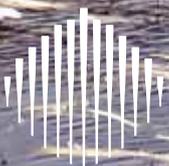


The Future of Wellbeing

Next Policy Steps
for Building Mentally
Resilient Societies

**WORLD
GOVERNMENT
SUMMIT 2023**

in collaboration with



To Inspire and Enable The Next Generation of Governments

The World Government Summit is a global platform dedicated to shaping the future of governments worldwide. Each year, the Summit sets the agenda for the next generation of governments with a focus on how they can harness innovation and technology to solve universal challenges facing humanity.

The World Government Summit is a knowledge exchange center at the intersection of government, futurism, technology, and innovation. It functions as a thought leadership platform and networking hub for policymakers, experts and pioneers in human development.

The Summit is a gateway to the future as it functions as the stage for analysis of future trends, concerns, and opportunities facing humanity. It is also an arena to showcase innovations, best practice, and smart solutions to inspire creativity to tackle these future challenges.



Table of Contents

Topics

Executive Summary	05
Glossary Of Key Mental Health Terms	07
The Impact Of Mental Ill Health On Society: A Reality Check	09
Mental Health And Wellbeing: The Global Assessment	11
Children And Adolescents: The Increasingly Urgent Case For Better Mental Health Care And Support	12
Global Shortage Of Mental Healthcare Provision	13
How Governments Should Respond To The Digitalization Of Mental Healthcare	15
Digitally Aware Patients Are Driving The Rise Of Digital Therapeutics	17
Broadening Access To Digital Mental Healthcare In Developed And Developing Countries	18
The Need For Improved Regulation And Budgetary Discipline In Digital Mental Healthcare	19
The Metaverse: The Next Digital Testing Ground For Mental Health And Wellness Policies And Programs	21
The Future Of Mental Health Funding: Why Targeting Wellbeing Is The Key To Controlling Budgets	23
Closing The Global Mental Health Spending Gap In Challenging Economic Times	25
Mental Wellbeing Initiatives In Action: Leading National Case Studies	26
The Next Generation's Mental Health And Wellbeing: How To Ensure Tomorrow's Voices Are Heard Today	29
The Increasing Mental Health Burden Carried By The World's Children And Adolescents	31
The Information Gap And How To Close It	32
Conclusion: The Case For Higher, More Focused Investment In Mental Health And Wellbeing In A Challenging Global Economy	35

Executive Summary

In 2022, the World Health Organization (WHO) estimated that around one in eight people globally were living with a mental disorder.¹ Positive mental health is vital to individual and public health, and society in general. **However, there is growing evidence that anxiety, stress, depression and other mental disorders are increasing worldwide, exacerbated by an alarming shortage of trained mental health workers and integrated mental health services.** At a global and national level, greater awareness of the burden of mental disorders is prompting governments to review their current policies and strategies, and take urgent action to improve their citizens' mental health and wellbeing. In this critical area, policymakers can learn lessons from other countries regarding best practices.

This paper builds on last year's World Government Summit (WGS) report on making wellbeing a national priority, and proposes key measures and initiatives that governments can introduce now to deliver sustained results.² It is encouraging that a growing number of governments are committed to destigmatizing mental disorders through national campaigns and information programs. In Scotland, for example, the devolved Scottish government's See Me initiative, launched in 2021, aims to address stigmas and discrimination around mental health.³ In New Zealand, last year's Wellbeing Budget 2022, the fourth in the series, measures the country's progress on a wider range of measures than traditional fiscal and economic metrics, with analysis of policy impacts across different areas of wellbeing.⁴ In the UAE, the government's Council for Digital Wellbeing, established in 2020, provides a range of information and services to help citizens maintain a healthy balance between the online and physical worlds.⁵

These initiatives illustrate increasing international recognition that the state has a duty of care to play an active role as an enabler of citizens' wellbeing, in addition to its traditional function as a regulator of health services. Wellbeing is a multi-dimensional concept that is affected by numerous health, social, behavioral and individual determinants. In this respect, the consensus view of health professionals and healthcare policymakers has advanced dramatically in recent years. Traditionally, mental illness was regarded as a private matter, or worse as a personal failure of character. Today, it is widely accepted that social and economic conditions and other factors beyond an individual's control often influence mental health.

From this perspective, **governments have a role to play in building mentally resilient societies by designing and implementing healthcare policies and initiatives that promote and sustain wellbeing.** Before embarking on this journey, it is important to appreciate that wellbeing spans the traditional "hard" boundaries between mental and physical health which are no longer recognized by medical professionals. On an everyday level, a person who is in good physical health is also more likely to feel positive about themselves and about life in general. Meanwhile, people who suffer from clinically diagnosed mental disorders such as anxiety and depression often exhibit physical health symptoms – the most obvious being high blood pressure.



The reason this study focuses on mental health and mental wellbeing is because of **the stigmas and misinformation that continue to surround the subject** – not least, the common misconception that they are separate from physical health and wellbeing. Such misinformation, which includes failing to distinguish between mental health and wellbeing (see glossary), undermines the ability of governments to design and implement evidence-based, holistic strategies and policies in this area. We therefore make the following key recommendations:

- 01** Increase government funding for the recruitment, clinical training and deployment of mental health professionals
- 02** Broaden access to digital mental healthcare and mental wellbeing products and services in developed and developing countries
- 03** Collect and process more comprehensive, detailed data on child and adolescent mental healthcare and wellbeing, leveraging new technologies and data analytics

Glossary

Glossary Of Key Mental Health Terms

Wellbeing: A positive state experienced by individuals and societies. Similar to health, it is a resource for daily life and is determined by social, economic and environmental conditions. Wellbeing encompasses quality of life, as well as the ability of people and societies to contribute to the world in accordance with a sense of meaning and purpose. Focusing on wellbeing supports the tracking of the equitable distribution of resources, overall thriving and sustainability. A society's wellbeing can be observed by the extent to which it is resilient, builds capacity for action and is prepared to transcend challenges.

Mental Health: A state of mental wellbeing that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community.

Mental Disorder: A clinically significant disturbance in an individual's cognition, emotional regulation or behavior, usually associated with distress or impairment in important areas of functioning.

Mental Health Conditions: A broader term covering mental disorders, psychosocial disabilities and other mental states associated with significant distress, impairment in functioning or risk of self-harm.

Source: World Health Organization



Section 1

The Impact Of Mental Ill Health On Society: A Reality Check



Mental Health And Wellbeing: The Global Assessment

In recent years, a worldwide rise in the incidence of mental disorders has been exacerbated by the cumulative impact of COVID-19, geopolitical conflict and severe economic challenges driven by the worst global inflationary pressures since the 1970s. Against this backdrop, the WHO's 2022 World Mental Health Report and related WHO and national studies last year make bleak reading.⁶

The WHO estimates that in 2020 the COVID-19 pandemic contributed to a worldwide annual increase of 27.6% in reported cases of major depressive disorder (MDD) and a 25.6% increase in cases of anxiety disorders.⁷ So far, the evidence suggests that while this trend is weakening, the incidence of cases is still higher than before the pandemic. For example, survey data compiled by the KFF polling organization for the United States Census Bureau indicates that around 40% of US adults reported symptoms of anxiety or depression at the height of the pandemic's first wave in 2020.⁸ By June 2022, the percentage had fallen to almost 33%, a significant reduction but still triple the pre-pandemic level of 11%.

These alarming statistics underscore two imperatives for policymakers. **Firstly, awareness of mental health and wellness as serious issues is still surrounded by taboos and stigmas in many societies, despite recent progress in some countries. Secondly, worldwide provision of mental health services falls far short of the level needed, given the scale of the challenge.** In October 2022, UN Secretary-General António Guterres stressed in his message to mark World Mental Health Day that it remains "one of the most neglected aspects of healthcare," with profound, wide-ranging social and economic consequences.⁹

To take just one illustration, the UN calculates that anxiety and depression cost the global economy around \$1 trillion annually.¹⁰ Secretary-General Guterres underscored the importance of concerted international action to "prevent the root causes of mental health conditions," on the sound principle that from both a healthcare and budgetary perspective, prevention is always better than cure.

In line with the rest of the world, there is a strong case for more investment in mental healthcare and support across the GCC region. For example, a study in 2016 published by The Lancet estimated that the total global cost of substantially scaling up effective treatment coverage for depression and anxiety disorders between 2016 and 2030 would be \$147 billion. Yet the projected global return on this investment would have been \$310 billion, based on the projected 43 million additional extra years of healthy life delivered during the scale-up period.¹¹ Last year, PwC analysis using the same methodology indicated that **at least 37.5 million productive days are lost annually in GCC countries due to untreated mental illness, equivalent to a loss of \$3.5 billion.**¹²

Children And Adolescents: The Increasingly Urgent Case For Better Mental Health Care And Support

Mental health conditions among children and adolescents account for a considerable proportion of the global disease burden within this age group.¹³ In November 2021, the WHO reported that one in seven of 10- to 19-year-olds worldwide have experienced a mental disorder, representing 13% of the total for all age groups. Even more shocking is the WHO's estimate that suicide is the fourth most common cause of death among young people aged 15-19.

Around the world, no region appears to be immune to the impact of child and adolescent mental health disorders. For example, in September 2021, a systematic academic literature review and meta-analysis of data across the six GCC countries indicated that almost half (45%) of children and adolescents had experienced depressive symptoms, as measured by the international Depression, Anxiety and Stress Scale (DASS).¹⁴ The same proportion (45%) had suffered from symptoms of anxiety, while more than a quarter (26%) had experienced stress. Meanwhile, almost one-third (32%) of children and adolescents in the GCC region have displayed symptoms of eating disorders, based on the standardized Eating Attitudes Test (EAT-26). **As this data demonstrates, governments owe children and adolescents better mental healthcare and support to give them the best possible chance in life.**

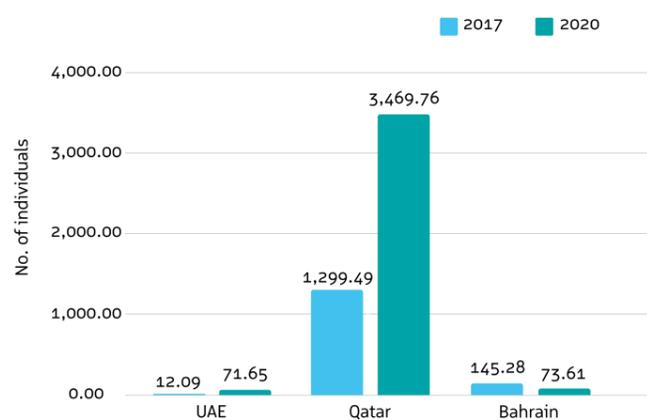
Yet the practical challenge of designing effective policies and programs that target children and young people is immense, given that multiple individual, familial, social and economic factors can affect a person's mental health from the earliest age. Among the various mental health determinants for adolescents, the WHO includes "living conditions, stigma, discrimination or exclusion, or lack of access to quality support and services."¹⁵ These universal factors are overlaid by more specific determinants, such as whether an adolescent has a chronic illness, autism spectrum disorder or, in the case of female teenagers, is pregnant or in an early or forced marriage. Other important determinants include poor parenting and bullying by other children or adults.

Global Shortage Of Mental Healthcare Provision

Around the world, patients struggle to gain access to mental healthcare and support from properly trained clinicians. This problem is not confined to developing countries. For example, the latest data from the WHO indicates that in 2016, there were just 10.54 psychiatrists per 100,000 people in the United States, that's two-thirds of the ratio set in 1980 by the United States Department of Health and Human Services in order to provide adequate national mental health coverage.¹⁶

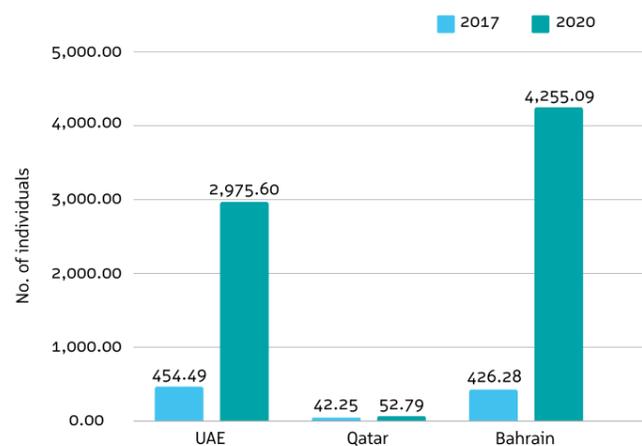
The equivalent ratio for the GCC region is even lower, with PwC analysis of data contained in the WHO World Mental Health Atlas 2020 showing that in 2020 there were on average just 3.02 psychiatrists per 100,000 people across the six member countries of the UAE, Saudi Arabia, Qatar, Kuwait, Oman and Bahrain. The UAE provides a stark illustration of why this shortfall matters, especially since the onset of the COVID-19 pandemic. Between 2017 and 2020, annual hospital inpatient admissions for mental health-related symptoms rose six-fold from 12.06 per 100,000 people to 71.65, while outpatient visits soared from 454.49 visits per 100,000 to 2,975.6.¹⁷ Meanwhile, the equivalent ratio for all mental health workers rose sevenfold in the same period from 7.19 to 50.29 per 100,000, although there were still only 4.2 psychiatrists per 100,000 people in 2020.

Inpatient Admissions (per 100,000 individuals)

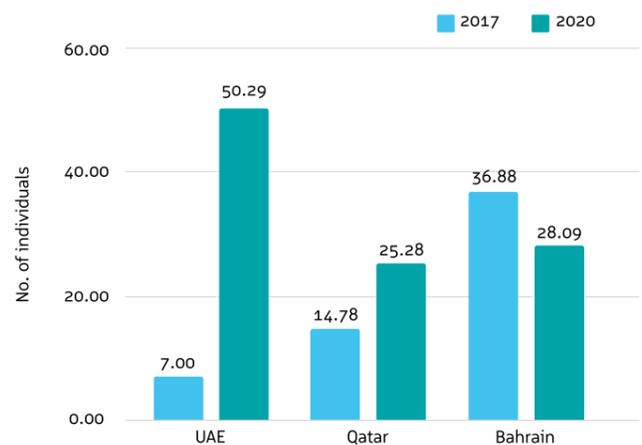


Source: WHO Mental Health Atlas, 2017, 2020

Outpatient Visits (per 100,000 individuals)



Number of mental health workers (per 100,000 individuals)



Mental health professionals per 100,000 population in six GCC countries

	Saudi Arabia	UAE	Oman	Qatar	Kuwait	Bahrain
Psychiatrists	3.41	4.24	1.65	2.22	2.35	4.27
Mental health nurses	2.54	38.66	9.91	18.18	14.50	21.08
Psychologists	3.25	2.89	0.96	1.62	1.35	1.16
Social workers	8.49	0.79	0.24	0.49	0.43	0.43
Other specialized mental health workers (e.g. Occupational Therapists)	-	3.73	0.30	2.75	0.12	1.16
Total mental health professionals	17.70	50.29	13.07	25.28	18.75	28.09

Source: WHO Mental Health Atlas 2020

The general shortage of qualified mental health professionals across the GCC is exacerbated by the lack of relevant university-level degree programs in clinical psychology and psychiatry. In the UAE, for example, there is almost no access to master's or doctorate level programs in these subjects. Compounding the problem, many qualified and competent mental health professionals in the UAE are unable to practice because of the slow licensing process, which is poorly aligned with internationally recognized licensing standards. **"I can personally say we would have hundreds, if not thousands more [mental health] clinicians working in the UAE if it used best licensing practices from overseas,"** observes Dr. Saliha Afridi, managing director of the UAE's LightHouse Arabia Center for Wellbeing, one of the Middle East's few specialist mental health clinics.¹⁸ Meanwhile, an academic study in 2020 found that ignorance and prejudice surrounding mental illness are an additional obstacle to the recruitment and training of mental health professionals in the UAE, reflecting a region-wide problem.¹⁹

Yet despite these issues, there is more positive news about the region's mental health landscape. As we note below (see Section 3), GCC governments in recent years have taken concerted action to destigmatize mental ill health. To accelerate progress on this front, PwC recommends **more systematic and frequent collection of data on mental health awareness and prejudice among citizens, to feed into evidence-based and culturally sensitive education and information programs.**²⁰

Globally, investing in more mental health professionals while breaking down stigmas should serve as the platform for a more outcome-oriented approach to mental healthcare. Mo Gawdat, an Egyptian entrepreneur whose company Unstressable provides advice on how communities deal with stress, argues that **psychiatrists and physicians should be incentivized to focus on the number and pace of recoveries rather than the number of patients treated and the number of sessions provided.** According to Gawdat, increased accountability and incentives to prevent the onset of mental illness can also help reduce inefficiencies. In Gawdat's view, these inefficiencies include countless hours wasted on bureaucracy, which increases the workload of mental health professionals and the risk of burnout. This in turn adds to the cost of delivery and undermines the quality of service, as healthcare providers struggle to fill the gaps. Gawdat contends that more research should be conducted to assess the efficiency of outcome-oriented solutions that could potentially be more effective than the traditional numbers-oriented approach to mental healthcare delivery.

Section 2

How Governments Should Respond To The Digitalization Of Mental Healthcare



Section 2.1

Digitally Aware Patients Are Driving The Rise Of Digital Therapeutics

During the past decade, advances in digital therapeutics (DTx), often enabled by artificial intelligence (AI), have opened up new possibilities for treating mental disorders. **“Digital therapeutics represents a revolutionary opportunity for improving the care of mental health,”** says the leading British workplace consultant and author Bruce Daisley, whose podcast Eat Sleep Work Repeat explores with psychologists, neuroscientists and other experts how we can both pursue fulfilling careers and enjoy mental wellbeing.²¹

The rapidly widening scope of the metaverse also has the potential to create new avenues for treating mental health disorders through virtual simulations, as a study for the journal General Psychiatry noted last year.²² Digital medicine will never completely replace traditional mental healthcare and support. However, the COVID-19 pandemic and related lockdowns prompted governments, policymakers and clinical professionals around the world to explore more urgently how new, rapidly evolving digital technologies could deliver care and support for citizens under extreme stress, who had little or no opportunity to receive expert in-person treatment. The challenge now is to leverage the lessons learned from this experience to integrate digital tools into mainstream mental healthcare.

It should be noted firstly that while digital tools such as mobile devices, apps and sensors can help compensate for shortages of in-person psychiatric services, the global evidence that digital therapeutics reduce costs is uneven. Digital therapeutics companies serving the mental healthcare market regularly publicize the potential cost-saving benefits of their products. However, academic research on this subject tends to be more cautious due to the lack of robust, verifiable evidence. For example, a systematic international review of digital health interventions targeted at children and adolescents with mental health conditions between 2010 and 2020 concluded that their cost-effectiveness was “understudied” and still needed “more rigorous and consistent demonstrations.”²³

A better way to look at the potential for digital therapeutics to improve mental health and wellbeing is by considering the rapid worldwide increase in patients who are “digital natives” at home in the online, virtual world, including for medical care. This is not all for the good, given that digitalization has also triggered the emergence of a wide range of negative mental health symptoms and conditions, especially among young people, including “digital addiction.” For example, a clinical survey in 2017 of “mental health concerns in the digital age” discussed various “detrimental impacts” from overuse of digital technologies, including lower social skills, lack of self-motivation, poor emotional intelligence and empathy, increased conflict with others, Attention Deficit Hyperactivity Disorder (ADHD) and depression in younger age groups.²⁴

The sheer global breadth and depth of digitalization today means that the term “digital native” can often apply to people in all age groups, with direct implications for mental healthcare and wellness policy design and implementation. This progressive digital inclusion of entire populations is driving the growth of online clinical products and services that can sometimes complement or replace traditional in-person healthcare. One illustration is the way many older people during the pandemic became accustomed to ordering repeat prescriptions online and engaging in remote consultations with their doctor to discuss their overall health, including their mental wellbeing. At the same time, claims made about the beneficial impact of digital inclusion on wellbeing, especially among older age groups, are often wholly unproven. For example, in 2021 a systematic review and meta-analysis of the effectiveness of digital technology interventions in reducing loneliness in older adults concluded unambiguously that to date there is “no evidence” to support this assertion.²⁵ As the authors also noted, more research is needed.

Section 2.2

Broadening Access To Digital Mental Healthcare In Developed And Developing Countries

Against this complex, under-researched background, one point is at least clear: **The global increase in patients’ digital awareness, accompanied by accelerating advances in digital therapeutics, is creating opportunities for policymakers to strengthen mental healthcare services and implement effective wellness programs, provided they are conscious of the limits of what new technologies can achieve in this area.** It is encouraging in this regard that a growing number of governments worldwide have begun to integrate digital mental healthcare interventions (DMHIs) progressively into healthcare legislation and public health insurance models. In Germany, for example, the 2021 Digital Healthcare Act entitles any citizen with public health insurance to be reimbursed for using approved DMHIs.²⁶ In the United Kingdom, the National Health Service’s Improving Access to Psychological Therapies program offers free-of-charge computerized cognitive behavioral therapy (CBT) to treat depression and anxiety disorders.²⁷ In Australia, the Department of Health’s Head to Health platform provides a portal to digitalized resources including DMHIs, some of which are free with a prescription or otherwise only cost a small fee.²⁸

As a recent global review of DMHIs notes, there is significantly less access to new digital mental healthcare products and therapies in low- and middle-income countries.²⁹ Furthermore, there is a lack of a robust data base to measure their clinical effectiveness. A 2020 review of 37 studies of DMHIs in low- and middle-income Asian and Latin American countries found that the sample sizes were generally small and did not cover children and adolescents.³⁰ Nonetheless, the global trend toward wider adoption of DTx is clear; even five years ago, it is unlikely that a comparable review of DMHIs across developing countries would have yielded more than a handful of such studies.

The Need For Improved Regulation And Budgetary Discipline In Digital Mental Healthcare

In 2021, data compiled by Grand View Research suggested that the global DTx market was worth \$4.2 billion, with a forecast compound annual growth rate (CAGR) of 26.1% between 2022 and 2030.³⁴ The correct starting point when considering digital mental healthcare is therefore to assume that DTx have entered the healthcare mainstream or will do so imminently, depending on whether a country has a developed or developing economy.

From this perspective, there are two challenges that governments must address now to ensure that mental health policies and programs are fit for this increasingly digitalized future.

Design and implement robust regulations for DTx

According to the Digital Therapeutics Alliance, a global industry association, DTx should be “held to the same standards of evidence and regulatory oversight as traditional medical treatments.”³² In this regard, DTx products should demonstrate “product safety, efficacy, quality, patient centricity and ongoing clinical impact.” Yet while this mission statement is admirable, the reality on the ground is that governments and regulators are struggling to keep pace with a rapidly evolving industry.

The United States, the world’s largest DTx market, illustrates the point. In 2021, an academic study noted that there were only “a few” clinically tested software devices for treating specific mental health disorders such as substance abuse and chronic insomnia that had been authorized by the U.S. Food & Drug Administration (FDA) to that year.³³ The study highlighted six such FDA-approved devices. At the same time, there are numerous DTx products and services for mental health disorders available to consumers without specific FDA approval, ranging from clinically tested devices to those where there is little or no reliable evidence to support the company’s advertising.

We have noted above how countries such as Germany are providing good, early examples for other governments of how to integrate digital mental healthcare into the existing regulatory framework. **Governments need to draw on these case studies urgently to develop similarly robust frameworks, given the rapid evolution and proliferation of DTx for mental disorders.**

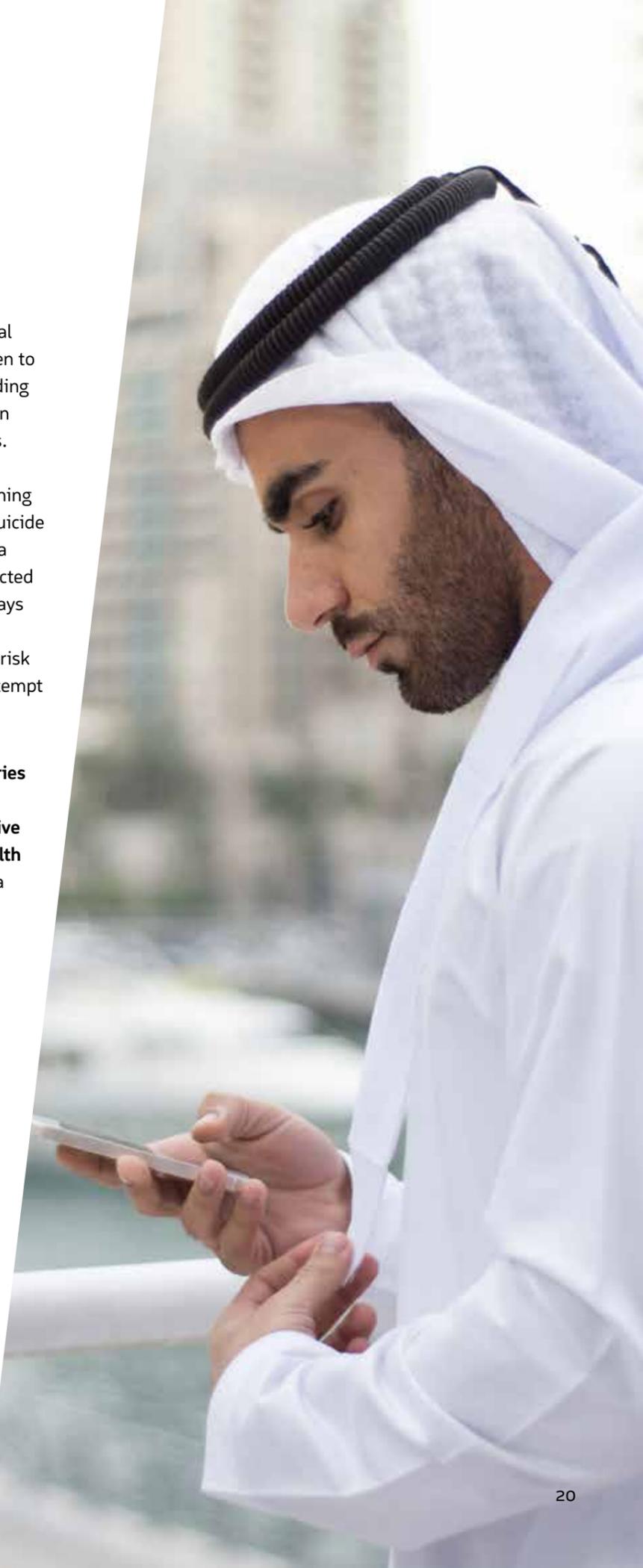
Ensure that DTx is subject to the same level of rigorous cost/benefit analysis in government purchasing programs as traditional therapies and treatments

Governments, as much as individuals, are prone to pay too much for healthcare devices and services that fail to deliver a return on investment in terms of improved health outcomes. This problem is rife in traditional healthcare budgets and a particular issue in mental healthcare, where measuring outcomes is often challenging.

Governments need to recruit and develop the necessary expertise to conduct rigorous cost-benefit analyses of DTx products and services before purchasing them for the public healthcare sector. More broadly, the same principle applies to designing DMHIs; an ineffective digital intervention has the potential to waste huge amounts of taxpayers’ money.

To be clear, there is no doubt that some DTx mental health devices and DMHIs are both clinically proven to deliver benefits and be cost effective. An outstanding example is the use of AI technologies in prediction analytics to predict and manage suicide risk cases. In one 2017 study by the Vanderbilt University Medical Center in the United States, machine learning algorithms were able to improve the analysis of suicide risk data in a survey sample of 5,167 adults with a record of self-injury and reduce the average predicted time frame of future suicide attempts from 720 days to 7 days. The study concluded that the findings represented “a step toward accurate and scalable risk detection and provide insight into how suicide attempt risk shifts over time”.³⁴

The difficulty for governments and health ministries is distinguishing between these types of digital interventions and products, with verifiable positive results, and the mass of other digital mental health solutions whose benefits are uncertain. But it is a challenge that cannot be avoided, given spiraling mental healthcare costs in developed and developing countries.



The Metaverse: The Next Digital Testing Ground For Mental Health And Wellness Policies And Programs

So far, the potential of the metaverse to transform the way we live has scarcely begun to be realized. And in the field of mental health, healthcare professionals and policymakers should at least begin to inform themselves about how the metaverse could open up new therapeutic vistas, given the speed with which digital technologies such as AI and machine learning are already improving patient outcomes.

An August 2022 study of the future of mental health in the metaverse notes that “entering the metaverse will surely impact our reality, with possible negative and positive effects on mental health.”⁵⁵ On the positive side, the study suggests that virtual reality (VR) and augmented reality (AR) tools that simulate real-life interactions in the metaverse could be used to help treat conditions such as ADHD, autism, Post-Traumatic Stress Disorder (PTSD) and eating disorders.

At present, the metaverse is largely uncharted territory for mental health and wellness, but its potential in this field is worth exploring. **The task today for governments is to build a solid, clinically-tested evidence base for treatments and therapies that use the metaverse, and to ensure they are regulated rigorously and consistently to agreed international standards.**



Section 3

The Future Of Mental Health Funding: Why Targeting Wellbeing Is The Key To Controlling Budgets



Closing The Global Mental Health Spending Gap In Challenging Economic Times

On average, governments worldwide spent \$7.49 per capita on mental healthcare and support in 2020, according to official figures compiled by the data research company Statista.³⁶ This figure is clearly inadequate in the context of the global increase in mental health disorders, especially in developing countries. Based on the same data, most governments in Africa and Southeast Asia on average allocate almost nothing (\$0.1) to mental health in national budgets, although these figures may mask spending inside general healthcare expenditure. By contrast, government expenditure in Europe on mental health averaged around \$46.49 per capita in 2020.

The WHO's most recent World Mental Health Atlas 2020 maps how lack of investment in mental health weakens policies and programs at every level, with direct consequences for patients and societies.³⁷ For example, in 2020 only 51% of the WHO's 194 member states reported that their mental health policy or plan was in line with international and regional human rights treaties, while only 52% met the WHO's target standard on mental health promotion and prevention programs.³⁸ Commenting on these findings in October 2021, the WHO's Director-General, Dr. Tedros Adhanom Ghebreyesus, said member states must **"dramatically accelerate the scale-up of investment in mental health, because there is no health without mental health."**

Unfortunately, the challenge set by the WHO is even more daunting today, in context of the world's worst inflationary spiral since the 1970s and the threat or reality of recession in many countries. Governments will need not only to invest far more in mental health for the remainder of the decade, but also to invest more smartly, ensuring that each dollar spent has the maximum positive impact on outcomes. On the supply side, this will mean making well-informed decisions about some of the new clinical technologies and therapeutics outlined in the previous section.

Meanwhile, on the demand side, government mental healthcare budgets will need to be attuned to the specific needs of different age groups, especially children and adolescents, as we will examine.

Above all, governments should never lose sight of the fact that in **mental health, as in all healthcare, prevention of illness is always better than treatment – both for the patient and for budgets.** This universal truth is obscured by the invisibility of many mental illnesses and disorders in a world where stigma, prejudice and misinformation ensure that sufferers are often not even aware that they need clinical treatment and support. Yet this underscores why the concept of wellbeing should be fundamental to mental health budget planning and forecasting. **Well-designed policies and programs that help foster mental "fitness" and resilience can be one of the most cost-effective ways to contain expenditure on psychological and psychiatric diseases and disorders whose severity often increases when patients do not accept that they are ill.**

Governments and health professionals around the world use many different definitions of mental wellbeing, but all of them are in line with how the United Kingdom's National Health Service (NHS) understands the term. "Mental wellbeing means feeling good – about ourselves and the world around us – and functioning well," the NHS states, adding: "Building stronger, wider social connections can help us feel happier and more secure, and give us a greater sense of purpose."³⁹

Governments in developed and developing countries have plenty to learn from each other about how to design and implement wellbeing initiatives, given that the concept scarcely featured in policymaking a decade ago. Set out below are key national case studies that offer lessons and guidance for governments and health professionals in other countries.

Mental Wellbeing Initiatives In Action: Leading National Case Studies

Iceland's Shorter Working Week

Starting in 2015, the Reykjavik City Council and then Iceland's national government organized two trials of a shorter working week, covering more than 2,500 people. The goal was to test whether cutting the 40-hour week by up to five hours with no reductions in pay would improve people's work-life balance and maintain or increase their productivity.

The results of these trials were generally positive across a wide range of health and economic indicators. In most trial workplaces, productivity and service provision remained the same or improved, while the incidence of employee stress and burnout fell. These findings encouraged other employers in Iceland to offer their employees the right to reduce their hours. By June 2021, only around 14% of the country's employees were still contracted to work a full 40-hour week, according to Autonomy, a United Kingdom-based workplace research firm.⁴⁰

In the wake of Iceland's success, other shorter working week trials have been launched in various countries including the United Kingdom, United States, UAE and Australia.

The Netherlands – Making remote working a legal right

The mass shift to remote working during COVID-19 lockdowns has generated much debate around the world about whether splitting time between home and the office can help people achieve a better work-life balance. In this regard, the Netherlands' Flexible Work Act⁴¹, which came into force in 2016, provides useful evidence for policymakers, employers and employees about the potential benefits and drawbacks of hybrid working for a person's mental wellbeing.

Among other measures, the Act states that employees who have been with a company for at least 26 weeks have the right to ask to change their place of work, including to their home, provided the business has 10 or more employees. The law's impact was immediate. For example, in 2019, the last year before COVID-19, 14.1% of the employed population in the Netherlands worked from home, compared with an EU average of 5.4%.⁴²

In July 2022, the Dutch parliament went one step further, approving legislation to establish the right to work from home. The onus is now on the employer to demonstrate that such a request would not be in the company's interests, making it more difficult to refuse such an application.⁴³

The UAE's Digital Wellbeing Council – raising awareness of online harms

Across the Middle East, governments are increasingly aware that their ambitious digital transformation agendas need to incorporate measures to safeguard citizens' mental wellbeing in the online world. The UAE's Council for Digital Wellbeing, established in 2020, is one such initiative, as part of the country's National Program for Happiness and Wellbeing.⁴⁴

The council's remit includes raising awareness about the potential risks of using the internet, with information and education programs covering areas such as online harms for children, digital ethics and cyberbullying. There are also online advice packs for parents on how to protect their children from inappropriate content.

New Zealand's Wellbeing Budgets – pioneering a new economic model

In last year's report on making mental wellbeing a national priority, we highlighted New Zealand's innovative wellbeing budgets as an example for other governments to follow. The 2022 budget, the fourth in the series, provides further evidence of how viewing government expenditure as an investment in physical and mental wellbeing enables better long-term policies across a range of areas, from building a sustainable economy to traditional policy sectors such as employment and social security.⁴⁵ For example, New Zealand uses a Living Standards Framework and a Māori people's "He Ara Waiora" Framework to support its budgetary analysis and provide a structured approach to wellbeing that encompasses different cultural perspectives and knowledge systems.

It is worth noting that New Zealand's wellbeing budgets do not insulate the country from the same economic headwinds that have afflicted the rest of the world in recent years. As the foreword to the 2022 budget observes, high inflation, rising living costs, and supply shortages and bottlenecks are buffeting New Zealand's economy. Yet by focusing on wellbeing, the government believes it can increase citizens' resilience in the face of current and future external shocks and thus improve overall mental and physical health.



Section 4

The Next Generation's Mental Health And Wellbeing: How To Ensure Tomorrow's Voices Are Heard Today



Section 4.1

The Increasing Mental Health Burden Carried By The World's Children And Adolescents

We have already noted the urgent case for governments to provide better mental healthcare and wellbeing support for children and adolescents. One reason is the sheer number of young people worldwide. Globally, around 25% of the world's population is below the age of 15, but the proportion is markedly higher in most developing countries. Across Africa, the world's "youngest" continent, around 40% of the total population is in the 0-15 age group, based on official data compiled by the research group Statista.⁴⁶ As we have also observed, bolstering the mental wellbeing of the next generation is in everyone's interest, to mitigate the impact of working-age adults who cannot realize their full potential as citizens due to mental ill health.

The second reason why children and adolescents merit increased attention by governments when designing and implementing mental health policies and initiatives is because their needs are also particular, compared with the adult population. For example, a non-comprehensive list of children's mental disorders published by the United States' Centers for Disease Control and Prevention (CDC) includes conditions such as Oppositional Defiant Disorder (ODD), Conduct Disorder (CD) and Obsessive-Compulsive Disorder (OCD), all of which can present with specific symptoms in children and adolescents.⁴⁷ In addition, the CDC notes "other conditions and concerns" that can affect children's learning, behavior and emotions, such as autism, substance misuse and self-harm.

A decade ago, one of the main challenges for advocates of improved, targeted child and adolescent mental healthcare and support was persuading many governments to acknowledge the scale of the problem. This is no longer true. The challenge today is firstly a lack of resources, despite growing awareness of the increase in mental health conditions among children and young people. For example, Dr. Afridi of the UAE's LightHouse Arabia Center for Wellbeing says that she and her colleagues are witnessing long waiting lists of children needing to be seen, amid a regional shortage of specialist mental health professionals for young people. **"A lot of their difficulties can be explained by the pervasive and invasive use of social media and gaming, cyberbullying, increased academic pressures, and overworked and stressed parents who may also be struggling with a mental health condition or burnout,"** says Dr. Afridi.⁴⁸

This dearth of resources exacerbates the scarcity of robust, detailed national and international data about children and adolescents' mental health and wellbeing, which can be used to design and implement effective policies and programs. To some extent, the scarcity of data reflects the subject area. Young children and teenagers often struggle to describe their symptoms and their parents may be further inhibited from seeking treatment for their children by stigmas surrounding mental disorders. Dr. Afridi adds that parents also struggle to acknowledge and help their children navigate modern pressures such as those brought about by social media, because they were not part of their own experience as children and adolescents. **This puts the onus on governments to help to bridge the information gap, learning from best practices and case studies in other countries.**

Section 4.2

The Information Gap And How To Close It

The Middle East and North Africa (MENA) region provides a telling illustration of how governments and academic institutions need to conduct and commission more research on mental health and wellbeing among the youngest age groups. Last year's Arab Youth Survey 2022, based on interviews across the region with 3,400 18- to 24-year-olds, found that one in five thought their mental health was "poor or not too good," with financial difficulties and family problems cited as the most important causes of stress.⁴⁹ Yet there is no equivalent MENA-wide survey of mental health among children and adolescents and relatively little regional academic research in this field, compared with Europe and North America.

The better news is that an increasing number of countries around the world are starting to collect and process data more systematically. For example, in 2022, France's health and education ministries launched a nationwide survey of mental health among children aged 3-11, aimed at obtaining data across a range of key indicators, from the prevalence of mental disorders to socio-economic risk factors.⁵⁰ In total, more than 30,000 children participated in the survey, whose findings had not yet been published at the time of this report.

We highlight here three other national survey series that are potential models for other governments to adopt to improve their own data on child and adolescent mental health.

United States: Youth Risk Behavior Surveillance System (YRBSS)⁵¹

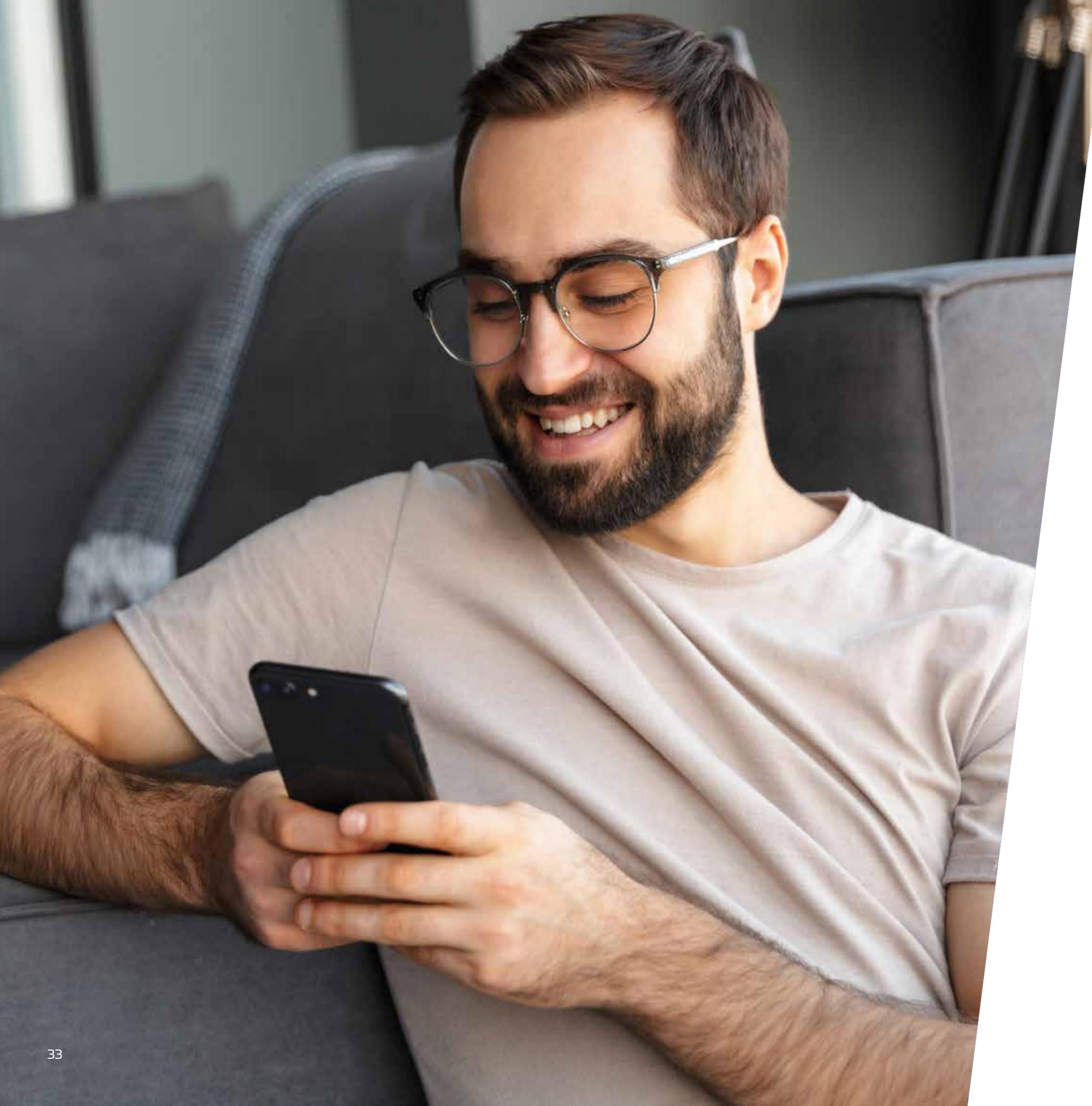
This CDC-sponsored survey of United States high-school age children is conducted every two years and focuses on six categories of physical and mental health-related behaviors, from alcohol and drug abuse to unhealthy diet. The two-tier program includes a national school-based survey led by the CDC and local surveys conducted by state and local education and health agencies and tribal governments.

At a state level, the results of Indiana's 2021 YRBSS demonstrate the richness of the data obtained from a gender-balanced survey sample of 1,029 students in 43 public high schools, as well as the scale of the mental health challenge among the group. Some 30.7% reported that their mental health was not good all or most of the time, including suffering from depression, anxiety or stress; 27.7% said they had seriously considered attempting suicide; and 11.8% had actually attempted suicide. Other questions covered topics such as living with someone who was depressed, mentally ill or suicidal (37.9%) and being separated from a parent or guardian because they went to prison or a detention center (18.3%).⁵²

United Kingdom: Youth Voice Census⁵³

This annual report, organized by the not-for-profit social enterprise Youth Employment UK, tracks attitudes among adolescents and young people across a wide range of issues, including their overall mental health and wellbeing. The latest 2022 report, covering 4,083 respondents between 11 and 30, draws attention to what it describes as an "escalating" mental health crisis among this age group, based on the survey findings.

For example, 28.5% of respondents said they had "social, emotional and mental health challenges." These included negative age-related mental health impacts caused by exam pressure (49.1%), anxiety regarding barriers to finding work (51%) and low self-belief among school children and students in education (36.6%).



Ireland: Young People's Use of Digital Tools to Support Their Mental Health During Covid-19 Restrictions⁵⁴

Themes that surface in national and international surveys of children and young people's mental health can be explored in greater depth through more detailed research. A recent exploratory study of how young people in Ireland used digital tools to support their mental health during the first COVID-19 lockdown in 2020 illustrates the point.

A total of 393 respondents in the 18-24 age group were recruited for the anonymous survey via adverts on social media including Facebook, Twitter and Instagram. Around half (51.4%) reported that they were using social media and mental health apps as sources of support, double the proportion (26%) who were using formal online advice web pages by charities and other organizations. Facebook was the main hub for support groups while Instagram was more popular for engagement with influencers who focused on mental health issues.

Overall, the study indicated that digital technologies and online resources could play an important role in supporting young people's mental health. These interventions would need to be rigorously regulated and monitored by governments and social media companies to ensure that the mental health information, products and services that young people could access were safe and evidence-based.

Conclusion

The Case For Higher, More Focused Investment In Mental Health And Wellbeing In A Challenging Global Economy



It is easy to make the case against increasing expenditure on mental health in difficult economic times. As this report appears, governments worldwide are struggling to contain fiscal deficits after their unprecedented emergency borrowing and spending during the first wave of COVID-19. Meanwhile, the worst global inflationary spike since the 1970s, accompanied by soaring energy prices, increased the pressure on government budgets in 2022.

We hope that the evidence set out in this report demonstrates why **cutting back investment in mental health and wellbeing is short-sighted and ultimately counterproductive**. At the same time, realism is required regarding the fact that budgets in both developed and developing countries are likely to remain stretched for the foreseeable future. In this difficult environment for policymakers, our key recommendations focus on three areas where well-designed and adequately funded policies and programs will deliver the maximum return on investment in terms of improving the mental wellbeing of all citizens.

1. Increase government funding for the recruitment, clinical training and deployment of mental health professionals

It is worth noting that in many parts of the world, most mental health conditions are treated by general practitioners and family medicine doctors, with only severely mentally ill patients referred to psychiatrists. As a result, the ratio of psychiatrists to the total population is often not an accurate measure of mental healthcare coverage. Nonetheless, data compiled by the WHO and national governments in both developed and developing countries reveals an increasing gap between rising demand for clinicians who are qualified in mental healthcare and insufficient supply.

2. Broaden access to digital mental healthcare and mental wellbeing products and services in developed and developing countries

This report reflects a growing consensus that digital medicine is not a “magic fix” in mental healthcare and wellbeing, despite the rise of a global digital therapeutics (DTx) industry and the increasing deployment of digital mental healthcare interventions (DMHIs). Rigorous cost-benefit analysis and regulation are required to ensure these solutions primarily serve the interests of patients – not least, that the claims of manufacturers are clinically tested before products and services reach the market. Yet within this framework, the case for broadening access has already been demonstrated by the first wave of the COVID-19 crisis, when digital technologies helped maintain and even improve mental health provision during a period of extreme stress and anxiety for many citizens. Governments need to build on this experience, while maintaining strict oversight of new DTx devices and treatments.

3. Collect and process more comprehensive, detailed data on child and adolescent mental healthcare and wellbeing, leveraging new technologies and data analytics

As our report highlights, there is currently a mismatch between rising levels of global concern about the mental health and wellbeing of young people, led by the WHO, and the quantity and quality of data in this critical area. Accurate, timely knowledge about the mental health and wellbeing of children and adolescents in low- and middle-income countries is generally patchy at best, even though they are often the section of the population that is most vulnerable to the impact of war, disease and natural disasters. New digital technologies and data analytics, combined with learning from best practices in other countries, can rapidly enable governments to develop a robust evidence base on child and adolescent mental health which will in turn lead to better-informed policies and programs.

The next steps

A year ago, we argued that the principal challenge for governments was to make mental wellbeing a national priority. No one wants a repeat of COVID-19’s terrible impact on so many citizens’ mental health, but the experience has at least made this argument far easier to make. This report has identified many examples from around the world, which demonstrate that an increasing number of governments now see wellbeing as integral to their citizens’ general health, and the health of society. **The challenge is to maintain momentum, leveraging new technologies and advances in DTx, while ensuring that mental health and wellbeing products and services are regulated as rigorously as their counterparts in physical healthcare.**

Endnotes

- ¹ World Health Organization, World Mental Health Report: Transforming Mental Health for All, 2022, <https://www.who.int/publications/i/item/9789240050860>
- ² World Government Summit, Making Mental Wellbeing a National Priority, April 25, 2022, <https://www.worldgovernmentsummit.org/observer/reports/2022/detail/making-mental-wellbeing>
- ³ Scottish Government, “Tackling mental health stigma and discrimination”, Sept 27, 2021, <https://www.gov.scot/news/tackling-mental-health-stigma-and-discrimination/>
- ⁴ New Zealand Government, Wellbeing Budget 2022: A Secure Future, <https://www.treasury.govt.nz/publications/wellbeing-budget/wellbeing-budget-2022-secure-future>
- ⁵ UAE Government, Digital Wellbeing Council, <https://www.digitalwellbeing.ae/>
- ⁶ World Health Organization, World Mental Health Report: Transforming Mental Health for All, 2022, <https://www.who.int/publications/i/item/9789240050860>
- ⁷ World Health Organization, “Mental Health and COVID-19: early evidence of the pandemic’s impact: scientific brief”, March 2, 2022, <https://apps.who.int/iris/handle/10665/352189>
- ⁸ US Census Bureau, Household Pulse Survey 2020-2022, “Adults Reporting Symptoms of Anxiety or Depressive Disorder During COVID-19 Pandemic”, <https://www.kff.org/other/state-indicator/adults-reporting-symptoms-of-anxiety-or-depressive-disorder-during-covid-19-pandemic/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
- ⁹ United Nations, “Time to make neglected area of mental health ‘a global priority,’ urges Guterres”, Oct 2, 2022, <https://news.un.org/en/story/2022/10/1129377>
- ¹⁰ United Nations, “Time to make neglected area of mental health ‘a global priority,’ urges Guterres”, Oct 2, 2022, <https://news.un.org/en/story/2022/10/1129377>
- ¹¹ Chisholm, Dan et al., “Scaling-up treatment of depression and anxiety: a global return on investment analysis”, *The Lancet*, 3, 5, May 1, 2016, pp.415-424, [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(16\)30024-4/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(16)30024-4/fulltext)
- ¹² PwC Middle East, The Socio-Economic Impact of Untreated Mental Illness, June 2022, <https://www.pwc.com/m1/en/publications/socio-economic-impact-untreated-mental-illness.html>

Endnotes

- ¹³ World Health Organization, “Adolescent Mental Health”, Nov 17, 2021, <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- ¹⁴ Moon Fai Chan et al., “Child and adolescent mental health disorders in the GCC: A systematic review and meta-analysis”, *International Journal of Pediatrics and Adolescent Medicine*, 8 (3), Sept 2021, pp.134-145, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8319685/>
- ¹⁵ World Health Organization, “Adolescent Mental Health”, Nov 17, 2021, <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- ¹⁶ US Department of Health and Human Services, Health Resources Administration, Office of Graduate Medical Education, Report of the Graduate Medical Education National Advisory Committee to the Secretary, 1980, cited in Satiani, Anand et al., “Projected Workforce of Psychiatrists in the United States: A Population Analysis”, *Psychiatry Online*, March 15, 2018, [https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201700344#:~:text=Many%20have%20utilized%20a%20psychiatrist,adults%20and%20children%20\(19\).](https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201700344#:~:text=Many%20have%20utilized%20a%20psychiatrist,adults%20and%20children%20(19).)
- ¹⁷ World Health Organization, Mental Health Atlas, 2020, <https://www.who.int/publications/i/item/9789240036703>
- ¹⁸ Dr. Saliha Afridi, LightHouse Arabia Center for Wellbeing, direct input on this report, Dec 2022
- ¹⁹ Amber Haque, “Mental Health Laws and Reflections on Culture: The Case of United Arab Emirates”, *Journal of Muslim Mental Health*, 14, 1, 2020, <https://quod.lib.umich.edu/j/jmmh/10381607.0014.103/--mental-health-laws-and-reflections-on-culture-the-case?rgn=main;view=fulltext>
- ²⁰ PwC Middle East, The Socio-Economic Impact of Untreated Mental Illness, June 2022, <https://www.pwc.com/m1/en/publications/socio-economic-impact-untreated-mental-illness.html>
- ²¹ Bruce Daisley, direct input on this report, Dec 2022
- ²² Usmani, Sada Suhail et al., “Future of mental health in the metaverse”, *General Psychiatry*, Vol. 5, Issue 4, Aug 2022, <https://gpsych.bmj.com/content/35/4/e100825>
- ²³ Lehtimaki, Susanna et al., “Evidence on Digital Mental Health Interventions for Adolescents and Young People: Systematic Overview”, *Journal of Medical Internet Research*, 8, 4, April 2021, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8120421/>
- ²⁴ Scott, David. A et al., “Mental Health Concerns in the Digital Age”, *International Journal of Mental Health and Addiction*, 15, 2017, pp. 604-613, <https://link.springer.com/article/10.1007/s11469-016-9684-0>
- ²⁵ Shah, Syed Ghulam Sarwar et al., “Evaluation of the Effectiveness of Digital Technology Interventions to Reduce Loneliness in Older Adults: Systematic Review and Meta-analysis”, *Journal of Medical Internet Research*, 23, 6, June 2021, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8214187/>
- ²⁶ Gerke, Sara et al., “Germany’s digital health reforms in the COVID-19 era: lessons and opportunities for other countries”, *npj Digital Medicine*, 3, 94, July 10, 2020, <https://www.nature.com/articles/s41746-020-0306-7>
- ²⁷ Richards, Derek et al., “Digital IAPT: the effectiveness & cost-effectiveness of internet-delivered interventions for depression and anxiety disorders in the Improving Access to Psychological Therapies programme: study protocol for a randomised control trial”, *BMC Psychiatry*, 59, March 2, 2018, <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-018-1639-5>
- ²⁸ <https://www.headtohealth.gov.au/>
- ²⁹ Lattie, Emily G. et al., “An overview of recommendations for more accessible digital mental health services”, *Nature Reviews Psychology*, 1, 2022, pp. 87-100, <https://www.nature.com/articles/s44159-021-00003-1>
- ³⁰ Carter, Helena et al., “The emergence of digital mental health in low-income and middle-income countries: A review of recent advances and implications for the treatment and prevention of mental disorders”, *Journal of Psychiatric Research*, 133, Jan 2021, pp 223-246, <https://pubmed.ncbi.nlm.nih.gov/33360867/>
- ³¹ Grand View Research, Digital Therapeutics Market Size, Share & Trends Analysis Report By Application (Diabetes, Obesity, CVD), By End User (Patients, Providers, Payers, Employers), By Region, And Segment Forecasts, 2022 - 2030, <https://www.grandviewresearch.com/industry-analysis/digital-therapeutics-market>
- ³² Digital Therapeutics Alliance, “Understanding DTx: A New Category of Medicine”, 2022, <https://dtxalliance.org/understanding-dtx/>
- ³³ Nwosu, Adaora et al., “Digital therapeutics for mental health: Is attrition the Achilles heel?”, *Frontiers in Psychiatry*, 13, 2002, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9380224/>
- ³⁴ Walsh, Colin G. et al., “Predicting Risk of Suicide Attempts Over Time Through Machine Learning”, *Clinical Psychological Science*, 5, 3, April 11, 2017, <https://journals.sagepub.com/doi/10.1177/2167702617691560>
- ³⁵ Usmani, Sadia Suhail et al., “Future of mental health in the metaverse”, *General Psychiatry*, 35, 4, Aug 2022, <https://gpsych.bmj.com/content/35/4/e100825>
- ³⁶ <https://www.statista.com/statistics/1035552/government-mental-health-expenditure-per-capita-by-region/>
- ³⁷ World Health Organization, Mental Health Atlas 2020, Oct 8, 2021, <https://www.who.int/publications/i/item/9789240036703/>
- ³⁸ World Health Organization, “World misses most 2020 mental health targets; extension of WHO Mental Health Action Plan to 2030 provides new opportunity for progress”, Oct 8, 2021, <https://www.who.int/news/item/08-10-2021-who-report-highlights-global-shortfall-in-investment-in-mental-health>
- ³⁹ National Health Service, “Five steps to mental wellbeing”, <https://www.nhsinform.scot/healthy-living/mental-wellbeing/five-steps-to-mental-wellbeing#connect-for-mental-wellbeing>
- ⁴⁰ Autonomy, Going Public: Iceland’s Journey to a Shorter Working Week, June 2021, <https://autonomy.work/portfolio/icelandsww/>
- ⁴¹ <https://paltheoberman.nl/en/news/39/the-flexible-work-act-wet-flexibel-werken>
- ⁴² Eurostat, “How usual is to work from home?”, April 24, 2020, <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20200424-1>
- ⁴³ Bloomberg, Dutch House Approves to Make Work From Home a Legal Right, <https://www.bloomberg.com/news/articles/2022-07-05/dutch-parliament-approves-to-make-work-from-home-a-legal-right>
- ⁴⁴ UAE Government, Digital Wellbeing Council, <https://www.digitalwellbeing.ae/>
- ⁴⁵ New Zealand Government, Wellbeing Budget 2022: A Secure Future, <https://www.treasury.govt.nz/publications/wellbeing-budget/wellbeing-budget-2022-secure-future>
- ⁴⁶ Statista, Proportion of selected age groups of world population and in regions in 2022, <https://www.statista.com/statistics/265759/world-population-by-age-and-region/>
- ⁴⁷ Centers for Disease Control and Prevention, Children’s Mental Disorders, last reviewed Nov 16, 2022, <https://www.cdc.gov/childrensmentalhealth/symptoms.html>
- ⁴⁸ Dr. Saliha Afridi, LightHouse Arabia Center for Wellbeing, direct input on this report, Dec 2022
- ⁴⁹ Arab Youth Survey 2022, <https://arabyouthsurvey.com/en/findings/#my-lifestyle-9>

Endnotes

- ⁵⁰ Santé publique France, “Enabee: étude nationale sur le bien-être des enfants”, 30 May, 2022, <https://www.santepubliquefrance.fr/etudes-et-enquetes/enabee-etude-nationale-sur-le-bien-etre-des-enfants>
- ⁵¹ Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, <https://www.cdc.gov/healthyyouth/data/yrbs/index.htm#:~:text=YRBSS%20is%20a%20system%20of,health%20agencies%20and%20tribal%20governments.>
- ⁵² Indiana Department of Health, 2021 Youth Risk Behavior Survey, June 2022, 2021 <https://www.in.gov/health/mch/files/2021-YRBS-2020-SHP-Slides.pdf>
- ⁵³ Youth Employment UK, Youth Voice Census Report 2022, “A stark reality: young people are in an escalating state of mental crisis”, Sept 2022, <https://www.youthemployment.org.uk/youth-voice-census/>
- ⁵⁴ Claudette Pretorius and David Coyle, “Young People’s Use of Digital Tools to Support Their Mental Health During Covid-19 Restrictions”, *Frontiers in Digital Health*, Dec 1, 2021, <https://www.frontiersin.org/articles/10.3389/fdgth.2021.763876/full#B32>

Authors

Hamish Clark

Chief Wellness Officer, PwC
Middle East

Thierry Boulos

Manager, Health Industries,
PwC Middle East

Acknowledgments

PwC Middle East would like to thank Dr. Saliha Afridi from LightHouse Arabia, Mo Gawdat from Unstressable and Bruce Daisley of Eat Sleep Work Repeat for their insights and contributions to this paper.



**WORLD
GOVERNMENT
SUMMIT**



@WorldGovSummit



#WorldGovSummit

Join the conversation
worldgovernmentsummit.org