Health for a Digital Generation –
Considerations for Developing National Health Strategy

Abstract: Key components of the approach are introducing and implementing digital technologies in health; engagement of young people for health and policy development; developing sustainable strategy that helps the Government of Georgia achieve universal health coverage and is able to address challenges now and in the future as the digital generation is moving up on the age pyramid.

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1. Global Strategy on Digital Health

In **2005** the **World Health Assembly** through its resolution on eHealth urged Member States "*to consider drawing up a long-term strategic plan for developing and implementing eHealth services, to develop the infrastructure for information and communication technologies for health, and to promote equitable, affordable and universal access to their benefits.*" Countries and stakeholders were urged to direct their efforts towards creating a consistent eHealth vision in line with a country's health priorities and resources, developing an action plan to deliver the proposed vision, and creating a framework for monitoring and evaluating eHealth implementation and progress.

In **2013**, the **Health Assembly** adopted a resolution on eHealth standardization and interoperability, which urged Member States "*to consider developing policies and legislative mechanisms linked to an overall national eHealth strategy*".

The **2030 Agenda for Sustainable Development**, adopted by the **United Nations General Assembly** in **2015**, highlights that the spread of information and communications technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies.

With the recognition that information and communications technologies present new opportunities and challenges for the achievement of all 17 Sustainable Development Goals (SDGs), there is a growing consensus in the global health community that **the strategic and innovative use of digital and cutting-edge information and communications technologies will be an essential enabling factor towards ensuring that people benefit from universal health coverage, that people are better protected from health emergencies, and that people enjoy better health and well-being**.

Although it is recognized that digital transformation of health care will be disruptive, technologies such as the Internet of things, artificial intelligence, big data analytics, blockchain have the potential to enhance health outcomes by improving medical diagnosis, data-based treatment decisions and self-management of care.

The **World Health Assembly Resolution on Digital Health approved by WHO Member States** in May **2018** demonstrated a collective recognition of the value of digital technologies to contribute to advancing universal health coverage and other health related targets of the SDGs. This resolution urged ministries of health "*to assess their use of digital technologies for health and to prioritize, as appropriate, the development, evaluation, implementation, scale-up and greater use of digital technologies*". Furthermore, it tasked WHO with providing normative guidance in digital health, including through the promotion of evidence-based digital health interventions.

Thus, in **2020**, the **World Health Organization** developed in **the *Global Strategy on Digital Health 2020-2025* that aims at strengthening health systems through the application of digital health technologies towards achieving the vision of health for all**.

2. European Health Strategy

Health 2020 is a European policy framework supporting action across government and society for health and well-being. It sets out a far-sighted and ambitious agenda for health and well-being, and identifies it as a crucial aspect for economic and social development. The strategic dimensions of the Health 2020 focus on health as a human right; whole-of-government and whole-of-society approaches to equitable improvement in health; strong and invigorated governance and leadership for health;

collaborative models of working and shared priorities with other sectors; the importance of community and individual reliance and empowerment; and the role of partnerships.

The Health 2020 policy is based on **four priority areas for policy action**:

- investing in health through a life-course approach and empowering people;
- tackling the Region's major health challenges of noncommunicable and communicable diseases;
- strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance, and response; and
- creating resilient communities and supportive environments.

Health 2020 remains **committed to a primary health care (PHC) approach** as a cornerstone of health systems in the 21st century. PHC can respond to today's needs by fostering an enabling environment for partnerships to thrive, and encouraging people to participate in new ways in their treatment and take better care of their own health. Making full use of 21st century tools and innovations such as communications technology – digital records, telemedicine, and e-health – and social media can contribute to better and more cost-effective care. Recognizing patients as a resource and as partners, and being accountable for patient outcome are important principles.

Telemedicine, e-health (electronic health) **and m-health** (mobile health), which already **have significant potential for increasing patient participation and empowerment and for streamlining systems of monitoring and care while reducing costs**. New patient-based connectivity and medical devices allow for increasing home-based care and enable people to stay active and to contribute to society. These information technology–based developments may be linked with new self-management tools, health applications and devices for patients and their caregivers to better manage their health or chronic disease from home.

3. Engaging Young People for Health

As digital natives, young people bring a unique perspective to global discussions and can provide valuable contributions when given the opportunity. Young people themselves are best placed to understand their own needs and offer 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 them in leadership and key decision-making processes.

WHO highlighted **four areas of strategic opportunity concerning young people: Leadership; Country impact; Focusing global public goods on impact; and Partnerships**. Recommendations regarding these areas are as follows:

- Leadership:
    - Create a fully resourced WHO strategy for engaging with young people.
    - Modernize WHO culture to orient the organization towards young people, ensuring none are left behind in the SDG era.
- Country impact:
    - Engage all young people, taking into account their diverse backgrounds and characteristics, in health and sustainable development planning and implementation.

- Strengthen the capacity of organizations to engage safely, effectively, and meaningfully in ways that enable young people to augment their knowledge and to lead on health and rights.
- Focusing global public goods on impact:
  - Engage young people throughout the design and delivery of global public goods, and especially on issues that affect their health and rights.
  - Establish an innovative partnership-driven platform, so that young people can share their experiences and ideas to monitor and drive change on health and the SDGs
- Partnerships:
  - Forge innovative partnerships with diverse organizations that engage with young people.
  - Mobilize resources for a comprehensive, coherent global movement that engages the power of young people for health and sustainable development.

A **global online survey from 2019** – *Health and Technology: What young people really think* – gathered the view of over 1,500 young participants to better understand their attitudes to and opinion on health, technology and youth participation.

The survey concluded important findings. The overarching **messages from young people are clear**:

- The international community needs to **focus more on young people's health**;
- **Technology will be critical to achieving UHC**; and
- As digital natives, **young people must be given a strong voice in decision-making processe**s.

4. Demography

4.1. Global Demography

The world today has the largest generation of young people in history with 1.8 billion between the ages of 10 and 24 years.

4.2. Demography Trends in Europe

Figures for **2016** indicate that there were just over 510 million inhabitants in the EU-28. Of these, 79 million were children aged 0-14 years and 88 million were **young people aged 15-29 years**, which means 15.6% and **17,4% share of the EU-28's population**, respectively. The combined share of children and young people (those aged 0-29 years) in the EU's population fell from 39.6% in 1996, through 35.5% in 2006, to 33.0% by 2016.

As the share of children and young people in the EU's population decreased, the relative importance of the elderly aged 65 years and over grew. The proportion of elderly persons in the EU's population climbed at a steady pace from 14.9% of the population in 1996, through 16.8% in 2006 to reach 19.2% at the end of the time series.

The EU's age pyramids for 1996 and 2016, provide evidence of the ageing of the EU's population: there is a notable bump during this 20-year period. In 1996, the highest share of the population was accounted for by those aged 25-29 or 30-34 years — in other words, people born mainly during the 1960s. By 2016, this same group had aged and moved into the age group of persons aged 45-49 or 50-54 years; the age group 45-49 years accounted for the highest share of the population among any of the five-year age groups.

In 2016, the three five-year age groups that together cover the aggregate for children (those aged 0-4 years, 5-9 years and 10-14 years) as well as the youngest five year age group among young people (in other words the age group 15-19 years) accounted for the smallest shares of the EU-28 population in terms of five-year age groups.

There is a fall in the relative share of children and young people in the total EU population between 1996 and 2016. Nevertheless, the fall is greater for the three five-year age groups covering young people (15-29 years) than for children.

The other notable difference between the pyramids for 1996 and 2016 is **the increasing share of the elderly in the total population**. This was particularly true among the oldest group of women (those aged 85 or above), as longevity increased at a rapid pace over the last two decades.

According to the main scenario of *EUROPOP2015*, which corresponds to the latest *Eurostat* population projections round, by 2080 the number of children and young people in the EU-28 is likely to be 162.0 million, which is 4.8 million less than in 2016. Although the EU-28 total population is projected to keep growing through to 2045, reaching 529.1 million, **the share of children and young people in the total projected population will decrease** from 33.0 % in 2016 to 30.6 % in 2043. Then, from 2043 to 2080, the share of children and young people is projected to increase slowly and almost continuously (reaching 31.2 % in 2080), therefore remaining below its 2016 level.

4.3. Demography in Georgia

According to **2013** data, the average age of the population of Georgia was 38 years. 13.8% of the population was 65 years of age and older. **The proportion of 15-29 year-old people in the total population was 22.5 %,** and the majority of this cohort (50.8 %) is male. The majority of young people (53.1 per cent) lives in cities, and of these 27.7 per cent live in Tbilisi city. The proportion of young people in the population in the regions is highest in Kvemo-Kartli, where the rate is 25.4%; in contrast, the proportion is lowest in the Samegrelo region (19.1%). The proportion of the 20-24 and 25-29 years age groups is almost equal in the total population, at 8.1% and 8.0% respectively, while the proportion of those in the 15-19 age group is relatively low compared to the other two age groups, and is 6.3% of the total population. The number of young men as a proportion of the total number of men is 23.9%, while the number of young women as a proportion of the total number of women is 21.1%.

In **2014**, approximately **21% of the population of Georgia** (770,809 persons) **were between the ages of 15 and 29 years**. The number of young persons (15-29 years old) has dropped from 995 thousand in 2002 to 771 thousand in 2014. Of the total 770,809 young people (15-29 years) in Georgia, roughly 60 percent (461,383) live in urban areas whilst 40 percent (309,426) live in rural areas. In 2014, there were approximately 113.6 males for every 100 females at the age of 15, 107.6 males per 100 females at age 20 and 102 males per 100 females at age 27 for example.

Over the past six years trend remained unchangeable. In **2020**, there are less female in age group 15-29 years (321,000) than male (351,000) in the same age group (109,000 male in age group 15-19 years, 115,000 in age group 20-24 years, and 127,000 in age group 25-29, while 96,000 female in age group 15-19 years, 103,000 in age group 20-24 years, and 122,000 in age group 25-29 years). In 2020, approximately **18% of the population of Georgia** (672,000 persons) **are between the ages of 15 and 29 years**.

5. Health Policy Development in Georgia

5.1. Universal Health Care Programme

By **2012**, nearly 38% of the county population was insured by the State, and 8.43% citizens enjoyed private and corporate insurance respectively and the rest approximately **54% remained without any health insurance**.

Therefore, in **2013**, to increase access and quality of care, **the Government of Georgia launched the *'Universal Health Care Programme'***, a minimum service package for all citizens with no state or private insurance. The goals of UHC are to increase geographic and financial access to primary health care; to rationalize expensive and high-tech hospital services by increasing PHC utilization; and to increase financial access to urgent hospital and outpatient services. Yet out-of-pocket expenditure remains a barrier to accessing health services.

5.2. National Policy Framework

Georgia has no traditional national health strategy. Instead, the *2014-2020 State Concept of Healthcare System of Georgia for 'Universal Health Care and Quality Control for the Protection of Patients' Rights* serves as a national policy framework. The concept is aligned with the Health 2020 (i.e. strategic objectives aims at improving health for all and reducing health inequalities). However, it has no indicators.

The market-based health care system had a negative effect on quality of health care, thus the **Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs (MoIDPLHSA) has taken steps to improve quality of care**.

Priorities of the national healthcare policy in 2014-2020 are as follows:

1. Health in All Policies - a common state multi-sectoral approach.
2. Development of healthcare management.
3. Improvement of the system of financing the healthcare sector.
4. Development of quality healthcare services.
5. Development of human resources in the healthcare sector.
6. Development of information systems for healthcare management.
7. Facilitation of maternal and child health.
8. Improvement of the prevention and management of priority communicable diseases.
9. Improvement of the prevention and monitoring of priority non-communicable diseases.
10. Development of the public healthcare system.

Despite the efforts and initiatives, the Government of Georgia has taken since 2013, **further improvements and measures are needed to increase the efficiency of the healthcare system as well as the accessibility of a full range of health services and improve the quality of health services**.

5.3. Vision for Developing Healthcare System

The Healthcare and Social Issues Committee of the Parliament of Georgia has developed *a vision for developing the healthcare system in Georgia by 2030*. The vision has been built upon the fundamental right to health by means of the efficient health care system and that every citizen of Georgia can afford quality health care services and products without facing financial hardship.

To realize the vision the following **basic principles** have been agreed on:

- Protection of human rights in healthcare and the inviolability of honour and dignity in both civilian and penitentiary systems;
- Fair distribution of lifelong healthcare risk management between an individual, the market and the government;
- Compatibility with the country's economic and demographic development trends and the general vision of social policy;
- Focus on primary healthcare, integrated service-based approaches and declaring disease prevention and primary healthcare as the fields of priority;
- Exclusive responsibility of the state for public health and public health programs;
- Common rules on the healthcare market: equal coexistence of public and private sector representatives under general, homogenous regulations.

5.4. Digital Georgia

The document ***"A Digital Georgia: e-Georgia strategy and action plan 2014-2018"*** – developed within the *twinning project "Promote the strengthening of E-Governance in Georgia"* in collaboration with Austria and Germany – illustrates the path leading to a modern Georgia and provides a comprehensive framework for societal changes enabled by Information and Communication Technology (ICT). It focuses on those potential fields, where the public sector is able to take measurements and to set frameworks to exploit the full potential of ICT.

Healthcare supported by electronic processes and communication is an important area of a digital society. A *"Georgia Health Management Information System Strategy"* was developed by the Ministry of Labour, Health and Social Affairs in 2011.

Georgia is on a good path towards introducing Information and Communication Technology into the health sector. Several services like e-Prescription were set up and a registry of pharmacies is available. A strong medical electronic system is required as the hospitals are mainly privatised, and close coordination between the public and private sector is necessary. In addition, PHC reform initiated in 2019, aims to introduce telemedicine in primary healthcare services and equip PHC centres with advanced technologies for prevention and control of various health conditions.

5.5. National Priorities on Youth

The *Georgian National Youth Policy* **was approved in 2014 by the Government of Georgia** and is a comprehensive regulatory framework for the development of youth, aged 14-29 years in Georgia. Its implementation requires multi-stakeholder commitment and action from youth, state agencies, civil society, private sector, and local and international organizations.

The goal of the Youth Policy is *"encouraging establishment of relevant environment for a comprehensive youth development which will enable the youth to fully realize their potential and be actively involved in all the areas of the public life"*. To achieve this, the Youth Policy stipulates timely **action by the State in the development, implementation, and evaluation** of the following areas:

1. Participation: create opportunities and youth involvement in social, economic, cultural, and political spheres.
2. Education, employment, and mobility: create opportunities for education, employment and professional growth for youth which is both appropriate and of high quality.

3. **Health: establish a healthy lifestyle among youth and improve the quality of and access to medical care services which are youth-friendly in nature.**
4. Special support and protection: awareness creation among young people regarding their civil rights and responsibilities; create an environment which is safe and secure for young people; rights protection of young people; and supporting young people with special needs.

The Ministry of Sport and Youth Affairs of Georgia bears the responsibility in meeting the commitments made in the Youth Policy. The document also stipulates the importance of concerted efforts by other actors such as the Parliamentary Committee on Sports and Youth Affairs of Georgia, local municipalities, youth, youth organizations, stakeholders, international organizations, the media, and researchers.

5.6.   Public Administration Reform Project

The *Public Administration Reform Project* **funded by the European Union supports the Government of Georgia, in particular, the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs to strengthen sector policy development and implementation in health care sector.** The Project provides technical expertise in strategic conceptualisation, planning and monitoring of the National Health System Strategy.

The **purposes of the Project**, *inter alia*, are as follows:

- Policy development and coordination: to improve results-based approach in policy-development, coordination, and implementation;
- Coordination and structuration of public administration: to improve efficiency of the administration by improved intra and inter-ministerial business processes related to policy making and service delivery;
- Communication: to raise public awareness and increase visibility of the Government's public administration reform agenda as well as on available public services.

Within the framework of the project, the **goals of health system strengthening were proposed and agreed with MoIDPLHSA** as follows:

- Strengthen governance
- Ensure adequate and sustainable funding and improve efficiency of health financing
- Build up human capital
- Ensure efficient procurement and supply of high quality, effective and safe medicines;
- Ensure health facilities and necessary equipment of high quality and safety
- Extend digitalization and e-health solutions and develop health management information system
- Strengthen health care delivery system and improve quality of health care services

In addition, for the development of national health strategy, the following **priority areas have been defined**:

- Primary health care development;
- Efficient provider payment mechanisms and strategic purchasing;
- Digitalization in health and introducing new technologies in health care delivery.

6. Conclusions and Recommendations

6.1. Conclusions

- Young people (15-29 years) need to be one of the key target groups of national health strategy (i.e. health promotion and prevention, health education and literacy, healthy lifestyle, and health risks).
- Young people (15-29 years) will move up on the age pyramid over the next 10-20 years and will challenge the health care system with their increasing health needs (mainly due to non-communicable diseases) over this period and later.
- The national health strategy needs to consider new challenges and opportunities provided by new technologies (i.e. big data in health, digitalization, telemedicine, e-health, smart/mobile solutions, etc.).
- The national health strategy needs to ensure equal access to new technologies (i.e. telemedicine, e-health, smart/mobile solutions, etc.).
- The strategy needs to consider that young people are digital natives and they access to health services by using modern information and communication technologies.
- Georgia has a younger population than that of the EU, and the proportion of the young people in the population is higher than that is in most of the EU Member States.
- The population of Georgia is ageing, too, and the proportion of young people will decrease over time, while the currently young generation will represent a bigger share of the population.
- A sustainable and dynamic health strategy needs to be developed by considering the needs as well as engagement of young people, and needs to address their different needs now and in the future.

6.2. Recommendations

- Consider a novel approach to developing national health strategy that will be built upon the access to and use of new technologies, will address both current and future needs of young people, and will ensure engagement of young people for health.
- Conduct a survey based on the report *Health and Technology – What young people really think* to confirm the results and conclusions of the international survey in Georgia.
- Call for young people and youth-led organizations to have their say on how digital innovation can uphold quality health for all.
- Give young people a platform to amplify their voices, shape and contribute to the development of national health strategy to achieve universal health coverage.

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