





## HEALTH & TECHNOLOGY: WHAT YOUNG PEOPLE REALLY THINK

Despite progress in many areas, the world continues to face massive global health challenges. **Half** of the world's population — over 3.5 billion people — struggle to access essential health services. Health expenses push more than **100 million people** into extreme poverty each year. Environmental pollution and changes in nutrition mean that noncommunicable diseases are now the **leading cause** of mortality and morbidity. Air pollution has reached record levels and is considered by the World Health Organization as the **greatest environmental risk to health**, while climate change is predicted to cause **250,000 additional deaths** each year between 2030 and 2050. Global health spending has reached record levels and is expected to increase to over **\$15 trillion** by 2050. Despite leveling off since 2010, international development assistance for health has also grown significantly over the past two decades, reaching nearly **\$39 billion** in 2018. But investments do not always reach the most vulnerable.

### SURVEY QUICK FACTS



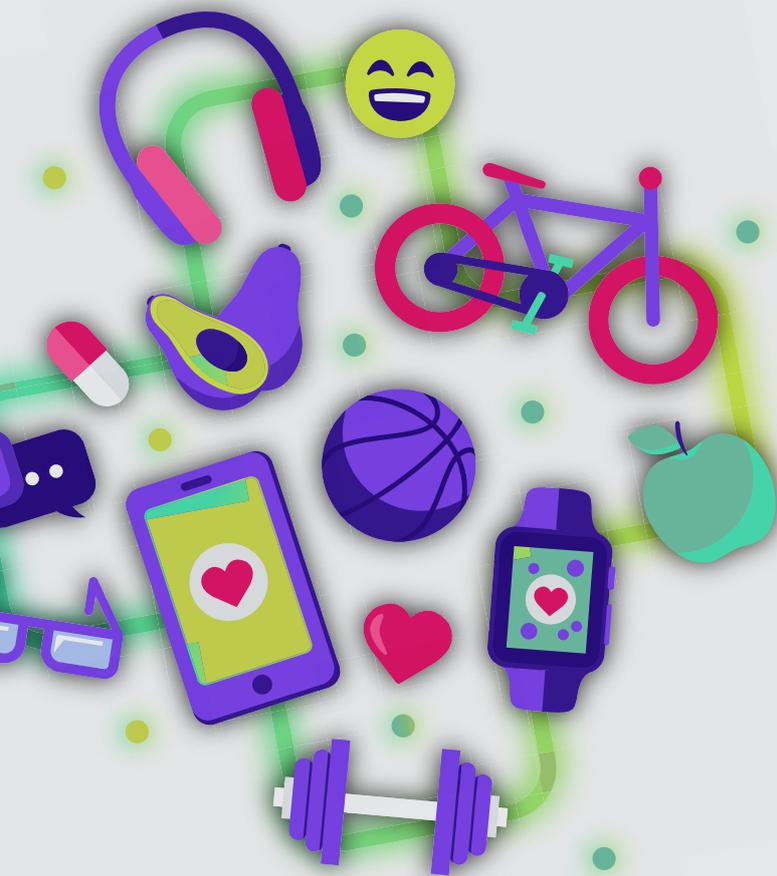
**+ 1.5K  
RESPONDENTS  
> 50% FEMALE  
PARTICIPATION**



**RESPONSES  
FROM +125  
COUNTRIES**

Young people are among the most neglected groups. Although people between 15 and 29 years old make up **nearly a quarter** of the world's total population, the international community dedicates less than **2% of global development assistance for health** toward young people.\* This is despite there being a general agreement that the Sustainable Development Goals and in particular target 3.8 on Universal Health Coverage cannot be reached without investment in young people's health and well-being.

There are solutions. The digitalization of health interventions has tremendous



potential to improve access and reduce costs for the world's most vulnerable people. Global organizations are recognizing the importance of technology for health. Earlier this year, for example, WHO published a first draft of its "**Global Strategy on Digital Health**" that places digital health technology at the center of achieving UHC. While these are promising signs, it is less clear what young people actually think about health and technology: how important is technology in their health care decision-making? How do they envision the role of technology within a health care system?

Engaging with young people on these issues is critical. As digital natives, young people bring a unique perspective to global discussions and can provide valuable contributions when given

the opportunity. After all, young people themselves are best placed to understand their own needs and offers solutions that work. Acknowledging the importance of increasing engagement with young people, WHO published "**Engaging Young People for Health and Sustainable Development**" in 2018, laying out opportunities to meaningfully integrate young people in leadership and key decision-making processes. But what do young people think about their engagement in global governance? And what role should they play in health discussions?

To contribute to this important conversation, a new **coalition** of the world's leading health and rights organizations including Fondation Botnar, Women Deliver, PATH, and the Partnership on Maternal, Neonatal and Child Health, worked with Devex to conduct a global youth survey that sheds light on what young people really think about technology in global health.

Through an online survey we gathered the views of over 1,500 young people around the world. Although limitations in the methodology mean that the results are not representative of all young people and averages mask the vastly different realities of young individuals around the world, our survey uncovered new data that helps better understand young people's views on health, technology and youth participation.

The following provides an overview of some of the most important findings. The overarching messages from young people are clear: 1) the international community needs to focus more on young people's health; 2) technology will be critical to achieving UHC; and 3) as digital natives, young people must be given a strong voice in decision-making processes.

## **KEY TERMINOLOGY AND DEFINITIONS:**

**Sustainable Development Goals** – the 17 SDGs, adopted by all United Nations member states in 2015, are a global blueprint to end poverty, protect the planet and ensure that all people live in peace and prosperity by 2030.

**Universal Health Coverage** – is defined by the World Bank as “ensuring that people have access to the health care they need without suffering financial hardship.” SDG 3.8 is the global target to achieving UHC.

**Young people** – are not a homogenous group and there are significant differences across age, gender, ethnicity, religious identity, sexual identity, economic status and other factors. There are also differences in definitions of young people. However, for the purpose of this report we define “young people” as individuals between the ages of 15 and 30 years old, except otherwise stated.

**Digital health technology** – refers to the use of telecommunications and virtual technology to deliver health care outside of traditional health care facilities.

**Artificial Intelligence in health** – refers to the use of computers for automated decision-making to perform tasks that normally require human intelligence such as diagnosis through algorithms, machine learning and software.

**Internet of Things** – refers to the connection of devices to the internet that are not typically associated with internet connectivity such as cars or houses.

**Digital Natives** – is a term created by Mark Prensky in 2001 to describe the generation of people who grew up with technology including computers and the internet. Digital natives are familiar with technology and computers at an early age.

*\*data refers to young people between the ages of 15-24*

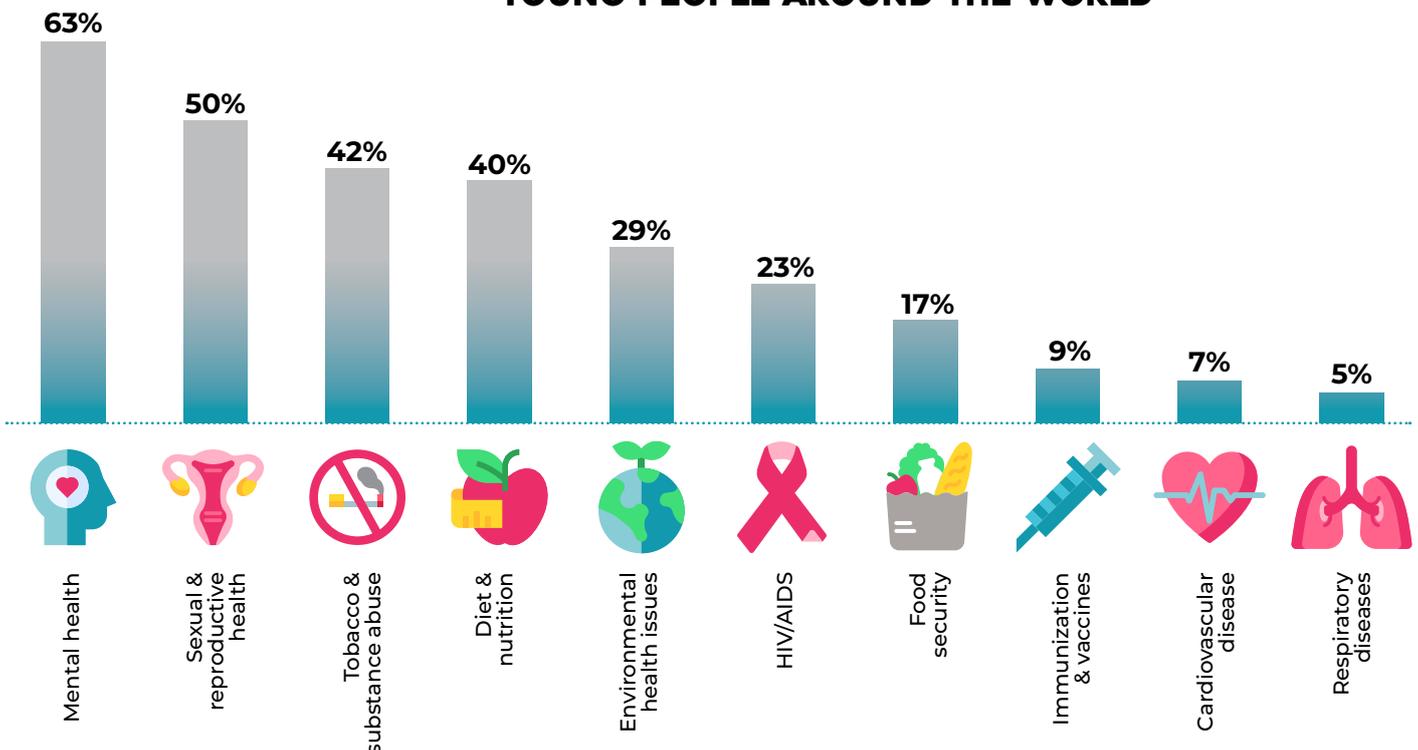


## MORE THAN NUMBERS: YOUNG PEOPLE'S HEALTH CONCERNS

According to the latest global figures, **over 2.6 million** young people aged 15-29 died in 2016 — that's over 7,100 a day. Road traffic accidents are the leading cause of death, followed by self-harm, violence, maternal conditions, and the consequences of HIV and AIDS. Although there are positive changes — the overall mortality rate in this age group has **dropped by about half a million** and the mortality rate related to HIV and AIDS has halved since 2007 — progress has been much slower than for other age groups and figures remain unacceptably high.

Statistics like these are important to understand global health trends, but equally important are the views of young people themselves. So, we asked them directly about their health.

### TOP 10 HEALTH CONCERNS FACED BY YOUNG PEOPLE AROUND THE WORLD



According to the latest global figures, **over 2 million** young people aged 15-29 died in 2017 — that’s nearly 5,500 a day. Road traffic accidents are the leading cause of death, followed by self-harm, violence, maternal conditions, and the consequences of HIV and AIDS. Although there are positive changes — the overall mortality rate in this age group has **dropped by about half a million** and the mortality rate related to HIV and AIDS has halved since 2007 — progress has been much slower than for other age groups and figures remain unacceptably high.

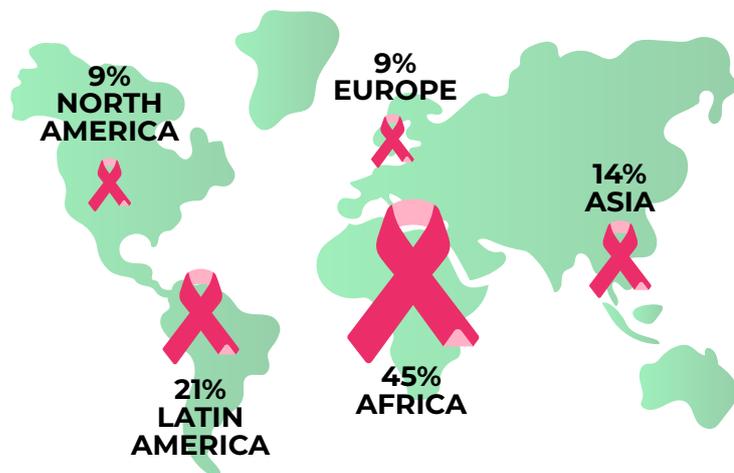
Statistics like these are important to understand global health trends, but equally important are the views of young people themselves. So, we asked them directly about their health.



While mental health is also less of a concern among young people in Africa – 41% compared to 72% for the rest of the world – young Africans are more worried about sexual and reproductive health and HIV and AIDS than young people from other regions.

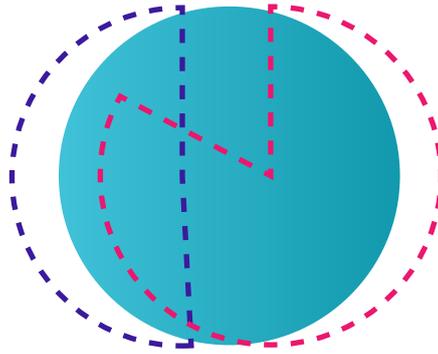
**YOUNG PEOPLE IN ASIA RATE THE STATE OF THEIR CURRENT HEALTH THE LOWEST. ONLY 41% STRONGLY AGREE THAT THEY ARE IN GOOD HEALTH COMPARED TO 61% OF YOUNG AFRICANS**

**PERCEPTION OF HIV/AIDS AS TOP HEALTH CONCERN ACROSS REGIONS:**



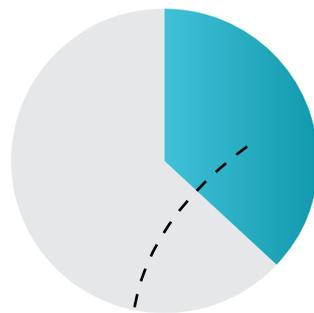
Overall, young people feel they are in good health and more importantly agree that taking care of themselves today will pay off in the future.

**51% OF YOUNG PEOPLE STRONGLY AGREE THAT THEY ARE CURRENTLY IN GOOD HEALTH**



**83% OF YOUNG PEOPLE STRONGLY AGREE THAT TAKING CARE OF THEMSELVES NOW WILL PAY OFF IN THE FUTURE**

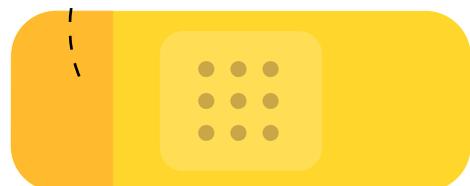
However, not everyone believes that they have necessary access to the health services they need.



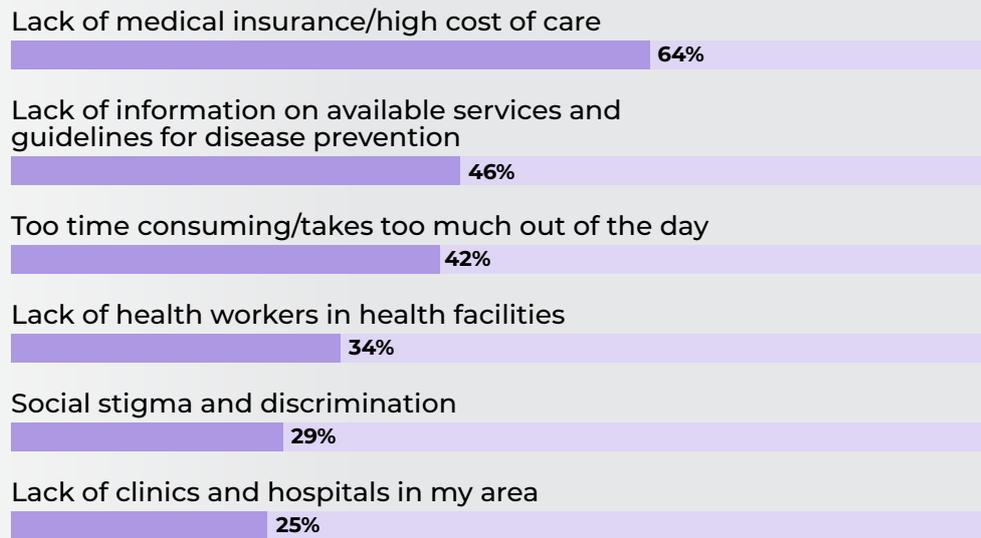
**37% OF YOUNG PEOPLE SAY THAT THEY HAVE DIFFICULTY ACCESSING HEALTH SERVICES**

And level of access differs across regions.

**WHILE 20% OF YOUNG PEOPLE SURVEYED IN EUROPE AND NORTH AMERICA SAY THEY STRUGGLE WITH ACCESS TO HEALTH SERVICES, 45% OF YOUNG PEOPLE FROM AFRICA, ASIA, AND NORTH AMERICA NOTE THAT THEY HAVE DIFFICULTY ACCESSING SERVICES**



## TOP REPORTED BARRIERS PREVENTING YOUNG PEOPLE FROM ACCESSING HEALTH SERVICES:



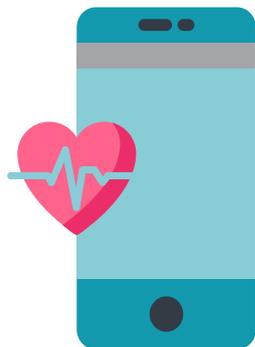
According to survey respondents, lack of insurance and the high costs of health care are the biggest barriers for young people's access to health services. But limited information around services and the time it takes to reach health services are also barriers.





## **YOUNG PEOPLE AGREE: INVESTMENT IN TECHNOLOGY IS CRITICAL**

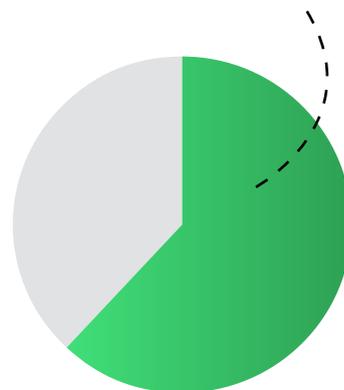
Health technology has had a huge impact on almost all areas of professional health care. The ongoing digitalization of health records and new technologies such as telemedicine are challenging traditional doctor-patient relationships and creating a more patient-focused health care systems. Artificial Intelligence is another game-changer, offering personalized treatment plans and promising new levels of efficiency in patient care. At the same time, technology for health has not reached its full potential. **Interoperability** – the ability of computer systems to connect and exchange data – and access to technology, for instance, remain challenges in many countries. Yet this does not stop young people believing in the transformative power of technology.

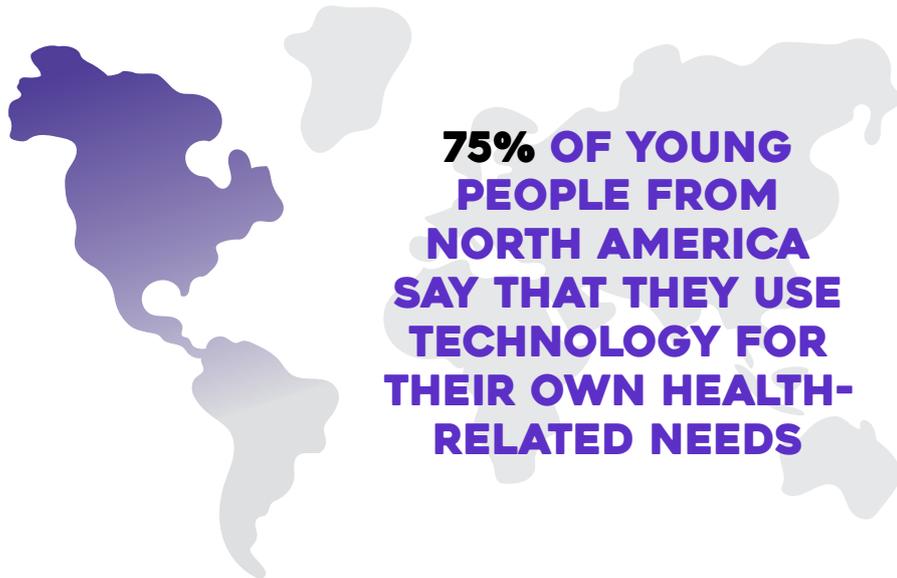


**92% OF YOUNG  
PEOPLE AGREE  
THAT TECHNOLOGY  
IS A CRITICAL  
ENABLER OF  
HEALTH CARE  
SOLUTIONS**

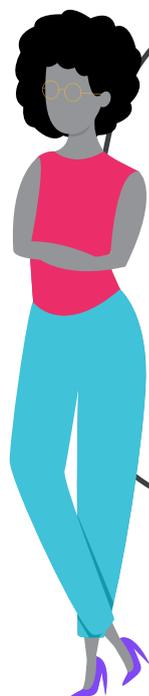
And:

**OF THE YOUNG PEOPLE  
WE SURVEYED 62% SAY  
THAT THEY ALREADY  
USE TECHNOLOGY FOR  
THEIR OWN HEALTH-  
RELATED NEEDS**





Technology is used to address a wide variety of health needs, from finding health practitioners to scheduling appointments and using fitness tracking applications and gear, to accessing critical health information and advice online.



**“I USE TECHNOLOGY TO SEARCH FOR CREDIBLE HEALTHCARE PROVIDERS AROUND MY GEOGRAPHICAL LOCATION. TECHNOLOGY ALSO HELPS ME GAUGE THE AMOUNT OF TIME IT WOULD TAKE TO GET TO THESE FACILITIES IN CASE OF AN EMERGENCY.”**

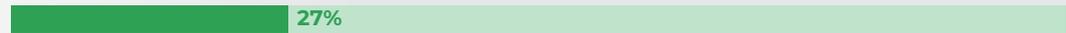
Female respondent from Africa;  
aged 25-30

## TOP REPORTED EXAMPLES OF TECHNOLOGY USED BY YOUNG PEOPLE FOR HEALTH NEEDS\*

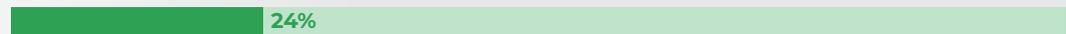
Access health information and advice



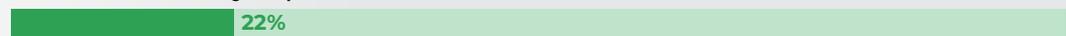
Identifying health practitioners and booking appointments



Use of fitness tracking applications & gear



Record and analyze personal health data



*\*figures show % of coded answers.*

However, despite young people's openness to technology and change, there are challenges and concerns. Young people are particularly worried about data security and false information.

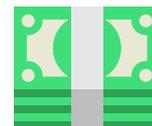
## BIGGEST CONCERNS REPORTED BY YOUNG PEOPLE WHEN USING APPS AND TECHNOLOGY FOR HEALTH:



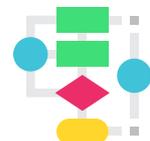
Personal data security  
**67%**



Inaccurate information  
**46%**



High cost of entry & maintenance  
**29%**



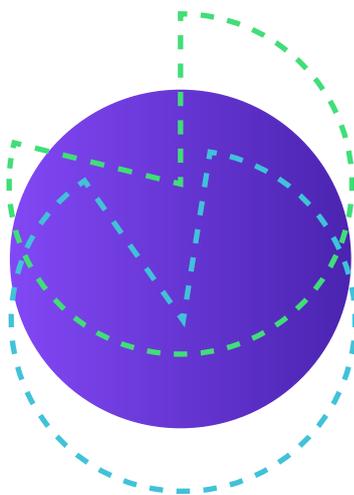
Bias in algorithm  
**28%**



## YOUNG PEOPLE BELIEVE: POLICY INVOLVEMENT IS NECESSARY

The health of young people today is the foundation for future generations of healthy adults. With young people making up nearly a quarter of the world's population, investments in adolescent health brings with it a **triple dividend of health benefits** – for young people today, into adulthood and for the next generation of children. Yet, until recently governments, global institutions and the broader international community have been slow to increase investments in young people's health. Adolescence is considered the healthiest time of life, which explains why young people's health remains a low priority. For instance, only 2% of global development health assistance was directed towards young people between 2003 and 2015. This comes despite the fact that declining mortality rates among adolescents **have not mirrored** the rapid declines in under five mortality rates. While there is increasing recognition that more needs to be done — starting with the “**U.N.'s Global Strategy for Women's, Children's and Adolescents' Health**” launched in 2015 – a lot of work still lies ahead.

The survey results support this point:



**79% OF YOUNG PEOPLE AROUND THE WORLD THINK THAT THEIR HEALTH CONCERNS ARE NOT ADEQUATELY ADDRESSED**

**88% THINK THAT GOVERNMENTS NEED TO DO MORE TO PROVIDE ACCESS TO AFFORDABLE AND QUALITY HEALTH CARE**



**YOUNG WOMEN ARE EVEN MORE WORRIED. 86% SAY THAT THEIR HEALTH CONCERNS ARE NOT ADEQUATELY ADDRESSED COMPARED TO 74% OF YOUNG MEN**

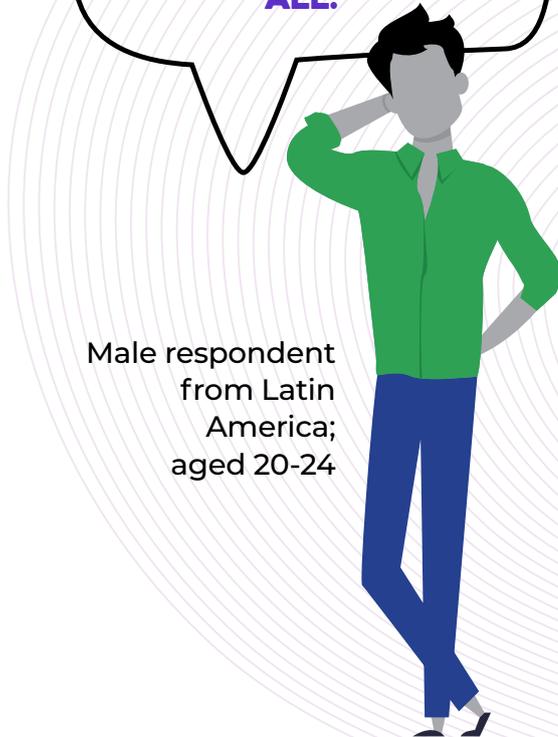
In fact, young people think that it is the responsibility of governments to ensure health care is accessible to all. According to survey respondents, governments need to focus more on the marginalized and disadvantaged, invest in facilities, training and education, and do more to address emerging health challenges among young people such as mental health. In other words, UHC must remain a top priority for governments.

**BASED ON YOUR PERSONAL EXPERIENCE, PLEASE FURTHER EXPLAIN YOUR VIEWS ON THE GOVERNMENT’S ROLE IN PROVIDING ACCESS TO AFFORDABLE AND QUALITY HEALTH CARE\***



*\*figures show % of coded answers.*

**“HEALTH IS A HUMAN RIGHT AND ALL GOVERNMENTS HAVE A RESPONSIBILITY TO THE PEOPLE OF THEIR COUNTRIES. AS SUCH, IT IS THEIR RESPONSIBILITY TO ENSURE THAT HEALTHCARE IS ACCESSIBLE AND AFFORDABLE TO ALL.”**



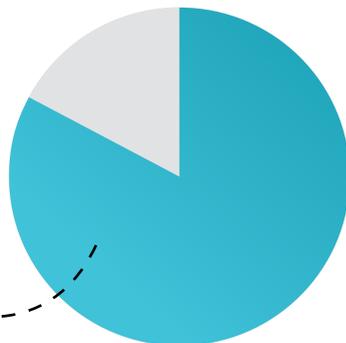
**“THE GOVERNMENT WORKS FOR THE PEOPLE, AND I BELIEVE IT IS THEIR ROLE TO PROVIDE ACCESS TO AFFORDABLE AND QUALITY HEALTHCARE THROUGH POLICIES AND SERVICES. HEALTHCARE SHOULD NOT BE POLITICIZED - IT IS A BASIC HUMAN RIGHT TO LIVE WELL.”**

Female respondent from North America; aged 25-30



Young people strongly believe that their involvement in the decisions that governments make about health care is necessary and that it should follow the mantra “nothing about us, without us.” Involving young people in decision-making processes leads to a better understanding of challenges and needs, and ultimately helps improve policies and solutions. Yet, latest figures from the Inter-Parliamentary Union show that although the global proportion of members of parliaments under 30 years of age has risen since 2016, **young people constituted just 2% of the world’s parliamentarians in 2018.** While there is increasing recognition that engaging young people in discussions is critical to tap into this transformative potential, young people need the resources and access to meaningfully and authentically take up leadership positions. The survey results show that young people are looking for more meaningful participation.

**83% OF YOUNG PEOPLE THINK THAT THEY MUST BE INVOLVED IN THE DECISIONS THAT GOVERNMENT AND POLITICIANS MAKE ABOUT HEALTH CARE**



**14% EVEN THINK THAT YOUNG PEOPLE SHOULD LEAD THE DISCUSSION ON HEALTH CARE**

Technology can make a real difference in policy decision-making. According to the survey, young people believe that technology can be an important tool to raise awareness, collect data to inform lawmakers, and open avenues for dialogue and sharing of ideas. As digital natives, engaging young people through technology is a logical conclusion.

**“I THINK THAT THE GOVERNMENT SHOULD INVEST MORE IN HEALTH CARE SERVICES AS THEY ARE ESSENTIAL. NOT ONLY DO WE NEED HEALTH SERVICES, INVESTING IN SUCH WILL ADVANCE OUR COUNTRY.”**

Male respondent from Asia; aged 15-19

### WHAT WOULD BE THE BIGGEST POSITIVE IMPACT OF TECHNOLOGY ON PUBLIC HEALTH POLICY?\*



Create platforms for raising awareness



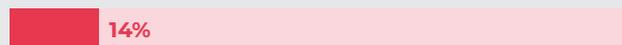
Collect data to inform lawmakers



Open avenues for dialogue and ideas



Provide feedback mechanisms

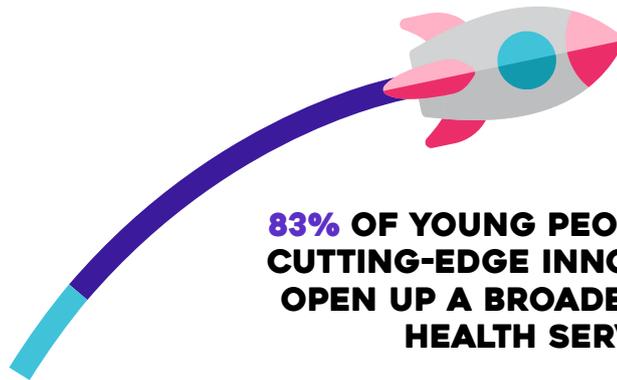


*\*Single selection question. Low and similar percentages indicate that respondents are divided on what they believe is the single most important impact of technology on public health.*



## **YOUNG PEOPLE KNOW: TECHNOLOGY IS THE FUTURE OF HEALTH**

It is clear that young people believe that technology must play an essential role in the future of health care. The majority of young people agree that five to 10 years from now, technology will be at the forefront of ensuring access to quality health services.



**83% OF YOUNG PEOPLE SAY THAT  
CUTTING-EDGE INNOVATION WILL  
OPEN UP A BROADER RANGE OF  
HEALTH SERVICES**

And expectations of personal use of technology are similar.

**84% OF YOUNG PEOPLE SAY  
THAT IN THE FUTURE THEY  
WILL USE MORE DIGITAL,  
WEB-BASED TECHNOLOGIES,  
AND/OR APPS TO TRACK  
THEIR HEALTH AND INFORM  
HEALTH-RELATED DECISIONS**



Young people express high hopes for the potential of AI; the “Internet of Things,” including smart devices and digital trackers; data analytics; smartphones; and biometrics to revolutionize access to and delivery of health care.

**“YOUNG PEOPLE DON’T KNOW A WORLD WITHOUT TECHNOLOGY. IT’S WHERE WE HANG OUT, LEARN, CONNECT, SHARE AND PLAY. THE BIGGEST BENEFIT WILL ALWAYS BE RAISING AWARENESS ABOUT HEALTH CONDITIONS, ENABLING YOUNG PEOPLE TO KNOW THEIR RIGHTS AND WHERE TO SEEK SERVICES.”**

Female respondent from Europe; aged 25-30

### **TOP 5: TECHNOLOGY AREAS WITH THE MOST POTENTIAL FOR HEALTH 5-10 YEARS FROM NOW**



Artificial Intelligence/ Machine Learning

35%



Internet of Things

35%



Data Analytics

33%



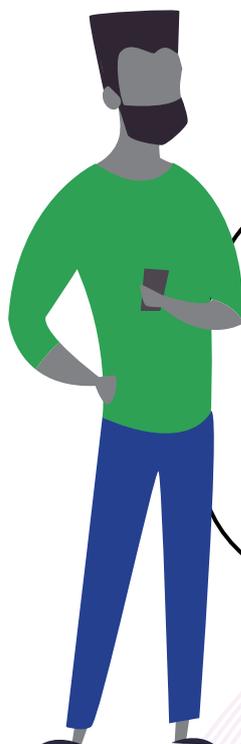
Smartphones

31%



Biometrics

21%



**“TECHNOLOGY PROVIDES BETTER ACCESS, QUICKER ANSWERS AND THE OPPORTUNITY TO BE MORE ENGAGING TO YOUNG PEOPLE WHO RELY SO MUCH ON TECHNOLOGY FOR OTHER THINGS IN THEIR LIFE.”**

Male respondent from Asia; aged 20-24

## TOP 5 BENEFITS OF INTEGRATING TECHNOLOGY WITH YOUNG PEOPLE'S HEALTH CARE AND WELL-BEING:

Health care is more accessible and affordable

48%

Accurate health information is shared faster

42%

Health assessments are quicker

39%

Empowers young people to choose health care options

36%

Improves monitoring of health

22%

*\*figures show % of coded answers.*

The reasons behind young people's trust and hopes for technology are straightforward. **Technology has the potential to provide better, cheaper, and more accessible health care for all.**



**“TECHNOLOGY CAN BRIDGE THE GAP IN ADDRESSING UNMET NEEDS, PARTICULARLY IN AREAS SUCH AS MENTAL HEALTH; IT SIGNIFICANTLY IMPROVES ACCESSIBILITY TO SERVICES; IT INCREASES TRANSPARENCY; IMPROVES REACH TO RAISE AWARENESS; IMPROVES DECISION-MAKING BY PROVIDING A WEALTH OF INSIGHTS FROM DATA - EVEN IN REAL TIME; IT IS A FACILITATOR IN MAPPING AND ANALYZING HEALTH ISSUES ON A GLOBAL SCALE IMPROVING REACTIVE AND PROACTIVE SOLUTIONS AND RESPONSE TIMES.”**

Female respondent from Middle East; aged 25-30



## WHERE WE GO FROM HERE

Good health and well-being underpins everything we do. Health cuts across urban and rural settings and affects productivity, inclusivity and quality of life. With just a decade left to realize the SDGs and achieve UHC, we are at a critical point in time. This is particularly true for young people. Although young people account for nearly a quarter of the world's population and encounter bigger health challenges today than those faced **25 years ago**, investments in young people's health have largely been neglected.

But, as this survey illustrates, there are solutions. While global health challenges remain enormous, young people note that technology offers tremendous potential to transform access to and the quality of health care. Technology is already an enabler of health care solutions and will continue to be even more so in the future. At the same time, young people want and need to be involved in the global decision-making processes that impact their own health. Listening to young people's concerns ensures that policies and investments are directed to where they are needed most. This survey, for instance, found that mental health is a real concern among young people and a lack of medical insurance and the high costs associated with care remain the biggest barrier to care. But the survey also shows that there are significant differences among different groups of young people.

These and the many other findings in this survey are important issues to understand in more depth. And this is where more listening is necessary. The snapshot findings gathered here should not be seen as a global representation of the views of all young people, but encourage deeper analysis, further data gathering and most importantly more open and meaningful engagement with young people.

Following this survey, the coalition partners call for young people and youth-led organizations to have their say on how digital innovation can uphold quality primary health for all. To give young people a platform to amplify their voices, shape and contribute to the vision and mission of the coalition, and help guide a youth-led agenda around UHC 2030, the coalition will fund and support the setup of an independent Youth Council in the coming months.

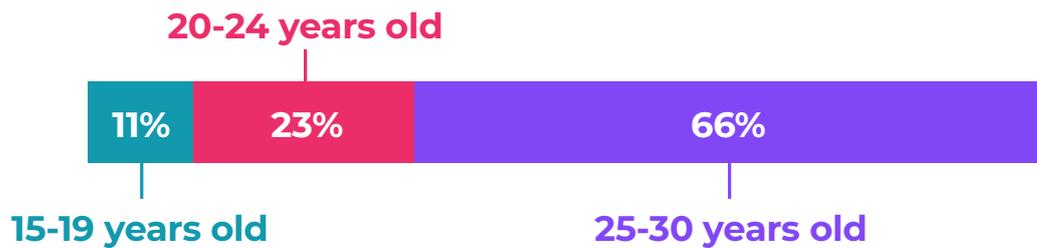
The one message to take away from this survey is simple: We must ensure that technology and youth participation remain global priorities – starting no later than with the upcoming U.N. High-level Meeting on UHC on September 23, 2019.



# METHODOLOGY

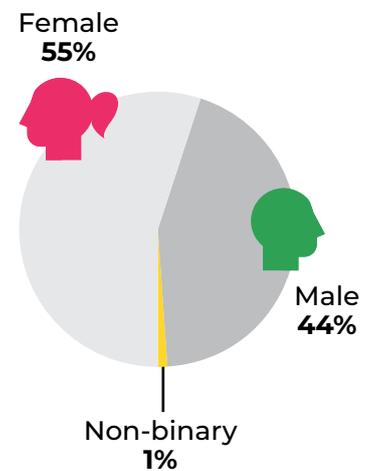
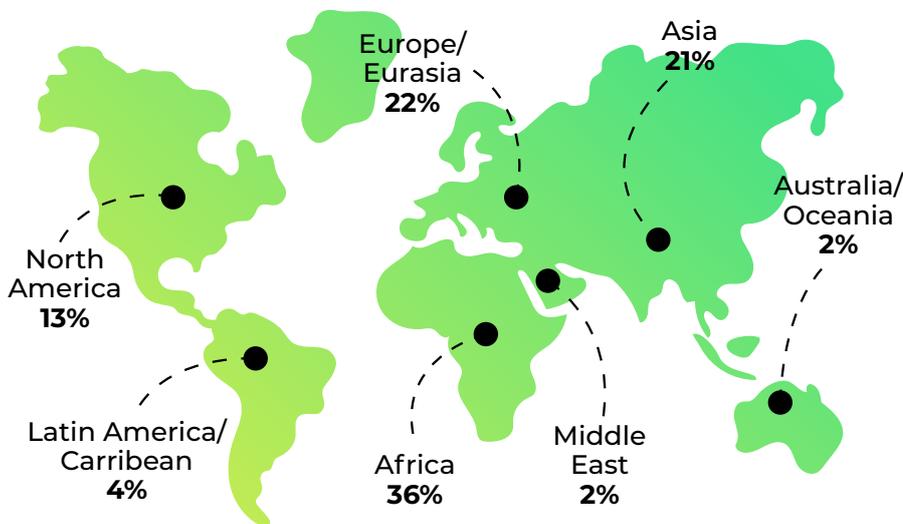
This report is based on an open online survey conducted from May 9 until July 1, 2019. A screener question at the beginning of the survey ensured that participants were aged between 15 and 30 years old. To provide actionable information, the survey data was analyzed across different demographic groups including age, gender and region.

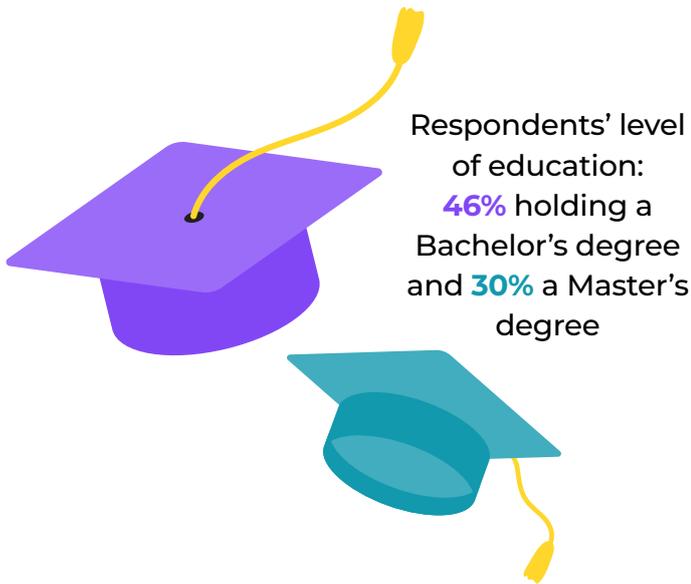
Of the **1,510 young people** that participated in the online survey:



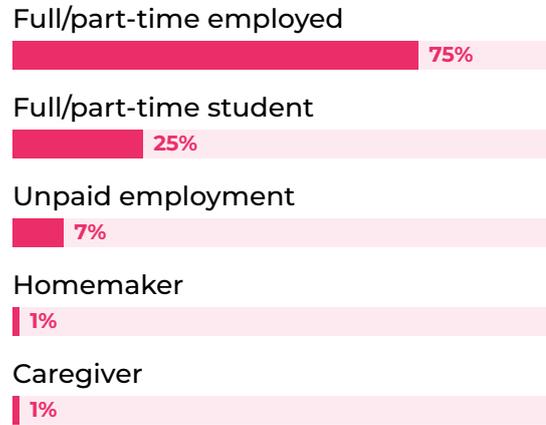
We received responses the following regions and a total of 128 different countries:

With a slightly higher female participation:





And most are employed or studying:



### Limitations

This survey faces a number of limitations. Although considerable, the sample size does not allow for an adequate representation of all young people around the world. There is also selection bias as the survey required internet access, was only administered in English and outreach was limited to a number of youth networks and the Devex community of global development professionals. Further limitations include pre-selected answers available for single selection questions, which for instance lacked an option for safety/security to our question on top health concerns.

# ACKNOWLEDGEMENTS

This report is the result of contributions from numerous individuals and organizations. We would like to thank all survey participants for sharing your views and providing the important data this report is built on. We would also like to thank all organizations that have helped distribute the survey across their network, in particular:

**AIESEC**

**Fight the Fakes**

**Friendship Ambassadors Foundation**

**Global Changemakers**

**International Youth Foundation**

**YEARS**

**Youth Hub Africa**

**YTH Initiative**

**PMNCH Youth Constituents**

**SDSN Youth in Northern Europe**

**The Youth Assembly**

**Women Deliver**

**World Assembly of Youth**

**World Organization for Sustainability Leadership**

**World Youth Alliance**

And a special thanks goes to two young leaders for their invaluable contributions to the development of this survey, outreach and drafting of the report:

**Tanisha Chadha, Program Officer**, Strategic Investment (Youth) at Centre for Catalyzing Change and Young Leader, Women Deliver Young Leaders Program

**Richard Mawutor Dzikunu**, Young Leader, Women Deliver Young Leaders Program

## COALITION PARTNERS

**Fondation Botnar** is a Swiss-based foundation which champions the use of AI and digital technology to improve the health and wellbeing of children and young people in growing urban environments. To achieve this, the foundation supports research, catalyzes diverse partners, and invests in scalable solutions around the world.

**PATH** is a global organization that works to accelerate health equity by bringing together public institutions, businesses, social enterprises, and investors to solve the world's most pressing health challenges. With expertise in science, health, economics, technology, advocacy, and dozens of other specialties, PATH develops and scales solutions—including vaccines, drugs, devices, diagnostics, and innovative approaches to strengthening health systems worldwide.

**Women Deliver** is a leading global advocate that champions gender equality and the health and rights of girls and women. Our advocacy drives investment – political and financial – in the lives of girls and women worldwide. We harness evidence and unite diverse voices to spark commitment to gender equality. And we get results. Anchored in sexual and reproductive health, we advocate for the rights of girls and women across every aspect of their lives. We know that investing in girls and women will deliver progress for all. And every three years, we galvanize momentum at the global Women Deliver Conference – our signature event. It's a bold and diverse gathering, a fueling station of ideas, and generator of action, convening thousands of decision-makers from civil society, governments, the private sector, and international agencies alongside advocates, activists, and journalists to identify solutions and drive change for girls and women.

**The Partnership for Maternal, Newborn & Child Health** is the world's largest alliance for women's, children's and adolescents' health, bringing together partners from across the sexual, reproductive, maternal, newborn, child and adolescent health communities, as well as health-influencing sectors. The Partnership provides a platform for organizations to align objectives, strategies and resources, and agree on priority interventions to improve the health and well-being of women, children and adolescents

