

IN COLLABORATION WITH



# NATIONAL BLUEPRINT FOR BEHAVIOURAL INSIGHTS IN HEALTH

MAINSTREAMING BEHAVIOURAL SCIENCES

FOR BETTER HEALTH



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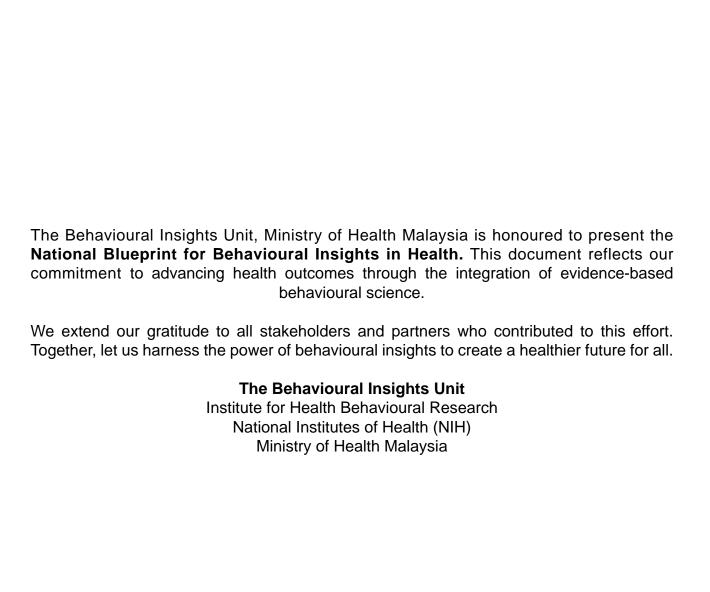
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#### **FOREWORD**

Behaviour is central to health. Our habits and how we engage with health greatly affect our well-being and the efficiency of healthcare systems. It is important to understand the factors that shape health behaviours and use this knowledge to create effective solutions that improve health and support well-being.

Globally, we face numerous health challenges that arise from a combination of biological, psychological, economic, environmental, and social factors. These challenges, such as the rising rates of non-communicable diseases (NCDs) leading to long-term health conditions and health inequalities, affect everyone. Behavioural and social sciences offer a promising path forward for health. Research shows that creating environments that make healthy choices easy and accessible is more effective than simply telling people what to do.

To make progress in health, we must apply behavioural and social sciences to create environments and policies that support healthier behaviours. This involves addressing both individual choices and broader social and environmental factors, making healthy choices easier while tackling root causes of poor health, such as social inequalities and environmental barriers.

Malaysia has developed a strategy to apply behavioural insights in health, marking the beginning of an ongoing journey. This strategy requires all stakeholders to work together to improve health outcomes by applying behavioural and social science methods, and it uses a whole-of-nation approach that involves sectors such as transport, urban planning, education, media, agriculture, local governments, and community organisations to create an environment that supports healthy living.



#### **FOREWORD**

The evolving landscape of public health calls for a deeper understanding of the human experience. A transformative shift toward the biopsychosocial model, one that thoughtfully integrates biological, psychological, and social dimensions of health in a cohesive and evidence-informed manner, is essential in understanding human health behaviour.

Behavioural science provides valuable tools to understand and influence the human factors that shape health outcomes. Whether addressing risk behaviours, improving treatment adherence, or promoting preventive actions, evidence shows that health systems are more effective when designed around how people actually behave, not just how we expect them to. This requires embedding behavioural insights at the core of health policy, planning, and service delivery at every level of the system.

The adoption of behavioural science must now progress from inspiration to implementation. It is time we institutionalise behavioural science as a core function of our health governance and operations. This involves building the capacity of our health workforce to apply behavioural tools, integrating behavioural insights into programme design, implementation and evaluation, and collaborating across sectors to co-create environments that make healthy choices easy,

attractive, and sustainable. We must act with urgency and unity, drawing upon our collective commitment to delivering health services that are people-centred, resilient, and responsive to the evolving needs of our communities.

We are thankful to the former Director General of Health for the leadership in driving behavioural science to strengthen our health system. Moving forward, let this National Blueprint be more than a plan. It must be a catalyst for system transformation that puts people and behaviour at the centre of everything we do.

Datuk Dr. Mahathar bin Abd Wahab

Director-General of Health Malaysia



#### **FOREWORD**

Behavioural science is increasingly gaining prominence as an essential pillar of global public health-transforming how we understand and influence the factors that shape human behaviours and health outcomes. From improving vaccine uptake to strengthening chronic disease management and emergency response, it has proven important in designing policies and interventions that are not only evidence-based but also people-centred and contextually grounded.

The World Health Assembly's 2023 adoption of the Behavioural Sciences for Better Health Resolution by all Member States marked a significant global milestone. It affirmed the growing recognition that systematically applying behavioural science is important to building stronger, more inclusive, and more resilient health systems.

Malaysia has taken commendable steps in this direction. The establishment of the Behavioural Insights Unit within the Ministry of Health and the country's leadership in advancing the WHA Resolution "Behavioural Sciences for Better Health", reflect a growing commitment to innovation, evidence- informed practice and systems transformation.

This National Blueprint for Behavioural Insights in Health is an important next step. It outlines a clear strategic direction to embed behavioural science across Malaysia's health governance, policy, and service delivery. More than that, it reflects a broader vision—one that underscores a whole-of-nation approach to address behavioural factors at the individual and community levels,

which are shaped by economic, environmental and social determinants of health.

nealth.

WHO is honoured to have supported this journey through technical collaboration, capacity building, and global knowledge exchange. As Malaysia moves forward with implementation, this Blueprint stands as a model for the region and beyond—that by placing human behaviour at the heart of health systems, we can advance equity, effectiveness and sustainability in public health.

Dr. Rabindra Abeyasinghe

WHO Representative to Malaysia, Brunei Darussalam and Singapore



#### List of abbreviations (NBBI)

**ANMS** Agenda Nasional Malaysia Sihat

**BI** Behavioural Insights

BIT Behavioural Insights Team

**HWP** Health White Paper

MEL Monitoring, Evaluation and Learning

MOH Ministry of Health

NBBI National Blueprint for Behavioral Insights in Health

NCD Non-communicable Disease

TAG Technical Advisory Group

**UK** United Kingdom

**UNFPA** United Nations Population Fund

**US** United States

WHO World Health Organization

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## **EXECUTIVE SUMMARY**

The application of behavioural insights (BI) in the public sector has been introduced in the Twelfth Malaysia Plan, 2021-2025 and further strengthened in the Thirteenth Malaysia Plan (2026–2030) as an integral tool to enhance the Government's services in designing and implementing policies to guide people to make better decisions. Within the health sector, the integration of BI enables for a deeper understanding of health-related behaviours among individuals and communities, paving the way for more impactful strategies for better health outcomes.

This first National Blueprint for Behavioural Insights in Health (NBBI) is a strategic document designed to chart the way forward for BI in health for Malaysia. It represents a visionary roadmap to harness the potential of behavioural science to enhance health outcomes through the sustainable integration of BI in the formulation of behaviourally informed health related policies and practices. This will contribute to a better health ecosystem, driving impactful and equitable health outcomes.

The NBBI is aligned with the priorities of the WHO Resolution on Behavioural Sciences for Better Health and the Malaysia Health White Paper. It acknowledges the whole-of-government and whole-of-society approaches to addressing the economic, environmental, and social determinants of health. The NBBI outlines six key priority areas that provide a comprehensive framework for advancing behavioural science in the context of health, encompassing a holistic health spectrum from preventive health, clinical and disease management, and health service delivery.

The overarching purpose of the NBBI is to integrate BI into health-related policies and practices, to catalyse structural support and drive sustainable behaviour change for better health. This integration must be supported by a well-trained workforce, heightened public awareness, ongoing research and innovation, systematic evaluation and monitoring, and robust public advocacy and collaboration efforts. It aligns with the Resolution's call for a holistic approach, emphasising the importance of understanding and influencing individual and community behaviours to support and promote better health practices. It envisions a proactive integration of behavioural sciences into healthcare decision-making processes, ultimately contributing to improved health outcomes and the overall well-being of the Malaysian population.

#### AT A GLANCE:

#### THE NATIONAL BLUEPRINT FOR BEHAVIOURAL INSIGHTS IN HEALTH

#### VISION

To establish Malaysia as an international leader in integrating behavioural science into the planning, design, and evaluation of health initiatives for a better health ecosystem - driving impactful and equitable health outcomes.

#### MISSION

To use the insights from behavioural science to enhance health policies and practices in Malaysia, resulting in improved health outcomes, efficiencies, equity, and optimised public well-being through shared ownership by the whole of society.

#### **HEALTH AREAS**

**Preventive Health** 

**Clinical and Disease Management** 

**Health Service Delivery** 

## PRIORITY

#### STRATEGIC ACTION

Policies &

. . . . . . . . . . . . . . . .

Reviewing existing national health policies

Reviewing existing health programs

Develop toolkit for practical guidance

Capacity Building Develop and deliver training packages

Conduct expert seminars/webinars/ CME

Integrate BI module into existina curricula platforms

Define key research priority areas

Conduct research for behavioural mapping. behavioural diagnosis, and behaviourallyinformed interventions

Learning (MEL)

. . . . . . . . . . . . . . . . .

Develop system for MEL

Leverage on innovative methods for MEL

.......

Establish respository for health behavioural data & learnings

. . . . . . . . . . . . . . . . . . .

Provide consultancy services

Establish a registry of BI experts

Broaden engagement with key stakeholders and the public

Collaboration & Advocacy

**Build foundational** engagements

Facilitate knowledge exchange

Facilitate collaborations

Establish a community of practice

Drive sustainable funding and resources



# **BACKGROUND**



## The Challenges of Behaviour Change for Health:

## A Behavioural Science Perspective

Promoting behaviour change for health presents significant challenges, often more complex than it initially appears. While recommending healthier behaviours, such as improved nutrition and increased physical activity may seem straightforward, translating these recommendations into sustained action is considerably more difficult. This difficulty arises

because individuals often develop habits over many years, and awareness of the benefits of healthier behaviours does not always lead to behavioural change. Understanding the psychological and social determinants of behaviour is therefore crucial. Social norms, personal motivations, and unconscious biases significantly influence health-related decision-making processes (1).

One of the key challenges in behaviour change is overcoming deeply ingrained habits.

In Malaysia, findings from the National Health and Morbidity Survey (NHMS) 2023 have highlighted key health-related issues that need attention. For example, more than half of the adult population (54.4%) is overweight or obese, 1 in 2 adults leads a sedentary lifestyle and 95.1% of adults consume inadequate fruit and vegetables daily (2). This underscores the urgency of addressing behavioural challenges. Psychological challenges are compounded by environmental and societal factors that make healthier choices less accessible. The COVID-19 pandemic further accentuated the importance of addressing behavioural issues, as behaviour change played a pivotal role in mitigating the spread of the virus. For example, adherence to preventive measures like mask-wearing, hand hygiene, physical distancing and vaccine uptake demonstrated how behavioural science can guide effective public health strategies. A joint project between MOH and WHO Malaysia during the COVID-19 pandemic used behavioural insights to optimize communication interventions for preventive behaviours and inform future risk communication strategies. This experience highlights the potential for applying and leveraging behavioural science to other persistent health challenges in Malaysia.

One of the key challenges in behaviour change is overcoming deeply ingrained habits. These habits are often reinforced by environmental cues, such as the routine of consuming snacks while watching television or the tendency to avoid exercise after a long workday (3). The familiarity and comfort associated with these behaviours create significant barriers to change. Additionally, human cognitive biases, such as the tendency to favour immediate gratification over long-term benefits, further complicate efforts to adopt healthier behaviours (4). This phenomenon, known as "present bias," illustrates the difficulty individuals face in prioritising future health benefits over immediate pleasures (5).

# What is **Behavioural Insights**?

Behavioural sciences refers to multidisciplinary fields whose aim is to understand, explain, predict and/or influence individual, community, or population-level human behaviours.

Behavioural insights are actionable conclusions about human behaviour derived from findings in the behavioural sciences and/or from practical applications of behavioural sciences to real-world challenges and opportunities.

Behavioural science, as stated in the World Health Organization (WHO) resolution, is a multidisciplinary scientific approach that examines human action and its psychological, social, and environmental drivers, determinants and influencing factors (6). It is applied to protect and improve people's health by informing the development of public health policies, programmes and interventions that can range from legislation and fiscal measures to communications and social marketing, as well as to support other public health efforts. While "behavioural science" and "behavioural insights" are often used interchangeably to describe the understanding of human behaviour, BI specifically refers to the lessons about

The application of BI spans a wide range of areas, including public policy, healthcare, finance, marketing, education (7), and more. By understanding the factors that influence behaviour, health stakeholders can design interventions, policies, and strategies that are more likely to achieve positive and beneficial outcomes (4).

The WHO outlines six principles for applying BI to guide effective health interventions (8).

## Principle 1 to 3:

Understanding what influences behaviour

human behaviour derived from behavioural sciences.



1. Cognitive and other psychological factors underpin human behaviour.



2. Social and cultural contexts, and accompanying norms, values, and practices, influence behaviour.



3. Environmental influences: external factors in the environment can enable or discourage healthy behaviour.

#### Principle 4 to 6:

Understanding how to harness behavioural evidences and theory



4. Behavioural evidence and theory should be used in planning, designing and implementing health policies and programmes.



5. Evaluate strategies and interventions to provide empirical evidence on what works in facilitating healthy behaviour.



6. Participatory approaches should be used in planning, designing and implementing health policies and programmes.

Figure 1: Principles and steps for applying a behavioural perspective to public health

These principles address both the factors that shape behaviour and the methods for designing impactful strategies. The first three principles focus on understanding behaviours by identifying three key areas of influence: cognitive and psychological factors, cultural and social dynamics, and environmental elements, including physical surroundings. These dimensions are

interconnected and collectively shape both individual and group behaviours. Considering them together provides a comprehensive view of behavioural drivers. By gathering evidence on these influences and their interplay, valuable insights can be gained to guide effective interventions that encourage the adoption of desired behaviours.

Structural interventions such as policies that foster healthier environments are essential to complement individual-focused efforts.

The remaining three principles outline how to use behavioural evidence and theory to design, implement, and evaluate public health strategies. To effectively drive behavioural change, interventions must target specific enablers and barriers that influence the desired behaviour. Ongoing evaluation is essential to assess the effectiveness of these strategies, identify areas for improvement, and refine approaches as needed. Equally important is a participatory approach, which involves engaging the affected communities in the design and implementation process. This builds trust, fosters collaboration, and ensures that interventions are tailored to the community's context, thereby increasing their likelihood of success.

Rather than assuming that individuals will naturally opt for healthier choices, this approach acknowledges the various obstacles they face and employs evidence-based strategies to promote healthier behaviours (9). For instance, implementing subtle cues such as placing healthier food options at eye level in grocery stores, can substantially influence consumer choices (10). Furthermore, BI suggests that modifying the environment to make healthy choices more convenient or automatic can be more effective than relying solely on individual decision-making (11).

However, focusing exclusively on individual behaviour is insufficient. There is a growing recognition that structural interventions such as policies that foster healthier environments are essential to complement individual-focused efforts (12). Factors such as access to nutritious foods, safe spaces for physical activity, and supportive workplace policies play critical roles in either facilitating or hindering behaviour change (13). Research indicates that integrating policy interventions with behavioural strategies is more effective in promoting sustained health behaviour changes (14). A comprehensive behavioural approach that combines both individual-level interventions and structural changes is more likely to foster an environment conducive to lasting behaviour change (15).





Malaysia has achieved significant health outcomes, broad health services coverage, and financial risk protection since Independence. However, population health is facing significant challenges including an ageing population with increasing burden of non-communicable diseases (NCDs) and an overstretched health system (16). The system faces new health

challenges due to changes in lifestyle, urbanisation, and planetary health issues such as climate change. These challenges have placed additional strain on the health system, with significant gaps becoming clear during the COVID-19 pandemic. The pandemic highlighted the vital role of health in the economy, social well-being, and national security, emphasising the need for a high-performing health system. Accordingly, the Health White Paper (HWP) proposes systemic and structural reforms to ensure the Malaysian health system becomes more equitable, sustainable, and resilient.

Embedding BI becomes integral to shifting the focus from merely treating illnesses to adopting a new paradigm centred on maintaining overall well-being.

The HWP outlined several key challenges to be addressed:

1	Rising burden of non-communicable diseases	5		Imbalance in expenditure between hospital care and clinic care
2	Emergence and re-emergence of communicable diseases	6	のできる	Imbalance between funding versus demands on the health system
3	Impact of mental health	7		Limitations in current structures related to resource management, governance, and stewardship
4	Dichotomous service delivery by the public and private sectors	8		Complex operating environment vs. demands for a coordinated multi- system, multi-sectoral approach

To address these challenges, the HWP aims to reform the nation's health system to achieve better health and well-being for the people. The HWP outlines a holistic proposal for systemic and structural reforms of the Malaysian health system addressing the nation's health challenges while ensuring greater equitability, sustainability, and resilience of the health system.

As part of this reform, embedding BI becomes integral to shifting the focus from merely treating illnesses to adopting a new paradigm centred on maintaining overall well-being. The emphasis on health promotion and disease prevention will not only be integrated into the healthcare system but also implemented at all levels nationwide. Understanding and influencing behaviours at all levels is crucial for addressing the challenges within Malaysia's health system. Generally, human behaviours such as adherence to health guidelines and engagement in healthy lifestyle behaviours, significantly influence health outcomes.

Patients' behaviours, including care-seeking behaviours and adherence to treatment plans, are critical for effective healthcare delivery. Similarly health workers' behaviours such as prescribing practices and adherence to best practices, significantly influence the quality and efficiency of the health system.

In that context, BI certainly holds significant potential to support not only the HWP, but also the Agenda Nasional Malaysia Sihat (ANMS), a national agenda for a healthy Malaysia. This initiative goes beyond conventional health promotion



programmes by adopting the 'Health in All Policies' approach. ANMS aims to encourage various ministries to consider their contributions to the national health agenda. For example, how can the town planning lead to better health outcomes? How do agricultural policies improve the affordability and accessibility of healthy foods? How can local authorities enhance environmental cleanliness for better health? These efforts collectively aim to achieve holistic health improvements for the population.

There are four main thrusts under the ANMS; 1) Strengthening the promotion of healthy living, 2) Strengthening health and wellness services, 3) Empowering self-management of health, and 4) Strengthening environmental cleanliness.

The long-term Agenda is outlined to accomplish in 2030. As the 'Health in All Policies' approach is essential for better health outcomes, BI applications can support understanding of how we talk about and act upon social determinants of health outcomes, facilitating behaviourally-informed policies and practices.

# What makes the behavioural insights approach different?

Health outcomes depend not just on what we know, but on what we do — behavioural insights help turn evidence into effective action.

# Are we designing for real behaviour— or just ideal assumptions?

The BI approach represents a significant shift from traditional methods in health policy and practice. Unlike conventional approaches, which often assume that individuals make

BI approach adopts an evidence-based perspective which acknowledges the complexity of human behaviour and the multitude of factors influencing decision-making.

decisions based on complete information, clear incentives, and act in line with their intentions, the BI approach adopts an evidence-based perspective which acknowledges the complexity of human behaviour and the multitude of factors influencing decision-making. This understanding enables the design of more effective policies and interventions that are better aligned with how people truly think and behave in real-world contexts.

One key difference in the BI approach is its emphasis on a people-centric perspective that considers individuals' biases (systematic errors in thinking)

and heuristics (mental shortcuts that can lead to quicker decisions but also potential errors). Traditional methods often assume that individuals always make the optimal choices. In contrast, BI approaches recognise that individuals do not always act in their best interests due to emotional influences, social pressures, and environmental factors. By adopting a participatory approach, BI actively engages individuals and communities in the design and implementation of interventions, ensuring that solutions

Another crucial aspect of the BI approach is its emphasis on integrating individual behaviour change with structural and environmental support systems.

are contextually relevant and co-created with those directly affected. This perspective not only enhances the understanding of behaviour but also fosters ownership and empowerment, enabling the development of interventions that are both effective and sustainable.

## Are we empowering people—or just expecting them to conform?

Another crucial aspect of the BI approach is its emphasis on integrating individual behaviour change with structural and environmental support systems. While individualfocused strategies subtly steer individuals towards healthier choices, these efforts can be significantly amplified by modifying the broader environment. For instance, policies that ensure access to healthy foods, create safe spaces for physical activity, and promote supportive workplace practices can create an enabling environment that fosters individual behaviour change (15). This approach of integrating BI with structural interventions ensures a more comprehensive strategy addressing both personal and environmental determinants of health.

The BI approach offers a more comprehensive framework for defining policy problems and identifying their underlying behavioural causes. In contrast, traditional methods often focus on modifying economic factors, such as price and demand, to influence behaviour. BI approaches explore a wider range of mechanisms, including social marketing, information provision, and the framing of choices (1). These strategies can be substantially reinforced by structural

Integrated into traditional policy-making and programme delivery, BI offers a perspective that alians interventions with the natural tendencies of human behaviour.

supports, such as community programs, school-based health education, and public policies that create healthier environments. This broader perspective enables the development of interventions that are not only more effective in driving behaviour change but also more responsive to the diverse needs and preferences of the target population.

# Are we building inclusive solutions or relying on one-size-fits-all?

Behavioural interventions encompass a wide range of strategies, with nudging being one example. Rather than replacing traditional policy levers, BI complement and enhance them, optimising their effectiveness, efficiency, and equity. Nudging involves subtly guiding individuals towards healthier choices without restricting their freedom of choice. For example, arranging healthier

food options at eye level in cafeterias or using reminders to encourage regular physical activity are simple, low-cost interventions that can drive meaningful behavioural change.

When integrated into traditional policy-making and programme delivery. BI offers a perspective that aligns interventions with the natural tendencies of human behaviour. For instance, urban planning initiatives promoting active transportation or policies regulating the availability of unhealthy food options become more effective when guided by BI principles. By addressing both individual behaviours and the broader environmental context, this approach not only enhances the design and delivery of policies but also improves outcomes by aligning interventions with the natural tendencies of human behaviour, while minimising the risk of failure.



Furthermore, BI-informed policies tend to be more cost-effective and versatile than traditional approaches (17). They can function as standalone instruments or to complement traditional policy tools, such as regulations and incentives. This flexibility allows policymakers to design more tailored interventions that address specific health challenges while making efficient use of limited resources (18). Focusing on the psychological, social, and environmental drivers of behaviour, BI approaches can more effectively bridge the gap between policy design and actual human behaviour change than traditional methods, which often rely heavily on economic incentives and penalties.

Engaging stakeholders, including the target populations in co-creating solutions ensures that participatory approaches tailor interventions to real world needs and preferences, foster a sense of ownership and enhance their relevance.

The BI approach offers a distinct and innovative framework for shaping health policies and practices. Recognising the complexity of human behaviour and the contextual factors that influence decision-making, BI approaches provide more people-centric, contextdependent, and cost-effective solutions. A crucial element in achieving these people-centric outcomes is integrating participatory approaches, where individuals and communities are actively engaged in designing. implementing, and evaluating interventions.

Engaging stakeholders, including the target populations in co-creating solutions ensures that participatory approaches tailor interventions to real world needs and preferences, foster a sense of ownership and enhance their relevance. When combined with BI evidence and theory, these strategies not only leverage behavioural insights but also empower communities to identify barriers and collaboratively develop practical solutions to overcome them. Additionally, aligning participatory methods with structural and environmental changes enhances the overall impact, fostering more effective and sustainable behaviour change and improved health outcomes (8).





# THE BEHAVIOURAL INSIGHTS MANDATE



The potential of the BI approach for health contributes to the Sustainable Development Goal number three: ensuring good health and well-being for all at all ages. Additionally, BI aligns with the vision for health articulated in the Health White Paper and the Agenda Nasional Malaysia Sihat.

Malaysia delivered a keynote address at the seventyfifth World Health Assembly in May 2022, highlighting the vital role of behavioural science in the country's response to the COVID-19 pandemic. Consequently, the Ministry of Health established a national BI function in September 2022, recognising behavioural science as the key defence mechanism for Malaysia's health system. This establishment became a cornerstone of the Behavioural Insights (BI) Unit under the Ministry of Health Malaysia. Malaysia then proposed a resolution called Behavioural Sciences for Better Health, which received unanimous support from all WHO Member

States at the Seventy-sixth World Health Assembly in May 2023. Consequently, the BI Unit in Malaysia now leads efforts in providing strategic guidance, technical support, knowledge sharing, capacity building, and partnership development for behavioural science within the Ministry of Health.

The application of BI in the public sector, initially introduced under the Twelfth Malaysia Plan (2021–2025), has been further strengthened in the Thirteenth Malaysia Plan (2026–2030) as a strategic tool to improve policy design and service delivery. RMK13 recognises BI as a means to promote better decision-making among the public, enhance programme effectiveness, and support people-centric governance. In the health sector, BI continues to play a vital role in advancing Sustainable Development Goal number three: ensuring good health and well-being for all at all ages (19). Additionally, BI aligns with the vision for health articulated in the Health White Paper and the Agenda Nasional Malaysia Sihat (20).

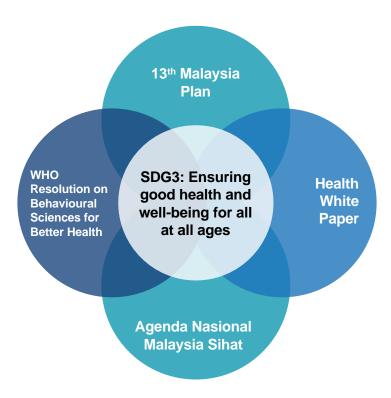
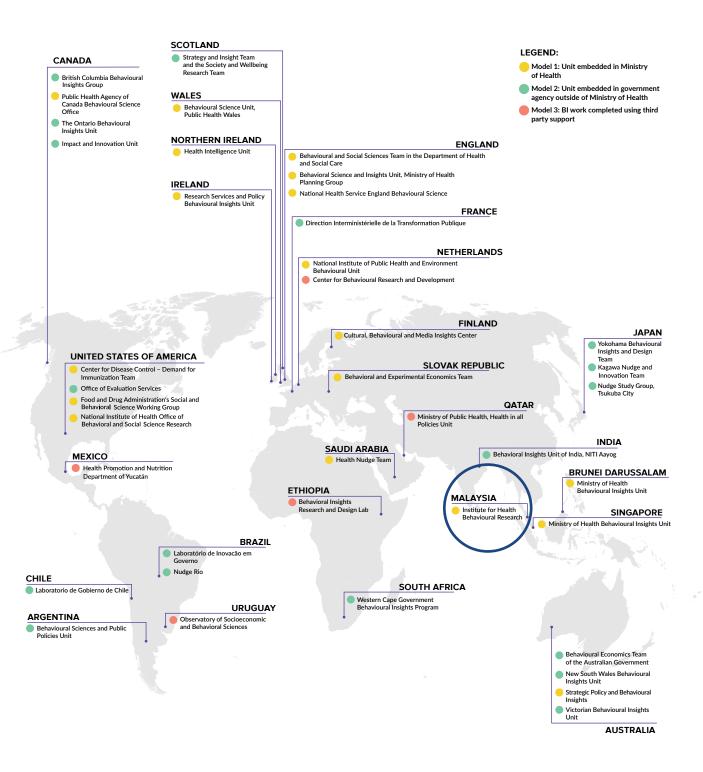


Figure 2: Strategic Foundation for National Blueprint for Behavioural Insights in Health

In 2024, Malaysia was featured in a joint report by the World Bank and WHO on Behavioural Science Around the World Volume III: Public Health. The report recognises Malaysia as one of the few countries globally to establish a Behavioural Insights Unit dedicated to applying behavioural science in public health (21).



**Figure 3:** Malaysia featured in World Bank-WHO's Report on Behavioural Science Around The World (Vol. III), 2024.

This recognition underscores Malaysia's commitment to using behavioural science to address public health challenges. By establishing a dedicated Behavioural Insights Unit, Malaysia integrates global best practices with local expertise to develop effective, contextually relevant solutions. The report highlights the country's progress and its role as a model for leveraging behavioural science to improve health outcomes.







The Ministry of Health (MOH) Malaysia established the Behavioural Insights Unit on September 6, 2022 to demonstrate its commitment to enhancing the application of behavioural science in health. This unit aims to strengthen the integration of behavioural science into policy-making, ensuring that health policies are informed by an evidence-based understanding of human behaviour.

The Unit ultimately aims to become the Behavioural Insights Centre of Excellence for Health in Malaysia, facilitating the application of behavioural insights based on scientific evidence to formulate behaviourally informed health policies and practices.

The BI Unit typically operates as a focal point for the MOH, delivering strategic guidance, technical assistance, knowledge sharing, capacity building and developing partnerships to further behavioural science for better health.

- Mainstreaming BI through strategic leadership and governing on BI at the national level, developing strategic plans, establishing structural and operational frameworks, and building functional units for BI
- Providing capacity building in BI for organisations and stakeholders through training, development of learning modules and guiding tools
- Providing technical assistance on BI to other organisations and stakeholders through consultations and facilitating BI knowledge sharing through a community of practice
- Forming collaborations and partnerships, both locally and internationally, to build competency in BI and developing joint initiatives with other BI experts
- Developing BI pilot projects for organisations and stakeholders interested in using BI for policies and programs

The BI Unit is proactive in conducting training for a diverse group of health officers at various levels within the Ministry of Health Malaysia. This includes individuals from different divisions at the headquarters, state health departments, and district health offices. The objective of this initiative is to empower health officers with the knowledge and skills necessary to integrate behavioural insights into their respective roles. Extending training to officers at various organisational levels, the BI Unit aims to mainstream behavioural science within the Ministry of Health's initiatives, fostering a collaborative and informed approach to health across different administrative tiers.



#### VISION AND MISSION

NBBI serves as a roadmap to harness behavioural science to improve health outcomes by sustainably integrating BI into the development of behaviourally-informed health policies and practices, aiming for a better and more equitable health ecosystem.

NBBI is a strategic document outlining the future of BI in health for Malaysia. The NBBI aligns with the priorities of the WHO Resolution on Behavioural Sciences for Better Health and the Malaysia Health White Paper, including the recognition of the whole-of-government and whole-of-society approaches to addressing economic, environmental, and social determinants of health.



#### **Our Vision:**

To establish Malaysia as a international leader in integrating behavioural science into the planning, design, and evaluation of health initiatives for a better health ecosystem. driving impactful and equitable health outcomes.



#### **Our Mission:**

To use insights from behavioural science to enhance health policies and programmes in Malaysia, resulting in improved health outcomes, greater efficiencies, equity, and optimised public well-being through shared ownership by the whole of society.

The overarching purpose of the NBBI is to integrate BI into health-related policies and practices to catalyse structural support and drive sustainable behaviour change for better health. This integration must be supported by a well-trained workforce, heightened public awareness, ongoing research and innovation, systematic monitoring and evaluation, and robust public advocacy and collaboration efforts. It specifically aligns with the WHO Resolution's call for a holistic approach, emphasising the importance of understanding and influencing individual and community behaviours to support and promote better health practices (6). The NBBI outlines six key priority areas, aimed at providing a comprehensive framework for advancing behavioural science in the context of health, across a holistic health spectrum from preventive health, disease and clinical management to health service delivery.



This NBBI recommends the BI approach across the three health areas encompassing preventive health, disease and clinical management, and health service delivery.

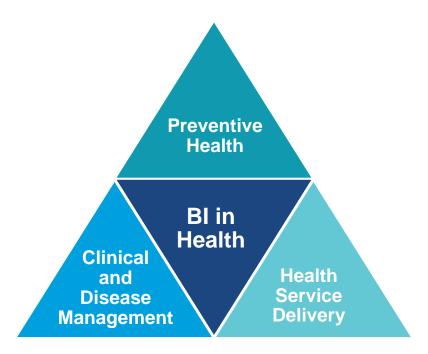


Figure 4: The three health areas for behavioural insights for health

Addressing behavioural factors and leveraging insights into human decision-making, healthcare systems can improve health outcomes, enhance patient experiences, and achieve more efficient use of resources.



Preventive Health: Preventive health strategies aim to reduce the incidence and impact of diseases by enabling behaviours that support overall health and well-being. These strategies address a wide range of issues, including healthy lifestyle component, and other factors that influence quality of life. Despite the known benefits of preventive measures, such as reducing the burden of chronic diseases and improving population health, uptake and sustained adherence to these behaviours often face significant barriers.

Behavioural science examines the interplay of psychological, social, and environmental factors that influence the adoption of desired behaviours. Leveraging BI, these approaches can address challenges such as lack of motivation, competing priorities, and behavioural biases that hinder individuals from making healthier choices. As a result, BI not only mitigates barriers but also creates supportive environments that enable sustained improvements in health and well-being.



Clinical and Disease Management: Effective disease and clinical management require patients to adhere to treatment regimens, medications, and lifestyle modifications. Equally important are healthcare worker behaviours, such as appropriate prescribing, timely referrals, and effective communication, which play a critical role in ensuring successful health outcomes. However, non-adherence remains a pervasive issue in healthcare, leading to poorer health outcomes, increased healthcare costs, and higher rates of hospitalisation.

BI provides critical insights into understanding patient behaviours, decision-making processes, and factors influencing adherence. This understanding allows for tailored interventions that enhance patient engagement, improve adherence rates, and optimise clinical outcomes (22).



Health Service Delivery: Optimal health service delivery involves ensuring access to timely, equitable, and patientcentred care. However, healthcare systems often struggle with inefficiencies, disparities in access, and varying levels of patient engagement. BI can help redesign healthcare delivery models by identifying patient preferences, decision biases, and barriers to accessing care. Integrating these insights, policymakers and healthcare providers can design interventions that enhance patient satisfaction, improve healthcare outcomes, and optimise resource allocation (23).

Incorporating BI across these three areas of health is essential to overcoming the complex challenges in healthcare delivery. Addressing behavioural factors and leveraging insights into human decision-making, healthcare systems can improve health outcomes, enhance patient experiences, and achieve more efficient use of resources.



## The Six Priority Areas for Mainstreaming Behavioural Insights for Health



1

#### **POLICY & PRACTICE**

To strengthen the integration of BI into Malaysia's health policies and programs, ultimately leading to improved health outcomes and a more efficient health ecosystem.



2

#### **CAPACITY BUILDING**

To create a well-informed, skilled workforce capable of leveraging BI to design and implement health interventions that are more effective, sustainable, and tailored to the needs of the population.



3

#### **RESEARCH & INTERVENTION**

To focus research efforts, gain a deeper understanding of health-related behaviours, and implement evidence-based interventions to improve health outcomes in Malaysia.



4

### MONITORING, EVALUATION <u>& LEARNING</u>

To create a structured approach for monitoring, evaluating and learning ensuring continuous improvement and effective implementation in the Malaysian health context.



5

#### **CONSULTATION & ADVISORY**

To provide comprehensive support, expert guidance for stakeholders involved in health-related policies and practices in Malaysia, ensuring the successful integration and application of



6

#### **COLLABORATION & ADVOCACY**

To enhance knowledge sharing, foster collaboration, and build a strong community of practice for BI in the health sector in Malaysia, leading to more effective and inclusive health policies and practices.

The six priority areas are central to establishing a comprehensive and sustainable framework for mainstreaming BI into Malaysia's health policies and practices. Policy and practice ensure that BI becomes a foundation of national health strategies, aligning with global standards and national priorities. Capacity building strengthens the workforce across all levels, empowering stakeholders to implement BI effectively on a larger scale. Research and intervention drive evidence-based innovation to address complex health challenges tailored to the Malaysian context. Monitoring, evaluation and learning ensure systematic assessment and refinement, enabling data-driven decision-making and accountability. Consultation and advisory facilitate expert guidance and inter-agency alignment, ensuring consistency and credibility. Collaboration and advocacy promote a whole-of-government and whole-of-society approach, fostering partnerships that amplify impact and drive collective action. These areas together form a comprehensive and strategic NBBI, ensuring that BI contributes meaningfully to the health and well-being of the Malaysian population.



#### Policy and practice

- 1. Review existing national health policies to identify gaps and opportunities for integrating BI.
- 2. Review existing health programs to identify areas where BI can enhance effectiveness and uptake.
- Develop toolkits or resources that offer practical guidance on integrating BI into various aspects of health policy design, implementation, and enforcement.



#### **Capacity building**

- 1. Develop and deliver BI training packages tailored to diverse needs of professionals involved in health-related policies and practices, to enhance competencies and capabilities in applying BI.
- Organise specialised seminars, webinars and professional development sessions focused on emerging trends and innovations in the application of BI.
- **3.** Incorporate BI training modules into relevant educational curricula and learning platforms.



#### Research and interventions

- 1. Define key research priority areas or areas for improvement in BI for health, aligning with national health goals and emerging public health needs.
- 2. Conduct research on behaviour mapping, behavioural diagnosis, and behaviourally informed interventions, using a participatory approach.



#### Monitoring, evaluation and learning

- 1. Develop a system for monitoring, evaluation, and learning (MEL) with clear indicators, data collection methods, and reporting processes for BI projects in health.
- 2. Leverage innovative methods for MEL, including digital tools, real-time analytics, and participatory evaluation techniques, to enhance data-driven insights and feedback.
- 3. Establish a repository for health behavioural data and learnings from BI research/projects to enhance the accessibility of insights, and regularly communicate these insights to stakeholders to support evidence-based decision-making for health policies and practices.



#### **Consultation and advisory**

- Offer consultancy services on BI (e.g., diagnosing barriers and enablers, designing intervention) to assist parliamentarians, policymakers, programme managers, and technical officials in integrating BI into the design, implementation, and evaluation of health-related policies and practices.
- 2. Establish a registry of BI experts to streamline the identification and engagement of experts for targeted consultation.
- Broaden engagement with key stakeholders and the public through participatory approaches to identify and address diverse needs and perspectives.



#### Collaboration and advocacy

- 1. Build foundational engagements for awareness of BI through introductory sessions, webinars, and seminars.
- 2. Facilitate knowledge exchange between BI practitioners through conventions, summits, and conferences.
- 3. Facilitate collaboration among ministries, agencies, and diverse stakeholders—including policymakers, healthcare professionals, researchers, community representatives, and experts through initiatives such as targeted research calls, academic placements, internships, and joint projects, to foster synergy, maximise impact, and integrate complementary approaches.
- **4.** Establish a community of practice for BI to promote networking, knowledge sharing, and collaboration among experts and practitioners.
- Drive sustainable funding and resources for BI by advocating for long-term investments and forging strategic partnerships to ensure the continued development, implementation, and scaling of BI initiatives in health.



# The Governance of Behavioural Insights for Better Health

The governance structure for mainstreaming BI in health is a central structure to ensure a coordinated, efficient, and collaborative approach to addressing health priorities in Malaysia, with each hierarchical commission playing an important role.



Overall, the setup promotes multi-level accountability, stakeholder engagement, and evidence-based decision-making to improve health outcomes in Malaysia.

## The Stakeholder Map for Integrating Behavioural Insights in Health

The Stakeholder Map for Health emphasises the multi-sectoral nature of health determinants, illustrating that achieving health and wellness extends beyond the responsibilities of healthcare providers. Rather it necessitates cross-sectoral collaboration to address social, environmental, and economic factors that influence health outcomes. This map illustrates the interconnected roles of various sectors and groups in advancing the use of BI for improved health and wellness outcomes. It is organised into concentric circles, emphasising the interrelation and influence of stakeholders.

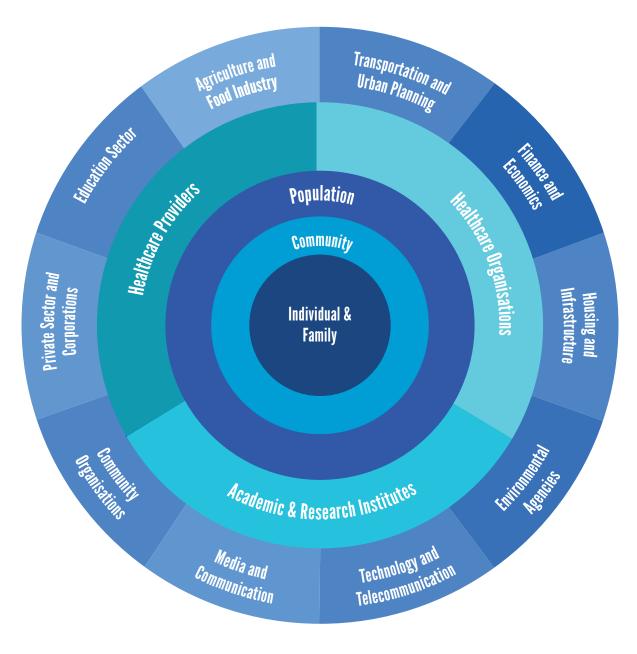


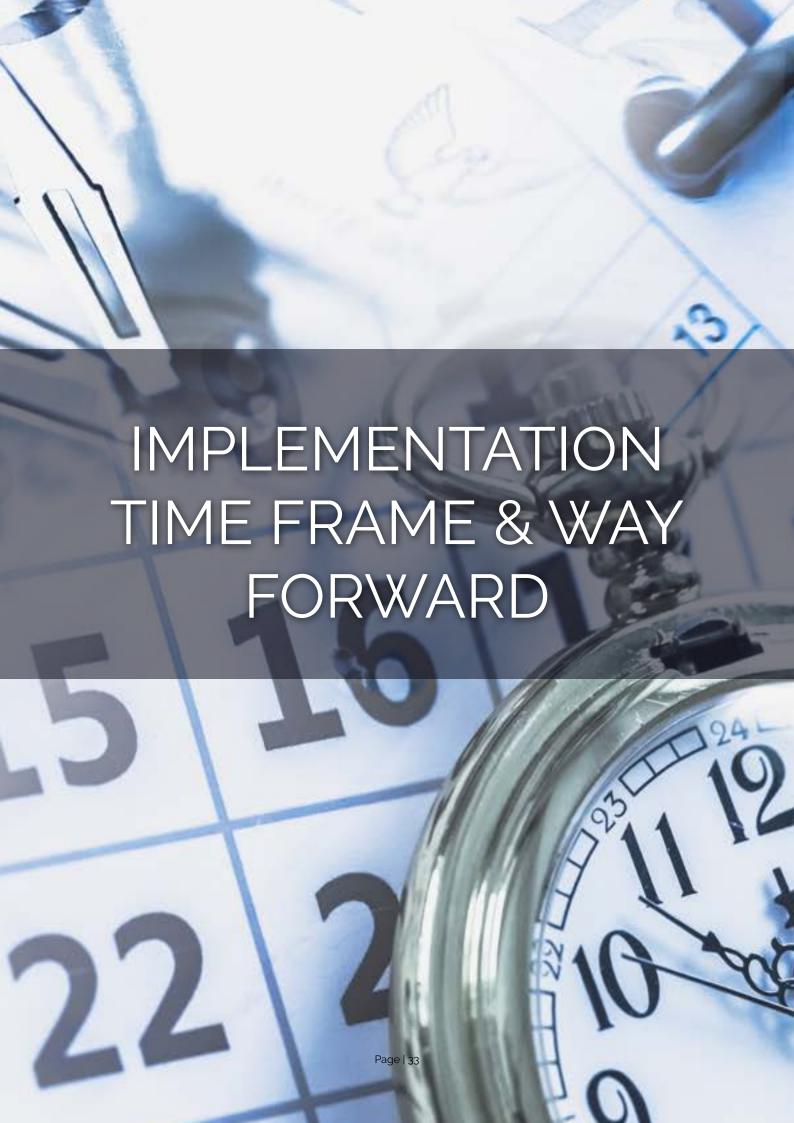
Figure 5: The stakeholder map for integrating behavioural insights in health

At the heart of the map are individuals and families, reflecting that health begins at the personal level. Surrounding this includes community and population, emphasising the broader social contexts and collective responsibilities for health. At the middle layer, are the healthcare providers, academic and research institutes, and health organisations, all of which are critical for implementing and supporting health interventions. These stakeholders play direct roles in shaping health behaviours and outcomes. The outermost layer represents sectors that indirectly, but significantly influence health, including:



This stakeholder map serves as a roadmap for using behavioural science to understand and address health challenges through a holistic and integrated approach, recognising the importance of collective action across various domains. In particular, the stakeholder map serves to:

- ▶ Guide policymaking: By identifying the stakeholders, decision-makers can create comprehensive strategies that involve all relevant sectors.
- Promote collaboration: Encourages partnerships among sectors to maximise impact.
- Highlight interdependence: Demonstrates how systemic factors interplay to influence health outcomes.
- ▶ Inform interventions: Helps design targeted and sustainable health initiatives by engaging appropriate stakeholders.



While work on BI for health began prior to 2025, the implementation of the NBBI is envisioned as a structured journey spanning six years, 2025 until 2030, aiming to integrate BI into health policies and practices effectively.



#### 2025-2026: Activation Phase

- 1. Establish a comprehensive action plan for mainstreaming BI
- 2. Establish the groundwork by reviewing existing policies, programs, and capacities
- 3. Identify gaps, opportunities, and key stakeholders for integrating BI
- 4. Develop frameworks for monitoring, evaluation and training
- 5. Establishment of BI functional units for health at all relevant levels of organisations
- 6. Pilot BI interventions and tools in select health programs and policies
- Expand Bl capacity through training packages, expert seminars, and initial collaborations
- 8. Begin developing and testing toolkits, and research priorities
- 9. Foster multisectoral engagements to mainstream BI



#### 2027-2028: Acceleration Phase

- 1. Expand successful BI interventions across health programs and policies nationwide
- 2. Institutionalise BI training into curricula and CPD pathways
- 3. Strengthen MEL systems to provide robust evidence and insights
- 4. Expand international collaborations and showcase Malaysia's BI successes regionally and globally



#### 2029-2030: Advancement Phase

- 1. Fully integrate BI into national health policies, programs, and practices
- 2. Establish systems for data sharing, consultation, and funding for BI initiatives
- 3. Consolidate lessons learned and outcomes from the NBBI
- 4. Publish results and advocate for the next phase of BI development
- 5. Position Malaysia as a leader in applying BI for health through global engagement

With this dynamic timeline, the NBBI will pave the way for a healthier, more equitable future, solidifying Malaysia's leadership in applying BI for health, driven by robust stakeholder engagement and unwavering leadership commitment. High-level buy-in and dynamic multi-sectoral partnerships will form the backbone of this effort, guided by a dedicated task force to champion progress.

#### THE DEVELOPMENT OF NBBI

#### From consultation to co-creation: Building the Blueprint through a multistakeholder effort

Quarter 1, 2024: Development of the NBBI emerged following a situational analysis of current BI practices, challenges and opportunities within the Malaysian health system initiated after the establishment of the Behavioural Insights Unit within MOH since 2022. In parallel with the initiation of the development of the NBBI, In parallel with the initiation of the development of the NBBI, a survey among the Ministry of Health Malaysia's workforce was conducted across its departments using an adapted and translated version of the WHO Workforce Survey Tool of the Use of Behavioural Science in Organizations (2023). Collectively, findings highlighted the key challenges in applying behavioural science including the need for BI guidelines or modules in health, capacity-building initiatives, and expert advice.

Quarter 2, 2024: MOH initiated a collaborative effort with WHO Country Office for Malaysia, Brunei Darussalam and Singapore to conceptualise and develop the NBBI. A rapid global desk review of BI guiding/strategy documents from countries around the world and a desk review of existing policies, programs, and initiatives related to BI across various agencies and stakeholders in Malaysia was conducted. These reviews aimed to identify best practices, contextualise BI approaches, and pinpoint gaps and opportunities for local implementation. This effort was further reinforced through stakeholder engagements involving representatives from various MOH divisions and government agencies.

Quarter 3, 2024: A critical milestone in developing the NBBI was the Town Hall and Consultative Workshop held on 5th and 6th August 2024 in Putrajaya. These sessions brought together more than 100 representatives from diverse sectors, including government ministries, United Nations agencies, universities, corporations, and non-governmental organisations. The objective of these sessions was to refine the six priority areas of the NBBI and secure commitments to accelerate efforts aimed at strengthening the behavioural insights approach in health. Using a participatory approach, the consultative workshop was structured around the six key priority areas to ensure comprehensive coverage of the NBBI. This approach facilitated in-depth attention, incorporating diverse perspectives to enrich both the deliberations and outcomes. The insights gathered from this collaborative effort have been instrumental in shaping a comprehensive framework, where each priority area synergistically contributes to achieving the NBBI's objectives.

Quarter 4, 2024: The insights gathered during the Town Hall and Consultative Workshop were utilised to refine the draft NBBI, ensuring it aligns with the collective vision and strategic priorities identified by stakeholders. Bilateral consultations were held with key partners and stakeholders to secure commitments for collaborative action and ensure alignment of efforts across sectors.

2025: Building on the momentum of 2024, additional bilateral consultations, engagement sessions and town halls were held to finalise the NBBI and prepare for its implementation. These efforts culminated in the official launch ceremony of the NBBI.



# BEHAVIOURAL SCIENCES: ACROSS BORDERS



The application of BI has gradually influenced policy-making worldwide by integrating findings from psychology and behavioural economics to design more effective public policies. These insights aim to account for the actual behaviour of individuals, community and organisations, moving beyond reliance on traditional assumptions about human behaviour.

Over the past two decades, BI has been increasingly used in countries around the world. Over the past two decades, BI has been increasingly used in countries around the world. In some countries, BI has been institutionalised within government policy-making, like in UK, Australia, Japan, US and some countries in Europe, demonstrating their effectiveness in areas like tax collection and health warnings on cigarette packages. Governments are leveraging BI to encourage compliance, enhance public

and business interactions, and promote social and environmental responsibility in businesses. This is achieved through a range of techniques, from nudges to corporate transparency measures (24).

Since the establishment of the inaugural Behavioural Insights Unit in 2010 within the United Kingdom Cabinet Office, numerous BI teams have emerged globally. While they differ in their missions, models, and methodologies, they all share a common goal – to deepen our comprehension of 'what motivates people' and to apply this knowledge to improve policy and society.

Globally, behavioural public policy bodies has been on the rise. Since 2018, the number of bodies worldwide has more than tripled, from 201 to 631 by May 2024. This reflects a growing global interest in behavioural approaches (7, 33).

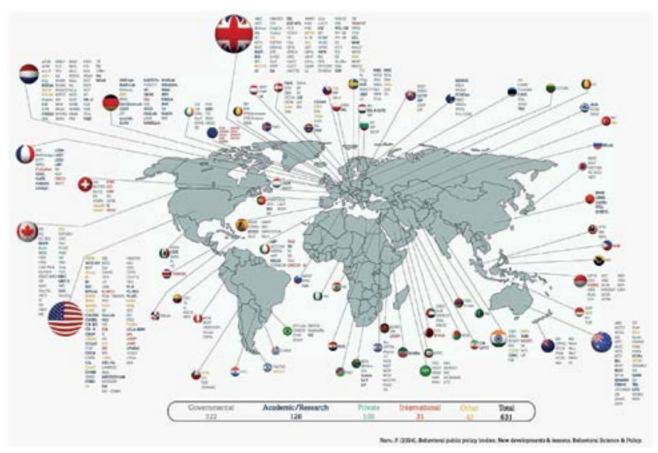


Figure 6: Distribution of behavioral public policy bodies worldwide

#### **EXPERIENCES FROM ASIAN COUNTRIES**

Across Asia, several countries have successfully integrated BI into public health initiatives, demonstrating innovative approaches to address health challenges. India has leveraged these insights in various health campaigns, particularly in sanitation and tuberculosis prevention. The Swachh Bharat Mission utilised community engagement and social marketing to encourage better sanitation practices. Additionally, targeted messaging in tuberculosis

Engaging local communities in program design enhances relevance and effectiveness, while culturally relevant messaging can significantly influence behaviour change.

campaigns addressed stigma and misinformation, effectively increasing awareness and treatment adherence (25). In Singapore, the application of BI has been particularly prominent through initiatives led by the Health Promotion Board. The Healthier Dining Program encourages restaurants to offer healthier options by using nudges like menu labelling, which influences consumer choices without limiting options. Furthermore, the National Steps Challenge gamifies physical activity by rewarding participants for reaching step goals.

This approach effectively motivates behaviour change through competition and social engagement (26). In Japan, BI has been integrated into workplace health promotion programs that encourage regular health check-ups and healthy lifestyles. Local government units have adopted nudges to improve health check-up uptake by integrating cancer screening into general medical examinations as a default option rather than an additional choice. Recognising cognitive biases that hinder health-related decisions, Japan employs nudges to improve the uptake of preventive health measures, emphasizing the importance of early detection for better health outcomes (27). The Philippines has implemented maternal health programs that utilise BI to empower women and improve access to prenatal care. Community education and support groups play a crucial role in encouraging women to seek necessary healthcare services (28).

From these experiences, several key lessons emerge for future public health initiatives. Engaging local communities in program design enhances relevance and effectiveness, while culturally relevant messaging can significantly influence behaviour change. Subtle environmental changes can effectively encourage healthier choices without restricting options. Utilising evidence-based interventions ensures that strategies are grounded in research, while multi-sectoral collaboration fosters comprehensive approaches to public health challenges. Finally, the development and allocation of human and financial resources for the use of BI is essential for sustainable implementation.

The lessons learned from the UK's Behavioural Insights Team (BIT) further reinforce these findings. BIT's experience emphasises the importance of integrating behavioural science into policymaking through a structured approach that includes defining outcomes, understanding context, building interventions, and testing them through randomised controlled trials (29). The commitment to iterative learning such as testing various interventions design and refining strategies based on evidence has proven crucial for developing effective health policies (30). The experiences from India, Singapore, Japan, and the Philippines illustrate the potential of BI to transform health strategies across Asia.

#### MALAYSIA'S EXPERIENCE

As for Malaysia, BI initiatives are in line with the six key priority areas and are being integrated into several health initiatives. Projects include empowering communities in Sabah for malaria prevention, implementing pre-diabetic intervention programs, employing nudge-based strategies to reduce overcrowding in emergency departments, exploring perception and experience on mental health stigma and help seeking behaviour among adolescents from multi sectoral perspectives, developing field-friendly health behavioural assessment tool for lifestyle prescription, and promoting handwashing behaviour among pioneer school children in Selangor (31). These initiatives reflect a commitment to translating insights into actionable strategies that yield health outcomes. Despite still being in progress, the experiences based on projects completed, integrating BI into policy and practices, and numerous capacity building highlight the need for collaborative actions and adaptable strategies (32).

In addition, continuous efforts have been made to advocate on the use of behavioural insights through multi-level consultations with policy-makers, programme planners, and frontline implementers. This includes targeted engagements and technical discussions with stakeholders across departments to support evidence-informed decision-making. Several new projects have also emerged, such as those addressing vaccine hesitancy, and obesity prevention, all of which incorporate behavioural principles into message framing, service delivery, and public communication strategies.

Malaysia has also taken a step forward through the launch of the Dasar Literasi Kesihatan Kebangsaan (National Health Literacy Policy), which reinforces the need for people-centred and behaviourally-informed approaches in strengthening population health. The policy marks a significant milestone in elevating the use of behavioural science across health systems, reinforcing the importance of simplifying access, improving comprehension, and building trust through strategic communication.

However, as more nations recognise the value of integrating behavioural science into public health policies, the potential for positive change continues to grow across the region.



#### CONCLUSION

The NBBI sets a transformative agenda for integrating behavioural science into Malaysia's health sector. By aligning with global priorities and leveraging innovative approaches, it establishes a robust framework, with six key priority areas and eighteen strategic actions, to address complex health challenges and drive sustainable behaviour change. Through a collective commitment to capacity building, research, and collaboration, the NBBI envisions a future where behaviourally-informed policies and practices enhance health outcomes and the well-being of all Malaysians, ensuring a healthier and more equitable society.

As part of this shift, the NBBI signals a move from over-reliance on the traditional medical model toward a more holistic biopsychosocial approach, recognising that health behaviours are shaped by a complex interplay of individual, social, and environmental factors. Behavioural insights offer a new perspective on how policies can be more effectively designed, centred around real-world human behaviour rather than idealised assumptions, to help achieve sustainable improvements in population health and build a healthier nation.



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#### ACKNOWLEDGEMENT

#### **International Organisations**

- 1. WHO Country Office for Malaysia, Brunei Darussalam and Singapore
- 2. WHO Regional Office for the Western Pacific
- WHO Behavioural Insights Unit
- 4. United Nations Children's Fund (UNICEF)
- 5. United Nations Development Programme (UNDP)
- 6. United Nations Population Fund (UNFPA)

#### **MOH Malaysia**

- Health Education Division
- 2. Nutrition Division
- 3. Oral Health Programme
- 4. Food Safety and Quality Programme
- 5. Disease Control Division
- 6. Traditional and Complementary Medicine Division
- 7. Medical Development Division
- 8. Planning Division
- 9. Account Division
- 10. Family Health Development Division
- 11. Pharmaceutical Services Programme
- 12. Nursing Division
- 13. Digital Health Division
- 14. Public Health Development Division
- 15. Regulatory Pharmacy Division
- 16. Allied Health Sciences Division
- 17. Human Resource Division
- 18. Internal Audit Division
- 19. Corporate Communications Unit
- 20. Policy and International Relations Division
- 21. Health Transformation Office
- 22. Public Health Institute
- 23. Institute of Respiratory Medicine
- 24. Institute for Clinical Research
- 25. Institute for Health Behavioural Research
- 26. Institute for Health Management
- 27. Institute for Medical Research
- 28. Institute for Health Systems Research
- 29. Institute for Respiratory Medicine
- 30. Johor State Health Department
- 31. Kelantan State Health Department
- 32. Kedah State Health Department
- 33. Melaka State Health Department
- 34. Pahang State Health Department

- 35. Perlis State Health Department
- 36. Sarawak State Health Department
- 37. Terengganu State Health Department
- 38. Perak State Health Department
- 39. Labuan Federal Territory Health Department
- 40. Federal Territory of Kuala Lumpur & Putrajaya Health Department
- 41. Selangor State Health Department
- 42. Negeri Sembilan State Health Department
- 43. Sabah State Health Department
- 44. National Blood Centre
- 45. Kuala Lumpur Hospital (HKL)
- 46. National Centre of Excellence for Mental Health (NCEMH)
- 47. Branch of Assistant Medical Officer Services
- 48. Engineering Services Division

#### Other Ministries

- 1. Ministry of Economy
- 2. Ministry of Agriculture and Food Security
- 3. Ministry of Domestic Trade and Cost of Living
- 4. Ministry of Science, Technology, and Innovation
- 5. Ministry of Education
- 6. Ministry of Housing and Local Government
- 7. Ministry of Women, Family and Community Development (KPWKM)

- 8. Ministry of Tourism, Arts and Culture
- 9. Ministry of Investment, Trade and Industry (MITI)
- 10. Ministry of Communication
- 11. Ministry of Transport

#### Academia, Research Institutions, NGOs & Others

- 1. Universiti Kebangsaan Malaysia (UKM)
- 2. Universiti Putra Malaysia (UPM)
- 3. University of Malaya (UM)
- 4. University Malaysia Sabah (UMS)
- 5. International Islamic University Malaysia (UIAM)
- 6. HELP University
- 7. ProtectHealth Corporation
- 8. PlanMalaysia
- 9. SWCorp Malaysia
- 10. Malaysia Psychology Association
- 11. National Cancer Society Malaysia
- 12. National Sports Institute of Malaysia
- 13. Social Security Organization (PERKESO)
- 14. Malaysian Psychological Association (PSIMA)





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