World Health Organization
REGIONAL OFFICE FOR Europe

Behavioural insights units

Setting up behavioural insights units for improved health outcomes

Considerations for national health authorities

Abstract

Understanding human behaviour and its cultural contexts can offer powerful insights to support healthy behaviours in people's daily lives and the way they use health services. Many countries are increasingly investing in understanding the behavioural, cultural and social factors that influence behaviour to achieve more evidence-informed, effective and people-centred policies and services.

A dedicated behavioural insights (BI) unit in a ministry of health, public health institute or other institution can drive the implementation and impact of BI. These units are likely to draw on different disciplines and have different names and focus areas (for simplicity, all such units are referred to in this document as BI units).

Based on the experience of others who have set up such units, this document offers eight considerations for countries that wish to set up BI units:

1. Ensure buy-in and involve stakeholders
2. Determine location
3. Identify funding
4. Develop a strategy
5. Plan staffing and upskilling of team members
6. Identify focus areas of health
7. Plan projects: a mix of complex projects, early wins and policy advice
8. Manage ethical questions.

Every country in the WHO European Region is different. The eight considerations offer a starting point for assessing how to set up a BI unit to help drive better health for all.

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Abbreviations

BCI	behavioural and cultural insights
BI	behavioural insights
EU	European Union
FOPL	front-of-pack labelling
GP	general practitioner
NGO	nongovernmental organization
OECD	Organisation for Economic Co-operation and Development
PD	Parkinson's disease
THL	Finnish Institute for Health and Welfare
TIP	Tailoring Immunization Programmes
VHC	village health committee

Introduction

Behavioural and cultural factors play a key role in reducing both life expectancy and years in good health *(1)*. Despite this, health policies, health services and health communication are often designed and delivered without an in-depth understanding of the barriers and drivers people face in their daily lives and their uptake of health services. This can lead to policies and programmes not achieving their full potential: service uptake remains low; adherence to treatments or prevention measures is incomplete; and behaviours related to tobacco, alcohol, nutrition and physical activity lead to preventable diseases *(2)*.

Member States in the WHO European Region have set ambitious goals to improve the health and well-being of all. To reach these goals, countries need to systematically explore the barriers to and drivers of health behaviours, understand the cultural context and the evidence from behavioural science, and incorporate these insights into policy planning, service delivery and health promotion.

> "Health policies, services and communication are often designed and delivered without an understanding of the barriers and drivers people face."

What is behavioural insights?

An increasing number of countries across the world are already using behavioural insights (BI) to improve health outcomes. BI includes a wide range of empirical findings from various fields, including behavioural economics, cognitive psychology and social psychology.

It refers to empirical findings about systematic tendencies in our thinking and behaviour; these are often activated by features of the environment, such as present bias, which can lead people to focus on short-term benefits over their longer-term health *(3)*; availability bias, which can lead people to exaggerate some risks and to underestimate others *(4)*; and unrealistic optimism, which can lead people to have a false belief that they are immune to serious health risks *(5)*. BI also includes concrete findings about strategies that work and that do not work to change behaviours. Automatic enrolment and simplification can, for example, increase participation in life-saving programmes *(6)*. BI can even be used to rethink the way whole health systems work *(7)*.

What is behavioural and cultural insights?

Behavioural and cultural insights (BCI) is a term used by the WHO Regional Office for Europe that incorporates a broader spectrum of factors that affect health behaviours, including psychological factors as well as cultural, social, historical, literacy-related and structural ones (Box 1). BCI provides a set of tools and methods to improve our understanding of behaviours, generate solutions and measure impact. The approach is holistic, people-centred and evidence-informed and seeks to improve health outcomes. BCI can be used to understand and influence the individual, cultural and structural barriers to health and the drivers that enable, support and promote healthy behaviours.

The behaviours that can be affected through these approaches range across the health spectrum. Examples include maintaining a healthy diet and physical activity levels; appropriate use of antibiotics; tobacco cessation; utilizing screening programmes; reducing unnecessary prescriptions; and vaccine acceptance and uptake. Some case studies are given in Boxes 4 and 7.

Box 1. WHO Regional Office for Europe's definition of behavioural and cultural insights

Behavioural and cultural insights (BCI) involves understanding the factors that affect health behaviours and practices and using these insights to inform more effective health policy, health services and health promotion. These barriers and drivers relate to a broad spectrum of factors, including individual capability and motivation, cultural and social practices, social support and norms, as well as historical, structural and political conditions. BCI draws on a range of disciplines and methods outside the biomedical sphere that seek to understand, affect and enable human behaviour. Although not medical, its underlying logic is similar to that of diagnosis and treatment: only when we understand the underlying factors that affect behaviours do we know how best to enable, promote and support them. For further details and examples, see the Behavioural and Cultural Insights Hub *(8)*.

The diversity of BI units

In this document "BI unit" is used as a general term, but it is recognized that such units will have a different and perhaps broader focus, as well as different names, in different contexts. BI units have already been set up in a number of countries, including Finland, the Netherlands, Slovakia and the United Kingdom (Wales) (Box 2), while the WHO Regional Office for Europe has established its own Behavioural and Cultural Insights Unit. The Organisation for Economic Co-operation and Development (OECD) tracks BI units across different policy areas globally *(9)*.

Box 2. Some existing BI units that have been set up in Europe

Finland: Cultural, Behavioural and Media Insights Centre. The Finnish Institute for Health and Welfare (THL) launched the Cultural, Behavioural and Media Insights Center (CUBE) within the Communications and Influencing Unit in January 2022. THL has a long history of working with health interventions and projects to encourage lifestyle change. The new centre builds on many years of BCI activities across THL, in particular its Health Security Department, related to vaccine acceptance, communications and most recently to the COVID-19 pandemic. The aim is to scale up activities and broaden the impact of BCI on a range of health and welfare topics at THL.

Netherlands: Corona Behaviour Unit. With a mandate from the director-general of the Dutch Ministry of Health, Welfare and Sports, the National Institute for Public Health and the Environment set up a BI unit in March 2020 to produce research to inform the country's COVID-19 response. The unit draws on top academics in the country, involving a network of 20 university professors as well as 60 full- and part-time staff members. Among other research activities, the unit conducts large-scale surveys of the Dutch population every three to six weeks and qualitative studies, which have received much attention from policy-makers and the media. The surveys focus on preventive behaviours, well-being and confidence in policy decisions *(10)*.

Slovakia: Behavioural and Experimental Economics Team. In the Slovakian Ministry of Health, civil servants who see the value of behavioural science are working in partnership with academics to attract funding, find partners and create leadership buy-in for the approach. The team is interested in complex behaviours and long-term effects. One of the early projects, conducted in partnership with the national transfusion system, uses surveys and experiments to increase blood and plasma donations *(11)*.

United Kingdom (Wales): Behavioural Science Unit. Public Health Wales is building on its use of behavioural science to improve and protect health by establishing a BI unit within its WHO Collaborating Centre on Investment for Health and Well-being. The unit provides specialist support to optimize policy, services and communications, including around health screening, communicable disease response and the wider determinants of health. A priority is development of capability and capacity at all levels of the public health system, which is being realized through academic partnering and stakeholder engagement *(12)*.

What does a BI unit do?

The activities of BI units will vary depending on their priorities and resources. In most cases, BI units are likely to engage in:

— BI projects (see Box 6 for more details);

— policy advice (see section 7.3 for more details);

— rapid BI feedback on products (such as forms and letters);

— technical assistance and advice to other parts of the organization and the health system;

— engagement, advocacy and information to increase awareness of BI (for example, meetings, events, conferences, communities of practice, fact sheets, videos, public reports, peer-reviewed publications, unit website); and

— capacity-building in applying BI to health across relevant stakeholders (for example, training delivery, webinars, workshops).

Setting up a BI unit

There are over 200 bodies applying BI to public policy across the world *(13)*, many of which have successfully applied the approach to health policy and health services *(14)*. This document sets forth a number of issues that countries wishing to set up BI units for improved health outcomes should consider. Setting up a dedicated BI unit can provide an opportunity to work on a range of topics, build capacity and achieve greater impact. The remainder of this document considers, under eight headings, how best to set up BI units. In addition to these considerations, a number of factors that may contribute to the success of BI units, based on interviews with experts, are highlighted (Box 3).

While this document draws on insights from a broad range of experts and practitioners in the field of BI, it should be noted that many of the decisions related to setting up a BI unit will depend on the specific country context. This document should be useful to anyone who is considering setting up a BI unit in the area of health, whether in a ministry of health, a public health institute, a research or academic institution, or within the health system.

Box 3. What factors contribute to the success of BI units?

The following factors have been central to the success of existing BI units in different policy areas.

Support from decision-makers. The buy-in and engagement of senior leaders can be critical to a BI unit's success (see section 1.1). This can be achieved, for example, by linking early projects to national health priorities (see sections 6 and 7).

Stakeholder involvement. Engaging relevant stakeholders in setting up the unit and throughout projects makes them more likely to support the unit (see section 1.2).

Sufficient resources. To give a unit a genuine chance of success, it needs funding and staff who will be considered credible and experienced by key stakeholders (see sections 3 and 5).

Clear strategy. Having a clear strategy (scope, vision and objectives) will help a newly established BI unit engage with the right stakeholders, manage expectations and prioritize resources (see section 4).

Expectation management. It may take time to collect data and translate insights into interventions. Interventions in turn may take time to implement and evaluate for impact. To keep the support of decision-makers or funders, it is important to manage expectations as well as to share interim findings and achievements (for example, findings from initial problem definition or diagnosis and research activities) and offer relevant, accessible and useful advice early on.

Demonstrating value and impact. To prove its value, a BI unit needs to be able to show the impact interventions have on behaviour. Decision-makers and funders are likely to expect the unit to demonstrate value or even return on investment. Qualitative feedback is useful, and quantitative forms of evaluation, such as experimental designs, allow impact to be quantified and return on investment to be determined.

Eight considerations for setting up a behavioural insights unit

Interactive PDF
Navigate to the eight considerations via the top nav and the buttons below.

This section discusses eight considerations that are offered on the basis of advice from experts who have set up BI units in the past. Although presented in a particular sequence, the precise order in which each of the eight elements should be considered will vary according to the specific context.

The eight considerations are:

1. Ensure buy-in and involve stakeholders
2. Determine location
3. Identify funding
4. Develop a strategy
5. Plan staffing and upskilling of team members
6. Identify focus areas of health
7. Plan projects: a mix of complex projects, early wins and policy advice
8. Manage ethical questions

1 Ensure buy-in and involve stakeholders

Experience shows that a targeted and strategic advocacy effort can help ensure buy-in, support and acceptance among key stakeholders. Stakeholders may include people representing different levels within the ministry of health, institute of public health, government, parliament or host organization (see section 2), health-care professionals, civil society, professional associations, patient organizations and community groups.

1.1 Management and decision-makers

Securing buy-in among management and decision-makers can be achieved in a number of ways.

— **Leveraging political opportunities.** Early projects can focus on priority areas of health policy or service delivery that decision-makers care about or need to deliver on (see also sections 6 and 7).

— **Tapping into official commitments.** Investing in BI can be justified by linking it to existing national or international commitments, such as the WHO European Programme of Work 2020–2025, which was adopted by all 53 Member States and underlines the importance of BI. Setting up a BI unit may offer countries the opportunity to demonstrate that they are at the forefront of innovative approaches.

— **Framing BI as a tool for evidence-based policy-making.** Presenting BI as one tool among many in the policy-maker's toolkit can help reduce potential resistance, as can focusing on the approach as part of evidence-based policy-making.

— **Relevant case examples.** Concrete examples help to clarify how BI can add value, generating further interest (for some case studies, see Boxes 4 and 7). Examples can be drawn from countries that are similar to the country setting up a unit, as well as from countries it aspires to emulate. Such examples can include different types of BI projects, ranging from the use of qualitative insights to inform policy to experimental evaluation of behaviourally informed interventions. The focus of these examples may be on their outcomes or results. Representatives from BI units in other countries can be invited to meet key stakeholders.

— **Early wins.** Some projects can show impact in a relatively short period of time and be used to justify setting up the unit. These can be fast experiments on one-off behaviours such as screening attendance or involve reanalysing existing data (ideally with the ability to show causal impact, for example through natural experiments) *(15)*.(See section 7 for more on selecting projects strategically.)

— **Rapid feedback on products.** Letters, forms and other communication products would often benefit from a review from a BI perspective to make them simpler to understand, more attractive and more actionable. Such a service from the BI unit offers a low-risk and low-effort way for those in the host organization to engage with the BI approach.

— **Training sessions.** Training sessions for leaders and senior managers can help clarify what BI is, what it can do, and the return on investment it can deliver. They should use concrete and compelling examples and highlight opportunities for innovation.

Box 4. BI in action: examples of applying BI to health

Tailoring immunization programmes based on BI

Assumptions about why immunization uptake is low in certain communities can often be incorrect. The WHO Tailoring Immunization Programmes (TIP) approach combines formative research, BI and stakeholder engagement to uncover the barriers to and drivers of vaccination. Applying the TIP approach to the Charedi Orthodox Jewish community in London, United Kingdom, showed that the main barriers were associated with multiple factors, including the convenience of immunization services. The insights generated through the TIP approach allowed targeted interventions for subgroups to be developed *(16)*.

Using a multistakeholder approach to improve health literacy

Cardiovascular disease is a leading cause of death in Denmark, with health literacy offering a solution to improve outcomes. A project run in a rehabilitation unit in Denmark used a multistakeholder approach which combined engagement with health professionals (through workshops to codesign an action plan) and assessment of the needs of patients attending cardiac rehabilitation (through the Health Literacy Questionnaire, followed by workshops to generate ideas). Results showed that the local management and therapeutic teams gained a deeper understanding of patient vulnerability and needs and valued user involvement in developing solutions. The study also integrated health literacy thinking and local ownership and engagement into strategic, managerial and therapeutic practices and innovations *(17, 18, 19)*.

Using village health committees for disease prevention and health promotion in rural areas

In Kyrgyzstan much of the rural population has low levels of health literacy. To achieve behaviour change, a bottom-up participatory process was used in which neighbourhoods elected trusted community members to join the village health committee (VHC). The VHCs were trained to implement health actions by visiting people in their homes and working with other organizations. Outcomes that can be attributed to VHCs include reversing the brucellosis epidemic in Kyrgyzstan by promoting behaviours that protect people from infection during sheep lambing (total estimated cost savings of US$ 4 827 065 between 2007–2011), screening over 2 million people for hypertension, increasing awareness of nutrition, and early detection of health problems in children and pregnant women *(20)*.

Box 4. BI in action: examples of applying BI to health (continued)

Using social norm feedback to reduce antibiotic prescribing

Many doctors continue to prescribe unnecessary antibiotics even though it contributes to antimicrobial resistance. A national-scale randomized controlled trial run by the Behavioural Insights Team and Public Health England targeted general practitioner (GP) practices in England whose antibiotic prescribing rate was in the top 20% for the area. Half the GP practices were randomly allocated to receive a letter from a high-profile messenger (the country's chief medical officer) providing social norm feedback ("The great majority (80%) of practices in [local area] prescribe fewer antibiotics per head than yours."). The results showed a 3.3% relative reduction in antibiotic prescribing among the GP practices that received letters compared to those that did not. The effect of the one-off letter was shown to last at least six months. This is a meaningful result for a low-cost intervention that is easy to scale up *(21)*.

Using dance to improve physical outcomes among people with Parkinson's disease

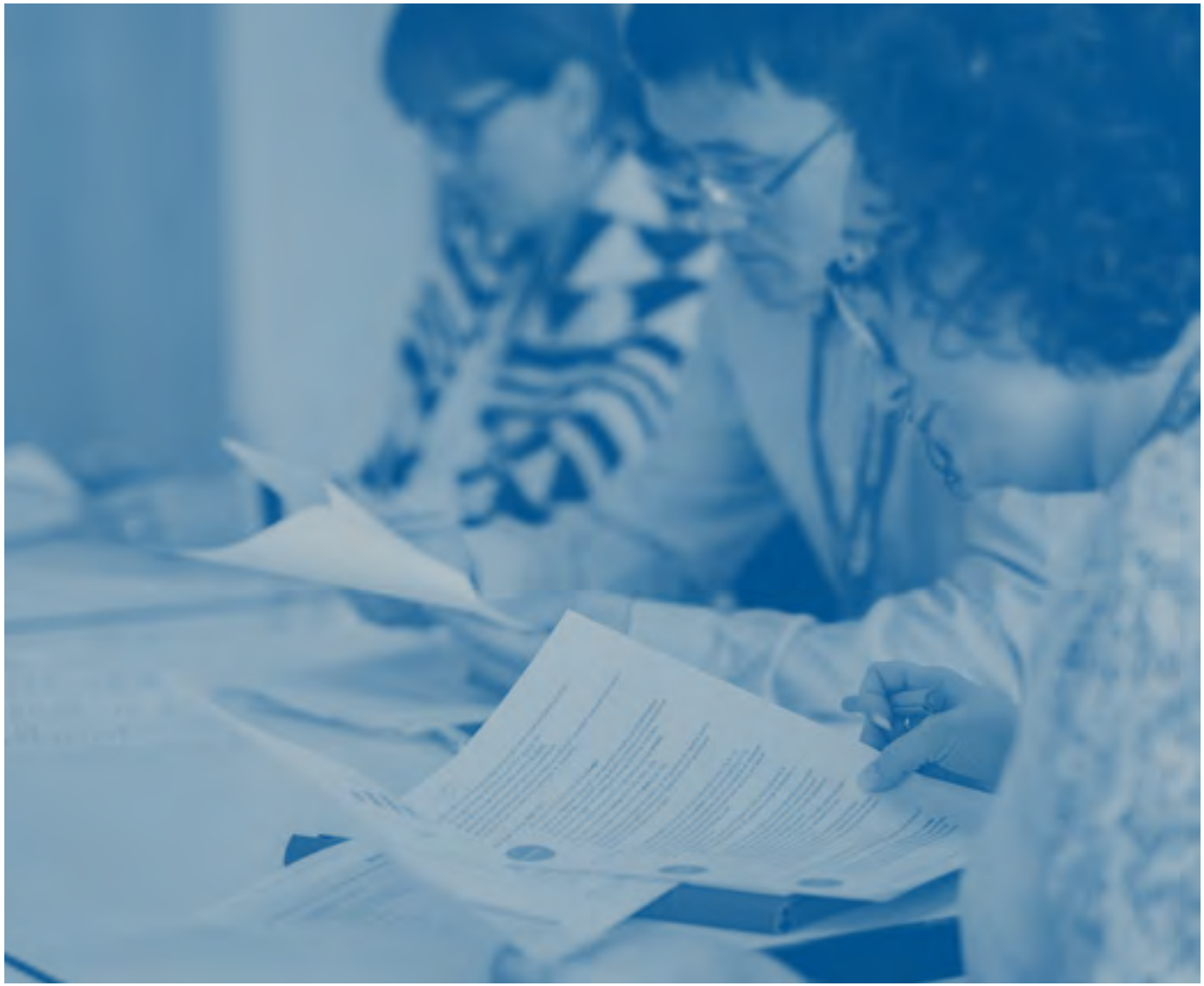
Across multiple meta-analyses, dance has been found to provide clinically meaningful improvements in motor scores for people with Parkinson's disease (PD), as well as improvements in balance, gait speed and functional mobility. Dance studies involving people with PD have also typically shown high compliance rates, low dropout and continued activity beyond the study period *(22)*. Within the WHO European Region, a number of Member States offer classes for people with PD. The majority of these are led by dance organizations that have developed relationships with doctors in primary care, hospitals or specialist PD treatment centres. Some provide direct referrals and participants can also self-refer.

For resources related to the use of BI in response to the COVID-19 pandemic, see Appendix, section F.

1.2 Involving stakeholders

Experience shows that stakeholders should be involved from project initiation through to design and evaluation, regardless of whether the BI unit leads or delivers the projects, or whether it is in a more advisory role, helping stakeholders to embed BI in their work. A mapping of the stakeholder landscape, including their needs and expectations, is an important step to ensure acceptance and support for the unit. Ongoing engagement with a broad range of stakeholders can also protect the unit against isolation and changes in political leadership.

Potential stakeholders for a BI unit include partners at national, regional and local levels, from across the political spectrum and from academia, nongovernmental organizations (NGOs), media, patient organizations and minority groups. Buy-in and engagement with health-care professionals, including frontline staff and middle management, are critical for successfully developing, testing or implementing any interventions that relate to the delivery of health services.



2 Determine location

2.1 Selecting a host organization

A BI unit is often located in a ministry of health or a public health institute. Alternative settings may be considered, such as a public research institute, a research or academic institution, a large hospital, a municipality or city administration or an NGO (Box 5). The location may influence, for example, the legitimacy of the unit, its access to decision-makers, or its ability to achieve impact by implementing and scaling up interventions.

A number of practical factors affect where the unit should be hosted. These include:

- **funding:** the ability to provide funding for the unit;
- **senior-level buy-in:** a sufficient level of support from senior leadership to ensure that the unit is deployed early in the policy process *(23)* and across priority areas; and
- **ability to draw on existing resources and capacity:** capacity and tradition of working with social science research and/or ability to provide in-kind support such as analytical or administrative staff to the unit.

Box 5. Organizational set-up outside the ministry of health or institute of public health

Most countries are likely to set up a BI unit in a ministry or an institution with a key role in health policy or research. A few alternative models are considered below. In some cases, multiple models may coexist in the same country.

High-level government office. Some countries may choose to create a cross-thematic BI unit in the office of the head of state (prime minister, chancellor, president) or within an intergovernmental structure). This model may be suitable when there is high-level buy-in and wide-ranging interest in applying BI. The unit would have the benefit of applying lessons from other policy areas to health. The central unit could exist in parallel with and support BI units specific to health (such models exist, for example, in Canada and Australia).

The network model. BI practitioners can work independently in different health policy or delivery institutions while also being in a structure for mutual support and engagement (a "community of practice model"). They can also be members of a central BI unit and at the same time be embedded in individual institutions for specific periods of time to run projects and build capacity (a "satellite model"). To be successful, the network approach is likely to require a certain level of experience and maturity in applying BI. It may therefore not work best when first introducing BI into health policy.

High-level oversight. Depending on the country, a BI unit set up in a ministry of health or a public health institute may be placed under high-level oversight by the parliament or the president. This option would have the potential benefits of increasing its visibility, legitimacy, longevity or funding. It may also involve barriers such as those related to longer institutional processes and reporting and unclear management and decision-making structures.

2.2 Placement within the host organization

Where the unit is located within the organizational structure also matters. Creating the unit in a cross-cutting strategy function may enable it to inform a range of decisions across areas of health policy. Setting the unit up within a department with a narrower remit (such as a specific policy unit, a health service delivery unit or a communications department) may affect its ability to influence the policy planning process. BI units are often set up in partnership with learning and innovation teams or evaluation units, to make use of existing skills and resources (*24*, *25*).

Identify funding

Sufficient and sustainable funding is essential. Mobilizing the necessary resources often involves a multipronged strategy to obtain external funding or donations, for example from foundations for specific projects, as well as targeted advocacy for sustainable internal funding of the programme *(26)*.

Key elements in the process to develop such a strategy include: defining funding needs; identifying the possible sources of funding and their decision-makers; understanding the priorities of these decision-makers; and justifying the investment and planning how they can best be approached.

Possible sources of funding include:

— Government or national budget: this may be obtained by attaching the unit to a government programme that is designed to receive funds over a longer period of time, such as a national health strategy (often designed to be implemented over a period of five years).

— Funding from health taxes, such as public health taxes on tobacco and sugary and alcohol products.

— Funding from structures, programmes or teams that benefit from the expertise provided by the BI unit; these may jointly fund activities, staff or consultants, or a BI unit may be considered an intergovernmental project.

— External global or regional donors or regional or global grants; examples include European Union (EU) recovery funding (by creating the unit within the framework of a national recovery and resilience plan) and Horizon Europe calls (by proposing applications in partnership with universities and/or private companies).

4 Develop a strategy

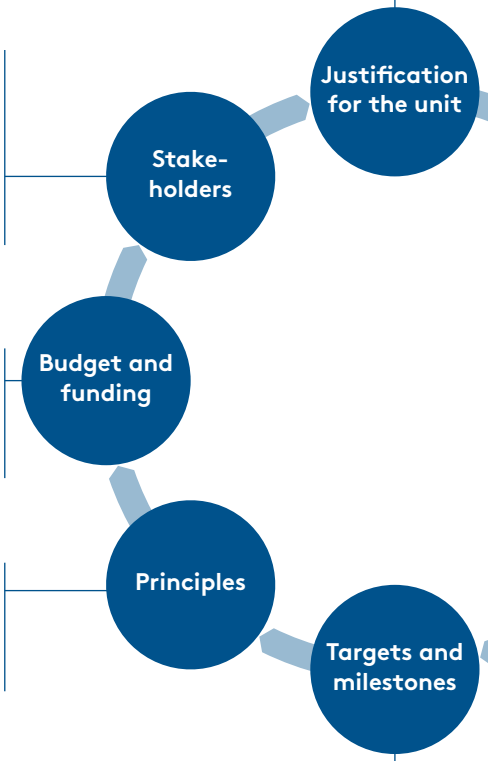
BI units can vary greatly in their ways of working, vision and priorities. An overall strategy defines the justification for the unit (problem statement), vision and mission, objectives, targets and milestones. A strategy may also provide some overall principles and values for the work and a mapping of key stakeholders, as well as a reflection on how the unit can to help achieve key national health priorities. Being clear on these matters helps to guide who the unit hires, who it partners with, its activities and its outputs. Clarity on the main elements included in the strategy will also ensure a realistic and sustainable action plan and help to justify funding (Fig. 1).

The considerations in this document can help inform the different parts of the strategy. The strategy should reflect the needs of the country and the priorities of key stakeholders, including decision-makers and funders. It should be regularly reviewed and updated.

> "Clarity on the strategy will ensure a realistic and sustainable action plan and help to justify funding."

Fig. 1. Elements in a BI unit strategy

How will you **justify** the investment in BI? Which problem will a new unit address, or which gap will it close? What is the possible added value in terms of health and well-being? Also, what is the scope and focus of the unit (for example, behavioural economics versus broader social sciences and humanities)?



Who are the unit's **main stakeholders** and what is their role (for example, support, funding, collaboration, projects, access)? What are their needs? How can they best be engaged with? Can the unit communicate a compelling case for their support?

Vision: what is the long-term outcome of the unit's work?
Mission: how will the unit work to achieve the vision? What types of projects, efforts and collaboration will lead to the vision?

What level of **human and financial resources** are needed and for which activities? What are the secured and possible sources of funding?

What are the 4–5 **main objectives** for the unit? For example, advocacy and awareness-raising, concrete projects, collaboration and communication.

What **values and principles** guide the unit's work (for example, evidence, equity, people- centeredness, actionable, cross-cutting)?

What are the unit's **main activities** (for example, diagnosis and research, intervention design, evaluation, policy advice, capacity-building)? What areas of health should the unit focus on? (They could, for example, be based on national health priorities.) What types of projects should the unit focus on?

What are the **key milestones?**
What would success in years 1–5 look like?

Plan staffing and upskilling of team members

Staffing depends on the financial and human resources available. Experts who have set up BI units recommend doing an internal mapping exercise to identify gaps, as well as capacity and capability, that may already exist within the organization. To complement existing capacity, it is useful to obtain an overview of existing expertise across the academic, research, policy and private sectors in the country. This can include searching for individuals with social or behavioural science training and experience within the national context or from abroad.

5.1 Staff profiles

Capacity and expertise which can be considered for a BI unit include:

- **Behavioural and cultural insights expertise and experience.** BI units can cover a wide range of disciplines that relate to human behaviour. The exact disciplines to include in an initial team will depend on the objectives of the unit (see section 4) and may involve expertise in social psychology, behavioural economics, broader social sciences, communications and humanities or market research. Designers can also be useful in bringing ideas to life.
- **Policy and cross-sectoral skills.** Understanding the policy process can be key to identifying feasible solutions and interventions and to effectively engaging with policy-makers. Additional insight into cross-sectoral work and experience of working in communities are ideal, as well as expertise in public health, health promotion and communication.
- **Evaluation and data analysis.** Demonstrating impact can be key to a unit, particularly in its early days (see Box 3). This may involve expertise in social research methods, monitoring and evaluation and running behavioural experiments.

All unit staff should have good communication and interpersonal skills in order to build networks and foster collaboration. Staff should also have an ability to translate research into practical policy ideas without coming across as too theoretical or academic *(27)*.

The head of the unit may be at mid-to-senior level and possess both policy experience and BI expertise in order to effectively engage with and persuade senior leaders. Other initial team members should ideally have 3–5 years of professional experience to ensure that they are considered credible counterparts when setting up projects and partnerships.

If all the necessary experience and expertise are not available in the unit to begin with, external experts and consultants can be drawn upon to support the team and strengthen its skills.

5.2 Upskilling team members

New units may struggle to find candidates with the ideal skills and experience. There are a few good ways to build the skills of the staff in the new unit.

— **Training.** There are several opportunities for training, online or face-to-face, related to the expertise and skills required for a unit. On-the-job training and peer support between colleagues with different skill sets are other opportunities.

— **Working together with a consultancy.** One option is to work closely in the initial phase with experienced partners such as a behavioural science consultancy or academic researchers. By working together, unit staff will develop skills that enable them to work on similar projects more independently. Such partnerships can also involve seconding staff to the new unit.

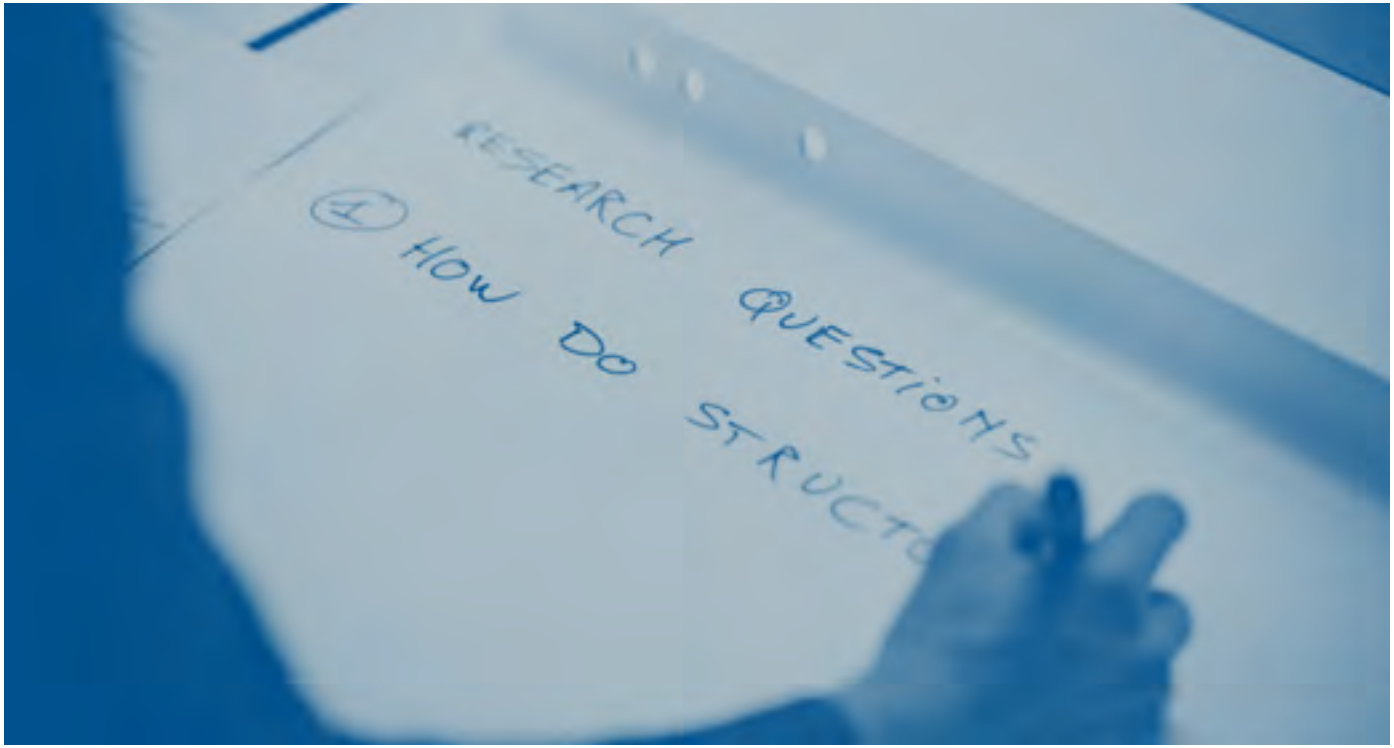
— **Mentors and advisers.** In addition to working directly on projects together, new units can also benefit from having a network of mentors and advisers. These can be members of BI units, health policy experts or academic researchers based nationally or in other countries.

— **Global BI network.** New units will benefit from connecting with BI units and practitioners in other countries. This can be achieved through the WHO Regional Office for Europe; WHO collaborating centres; networks run by WHO and other international organizations, such as the European Centre for Disease Prevention and Control, the United Nations Children's Fund (UNICEF) and the OECD; and various practitioner organizations *(28)*.

5.3 Role of academics

Experience shows that the relationship between academics and the BI unit can be mutually beneficial. For academics, it may offer opportunities to achieve social impact as well as visibility and publication opportunities. For a BI unit, academics can play an important role in planning, conducting and quality-assuring studies, and designing and testing interventions. Academics can ensure academic rigour and function as mentors and advisers, for example through a role on an advisory committee or panel. They can also be contracted as consultants or involved as partners to conduct studies. Academics with an applied (rather than theoretical) focus and experience in running empirical projects that involve citizens or end users are typically the best match for a BI unit. Hosting academics in the unit, through exchanges and fellowships, can be very useful when the unit is building its capacity.

Academic collaborators can also provide support for academic articles written for peer-reviewed publications based on data produced by collaborations with the unit. While peer-reviewed journals may not always be the best channel for disseminating findings widely, the goal of producing data of publishable quality pushes the unit to meet higher research standards. Peer-reviewed articles can also be impactful when paired with less technical materials such as fact sheets and videos.



Identify focus areas of health

BI units can help understand and address behaviours in multiple health areas and population groups. Potential projects to improve wider socioeconomic, cultural and environmental determinants of health can vary, and each country or unit will determine its own priorities for BI work. A country assessment to identify areas of health policy and behaviours to target may include the following steps.

— **Considering health priorities.** Ideally, a BI unit should contribute to implementing national health strategies and reaching health targets. The first step of the country assessment is therefore to review key health strategy documents and plans. This may also improve opportunities for sustainable funding.

— **Assessing health data.** Prioritization of health topics should be based on an in-depth understanding of critical health issues in the country and what contributes to life expectancy, well-being and years in good health *(29)*.

— **Consulting stakeholders.** Prioritization of health topics can involve consulting health experts in the policy world, health-care providers, local authorities and the health system, as well as people in the community. This approach may also increase awareness of the BI unit, enable health workers to feel more involved and identify potential partners *(30)*.

— **Identifying health inequalities and communities experiencing disadvantage.** In assessing health data, a particular focus can be on health inequalities and any potential to improve outcomes for groups experiencing disadvantage *(31, 32, 33)*

Plan projects: a mix of complex projects, early wins and policy advice

In planning their activities, BI units should be guided by their strategy (see section 4). Countries vary greatly in how much experience and support they have for using BI to improve health outcomes. Countries with established BI units and more experience and buy-in for the approach may wish to invest in more complex and longer-term projects. Such projects may include tackling "wicked" problems that are complex and difficult to define and solve or targeting harder-to-reach population groups. Countries where the BI approach is new and untested may wish to focus on proving the value of BI and ensuring continued support from decision-makers through an initial mix of early wins and more complex projects. In either case, the units may be able to offer significant value through evidence-based policy considerations and advice.

> "Countries may wish to focus on proving the value of behavioural and cultural insights and ensuring continued support from decision-makers through an initial mix of early wins and more complex projects."

7.1 Complex projects

Complex projects may require time-consuming efforts to gain insights, translate these into action, identify interventions, and implement and evaluate these before any impact can be documented. The various elements that constitute an end-to-end BI project are described in detail in Box 6.

With longer and more complex projects, it is important to manage expectations, to share interim findings, successes and achievements along the way, and to be clear how the insights gained from the research phase can be used to inform interventions and draw broader lessons for policy development and/or service design.

Box 6. The five phases of a BI project

A typical BI project consists of five main phases. Although the phases are presented in a linear way, there are many feedback loops and iterations between the phases. Resources on how to run BI projects can be found in the appendix.

Problem definition. This phase involves identifying priority health areas and population groups where targets are not being met; considerations of equity and the situation of those experiencing disadvantage should be included. This also involves determining which approach is relevant. If structural barriers (such as lack of access to services, lack of funding, or shortage of health workers or equipment) have already been identified, these often need to be addressed before new barriers are explored.

Diagnosis and research. This involves using relevant methods to understand the barriers and drivers of behaviour in the target population. Barriers or drivers may relate to cognitive shortcuts and heuristics, to individual health literacy, and to social and cultural norms and historic practices that support or drive a specific behaviour.

Intervention design. Drawing on insights from the research phase, one or more interventions or policy recommendations that aim to enable, promote or change behaviour are developed. Examples are many, ranging from increasing trust by applying motivational interviewing techniques in vaccination consultations, to introducing a sugar tax for beverages to influence producer and consumer behaviours (see Boxes 4 and 7). Intervention design focuses not only on *what* interventions are needed, but also on *how* they are to be implemented, as small details can have a large impact on behaviour. This phase also involves planning for monitoring and evaluation.

Monitoring and impact evaluation. Monitoring and evaluation aim to produce evidence of the process, outcomes and impacts of one or more interventions, including any unintended consequences. This is key because behaviour is complex and highly contextual. An intervention that has worked well in one context may not necessarily have the same impact in another, and it is difficult to predict which interventions will work in a given context (*34*).

Scaling. Often interventions are initiated on a small scale. Subsequent scale-up ensures that impactful interventions and policies are implemented on a wider scale to benefit a greater number of people. Further monitoring should be part of scaling up so that the effects in a group that is broader than that of the original project are understood. Planning and securing resources for scale-up early on help to ensure success.

7.2 Early win projects

Experience from BI units shows that engaging in a few early win projects to begin with can demonstrate value and impact in a shorter timeframe. They can help to create initial buy-in in contexts where BI is less recognized. Specifically for early wins, the following criteria can be considered.

- **High-priority topics.** Projects can be run on priority topics that the health-care system and important stakeholders care about and need to deliver on, with internal and external partners who are ready and willing to collaborate (see section 6).
- **High chance of success.** When the barriers to behaviour are clear, the focus can be on adapting interventions that have been tested and found to work in a different context; for example, opt-out choice architecture *(35)* and descriptive norms comparisons *(36)* have strong behavioural evidence. This allows a shorter project to be run in which existing evidence makes it possible to move quickly through the research and intervention design phases.
- **Measurable outcome.** Projects can focus on behaviours that can be measured, so that the impact of any interventions can be demonstrated rapidly. Ideally, data linked to these behaviours would be routinely collected and accessible to health authorities, thereby avoiding the need to set up new infrastructure for measurement.
- **Actionable quickly.** The intervention can be simple to implement and the outcome easy to measure. One-off behaviours (such as cancer screening attendance) may deliver results faster than projects on complex issues such as obesity or smoking. Interventions are faster to implement if channels (such as letters and intake processes) that already exist and are owned by the health authorities or a partner organization can be used to engage with the target population.
- **Scalable.** If found to be effective, the interventions should be easy to replicate in other parts of the country or the health system.

Even when a project looks like a potential early win, it is important to manage expectations regarding results. The purpose of impact evaluations is to find out what works and, inevitably, there are sometimes unexpected results. Using mixed methods and process evaluations alongside experimental methods makes it possible to learn even from projects where the intervention did not have the expected impact. In a well-balanced portfolio of different projects, negative or null results become part of a useful body of evidence without casting doubt on the credibility of the unit.

> "It is important to manage expectations regarding results."

7.3 Policy advice

In some areas, there is already a significant body of evidence on how to effectively affect people's health behaviours. In these cases, BI can add significant value through evidence-based policy considerations and advice, as has been shown by the demand for behavioural science input in the COVID-19 response *(37, 38)*.

BI can also play an important role in informing policy design for regulatory measures by providing a more evidence-based and contextual understanding of human decision-making. Examples include introducing new taxes on sugar-sweetened beverages and adding nutritional labels to food products (see Box 7).

In using such existing evidence, it is important to consider any differences that might make it less applicable to a new policy in a different setting or context.

Box 7. BI in action: influencing policy design

Designing the United Kingdom's sugared drink tax through a behavioural lens

In 2016 the United Kingdom government announced that the Soft Drinks Industry Levy would come into effect in 2018. The tax draws on several principles from behavioural science. First, reformulation as a way to improve nutrition acknowledges how challenging it can be for individuals to use willpower to change ingrained eating habits that are often responses to the environment (such as the availability and price of unhealthy options). Second, the tax was innovatively designed to drive producer behaviour by setting a tax that escalated, in three tiers, according to sugar levels in the drink. As a result, the amount of sugar sold per person from soft drinks fell by 30%, or 4.6 g per person per day *(39)*.

Introducing front-of-pack labelling in France

Front-of-pack labelling (FOPL) is a promising and cost-effective solution to support consumers in making healthier choices. FOPL can also encourage producers to make healthier products. To identify what kind of FOPL would be acceptable and effective, France conducted an extended consultative process with the food manufacturing and retail industries, scientists and consumers. These consultations led to the proposal of several FOPL systems, which were then tested using various methodologies, combining experimental designs, randomized trials or experimental platforms and a large-scale real-world experimental trial in 60 supermarkets in 2016 *(40)*. Ultimately, the Nutri-Score system proved to perform best in influencing the nutritional quality of consumers' food purchases and was put forward as the recommended system in October 2017 by the Ministry of Health, the Ministry of Agriculture and Food, and the Ministry for the Economy and Finance *(41)*.

Manage ethical questions

A BI unit should be able to manage data according to national legislation.

BI projects often use individual or group-level data to understand behaviour and may involve experiments in which some individuals receive interventions and others do not. This means that data collection and issues of privacy, consent and potential unequal effects on different groups all need to be carefully considered *(42)*. An ethics set-up may include the following components.

— **Ethical review board.** An ethical review board that already exists within the organizational set-up, or the ethical review board of a local university, can be approached for ethical approval of projects. In cases where this is not possible or desirable, a BI ethical review board may be established, which will consist of external experts to review and approve research projects.

— **Specific behavioural considerations.** The BI approach comes with a unique set of ethical considerations with which existing ethical review boards may not be familiar. These include, for example, reflecting on whether people are aware that they are being influenced and whether they are able to avoid the intervention if they want to *(43)*. The unit should ensure that the ethical aspects specific to BI projects are given due consideration *(44)*.

— **Data protection policy and responsible officer.** In addition to following national data protection regulations, the BI unit should establish a data protection policy to clearly spell out how data will be collected, stored and used. A responsible officer should be assigned to ensure that the policy is followed for every project.

— **Preregistration of studies.** BI units may also increase transparency by preregistering studies. Preregistering creates a permanent record of the research plan before any data are analysed. The plan is stored in a date-stamped, uneditable file in a secure online archive. Preregistration leads to higher-quality research and increases trust and legitimacy *(45)*. It is particularly important for experimental designs, such as randomized controlled trials, and analysis of correlational data such as surveys, but it can also be used for systematic reviews and more exploratory or qualitative studies. Preregistering an analysis plan for qualitative data can also help to clarify the aims of the research and reduce subjective interpretations of the data. There are multiple online platforms that facilitate preregistration *(46)*.

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Appendix: Resources for applying behavioural and cultural insights

A. Setting up BI units

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B. Conducting BI projects

Barrier Identification Tool. London: Behavioural Insights Team

Behaviour change: guides for national and local government and partners. London: Public Health England; 2020

Ethics resources [online hub]. Applied Behavioral Science Association; 2021

Online tools for behaviour change [online hub]. London: UCL Centre for Behaviour Change

Tools and ethics for applied behavioural insights: the BASIC Toolkit. Paris: OECD Publishing; 2019

C. Evaluation and monitoring

BetterEvaluation online platform. Melbourne: BetterEvaluation; 2019

Test, learn, adapt: developing public policy with randomized controlled trials. London: Cabinet Office/Behavioural Insights Team; 2012

D. Applying BI to vaccine-related behaviours (non-COVID-19)

A field guide to qualitative research for new vaccine introduction. Copenhagen: WHO Regional Office for Europe; 2018

Tailoring immunization programmes for seasonal influenza (TIP FLU): a guide for increasing pregnant women's uptake of seasonal influenza vaccination. Copenhagen: WHO Regional Office for Europe; 2017

The Little Jab Book: 18 behavioural science strategies for increasing vaccination uptake. Busara, Common Thread, Save The Children; 2021

TIP: tailoring immunization programmes. Copenhagen: WHO Regional Office for Europe; 2019

E. Applying BI to behaviours related to anti-microbial resistance

The TAP quick guide: a practical handbook for implementing tailoring antimicrobial resistance programmes. Copenhagen: WHO Regional Office for Europe; 2021

F. Case studies from different areas

Behavioural and Cultural Insights Hub. Copenhagen: WHO Regional Office for Europe; 2022

Behavioural insights project map. Observatory of Public Sector Innovation. Paris: Organisation for Economic Co-operation and Development

G. Applying BI to behaviours related to COVID-19

Behavioural considerations for acceptance and uptake of COVID-19 vaccines. Geneva: World Health Organization; 2020

Behavioural insights research to support the response to COVID-19: a survey of implementation in the EU/EEA. Stockholm: European Centre for Disease Prevention and Control; 2021

COVID-19 Behavioural Science Research Tracker. Providence (RI): The Policy Lab [n.d.]

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Data for action: achieving high uptake of COVID-19 vaccines. Geneva: World Health Organization; 2020

Facilitating COVID-19 vaccination acceptance and uptake in the EU/EEA. Stockholm: European Centre for Disease Prevention and Control; 2021

Health workers in focus: policies and practices for successful public response to COVID-19 vaccination. Copenhagen: WHO Regional Office for Europe; 2021

Regulatory policy and COVID-19: behavioural insights for fast-paced decision making. Paris: Organisation for Economic Co-operation and Development; 2020

Survey tool and guidance: behavioural insights on COVID-19. Copenhagen: WHO Regional Office for Europe; 2020

Young people and COVID-19: behavioural considerations for promoting safe behaviours. Geneva: World Health Organization; 2021

H. Community engagement and participatory approaches

Community champions: a rapid scoping review of community champion approaches for the pandemic response and recovery. London: Public Health England; 2021

Community engagement: a health promotion guide for universal health coverage in the hands of the people. Geneva: World Health Organization; 2020

Human Centered Design 4 Health [online hub]. New York (NY): United Nations Children's Fund

Migration and health: enhancing intercultural competence and diversity sensitivity [online course]. Geneva: World Health Organization; 2020

Participatory methods toolkit: a practitioner's manual. Tokyo: United Nations University; 2003

Toolkit on social participation: methods and techniques for ensuring the social participation of Roma populations and other social groups. Copenhagen: WHO Regional Office for Europe; 2016

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The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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