

areas and points of entry, including (a) access to medical services, like diagnostic services; (b) access to equipment and personnel for transporting infected travelers to the appropriate medical facility; (c) surveillance activities; (d) risk communication and social mobilization; (e) environmental health (i.e., vector control, solid and liquid waste management, potable water, and general sanitation); and (f) data management and information exchange in close collaboration with WHO.

5. Crosscutting Issues: Gender, Digital Health, and Innovations

79. **Key challenges to gender.** Gender equality in the health sector requires much work in CAREC countries. Awareness of gender issues is rare (footnote 42). The pandemic has even deepened the challenges that had existed prior to the outbreak, such as accessing health services, unequal earnings and job opportunities, mental health issues, and domestic violence.

80. **Proposed actions.** The CAREC Health Strategy 2030 will focus on achieving greater attention to the health needs of women and considering women in designing services and analyzing data (footnote 4). Areas of intervention may include the following:

- (i) Improving sex disaggregation of data in the health sector of the CAREC region through the application of the CAREC WGH program.
- (ii) Informing about gender concepts, meanings, gaps, and implementation options in health projects.
- (iii) Including specific needs of women in health planning and designing of services.

81. **Key challenges for digital health.** Digital health is a key innovation and has the capacity to revamp healthcare systems across the region,

including in public health, health security, and clinical services efficiency. Key challenges in this domain with respect to CAREC countries include the ethical aspects of medical data management to meet international conventions on patients' human rights, as well as challenges in terms of needed infrastructure, interoperability, governance, and leadership. CAREC countries are at differing stages of digital readiness and maturity. The pandemic has significantly stressed existing information and communication technology (ICT) resources in these countries and has shown the importance of creating a robust health information technology (IT) infrastructure to enable maximum connectivity in these countries.

82. The ability to keep tabs on hospital occupation, average bed days, and intensive care unit occupation helps managers plan where and how to boost capacity to meet a surge in demand, such as during a pandemic. Analyzing such electronic information in terms of how interventions and mitigation efforts result or fail in “flattening the curve” is vital for health security and pandemic management. At the same time, personal rights to confidentiality and patient human rights need to be protected in how these electronic information systems are constructed and used.⁷⁵ Limited ICT network and interoperability and the need for strong commitment to the development of digital health human resource capacity, policies, and other ICT infrastructure to implement digital technologies, however, remain a very real challenge.

83. To benefit from a wide variety of digital health tools and services, governments must decide on the sequencing of digital health development and implementation according to the needs of the country and/or region. With limited resources, the implementation of large-scale digital health projects that attempt to solve different medical, public health, health care financing, and social care issues is not feasible. As a joint effort to

⁷⁵ World Health Organization. 2012. *Legal Frameworks for e-Health: Global Observatory for e-Health Series*. Volume 5. Geneva; WHO. 2017. *WHO Guidelines on Ethical Issues in Public Health Surveillance*. Geneva; B. Riso et al. 2017. Ethical Sharing of Health Data in Online Platforms: Which Values Should Be Considered? *Life Sci Soc Policy*. 13 (1). p. 12.

improve structural instruments for digitalization, CAREC countries should seek opportunities to build shareable resources for digital health. Those resources could include data security and privacy guidelines, policy for the digital identity of residents (including migrants), and taxonomies and vocabularies for health data and data exchange. A shared network of digital health training and education institutions would also help in the capacity building of the CAREC region.

84. **Proposed actions.** The CAREC Health Strategy 2030 will focus on strengthening health information systems in the CAREC region and managing data jointly and more efficiently.⁷⁶ Areas of intervention may include the following:

- (i) Identifying willing CAREC member countries' digital health priorities and assessing their digital health landscapes, as appropriate, to suggest and support implementation of suitable digital health solutions.
- (ii) In partnership with willing CAREC member countries, conducting gaps assessment for achieving graded stepwise health system data interoperability. An example is identifying gaps currently hampering the ability of different health sector IT systems to “speak to each other,” including between laboratory devices and applications (systems such as patient records and encounter registers), so that data can be accessed, exchanged, integrated, and cooperatively used in a coordinated manner within and across organizational, regional, and national boundaries to provide timely and seamless portability of information to optimize health security.
- (iii) Based on the gap analysis, proposing health data exchange architectures, application interfaces, and standards that enable data to be accessed and shared appropriately and securely across the complete spectrum of care in willing CAREC member countries; and providing the necessary training when such

- sharing is to take place within all applicable settings and with relevant stakeholders.
- (iv) Launching practical experimental initiatives for regionally unified coding of health data for willing CAREC countries through CAREC-wide promotion of WHO-recommended International Classification of Disease ICD-10 (and upcoming ICD-11) and International Classification of Primary Care to help ensure cross-country compatible and comparable data in national health IT systems and databases.
- (v) Engaging in regional policy dialogues and knowledge exchange where information on successful digital approaches and policies to address challenges can be exchanged and fostered between countries.
- (vi) Promoting and strengthening capacity on standardized and interoperable health information systems to overcome separate vertical systems and overlapping sources of data.
- (vii) Improving data management and data capture mechanisms, including quality of captured data capacity, analytical capacity, and presentation skills, in willing CAREC member countries.
- (viii) Adopting methods to enable cross-border data sharing and use in willing CAREC member countries.
- (ix) Strengthening digital leadership and digital skills among the top-level decision makers.
- (x) Developing a sustainable and realistic regional action plan of digital health implementation for willing CAREC countries.

85. **Key challenges for innovations.** Even though innovative models were developed and implemented in some countries during the COVID-19 pandemic, other countries were missing sufficient technical capacity for adopting, implementing, and scaling up innovative models and solutions (footnote 36). Being able to rapidly adopt innovations is key to solving the current crisis and to preparing for future pandemics.

⁷⁶ ADB. 2022. *CAREC Digital Strategy 2030: Accelerating Digital Transformation for Regional Competitiveness and Inclusive Growth*. Manila.

86. **Proposed actions.** The CAREC Health Strategy 2030 will focus on improving the technical capacity for adopting, implementing, scaling up, and sharing innovative models and solutions. Areas of intervention may include the following:

- (i) Creating awareness on existing national, regional, and global innovative solutions for mitigating health crises like the COVID-19 pandemic.
- (ii) Offering capacity-building workshops and webinars on innovative solutions in the health sector to CAREC member countries.
- (iii) Exploring the development of a fund for supporting innovations in health emergencies.
- (iv) Supporting the creation of a regional innovations knowledge exchange platform to facilitate knowledge transfer and technical capacity building on health security.