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#### **G. PLAN OF ACTION FOR THE STRENGTHENING OF VITAL STATISTICS 2017-2022: MIDTERM REVIEW**

##### **Background**

1. Following the recommendations adopted in 2016 by the 55th Directing Council of the Pan American Health Organization (PAHO) (1), which recognized the importance of a new plan of action that would continue to improve the coverage and quality of vital statistics in Member States of the Region of the Americas, the *Plan of Action for the Strengthening of Vital Statistics 2017-2022* (document CSP29/9) (2) was adopted by the 29th Pan American Sanitary Conference in 2017.
2. The purpose of this document is to inform the Governing Bodies of the Pan American Health Organization (PAHO) of progress towards the objectives defined in the plan of action (2) and to highlight the challenges to be overcome in the coming years in order to achieve the targets set for 2022.

##### **Analysis of Progress Achieved**

3. This report has been structured on the basis of the four strategic lines of action set out in the plan, breaking down the progress made on each of the established indicators, by objective, and mentioning any relevant limitations. In addition, it reports on lessons learned and good practices identified, based on the four levels at which the strategic lines become operational, as described in the plan of action: country, intercountry, institutional, and interagency.
  4. The Plan of Action for the Strengthening of Vital Statistics 2017-2022 established a total of 27 indicators. It is noteworthy that in 30% of cases (eight indicators) the 2022 target has already been met or exceeded, while measurable progress (to a greater or lesser extent) has been made on 13 other indicators.
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***Strategic line of action 1: Strengthening vital statistics systems***

5. This line of action encompasses 16 of the 27 of the indicators. Progress has been achieved on 69% of these, and two targets have been reached ahead of time.

<b>Objective 1.1:</b> Update action plans for strengthening vital statistics within the framework of health information systems	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.1.1</b> Number of Member States that are updating their legislation and incorporating the reporting and use of birth and death registries</p> <p>Baseline (2017): 10 Target (2022): 20</p>	<p>10 Member States (none added to baseline). However, joint actions will continue to be carried out with countries and territories, and the target is expected to be met by 2022.</p>
<p><b>1.1.2</b> Number of Member States that assign a personal identification number (PIN) to each newborn and each adult that does not have one</p> <p>Baseline (2017): 5 Target (2022): 10</p>	<p>13 Member States in Latin America are addressing this issue as it applies to vital statistics. Therefore, the target set for 2022 has been reached ahead of time; most Member States currently assign a PIN both to live-born infants and to adults who do not yet have one.</p>
<p><b>1.1.3</b> Number of Member States that implement nationally budgeted plans of action to strengthen vital statistics based on the updated assessment of their health information systems</p> <p>Baseline (2017): 10 Target (2022): 25</p>	<p>10 Member States (none added to baseline). However, under the new <i>Plan of Action for Strengthening Information Systems for Health 2019-2023</i> (document CD57/9, Rev. 1) (3), the target of 25 States is expected to be exceeded.</p>
<p><b>1.1.4</b> Number of Member States that provide access to vital statistics databases in accordance with open data policies</p> <p>Baseline (2017): 4 Target (2022): 10</p>	<p>By 2020, 14 Member States providing access to open data on vital statistics had been identified; thus, the target set for 2022 has been exceeded.</p>

<b>Objective 1.2:</b> Improve the coverage and quality of birth registration (disaggregated by sex, ethnic group, place of residence, and administrative subdivision)	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.2.1</b> Number of Member States with birth registration coverage at 90% or higher, and that reduce by at least 20% the gap in total coverage (data disaggregated by sex, ethnic group, place of residence, and administrative subdivision)</p> <p>Baseline (2017): 20 Target (2022): 25</p>	<p>20 Member States (none added to baseline). However, due to the periods for which information from sources historically used for calculation of live birth registration coverage are available, the nearest estimate (for the period 2015-2020) will be available in the second half of 2022.</p>
<p><b>1.2.2</b> Number of Member States with birth registration coverage below 90% and that reduce by at least 30% the gap in total coverage (data disaggregated by sex, ethnic group, place of residence, and administrative subdivision)</p> <p>Baseline (2017): 5 Target (2022): 10</p>	<p>5 Member States (none added to baseline). However, it is important to note the progress achieved to date with regard to birth registration coverage at the subnational level in 7 countries, which represents a major achievement towards identifying gaps and targeting interventions in these countries.</p>
<p><b>1.2.3</b> Number of Member States that record birthweight for 100% of live births</p> <p>Baseline (2017): 7 Target (2022): 20</p>	<p>As of 2019, 19 Member States included birthweight as a variable in their certification of live birth forms. In subsequent years, emphasis will be placed on monitoring this indicator to quantify progress toward registration of this variable.</p>
<b>Objective 1.3:</b> Increase coverage and quality of death registration (disaggregated by age, sex, ethnic group, residence and administrative subdivision)	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.3.1</b> Number of Member States with death registration coverage at 90% or higher and that reduce by at least 20% the gap in total coverage (data disaggregated by age, sex, ethnic group, place of residence, and administrative subdivision)</p> <p>Baseline (2017):14 Target (2022): 17</p>	<p>14 Member States (none added to baseline). However, due to the periods for which information from sources historically used for calculation of death registration coverage are available, the nearest estimate (for the period 2015-2020) will be available in the second half of 2022, which should allow achievement of the target.</p>

<b>Objective 1.3: Increase coverage and quality of death registration (disaggregated by age, sex, ethnic group, residence and administrative subdivision)</b>	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.3.2</b> Number of Member States with death registration coverage below 90% and that reduce the gap in total coverage by at least 30% (data disaggregated by age, sex, ethnicity, place of residence, and administrative subdivision)</p> <p>Baseline (2017): 11 Target (2022): 18</p>	<p>11 Member States (none added to baseline). However, it is important to note the progress achieved to date with regard to death registration coverage at the subnational level in 6 countries, which represents a major achievement towards identifying gaps and targeting interventions within these countries. The target is expected to be reached by 2022.</p>
<p><b>1.3.3</b> Number of Member States that reduce the proportion of ill-defined causes of death by at least 30% of the 2015 baseline</p> <p>Baseline (2014):<sup>1</sup> 0 Target (2022): 12</p>	<p>According to the Core Indicators 2019 (4), a total of 4 countries and territories have achieved a reduction of at least 30% in their proportion of ill-defined causes, which corresponds to 33% progress toward this target. In addition, 6 other countries and territories are more than halfway to the target. Conversely, 15 others have met setbacks on the road toward this target, as a result of one or more of the following causes: flagging efforts aimed at strengthening capacities for the proper registration of causes of death; lack of a mechanism for continuous monitoring and follow-up of said registration; a growing proportion of deaths certified by non-medical personnel; and a rising trend in deaths occurring outside medical facilities.</p>
<p><b>1.3.4</b> Number of Member States and territories that reduce the proportion of garbage codes used to classify causes of death by at least 30% of the 2015 baseline</p> <p>Baseline (2014):<sup>2</sup> 0 Target (2022): 25</p>	<p>According to the Core Indicators 2019 (4), only Ecuador has achieved a reduction of at least 30% in their proportion of garbage-coded deaths, which corresponds to 4% progress toward this target. Another 10 countries and territories are at least one-third of the way to the finish line, while 14 others have experienced setbacks, as a result of one or more of the following causes: reduced efforts to strengthen capacities in medical workers for the proper registration of causes of death; lack of a mechanism for continuous monitoring and follow-up of registration; a growing proportion of deaths certified by non-medical personnel; and a rising trend in deaths occurring outside a health facility.</p>

<sup>1</sup> As stipulated in the *Plan of Action for the Strengthening of Vital Statistics 2017-2022*, the baseline for this indicator will be "the one published in the Core Indicators 2016"; in the Core Indicators, this variable is dated "circa 2014" (5).

<sup>2</sup> As above.

<b>Objective 1.3:</b> Increase coverage and quality of death registration (disaggregated by age, sex, ethnic group, residence and administrative subdivision)	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.3.5</b> Number of Member States that publish their mortality data within two years of the closing of mortality statistics</p> <p>Baseline (2017): 26 Target (2022): 35</p>	<p>26 Member States (none added to baseline). However, joint actions are being taken with countries and territories to make progress towards this target by 2022.</p>
<b>Objective 1.4:</b> Have health information systems that provide mortality indicators	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.4.1</b> Number of Member States that conduct active searches for maternal deaths, to reduce the under-registration and misclassification of these deaths</p> <p>Baseline (2017): 8 Target (2022): 15</p>	<p>As of 2019, 14 Member States were conducting active searches for maternal deaths (to a greater or lesser extent, either routinely or sporadically), which corresponds to 93% progress towards the 2022 target.</p>
<p><b>1.4.2</b> Number of Member States that increase the capture, registration, and analysis of deaths in children under 5 (disaggregated by age, sex, and place of residence) and cause of death</p> <p>Baseline (2017): 0 Target (2022): 15</p>	<p>9 Member States have a specific section on their death certificate to collect specific data relating to the deaths of children under 1 year of age, which should allow progress on analysis of these deaths in the coming years.</p>
<b>Objective 1.5:</b> Establish mechanisms for the integration of vital statistics, civil registries, and other health information systems through governance, the development of standards, and interoperability	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.5.1</b> Number of Member States with functional interinstitutional national committees for civil registration and vital statistics systems</p> <p>Baseline (2017): 7 Target (2022): 15</p>	<p>18 Member States have formal interinstitutional committees, of which 8 hold periodic scheduled meetings and 5 others hold <i>ad hoc</i> meetings as required. This corresponds to 87% progress towards the 2022 target.</p>

<b>Objective 1.5:</b> Establish mechanisms for the integration of vital statistics, civil registries, and other health information systems through governance, the development of standards, and interoperability	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>1.5.2</b> Number of Member States that capture personal identification numbers (PINs) during registration of vital statistics and through other health information systems, thus helping create links between systems</p> <p>Baseline (2017): 4 Target (2022): 15</p>	<p>18 Member States collect one or more personal identification numbers (PINs) on death certificates, which contributes to the creation of links between systems. Collection of PIN data for live birth registration, as well as within the framework of other health information systems, will be further addressed in the <i>Plan of Action for Strengthening Information Systems for Health 2019-2023 (3)</i>.</p>

***Strategic line of action 2: Modernizing vital statistics processes with the support of information and communications technologies***

6. This line of action includes six of the 27 of the indicators; targets for four of these have been reached in advance.

<b>Objective 2.1:</b> Increase the use of information and communications technology and <i>eHealth</i> initiatives for the capture, management, and dissemination of information related to vital statistics	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>2.1.1</b> Number of Member States that link their birth registry offices with the national level through internet-based systems</p> <p>Baseline (2017): 7 Target (2022): 10</p>	<p>In 15 Member States, all vital statistics data are conveyed electronically from local to regional offices and from there to national headquarters. The target for this indicator has thus been reached in advance.</p>
<p><b>2.1.2</b> Number of Member States that electronically link their death registry offices with the national level through internet-based systems</p> <p>Baseline (2017): 4 Target (2022): 10</p>	<p>In 15 Member States, all vital statistics data are conveyed electronically from local to regional offices and from there to national headquarters. Again, the target set for this indicator has been reached in advance.</p>
<p><b>2.1.3</b> Number of Member States that use automated coding of deaths, and ensure that this is linked to other systems, such as the birth registry</p> <p>Baseline (2017): 7 Target (2022): 20</p>	<p>4 Member States use automated coding as part of their routine processes for the integration of official mortality information; in 3 other countries, efforts to implement official use of this method have been intensified.</p> <p>In addition, 6 other countries received training for the use of this tool through the Latin American and Caribbean Network for Strengthening Health Information Systems (RELAC SIS). Thus, further progress towards the target is expected.</p>

<b>Objective 2.1:</b> Increase the use of information and communications technology and <i>eHealth</i> initiatives for the capture, management, and dissemination of information related to vital statistics	
Indicator, baseline, and target	Status
<p><b>2.1.4</b> Number of Member States with mechanisms that offer physicians and other professionals in-person or virtual training to fill out a death certificate</p> <p>Baseline (2017): 7 Target (2022): 15</p>	<p>As of 2019, 45 countries and territories offered physicians the online course developed by RELAC SIS (both web-based and in an app-based version for mobile devices) to build capacity in proper completion of death certificates. To date, over 150,000 professionals have taken the course.<sup>3</sup> The target for 2022 has thus been greatly exceeded.</p>
<b>Objective 2.2:</b> Facilitate access to and dissemination of vital statistics through Member States' electronic portals	
Indicator, baseline, and target	Status
<p><b>2.2.1</b> Number of Member States that have open access to vital statistics data (for example: electronic portal or other means of dissemination)</p> <p>Baseline (2017): 16 Target (2022): 25</p>	<p>By 2020, 25 countries and territories had open access to vital statistics data, and the target set for 2022 was thus reached in advance.</p>
<b>Objective 2.3:</b> Develop governance and data management strategies for vital statistics, within the framework of health information systems	
Indicator, baseline, and target	Status
<p><b>2.3.1</b> Number of Member States that have a vital statistics governance and data management strategy within the framework of health information systems, based on a legal framework</p> <p>Baseline (2017): 16 Target (2022): 25</p>	<p>16 Member States (none added to baseline). However, the target is expected to be reached within the framework of the <i>Plan of Action for Strengthening Information Systems for Health 2019-2023 (3)</i>.</p>

<sup>3</sup> This course was included in the RELAC SIS program of work on the basis of a best practice shared by Uruguay. For its development, PAHO received support from the Collaborating Centres for the WHO Family of International Classifications (WHO-FIC) in Argentina and Mexico (Argentine Centre for Classification of Diseases [CACE] and Mexican Center for Disease Classification [CEMECE], respectively). It is currently available in Spanish, French, and English.

***Strategic line of action 3: Strengthening the capacity for management and analysis of vital statistics***

7. This line of action includes three of the 27 indicators. For two of these, no progress has been made to date.

<b>Objective 3.1: Strengthen vital statistics data analysis</b>	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>3.1.1</b> Number of Member States that are strengthening technical capacity in vital statistics data analysis at the national and subnational level</p> <p>Baseline (2017): 25 Target (2022): 35</p>	<p>25 Member States (none added to baseline). However, new workshops are being developed to ensure the target is reached by 2022.</p>
<b>Objective 3.2: Develop, disseminate, and use tools to automate data generation in order to facilitate vital statistics data analysis, with emphasis on geographical and demographic disaggregation</b>	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>3.2.1</b> Number of Member States that have automated data generation tools for vital statistics analysis</p> <p>Baseline (2017): 9 Target (2022): 15</p>	<p>There are still only 9 countries with automated data generation tools for vital statistics analysis. No progress has been made on this indicator. Nevertheless, a number of countries and territories not included in this group are working to make progress toward this target until 2022.</p>
<b>Objective 3.2: Develop, disseminate, and use tools to automate data generation in order to facilitate vital statistics data analysis, with emphasis on geographical and demographic disaggregation</b>	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>3.2.2</b> Number of Member States that conduct a comprehensive health situation analysis at least every two years to include vital statistics and health data disaggregated at the geographical and demographic level, as appropriate to the national context</p> <p>Baseline (2017):10 Target (2022): 25</p>	<p>Six countries conducted a comprehensive health situation analysis, including vital statistics data, between 2018 and 2019. In addition, 7 other countries and territories were identified which may meet this indicator in the medium term, as they already have the necessary data available, but have yet to compile an integrated report.</p>

***Strategic line of action 4: Strengthening and sharing of best practices related to vital statistics***

8. This line of action includes only two indicators. The set targets for both have been reached ahead of time.

<b>Objective 4.1:</b> Identify, promote, and disseminate best practices developed by the Member States so that they can be used to strengthen priority areas	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>4.1.1</b> Number of Member States that participate in networks that support the strengthening of vital statistics and allow the dissemination of best practices in the Region</p> <p>Baseline (2017): 15 Target (2022): 30</p>	<p>By 2019, a total of 45 countries and territories had participated in at least one RELAC SIS practice, surpassing the 2022 target.</p> <p>These 45 countries and territories include 18 which participated in at least five of the six RELAC SIS core practices.</p>
<b>Objective 4.2:</b> Establish partnerships with other international agencies and partners to strengthen vital statistics, with a view to harmonizing technical cooperation projects and programs and financing	
<b>Indicator, baseline, and target</b>	<b>Status</b>
<p><b>4.2.1</b> Number of countries carrying out at least two synergized projects with international agencies to strengthen vital statistics</p> <p>Baseline (2017): 10 10 Target (2022): 20</p>	<p>Between 2017 and 2019, 22 countries and territories carried out at least joint two projects with PAHO to strengthen vital statistics under the RELAC SIS framework. In addition, during 2019, 8 of these 22 countries and territories were involved in a joint project with the World Bank to conduct a status diagnosis of their vital statistics systems.</p>

**Lessons Learned and Best Practices**

9. Lessons learned and best practices at the different levels at which the strategic lines become operational are given below:

- (a) **Country:** Seeking to establish consensual roadmaps with countries to move towards achieving the targets set out in the *Plan of Action for the Strengthening of Vital Statistics 2017-2022*, technical cooperation was provided to six countries.<sup>4</sup> The results obtained were satisfactory insofar as actors and decision-makers from all the different institutions involved within the country participated, and interest was shown by the highest authorities. Specific progress towards achieving the targets of this plan will undoubtedly also depend largely on the active participation of all involved. The achievements in obtaining data disaggregated at the

<sup>4</sup> Missions carried out for this purpose in 2017-2019: Colombia, Ecuador, Honduras, Paraguay, Peru, and El Salvador.

subnational level reflect domestic progress in these countries, as well as their commitment to narrowing gaps so as to leave no one behind, in accordance with the United Nations 2030 Agenda for Sustainable Development.

- (b) **Intercountry:** RELAC SIS has established itself as the most prominent and most successful mechanism for the dissemination of best practices among the countries of the Region. However, its limited relevance in the English-speaking Caribbean is a major challenge.
- (c) **Institutional:** Many of the achievements reflected in this report were achieved through interprogrammatic work led by the Information Systems and Platforms for Health Unit (EIH/IS) with various PAHO technical units, including the Latin American Center for Perinatology/Women's and Reproductive Health (CLAP/WR). This made it possible to articulate common, integrated proposals for technical cooperation that facilitated the mobilization of resources, among other aspects.
- (d) **Interinstitutional:** Operationalization of the *Plan of Action for the Strengthening of Vital Statistics 2017-2022* through this component greatly facilitated the progress achieved to date. Support from and partnerships with other international agencies will continue to be critical to achieving the set targets.<sup>5</sup> Likewise, joint work with WHO collaborating centers was indispensable for strengthening technical cooperation.

### Action Necessary to Improve the Situation

10. In order to achieve the goals of the *Plan of Action for the Strengthening of Vital Statistics 2017-2022*, it is essential to secure the involvement of key actors in the vital registration information system within each Member State, as well as the commitment of the highest authorities.<sup>6</sup> In this regard, it is necessary to establish and operationalize interagency committees for the implementation of health information systems with an emphasis on national vital statistics systems.

11. Within the framework of the *Plan of Action for Strengthening Information Systems for Health 2019-2023*, based on the results of a maturity assessment of the model, PAHO will continue to provide specific technical cooperation to countries with the greatest needs

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<sup>5</sup> The Economic Commission for Latin America and the Caribbean (ECLAC), the Latin American and Caribbean Demographic Center (CELADE, ECLAC Population Division), the World Bank (WB), the Inter-American Development Bank (IDB), the Organization of American States (OAS), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), the United States Agency for International Development (USAID), MEASURE-Evaluation and Management Sciences for Health (MSH), the Canadian International Development Agency (CIDA), the United Nations Statistics Division (UNSD), and the Statistics Conference of the Americas (SCA), among other international agencies.

<sup>6</sup> Primarily the Ministry of Health, civil registry office, national statistics office, and agency responsible for forensic medicine services, or their equivalents. Furthermore, the involvement of an entity hierarchically superior to all of these instances is required for optimal operationalization.

and conduct joint work to establish roadmaps to achieve targets. In addition, in countries with a recent roadmap, an internal mechanism for periodic assessment should be implemented to monitor progress and identify possible deviations.

12. Interagency and interprogrammatic work needs to continue and increase so as to join efforts and pool resources to ensure compliance with the *Plan of Action for the Strengthening of Vital Statistics 2017-2022*. Likewise, continued support is needed from the collaborating centers for the WHO Family of International Classifications (WHO-FIC) in the Region and related collaborating centers.

13. RELACSYS is expected to consolidate and expand its work within the framework of the *Plan of Action for Strengthening Information Systems for Health 2019-2023*.

14. The technical capacities of human resources should continue to be strengthened, preferably through “training the trainer” schemes, primarily in the following areas: WHO-FIC, proper classification of cause of death in death certificates, data processing, and information production and analysis.

15. In particular, in order to make further progress in strengthening the management and analysis capacity of vital statistics data, it is necessary to develop and disseminate a set of tools on which countries’ national and subnational teams can rely to support their capacities.

### **Action by the Directing Council**

16. Considering the extraordinary and unprecedented circumstances presented by the COVID-19 pandemic, and in accordance with Resolution CE166.R7, this report will be published for information purposes only, and it will not be discussed by the Directing Council.

### **References**

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