Avoiding duplication of work, learning from each other and having access to experts from all over Europe. These are important advantages of a European network for science advice on health issues in the public domain. The quality of national recommendations will improve, says Louise Gunning, current president of EuSANH and president of the Health Council of the Netherlands.

‘A European network strengthens national advice’

Across Europe, governments want to base policies addressing complex issues on scientific evidence. States often face similar issues, for instance around vaccination, chemicals in the workplace, exposure to substances in the environment, nutrition or new technology in healthcare. All advisory bodies in Europe map the state of science for governments in order to advise on public programmes.
By collaborating, sharing knowledge and expertise, advisory bodies can do more with fewer people. Gunning gives an example: “Take the consequences of exposure to chemicals in the workplace. You can agree that one advisory body examines substance x and another analyses substance y. Then you might examine sixty percent more substances using the same people.”

**Sharing results**

Cooperation within EuSANH, the European Science Advisory Network on Health, focuses on the work preceding the publication of advice. It is about bringing together the scientific literature and interpreting and evaluating it. Based on this collaborative science, the members themselves advise their governments. Gunning: “By working together, we strengthen national advice. Although all advisory bodies will rely on the same research, the recommendations they deliver to their governments may differ. This is logical, not every country can or will spend the same on health care or have the same priorities.”

Moreover, the members of the network themselves determine how intensively they cooperate, emphasises Gunning. “They can choose to use each other’s reports. In any case, it is important that the advisory bodies in Europe are aware of each other’s work and have access to published advice. And that means, for example, that it also has to be available in translation.”

**Valorization in the public domain**

EuSANH may also contribute to the valorization of research in the public domain, Gunning expects. “We finance a lot of health research from public funds, both nationally and through the European Union. Some of those results are converted into products by companies, which is what we call valorization. But much of the research will be translated into public programmes. This is also a form of valorization. For this, EuSANH is a logical partner for Europe.”

To date, requests for advice have come from national governments. But it is expected that at a later stage the European Union will also request advice. Gunning: “Responsibility for health policy now rests largely with the member states. In many countries the advisory role is legally assigned to a national organisation. So a lot needs to happen before EuSANH can release European recommendations. But a number of issues will also play out at the European level. From the perspective of a national advisory body, it is therefore important that the experts we rely on sometimes join European commissions.”
Sharing expertise
A major benefit of collaboration is that members have access to experts from across Europe. “It could be that you really have no one at home who is an expert on a particular subject. Then you can add an English person and a Swiss person to the committee if that is where the real expertise lies. And if you have an expert, you can share that expertise with European colleagues. The fact that you have a network of like-minded members, and can get to know each other, means that you can learn from each other.”

Gunning is not afraid of rivalry. “Scientists have long been very international. They compete with each other for grants, review one another’s articles for journals and meet each other at conferences. And if there are competing views, that can be only a good thing. At the Health Council we always try to include conflicting scientific opinions in committees. The evaluation of research is never unequivocal. You want different viewpoints represented. If you do that on a European level, you will most likely get more specific expertise and at the same time cover all perspectives and angles.”

Quality seal
Meanwhile, the network has developed a common methodology, which has been tested using a case study. Gunning: “If you each take on a share of the work, you want to be sure that the other parties are conducting their share in the same way. The more you follow the same approach, the easier and more meaningful collaboration becomes.”

The aim is for EuSANH to develop into a name that stands for quality. As example, Gunning refers to the renowned Cochrane Collaboration: “Cochrane analyses are widely accepted by doctors as the basis of their medical practice. Through this network, a great many doctors have easy access to the latest scientific information.”

The Institute of Medicine in the United States is also a source of inspiration. “EuSANH has the potential to be as influential. The number of experts that the United States is able to consult is a multiple of that of the Netherlands or any other EU member state. They can simply draw from a much larger pool of experts. With a European network we also have that advantage.”
Science and technology have become pivotal in our modern culture and are key drivers of social and economic prosperity. People expect governments to capitalise on the benefits of new scientific discoveries and new technologies. This raises many complex issues. In health in particular, we are faced with a host of challenges, ranging from the deployment of new technologies to preventing obesity to dealing with chronic diseases.

Governments are required to address increasingly complex questions and make decisions which have deep societal impact. Moreover, the authority of scientific and technological knowledge is no longer obvious. It is increasingly seen in a broader social context and has become a matter for public debate.

**Science advice**

Scientific advice on health is defined as the solicited or unsolicited analysis of a defined public health, health care or health policy problem, based on updated scientific knowledge, considering also relevant expert judgment, practical experience, and ethical, cultural and societal values and implications, with conclusions and recommendations for health policy.

In a world of increasingly rapid scientific progress, good science advice can play a key role in successful policy decisions on health. In particular, science advisory bodies can help to summarise available evidence and give sound advice to policy makers. In this way, they can bridge the gap between the scientific community and policy makers, paving the way for effective, evidence-based decision making. Most EU member states have their own national advisory bodies that provide science advice. However, many health issues have transnational dimensions that call for an international perspective.
Many health issues have transnational dimensions that call for an international perspective.
More efficiency, more quality

How is science advice currently prepared in member states? That was the first question to be answered in establishing a common framework for scientific advice across Europe. Therefore, the function and structure of existing national science advisory bodies for health in twelve European countries was researched. Also, a thematic analysis of reports from each country was carried out. In addition, policy makers and science advisors in ten countries were interviewed on the process and the barriers and opportunities involved with science advice.

Wide variety
Overall, advisory bodies show wide variation in their methodologies in preparing advice. This can partly be explained by their different positions and responsibilities. The majority of countries have specific institutions that provide science advice as their main function. Others combine science advice with other tasks. The breadth of the field also varies. The topics addressed by the advisory bodies are very diverse. Sometimes there are separate agencies for different areas of health. There is especially a great deal of variation when it comes to the relationships between the science advisory bodies with policy makers. At the same time, the positioning of the advice within the policy making process and the impact of the advice on policy decisions differ significantly.

To understand how both policy makers and science advisors are engaged in scientific advisory activities, a survey was conducted amongst 19 policy makers and 25 science advisors. In general, the factors most affecting the relationship between policy makers and science advisors turned out to be different timing, different interests, and translating policy problems into research questions. The quality criteria within the science advisory process that were most important for both groups were transparency (clear, open and accessible information), independence, procedures to adequately deal with conflict of interest, rigor, and systematisation of knowledge.
Advantages of cooperation
The variety encountered offers opportunities to learn from one another and use each other’s work and expertise. Members could share the initial work of synthesising scientific evidence on which the advice is based. They will then be able to cover more topics, adding to the cost efficiency of collaboration in producing science advice.

Also, collaboration between science advisory bodies is undoubtedly the best way to improve the quality of science advice on health in Europe. Member organisations have a great deal to learn from each other’s methods and knowledge. Collaboration makes it possible to mobilise a large number of experts and enrich the knowledge base by involving experts with different backgrounds and coming from a range of disciplines. By recruiting the very best available expertise and operating to European standards, the quality of science advisory reports will radically improve.

Collaboration within EuSANH
The diversity of science advice points to major opportunities for improvement, which can be taken through EU cooperation on science advice on health. EuSANH is the vehicle through which collaboration is achieved.
EuSANH’s mission is to promote independent science advice on health issues to national and European health authorities and to support evidence-based health policy. To achieve this goal, EuSANH focuses on exchange of national reports, mutual consultation of national experts, coordination of work programmes and joint work on preparing European science advisory reports on health. EuSANH is at the heart of European collaboration on science advice on health. Through this network, science advisory bodies across Europe can share expertise and information, avoid duplicating or overlapping activities and reduce workload. This will enhance the quality of advisory reports.

**Stages of development**
Taking into account the differences in maturation of each member organisation, EuSANH has defined three different phases of development:
1. In the short term, a bottom-up approach of collaboration is foreseen that saves work.
2. In the mid term, EuSANH will focus on providing quality assurance.
3. In the long term, EuSANH aims to achieve European recognition, and will run top-down European projects.

EuSANH promotes independent science advice on health issues and supports evidence-based health policy.
Ensuring quality and credibility

EuSANH aims to improve the quality of science advice of the participating science advisory bodies from across Europe. A common methodological framework will be key to providing the best possible science advice, in terms of both the quality and credibility of reports.

**Key principles**

Based on the research conducted into the current state of affairs of science advisory bodies and science advisory reports in participating countries, EuSANH has drawn up a dynamic framework for producing, reviewing, disseminating and evaluating science advisory reports on health. We have identified seven stages involved with creating science advice and have summarised key principles for each stage.

1. **Framing the issue**

Policy makers and science advisors should regularly discuss emerging issues requiring advice. In formulating a request for advice, policy makers and science advisors should determine in close cooperation the set of questions to be addressed. In doing so, they should consider whether a European or international perspective is appropriate. The health research community can be involved in the process from the outset.

2. **Planning the process**

When planning the process, it is important that policy makers and science advisors take into consideration the stage within the policy making process at which the scientific advice is needed. Policy makers and scientists tend to have different points of departure and reference, and work to different time frames. It is up to them to link their two worlds. Once the scope and duration of the task have been agreed upon, the science advisory body should develop operational procedures to manage the entire advisory process.
3. Drafting the advisory report
To ensure credibility, committee members should be selected on the basis of professional excellence and appropriate range of expertise, and should reflect the diversity of scientific opinions. To guarantee independence from political, economic and special interest influence, invited experts should be screened for conflicts of interest. Furthermore, committee members should carry out their deliberations in closed meetings in order to avoid political and special interest influence. The committee should be accountable for the final report. Depending on the issue, policy makers could be involved as official observers in the committee or stakeholder hearings could be held. This may increase support for the final recommendation.

In order to ensure scientific transparency, data sources such as existing systematic reviews and HTA reports used in producing the report should be specified. All assumptions made in interpreting and synthesising the data should be documented and explained and uncertainties described.

4. Formulating the recommendations
The success of science advice depends on its clarity, feasibility and applicability to a particular issue. It is important for advisory bodies to have good knowledge of the political climate. Clear language should be used in the report, which ought to address the whole issue. Any ethical or legal principles should be specified. Sometimes it is better not to formulate recommendations but to provide policy options.

5. Reviewing the report
The report should undergo an independent peer review. This should help to guarantee continuity in producing advisory reports on similar issues and secure consistency with other reports of the advisory body. The authors of the report are then to address the comments and suggestions which arise. An editorial process should be established to resolve disagreements.
Case study

Determinants of a successful implementation of population-based cancer screening programmes

To test the methodological framework and the functioning of the network, EuSANH conducted a case study on determinants of a successful implementation of population-based cancer screening programmes. The aim of the study was to discover the procedures needed for effective implementation of screening programmes for cervical, breast and colorectal cancer. Six science advisory bodies cooperated on the advice and identified twelve experts from ten member states for the committee.

Because the advice is addressed to governments of different European countries, the report focuses on success factors that can be extrapolated from one cancer screening programme to another. The purpose is to facilitate for a region or country where there is a will to initiate or improve such a programme.

Preparation
The first task was to frame the questions that needed to be addressed: what are the important organisational aspects when implementing cancer screening programmes? How can barriers to participation in screening programmes be reduced? What advice can be given to decision makers in a European country wanting to initiate a cancer screening programme?

The Swedish Council on Health Technology Assessment gathered already-existing evidence and prepared background material. A committee with twelve experts from ten countries was established. The committee included experts on cancer epidemiology, health care systems, implementation and policy barriers, oncology, health economics and medical ethics.

Discussion
The committee met at a workshop in Stockholm on 7-9 February 2011. The experts added their professional experience and judgment to the existing material. The discussions were attended by international stakeholders such as WHO Europe, the European Commission and the European Cancer Patients Coalition. The committee worked on two documents. One was an advisory statement which included the expert judgment of the committee.
The other was a report on the important aspects to be considered when implementing a cancer screening programme. By the end of the meeting, the two documents had been drafted and the experts had been assigned to complete them and circulate them for comments. The science advisory report was delivered to the European Commission in September 2011.

**Evaluation**

The evaluation of the process showed that there were major advantages to science advice based on the work of a European expert group. In the area of cancer screening, the committee predicts an increasing need for knowledge and expertise. A network of experts is essential to meeting this need.

The subject was suitable for European cooperation. Different European countries vary in their approach to screening programmes. It was useful to investigate the underlying scientific basis. Because some of the necessary information was contained in non-published literature, it was a great advantage to consult local experts.

The committee also found that EuSANH’s proposed methodology was highly effective. In particular, the evidence-based approach was greatly appreciated. It was seen as an advantage that prepared background material was distributed before the meeting. Based on this work, it is possible to quickly reach a joint recommendation.

A suggestion for future workshops is to plan two face to face meetings instead of only one. The first meeting will address the questions to be considered and discuss the further procedure. Thereafter the literature search can be performed. At a second meeting the committee could work on the evidence and recommendations and prepare the science advice.

*Results of the case study were published by Lynge E et al., Determinants of successful implementation of population-based cancer screening programmes, Eur J Cancer (2011), doi:10.1016/j.ejca.2011.06.051.*
Member states may provide their own systems to test the quality of advice given by a national standing committee. When the European Union is the client, experts from different countries will be asked to take another critical look at conclusions and recommendations. Eventually, a European audit committee could be established.

6. Publishing the report
The finalised peer reviewed report should be made publicly available. This includes providing the report to the policy maker and to the health research community. Where more active dissemination is required, press releases, press statements, press briefings and scientific publications may be considered. Meetings with policy makers and target groups can be organised to provide more clarification. Preferably, the (summarised) report should be available in English.

7. Assessing the impact
Given that science is only one of the elements that can influence policy making, it would not be appropriate to assume a direct relationship between science advice and policy. However, if science advice is correctly positioned within the decision making process, it will be taken into account. There should therefore be a follow-up procedure to monitor policy decisions in response to the advisory report. In addition, since accountability is an essential part of public service, the advisory body should regularly perform a (self)assessment, in terms of both the impact of its reports and its performance.

For the total methodological framework visit www.eusanh.eu

---

Stages in the science advice process

1. Framing the issue
2. Planning the process
3. Drafting the advisory report
4. Formulating the recommendations
5. Reviewing the report
6. Publishing the report
7. Assessing the impact
In January 2012, the EuSANH-ISA project will come to an end and EuSANH will be fully independent. To continue to be successful, it is essential to put in place a sustainable European structure of cooperation.

**Finance**

EuSANH will be independent from European funding. The network will function on the basis of collaboration between member states. Most of this input will be person time. The contributions paid by EuSANH members should cover the costs of the small overhead structure. The network is also able to sign up for European programmes for which grants are awarded.

**Organisational structure**

The Governing Council is the governing body of EuSANH. Normally the Council meets once a year. Each member (state) has a representative in the Governing Council. The president of the Council is the president of EuSANH and also the president of the Executive Board. The Executive Board is made up of five members from different member organisations, and is responsible for the overall direction and management of the interests of EuSANH. EuSANH’s structure will further include a Secretariat to support the day-to-day running of the network, expert groups formed to prepare joint science advisory reports and (in time) an audit committee to ensure the quality of advisory reports. The Secretariat will be hosted by one of the participating bodies.

**Means of communication**

Besides face-to-face contact, email, telephone, an annual meeting and emeetings, EuSANH will use the web communication platform SINAPSE for communication between members. SINAPSE is a free public service of the European Commission. SINAPSE will also be central for external communications, along with the EuSANH website and newsletter.

Read EuSANH’s constitution on www.eusanh.eu
Founding meeting in Bucharest

To formally launch this new EuSANH organisation, a founding meeting took place in Bucharest on 13-14 October 2011. Presidents of science advisory bodies from more than half of the European member states became ‘Founding Members’ of the new EuSANH organisation. These members convened in the first meeting of the Governing Council and agreed on the constitution and on membership. On that occasion, the first ‘EuSANH President’s dinner’ was also launched: a yearly occasion to meet and discuss the most challenging health issues the member states are confronting.
More information

EuSANH-ISA partners
The EuSANH-ISA studies were conducted by the following EuSANH members:

• Health Council of the Netherlands, (GR), Coordinator
• Institute of Health Carlos III, Spain (ISCIII)
• Superior Health Council, Belgium (SHC)
• Swedish Council on Health Technology Assessment, Sweden (SBU)
• National Institute of Public Health – National Institute of Hygiene, Poland (NIZP-PZH)
• National School of Public Health, Management and Professional Development, Romania (SNSPMPS)

For more information and detailed reports on the EuSANH-ISA studies, please visit www.eusanh.eu.

EuSANH members
Currently, more than half of the European member states are represented in the formal EuSANH organisation and more are expected to join in near future.
Contact persons for member organisations can be found at www.eusanh.eu.

Keeping informed
Would you like to be kept informed of EuSANH developments?
Sign up to the EuSANH newsletter via www.eusanh.eu.
For more information please contact the EuSANH coordinating secretariat. The contact person is Ms Dorine Coenen, d.coenen@gr.nl or eusanh@eusanh.eu.

The EuSANH-ISA project is supported by funding under the Seventh Framework Programme of the European Community under grant agreement number 229716.