



# **CRVS country reports** Peru: Reflections on the first four years of the Bloomberg Philanthropies Data for Health Initiative

March 2021



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# Peru: Reflections on the first four years of the Bloomberg Philanthropies Data for Health Initiative

This report, which forms part of a series of papers documenting interventions led by the Bloomberg Philanthropies Data for Health Initiative at the University of Melbourne over a four year period from 2015 to 2019, presents the interventions implemented through the Initiative in Peru to improve the quality and timeliness of mortality data produced by the country's civil registration and vital statistics system. Other reports in this series and further resources on the Initiative's activities in Peru can be found on the CRVS Knowledge Gateway: <a href="https://crvsgateway.info/">https://crvsgateway.info/</a>

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## **Executive summary**

The Government of Peru has a strong track record of demonstrating commitment to developing a strong civil registration and vital statistics (CRVS) system capable of supporting informed, cost-effective health policy and planning to benefit its diverse population. Peru's CRVS system, however, has been challenged by unreliable and incomplete data, particularly mortality data, which has historically not well represented the health of the population. Many factors contributed to this, including a significant proportion of deaths occurring outside of health facilities, geographical barriers to certifying causes of death in rural populations, poor-quality medical certification of cause of death (MCCOD), and lack of a formal mortality coding system. In addition, Peru had no permanent coordinating body for the CRVS system, although a tripartite agreement existed between three principal ministries/ agencies: (1) The Registro Nacional de Identificación y Estado Civil ([RENIEC], responsible for overseeing the civil registration function); (2) The Instituto Nacional de Estadística e Informática ([INEI], the national statistics office), and; (3) The Ministry of Health (MINSA). To address the challenges, over a period of four years from April 2015 to March 2019, the Bloomberg Philanthropies Data for Health (D4H) Initiative worked closely with the Government of Peru to strengthen capacity among stakeholders, improve data coverage and quality for deaths occurring in health facilities, and implement a new online death notification system (SINADEF: Sistema Informático Nacional de Defunciones, National Information System of Deaths).

Peru's high-level political commitment towards engaging in CRVS-strengthening activities over the four-year implementation period was encouraging, with significant focus on supporting stakeholders and health facilities to efficiently produce goodquality, reliable information. D4H supported and guided the tripartite agreement, offered training and innovative tools, and influenced a significant shift in the quality and completeness of national mortality data. A national CRVS coordinating committee was established, which strengthened the cooperation between the appropriate stakeholders. Improved governance was an extremely crucial outcome of the strategy; the technical committee oversaw the newly introduced interventions and worked closely with D4H, ensuring continuous evaluation of the CRVS system. The committee also assumed responsibility for future interventions.

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The D4H intervention in Peru was a remarkable success, with the greatest achievement undoubtedly the launch of SINADEF in 2016. SINADEFF has been instrumental in moving the country away from what was previously a paper-based notification system, and since being launched, more than 7000 physicians have received MCCOD and SINADEFF training, far exceeding the initial training target of 5000 physicians. Following the training of staff in use of SINADEF, death certification error rates fell by 38 per cent. Additional training was also provided for national teams such as those from MINSA, both at the central level and at the local level in all regions across the country. The Government of Peru plans to continue to raise awareness and provide training on MCCOD and SINADEF for medical staff in all 26 regions of the country, improving death certification and notification practices nationally.

Based on the successful national roll-out of SINADEF, other electronic solutions have been implemented, such as the SmartVA eLearning platform and the automated mortality coding tool, Iris. With 30 coders trained in automated coding, in 2018, coders were able to re-code 70 per cent of data from 2016.

The Government of Peru as been a key driver of the interventions, maintaining constant involvement in activities, establishing a strong and dynamic work force capable of responding to the changes, and adapting available tools to ensure they can be sustainably used and maintained. Peru has shown important engagement in the CRVS-strengthening activities and has gained knowledge and experience that can be used to support other countries within South America and globally to implement similar CRVS processes.

## Strengthening Peru's CRVS system

## Background

With a population of more than 31 million people and one of the fastest growing economies in South America, improving the population's health has been a key focus for the government.<sup>1</sup> At the beginning of the D4H Initiative in 2015, strengthening the CRVS system was a top priority for major stakeholders, driven by a strong culture of data use, as well as by national aspirations to demonstrate progress toward the country's development agenda - for example, by joining the Organisation for Economic Cooperation and Development (OECD).

Recognising systemic shortcomings, Peru began investing in efforts to strengthen their CRVS system. Focus was placed on capturing representative data on the health status of the population to guide the formation and evaluation of policies to improve population health, and to identify the least served sub-populations. While there was no permanent coordinating body for the CRVS system; a tripartite agreement between RENIEC, INEI and MINSA ensured the involvement of principal ministries/agencies.<sup>2,3</sup> The three bodies were well coordinated; however, further efforts were needed to ensure that complete, high-quality data were obtained. Such data could then be used to develop informed, cost-effective health policy and planning initiatives to benefit Peru's diverse population, helping to mitigate future health threats.<sup>4,5,6</sup>

An international study in 2015 (based on data up to 2012) concluded that Peru's vital statistics performance index was 'medium'. Although there had been significant improvements in birth registration completeness, the detail and quality of the mortality data remained unreliable and incomplete. Therefore, Peru - in conjunction with D4H - conducted a baseline evaluation to identify the matters affecting the CRVS system, to better understand challenges the system faced. The workplans that were jointly developed by Peru and D4H over the first four years of the Initiative relied on the baseline evaluation of Peru's CRVS system to highlight key areas in need of improvement (Box 1). The evaluation and subsequent workplans resulted in the identification of a group of priority interventions aimed at improving the quality and sustainability of the CRVS system.

World Bank (2017). The World Bank in Peru. Overview. Available at: www.worldbank.org/en/country/peru/overview (accessed 14 March 2019).

University of Melbourne. Peru, CRVS country overview. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne; 2018. [offline] 2

University of Melbourne. Peru: An exceptional example of CRVS system advancement. CRVS country perspectives. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne; 2017. Available at: https://crvsgateway.info/file/16990/68 3 4

Huicho, L, Trellas, M, Gonzales, F. National and sub-national under-five mortality profiles in Peru: a basis for informed policy decisions. *BMC Public Health*. 2006; 6:173. Available at: <a href="https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-6-173">https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-6-173</a> 5

Huicho, L, Trellas, M, Gonzales, F, Mendoza, W, Miranda, J. Mortality profiles in a country facing epidemiological transition: An analysis of registered data. *BMC Public Health*. 2009; 9:47. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-9-47

<sup>6</sup> Setel et al. A scandal of invisibility: making everyone count by counting everyone. The Lancet. 2007; 370:1569-1577.

## Box 1: Baseline status of the Peruvian civil registration and vital statistics system

At the beginning of the Bloomberg Philanthropies Data for Health (D4H) Initiative, partner cities and countries were involved in completing a baseline evaluation. The baseline evaluation framework is a best-practice technical tool that measures, compares and tracks civil registration and vital statistics (CRVS) technical interventions.<sup>7</sup> It does this by providing a comprehensive scientific assessment of the CRVS system at baseline, to help countries identify the most efficient and cost-effective areas for CRVS technical intervention.

The baseline evaluation for Peru was conducted in early 2016, based on information from the key ministries and agencies. The baseline evaluation found that:

- There were several institutions involved in the mortality reporting system, causing issues that inhibited completeness in the country (e.g. a fragmented health sector, non-official cemeteries, and processes of data capture that were not familiar to health workers).
- Completeness of registration was low due to a lack of incentives, low levels of interaction with the health system in remote areas, and data transfer coordination issues between institutions.
- Physicians were expected to code all causes of death on the mortality certificate and select the underlying cause of death, but very few had received training in International Classification of Diseases and Related Health Problems (ICD) coding.
- The mortality information system collected deaths occurring at the national level (in both public and private health institutions) and in the home, for natural and external causes.
- This system was divided into three parts. The Ministry of Health and the Registro Nacional de Identificación y Estado Civil each collected data from different parts of the death certificate and worked independently. The third was a part of the national statistics office, which worked in data validation. Until 2017, they had never mapped the processes of each part.

The baseline evaluation identified that Peru's CRVS system needed to improve completeness of registration, quality of mortality data and build human capacity to generate demographic estimates used for vital statistics. Further, more efficient, comprehensive and cohesive governance of the mortality system was needed to enhance the utility of the data collected.

## Improving the quality and capture of mortality data

A key concern of MINSA was the improvement of completeness of birth and death registration; therefore, an agreement with RENIEC was made to develop and use online systems of registration. The online live births registration system (CNV en Linea), implemented in 2012, helped simplify the birth registration process and significantly increase completeness of birth registration. The system is now used in around 80 per cent of all health facilities across the country. Piloting of the electronic death registration system occurred in 2015, with national implementation of the system beginning in 2016, with support from D4H. This online system for capturing health facility deaths (CDEF en linea) enabled physicians to notify health facility deaths to a database housed in and managed by RENIEC. Data regarding facility deaths is entered by physicians, who then choose an underlying cause of death (COD) (which is automatically assigned an ICD code) from a drop-down list. Rollout of the system (SINADEF) has been the country's primary focus to improve completeness of death registration and mortality data at a national level. In 2018, SINADEF captured almost 80 per cent of Peru's of annual deaths.

Peru recognised, however, that methods were needed to account for internal data migration and estimating completeness at a subnational level. To address this, technical experts from D4H at the University of Melbourne (UoM) provided training to build capacity within the national statistics office (INEI) to produce more accurate demographic estimates. Historically, Peru's demographic estimates were calculated using comparatively simplistic methods, with the D4H training focussed on more sophisticated methods, including the Adair-Lopez method.<sup>8</sup>

CRVS country reports

- 7 Mikkelsen L, Richards N, AbouZahr C, Adair T, Lopez AD, deSavigny D, Onaka A, Nichols E, Bronson G. A framework for evaluating national CRVS systems at baseline. CRVS technical guide. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne; 2018. Available at: <u>https://crvsgateway.info/file/17043/277</u>
- 8

# Improving coordination of the CRVS system: Formation of a national coordinating committee

With support from the Government of Peru, D4H worked to strengthen interinstitutional coordination between RENIEC, INEI and MINSA to help form a national coordination committee – the Technical Committee for Inter-Institutional Coordination - to oversee COD data collection and quality improvement for use in population health policy and planning.<sup>9</sup> The Committee, which represented the first time the three agencies had actively worked together and collaborated to improve CRVS activities, met quarterly and focused on:

- Building governance
- Creating a detailed CRVS work plan
- Developing new processes for data capture
- Improving record linkage.

To support the Committee's mandate and capacity to understand key CRVS challenges and concepts, various workshops were held - such as a mortality data quality workshop in July 2016 - helping to increase the skills and understanding of committee members on a range of CRVS topics.

The formation of the Committee was a key milestone in the D4H intervention in Peru, leading to the development of a network of collaborators at both national and community levels, with a special focus on the Medical College of Peru and the universities. Additionally, for the first time, a specialist sub-committee responsible for enhancing the production of meaningful mortality data was formed, sitting under the Inter-Institutional Coordinating Committee.<sup>10</sup>

## Strengthening certification practice through physician training

In Peru, MINSA is the principal agency responsible for capturing and publishing COD data. Causes of death must be certified by either the attending physician for hospital/in-facility events, or a medical professional responsible for death certification for out-of-facility events, and recorded on the World Health Organization's (WHO) International Form of Medical Certificate of Cause of Death. Physicians who certify the death and COD also provide corresponding International Classification of Diseases and Related Health Problems (ICD) codes on the death certificate, but ICD decision rules are not generally applied. Medical students are briefly introduced to MCCOD, however, the training can be inadequate and often not put into good practice. Therefore, strengthening certification practices was a key priority to improve the quality of COD data across Peru.

To better educate physicians in the practice of medical certification (**Box 2**), the Government of Peru introduced a training program targeted at physicians primarily working in public hospitals and legal medicine divisions within government. With the support and guidance of the D4H Initiative, by December 2018, almost 7000 physicians, representing about 20 per cent of physicians working in public health facilities in Peru, had received MCCOD training, well exceeding the initial goal of 5000 trained physicians by March 2019. This achievement demonstrated Peru's commitment to gaining more accurate and reliable COD data for use in better public health planning and policy. Importantly, upskilling Peru's physicians in MCCOD strengthened the implementation of the online death notification system, SINADEF, with results from 2018 indicating a 38 per cent reduction in errors on death certificates. The Peruvian Association of Faculty of Medicine has incorporated the MCCOD course as a permanent and required offering to Peruvian doctors. Additionally, an MCCOD app has been created and approved for use by physicians that provides real-life case studies and information on regulations and guidelines for MCCOD that are specific to Peru.

Peru Implementation Working Group. *Peru: An exceptional example of CRVS system advancement.* CRVS country report. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne; 2018. Available at: <a href="https://crvsgateway.info/file/16990/68">https://crvsgateway.info/file/16990/68</a>
 ibid.

## Box 2: What is medical certification of cause of death?

Medical certification is the process physicians use to determine the underlying cause of death (COD), that is, 'the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury'.<sup>11</sup> To correctly complete a medical certificate of death, the physician must identify the disease directly causing the death, and then trace the sequence of events back to the underlying COD. The physician must also list other diseases or conditions contributing to the death.<sup>9</sup>

MINSA also requested that Peru's medical schools include MCCOD training in medical school academic programs. This initiative resulted in professors from more than 30 medical school academic programs receiving MCCOD training, providing them with the capacity to continue training students in best-practice medical certification. Training Peru's future physicians on the importance of medical certification and the generation of quality COD data for population health planning purposes, is key to improving the future sustainability and reliability of mortality statistics generated from Peru's CRVS system.<sup>12</sup>

## Supporting implementation of an online system for death notifications

In 2013, only 75 per cent of deaths were recorded in Peru, with death records being paper-based and often failing to reach INEI. This was because relatives could access the death registration forms or take the decedent directly to the morgue without a death certificate, making information on deaths very difficult to retrieve.<sup>13</sup> To improve this process, in 2016, the Government of Peru implemented a national electronic death notification system, known as SINADEF. D4H provided technical assistance for the planning of a national rollout of SINADEF, preparing Enterprise Architecture maps and standard operating procedures to guide the capture and transfer of paper-based mortality data to the online system. The Initiative further supported the preparation of the national implementation plan and conducted train-the-trainer workshops for hospital registrars and health information system officers on the use of SINADEF. The implementation of national training was overseen by MINSA, with regular sub-national monitoring and supervision provided by D4H.

In support of the new online mortality system, two ministerial resolution guidelines were updated, processes among stakeholders were reviewed and updated, and notifications were collected from more sources. Late 2017 saw the official launch of SINADEF by the new Minister of Health, who expressed support for the online system and for the D4H Initiative, encouraging all regional health directors to promote and commit resources to improve SINADEF and D4H–related interventions. The database is now shared among RENIEC, MINSA and INEI, allowing relevant stakeholders to use the data to make informed decisions that benefit the health and wellbeing of Peru's population.

To ensure that SINADEF was successful, it was extremely important that all the stakeholders understood that the process was essential and, therefore, compulsory. High-level support and commitment helped people using the system appreciate its value, and increased awareness for the technology's capacity to improve the overall population's health and wellbeing:

"This information will also become the basis for decision-making on public health and policy matters, to be able to prevent fatalities. If we know what the main cause of death is, we will know when the population pyramid has turned up-side-down."

- Dr Rosario Kiyohara Okamoto, Director, Hospital Dos de Mayo

With support from D4H, physicians and technical assistants in health facilities across all 25 regions have been trained on SINADEF. Online death certificates issued through SINADEF increased from 35 215 in 2017, to 73 792 in 2018, representing 40 per cent of expected deaths for that year.

The University of Melbourne. *Handbook for doctors on cause of death certification.* CRVS technical guide. Melbourne, Australia; Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, The University of Melbourne; 2018. Available at: <u>https://crvsgateway.info/file/17384/57</u>
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 Peru Ministerio de Salud and Insituto Nacional Estadística e Informática. *Perú: Bloomberg Philanthropies Data for Health Initiative work plan*. Unpublished; 2016

"Previously, completing paper forms was very problematic. They could get lost, mixed-up or they just weren't readable ... So, by using technology, access to information is available to those who need to use it. To be able to record information, such as patients' death records is an achievement and a very significant advancement."

- Dr Rosario Kiyohara Okamoto, Director, Hospital Dos de Mayo

Despite being in the early stages of implementation, SINADEF has already improved the coverage, quality and availability of death records in Peru. This has increased the efficiency and timeliness of the government's ability to produce mortality data. The continuous technical capacity-building in SINADEF has helped physicians use the system; however, there were some challenges when rolling out SINADEF nationally. For example, due to its relative isolation and accessibility difficulties, SINADEF has only been set up in three out of 12 hospitals in the Amazonian region.

To further support the implementation of SINADEF, Janet Miki from MINSA, participated in the CRVS Fellowship Program at the University of Melbourne. Her Fellowship focused on assessing the accuracy of the death certificates entered into SINADEF, helping to improve the overall quality of COD data. The investigation examined common errors in death certificates before the introduction of SINADEF, compared with death certificates completed after medical certification training and the introduction of SINADEF. Janet found that the interventions had proved effective, with the average error score reduced by 38 per cent after online intervention training for SINADEF and by a further 26 per cent after MCCOD training. The findings provide a strong evidence base for Peru and other countries considering implementation of an online system of notification and certification.<sup>14</sup>

## Developing an automated verbal autopsy eLearning tool

With support from D4H, Peru piloted an automated verbal autopsy (VA) instrument to support COD information and capture more complete mortality statistics that better represent the reality of the population's health.<sup>15</sup> Because VAs were to be performed by physicians in remote areas, an application of the automated VA tool<sup>16</sup> was introduced – SmartVA for Physicians (**Box 3**).<sup>17</sup> SmartVA for Physicians has a number of advantages, and in the case of Peru, it feeds more directly into SINADEFF as it is electronic, rather than paper-based.

## Box 3: What is SmartVA-for Physicians?

Developed by the University of Melbourne, SmartVA for Physicians (also known as SmartVA Auto-Analyse) is a diagnostic program for physicians that runs on Tariff 2.0 to analyse the verbal autopsy data to produce a cause of death (COD). SmartVA for Physicians produces real-time COD estimates from the Tariff score, offering the physician up to three potential causes of death, the likelihood of death from each cause, and a summary of all endorsed symptoms. Physicians then make an informed, final decision on the COD for each decedent.<sup>18</sup>

While there are many benefits to SmartVA for Physicians, users require training in order to understand the sensitivity and correct use of the software. To address this, an advanced online eLearning system was developed to help support SmartVA training across Peru (**Figure 1**). This cost-effective tool provides virtual and self-instructional training for physicians to develop and strengthen their certification practices, and ensures that all physicians can use SmartVA to the same standard. The online system includes a syllabus and all information about the interview process, such as an interviewer manual and a SmartVA survey. The eLearning has four modules, which include fora, video seminars, theoretical classes, and an exam that must be completed to receive the certification in SmartVA training. The tool helps build physicians' capacity to use VA to capture more accurate and reliable COD data and provides a pathway to sustainably train physicians in certifying COD where they are working in areas with little or no peer or educational support available.

Development of the SmartVA eLearning tool further emphasises Peru's dedication to strengthen its CRVS system, ensuring that ample training opportunities are available in all regions. This is a novel way of implementing SmartVA training and can be used as a guide for other VA training programs internationally.

The University of Melbourne. *Introduction to SmartVA for Physicians*. CRVS best-practice and advocacy. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne; 2020. Available at: <u>https://crvsqateway.info/file/16946/3919</u>

<sup>14</sup> Miki J. CRVS Fellowship profile: Assessing the impact of death certification interventions in Perú. CRVS Fellowship reports and profiles. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne, and Ministry of Health, Peru; 2018. Available at: https://crvsgateway.info/file/17018/2435

<sup>15</sup> Automated VA. Available at: <u>https://crvsgateway.info/Automated-VA~557</u>

<sup>16</sup> SmartVA. Available at: <u>https://crvsgateway.info/SmartVA~547</u>

<sup>17</sup> Peru Implementation Working Group. Peru: An exceptional example of CRVS system advancement. CRVS country reports. Melbourne, Australia: Bloomberg Philanthropies Data for Health Initiative, Civil Registration and Vital Statistics Improvement, University of Melbourne; 2018. Available at: <u>https://crvsgateway.info/file/16990/68</u>

## Figure 1: SmartVA eLearning tool homepage



## Introducing Iris automated mortality coding

To further support the development of a standardised, efficient coding system in Peru, Iris software for automated mortality coding was introduced (**Box 4**), with MINSA and INEI collaborating to develop a training plan. Through the D4H Initiative, 30 coders were trained in use of the tool, and a country-appropriate dictionary for Peru's use of Iris was developed. In 2018, Iris was used to re-code 2016 mortality data. Initial results proved positive, with Iris able to code 70 per cent of the medical certificates, similar to the experience of other countries such as Australia where the tool is routinely applied to code death certificates.<sup>19</sup>

## Box 4: What is Iris?

Iris is an interactive software developed for coding of cause of death (COD) and for selecting the underlying COD using the International Classification of Diseases and Related Health Problems (ICD) coding rules. Iris has been installed in several European Union countries, as well as by the Office for National Statistics in the United Kingdom and Statistics Canada. In the Asia– Pacific region, the Australian Bureau of Statistics and the Fijian Statistical Office use Iris. The Philippines – another Bloomberg Philanthropies Data for Health country – was the first in Asia to implement Iris.<sup>20</sup>

The introduction of Iris was a notable achievement for Peru, as it was one of the first Latin American countries to use the software. In tandem with the other D4H interventions, the implementation of Iris will greatly increase the quality and reliability of COD data to support informed health decision-making.

19 Miki et al. Saving lives through certifying deaths: assessing the impact of two interventions to improve cause of death data in Peru. BMC Public Health. 2018; 18:1329

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<sup>20</sup> Iris ICD coding tool. Available at: https://crvsgateway.info/learningcentre/improving-quality-and-presentation-of-crvs-data/IRIS-icd-coding-tool

# Ensuring sustainability and facing challenges

"I am delighted to see the immense progress that has happened in Peru in vital statistics in the last four years, and the immense degree of personal ownership this country has taken of its data systems. [Peru] will benefit enormously for many decades to come with those investments."

- Professor Alan Lopez, Director, Bloomberg Philanthropies Data for Health Initiative, University of Melbourne

Peru has shown great enthusiasm and commitment throughout the D4H Intervention, increasing the likelihood that the processes established and knowledge gained can be maintained and managed in-country. Strengthening the tripartite agreement and establishing a functioning national coordinating committee has supported ongoing development and evaluation of CRVS practices. As a result, Peru has implemented key changes that will have long term benefits for the national CRVS system, such as updating regulations to institutionalise SINADEF to better capture mortality data nationally.

While progress has been achieved in training physicians in correct medical certification of deaths, it is still nascent, and thus, it is vital that MINSA continues and intensifies training programs in medical certification. This is particularly important for Peru's private physicians, to ensure that certification practices improve across all sectors of the health system, not just in public hospitals. To encourage best practice COD certification, MINSA has collaborated with the Peruvian Association of Medical Schools to incorporate the MCCOD training into their tertiary curriculum. The certification app is available to all physicians to provide support and exercises to ensure the correct completion of death certificates. This, and the introduction of SINADEF and Iris, helps to secure greater capacity for capturing accurate COD information in Peru.

Unfortunately, the late start for interventions to improve the diagnosis of community deaths using automated VA has meant that the country did not benefit from the full potential of the intervention to transform the quality of community COD data, and thus, ensure it is more fit for purpose. A priority for the government will be to effectively pilot and implement a system for training all rural physicians in automated VA methods and supporting them to routinely apply these methods for all home deaths that they certify. Doing so will greatly increase the policy value of the COD data collected in rural areas.

The investments made by Peru with the support of D4H are now well embedded into the country's CRVS processes, helping to ensure that better quality vital statistics will be collected to inform public health policy and planning. The Government of Peru will continue to prioritise governance strengthening measures to ensure the institutionalisation and sustainability of a fully functional CRVS system, focussing on expanding the coverage of birth and death data across the country and improving the quality, availability and timeliness of COD data for the population.

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Australian Government

Department of Foreign Affairs and Trade

The program partners on this initiative include: The University of Melbourne, Australia; CDC Foundation, USA; Vital Strategies, USA; Johns Hopkins Bloomberg School of Public Health, USA; World Health Organization, Switzerland.

Civil Registration and Vital Statistics partners:







## For more information contact:

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