Country experiences of implementation of the European regional resolution for behavioural and cultural insights

QUALITATIVE BASELINE STUDY WITH BCI FOCAL POINTS

Draft report for consultation at the WHO regional meeting on behavioural and cultural insights for health

Copenhagen, Denmark, 12-14 September 2023

World Health Organization
European Region

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Abbreviations

AF	Action Framework (European regional action framework for behavioural and cultural insights for health, 2022–2027)
BCI	Behavioural and cultural insights
COM-B	The 'capability', 'opportunity', 'motivation' and 'behaviour' model
ECDC	European Centre for Disease Prevention and Control
FPs	Focal Points (official BCI Focal Points)
HMOs	Health Management Organizations
NCDs	Noncommunicable diseases
PHAs	Public health authorities
RCT	Randomized control trial
SC	Strategic commitment
TDF	Theoretical Domains Framework
WHO	World Health Organization

1. Key findings

1.1 Background and study purpose

Countries across the WHO European Region (the Region) are increasingly using behavioural and cultural insights (BCI) to strengthen health-related policy, services, and communication processes. In September 2022, the Member States adopted the regional Resolution EUR/RC72/R1 (BCI resolution) alongside the 5-year European regional action framework for behavioural and cultural insights for health, 2022–2027 (BCI action framework). The BCI resolution and its accompanying BCI action framework had been developed through a process of engagement with Member States and partners, the former most notably through the appointment of official BCI Focal Points (FPs) representing public health authorities from across the Region. With the BCI resolution, **Member States made five strategic commitments (SC), and committed to reporting on their implementation**. The strategic commitments are to build support for BCI (SC 1), to conduct BCI research (SC 2), and to apply BCI to improve health outcomes (SC 3) by committing resources (SC 4), and implementing strategic plans (SC 5).

This study was undertaken because WHO Regional Office for Europe (WHO Europe) jointly with the ECDC wished to gain a deeper understanding of implementation experiences. This would allow WHO Europe, ECDC and other regional and international partners to provide the relevant and needed support to public health authorities across the Region in advancing the implementation of the BCI resolution. **This study involved interviews with FPs on their implementation experiences** and was undertaken as FPs were preparing the first round of reporting under the resolution. All FPs were invited to participate, and interviews represent the views of FPs across public health authorities in 23 Member States (a response rate of 43%). The main findings are summarized below.

1.2 Views about the future

Overall, the study shows that **there is both commitment to and optimism** for future BCI work, and the BCI resolution, BCI action framework, and reporting requirements are good drivers of change. At the same time, **a number of important barriers to increasing BCI work were identified**. The respondents proposed a range of actions to support them to overcome these barriers.

Most FPs expressed **positive views** on how BCI for health would develop in their country over the next five years. The use of BCI is seen as an effective and efficient way of addressing health challenges involving behaviour, alongside other interventions. It is also seen as a useful umbrella under which to package a number of approaches to addressing health challenges. Some FPs mentioned specific intentions or plans to increase BCI work such as to deliver and advocate for research projects, to integrate BCI into health programs, and to figure out the best ways to persuade health authorities to invest in BCI work. The challenge of ensuring that commitments under the resolution and action framework translate into actions was mentioned by some FPs. A small number of FPs expressed a concern that the potential benefits of BCI work could be reduced if BCI became viewed as a common sense approach (whereby a scientific approach is not followed, and people are not engaging with theories, models, or the data) resulting in poor quality BCI work.

1.3 Experiences of working with the Action Framework

FPs identified **several benefits of the BCI resolution, BCI action framework and reporting requirement**.

1. prioritization of BCI by the WHO emphasizes the importance of BCI work, and the national commitments increase awareness of BCI for health among very senior officials.
2. they provide a firm basis for undertaking BCI work and FPs are already using them as a lever for undertaking it.
3. they provide an impetus to undertake BCI work faster and to better document it.
4. reporting under the progress model provides a unified reporting system that facilitates comparison, and places progress and challenges in the spotlight.
5. they help FPs to engage with a wider set of health sector colleagues.

1.4 Barriers to increasing BCI work for better health

FPs mentioned **a range of barriers to increasing BCI work for better health.** Important skills gaps for undertaking BCI research for public health authorities were gaps in behavioural science skills, in skills for problem definition and understanding, and in trialling and impact evaluation skills. Other barriers mentioned included a lack of staff, of funding and of time.

FPs also mentioned **several barriers to applying BCI findings** to health policy, practice and or communications. Skills gaps included a lack of expertise in communicating key messages to decision makers, in the use of theoretical frameworks or BCI tools, and in how to use evidence to change interventions. Other barriers related to research processes not being connected with decision making processes, and organizational culture.

1.5 Possible support

FPs identified **a range of factors that would help to increase BCI work for health in their country**. The two most mentioned items were to be able to demonstrate the impact of taking a BCI approach more clearly, and training on BCI for FPs and their colleagues. Other commonly mentioned factors were to have additional funding for internal staff and commissioning of BCI research and applications (some mentioned the need for a dedicated unit in their country), greater awareness among key decision makers of the relevance of BCI for better health combined with more networking with key decision makers, and for the WHO/Europe BCI Unit to continue with its work.

1.6 Possible support from WHO/ECDC

When asked about possible **future support from the WHO Europe, ECDC and other partners FPs mentioned a wide range of actions** that would help to increase BCI work for health. Actions mentioned by three or more FPs were to have a permanent networking structure to share countries work and experiences, more advocacy for funding for BCI for public health authorities, collating brief case studies of good practice while also undertaking in-depth extraction of learning from successful BCI work, providing BCI training and capacity building, and for the WHO/Europe BCI Unit to continue its supportive work.

1.7 Differences

There were **some differences across FPs** in terms of how they spoke about BCI research or applications. Some FPs spoke directly of BCI work, describing how they were undertaking research in or applying findings from behavioural economics or science to help achieve health objectives (these FPs tended to be in a behavioural science unit or team in high-income countries). Other FPs spoke more indirectly of how BCI is relevant to areas such as public health, health promotion, health protection, or health literacy. The challenge of funding and resourcing of BCI work was mentioned by Member States from across the Region. The **overall pattern is one of commonalities** in terms of the challenges faced across geography and income levels.

1.8 Overall

It is clear from the views of FPs that the BCI resolution, BCI action framework, and support of the WHO/Europe BCI Unit **are considered very important achievements**, but it is also clear that **additional national and international support is needed** to fully realise the potential of BCI for better health.

1.9 Recommendations for regional and international organizations

The following recommendations for action by regional and international organizations to support Member States advance the implementation of resolution EUR/RC72/R1 related to behavioural and cultural insights for health were developed based on an interview study with Member States / entities conducted during April-May 2023. The recommendations are structured according to the five strategic commitments of the resolution and its accompanying 5-year action framework.[1]

SC 1 Build understanding and support of BCI among key stakeholders

1. Continue to use the resolution, action framework, reporting, meetings, and high-level advocacy to increase the visibility, understanding and prioritization of BCI work for better health.
2. Develop a permanent Networking Structure for sharing Member States' plans, work, experiences and overall good practice on BCI work for better health, based on and transitioning from the network that was established to develop the Resolution and Action Framework, and to facilitate reporting. Consider having a thematic / pillar structure to the Network with sub-groups focusing on specific topics and with elements of co-production of resources by working with Member States.
3. Develop a short suite of impactful material to promote a better understanding of the importance of BCI work among high-level officials by clearly explaining what BCI is, how it differs from other approaches, how it can help to improve public health and also heath system efficiency, and what practical steps can be taken. This should include (a) a short video and (b) a two-page flier.
4. Continue to demonstrate impact by using brief case studies of the benefits of using BCIs.
5. Lead the development of template "pitches" (one to two pages) of why BCI research or applications of BCIs for specific topic areas would be beneficial and what it could involve.
6. Make available to FPs and their teams bootcamp foundation training in the behavioural and cultural sciences for health.

[1] Some of the actions are abbreviated here, for example under SC2. The complete list is included in section 9 below.

7. Support the wider use of national BCI-related networks, collate and share information on national networks currently operating (e.g., how organised, functions, frequency and format of meetings, topics covered).
8. Reach an audience wider that those with a pre-existing interest in BCI by identifying priority health topics supported by WHO conferences and training materials, and integrating BCI findings into such conferences and training materials.

SC 2 Conduct BCI research

1. Develop written Guidance and provide Training and Technical Advice on:
   Impact Evaluation.
   a) Quantitative Research Methods.
   b) Qualitative Research Methods.
   c) Literature Synthesis Methods.

Facilitate cross-country research teams by providing a mechanism for countries to pursue the possibility of collaborating on research studies (e.g., a review on a topic of shared interest).

2. For surveys on healthy and unhealthy behaviours undertaken in numerous countries determine (a) if additional behavioural analysis of the available data would be useful (e.g., to gain a better understanding of drivers, barriers or associations) and (b) if an improved understanding of behaviours could be gained through feasible amendments or additions to the questionnaires.
3. Determine if a shared facility for online experiments for diagnostics and pre-testing interventions would be justified.

SC 3 Apply BCI to improve outcomes of health-related policies, services and communications^

1. Develop written Guidance and Training on how to apply a BCI lens to health policies, services and communications.
2. Undertake in-depth case studies to extract the learning from cases where findings from impact evaluations or other beneficial applications of BCIs have been scaled up or adopted as part of a policy, service or communication.
3. Help to develop a brief guide on the types of BCI services and functions that are provided by existing BCI Units and Teams in Member States. This would demonstrate how BCI can be applied to policy, services and communications. Areas mentioned by FPs included light touch consultancy, input into meetings and steering groups, diagnostic work, design solutions, behavioural pathway mapping, and intervention and policy mapping, and intervention redesign and testing (including impact evaluation).
4. Be available to FPs to provide advice on Member States can best expand BCI activity given resources and on how best to focus BCI efforts.

SC 4 Commit human and financial resources for BCI and ensure their sustainability^

1. Advocate for international research and capacity building funding for BCI for health. It was suggested by FPs that the WHO/Europe could advocate at the European Union or European level for funding for specific research calls or joint actions for behavioral insights research and capacity building which health policy and service organizations could potentially apply for.

SC 5 Implement strategic plan(s) for the application of BCI for better health^

1. Develop written Guidance to make more tangible what a dedicated national or sub-national strategy or plan for the application of BCI for better health might cover and to communicate the added value of having a dedicated strategy or plan.
2. Help to capture the experiences of countries who have already developed or are currently in the process of developing a dedicated strategy for behavioural science or BCI for health, and of countries who are developing plans on specific health topics with BCI as a major element.

^ Three actions under **SC 1** are also particularly relevant to this SC (i.e. to SC 3, 4 and 5). Specifically, 3. Develop a short suite of impactful material, 4. Continue to demonstrate impact by using brief case studies, and 5 Lead the development of template "pitches".

2. Introduction

2.1 Background

Countries across the WHO European Region[2] (the Region) are increasingly scaling up their application and integration of behavioural and cultural insights (BCI) for health and using this to strengthen health-related policy, service and communication processes.

In September 2020, the 53 Member States of the Region adopted the European Programme of Work, 2020–2025 which identified BCI as a flagship priority for health in the Region. In September 2022, the Member States adopted the regional Resolution EUR/RC72/R1 (BCI resolution) alongside the 5-year European regional action framework for behavioural and cultural insights for health, 2022–2027 (BCI action framework). This was followed by a global resolution on behavioural science for better health in May 2023. The BCI resolution and BCI action framework had been developed through a process of engagement with Member States and partners, including the European Centre for Disease Prevention and Control (ECDC), the former most notably through the appointment of official BCI Focal Points (BCI FPs) representing public health authorities from across the Region. With the resolution, Member States made five strategic commitments, and committed to reporting on their implementation in relation to each strategic commitment every other year.

In addition to this, WHO Regional Office for Europe (WHO Europe) jointly with the ECDC wished to explore in more depth the status of the work done and more importantly the challenges faced and drivers experienced. This was done to gain a deeper understanding and context to the official reporting which would allow WHO Europe, ECDC and other regional and international partners to provide the relevant and needed support to public health authorities across the Region in advancing the implementation of the BCI resolution.

What is Behavioural and cultural insights?

Behavioural and cultural insights (BCI) is a term coined by WHO Europe. It refers to systematically exploring the contextual and individual factors that affect a health-related behaviour or practice, and using that insight to develop interventions that enable, support and promote these behaviours and to evaluate their impact, quality and acceptability. Key words are insights, engagement and evaluation.

BCI draws on disciplines such as behavioural science and economics, anthropology, sociology and cultural studies. The word 'cultural' was added to 'behavioural insights' to highlight the importance of the sociocultural context, systems and structures alongside individual factors when assessing and addressing health behaviours.

2.2 Purpose

The overall purpose of this study is to obtain a qualitative view of the issues facing Member States in relation to BCI for health, as perceived by the FPs. The study focuses on five key topics: goals for BCI work for health, skills to conduct BCI Research, skills to apply BCI findings, understanding and support among key stakeholders, and thoughts about the future. The study questions are presented in Appendix

[2] For a list of the 53 Member States of the WHO European Region, please see WHO/Europe | Home.

B.1. In line with the BCI action framework, this study focuses on actions implemented by public health authorities and institutions, including actions implemented in collaboration with external stakeholders. Work conducted independently by external stakeholders such as nongovernmental organizations (NGOs), academic institutions or private entities in which public health authorities or institutions have not been involved are outside the scope of this study.

2.3 Methods

Research Team

The six members of the study team who conducted the interviews were employees of the WHO/Europe or the ECDC (see Appendix A for a list of team members). The interviewers had experience of research and of facilitation. Four of the interviewers were female and two were male. Some participants were familiar with their interviewers, for example from attending meetings facilitated by WHO Europe or ECDC. Each interviewer stated at the start of each interview, "I want to stress that there are no right or wrong answers, there is no judgement or expectations. We simply want to learn from your understanding of how the situation regarding behavioural and cultural insights is in your country." The Principal Investigator, Robert Murphy, did not undertake any of the interviews as he is also a national focal point (who was on leave of absence to undertake the analysis).

Study Design

The study was underpinned by a content analysis frameworks, to systematically organize data into a structured format (Liamputtong & Ezzy, 2005). The design of the study's topic guide was informed by strategic commitments of the action framework and by the COM-B model components and domains in the Theoretical Domains Framework (TDF), discussed in more detail in Appendix C.

In January 2023, FPs from all 53 Member States in the Region were sent an email, including an informed consent form, inviting voluntary participation in this qualitative study. FPs who did not reply to the initial email were sent a reminder. A total of 26 interviews with FPs were undertaken, representing public health authorities in 23 Member States.[3] This is equivalent to a response rate of 43%. All interviews that commenced were completed, that is no participants dropped out of the study.

Participation in this study presented minimal ethical concerns. Participation was voluntary and FPs were provided with an informed consent form. Results are anonymized. As this is a regional study, no national ethics approval was requested from the Principal Investigator. The study was submitted for approval by the WHO Ethical Review Committee and was considered exempt from review (ERC.00003876).

Interviews took place online during work hours. No one else was present during the interviews besides the participants and the researchers (and in some instances an administrative support person for the research team). In a few cases, two BCI focal points from a country attended the interview. Respondents represented the diversity of the Region in terms of Member State income level and geography.[4]

[3] While there are 53 Members States in the WHO European Region, five of the interviews conducted related to entities within these countries.

[4] Geography: UN Statistical Commission geographical regions can be accessed via https://unstats.un.org/unsd/methodology/m49/. Income levels: World Bank classifications by income level can be

To ensure standardization of approach between interviewers, a topic guide was used by interviewers during the interviews (this is provided in Appendix B.2). All team members inputted into the design of the topic guide by way of written comment and by verbal input during online meetings (e.g., the fifth iteration of the topic guide was the version used for the first interviews). Following the first four interviews there was a meeting of the team to discuss experiences and it was felt the topic guide was working well (i.e., no substantive changes were made to it).

Interviews were recorded for subsequent production and analysis of interview transcripts. Interviews took place in English or Russian language. Russian language transcripts were translated into English, and analysis was undertaken in English. All of the main topics in the topic guide were covered in the interviews. There was a natural flow from topic to topic and good rapport between interviewees and interviewers. Interviews lasted 40 to 70 minutes.

Analysis and Findings

The Principal Investigator undertook the coding and analysis of transcripts and produced the report. The themes were primarily identified in advance, as per the questions in the topic guide. The process of coding (selecting significant sections from participant statements) was undertaken in the software package MAXQDA. The approach to the analysis was consistent with that described by Rädiker, Stefan & Kuckartz, Udo (2020) in that all interviews were analysed in the same way. Each interview undertaken in English was listened to in full and all of the interview transcripts (interviews undertaken in Russian were transcribed to English) read in full before analysed in detail, and all interviews relevant to the questions were included. The PI provided two interim presentations of findings to the study team before producing a draft report.

Quotations from participants are provided to illustrate themes and findings. To support readability some quotes are edited. Quotes within this report are anonymized. Each respondent was allocated a random number by a computerized number generator. This randomized number is the number shown alongside quotes. The participant number is not reported in instances where it was believed by the PI that (a) it might be possible for a reader to associate a quote with a particular MS and hence link a participant number with a MS, or (b) if a quote might be perceived as sensitive. In such cases the participant number is not reported. Participants were provided with a draft report for comment.

Limitations

The study covers a wide range of issues across a large and diverse Region and the perspective for each public health authority is typically based on the views of one person (the FP). Therefore, it is possible that some issues that may have relevance for a particular Member State may not have been mentioned by a FP during their interview, or they may have placed emphasis on aspects of particular importance to themselves. While there were several advantages to using WHO/Europe and ECDC staff as interviewers, (including increasing trust, ensuring understanding of issues discussed, and increasing the understanding of the study findings among the organizations who wish to act based on these), this may have affected the participants in how they talked about the topics and particularly about the work of WHO or ECDC.

accessed here: https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2023. Income levels for 2021 were used for the analysis.

3. Findings on Goals

3.1 Have goals or commitments for BCI work for health been set?[5]

A minority of FPs mentioned **written goals or commitments** in addition to those of the resolution and of the action framework.

Regarding having a **strategic plan** for BCI for health, only one FP mentioned having an existing national strategy for behavioural science, and another FP mentioned a commitment to develop during 2024 a national strategy for behavioural science. A small number of FPs mentioned explicit integration of BCI research or applications into **a specific health plan**. The areas mentioned were antimicrobial resistance (AMR), tuberculosis, and an overall health plan. The existence of a written **internal annual business plan or action plan** specifically including BCI-related work was mentioned by two FPs. In these two countries there was a behavioural science unit or team.

Many FPs indicated that they **could not think of documents with explicit goals for BCI for health** (research or application) in their country. Nevertheless, these FPs noted that they are aware of policy or strategy documents in their country that are still relevant for BCI for health as (a) these documents contain objectives to increase healthy behaviours which might involve BCI work, or (b) a BCI orientated approach is outlined in these documents, although this term is not used in the documents. A number of FPs referred to **the challenge of identifying relevant commitments** to BCI work across health strategies and plans, and the difficulty of determining what fits with the definition of BCI work. See Quote box 1.

Quote box 1: Goals and commitments to BCI

No specific document with concrete BCI goals, but there are documents with the objective to increase healthy behaviours and work under these strategies/plans might involve BCI work:

> ″ The objective is the reduction in mortality from NCDs [noncommunicable diseases] etc. The anti-smoking strategy has a set target to decrease the percentage of the smoking population and so on. This is already in the healthy lifestyles program. But we don't have a targeted, funded by the government, strategy to do this kind of research. P, Pos. 77

> ″ It's not a goal for BCI, but we do have something called a support tender where we set certain standards for our HMOs [Health Management Organizations] or other care providers. . . Bringing down the statistical incidence of a certain problem. And rather than dictate the solution to them, we offer financial incentive to meet a certain benchmark. And I think that that then gets them searching for the BCI tools that can reach that goal. P, Pos. 85-87

No specific document with concrete BCI goals, but strategies which take a BCI orientated approach, although not termed so:

> ″ Yes, there are some strategies, but they wouldn't be termed BCI. We have, for instance a strategy on health literacy and [the] way [we] work with health literacies [is] very much BCI oriented. We don't want to put the work with health literacy as an issue for individuals or users of the health system . . . we want to more to change the system. P, Pos. 18

[5] The participant numbering is removed from this sub-section to avoid potential identification of participants.

" I can't say that there has been any BCI strategies using [BCI] directly. As I said, I think BCI is a part of the tobacco strategy but it's not called BCI. So, BCI hasn't yet been a strategy in country. Nevertheless, I think it's used. P, Pos. 36

Challenge of identifying relevant commitments to BCI work across health strategies and plans and difficulty of determining what fits with the definition of BCI work:

[BCI is] Probably not organized under an umbrella in a behavioural science program, but those things exist in other strategies. They would just be a heading in another strategy. So we've got loads of strategies and lots of the work in them [involve] behavioural science. It's just it might not be labelled [BCI], it might not be brought together into a program. P, Pos. 32

" We have an obesity strategy. We have a physical activity strategy. We have lots of strategies that are around behaviors and they're informed by research that we have done at the time. But I don't know how much they necessarily fit within the kind of behavioural science or BCI definition or approach. P, Pos. 35

3.2 What would need to happen before developing strategic plan(s) for the application of BCI for better health?

During the interviews **two routes** were identified through which in principle a strategy for BCI for health might be developed. Route A**,** a fast-track route in which a Minister or very senior Civil Servant thinks this is a "great idea", and sets up a unit and develops a strategy. Route B, is the more typical approach which leads to the development of a strategy.

Several views were expressed by FPs in terms of what would need to happen to follow Route B, before a country would consider developing a strategy for the application of BCI for health. These are listed below and presented in more detail in Quote box 2.

- To communicate the added value and why it is needed within the country.
- To make the idea more tangible and what might it cover.
- To demonstrate impact in a wider range of areas within the country.
- To know more about what is being done in the country.
- To receive support through resources and funding.
- For there to be a greater culture of evidence-based policy and practice.
- For the WHO Europe to continue to push this area.

Quote box 2: What needs to happen before developing a strategy for BCI for health

Communicate the added value and why it is needed:

" And what can add with a BCI focus that we are not doing today? . . . I think we have to talk with ECDC, World Health Organization and other countries. How do we frame this as a different way of working? P 17, Pos. 39 and 40

- Well, I'm doubting if. I don't know if you need a national strategy. I don't know if it needs a separate strategy, but I don't know. P 16, Pos. 117

- I will repeat what I said earlier, we are already doing this work now. The question is that research is an intermediate task. The main task is to affect the risk factor and influence people's behavior regarding a particular risk factor rather than just do research. We have to use evidence-based approaches to the choice of interventions. And then learn what kind of approaches are needed doing the research within the state assignments. We do not rule out the preparation of a separate section or a separate document. I am not sure to what degree a separate strategy would be needed. I would put it this way, how can we develop a separate strategy without repeating what is already stated in others? Sorry, I am answering this question as a bureaucrat. But the first question I will be asked is, what do you have in this strategy that you cannot do without it? P 6, Pos. 34

- A national strategy would be a stretch focused solely on BCI. I think because of the nature of BCI, it falls in all sorts of other people's departments. To have a national strategy focused on a methodology or a tool rather than the issue at hand, whatever that may be, I think is not really the way work flows in our Ministry at least. P 23, Pos. 101 and 107

Make the idea of a BCI strategy more tangible and what might it cover:

- The thing is what exactly would be meant by a plan? We'd need to try to be a bit clearer on that. . . Maybe see a few examples [from] elsewhere, or a few kind of templates, of what it might look like. . . P 26, Pos. 42

- Demonstrate impact in wider range of areas within the country. I think the main thing is kind of just to continue to kind of apply it, increase awareness more, get more buy in P 26, Pos. 40

Know more about what is being done in the country:

- We need to know a little bit more about what's being done in *[Country 21]* that's doesn't use this name but they're actually doing BCI work. . . The second one is to build up an executive committee or something like that, a of board of stakeholders. P 21, Pos. 69

Support through resources and funding:

- I think there will be good intentions. . . . But if you ask something like we want a formal support as in money, I don't know [do not think it would be provided]. P 21, Pos. 71

- we have behavioral and cultural factor activities, in healthy lifestyles and tobacco, etc. However, at the moment in order to conduct this at the state level, we need funding. P 8, Pos. 82

Greater culture of evidence-based policy and practice:

- to change the attitude [of] policymakers, medical staff, [to] not to thinking about their own interests, but about the health of the population. P, Pos. 86

WHO continue to push this area:

> ” I think that it's going to be very important that WHO work on this, because this started because the WHO launched this initiative and had this idea. And that's why we started to work, because the Minister wanted to join this initiative. I think that if the WHO [and] ECDC needs us to push this in our government, but we need you. P 21, Pos. 75 and 81

4. Views on BCI Research and Barriers

4.1 What types of BCI research are undertaken?

The Status Report (WHO, 2023) on the implementation of the action framework documents the types of BCI research being undertaken by Member States. As part of this qualitative study there was an objective to see what types of research FPs mentioned when asked to get a sense of the research that first springs to mind.

When asked about the **type of BCI research** being undertaken in their country, FPs mentioned a range of types of research. The **most frequently** mentioned were **surveys** followed by **literature reviews**. Other types of research mentioned by **more than one FP were**: trialling, evaluations of interventions, and studies of factors that prevent or drive behaviours; followed by qualitative work, focus groups, and citizen and user panels. Other types of research mentioned **by a FP** were: diagnostics of perceptions, redesign of interventions based on behavioural evidence but not subject to specific testing, health system orientated research, epidemiological studies, testing of messaging, and social listening[6].

Some FPs mentioned types of BCI research that they are **not undertaking but which they would like to,** namely: (a) impact evaluations or randomised control trials (RCTs), (b) literature reviews, and (c) focus groups.

Some FPs, notably those with a unit or team for behavioural science, also mentioned **types of** BCI **services and functions.** These included:

- Light touch consultancy[7]
- Input into meetings and steering groups
- Diagnostic work
- Design solutions
- Behavioural pathway mapping
- Intervention and policy mapping.

[6] The distinction between tested and not tested redesigns made by some FPs was similar to that captured in the terminology of the European Commission's classification of behavioural policy initiatives (Sousa Lourenco J et al., 2016), as behaviourally-informed, i.e. designed after an explicit review of previously existing behavioural evidence although not benefiting from any specific prior experiment, versus behaviourally-tested, i.e., initiatives being explicitly tested, or scaled out after an initial experiment.

[7] Light touch consultancy referred to relatively high-level guidance provided by a staff member with behavioural science expertise and typically provided as real time feedback at meetings or through emails.

4.2 Who conducts BCI research?

There were differences in who conducts BCI research. **Three broad categories** emerged in terms of FP organisations' role in conducting BCI research:

- combination of within the FP organisation and commissioned out by FP organisation;
- mainly external to the FP organisation;
- all external to the FP organisation, FP organisation not conduct any research systematically.

FPs from a country with a unit or team for behavioural science for health also discussed **how work is initiated**. They seem to follow a strategy of advocating benefits of the approach - "light the fires " or "sow the seeds". Specific projects or work emerges from either (a) a direct approach or pitch *to* policy or technical or practice lead, or (b) a direct approach *from* people working in the area – often a follow-up from a previous pitch, and this type of work often requires working through the detail of the key questions and best approaches to inform these. Within this sub-set of FPs it appears that work by behavioural science teams within wider research units tend to be linked to a direct "client" whereas work by dedicated behavioural science Units also took a **more system wide** focus such as the development of documents that are not directly linked to a single client project (e.g., "how to" guides).

When asked to describe the main **factors that helped to undertake BCI research**, the FPs across the Region reported a range of factors as follows:

- Investment in **personnel** with the competencies to undertake behavioural science research and applications of findings from behavioural science, ideally in the form of a dedicated unit or team.
- Undertaking behavioural science research and applications, thereby **demonstrating an impact** on policy or practice, and showcasing good practice to demonstrate the value of taking a BCI approach.
- Good **relationships** with policy teams or colleagues.
- That a **Minister believed** that taking a BCI approach could improve health or health system performance.
- Working with **academics with expertise** in behavioural science and with an interest in public health policy.
- The creation of the **WHO Europe flagship** for behavioural and cultural insights and the development of the WHO's Resolution and BCI Action Framework for better health.
- **Connecting** behavioural science or BCI with national prevention objectives.
- The development of **a national strategy** on how behavioural science can improve population health and well-being.
- Making very **simple pitches** to policy and technical leads to demonstrate how the use of a behavioural science approach can add value and help to address their policy challenges.
- Producing **high quality work** and developing a **positive reputation** for the behavioural science work
- Working with **an external expert behavioural science advisory group** which provide reassurance to policy and service delivery staff involved in a BCI research or project applying BCI findings.
- Being able to undertake research or applications of findings **without direct monetary costs** for the policy/practice user (i.e., agreeing to the BCI work did not involve a financial cost for the client).

In terms of research **collaborations**, some FPs mentioned universities and academia. For some FPs from middle-income countries international partner organisations were mentioned as very important collaborators.

Focal points were typically located within a ministry of health or a public health agency. Two FPs noted that in a country where the FP is located within a public health agency it is important that the emphasis of realising the benefits of BCI for health is not restricted to public health protection and promotion work and that it can include other health system objectives (e.g., improving performance of the hospital system). In addition, it was viewed to be important that health benefits are explored **in the wider public health and health system efficiency benefits** too. As one FP noted:

> ″ it's very important to get into the health care system. We are just, we are the public health system and health promotion.

4.3 What are the most important skills gaps to be filled to conduct BCI research?

A range of skills gaps were reported. The three most reported skills gaps were related to **behavioural science**, **problem definition and understanding**, and **trialling and impact evaluation skills**. Some FPs also spoke more generally about gaps in qualitative or quantitative research skills.

The skills gaps in relation to behavioural science included a lack of behavioural scientists employed by health organisations and limited expertise in behavioural science and cultural studies of some staff undertaking BCI work - see Quote box 3.

Reported gaps in **problem definition and solution construction skills** relate to how to ask the right questions in order to identify the core problem, to understand the problem properly and have a complete picture, and to solve it in the right way. It was felt there is a need for a better understanding of the theoretical models that can be applied to address different behavioural challenges - see Quote box 4.

Skills gaps in **undertaking trials and impact evaluation** included a lack of knowledge of the technical skills to undertake such analysis but also a lack of knowledge or opportunity of how to operationalise this type of research (such as RCTs) within a Ministry or public health agency - see Quote box 5.

A number of FPs mentioned gaps in **qualitative** or **quantitative research skills**. This was particularly evident among FPs in middle-low income Member States. Qualitative skills gaps included good practice on how to run focus groups and how best to engage with specific communities or marginalized groups, while quantitative skills gaps included a lack of knowledge of which measures or instruments are well suited to inform approaches to behaviour change and how to undertake appropriate statistical analysis - see Quote box 6.

In relation to skills gaps **other issues mentioned** included: a lack of cultural competence among researchers, skills gaps on how to undertake studies, a lack of expertise in communication of key messages for a policy audience, weak public health research base in general. One FP also made a distinction between the **types of skills and knowledge needed at different levels within organisations**, and how these differ depending on the level (higher; middle; specialists) and role of staff in the organisation. More detail is provided in Quote box 7.

Quote box 3: Behavioural science skills

A lack of skills or a sound foundation for undertaking behavioural science research:

″ Some colleagues are doing things but let's say it's still not systematic theory and we're learning by doing. We have some skills in public health epidemiology. We can venture into the edges of social science and cultural behaviour but it's still not very safe in those waters. P 9, Pos. 135

Behavioural scientist posts do not exist in our public health authorities:

″ We don't actually have, to my knowledge, behavioural scientists in units, so that is also one of the shortcomings to begin with. Whereas as I've seen during BCI meetings, different countries have even dedicated units with behavioural scientists in these units. That would be a skill we might need and we're not aware that we might need it. P 13, Pos. 92

There is a lack of expertise in behavioural science:

″ I cannot be 100% sure about it, but to my knowledge there is no such a thing. Well to my knowledge, no masters degree for example in behavioural sciences. P 9, Pos. 176

″ I would say there's a still a lack of experts in the area. P 14, Pos. 81

Quote box 4: Problem definition and solution construction skills

A lack of expertise in problem definition and understanding:

″ There is a big gap at the start of a project in [terms of] what is the problem and do you understand the problem properly? Do you have the right perspectives on what is the problem that you want to solve? And [is] the way you are solving it, the right way? So I think we have [got] to have some knowledge . . . in the questioning [of] the public health issue that we want to change. And I think here we could use directly BCI knowledge as consultants. And we could, also use some knowledge on . . how do we use [BCI] experts in asking the right questions, in setting the right problem. So I think this is the biggest gap. P 17, Pos. 91-92

Being unaware that not all of the relevant behavioural factors are being considered:

″ I think in general it's not a matter of knowledge gap actually it it's a matter of perspective. Because we [are] already looking at parts of [what affects] behaviour but [we are] not [looking at or taking] a complete picture [only look at parts of the puzzle]. P 24, Pos. 100

A lack of awareness of what theoretical models should be used:

″ I think that theoretical models are really important and underexplored when we are talking about our situation. We need surveys, we need activities to be more aligned with good theoretical models. Motivation, drivers, what are the concepts that under this motivation, what are the concepts to provide baseline and then to create concrete measures of changing attitudes or behaviour. How [to] better communication. So, we need theoretical models. When we have theoretical models then we have good examples for creating items or to use standardised measures. P 18, Pos. 217

Quote box 5. Trials and impact evaluation skills

A lack of expertise in how to undertake impact evaluation:

- ″ We do far less about implementation studies and evaluation. I wonder if a lot of that is because people don't feel completely comfortable about how to evaluate these things? We talk about RCT's and experimental studies [but] there's very little experience of people having run those in the mainstream in government. I think probably a lot of people don't know where to start. How do you design and evaluation and win people over and get the money for it. So, actually I would just think that's quite a big one evaluation and that's a key bit missing. P 20, Pos. 95

A lack of experience of running randomized controlled trials in public health agencies:

- ″ We've got skill gaps, particularly in relation to trials, so doing this stuff and show[ing] attribution to the change that we made. It's perhaps not [a] skills gap. It's [an] opportunity gap to do it, to execute some of those experiment. Execute some trials and then write them up to show that this stuff works and [that] it makes a difference. It might be time. I mean we've got PhD, doctorate level, guys in the team, so they know how to do it. I don't think we lack the skill [but] that we lack the time because at the minute we're still lighting fires. P 12, Pos. 154

Quote box 6. Qualitative and quantitative research skills

Gaps in qualitative research skills:

- ″ I do not think we all know how to work in focus groups yet. P 5, Pos. 60
- ″ How to do the qualitative research. It's [current research is] mostly using data systems of information, laboratory and some population epidemiology working with schools, but always in a closed question quantitative way. So, we have to know better how to work with specific communities with their special needs. I want to get credibility among those groups, for example, because the prejudices might still be among us. P 9, Pos. 167
- ″ It's complicated for qualitative and we still lack the people who would do that part of the work. P 14, Pos. 84

Gaps in quantitative research skills - what to measure to inform approaches to behaviour change:

- ″ We need activities that will be more aligned on some good theoretical model. Not just about synthesis of factors, motivations, drivers, but what are the concept that is under this motivation. What is the concept that can provide baseline to create survey and then to create concrete measures that would be focused on some attitudes of changing behavior? P 18, Pos. 215

Gaps in quantitative research skills – how to undertake appropriate statistical analysis:

- ″ I think analysis is very important also, because we get a lot of data and we do not know how to analyze it. P 5, Pos. 67

Quote box 7: Other skills gaps mentioned

A lack of cultural competence among researchers:

- ″ I think the gap is to train people in order to be a culturally and behaviorally aware, as sociologists call it, to people who do not fit the norm. From my experience I would place

emphasis [on this] and I would say that academics lack that [empathy and it] is a gap. P 1, Pos. 60

A lack of knowledge of how to plan and conduct systematic studies:

" In general, if we talk about skills, first, I think, we have to know how to write research protocols, design research studies, then create a committee, conduct the study itself, after that prepare an analytical report for the study with recommendations. I think all of these components should be done as a package. P 5, Pos. 25

A weak public health research base in general:

" One of the fields which is really weak is basically research. It is not just a question of behavioural and cultural insights, but in general research. But you know the general narrative is that these topics and subjects are not important, are not relevant for medical doctors and therefore they are not given the priority [they should be given]. P 19, Pos. 4

Distinction between the **types of skills and knowledge needed at different levels within organisations**, and how these differ depending on the level of staff:

We are [thinking] about a bell curve of individuals in a hierarchy and knowledge of application of behavioural science at the edges. You know the top end of the hierarchy might be that Minister, which [s/he] doesn't need to know as much as the people at the top of the bell curve, which would be midway in the hierarchy, which would be the practitioners. They've got to know how to do this stuff to make their interventions or policies, services or communications stick. And then at the end of the bell curve or lower down the hierarchy need to know less on scale. So, we are thinking about chunking things up a little bit more, about what people need to know. P 12, Pos. 135

4.4 Non-skills barriers to BCI research

In response to the question on skills gaps, some FPs (notably in high-income Member States) indicated that a **capacity gap** was a more significant issue – see Box 3.6. It is notable that such capacity gaps result in a level of unmet demand but that this was not always visible to staff within the organisation that the FP works in. FPs referred to the implications of a limited amount of capacity as work not being written up, pitches for potential projects not being made, and opportunities not taken. Of the FPs who indicated they did not have skills gaps, many of them subsequently reported the need for training. This indicates the desire for training and capacity building in BCI, even among FPs who view their teams to have competency this area. Quote box 8 provides more detail.

In the research section of the interview many FPs volunteered that they thought there were non-skills barriers to undertaking BCI research. In addition to the capacity gap mentioned above, other barriers mentioned included the following. Quote box 9 provides more detail.

- Lack of funding
- Time pressure to produce research
- Other non-BCI work demands on staff time
- Limited involvement of other agencies
- Lack of organizational ethics approval infrastructure for primary research.

Quote box 8: Gaps in capacity as a barrier to BCI research

- ″ I would say that I have the skills. I do not have enough because we're covering the behavioural science aspect, but we're also covering aspects of population health. P 2, Pos. 45
- ″ It's more people and then with similar kind of skills to what we have at the moment, more or less. It's mainly a gap around numbers probably. P 26, Pos. 65
- ″ Is there enough capacity . . . within *[Country 16]*. That I don't think so, but that's not a knowledge question. P 16, Pos. 157

Quote box 9: Other barriers to BCI research

A lack of funding:

- ″ I think that one of the gaps is the insufficiency of financing. P 15, Pos. 68
- ″ We must have more money, of course. P, Pos. 56
- ″ There's no money for commissioning. P, Pos. 40

Time pressure to produce research:

- ″ There's another problem with the timing, the budgets, for conducting randomized controlled trials. It's always do this [as] soon as possible and then not allocating enough time. P 14, Pos. 100

Demands to undertake other non-BCI work:

- ″ Last year we did extra non-BCI work [and as a result] there were BCI things that were initially on our work program for last year but they didn't happen [because of fixed capacity]. P 26, Pos. 83

A limited involvement of other agencies:

- ″ Other government agencies have to be more active, more involved. P 15, Pos. 68

A lack of organizational ethics approval infrastructure for primary research:

- ″ Lack of ethics approval infrastructure for primary research P, Pos. 142

5. Views on Applying BCI and on Barriers

5.1 How are BCI findings applied?

A number of mechanisms were mentioned through which BCI were applied, meaning used to inform the development or further improvement of health-related policy, services or communications. These were:

- Discussions and meetings with key decision makers,
- Behaviourally informed and tested design projects,
- Behaviourally informed but not systematically tested design projects,
- In formulation of a new policy,
- Advisory groups with BCI experts,

- Via leaders within groups in the community.

Of these mechanisms, the most commonly mentioned was through meetings and discussions. The most concrete application mechanism was the use of behaviourally informed and tested design projects. While the most commonly mentioned framework was COM-B and the Behaviour Change Wheel (Michie, van Stralen, & West, 2011),many FPs (particularly those in high-income Member States) felt that BCI findings were not systematically applied or how they are applied could be improved.

5.2 Are there skills gaps to applying BCI?

Many FPs believed there were skills gaps to applying BCI findings to health policy, practice and or communications. A range of skills gaps were identified as follows. Quote box 10 provides more detail.

- How best to communicate key messages from research to decision makers,
- How to apply findings from BCI specifically to communications,
- A lack of understanding of public or service user needs,
- A lack of awareness of and expertise in using tools and instruments to apply BCI,
- A lack of awareness of and expertise in using theoretical models to base approaches and applications of BCIs,
- How to use evidence to change an intervention.

Quote box 10: Skills to applying BCI findings

Communicating key messages to decision makers:

> ″ So, I would say the more difficult part of course is [the] advocacy part. I mean communicating this identified need to those policy makers to make sure that their documents and policies and strategies would cover all this identified problems to be addressed in different programs. P 14, Pos. 95

> ″ Researchers are used to writing long scientific papers. You have to look at a certain way to [communicate to get] results [for policy]. What does it [the research findings] mean for policy? What can you do with policy [given the research findings]? P 16, Pos. 156

Skills in how to apply findings from BCI to communications:

> ″ There are communication units in all organizations but when it comes to behavior change, for some reason, since COVID, they think it is our prerogative, and they come to us. They do not do BCI work. They do not know it. They come to us, and we are first graders ourselves. P 5, Pos. 86

Lack of understanding of public or service user needs:

> ″ From my experience with administrators and civil servants, they lack the skills they lack the empathy. If I were the Minister of Health, first of all, I would made it compulsory for some of my staff to undergo training when it comes to behavior and cultural issues. P 1, Pos. 65

Awareness of and expertise in using tools and instruments to apply BCI:

> ″ We need more sensitization about BCI and the terminology. Some concrete examples and tools that can be used and modified. Case examples are very useful but also tools, instruments, concepts from different fields of science. That is something that [needs to] be upgraded. P 18, Pos. 213

How to move from identifying a barrier or issue to amending an intervention:

> ″ So, what do I do with this new finding. [For instance, suppose we] now know it's a motivational gap. We know it's a reflective motivational gap. What do we do to build [on] that? How do we build [findings] into our intervention? That's a challenge for our stakeholders. So how we [can] help our stakeholder over that is our challenge. P 12, Pos. 111-112

> ″ [There is a gap related to] implementation science. I think there's a lot in that space because we are seeing that through readiness activity. People are getting the early stages right: define the behaviour, do some diagnostic, gather some insight, understand people's worlds, describe the barriers for them, even codify what might need to happen next. [But] building that into an intervention, implementing the new approach to it, that's difficult. That [is what] people are really struggling with.

5.3 Non-skills gaps to applying BCI

When discussing skills gaps several FPs discussed non-skills gaps and barriers. Some of these related to the way in which **research processes or evidence are or are not connected with decision making** processes and include the following. Quote box 11 provides more detail.

- A lack of behavioural science expertise representation on senior advisory groups,
- An absence of close connections between researchers and intervention providers,
- The need for more timely production of research for use in interventions,
- The absence of a systematic instrument or mandated process that requires new policies to be reviewed through a BCI lens.

Other barriers related to **organizational culture** and the context within which they operate. These were as follows. Quote box 12 provides more detail.

- Risk aversion among health decision makers in policy or practice to making a change,
- Difficulties in getting to the stage of trying something new,
- Lack of a test, learn, and adapt culture in public health authorities,
- Lack of an evidence-based policy (EBP) experience or culture.

Quote box 11. Non-skills gaps to applying BCI findings: Connecting evidence with decision making

There is a lack of behavioural science expertise representation on senior advisory groups:

> ″ But during COVID this was very hard because the behavioural sciences weren't part of the COVID crisis structure. So, when results came in, the head of the Infectious Diseases Unit was present at the ministry, where policy advice was discussed and the results from the behavioral studies were only introduced on paper. And there's no expert present to elaborate on the results [to communicate them more effectively]. P, Pos. 168

Closer connections between researchers and intervention providers are needed:

> ″ I think we have to connect the research institution closer with the authorities and with the health professionals when the projects are running. How do we connect research or data with changing the interventions in the project? So how do we make this bridge from data to changing the intervention. P 17, Pos. 65 & 81

More timely production of research for use in interventions is required:

- ″ I think the [typical] way of using research is not good enough. And this was a very good eye opener on the COVID-19 work. So, we had some research about public opinion, why there is some vaccination hesitancy, barriers of vaccinations, access and so on, and that was applied directly into our [public health] work just after the research has been done. At the other research areas [typical approach] there is a too long changing perspective, so the project just go on and the research will come afterwards. And will be just the research for the [sake of] research [as it is] not used directly at the practice. So, I think we have to step [up to] using the research in the running [of projects], to [be used in the] changing of the interventions. P 17, Pos. 61-63

There is no systematic instrument or process requiring the use of BCI in policy:

- ″ So well, there are some examples of involving communities or giving an opportunity to communities or representative groups to give their interests [views during the development of public policies], but [there are] no real instruments or systematic processes to translate behavioural [and] cultural [insights] into policy. [For instance, there is not a requirement similar to the executive order, signed in 2015 by the then President Barack Obama, for public authorities to incorporate behavioural science findings into public policy.] P 9, Pos. 176

Quote box 12: Non-skills gaps to applying BCI findings: Organisational culture

Risk aversion to making changes:

- ″ There's something about kind of risk aversion or consensus or accountability. I think stuff sometimes doesn't get off the ground when people get cold feet. . . You know there's an easy option, which is what you've been doing for a long time and [people can] get stuck there. How can you incentivize or what are the skills that are needed to try to create the conditions for an experiment or to do something else. P 20, Pos. 93

Difficulties in getting to the stage of trying something new:

- ″ With proposals and papers about deliberation and dialogue and trying to sell it to senior people and it never really gets into action mode, it's kind of stays in idea mode. And I think sometimes the priority is about how to initiate action and how to start things. And just to do things. I think, if you got a good idea, if it's worked elsewhere, you get to the point where it's actually worth trying to do it. P 20, Pos. 84

Lack of a test, learn, and adapt culture in public health authorities:

- ″ If you do the evaluation and monitoring, it tends to stop in the first round. [It is important to get across that] the work is not done once you have done the first circle, because you need to take the lessons learned and do it better next time. So, it's a challenge . . . in general to have the idea [that] this will not stop. P 24, Pos. 101

Lack of examples of evidence directly instigating policy change:

- ″ I haven't seen research be the direct instigator of a policy change. It tends to flow in the other direction. P 23, Pos. 171

Lack of evidence-based decision making:

- ″ So, my first answer is that the gap I need to cover is . . . evidence-based decision making and maybe something about types of research. P, Pos. 70

- ″ I don't think we have much experience in translating research into policy. P, Pos. 171

6. Stakeholders

6.1 Who are the most important stakeholders for increasing BCI work?

The **Ministry of Health** was most frequently discussed as the most important stakeholder for increasing BCI work. Reasons cited for the importance of the Ministry of Health included: it has overall responsibility for making policy decisions and for allocating funding, FPs have worked with policy leads to apply BCI or know policy leads in the Ministry are interested in applying BCI, and because support is required from the Minister to undertake certain research (e.g., national surveys). Quote box 13 provides more detail.

This was followed by reference to a **public health agency** as the second most important stakeholder, especially by FPs in high-income Member States. Quote box 14 provides more detail.

While FPs most typically referred to overall organizations, in several cases FPs spoke about specific policy leads in the Ministry or public health leads.

While asked about the most important stakeholder, many FPs discussed **a wide range of stakeholders**. These include government ministries other than health, communications units in public bodies, leading academics, scientific societies, national patients' associations, and representative organizations of health professionals such as clinicians, nurses, or physical therapists.

Quote box 13: Most important stakeholders – Ministry of Health

The Minister has policy responsibility and the Ministry makes the funding decisions:

- ″ the key keeper people or to key stakeholders are surely that the ones who like make decisions and give money and the politics. P 11, Pos. 62

Staff in the Ministry of Health need to be involved in the process:

- ″ Well, it's definitely Ministry of Health and Social Welfare. . . They need to be more involved in all this process. They need to be updated regularly [with] information about expectations and the possibilities. P, Pos. 85
- ″ The Ministry of Health, [it is responsible for] legislation. It's the authority who is responsible for policy making. Who is responsible for the health of the population. P 10, Pos. 96

Staff with policy responsibility in Ministry of Health are using BCI:

- ″ Within the Ministry it's the Head of Unit or the assistant to the Head of Unit. P 26, Pos. 101
- ″ I would say that it would be policy leads within our Department of Health. Because they are the ones who are really into building on capacity to enable behavioural factors to be part of the jigsaw [when] putting together strategies or policies. P 2, Pos. 35

The Ministry of Health's support is required for national surveys:

- ″ Since 2006, when we started doing these surveys, without the support of the Ministry of Health, we would not have been able to implement these studies, because even if you have donor organizations, some external organizations, if the Ministry of Health doesn't support it, the study is impossible to conduct. It might be some small survey, but not at the level of the whole country. P, Pos. 52

Quote box 14: Most important stakeholders – Public health agency

- ″ I think I started really grand with government policy makers, because the cascade then would be that they would reach a wider audience, but I've got more realistic around it and lots of our activity is with public health practitioners. P 12, Pos. 116
- ″ I would also mention the Public Health Center as the Minister of Health as the main institutions. P 3, Pos. 78
- ″ I think it's public health as the main actor in terms of innovation, introducing new ideas. The research and policy in [this] have [to] remain active, but when it comes to BCI, it has to work closely with the social work or social sciences faculty. In my opinion these two institutions can make the difference. Of course, the Ministry of Health and Social Affairs well, it's at the top of the hierarchy, but the most they can do is sign documents to allow processes. But the real work will be done within those stakeholders I mentioned, it's public health and the faculty of social sciences. P 9, Pos. 185

- So, [you] can take it two ways. There's the internal one … the kind of Chief Medical Officer or Deputy Chief Medical Officers and our Director, you know that kind of line of command and management. [But externally] we've had a really close relationship with an influential director of public health who is now the President of the Association of Directors of Public Health, they are [a] very influential, important group. P, Pos. 93 & 95

6.2 How well do stakeholders understand BCI and how it can benefit their work?

None of the FPs felt that there was widespread understanding, i.e., across their organisation or across all stakeholders, of the how BCI could benefit their work.

Many FPs reported that they felt there was **some understanding in pockets** among stakeholders of how BCI could benefit their work. Certain topics or areas were mentioned where it was felt there was some understanding. These included health protection, health promotion, health literacy, public health areas. It was also noted that where there is some understanding, that it is sometimes at a shallow level. Quote box 15 provides more detail.

Some of the FPs felt that there was **little understanding** among stakeholders of the how BCI could benefit their work. For instance, it was felt that there was little understanding of the range of factors that influence behaviours and little understanding of how a BCI approach could help to achieve health objectives. This was often felt to be due to the relatively new nature of the concept and the very busy workloads of key stakeholders. Quote box 16 provides more detail.

Quote box 15: Some understanding in pockets of how BCI can benefit work in health

Some understanding of BCI for certain topics in certain areas:

- I'm not sure they have [BCI] on top of their mind, that BCI is a focus. We use [the] World Health Organization to promote different topics. For example, health literacy. I think there is a very good understanding that we have to do something about health literacy. Maybe we should have some framework and work on translating BCI into a local context [on how it applies to different areas in a local context]. P 17
- I think the external stakeholders that we've discussed do [understand how BCI can benefit their work], but the internal stakeholders that we've discussed don't. P 7
- I think within the sort of people in the Department of Health that I've mentioned, yes [they understand how BCI can benefit their work]. Internally, I don't think [so]. There's room for more understanding. . . .They are certainly not unwilling, but it's just how it works out and the processes and things like that. I would like to spend more time in discussion with them. So, I think I'm knocking against an open door really with some people internally. P 2
- Definitely in the public health department [understand how BCI can benefit their work]. The other departments, perhaps less familiar, they're less focused on the general population. They're focused on the hospitals or the clinics. . . . Like I said, there's not a huge amount of awareness of it as a formal concept. P 23, Pos. 204 & 223
- Tricky question. Of course they do. Mostly, those are competent specialists within healthcare organizations. And in recent years, this understanding is [increasing] and will be increasing, I hope. But there is an understanding. P 15, Pos. 85

Some understanding of BCI in pockets but it may be at a shallow level:

- ″ I think that's another thing that's changed [as] a lot of those people have probably read Nudge. You know a lot of people developing policy now are aware of Nudge [and] probably read some of those materials so they get some of that popular science understanding because they think it's important to policy. So, the policy profession has a little bit of that sort of shallow understanding of it. P 7
- ″ I think [interest in behavioural science] as a measure of curiosity and interest, it's quite strong. But also it [large attendance at internal seminars on behavioural science] suggests that it's not really bedded in and that people don't necessarily feel too confident about it at the moment. And in a session like that, we might get a lot of senior leaders come in, because they don't know it and they're curious about it and they want [to] test their knowledge or to ask questions. P
- ″ I think it's hard to know. You can say it is [at a] superficial level. People, especially with [policy responsibility for addressing the] COVID-19 pandemic, they're big into behaviour change and they're very aware of it. But for a lot of areas it won't be that obvious how it could really actually benefit them. They need a simple kind of approach, [for someone to] say look this is where you could apply this for your work area. This [is how BCI] could be useful for your area. P 26

Quote box 16: Little understanding of how BCI can benefit work in health

- ″ There's a lack of understanding. . . We have habits, attitudes, values etc. I think this is something people don't know. They think that maybe we can just say to the school kids that alternative tobacco products aren't useful aren't like healthy, and they're not going to use them anymore. P 11
- ″ I would say little [of how BCI can benefit work in health]. I don't think they fully comprehend the importance of the BCI work. So that's why it's a matter of educating, training them and having them as an ally. P 1
- ″ I think the level is low. Let’s admit it. As I said earlier, we are taking our first steps ourselves, we need to get well on our own feet. And then advocate at the level of the Ministry of Health. For example, the breastfeeding project. [Unclear name], she does not have time for everything, she listens to us, and so on. And if we explain everything clearly, it will make it easier. P 5, Pos. 84
- ″ The government structure is relatively less informed [than UN and WHO]. P 14, Pos. 150
- ″ In my opinion, my very instinctive and honest opinion, [there is] not much aware[ness]. Many people within the organizations are doing it sometimes without being much aware they're doing it. Like in the case of age, like in the case of drug abuse, like in the case of violence against women or well, now more and more probably even in noncommunicable diseases. So, we are getting more aware about it. But as I said it probably was done, but under a lot of international influence and expertise. P, Pos. 206

6.3 What has been done to increase awareness of BCI among key stakeholders?

FPs indicated that the Resolution and the Action Framework were very useful to help to increase awareness of the benefits of BCI among key stakeholders (as discussed in Section 6.3). In terms of actions over and above those taken to support the adoption of the resolution and reporting of the Action Framework, many FPs indicated that they **had not taken targeted actions to increase awareness** among stakeholders. Many FPs said they would like to or planned to take actions in the future to increase stakeholder awareness.

Of the FPs reporting **specific actions taken**, many were FPs from high-income Member States, and actions included:

- Holding targeted meetings with key stakeholders.
- Having a behavioural science network for policy makers. Behavioural science policy networks tended to be behavioural science and policy or practice specific, to be cross government rather than solely focusing on health, to involve peer support and sharing, and for meetings to take place every couple of months.
- Holding internal seminars and sometimes presenting at external seminars. Internal seminars tended to include a mixture of issue specific and general interest topics, to be open to all staff (it was reported that it was very motivational for staff working on BCI when senior staff attend the seminars), and to be delivered by a mix of internal staff and invited speaker delivery. Some FPs reported they would like to or plan to hold seminar.
- Amending the approach to dissemination, for instance branding publications under a Behavioural Science series banner.

When discussing their views on the understanding of stakeholders of how BCI work could support their work, FPs offered **several wider reflections**. These are grouped here into two categories: resources to help better increase stakeholder understanding and other points to consider.

A number of comments related to **resources to help to increase stakeholder understanding**. This included an expanded video (one that provides additional detail to that in the video produced to explain the Action Framework and reporting requirements), a one-page FAQs style sheet, short cases studies, and a TIP (Tailoring Immunization Programmes) type program (i.e., a comprehensive guide) on how to apply BCIs to health. More detail is provided in Quote box 17.

FPs also provided a range of **other points to consider**. These include (see also Quote box 18 for more detail):

- the benefits of focusing on key areas,
- the need to make multiple pitches,
- addressing negative perceptions of nudges,
- how to avoid cynicism of buzz words and new solutions,
- the challenge of terminology to convey the concept (e.g., behavioural insights versus behavioural science; cultural insights; behavioural science versus behavioural sciences).

Quote box 17: FP reflections on stakeholder understanding and awareness - resources to help

Learning about how to explain what BCI is and what the benefits of it are for work in health:

> ″ I mean I think explaining it is one of the hardest things. I've seen so many guides about how to do behavioural science, but it always seems even the best ones, they seem [to] need a bit of motivation to get to the end of it. Because you've really got [to] be interested, haven't you? So, it's hard to summarize the whole thing really easily. Although there's some great examples. So, I think learning about how to explain it, how to increase capacity, how to get people interested in it. P 20, Pos. 62

An introductory video on BCI for health:

> ″ So, people can go to the video [a video produced by the WHO BCI Unit to explain the Action Framework and the reporting requirement]. Yes, it is very good. But somehow when people finished the video, they said now what. There is something to be added to the video, it is like unfinished business. There is something to be added to the video to make it crystal clear why the contribution of the person sitting opposite me, representing a NGO or Governmental [is needed and what it might involve]. P 1, Pos. 89

A frequently asked question sheet on BCI and its benefits for work in health:

> ″ It would help, maybe again from your Division, [to have] a frequently asked questions one page fact sheet. So, when I go and see the Minister and . . . civil servants and I think it's better if you just give them just one page, not more than frequently asked questions. Bam, bullet points.

Short case studies on the benefits of BCI for health:

> ″ If we have, documented from your Division, one or two case studies but short and sweet. P 1, Pos. 92 and 93

A document explaining how to apply BCI to health:

> ″ I think a program that is as concrete as TIP [Tailoring Immunisation Programmes] on BCI could be very helpful. I'm not sure it can be done, but it [TIP] was very good to lean on. P 17, Pos. 138

Quote box 18: FP reflections on stakeholder understanding and awareness - other points to consider

The benefits of focusing on key areas:

> ″ [There is an advantage to] just focus[ing] in on the kind of key areas where you really think you can make a difference or where you know you are probably going to have a demand. P 26, Pos. 133

The need to make multiple pitches:

> ″ You're not going [to] have success in lots of areas. [You] make lots of pitches that won't happen [will not subsequently become projects] either because the lead person isn't really bought into it, or maybe they are bought into it but then something else happens they have to prioritize or they can't get the agency to agree to things. [So you need to make multiple pitches to generate enough projects]. P 26, Pos. 135

Addressing negative perceptions of Nudging:

> ″ So there's people in [this] Country [who are] probably slightly alienated by some of the aspects of the formulations of the Nudge version of behavioural science . . . That maybe it's a bit too

top down, it's a bit too much solving problems without really involving people and [is the work of] policy wonks. P, Pos. 48

How to avoid cynicism of buzz words and new solutions:

- In county governments settings . . . things go around and people get quite cynical about stuff that appears to be like the new solution. You know, the buzzword and stuff. So, how do you pre-empt and deal with any kind of cynicism about something that appears to be a new fad? P 20, Pos. 63

Being clear on wording and terminology:

- Behavioural insights v. behavioural science; cultural; behavioural science v behavioural sciences. Multiple FPs

6.4 Views on what managers think about the objective to increase the use of BCI?

With regard to how health sector managers would view the objective to use BCI more, some FPs felt they would be indifferent or would not be aware of it, some felt they would be supportive of the concept of applying it, and some it would depend on the individual's professional background or area of work or if they typically took an evidence based approach to policy or practice. Quote boxes 19-21 provide more detail. It was typically felt that managers would face obstacles to the use of BCI such as time, money, and risk. Quote box 22 provides more detail.

Quote box 19: Views on what managers think – indifferent or not aware of it

They are indifferent to or do not view BCI as part of their job:

- From my experience, I think they are indifferent. I think they are indifferent. It takes a lot of persuasion to persuade them. P 1, Pos. 93
- Not really, no. [Managers do not see it as part of their job] P 7, Pos. 118

They are not aware of a BCI approach:

- Like I said, there's not a huge amount of awareness of it as a formal concept. I think they're well aware of the need to bring the population along with whatever changes they're looking to make. In so much as there could be, perhaps working groups within the BCI initiative around specific health challenges that many of these departments face. [Then] they might be able to learn from the research and be exposed to it in in that way, sort of in an international context. Whereas nationally, [otherwise] I'm not sure how much they would see new concepts being developed abroad. P 23, Pos. 223

There is a need to produce results from BCI to help interest in it to grow:

- No one asks anything [at internal meetings about BCI work]. I have already told them about Israel [WHO Regional Committee meeting] and signing the documents [adoption of the Resolution and Action Framework] and that we are already committed to do BCI work. But do you know why they do not ask? Because we haven't shown any results yet. If we do several studies and show the results, they will be interested. . . I think the most important thing, if we do BCI work, we will talk about it in a meeting, and maybe somebody will get interested in using it in their programs, we have to talk about it, and maybe then other institutions will get interested, but not yet. P, Pos. 89

Quote box 20: Views on what managers think – supportive

- ″ I think they're supportive. You know, if I if I think about our Chief Medical Officer again was the lead in this kind of area or Ministerial level. P 12, Pos. 133
- ″ I think I'd be guessing a little bit, but I imagine that they are supportive of this. And I mean I've got a lot of confidence when I hear them speak [health sector mangers] and how they think about things. I think that they would naturally be supportive and drawn and this would be like a quite default way that they would approach these types of problems. P 20, Pos. 70
- ″ I'm not sure that they are aware of BCI as a term from World Health Organization, but I think they are very keen on working on the principles in BCI. P 17, Pos. 144

Quote box 21: Views on what managers think – depends on area or manager

Whether a manager would be supportive or not of BCI would depend on a person's professional background:

- ″ I'm not sure I can put it in one box. I think some of them definitely would like the idea and this will depend on their background. If they are people coming from public health prevention, promotion, education, social work, they would feel respected in their profession and what they're doing. But in some in some areas, [such as] managers, economists, sometimes even at the policy level well few of them may consider it interesting and then use as an instrument of politics. But many of them can consider [it] just another non important thing among their many important responsibilities. P 9, Pos. 230-231

Varies by health sector area and by managers' approach to evidence use:

- ″ I guess it probably varies from area to area, and probably an even by personality. I think there's some managers who tend to be very pro evidence and [they] try to use it wherever they can. In certain areas of health where behaviour, especially public or population health, where they'll be very open to it or be bought into it. And then there's other areas like service delivery areas where they might [not] see it as being that relevant and so won't necessarily see it as their job. P 26, Pos. 125

Quote box 22. Views on what managers think – challenges facing managers

Managers are very conscious of the risks associated with making a change:

- ″ Some people who kind of see it as you know, in a positive light. But I think once you talk about applying it and making the change, it gets a bit risk. You know, for a lot of managers then it's a bit of a risk like. And so unless they have a major kind of problem that they're that they're being told, you really need to kind of address this. They're less probably inclined to try to change things because it's a risk, so I think there is a that would be a bit of a challenge. P 26, Pos. 125

Managers think it is important but they may not want to allocate resources to BCI:

> ” One answer short. I think they think it's really important, but don't want to spend any money on it. Sorry. P 16, Pos. 239

Managers have limited time and face many pressures:

> ” I think the issue might be just around time and resourcing and some of the practical challenges that they're dealing with and just really maybe not getting the right amount of time to create their infrastructure. . . . There's so many priorities and so much pressure. I imagine that they find it quite difficult to be strategic always. P 20, Pos. 70

7. Thoughts on the Future

7.1 How do they see BCI developing in next five years?

Most FPs expressed a positive or **optimistic view** on BCI for health developing in their country. It is seen as a more effective and efficient way of addressing health challenges involving behaviour. It is also seen as a useful umbrella ~~approach~~ under which to package a number of approaches to addressing health challenges.

Some FPs mentioned specific intentions or plans to increase BCI work. This includes (a) to deliver and advocate research projects, (b) to integrate BCI into health programs, and to (c) figure out the best ways to persuade health authorities to increase BCI work.

Some FPs mentioned the challenge of ensuring that commitments under the Resolution and Action Framework translate into actions.

7.2 What would most help to increase BCI work for health?[8]

FPs mentioned a range of factors that would **most help to increase BCI work for health** in their countries.

Items mentioned by three or more FPs that would support BCI work, were:

- To be able to clearly demonstrate the impact of taking a BCI approach to health policy, services, and communications.
- For FPs and their staff, to receive training on BCI. Some FPs specifically mentioned it would be most useful for the WHO to hold the training and capacity building seminars.

Issues mentioned by two different FPs (but not by three FPs) that would support BCI work were:

- To have additional funding to cover the costs of internal staff to undertake BCI work and to commission BCI research and applications of BCI.
- To raise awareness of the relevance of BCI for better health.
- To have a Unit with a budget and staff dedicated to undertaking BCI work.
- To undertake more networking with key decision makers.
- For the WHO BCI Unit to continue its work to promote a BCI approach for better health.

[8] In Sections 6.2 and 6.3 in order to provide an indication of points seen as relatively important by several FPs it is indicated where specific points were made by three or more FPs, or by two FPs (but not three FPs).

Other issues mentioned by a FP that would help to increase BCI work for health included:

- To break down barriers that prevent BCI research being undertaken and findings applied.
- For advocacy of the BCI approach to occur within a higher level of their organisation and of Government.
- To create a better understanding between researchers and policy makers of the language they use and of the nature of their different professional worlds.
- To better explain what a BCI approach is and what the benefits of it are.
- To incorporate BCI into the education of healthcare professionals.
- For a greater degree of working together between academia and public health authorities.
- To review existing surveys for NCD risk factors to explore the benefit of including BCI informed questions.
- For those promoting a BCI approach within public health authorities to have a better focus on how best to contribute the most within available resources.
- For those promoting a BCI approach within public health authorities to work with a BCI community of practice and with experts in academia,
- For the expansion of BCI work for better health to become a priority of the Minister of Health.

Some FPs volunteered a view on what would **prevent or limit** an increase in BCI work as follows. Issues mentioned were that BCI work can be viewed as common sense leading to poor quality of work under a behavioural label, that there is not a strong basis for research in a country, and that there was a block on staffing. Quote box 23 provides more detail.

Quote box 23. Barriers that prevent or limit an increase in BCI-related work

If BCI is viewed as common sense leading to poor quality of work under a behavioural label:

> ” Some of the things that might get in the way is if the quality dimension of it is less. So that it feels a little bit more like oh anybody can just do this, it's quite easy. Then [it] just becomes another branch of common sense, and people are not really engaging with the models or the data or the theories. P 20, Pos. 100

There is not a strong research base in the country:

> ” So, as I said in the beginning, the country is very bad in research in general. It is not so easy. P, Pos. 93

There is a temporary block on recruitment of staff:

> “ But we do have challenges with the recruitment freeze, so when somebody leaves, we can't replace them. P, Pos. 131

7.3 What WHO, ECDC and other partner organizations support would help?

Overview

A total of 16 different actions or issues were mentioned by FPs when asked what support from WHO, ECDC and other partners would help to increase BCI work for health. These fell into three categories as shown below and each action is discussed in more detail in the subsequent Quote boxes.

Actions mentioned by three or more FPs were:

1. To provide an ongoing BCI networking structure to share the work and experiences of Member States.
2. To advocate for international funding for BCI work by public health authorities.
3. In relation to BCI good practice, to collate brief good practice case studies but also to invest in the extraction of in-depth learning from good practice examples.
4. To provide training and capacity building in BCI.
5. For the WHO BCI Unit to continue its work and the positive approach it takes to this.
6. To create and regularly promote toolkits and guidance for BCI work.
7. To continue to increase understanding of a BCI approach and the benefits of it for better health.

Actions to avoid duplication of effort or combine resources mentioned were:

8. To produce short (1 to 2 page) template documents on a range of health topics that FPs across the Region could amend and use to make pitches to Member State policy / technical leads on these topics advocating the benefits of applying a BCI approach. For instance, for each topic a template could specify the challenge/problem, explain why BCI is relevant to this, describe how taking a BCI approach had a positive impact in another Member State, and include suggestions on BCI approaches that could be taken.
9. To facilitate cross country literature reviews to be undertaken and to facilitate cross country study teams on additional types of suitable studies.
10. To facilitate online experiments to be undertaken by co-ordinating the creation of a shared resource for running online experiments (e.g., commission experts to be available to design and implement a set number of online experiments a year).

Other actions, mentioned by a FP were:

11. To create a pillar or thematic structure to the WHO Europe BCI Network to help to strengthen and to support the WHO BCI Unit's work by some Member State focal points joining pillar or thematic subcommittees and reporting back on work to the WHO BCI Unit.
12. For the WHO to integrate BCI findings into conferences and training on other health topics.
13. For the WHO to be available to provide advice to staff promoting BCI in specific countries on how best to expand BCI activity given available resources.

14. To identify new interventions or approaches to improve health.

15. To provide opportunities for face-to-face meetings of BCI focal points.

16. To host a BCI event in a FP country.

Quote boxes 24-30 provide more detail on actions by three or more FPs while Quote box 31 provides detail on actions suggested by one FP.

Quote box 24: Possible Support from regional or international organizations: Networking structure for sharing countries work and experiences

- Information on what different countries do and what are the good practices and what worked and what [did] not. This is something maybe that is valuable. P 11, Pos. 121

- To go on with these meetings [previously held FP meetings in relation to the Resolution and Action Framework] and to do build an international network that you can help on that. That has been very useful because for us sharing experience with others, that has motivated a lot of us and also give us some support. P 21, Pos. 313-314

- There's a thing called PHIRI. It came up during COVID and it's [an exchange where] people just shoot in a question: How is your country dealing with this? . . . And then there's [a rapid response] from different countries in the EU on [how they are] dealing with a certain thing. Something like that [for BCI work would be useful], as could kind of go: who's working on this, anybody interested in working together on the following things. P 26, Pos. 142

- Another thing is how do you facilitate knowledge sharing or putting people in contact. So, let's say when we were doing the business plan for next year and certain projects come up, I wonder are other countries doing anything on this? P 26, Pos. 157

- Networks. Is anybody working on this and how have you been finding that and as well as the individual methodology queries, we're not sure about how to approach it. To see the approaches taken in other countries, to weigh up the pros and cons and [to] reflect [on] how then it could be done in *[Country 2]*. P 2, Pos. 65

- I think it would be very good to have some regional or local meetings where we can discuss this topic and try to elaborate on what do we mean by BCI in our different countries and how could we tackle this work on BCI. So, I could hear from . . . other countries on how they are framing and going [about] questions, and there is a lot of knowledge from you and your colleagues [WHO BCI Unit] when you're conducting this. P 17, Pos. 157

- Simple document sharing and keeping the networks alive. P 9, Pos. 285

Quote box 25. Possible Support from regional or international organizations: Advocate for Funding

Advocate for international research funding and initiatives for BCI relevant to FP organisations:

- ″ We cannot do this just with our [existing resources]. We need [more] staff. [We sought extra internal resources and noted] the document [Action Framework] says support and it's one of the strategic commitments and the answer was you could apply for some grants. P, Pos. 332

- ″ it would be nice if you [WHO] can move [or] pressure the European Union to make more specific [research] calls for behavioral insight. P 21, Pos. 363

- ″ About the role of international organizations to advocate for funding for this (BCI work]. The European Union has research projects, but they also have joint actions that are not as competitive as others [research calls]. If you're doing a joint action on something, it needs to be promoted at a very high level and individual countries or individual teams like us don't have the capacity to [do that]. We can't get there. P 21, Pos. 370

Advocate for European level funds to be available for cross country work and capacity building:

- ″ If there was funding [at] the European level to do projects, different countries could bid. . . The Local Government Association has for years had some funding that local government can apply for. . . they get partnered with some expertise to do behavioral sciences. They do a project and then there's a series of case studies collected on the website. So, it builds capacity. There's a lot of learning that goes in the process itself, but also [it] develops case studies for others. And they've been doing it more through our kind of consortium approach. So, two or three local governments, you know. The same sort of model at the European level, where you got some funding and you can bring in some resource to support 5 to 10 countries working on something similar in action learning sets. P, Pos. 175-177

Quote box 25. Possible Support from regional or international organizations: Brief case studies but also in-depth extraction of learning

Brief case studies:

- ″ One thing that is very useful is the examples in the WHO webpage. The examples on how to apply these insights in different ways. I think that's very helpful. P 21, Pos. 298

- ″ Good examples are always very effective. P 4, Pos. 106

Extraction of learning:

- ″ A neat way of collating in a digestible format case studies of notable practice, [in a way that you can] pick [it] off the shelf and give to someone else. You know, take a little give a little, doesn't tend to work really. You got to invest in actively extracting [the learning] in a really easy way. For me it's got to be normal, easy, attractive and routine for us to provide learning. P 12, Pos. 233

Quote box 27. Possible Support from regional or international organizations: Training and capacity building

Training:

- Training on their very practical aspects of how to do it [BCI research and application of BCI findings] and how people did it. P 26, Pos. 141
- We are in need of support with research, with testing, evaluating the work, forming questions, doing analysis and qualitative research. P 15, Pos. 120
- Formal training, including online training and the presence of experts. P 9, Pos. 286
- Comparing myself to someone who has been trained in behavioral sciences. I haven't been trained in that field. So, I feel like I would need a bit of a comprehensive training module or whatever it is, a program. . . Definitely methodological training and anything that would facilitate BCI work. The BCI approach and relaying messages to colleagues. Anything related to that would be very helpful. P 13, Pos. 156 & 160

Build capacity in conducting BCI and applying BCI findings:

- How can we promote BCI work if we are like first graders ourselves? Let us strengthen the capacity of our team, show our research projects, and maybe offer it to other programs. And if we write these orders [ministerial decrees], BCI work will be implemented in any case [in different institutions]. But who are they going to turn to if we have no own capacity in our country? Like I said earlier, about the [research] protocols and so on, which we cannot do ourselves. We have to be able to do BCI work from start to finish. Only then can we advocate anything. And right now, I cannot say anything. We first need to learn it, because it is not as simple as I thought to begin with, I got even more confused when I started learning it. We have to learn. P 5, Pos. 114

Summer school and other countries:

- I would like for my BCI unit people to do a training in this summer school too, exchange ideas with other countries. It is a different level altogether. When I came back from that summer school, I was a different person. Can there be this summer school training arranged for our team here? When *[Name of WHO staff member]* visited last time, it was awesome. P 5, Pos. 137

Quote box 28. Possible Support from regional or international organizations: Continue WHO BCI Unit approach and work

- That you're *[the WHO BCI Unit]* there and you have that focus. It provides the resources that helps us to do our job. But also, the fact that we're able to link in and do that and we can reflect that in our outputs. So that helps almost by association with yourself, then that helps me. P 2, Pos. 63
- So, it's [the Action Framework] a request for accountability. [It] is important so that you can request us and we can do that request to our governments. P 21, Pos. 295
- The awareness of the benefits, we like the website, and everything is helpful. P 26, Pos. 140

" The WHO guide on how to establish a unit on BCI, with the eight considerations, that was a very good help for us. We didn't follow all the steps, we decided to consider the steps that were relevant for us. P, Pos. 168

Quote box 29. Possible Support from regional or international organizations: Toolkits and continue to increase understanding

Toolkits and guidance documents:

" WHO is always very good at you know making tool boxes or you know charts and graphics. P 4, Pos. 106

" develop guidance P 15, Pos. 112

" But if there are sort of European tools and resources, we might not have to do that. But then again, it gets tricky because very difficult for everyone to agree on what thing to promote. P 7, Pos. 168

Continue to increase understanding and recognition of the importance BCI work:

" I think it's good to have more visibility of the subject. To make sure that it's not only individualistic approach but also that environment structures are seen as well. I think it's very important to have both in it, to make the best of this. So, I like that about this initiative, that it's also like the cultural aspect is in there as well. P 25, Pos. 111

" Recognition of our work is important, not for our personal gains, but because then we can go to the Ministry and say, hey, what you're doing is important… I mean, we have been mentioned . . . Like what we're doing. So value us. Because [the] WHO and [the] ECDC is valuing us. P, Pos. 298 & 300

Quote box 30. Possible Support from regional or international organizations: Actions to avoid duplication of effort or combine resources

Create template pitches for topic areas that could be used by people working on BCI:

" There's things that just won't happen because people don't have time. The big issue is time. You could potentially have template pitches done up on different topic areas, one or two pages. If you're in a unit [or team] and you want to kind of engage someone, here's the kind of thing you might want to tailor. So [having templates would] just save time. P 26, Pos. 140

Facilitating cross country literature reviews teams and studies to be undertaken:

" Because resources are so tight, say in our AMR literature review, when we were doing that I've been wondering is there a staff member in some other country who could be doing part of this? Could you have joint literature reviews where people are working together on a shared topic or issue and you increase the resource [by] using people in different countries. P, Pos. 142

Facilitating online experiments to be undertaken through a shared facility:

" Having a facility for [running] online experiments would something that different countries could find useful. So maybe there's an advantage of creating a resource that could be shared. There might be countries with common interests in a topic but they might not have the money, or they might not have the time to contract something. [Putting in place a shared online facility for undertaking experiments could overcome these barriers.] P 26, Pos. 144 & 149-15

Quote box 31. Possible Support from regional or international organizations: Other possible actions mentioned by one FP

Creating a pillar or thematic structure to the Network:

" Maybe the time has come within the BCI division [WHO BCI Unit], for maybe two or three pillars to be formed, like subcode this where national focal points could join in order to strengthen, to support your work. It will help structuring your work as well. If you have two or three subcommittees, pillars, thematic committees, and reporting back to you, I think it will make your work easier as well. P 1, Pos. 131

For the WHO to integrate BCI findings into conferences and training on other health topics:

" I think the best way to do it would be to integrate BCI sessions within the other topical conversations that WHO engages on. I think it's wrong to think of it as a standalone concept or department. Obviously, you need a department to forward the concept and to ensure that it's up to date with the best way. I mean I send experts to countless WHO meetings, whether virtual or in person. And if there's a conference on addiction, or if there's a conference on cancer treatments or infection prevention or whatever, if there was a half hour session within that conference on the literature of the BCI findings in this area and how can it help your country. I think it would change the way that people think about their own disciplines, and they might start applying that [BCI] filter themselves. P 23, Pos. 269-270

For the WHO to provide advice on how best to expand activity:

" Technical support from the World Health Organization to discuss and see how to expand our activities. I understand that research requires money, but [to receive advice] in terms of strengthening cooperation, engaging other parties, strengthening intersectoral cooperation etc. P 8, Pos. 88

For the WHO and ECDC to identify new interventions or approaches:

If you can come up with some additional interventions for some age groups that can give good results, it will be very well-received. Then develop a compendium, a handbook of measures that may be adapted by countries to their national context and used. P 6, Pos. 74

7.4 Is the Action Framework and reporting requirement useful?

The vast majority of FPs indicated that the **Action Framework and reporting is useful**. None of the FPs said it was not useful. Examples of supportive comments include:

" I think it's been very useful and it's very important. P 26

- ″ Yes, yes, definitely. . . So it's a good help for us for awareness. P 24
- ″ Of course they are useful. Beyond any doubt. Any integral approach, is a good indicator that this topic is gaining support. P 6, Pos. 72

Only two FPs indicated they were undecided or awaiting judgement. This related to whether a survey could capture all of the changes that are hoped for and how the findings of the survey might be used by national decision makers, as illustrated below.

- ″ I'm a little skeptical, I think BCI sort of strikes me as a cross departmental tool. And anyone that fills out the survey will talk about what they're aware of, but. It's more important to get people thinking about. Sort of. You know, it's the difference of when you, when you look at a doctor, you treating the disease or are you treating the patient and for each of our departments, they're doctors that are addressing a topic. And they're seeing it within a certain framework, and we need to shift that framework a little bit to shift their perspective. I don't know that surveys will necessarily accurately measure that… But it's another tool among many and I hope I'm wrong. P 23, Pos. 272 & 275
- ″ I'm still hesitating in the future depending on how much would it help us in the in comparison to other countries, if, for example, the research shows that we have a large, much larger contingency of social scientists active, then there's a lack of urgency for our government to invest more in it. P 16

Several benefits of the Action Framework and reporting requirement were identified. These are listed below and expanded in Quote box 32.

- The existence of national commitments increases awareness of BCI among very senior officials.
- Prioritization of BCI by the WHO emphasizes the importance of BCI work.
- It provides a firm basis for undertaking BCI work.
- It is a useful lever for undertaking BCI work.
- It provides an impetus to undertake BCI work faster.
- It provides a unified reporting system that facilitates comparisons.
- It puts progress and challenges in the spotlight.
- It helps to engage with a wider set of colleagues.

Numerous FPs expressed **very positive views on the approach taken by the WHO BCI Unit** and of supports provided by the Unit in addition to the Action Framework. See Quote box 33 for details.

Quote box 32. Reasons why the Action Framework and the reporting is useful

The existence of national commitments increases awareness of very senior officials:

- ″ Often it's difficult for us to talk to people four or five levels above us . . . That's where the resolutions come in because they take account of commitments at the national level. They go through the desk of people higher up and they're very aware [that] now we've gotta commitments. So that all helps. P 7

There is prioritization of BCI due to the WHO emphasizing the importance of the work:

" Already, the existence of the BCI Unit at WHO is really good for us. It gives us more of an international [contact with] highly influential actors. So, it's good for us to have that because we can refer to that and say we are also doing this kind of work. I think that's already a good thing that we have that. P 25

" There's a commitment to it. We have to report on the progress and we have to try to improve it [BCI work]. So that really strengthens the prioritization of it. So that's really important. P 26, Pos. 139

It provides a firm basis for undertaking BCI work:

" It's another tool in my arsenal. It builds momentum as this is an ongoing development. [I can explain] how we factor into it, and [that] there's a structure and I need to report. It provides a firmer basis [to our BCI work]. P 2

If you think of our own situation before [the Resolution and Action Framework], it was me saying this [behavioural science] is a really relevant area, we've done projects on this before, we've got some really tangible impacts and benefits, we've got different areas in the Department interested in it. Whereas now it's also well actually, we've to report on progress on this, there's a commitment to it. We have to report on the progress and we have to try to improve it. So that really strengthens the prioritization of it. So that's really important. So just kind of keeping that up, [that] will be really useful. P 26, Pos. 139It is a useful lever for undertaking BCI work:

" I mentioned . . . using it as the lever. P 12

It provides an impetus to undertake BCI work faster:

" So, the reporting now to WHO has pushed this work. So, we have to do it quickly. So, the reporting is actually an opportunity for us to do start doing the work faster. P 24

It is a unified reporting system that facilitates comparisons:

" a unified reporting system . . . It is certainly useful. It is a framework that systematizes our work. And for you also, it is a unified system. If everybody is reporting or doing research based on the same framework, the monitoring on your part provides better results. It has a greater potential for making comparisons, analysis, etc., it is useful for us also. P 15, Pos. 112 & 115

It puts progress and challenges in the spotlight:

" They certainly are useful because since September [2022] the Deputy Minister supported them in every way so that [our] country could be involved. In terms of reporting, these data will show in the future, when compared to other countries, what the gaps and the achievements are... But of course, we have special aspects that need attention, and we have challenges. But the fact that it's in the spotlight is a fact. P, Pos. 93 & 95

It helps to engage with wider set of colleagues:

" Like I already said to all when I participated in previous period in this process of consultations [and] piloting of reporting was really useful because that was opportunity to speak with a lot of actors in public health and institutes and in the Ministry. And that was really a good facilitation process to present them [with] this concept and to see how it's used right now and how it can

be used in the future. Now when I'm speaking with my colleagues who are planning some activities, I always also use this opportunity to speak a little bit about this concept and this can be very useful to facilitate. P 18, Pos. 284

Quote box 33. Positive views on the approach taken and supports provided by the WHO BCI Unit

Supports and tools provided by the WHO BCI Unit (in addition to the AF) are very helpful

- Your group [the WHO BCI Unit and the meetings of focal points] is very welcome. I see how useful it's been and the potential on a number of levels. Whether it's providing a focus, the professional networking, the resources on the web. It's very, very welcome. P 2 Pos. 82 - 82
- We're using some of the materials already. The actual resources that you've provided and the animations and stuff is great. It's really good. P 20 Pos. 109 - 112
- The examples [on the WHO website] on how to apply these insights in different ways. I think that's very helpful. P 21, Pos. 298
- The WHO guide on how to establish a Unit on BCI, that was a very good help for us. P, Pos. 168

The approach of the WHO BCI Unit is very inclusive and it works well

- One of the important things, that I'm very pleased [about is] that [the] WHO is picking up BCI and including the culture components. P 16
- Is about improvement and progress from wherever you are. You talked about how it's just improvement. So that feels quite [like] an inclusive thing and you can learn from other countries. P 20 Pos. 110 - 110
- I think that the work that's been done [by the WHO BCI Unit] is really important and it's a very collaborative approach or it's a very inclusive approach and I think that's worked really well. I just think it's really important and just keep it up. P 26 Pos. 156 - 156
- The tone of it [the meetings of focal points chaired by the WHO BCI Unit] is perfect. I was a bit worried that [I was] going to feel like we're not very established and there'll be lots of established countries there talking to each other, and it just won't be useful, won't help us. But it's been really nice, in that there's lots of people on a similar journey, facing similar problems with the same kinds of questions. So, I think providing a platform for that to happen is really useful. P 20 Pos. 110 - 111
- I wanted to say thank you. Because you [the WHO BCI Unit] really are doing important work. It is an interesting, important, and profound area. P 6 Pos. 76 - 76
- I am in awe of how you [the WHO BCI Unit] manage those meetings [of the focal points]. It just seems to flow so well. P 2 Pos. 80 - 85

8. Sub-regional Variation

This section discusses differences within the Region. Caution is needed when considering sub-regional variation within the study. Firstly, the groups are relatively small, so the mentioning of an issue by a FP (or forgetting to mention an issue) could unduly create a pattern. Secondly, the study is based on the perspective for each Member State of the Focal Point and so the interviews typically involved the views of one person for each Member State (as opposed to the official reporting).

The overall pattern is one of commonalities in terms of the challenges faced. A small number of differences were observed as described below.

There were some differences across Member States in the **terms used when FPs spoke about BCI** research or applications. When asked about BCI work in their country, some FPs spoke directly, using the terms behavioural economics or behavioural science, with regard to the types of behavioural economics and science research that was being undertaken or the applications of findings from behavioural economics/science. These FPs tended to be from Member States with a Behavioural Science Unit or with a Behavioural Science Team (i.e., where a sub-component of a Unit with a broader research and analytical focus undertakes behavioural economics and science work). Within this study there was a concentration of such FPs in high-income countries in Northern Europe. Other FPs spoke more indirectly when asked about BCI work, in terms of how it is relevant to areas such as public health, health promotion, health protection, or health literacy.

There were also differences in the interviews across Member States in terms of the **ease with which one could distinguish** whether research being discussed involved purely determining the prevalence of healthy and unhealthy behaviours versus research which directly examined the drivers or barriers to such behaviours.

In terms of **written goals**, the FPs were concentrated in Northern Europe who mentioned having a national strategy for BCI for health (or a commitment to develop one) or having a written internal annual business plan or action plan with BCI commitments.

With regard to the **types of BCI research** undertaken that first sprung to mind, FPs who mentioned literature reviews were more concentrated in high-income Member States. In terms of research collaborations, perhaps not surprisingly, FPs who mentioned international partner organisations (such as the WHO, UN or World Bank) as important collaborators were from upper middle and lower middle income Member States.

The **challenge of funding and resourcing of BCI work** was mentioned by Member States from across the geographic sub-regions and from Member States within all income categories. The **overall pattern is one of commonalities in terms of the challenges faced**, as is reflected in the Recommendations section.

9. Brief Behavioural Diagnosis Using the COM-B Components

A behavioural diagnosis of relevant COM-B model components ('capability', 'opportunity', 'motivation' and 'behaviour') suggests that to increase BCI work (research and application) there is a need to improve physical and psychological capacity (skills and awareness, see Box 8.1), physical and social opportunity (resources along with social and professional supports, see Box 8.2), and automatic and reflective motivation (positive affect and written goal setting, see Box 8.3). See Appendix C for more details on the COM-B model and the Theoretical Domains Framework (TDF) and their use in this study.

Box 9-1 **Capability**: Brief COM-B component mapping using domains of the Theoretical Domains Framework (TDF)

COM-B Components	TDF Domain / Definition	Evidence of what needs to change for BCI work (research and application) to increase
Capability - Physical	Skills (D2): An ability or proficiency acquired through practice	**Evidence of the need for physical capability to improve as FPs identified:** a range of important skills gaps to conducting BCI research for policy, services or communications – see Section 3.3. a range of important skills gaps to applying findings from BCI research to policy, services or communications – see Section 4.2.
Capability - Psychological	Knowledge (D1): An awareness of the existence of something	**Evidence of the need for psychological capability to increase as FPs identified:** that they think that internal and external stakeholders' understanding of what BCI is and how it can benefit their work is limited – see Section 5.2. that in many cases relatively little has been done to increase awareness of BCI among internal and external key stakeholders in their country over and above work in relation the Resolution – see Section 5.3.

Capability - Psychological	Behavioural regulation (D14): Anything aimed at managing or changing objectively observed or measured actions	Does not appear to be a major concern as FPs identified: that the WHO Europe BCI Action Framework and the requirement to report on progress is useful for their country (see Section 6.4) some FPs specifically mentioned the benefit of the Action Framework being that it puts progress and challenges in the spotlight, it facilitates comparisons, and provides an impetus to do more and faster.

Box 9-2 **Opportunity:** Brief COM-B component mapping using domains of the Theoretical Domains Framework (TDF)

COM-B Components	TDF Domain / Definition	Evidence of what needs to change for BCI work (research and application) to increase
Opportunity - Physical	Environmental context and resources (D11): Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities ... Behaviour	**Evidence of the need for physical opportunity to improve as FPs identified:** a range of important non-skills gaps, including gaps in staff resources, to conducting BCI research for policy, services or communications – see Section 3.4. a range of important non-skills gaps, including gaps in resourcing to applying findings from BCI research to policy, services or communications – see Section 4.3.
Opportunity - Social	Social/professional role and identity (D3): A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting	**Evidence of the need for social opportunity to increase as FPs identified:** many managers (decision-makers) in health organizations in their country are likely to be unaware or indifferent about the objective to increase the use of BCI in health-related policies, services, or communications – see Section 5.4.
Opportunity - Social	Social influences (D12): Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours	**Evidence of the need for social opportunity to increase as FPs identified:** that they think that internal and external stakeholders' understanding of what BCI is and how it can benefit their work is limited – see Section 5.2.

Box 9-3 **Motivation**: Brief COM-B component mapping using domains of the Theoretical Domains Framework (TDF)

COM-B Components	TDF Domain / Definition	Evidence of what needs to change for BCI work (research and application) to increase
Motivation - Automatic	Emotion (D13): A complex reaction pattern, involving experiential, behavioural, and physiological elements.	**Evidence of the need for automatic motivation to improve:** there is scope to improve the positive affect associated with the benefits of BCI as FPs report low levels of awareness of the benefits of BCI among stakeholders (see Section 5.2) and a probable lack of awareness or indifference among managers (decision-makers) of the objective to increase the use of BCI (see Section 5.4). From a methodology perspective it is acknowledged that there was not a direct question on this TDF domain in the study topic guide.
Motivation – Reflective	Beliefs about consequences (D6): Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation	**Does not appear to be a major concern as FPs reported:** an overall positive outlook for BCI work for health in their countries over the next five years - see Section 6.1. a number of issues to be addressed before considering to develop a national BCI strategy, including the need to communicate the added value / why needed, to make the idea more tangible, and demonstrate impact in wider range of areas - see Section 2.2. From a methodology perspective it is acknowledged that there was not a direct question on this TDF domain in the study topic guide.
Motivation - Reflective	Goals (D9): Mental representations of outcomes or end states that an individual wants to achieve	**Evidence of the need for reflective motivation to improve as FPs reported:** that typically goals or commitments (over and above the commitment to the Resolution) have not been set for BCI work in their countries – see Section 2.1.

10. Discussion and Recommendations

Overall, the study shows that there is both commitment to and optimism for future BCI work, and the BCI resolution, BCI action framework, and reporting requirements are good drivers of change. At the same time, a number of important barriers to increasing BCI work were identified. The respondents proposed a range of actions to support them to overcome these barriers.

The following recommendations for action by regional and international organizations to support Member States advance the implementation of resolution EUR/RC72/R1 related to behavioural and cultural insights for health were developed based on this current interview study with Member States conducted during April-May 2023. The recommendations are structured according to the five strategic commitments of the resolution and its accompanying 5-year action framework.

SC 1 Build understanding and support of BCI among key stakeholders

1. **Continue to use** the resolution, action framework, reporting, meetings, and high-level advocacy to increase the visibility, understanding and prioritization of BCI work for better health.
2. Develop a **permanent Networking Structure** for sharing Member States' plans, work, experiences and overall good practice on BCI work for better health, based on and transitioning from the network that was established to develop the Resolution and Action Framework, and to facilitate reporting. Consider having a thematic / pillar structure to the Network with sub-groups focusing on specific topics and with elements of co-production of resources by working with Member States.
3. Develop a short suite of **impactful material** to promote a better understanding of the importance of BCI work among high-level officials by clearly explaining what BCI is, how it differs from other approaches, how it can help to improve public health and also heath system efficiency, and what practical steps can be taken. This should include (a) a short video and (b) a two-page flier.
4. Continue to **demonstrate impact** by using brief case studies of the benefits of using BCIs.
5. Lead the development of **template "pitches"** (one to two pages) of why BCI research or applications of BCIs for specific topic areas would be beneficial and what it could involve. These could be tailored by FPs to engage with policy/technical leads.
6. Make available to FPs and their teams **bootcamp foundation training** in the behavioural and cultural sciences for health.
7. Support the wider use of national BCI-related networks, **collate and share information on national networks** currently operating (e.g., how organised, functions, frequency and format of meetings, topics covered).
8. Reach an audience wider that those with a pre-existing interest in BCI by identifying priority health topics supported by WHO conferences and training materials, and **integrating BCI findings** into such conferences and training materials.

SC 2 Conduct BCI research

1. Develop **written Guidance and provide Training and Technical Advice** on:

    a) **Impact Evaluation.** FPs sought guidance on the technical aspects of how to run a randomized control trial (RCT) but also practical experiences of doing so within a public organization. Although not specifically mentioned in interviews, it might also be useful to cover additional techniques approved in Cochrane EPOC guidelines of non-randomised trials, controlled before-after studies (also called difference-in-differences studies), and interrupted time series studies.^

    b) **Quantitative Research Methods.** Specific techniques were not mentioned, but this could include statistical methods most relevant to understanding drivers and barriers or associations (e.g., multi-variate regression analysis, techniques such as Logistic regression, Ordered Logistic regression, ANOVA).^

    c) **Qualitative Research Methods.** This should include how to plan and run focus groups, the use of citizen / user panels, representative advisory boards and other techniques to reach marginalised groups.^

    d) **Literature Synthesis Methods.** This should include issues such as protocol development, searching, screening, information extraction, and formulation of conclusions and recommendations.^

2. **Facilitate cross-country research teams** by providing a mechanism for countries to pursue the possibility of collaborating on research studies (e.g., a review on a topic of shared interest).
3. For **surveys on healthy and unhealthy behaviours** undertaken in numerous countries determine (a) if additional behavioural analysis of the available data would be useful (e.g., to gain a better understanding of drivers, barriers or associations) and (b) if an improved understanding of behaviours could be gained through feasible amendments or additions to the questionnaires.
4. Determine if a **shared facility for online experiments** for diagnostics and pre-testing interventions would be justified.

^ Note re 1.a to 1.d: The focus should be on providing short and focused guidance and building capacity quickly. To prompt usability among a busy audience the material should be relatively brief with signposting to existing resources for more detailed discussion (e.g., CONSORT, Cochrane guides etc). Also, FPs expressed a preference for inclusion of experiences and learning from FPs / countries with experience in the above. An element of review of draft Guidance material by a sub-set of focal points may also be useful.

SC 3 Apply BCI to improve outcomes of health-related policies, services and communications^^

1. Develop written **Guidance and Training on how to apply a BCI lens to health policies, services and communications**. FPs were interested in what behavioural and cultural aspects might be most relevant, what theoretical models might be most relevant and how to apply them.
2. Undertake **in-depth case studies to extract the learning** from cases where findings from impact evaluations or other beneficial applications of BCIs have been scaled up or adopted as part of a policy, service or communication.
3. Help to develop **a brief guide on the types of BCI services and functions** that are provided by existing BCI Units and Teams in Member States. This would demonstrate how BCI can be applied to policy, services and communications. Areas mentioned by FPs included light touch consultancy, input into meetings and steering groups, diagnostic work, design solutions, behavioural pathway mapping, and intervention and policy mapping, and intervention redesign and testing (including impact evaluation).
4. Be **available to FPs to provide advice** on Member States can best expand BCI activity given resources and on how best to focus BCI efforts.

SC 4 Commit human and financial resources for BCI and ensure their sustainability^^

1. **Advocate for international research and capacity building funding** for BCI for health. It was suggested by FPs that the WHO/Europe could advocate at the European Union or European level for funding for specific research calls or joint actions for behavioral insights research and capacity building which health policy and service organizations could potentially apply for.

SC 5 Implement strategic plan(s) for the application of BCI for better health^^

1. Develop written **Guidance** to make more tangible what a dedicated national or sub-national strategy or plan for the application of BCI for better health might cover and to communicate the added value of having a dedicated strategy or plan.
2. Help to **capture the experiences** of countries who have already developed or are currently in the process of developing a dedicated strategy for behavioural science or BCI for health, and of countries who are developing plans on specific health topics with BCI as a major element.

^^ Note: three actions under **SC 1** are also particularly relevant to this SC (i.e. to SC 3, 4 and 5). Specifically, 3. Develop a short suite of impactful material, 4. Continue to demonstrate impact by using brief case studies, and 5 Lead the development of template “pitches”.

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Appendix A Study Team Members

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Appendix B.1 Study Questions

Goals

1. Have **goals or commitments been set** for BCI work in your country? [in addition to those in the Action Framework]
2. What would **need to happen** before your country would consider implementing strategic plan or plans for the application of BCI for health? [a quantitative indicator in the Action Framework]

Skills Gaps to Conduct BCI Research

1. Without getting into the details of specific projects, what **types of BCI research** are being done?
2. Who **conducts this research**? Do you collaborate with external partners organisations?
3. When it comes to **conducting BCI research**, what are the most important **skills gaps** / skills in your country that need to be filled in order to conduct BCI research?

Skills Gaps to Apply BCI Findings

1. Without getting into the details of specific applications, when it comes to **applying or using BCI approaches** and evidence to improve health-related policy, services or communication **how is this done**?
2. Now, in terms of **using BCI approaches or evidence**, what are the most important **skills gaps** / skills in your country that need to be filled in order to apply or use BCI approaches and evidence to improve health policies, services, and communications?

Understanding and Support Among Key Stakeholders

1. Who do you consider the **most important stakeholders** for increasing BCI work for health in your country?
2. How well do you think key internal and external stakeholders **understand what BCI is and how it can benefit** their work?
3. What, if anything, has been **done to increase awareness** of BCI among key internal and external stakeholders in your country?
4. What do you think **managers (decision-makers) in health organizations in your country think about the objective** to increase the use of BCI in health-related policies, services, or communications?

Thoughts about the future

1. How do you see **BCI for health developing** in your country over the next five years?
2. What would be most useful to **help to increase BCI work** for health in your country?
3. What **supports from the WHO/ECDC** would help to progress BCI work in your country?
4. In what ways, if at all, do you think the WHO Europe BCI **Action Framework and the requirement to report** on progress will be useful for your country?

Appendix B.2 Interview Topic Guide Used by Interviewers

Introduction **[3 mins]**

Thank you very much for your time and for agreeing to participate in this voluntary study. I want to stress that there are no right or wrong answers, there is no judgement or expectations. We simply want to learn from your understanding of how the situation regarding behavioural and cultural insights is in your country.

This interview will take up to 60 minutes. Your answers will be anonymized and kept confidential. The analysis will be based on the anonymized written transcripts. Can I turn on the recording? [turn it on – if they do not agree, politely end the interview]

Extent and Organisation (1) **[8 mins]**

Today's topic is your view on approaches to behavioural and cultural insights or BCI for health in your country. **By BCI work I am referring to research that explores the barriers to and drivers of health behaviours or if interventions have the intended effect on behaviours, and I am also referring to the use of insights to improve health policies, services or communications.** Different terms are used for this work such as behavioural sciences, social sciences or behavioural insights.

1. Please tell me briefly to what extent do public or government agencies in your country undertake BCI research or use findings from BCI to inform health policies, services, or communications?

<u>If BCI work has been done:</u>

1. Please briefly describe how BCI work is organised?

Prompts:

- how is BCI work initiated
- how is it resourced - is there dedicated staff or funding
- find out if a Unit or a team
- do other related public organisations have a Unit or team for BCI (i.e., the Ministry, the main health service organization, the public health organization).

2. What are the main factors that helped to undertake this work?

<u>If BCI work has NOT been done</u>:

1. Why not? What are the main reasons for this?

Goals (2) **[5 mins]**

1. Have goals or commitments been set for BCI work in your country?

Prompts:

- In an business / action plan of a Unit or team
- Integrated into a specific plan, e.g. a BCI in a plan for cancer, smoking, vaccination etc
- In a national strategy for BCI for health

If NO national strategy, go to Q2. If THERE IS national strategy, go to Section 3.

2. What would need to happen before your country would consider developing a national strategy for the application of BCI for health?

Skills to Conduct BCI Research (3) [10 mins]

If mentioned that BCI work is carried out:

1. Without getting into the details of specific projects, what types of BCI research are being done?

Prompts

- ☐ Literature reviews or briefs on barriers or interventions
- ☐ Studies on factors that prevent or drive a health behaviour
- ☐ Experiments, trials or action research

2. Who conducts this research? Do you collaborate with external partners organisations?

3. What are the most important skills gaps / skills in your country that need to be filled in order to conduct BCI research?

If said that BCI work is NOT carried out:

1. What broad types of BCI research do you think would be most useful in your country?

Prompts

- ☐ Literature reviews or briefs on barriers or interventions
- ☐ Studies on factors that prevent or drive a health behaviour
- ☐ Experiments, trials or action research

[Fine if initial answer is about specific topic areas, then ask about types of studies for those topics]

2. What are the most important skills gaps / skills in your country that need to be filled in order to conduct BCI research?

Skills to Apply BCI to Health Policies, Services, & Communications (4) [10 mins]

So far, we have talked about BCI research and how it's carried out in your country. Next, I'd like to talk about how this research is applied to improve actual policies, services, and communications.

If mentioned that BCI work is carried out:

1. Without getting into the details of specific applications, when it comes to applying or using BCI approaches and evidence to improve health-related policy, services or communication how is this done?

Prompts

- Staff using BCI approaches and guides, and which guides
- Staff communicating evidence to key decision-makers
- External BCI experts providing detailed design advice
- Advisory groups including external BCI experts

2. What are the most important skills gaps / skills in your country that need to be filled in order to apply or use BCI approaches and evidence to improve health policies, services, and communications?

If mentioned that BCI work is NOT carried out:

1. If a public or government agency in your country wanted to use behavioural and cultural insights to improve health-related policy, services or communication what types of *skills* do you think would help *to apply or use* the insights?

Prompts

- Staff who are familiar with BCI approaches and guides
- Staff who can communicate evidence to key decision-makers
- External BCI experts who can advise

2. What are the most important skills gaps / skills in your country that need to be filled in order to apply or use BCI approaches and evidence to improve health policies, services, and communications?

Understanding and Support Among Key Stakeholders (5) [15 mins]

1. Who do you consider the most important stakeholders for *increasing BCI work* for health in your country?

Prompt: areas of work, conducting BCI research v. applying BCI findings, internal/external, if mention small number of areas already engaged with then ask if there are other important areas.

2. How well do you think key internal and external stakeholders understand what BCI is and how it can benefit their work?

Prompts: do they know what is meant by BCI, do they know where BCI could be used.

3. What, if anything, has been done to increase awareness of BCI among key internal and external stakeholders in your country?

Prompts:

- Held internal seminar(s) or open conferences

- Shared case stories
- Provided new pieces / information on an intranet
- Held meetings with staff/Units in targeted areas/topics

4. What do you think managers (decision-makers) in health organizations in your country think about the objective to increase the use of BCI in health-related policies, services, or communications?

Prompts: believe it is their job to use BCI in their work, have positive *or* negative views about it, want to allocate funding and staff to this work.

Thoughts about the future (6) [8 mins]

1. How do you see BCI for health developing in your country over the next five years?

Prompts: intention to increase support, research, or applications; areas of possible work; have decisions been made to increase work in the area / increase resources / change structures.

2. What would be most useful to help to increase BCI work for health in your country?

Prompts: more or better trained staff, increased funds, help to pitch opportunities, more support for the work within health organisations.

3. What supports from the WHO/ECDC would help to progress BCI work in your country?

4. In what ways, if at all, do you think the WHO Europe BCI Action Framework and the requirement to report on progress will be useful for your country?

Prompts: monitor work, increase visibility, prioritization of the area.

5. Is there anything else you would like to add?

At the end of the Interview [1 min]

Thank you!

We will share the report with you for comment before it is published.

Do you have any last questions?

Goodbye

NOTE FOR INTERVIEWERS

Scope: As per the Progress Model the focus is only on actions in which national or local authorities or public health institutions were involved. Actions conducted independently by external stakeholders such as NGOs or academic/private institutions with no engagement from public or government agencies should not be included.

Approach: The approach is to ask open-ended questions. The prompts are to be used after the participant has had an opportunity to provide an initial answer

As noted on page 10 of the Protocol the moderator will:

- understand the research objectives and know the research guide well;
- ask open-ended questions to keep the participant talking and avoid a formal question/answer approach.
- make sure the discussion is relaxed, friendly and informal.
- give the participant time to think and answer.
- stay neutral and avoid reacting to or correcting the participant.

Managing expectations: A participant might ask what support the WHO / ECDC can provide. It will be important to manage expectations and not to create unrealistic expectations. The purpose of the study is to understand what participants think would help in general and to listen to any suggestions about what might be helpful from the WHO / ECDC. Know what the WHO / ECDC has planned for capacity building.

In advance the interview: undertake a brief trial run of the recording facility on your PC/laptop (i.e., have a two-minute chat with someone or yourself, to make sure the recording and transcribing is working ok).

When referring to the specific public health authority and political context of the focal point, seek to establish at the start the correct terminology by listening to the words used by the participant.

Appendix C The COM-B model and the TDF

The Behaviour Change Wheel (BCW) was developed from 19 frameworks of behaviour change identified in a systematic literature review. It consists of three layers: the hub or COM-B ('capability', 'opportunity', 'motivation' and 'behaviour') model which identifies the sources of the behaviour that could prove fruitful targets for intervention; surrounding the hub is a layer of nine intervention functions to choose from based on the particular COM-B analysis one has undertaken; and the outer layer identifies seven policy categories that can support the delivery of these intervention functions.

Under the COM-B model for any behaviour *to occur* there must be:

Capability, which can be either 'physical' (having the physical skills, strength, or stamina) to perform the behaviour or 'psychological' (having the knowledge, psychological skills, strength or stamina) to perform the behaviour.
Opportunity, which can be 'physical' (what the environment allows or facilitates in terms of time, triggers, resources, locations, physical barriers, etc.) or 'social' (including interpersonal influences, social cues, and cultural norms).
Motivation, which may be 'reflective' (involving self-conscious planning and evaluations (beliefs about what is good or bad) or 'automatic' (processes involving wants and needs, desires, impulses, and reflex responses).

Under the COM-B model "Changing *the incidence* of any behaviour of an individual, group or population involves changing one or more of the following: capability, opportunity, and motivation relating either to the behaviour itself or behaviours that compete with or support it" (p. 60, emphasis added).

To identify what needs to change using the COM-B model, Michie, Atkins, & West (2014) noted that one option is to conduct a structured discussion with stakeholders based on the COM-B model components and/or domains in the Theoretical Domains Framework (TDF). The TDF further elaborates the components of COM-B into 14 domains.[9] When resources are limited it is common practice not to explore all 14 domains, but instead to focus on what are viewed to the most relevant in a particular context – see Michie, Atkins, & West (2014) for example case studies. In this study the focus is on nine domains of the TDF (shaded below) which cover all of the elements of the COM-B and its subcomponents.

[9] The original TDF was developed by an international panel of 32 experts in behaviour change who identified 128 constructs from 33 behaviour change theories and simplified them into domains. Usability was developed with an international team of implementation scientists. The TDF has been validated and refined by an international panel of 36 experts in behaviour change (Cane, O'Connor, & Michie, 2012).

TDF Domain	Domain Definition	Constructs within Domains	Illustrative exemplar question^	COM-B
Knowledge (D1)	An awareness of the existence of something	Knowledge (including knowledge of condition / scientific rationale); procedural knowledge; knowledge of task environment	Do you know about X?	Capability - Psychological
Skills (D2)	An ability or proficiency acquired through practice	Skills; skills development; competence; ability; interpersonal skills; practice; skill assessment	Do you know how to do x?	Capability - Physical
Social/professional role and identity (D3)	A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting	Professional identity; professional role; social identity; identity; professional boundaries; professional confidence; group identity; leadership; organisational commitment	Is doing x compatible or in conflict with professional standards/identity?	Opportunity - Social
Beliefs about capabilities (D4)	Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use	Self-confidence; perceived competence; self-efficacy; perceived behavioural control; beliefs; self-esteem; empowerment; professional confidence	How difficult or easy is it for you to do x?	Motivation - Reflective
Optimism (D5)	The confidence that things will happen for the best or that desired goals will be attained	Optimism; pessimism; unrealistic optimism; identity	How confident are you that the problem of implementing x will	Motivation - Reflective
Beliefs about consequences (D6)	Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation)	Beliefs; outcome expectancies; characteristics of outcome expectancies; anticipated regret; consequents	What do you think will happen if you do x?	Motivation - Reflective
Reinforcement (D7)	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus	Rewards (proximal / distal, valued / not valued, probable / improbable); incentives; punishment; consequents; reinforcement; contingencies; sanctions	Are there incentives to do x?	Motivation - Automatic
Intentions (D8)	A conscious decision to perform a behaviour or a resolve to act in a certain way	Stability of intentions; stages of change model; transtheoretical model and stages of change	Have they made a decision to do x?	Motivation - Reflective

TDF Domain	Domain Definition	Constructs within Domains	Illustrative exemplar question^	COM-B
Goals (D9)	Mental representations of outcomes or end states that an individual wants to achieve	Goals (distal / proximal) ; goal priority; goal / target setting; goals (autonomous / controlled); action planning; implementation intention	How much do they want to do x?	Motivation - Reflective
Memory, attention and decision processes (D10)	The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives	Memory; attention; attention control; decision making; cognitive overload / tiredness	Is x something you usually do?	Capability - Psychological
Environmental context and resources (D11)	Any circumstance of a person's situation or environment that discourages or encourages the development of skills	Environmental stressors; resources / material resources; organisational culture / climate ; salient events / critical incidents; person x environment interaction; barriers and facilitators	To what extent do physical or resource factors facilitate or hinder x?	Opportunity - Physical
Social influences (D12)	Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours	Social pressure; social norms; group conformity; social comparisons; group norms; social support; power; intergroup conflict; alienation; group identity; modelling	To what extent do social influences facilitate or hinder x?	Opportunity - Social
Emotion (D13)	A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event	Fear; anxiety; affect; stress; depression; positive / negative affect; burn-out	Does doing x evoke an emotional response?	Motivation - Automatic
Behavioural regulation (D14)	Anything aimed at managing or changing objectively observed or measured actions	Self-monitoring; breaking habit; action planning	Do you have systems that you could use for monitoring	Capability - Psychological
Source: Taken from Michie, Atkins, & West (2014). ^ From Table 1.15 in Michie 2014				