RESILIENT HEALTH SYSTEMS

Introduction

1. The health situation of the Americas has improved considerably in recent decades (1). Sustained long-term economic development, the availability of financial and technological resources, and social policies aiming to alleviate poverty and improve health and well-being have resulted in significant improvements in life expectancies and health outcomes. Health systems are more inclusive and responsive, and access to health services continues to expand. Implementation of the International Health Regulations (IHR) heightens the response capacity of the health system. Policies geared towards universal access to health and universal health coverage improve fiscal space for health and the financial protection of individuals, while efforts to ensure health in all policies address the social determinants of health (2).

2. Health systems and the populations they serve nonetheless remain highly vulnerable to risks that directly impact the capacity of systems to respond to population needs. These risks include disease outbreaks, natural and other types of disasters, climate change and sustained stresses to the system such as economic downturns and migration of health workers. Such risks can significantly impact local, national, and global health, debilitating the response capacity of the health system and eliminating gains in health outcomes (3). Because social and economic development is linked to the health and well-being of the population, the fragility of health systems becomes an issue of individual, collective, national, and global health.

3. This policy document aims to review the characteristics of resilient health systems in the Americas. It provides policy guidance for Member States specifically on those critical variables that will ensure responsive and adaptive health systems in the face of immediate and short-term risks to health while promoting resilience as a component of health system strengthening in the middle to long term, in a manner that ensures the continued health and well-being of societies and the sustained social and economic development of the Region.
Background

4. The policy builds on global and regional analyses of problems and challenges faced during disease outbreaks such as Influenza A (H1N1), the Ebola virus disease (EVD) outbreak in West Africa (3) and the outbreaks of chikungunya (4) and Zika virus (5) in the Americas. It also builds on the implementation of the International Health Regulations (IHR) (2005) and the Report by the Director-General to the Special Session of the Executive Board on Ebola (2015), citing key public health events and emergencies (6). It highlights the need for countries to strengthen the implementation of essential public health functions (7) including core capacities detailed in the IHR, in particular the capacity to address existing and emerging health risks. In addition, it notes that efforts towards health system resilience must extend beyond the need to respond to risk reduction, disasters, and disease outbreaks; these efforts must be framed within sustainable development and address other sustained risks to the health and well-being of the population, including social instability, the growing burden of non-communicable diseases, and economic recession.

5. This policy document is in alignment with the PAHO Strategic Plan 2014-2019 (8) and the Health Agenda for the Americas 2008-2017 (9). It supports the overall objectives of the Sustainable Development Goals (SDGs) (10), in particular (but not limited to) Goal 3, ensuring healthy lives and promoting well-being for all at all ages through targeted interventions that address global health challenges, strengthening health systems, and improving management of and reducing global health risks. It links to the Paris Agreement on Climate Change (11), the Sendai Framework for Disaster Risk Reduction 2015-2030 (12), and the IHR (2005) which recognize the importance of health and health protection in combination with the need for investment in actions that improve resilience.

Situation Analysis

6. Countries in the Americas are committed to developing inclusive health systems and expanding access to health services that are comprehensive and integrated. Since the adoption of the Alma-Ata Declaration (1978) (13), primary health care integrated within health service networks has remained the cornerstone of health system development within the Region. Following policy reforms that led to the fragmentation of health systems during the 1990s, Member States endorsed the renewal of primary health care (14) and reaffirmed the role of the public sector in governance and stewardship of the health sector, promoting public health and health system development based on primary health care and the values of solidarity, equity, and the right to the highest attainable standard in health. These values continue to be the core pillars of health system development in the Americas, as evidenced in the adoption of the Strategy for Universal Access to Health and Universal Health Coverage (2014) (15).

7. Nonetheless, a series of events in recent years provides evidence that national health systems remain fragile and susceptible, increasing the vulnerability of populations to external risks that impact health and well-being, health protection, and social and
economic development nationally and globally. While disease outbreaks and disasters caused by natural phenomena and the impact of climate change constitute high-level, immediate risks to the health and well-being of the population, other, more sustained internal and external factors affect the sustainability and responsiveness of health systems and influence health outcomes. These variables include lack of sustained development; social instability; weak stewardship and governance to ensure implementation of essential public health functions; migration and rapid urbanization; barriers to health service access; inadequate availability and distribution of human, financial, and technological resources, including medicines and health technologies; and the growing burden and impact of non-communicable diseases and their corresponding risk factors.

8. Robust and responsive health systems that are inclusive and that meet the needs of the population require sustained political, social, and economic stability to develop and mature. Policies supporting sustained development and social and economic stability directly and indirectly impact health and well-being and health system resilience. Conversely, poverty, inequality, and social injustice contribute to persistent inequities in society and a lack of social stability. Within this context, the Region has experienced sustained periods of growth and stability in the last decade, providing some of the necessary conditions for national health systems to expand and become more resilient; more recently, however, many economies in the Region have seen reduced growth rates, resulting in fiscal pressure for the health systems.

9. Acute or sustained political and economic instability results in increases in morbidity and mortality rates; a principal cause is the inadequacy of health systems to provide comprehensive, integrated, and universally available health services in such conditions (for example, health workers may not be able to present for duty, or it may be unsafe for them to provide services). Weak stewardship during such times can affect decision making and planning, financing related to provision of services, health surveillance, and management of the supply chain for medicines and health technologies. Social instability directly impacts migration, with health workers often seeking more stable working conditions and economic opportunity abroad, resulting in depletion of the health workforce.

10. The EVD outbreak in West Africa devastated already weakened health systems and economies in Guinea, Liberia, and Sierra Leone, resulting in significant loss of life and further barriers to accessing needed care.

11. In 2015, an outbreak of chikungunya in the Americas resulted in more than 1.6 million suspected or confirmed cases, with the case rate exceeding 60% in the Dominican Republic (16). The magnitude of the stress to the health system when compared to the ability of the system to absorb such stress constitutes the principle determinant of the public health impact of a disease outbreak.

12. Between 2007 and 2015, 52 countries and territories reported local transmission of Zika virus; eight countries reported increases in cases of Guillain-Barré syndrome (GBS),
and Brazil and French Polynesia reported increases in microcephaly and neonatal malformations (17). This situation prompted the WHO Secretariat to convene the first meeting of the IHR Emergency Committee on Zika virus in February 2016 as a result of the growing strength of evidence about Zika and the virus’s association with microcephaly and GBS, determined as a Public Health Emergency of International Concern.

13. The chikungunya and Zika virus outbreaks in the Region demonstrated the acute impact a disease outbreak can have on the health system, and in particular the demand for integrated and emergency health services. Inadequate health surveillance, response, and information systems; poor implementation of infection prevention and control strategies; health professionals who are ill prepared to deal with disease outbreaks; inaccessible health services and healthcare institutions with inadequate infrastructure; and the need to rapidly mobilize additional financial resources to support surveillance and response activities, constitute important structural weaknesses within health systems (18). These outbreaks also demonstrated that fragmented approaches to public health emergency preparedness, including application of the International Health Regulations (IHR), represent a major risk to health and well-being as well as social and economic development.

14. Other variables pose a specific risk to the health and well-being of peoples in the Americas. The Paris Agreement on Climate Change recognizes the social, economic, and environmental value of voluntary mitigation actions and their benefits for adaptation, health, and sustainable development while acknowledging that parties should, when taking action to address climate change, respect, promote, and consider their respective obligations related to human rights; the right to health; the rights of indigenous peoples, migrants, children, persons with disabilities, and people in vulnerable situations; gender equality; and intergenerational equity.

15. Globally, the Americas remains the second most affected region in terms of disaster impact, with approximately 24% of all disasters between 2004 and 2014 occurring within the Region, affecting over 98 million people (19). The 2010 earthquake in Haiti resulted in devastating loss of life and infrastructure during a very short period, impacting the provision of basic health and social support services and leading to significant economic loss for a sustained period of time. The Sendai Framework for Disaster Risk Reduction highlights the need to foster disaster resilience within health systems.

16. The Region of the Americas has benefited from sustained economic growth in recent years. Economic stability and sustained investment in health has contributed to health system resilience as countries recognize that investing in resilience is far more efficient than financing acute or sustained emergency responses. The financial crisis of 2007 however affected health systems globally, with economies in the Region falling into a deep recession. Economic downturns remain one of the principal factors impacting health system responsiveness, adaptiveness, and resilience. Public spending in health as a
percentage of gross domestic product continues to be low, while out-of-pocket expenditures at the point of service remain high (20). Counter-cyclical health spending during an economic downturn may offset the associated increased demand for public health services. However, investments in health—both public and private—typically decrease during periods of economic turmoil and can take many years to reach pre-crisis levels (21), affecting health system sustainability and delivery of services, particularly to marginal and underserved populations.

17. As globalization progresses, health systems become increasingly linked. Rising levels of economic integration, global agreements that impact health and health regulations, fluctuations in the global economy, migration, multi-country disasters, and disease outbreaks highlight the interdependence of national health systems within the global health system framework. Populations will attempt to improve their health and well-being by seeking health services beyond national borders that meet their needs. Investment in health system resilience at the national level can therefore be considered a global public good, as it supports health and well-being at the national level, reduces risks to health systems beyond national borders, and ensures social capital and confidence in health systems and health governance mechanisms at all levels of the global health system.

Proposal

18. Resilience, a system’s ability to adjust its activity to retain its basic functionality when challenges, failures, and environmental changes occur, is a defining property of many complex systems (22). Health system resilience refers to the ability to absorb disturbances and respond and recover with the timely provision of needed services. It is the capacity of health actors, institutions, and populations to prepare for and effectively respond to crises, maintain core functions when a crisis hits, and, informed by lessons learned, reorganize if conditions require it (23).

19. Resilience is an attribute of a well-performing health system moving towards universal access to health and universal health coverage. The four strategic lines of action defined within the Strategy for Universal Access to Health and Universal Health Coverage provide the overarching framework for building resilience in health systems. Expansion of comprehensive and integrated quality health services based on primary health care, increased and more efficient health financing, improved governance and stewardship, and strengthening of essential public health functions will ensure progressive development of resilient health systems throughout the Region.

20. Resilient health systems are:

a) information and evidence informed, with the ability to rapidly collect and assimilate information and evidence, including from the health surveillance network, to inform strategic planning, preparedness, decision making, and response;
b) responsive, with the capacity to rapidly scale up population and individual based health services;

c) predictive, with health systems responding as expected and anticipated during strategic and risk reduction planning processes;

d) adaptive, with the ability to rapidly reorganize, transforming health system functions and operations in situations of crisis to address a specific risk or situation and to recover in a short period of time;

e) robust, with the capacity to sustain actions following a given shock or risk over a prolonged period of time, including through the mobilization of reserve capacity (technical, financial, technological, and human resources);

f) integrated, that is, systems ensuring universal access to comprehensive health services, with a first level of care integrated within health service networks (IHSNs);

g) people and community centered, with the ability to reach the whole of the population, as well as to respond in specific communities and/or populations;

h) participatory, with the active participation of the population in governance, policy development, risk communication, and decision-making processes, building social capital and confidence in the system; and

i) integrated at the local and national levels and interconnected with health systems regionally and globally.

21. Resilience cannot be built into health systems without the collective efforts of all relevant policymakers, within and beyond the health sector and over a sustained period of time; moreover, health equity cannot be achieved without addressing the social determinants of health across sectors. Resilient health systems intrinsically contribute to individual and collective health and well-being through a whole of government and society approach, reducing the vulnerability of societies to health risks at the local, national, and international levels.

22. Health system resilience can be progressively developed through integration of actions in the core policy areas of universal access to health and universal health coverage, disaster and emergency risk reduction, and public health surveillance and disease outbreak management, implemented within the broader framework of sustainable development. Resilience in health systems can be achieved through the following:

a) A whole of society commitment to achieving the Sustainable Development Goals. The commitment of the countries of the Americas to equity in health is long-standing and explicit in national development strategies and plans, as it is ubiquitous in international political declarations and agreements, most notably through adoption of the SDGs. A sustainable and whole of society commitment to achievement of the SDGs will help countries overcome the multipronged, pervasive effects on health of environmental, economic, and social inequities.
Policies aimed at inclusive and sustained economic growth, human development, and social participation in governance are emerging both worldwide and across the Region and are contributing to political and social stability. These policies in turn support the development of resilient health systems by creating an environment—economic and social—that not only protects the health system but also provides the conditions needed for the system to become robust, responsive, and people centered.

b) *Universal access to health and universal health coverage.* Resilience is an attribute of a well-performing health system moving towards universal access to health and universal health coverage. Implementation of the four strategic lines of action of the Strategy for Universal Access to Health and Universal Health Coverage—expanding equitable access to comprehensive quality, people- and community-centered health services, strengthening stewardship and governance, increasing and improving financing, with equity and efficiency, and strengthening intersectoral action to address the social determinants of health—is the foundation on which resilience is built into health systems in the Americas. The strategy provides a reference framework to facilitate mid- to long-term achievement of the characteristics of resilient health systems described above. Universal access to health and universal health coverage policies incorporate social capital into the health system, a critical asset in building resilient communities and societies.

c) *Application of the IHR through strengthening of national core capacities as part of essential public health functions.*

i. Recent disease outbreaks of international public health concern have dramatically highlighted the need for a holistic approach to the IHR to ensure a concerted, targeted, sustained, and adequate response irrespective of whether a health system is stressed by an acute event impacting public health or is at risk for such an event. A more systemic approach to strengthening the national core capacities detailed in the IHR, as part of a broader strategy to strengthen essential public health functions, is required to support countries in application of the regulations. In the absence of such an approach, global health remains highly vulnerable due to the persistent fragility of individual health systems.

ii. The IHR as a legal instrument should not be seen in isolation; rather, it should be viewed as a component of national health governance and regulatory frameworks, with responsibilities attributed to key institutions and entities within the health system, including within the executive, judicial, and legislative branches of government. Application of the IHR should be embedded in national policy development and planning processes and in legislative actions such as the establishment of national regulatory frameworks. The IHR can be progressively applied through efforts to strengthen health surveillance networks, organization of health services that support infection prevention and control, and development of a health workforce with the necessary competencies in terms of response. Laboratory
capacity is required as part of the health systems approach and should be strengthened to support implementation of the IHR.

d) **Health information systems that support identification and isolation of public health risks and delivery of appropriate responses.** Special emphasis and investment are required to develop health information systems that can capture impending risks or actual public health events in a timely manner and support a measured but targeted response to external or internal public health risks. Through public health surveillance mechanisms, such information systems should accommodate the collection and analysis of structured and unstructured data and information from formal and/or official sources (e.g., health services) as well as informal and unofficial sources (e.g., the community). In addition, health information systems in resilient health systems facilitate the reporting of capacity data (e.g., health service capacity and utilization, human resource mapping, availability of medicines and health technology) that support assessments of risk and system readiness and vulnerability with a view to mitigating risk. Health information systems guide the decision-making process in response to an evolving risk, public health event, or emergency and constitute a critical element of an adaptive and resilient health system: they determine whether the system is adequately coping under the stress or whether adaptive measures are required to enhance capacity and response. National health information systems must be integrated with other multi-hazard early warning mechanisms for disasters and should generate information in a timely manner to support decision making at all levels, from local to global.

e) **Disaster and other risk reduction strategies.** There is a need for action-oriented frameworks that governments and relevant stakeholders can implement in a supportive and complementary manner and that facilitate identification of risks, disaster related and otherwise, to be managed with corresponding investments to build resilience. The strategic orientations of the Sendai Framework for Disaster Risk Reduction should be implemented with an explicit focus on people and their health and livelihoods. Reductions in disaster-related mortality and morbidity, in the numbers of people affected by disasters, in economic loss due to disasters, and in the level of disruption in health service provision can be achieved through strategic risk reduction planning. Such processes should be developed through a multisectoral and multi-hazard approach that is specific to the health system but integrated with national risk reduction plans. Specific actions that contribute to disaster risk reduction are presented in Directing Council document CD55/17. Notwithstanding the importance of risk reduction in mitigating against a specific hazard, risk reduction strategies can also be applied to reduce the burden of communicable and non-communicable diseases (and their mid- to long-term effects on health systems) and to improve patient safety and quality of care. In addition, such strategies can assist in the prioritization of interventions in sectors other than health that directly affect the well-being of the population and the sustainability of the health system itself.
f) Investing in health system resilience, in particular the organization of adaptive networks of health care institutions

i. Investing in health systems is considerably more efficient than financing emergency responses related to the rapid proliferation of disease, exacerbated due to the fragility of health systems. In addition, such investments support better health outcomes, promote social development, and provide greater protection to the national economy. Sustained advocacy is required to preserve public financing during economic downturns, to increase access and coverage for those affected by economic recessions, and to protect health service provisions, particularly among individuals and communities living in conditions of vulnerability. Also required are investments in essential public health functions (in particular, governance and regulation), health surveillance and health information systems, risk reduction and communication, and a highly adaptive network of safe and secure health care facilities. Primary health care services should be universally available and should be articulated within a network that is adaptive and responsive.

ii. While sustained levels of financing are required for long-term investments in actions that support health system resilience, there is also a need for systems and mechanisms that rapidly release new financial resources in the event of a crisis. Sufficient capacity (health workers, financing, medicines and health technologies) is required to augment the response at the institutional level when needed and address any influx of patients while maintaining other health services. Also, in situations of stress, the system must have the capacity to rapidly reorganize the health service network to respond to the needs of individuals and the community (e.g., a potential overload of patients). Rapid development and dissemination of clinical guidelines specific to the disease outbreak or risk is required to ensure a timely response.

g) Research on resilience and health system performance. Research into the characteristics of resilience in health systems is required to generate further evidence on gaps; on linkages among system resilience, health protection, and social and economic development; and on health system strengthening, disease prevention and control, and risk reduction. Research agendas should be built on existing evaluation methodologies in health and development, health system performance, application of IHR capacities, and disaster risk reduction. Based on such research, opportunities exist to develop stress tests for health systems that deliberately examine system response beyond normal operational capacities in the event of a given risk or stress, as well as opportunities to identify and observe fragilities that can subsequently be addressed.
Action by the Directing Council

23. The Directing Council is invited to review the information provided and consider adoption of the corresponding resolution (Annex A).

Annexes

References


PROPOSED RESOLUTION
RESILIENT HEALTH SYSTEMS

THE 55th DIRECTING COUNCIL,

(PP1) Having reviewed the Resilient Health Systems policy document (Document CD55/9);

(PP2) Bearing in mind that the health situation of the Americas has improved considerably in recent decades, that social policies aiming to alleviate poverty and improve health and well-being have resulted in significant improvements in life expectancies and health outcomes, and that national health systems are more inclusive and responsive;

(PP3) Cognizant that policies supporting sustained development and investment in health systems and social and economic stability contribute both directly and indirectly to improved health and well-being, alleviation of poverty, elimination of inequities, and health system resilience;

(PP4) Observing that health systems remain highly vulnerable to risks that significantly impact local, national, and global health, debilitating the response capacity of health systems and eliminating gains in health outcomes and social and economic development;

(PP5) Deeply concerned by global disease outbreaks such as the Ebola, chikungunya, and Zika virus outbreaks that have highlighted important structural weaknesses in health systems, particularly weaknesses related to health surveillance, response, and information systems, to the implementation of strategies for infection prevention and control, to the competencies and capacities of health professionals, to health financing and mobilization of financial resources, and to the organization and delivery of health services;
(PP6) Noting that fragmented approaches to public health preparedness, including application of the International Health Regulations (IHR or Regulations), constitute a major risk to health and well-being and to social and economic development;

(PP7) Recalling article 44 of the Regulations and the commitment made by Member States at the 65th World Health Assembly (2012) to further strengthen active collaboration among States Parties, WHO and other relevant organizations and partners, as appropriate, in order to ensure the implementation of the IHR (Resolution WHA65.23 [2012], Document A68/22, Add. I [2015], and Resolution WHA68.5 [2015]), including establishing and maintaining core capacities;

(PP8) Recognizing that while disease outbreaks and disasters caused by natural phenomena and the impact of climate change represent high-level, immediate risks to the health and well-being of the population, other, more long-term internal and external risks—for example, lack of sustained development, social instability, weak stewardship and capacity in essential public health functions, demographic transitions, migration and rapid urbanization, economic crises, and the growing burden and impact of non-communicable diseases and their corresponding risk factors—affect the sustainability and responsiveness of health systems and influence health outcomes;

(PP9) Noting that economic downturns remain one of the principal risks affecting health system responsiveness, adaptiveness, and resilience;

(PP10) Cognizant that the Strategy for Universal Access to Health and Universal Health Coverage (2014), the values of solidarity and equity, and the urgent need for the majority of countries to strengthen their health systems, including from the perspective of the right to health where nationally recognized and the right to the enjoyment of the highest attainable standard of health, provide the foundation for continued health system development in the Americas;

(PP11) Recognizing that resilience is a critical attribute of a well-developed and well-performing health system whereby health actors, institutions, and populations prepare for and effectively respond to crises, maintain core functions when a crisis hits, and, informed by lessons learned, reorganize if conditions require it;

(PP12) Bearing in mind that resilient health systems are information- and evidence-informed, responsive, predictive, complex, adaptive, robust, integrated, participatory, and people- and community-centered;

(PP13) Aware that increasing levels of integration, migration, disasters, and regional/global disease outbreaks highlight the interdependence of national health systems within the global health system framework;

(PP14) Recalling relevant global frameworks and agreements, including the Sustainable Development Goals, the Paris Agreement on Climate Change, the Sendai Framework for Disaster Risk Reduction, and the International Health Regulations, as well
as relevant PAHO mandates, particularly the Strategy for Universal Access to Health and Universal Health Coverage,

RESOLVES:

(OP)1. To support the Resilient Health Systems policy (Document CD55/9).

(OP)2. To urge Member States to:

a) support the development of resilient health systems and societies in the framework of achievement of the Sustainable Development Goals;

b) develop resilience in health systems through integration of actions in the core policy areas of health system strengthening, social determinants of health, risk reduction, and public health surveillance and disease outbreak management, implemented within the framework of national sustainable development objectives;

c) work in accordance with the national context to gradually develop the resilience of health systems within the framework of the Strategy for Universal Access to Health and Universal Health Coverage;

d) build reserve capacity (health workers, financing, medicines, and health technologies) to scale up the response of health services in the event of an acute or sustained risk to the system and to support and coordinate the response of the health service network to the needs of individuals and the community;

e) implement a holistic and multisectoral approach to the IHR, including developing, strengthening, and maintaining the capacities and functions called for in the Regulations, as part of strengthening essential public health functions, by embedding the Regulations in national health policy and planning processes, in legislative actions and regulatory frameworks, and in efforts to strengthen the capacity of institutions, networks, and human resources to respond to disease outbreaks of international concern; and work with other partners to support States Parties’ IHR implementation;

f) strengthen health information systems that support the identification and isolation of public health risks, capture in a timely manner impending risks, and support measured and targeted responses, reporting on system capacity (e.g., health service delivery and utilization, human resource mapping, availability of health financing, and availability of medicines and health technologies), and decision making related to rapid reorganization of health systems and services;

g) develop multisectoral frameworks and implement multisectoral actions that focus on risk management and on strengthening the resilience of the health system;

h) maintain and increase investments in health systems and actions to improve their resilience, in line with the orientations of the Strategy for Universal Access to Health and Universal Health Coverage;
i) promote research on the characteristics of resilient health systems to generate further evidence on gaps and on linkages with system resilience.

(OP)3. To request the Director to:

a) provide support to countries, within the framework of the Sustainable Development Goals, in their development of multisectoral plans and strategies that support health system resilience and improved health and well-being;

b) advocate, among countries and partners, the importance of resilient health systems and their characteristics, as well as the integrated and long-term actions required to build such systems;

c) continue to support countries in strengthening their health systems and developing national plans towards universal access to health and universal health coverage;

d) support the development of reserve capacity in health systems (health workers, financing, medicines, and health technologies) to scale up the response of health services in the event of an acute or sustained risk to the system;

e) support the response of the health service network to the needs of individuals and the community;

f) promote a holistic approach in the application of the IHR through the strengthening of essential public health functions and continue to provide technical cooperation to countries in the assessment of health system readiness in the event of a disease outbreak of international concern;

g) provide support to countries in the development of health information systems to improve health surveillance and to monitor system capacity to detect, predict, adapt, and respond;

h) intensify cooperation in disaster and other risk reduction efforts within health systems, in the assessment and evaluation of risk, and in risk management, contributing to health system resilience;

i) continue to strengthen PAHO efforts to develop scientific evidence on resilient health systems, promote health systems research, and develop methodologies for the assessment of health system performance in situations of risk or stress;

j) promote the strengthening of regional cooperation strategies that include information systems, identification of real needs, and support mechanisms, to be considered by the States through their internally defined structures.
Report on the Financial and Administrative Implications of the Proposed Resolution for PASB

1. **Agenda item**: 4.5 - Resilient Health Systems

2. **Linkage to PAHO Program and Budget 2016-2017**:  
   a) **Categories**:  
      - Category 1, Communicable diseases  
      - Category 2, Non-communicable diseases and risk factors  
      - Category 4, Health systems and services  
      - Category 5, Preparedness, surveillance, and response  
   b) **Program areas and outcomes (OCM)**:  
      - Program Area 1.1 HIV/AIDS and STIs  
        - OCM 1.1 Increased access to key interventions for HIV and STI prevention and treatment  
      - Program Area 1.2 Tuberculosis  
        - OCM 1.2 Increased number of tuberculosis patients successfully diagnosed and treated  
      - Program Area 1.3 Malaria and other vector-borne diseases  
        - OCM 1.3 Increased country capacity to develop and implement comprehensive plans, programs, or strategies for the surveillance, prevention, control, and/or elimination of malaria and other vector-borne diseases  
      - Program Area 1.4 Neglected, tropical, and zoonotic diseases  
        - OCM 1.4 Increased country capacity to develop and implement comprehensive plans, programs, or strategies for the surveillance, prevention, control, and/or elimination of neglected, tropical, and zoonotic diseases  
      - Program Area 1.5 Vaccine-preventable diseases  
        - OCM 1.5 Increased vaccination coverage for hard-to-reach populations and communities and maintenance of control, eradication, and elimination of vaccine-preventable diseases  
      - Program Area 2.1 Non-communicable diseases and risk factors  
        - OCM 2.1: Increased access to interventions to prevent and manage non-communicable diseases and their risk factors  
      - Program Area 4.1 Health governance and financing  
        - OCM 4.1 Increased national capacity for achieving universal health coverage
- Program Area 4.2 People-centered, integrated, quality health services
  o OCM 4.2 Increased access to people-centered, integrated, quality health services
- Program Area 4.3 Access to medical products and strengthening of regulatory capacity
  o OCM 4.3 Improved access to and rational use of safe, effective, and quality medicines, medical products, and health technologies
- Program Area 4.4 Health systems information and evidence
  o OCM 4.4 All countries have functioning health information and health research systems
- Program Area 4.5 Human resources for health
  o OCM 4.5 Adequate availability of a competent, culturally appropriate, well regulated, well distributed, and fairly treated health workforce
- Program Area 5.1 Alert and response capacities (for IHR)
  o OCM 5.1 All countries have the minimum core capacities required by the International Health Regulations (2005) for all-hazard alert and response
- Program Area 5.2 Epidemic- and pandemic-prone diseases
  o OCM 5.2 All countries are able to build resilience and adequate preparedness to mount a rapid, predictable, and effective response to major epidemics and pandemics
- Program Area 5.3 Emergency risk and crisis management
  o OCM 5.3 Countries have an all-hazards health emergency risk management program for a disaster-resilient health sector, with emphasis on vulnerable populations
- Program Area 5.4 Food safety
  o OCM 5.4 All countries have the capacity to mitigate risks to food safety and respond to outbreaks
- Program Area 5.5 Outbreak and crisis response
  o OCM 5.5 All countries adequately respond to threats and emergencies with public health consequences

3. Financial implications:
   a) **Total estimated cost for implementation over the life cycle of the resolution (including staff and activities):**
      US$ 8,000,000, including funding for a health systems expert to assess health system performance and capacity to respond to risk and provide guidance to Member States on building resilient health systems as well as support in the implementation of essential public health functions (including the IHR), in the development of national roadmaps towards universal access to health and universal health coverage, and in the creation of risk reduction strategies related to communicable and non-communicable diseases.

   b) **Estimated cost for the 2016-2017 biennium (including staff and activities):**
      US$ 4,000,000 to scale up the PAHO response in strengthening national capacity and to develop the necessary tools and methodologies to assess health system response capacity.
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<td><strong>c)</strong> Of the estimated cost noted in b), what can be subsumed under existing programmed activities?</td>
<td>US$ 1,250,000, included in existing programs for health system strengthening, disaster preparedness, and disease control and prevention.</td>
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**4. Administrative implications:**

**a)** Indicate the levels of the Organization at which the work will be undertaken:

Within technical departments in Health Systems and Services, Communicable Disease and Health Analysis, Non-Communicable Diseases and Mental Health, and the special program of Sustainable Development and Health Equity. Actions are developed through PAHO country offices with the support of the Organization’s administrative support services.

**b)** Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):

One full-time professional in health system performance and assessment

**c)** Time frames (indicate broad time frames for the implementation and evaluation):

The guidance provided in this policy document should be reviewed, assessed, and revised within five years (2021).
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<th>Analytical Form to Link Agenda Item with Organizational Mandates</th>
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<tbody>
<tr>
<td>1.</td>
<td><strong>Agenda item:</strong> 4.5 - Resilient Health Systems</td>
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<tr>
<td>2.</td>
<td><strong>Responsible unit:</strong> Health Systems and Services/Medicines and Health Technologies (HSS/MT)</td>
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<td>3.</td>
<td><strong>Preparing officer:</strong> Dr. James Fitzgerald, Director, Health Systems and Services (HSS)</td>
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<td>4.</td>
<td><strong>Link between Agenda item and Health Agenda for the Americas 2008-2017:</strong> The proposed policy document is in complete alignment with the Health Agenda for the Americas 2008-2017. It notes the importance of strengthening national health governance and stewardship, addressing the social determinants of health, improving access to quality health services, reducing inequities, reducing risk factors for priority diseases, strengthening the health workforce, and promoting research and knowledge management. In addition, it highlights the need to improve health protection through a comprehensive approach including policies that promote sustainable development and the development of health systems and measures to improve the readiness and responsiveness of health services in the presence of particular risks.</td>
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<td>5.</td>
<td><strong>Link between Agenda item and the PAHO Strategic Plan 2014-2019:</strong> The policy document is completely aligned with core strategic areas of the PAHO Strategic Plan 2014-2019, particularly Categories 1 (Communicable Diseases), 2 (Non-communicable Diseases and Risk Factors), 4 (Health Systems), and 5 (Preparedness, Surveillance, and Response). The Plan specifically notes the importance of “reducing mortality, morbidity, and societal disruption resulting from epidemics, disasters, conflicts, and environmental and food-related emergencies by focusing on risk reduction, preparedness, response, and recovery activities that build resilience and use a multisectoral approach to contribute to health security,” as well as the need to build “coherent intersectoral policies to protect and empower people to increase community resilience against critical and pervasive threats.”</td>
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<td>6.</td>
<td><strong>List of collaborating centers and national institutions linked to this Agenda item:</strong> Ministries of health, ministries of planning, ministries of finance, ministries of defense, collaborating centers in IHR (Global Health Security Branch, Division of Global Health Protection, CDC) and disaster preparedness and emergency response (Yale University).</td>
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<td>7.</td>
<td><strong>Best practices in this area and examples from countries within the Region of the Americas:</strong> The processes developed in Member States to assess the capacity of health systems to respond during the outbreaks of Zika virus, chikungunya, and Ebola virus disease are examples of best practices in building resilient health systems. Such evaluations examined the key response elements required, from the IHR to health service readiness, in the face of large-scale outbreaks. Multisectoral planning was an important element of the response process, with sectors supporting national defense, health, and social protection working collectively in emergency preparedness.</td>
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Other examples of building health system resilience have been observed in programs such as Remediar in Argentina, where counter-cyclical investments in health systems, in particular provision of essential medicines through primary care programs, were made during a period of economic crisis, augmenting the capacity of the country’s public health primary care network to provide health care services to the population.

Although countries continue to improve response and recovery capacity following disasters due to natural phenomena, all countries must invest in actions to build health systems that are resilient to the threat of natural disasters. Notable examples of systems that are advanced in their development include those of Chile, Brazil, Mexico, and the United States.

8. **Financial implications of this Agenda item:**

   Investments in health system resilience at the national level are highly cost effective, as the cost of investing in health systems is considerably less than the financial impact of a high- or low-level sustained threat or risk. In addition, the inability to mitigate against risk may result in economic loss, affect development and health outcomes, and reduce the social capital in health systems.

   The work of the PAHO secretariat in health system resilience is embedded in Categories 1 (Communicable Diseases), 2 (Non-communicable Diseases and Risk Factors), 4 (Health Systems), and 5 (Preparedness, Surveillance, and Response) of the PAHO Strategic Plan 2014-2019 and in the corresponding budgetary allocations in programmatic areas within these categories. Developing actions to improve health system resilience requires sustained funding to provide support to Member States in conducting health system assessments, developing roadmaps towards universal access to health and universal health coverage, and strengthening governance and the implementation of essential public health functions and risk reduction strategies.