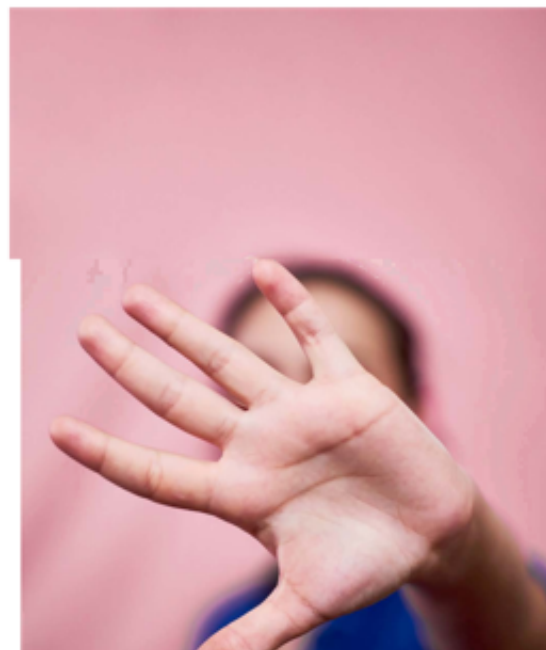
What evidence was found?

The AQuAS reports had the objective of evaluating the design and implementation of the protocol for addressing gender-based violence in the field of health care in Catalonia, published in December 2009.

Nine assessment reports were produced, one for each of Catalonia's health regions, and a tenth overall report for the whole of the territory.

The reports compiled the experiences, needs, weaknesses and proposals for improvement shared by health care professionals, women's organizations, and experts in health and gender-based violence from all over Catalonia.

The reports include multiple **proposals for improvements in prevention, detection, care and recovery** and for a new comprehensive model to address gender-based violence.





What was the impact on decision-making?

The AQUAS report contributed to providing the structure, and also the contents, for the health care model for women who have experienced situations of gender-based violence and for their children.

Though it was not the only study to contribute to the model, the evidence provided by the report was used to propose some of its objectives and a structure for the document. The report highlights the **key role of health care professionals attending women in situations of gender-based violence**, and stresses that the women should be the focus of the resources and the organization provided for this purpose by the Catalan public health system. At the strategic planning stage, the focus group sessions identified certain misguided ideas regarding the difficulties in detection and follow-up of these cases of abuse. In the tactical planning, principles are defined that have been prioritized by the persons consulted.

AQuAS participated not only in the preparation of the report but also in the presentation of the initial proposal of the model. It did so by recording the impressions, contributions and reflections of the various stakeholders to improve the model, achieve agreement on its final version, and then validate it.



How will the general public benefit?

This new model aims to **guarantee the protection of victims of gender-based violence and to make this protection more comprehensive**. The model recognizes the link with health care professionals as a basic priority tool to accompany women in their recovery process. It places health care professionals at the centre of projects and women at the centre of resources, providing care underpinned by the concept of intersectionality and the adoption of a biopsychosocial perspective.



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Notícia: Model d'atenció a la salut de les dones en situacions de violència masclista i la dels seus fills i filles https://salutweb.gencat.cat/ca/ambits_actuacio/linies_dactuacio/serveis_sanitaris/model-atencio-salut-dones-violencia-masclista/



Final thoughts

In this study we have assessed the impacts of AQuAS products on decision-making in health care. The analysis is illustrative rather than detailed, but it provides useful examples of some success stories that have had a real and wide-ranging impact on decision-making.

Below are a series of reflections drawn from the analysis which can shed further light on the impacts of these AQuAS products and the factors involved.



Factors associated with the impact of AQuAS products

- 1. The products selected and analysed here contribute to a diverse range of impacts on decision-making.** Despite the perception that the use of scientific evidence in decision-making is limited, and the likelihood that the information provided in the responses to the questionnaire may vary, most of the products analysed have contributed to real impacts on decision-making. Although only a small number of cases were evaluated, a notable diversity was observed in four different impact issues: 1) their influence on policy creation; 2) their implementation in the planning and management of services; 3) their effect on interaction activities with end users; and 4) their application in the creation of materials for training and the dissemination of information. Although this observation may be, in part, an artifact of the approach and definition adopted, it also suggests that the development of a tool for the systematic assessment of the impacts of AQuAS products on decision-making was appropriate for the purpose, since it enabled participants to express the different impacts in their own way. However, one of the limitations of the study is the variability in the responses (in terms of both content and detail) which makes it difficult to compare and summarize the impacts obtained.
- 2. The evidence must be relevant, useful and accessible.** Among the factors that emerged as important, the use of **guided assessments, personalized approaches, and rapid, timely responses** was confirmed. The participants' responses suggest that **communication and the message of the product** are key to its successful application; that is, a communication strategy focused on the end user can help the effective transfer

of the evidence generated. One way to reach a variety of users is to use different communication channels and messages adapted to their needs. It is essential to adapt the messages to the needs of the user and to present these messages in the context and media that they prefer.

- 3. Interaction with the decision-maker and relationships of trust help the creation of impact.** As most of the products selected had been requested by a particular person, it is not surprising that most of them generated an impact; according to the literature, the impact of products on decision-making is greater when the recommendations are the result of a request from decision-makers and planners. In this regard, the interaction with the end user also meant that most of the impacts achieved were direct, without the need for intermediaries in the transfer process. Influencing decision-making requires the development of intangible relationships of trust with decision-makers. Understanding what interests decision-makers and how to engage with them is crucial for an effective interaction. Continuous communication and clear articulation of decision-makers' expectations are needed to confirm the value of sustained engagement.
- 4. The access of decision-makers to good quality evidence,** fostered by these relationships of trust. Naturally, this enhances their capacity and motivation to take decisions based on evidence and, therefore, to be able to use this evidence independently.

We finish with some brief reflections on the best way to assess the impact of AQuAS products.

Some reflections on how to improve the assessment of impact

- 1. Six-month periods are sufficient to assess the contribution of AQuAS's products to the impact on decision-making.** The different products evaluated show that the period of time considered is sufficient for contributing to an impact. This issue should continue to be analysed in future evaluations, especially with respect to products that are not directly requested by a particular person. This is because they may require a longer time period, and a greater effort in terms of knowledge transfer and exchange.
- 2. The interview format produces more information on knowledge transfer and exchange, while the questionnaires can be used to obtain a general picture of the impact of the products.** The use of questionnaires provides information on a wide range of products, but it is often difficult to specify the exact role attributable to a particular product as distinct from other inputs, situations, and changes. The precise degree of contribution of the products to the promotion of the changes indicated is unknown; nevertheless, they clearly make a contribution to the decision-making process. One way to improve this aspect would be to incorporate more information on knowledge transfer and exchange into the questionnaire, so as to gauge the degree of a product's contribution, the time necessary for its impact to be noted, and the commitment of policy

makers. However, the selection of cases and the corresponding interviews provide more details about the context and nature of a product's impact.

- 3. Using a single type of decision-maker captures only a part of the product's impact of the product.** Finally, the use of a single type of decision-maker can only capture the impacts directly related to their perspectives, and may limit the identification of other impacts, especially unexpected ones. The literature indicates that a multifaceted approach is required to capture the full impact of a study, but it is nonetheless true that as the impacts become more diverse and further removed from the study's original purpose, it is more difficult to attribute them to that study in particular.

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