Milestone 29 - WP8, Task 8.3.2

Research/ desk work on health reporting in Member States

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Executive summary

This document is Milestone number 29 of the Joint Action on Health Information (hereinafter referred to as InfAct) with project number 801553. The report contains the methodology and results of the web-based desk research on national health reporting in EU Member States and associated project countries, conducted as part of task 8.3.2 of InfAct. It serves the purpose to present a comprehensive overview of the different formats and respective target groups for the dissemination of health information in the analysed countries.

Health information should be made adequately available to the relevant target groups in terms of presentation and dissemination. This results in different requirements for the preparation of health information, the health reporting formats and communication channels. At the European level, heterogeneity of health reporting practices in Member States causes, next to occasional language barriers, difficulties in facilitating access to EU-comparable information.

The findings of the web-based desk research show that public health reports are the mainly used format of health reporting in the analysed countries, while the most frequently addressed target groups are the general public and scientists or researchers. Based on the analysis of this research, a guidance document on standards and good practices for comparable and high-quality public health reports for EU Member States will be developed within task 8.3.2 of InfAct.

Key points

- Health reporting practices and quality in EU Member States are heterogeneous.
- 'Health reporting' is not a commonly used terminology in all analysed countries.
- Public health reports are the most frequently used health reporting format.
- The general public and scientists or researchers are the most frequently stated target groups of health reporting formats.
- Health reporting formats should be tailored to the needs and competencies of the target groups.

InfAct: Research/ desk work on health reporting in Member States

I. Introduction

Health reporting should provide up-to-date data and information on the population's health status and its determinants, as well as on healthcare services in the countries (or regions). Establishing an information or discussion base for health policy is a key objective of health reporting ('data for action'). Policy-makers are therefore an important target group, but not the only one. Scientists and researchers, health care providers, the media and the general public are among the other addressees of health reporting. As in other disciplines, there is often a gap in public health science between gaining new knowledge and its translation into practice and policy [1]. High-quality national health reporting for adequate dissemination of health information faces a number of important requirements. Depending on the needs and competencies of the respective target groups, different requirements arise for the preparation, format and communication channel for dissemination of health information [2].

The World Health Organization (WHO) names four central addressees in its framework for the implementation of surveillance of non-communicable diseases: health care providers, politicians, decision-makers in the health care system and the general public [3]. However, the WHO does not specify any specific formats, communication channels or guidelines for the provision of data to the various addressees. It is essential that the different formats respond to the needs of the addressees. While the technical/scientific target group is interested in details, understands academic vocabulary and trusts numbers, the non-technical audience is mainly interested in the key messages and prefers simplified vocabulary. Furthermore, the latter group has a very different understanding of numerical information [4].

Health reports cover a broad spectrum of topics, ranging from diseases, risk and protective factors to subjective well-being and health-related quality of life, utilisation of healthcare services as well as the structures and costs of healthcare systems. In general, health reports can be divided into two main types (considered here as two different formats): public health reports and health system performance assessment reports. A variety of other formats are used for the dissemination of health information including fact sheets, policy briefs or scientific journals. Particularly in the area of formats and communication channels, digitalisation opens up new possibilities for the visualisation and processing of data [5]. In addition to printed formats, online formats like websites and social media are also becoming increasingly important [6].

The overall objective of task 8.3 is to develop guidance for accessibility, availability and reporting of health information, including information on availability and quality of data/ indicators and the quality of reporting. Task 8.3.2 aims to facilitate the preparation of high-quality EU-comparable public health reports. The results of the web-based desk research on national health reporting presented in this report give an overview of the different formats and respective target groups for the dissemination of health information

in InfAct project participating countries. Starting from evidence and good practices in national health reporting, a guidance document and recommendations for health reporting in EU Member States (MS) will be developed, including potential formats and target groups.

II. Aim

The aim of the web-based desk research was to create a comprehensive overview of the different formats of health reporting and the respective target groups.

Good practice examples will be derived from the results, identified on the basis of criteria used in existing good practices [7-11] as well as the predecessor project 'Evaluation of National and Regional Public Health Reports (Eva PHR)' [12]. The good practice examples will, in close cooperation with partner countries, be transformed into a guidance document to provide common recommendations, including potential formats, target groups and quality criteria.

III. Approach

In order to identify different national health reporting formats and target groups, a web-based desk research was conducted among the InfAct partner countries (28 MS and 4 associated countries) (table 1 and figure 1).

Table 1: Analysed Countries

| Austria | Denmark | Hungary | Lithuania | Portugal | Switzerland |
Belgium	Estonia	Iceland	Luxembourg	Romania	United Kingdom
Bulgaria	Finland	Ireland	Malta	Slovakia	
Croatia	France	Italy	Netherlands	Slovenia	
Cyprus	Germany	Latvia	Norway	Spain	
Czech Republic	Greece	Liechtenstein	Poland	Sweden	

Figure 1: Map of analysed countries

For this purpose, an explorative search strategy on the status of health reporting in the MS has been drafted. After identifying potential sources for national health reporting, the websites of these institutes and ministries were searched for different health reporting formats. Subsequently, a Google keyword search was executed to identify relevant health reporting formats, followed by a search on Google scholar and PubMed/ Embase. The results were categorised on the basis of a qualitative content analysis before univariate analysis and cross-comparisons were carried out.

A consistent definition of health reporting was necessary to limit the concept. In this context, we have used the definition of 'Good Practice in Health Reporting' for Germany and adapted it considering the suggestions of the task partners [7]:

> Health reporting provides descriptions of the trends in health status of a population and its determinants, analyses problems and demonstrates areas in which action needs to be taken in health care, health promotion as well as health protection and disease prevention. As such, it provides a rational basis for participatory processes and a foundation for health policy decision-making.

For practical reasons the study focused on health reporting activities at national level and by institutions officially tasked with national health reporting. Regional health reporting activities were only considered where no national activities or publications existed.

Figure 2 describes the web-based desk research on the formats and target groups of health reporting carried out in the following steps:
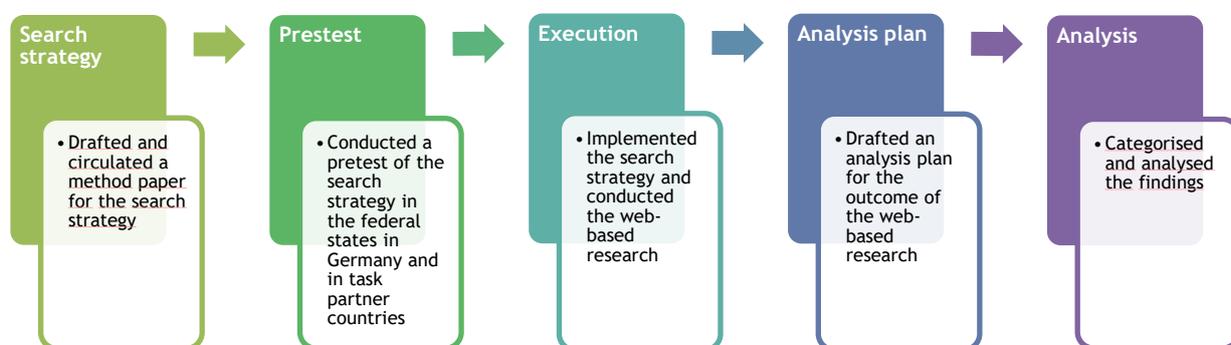
Figure 2: Methodological approach

A.   Search strategy

1.   Leading questions

In order to structure and focus the web-based desk research, the following leading questions were defined:

1. Which stakeholders provide health information for national health reporting?
2. Which health reporting formats are mainly used by the analysed countries?
3. At what intervals are health reports published?

4. Which target groups are addressed in the countries?

5. Which target groups are addressed by the formats in the countries?

2. Inclusion criteria

The following inclusion criteria were defined:

✓ Public Health Institutes, Ministries of Health and Statistical Institutes

✓ German and English language in the original, translations into English from other languages. Since not all countries provide an English translation of national health reports or the national-language websites of their Public Health Institutes, Ministries of Health or Statistical Institutes, the reports and websites were translated into English using the Google Translate tool (https://translate.google.com).

✓ Health reporting at national level. Regional health reporting activities were only considered where no national activities or publications existed.

✓ The most recent report in case of regular publication of a national health report

✓ Publications from the year 2000 onwards

✓ InfAct partner countries (28 MS and 4 associated countries; n=32)

3. Search strings and sources

The web search was carried out as follows:

First, potential sources for national health reporting, including national public health institutes, health ministries and statistical institutes were explored using the list of members of the International Association of National Public Health Institutes (IANPHI). The IANPHI is a suitable entry point as it forms a platform for many national public health institutes and connects them with each other. In case of missing information from IANPHI countries or for countries that are not members of the IANPHI, a Google search for potential sources was carried out (steps b-f). On the websites of these institutes and ministries, an explorative search was executed manually for different health reporting formats.

a) IANPHI: http://www.ianphi.org/whoweare/members/fullmemberlist.html

b) Search string via Google: 'national public health' Institute/Agency + [country]

c) Search string via Google: 'ministry of health' + [country]

d) Search string via Google: 'health observatory' + [country]

e) Search string via Google: 'health information' + [country]

f) Search string via Google: 'health statistics' + [country]

Subsequently, the Google keyword search (www.google.com) was used with various combinations of search terms to identify relevant health reporting formats in InfAct

partner countries. The first 30 hits of the search results were examined. Since the term 'health reporting' is not used homogeneously, the search was extended to the categories 'health reports' and 'healthcare'.

- 'Health reporting' OR 'health reports' OR 'healthcare' + [country]
- 'Public health reporting' OR 'public health reports' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'strategy' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'formats' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'indicators' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'target group' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'good practice' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'recommendations' + [country]
- 'Health reporting' OR 'health reports' OR 'healthcare' + 'guidelines' + [country]

Finally, in order to close further possible gaps, a search via Google scholar and PubMed/ Embase was carried out to identify documents on reporting with the same keywords.

In the case of lacking information on relevant institutional websites we used the network of InfAct partners to obtain information which was not readily available from desk research.

B. Analysis plan

1. Gaining knowledge
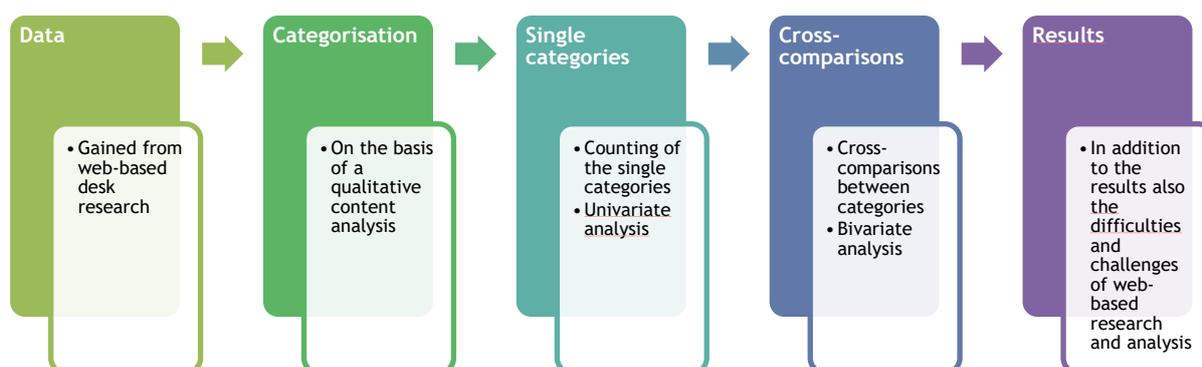
Figure 3: Flowchart of the gain of knowledge

Figure 3 illustrates the process of knowledge generation. The data obtained by the web-based desk research was first categorised according to Mayring [13] on the basis of a qualitative content analysis. In a further step, the univariate analysis of the research results followed, before cross-comparisons between the categories were carried out. Finally, in addition to presenting the findings, difficulties and challenges that emerged from the desk research and analysis were also described.

2. Central formats

The categorization (table 2) of health reporting formats including their description was established on the basis of literature review [1, 3-6, 12, 14, 15] and the input of the task partners:

Table 2: Central formats of health reporting

Format	Description	Pages
• **Public Health Report**	Comprehensive and detailed description of a variety of topics	~50-200
• **Health System Performance Assessment (HSPA) Report**	Country-specific process of monitoring, evaluating, communicating and reviewing the achievement of high-level health system goals based on health system strategies	~50-200
• **Short Report**	Topic-specific presentation of results and interpretation	~10-30
• **Fact Sheet**	Standardised presentation of circumscribed analyses	~1-10
• **Website**	All websites that provide health information	-
• **Statistical online-database**	Provision of collected data for own analyses	-
• **Scientific Publication**	Publication of specific topics relevant to science	~2-10
• **Scientific Journal**	Publisher of his own scientific journal	~20-100
• **Flyer/ Brochure/ Leaflet**	Compressed and simplified display of summarised public health information	~2-3
• **Workshop/ Seminar**	Face-to-face communication; documentation of workshop or seminar	-
• **Video**	Visualised simplified and comprehensible dissemination of health information	-
• **Social Media**	Dissemination of health information via Facebook, Twitter, Instagram	-

3. Central target groups

The following categorization (table 3) of target groups was elaborated on the basis of literature review [1, 3-6, 12, 14, 15] and input of the task partners:

Table 3: Central target groups of health reporting

Technical/ Scientific	Non-Technical
Health care providers Scientists/ Researchers Health educators	Politicians/ Decision-makers General public Patients Media/ Press Civil society groups and community organisations

IV. Results

The results comprise a total of 234 national health reporting formats from the 32 InfAct partner countries, with each categorised format counted only once per country. This means that on average there are over 7 different formats per analysed country. Most of the formats were identified by explorative search on the websites of the national public health institutes. The majority of current health reports were published after 2015. Most formats were available in English language and freely accessible. A total of three health reports were not freely accessible and therefore not included in the analysis.

Figure 4 shows the most frequently used formats on country level. At the top is the public health report followed by the digital formats social media and statistical online-database. More than 90% of the countries have published at least one public health report. More than half of the countries used social media (62,5%) and a statistical online-database (50,0%) as a format for disseminating health information. Videos and workshops or seminars were the least used communication channels. While about 40% of health reports were published once only, almost one third was published every 1 to 4 years and every 4 years or longer.
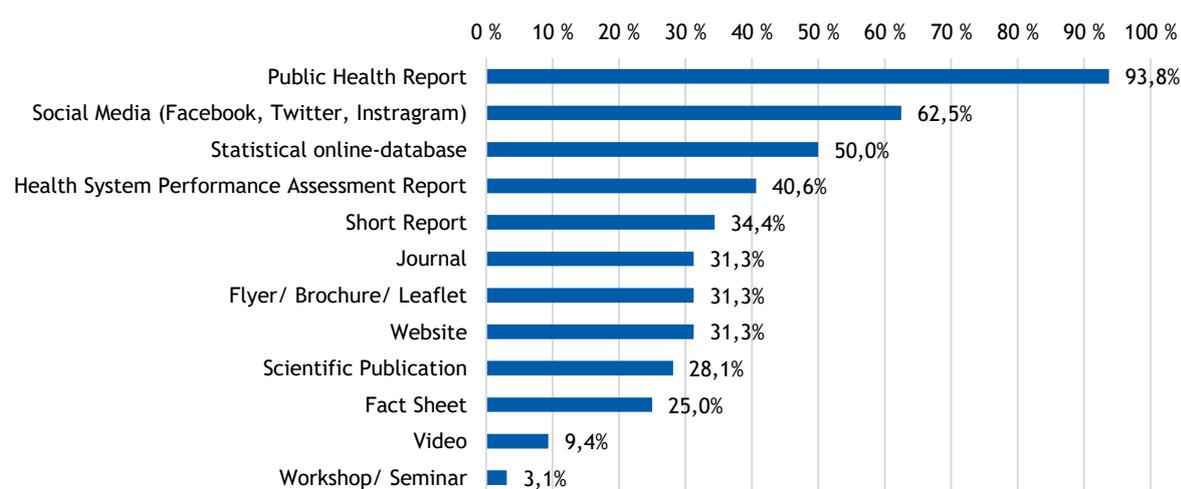
n=32 countries

Figure 4: Formats per country

Figure 5 refers to the target groups that were stated as addressees of health reporting by the partner countries. The general public (93,8%) and scientists/ researchers (90,6%) were the groups addressed by most countries, followed by health care providers (78,1%) and politicians/ decision makers (75,0%). While media/ press and patients were stated as addressees of more than half of the countries (53,1%), only a quarter (25,0%) address civil society groups and community organisations as well as health educators.
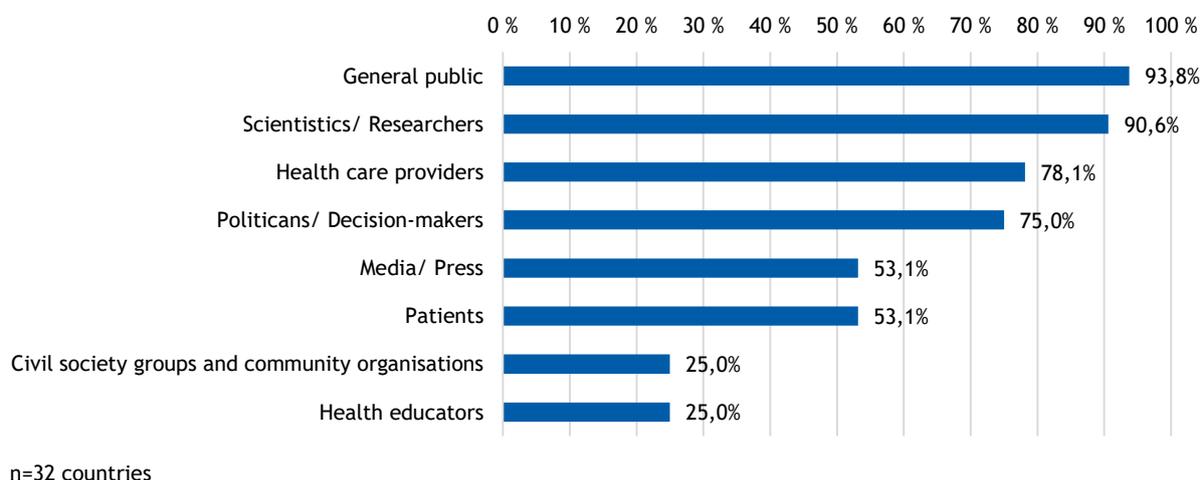
n=32 countries

Figure 5: Target groups per country

Figure 6 and table 4 illustrate which target groups are addressed by the formats in the countries (n=234). This information is partially provided within the health reporting formats but even more often as contextual information on the publishers' website. First, the non-technical target group consisting of politicians/ decision-makers, the general public, patients, media or press and civil society and community organisations are presented. The most frequently addressed group is the general public. For the majority of social media (95,0%) and fact sheets (90,9%) as well as all videos and websites, the general public is named as the main target group. In addition more than half of the formats short report and flyer/ brochure/ leaflet are aimed to the general public. Ca. 40% of public health reports and short reports are addressed to politicians and decision-makers, and journals (33,3%) also name health policy as a target group. Every analysed Health System Performance Assessment (HSPA) report addresses politicians/ decision-makers as the most important target group. Social media is mainly indicated to disseminate health information to media/ press, while patients are mentioned by some formats at a lower level. Civil society groups and community organisations are only stated by a small percentage of the formats, which leads to the generally lower frequency as a target group of health reporting formats.

The technical/ scientific target group is represented by health care providers, scientist/ researchers and health educators. Scientists/ researchers are particularly addressed by statistical online-databases, journals, workshops/ seminars and scientific publications. About 50% of public health reports name scientists and researchers as an important target group. Health educators are stated as an important target group by workshops or

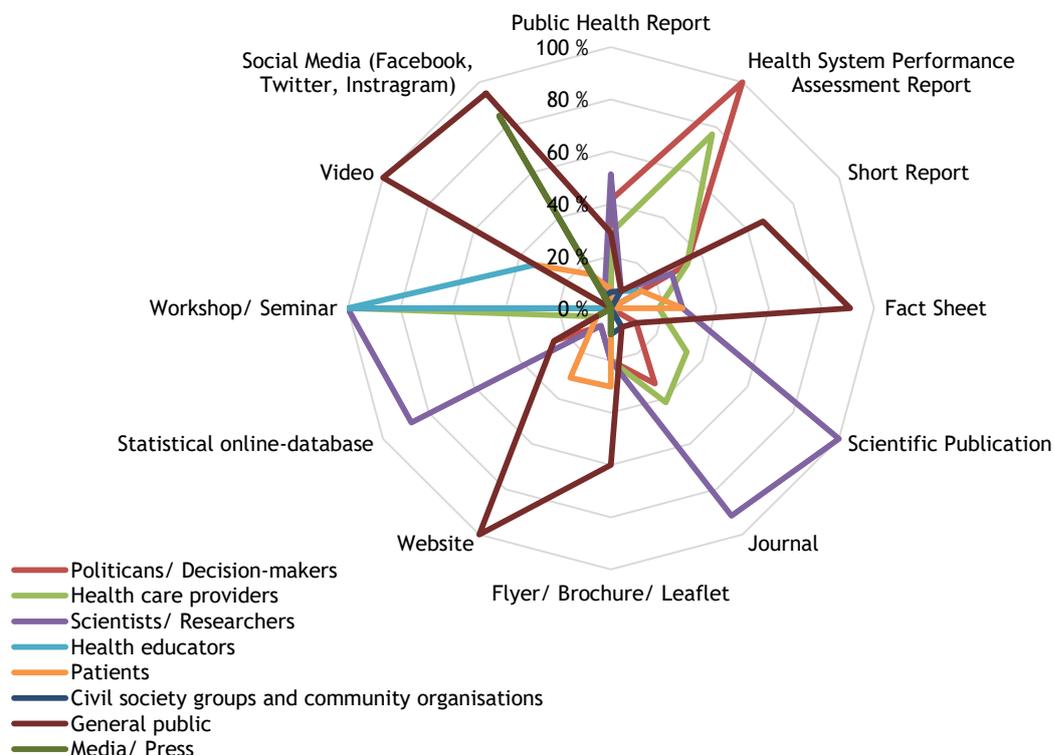seminars. This also applies to health care providers, who are also a major target group of HSPA reports.

Figure 6: Formats and their stated target groups

Table 4: Formats and their stated target groups

	Politicans/ Decision-makers	Health care providers	Scientists/ Researchers	Health educators	Patients	Civil society groups and community organisations	General public	Media/ Press
Public Health Report	41,4%	28,8%	51,4%	3,6%	7,2%	6,3%	28,8%	0,9%
Health System Performance Assessment Report (HSPA)	100,0%	76,9%	7,7%	7,7%	0,0%	7,7%	7,7%	0,0%
Short Report	33,3%	33,3%	26,7%	13,3%	13,3%	0,0%	66,7%	0,0%
Fact Sheet	0,0%	18,2%	27,3%	0,0%	27,3%	0,0%	90,9%	0,0%
Scientific Publication	11,1%	33,3%	100,0%	0,0%	0,0%	0,0%	11,1%	0,0%
Journal	33,3%	41,7%	91,7%	8,3%	0,0%	8,3%	8,3%	0,0%

Flyer/ Brochure/ Leaflet	20,0%	20,0%	20,0%	0,0%	30,0%	10,0%	60,0%	10,0%
Website	7,7%	0,0%	7,7%	0,0%	30,8%	0,0%	100,0%	0,0%
Statistical online-database	25,0%	6,3%	87,5%	0,0%	6,3%	0,0%	25,0%	6,3%
Workshop/ Seminar	0,0%	100,0%	100,0%	100,0%	0,0%	0,0%	0,0%	0,0%
Video	0,0%	0,0%	0,0%	33,3%	33,3%	0,0%	100,0%	0,0%
Social Media (Facebook, Twitter, Instragram)	0,0%	0,0%	5,0%	0,0%	15,0%	5,0%	95,0%	85,0%

Number indicates which percentage formats identified in the search (left column) addressed a particular audience (upper row)

V. Implications and challenges

The results of the web-based desk research will be used to identify good practice examples of national health reporting in different formats, based on quality criteria. Building on the results, a guidance document with recommendations for health reporting will be developed. While the focus will be on reporting standards for public health reports, other potential formats and respective target groups will also be addressed. The guidance is aimed to facilitate access to high-quality EU-comparable information, improve accessibility to understandable health information and promote generation and dissemination of health knowledge.

During the web-based desk research some challenges have arisen which could limit the findings. In some cases, only national language information was available on the analysed websites. Google translate was used to translate content from these websites in languages other than German or English into English for basic information and preliminary analysis. In order to get a complete picture, the network of InfAct project partners was used to obtain information which was not readily available from web-based desk research. Furthermore 'Health reporting' is not a commonly used terminology in all of the analysed countries. A consented and consistently used definition of health reporting would be helpful to make health information easier to find. Last but not least the heterogeneity of health reporting practices in MS was a major challenge, because health reporting formats could only with difficulty be clearly identified or assigned to the corresponding target group. Furthermore, inconsistencies in the use and implementation of the many different communication channels caused difficulties in categorising the results.

VI. Conclusions and recommendations

The report summarises the methodology and results of the web-based desk research on national health reporting in EU Member States and associated project countries. In

addition, it provides an overview of different national health reporting formats and the respective target groups within the analysed countries, based on categories consented within the project. The findings document the heterogeneity of health reporting practices and quality between the MS. The main results are, that – at country level – the public health report is the most frequently used format, followed by the digital formats social media and statistical online-database. Video and workshop/ seminar are the health reporting formats which are least in use to disseminate health information. At format level, the general public and scientists/ researchers are the most frequently mentioned target groups, while civil society groups and community organisations as well as health educators are the least addressed target groups.

It is crucial to consider in advance which target groups the health reporting formats are aimed at. The formats should be tailored to the needs and competencies of the target groups. Furthermore, it is important to reach a wide audience and to share health information in a timely manner. Therefore the language of scientific communication is important. Using resources efficiently and getting the attention of politicians/ decision-makers are important criteria for choosing a suitable communication channel [4]. The guidance document derived from the results of the web-based desk research will define desirable and feasible standards for good practice while accommodating the heterogeneity of health reporting practices in the EU. The guidance document can be a useful tool for making health information adequately available to the targeted groups while reducing inequalities in health reporting across EU countries.

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