Civil registration and the provision of legal identity are fundamental services that all humans have the right to expect from their governments. Functional civil registration and vital statistics (CRVS) systems\(^1\) also generate population data on fertility, mortality, and cause of death, which are indispensable to good governance and policy-making across sectors. This brief draws on the findings of a study conducted by the Ministry of National Development Planning/BAPPENAS in collaboration with PUSKAPA and Kolaborasi Masyarakat dan Pelayanan untuk Kesejahteraan (KOMPAK) between late 2015 and early 2016 to explore the ways in which the health sector in Indonesia is implicated in the government’s various commitments to improve Indonesia’s CRVS, and it recommends ways in which the health sector can contribute to an enduring solution.

\(^1\) This brief refers to Civil Registration and Vital Statistics (CRVS) systems to mean all government mechanisms of recording and/or reporting vital events—including birth, death, marriage, and divorce—and the manners by which those mechanisms relate to certifying vital events; though the research questions focused primarily on birth and death. In Indonesia, there is no single, universal CRVS system, but instead a tangle of mechanisms that intersect or overlap at times, but mostly run in parallel, rarely converging to create a whole.
CRVS in Indonesia

Indonesia currently has no single, consolidated mechanism for collating birth and death statistics across sectors, and mortality estimates are projected from the decennial census. The authority for registering births and deaths lies solely within the Ministry of Home Affairs, but several government bodies are positioned to contribute to registration activities, and many collect, analyze, and use data related to vital events.

Only 56 percent of Indonesian children (under 18 years old) have a birth certificate, and Indonesia is among the countries with the largest number of unregistered children under five in the world. Death registration is almost non-existent, and data on the causes of death are completely unavailable in many parts of the country. Without comprehensive, timely, and accurate vital statistics, ministries have reported being unable to accurately plan, target, or monitor their services.

Although one or two government bodies are typically responsible for managing a country’s CRVS, a weak system can have a domino effect across sectors. Following the adoption of the Sustainable Development Goals (SDGs), for example, the World Bank argued that legal identity coverage for all will “fundamentally support the achievement of at least 10 other SDGs,” including strengthening social protections, improving access of the poor to economic resources, ending preventable deaths of newborns, empowering women, and protecting children. A recent global study found that, even after controlling for factors like income and health systems strength, countries with well-functioning CRVS systems tend to have better health outcomes, including greater healthy life expectancy and lower rates of maternal and child mortality. Studies in Indonesia have found ownership of legal identities to be associated with the continuation of schooling and increased use of health services.

Recognizing these linkages, the Government has set out to strengthen mechanisms related to CRVS. This figures directly in President Widodo’s Medium Term Development Plan, which sets out to improve access to quality basic services, including health, education, social protection, infrastructure, and civil registration as a means of reducing poverty across the country. As part of this plan, the President aims to cover 85 percent of children with birth certificates by 2019. Several regulations have been issued in recent
years to simplify birth registration procedures, facilitate outreach to outlying communities, and promote collaborative efforts among ministries for improving death registration. The Ministry of Home Affairs has also made promising investments in modernizing the country’s population registry through the Population Administration Information System (SIAK), which is now in its fifth version. Yet these initiatives are often uncoordinated, and in the context of decentralization, standardized implementation across the country’s remote areas remains elusive. To date, no national plan has been made public detailing the government’s strategy for integrating birth, death, and cause-of-death registration in one comprehensive system with the capability of producing certificates for all vital events while also generating valid, continuous, and timely statistics that can be shared across ministries.

The Ministry of National Development Planning/BAPPENAS is exploring ways in which the various sectors with a stake in CRVS strengthening can be mobilized to work together towards a unified, complete, and reliable system. If birth and death are the principal vital events in an individual’s life, then it follows that the health system should be a core component of a country’s CRVS. Doctors, midwives, nurses, village health centre cadres, family planning counsellors, and other skilled health professionals, as well as traditional birth attendants (TBAs), are uniquely positioned to document vital events, while also providing information and support to families about registration services. With the Indonesian Ministry of Health being responsible for cause-of-death statistics nationally, it has a particular stake in receiving quality, timely, and complete fertility and mortality data, which are necessary for interpreting cause of death on the population level and necessary inputs for health services across regions.

Key Lessons from Other Low- and Middle-Income Countries

From a review of over 500 published reports and studies about CRVS in low- and middle-income countries, we found that developing countries have experimented with a range of strategies for integrating CRVS-strengthening efforts within the health sector, to varying degrees of success. A common approach has been to place civil registrars within health institutions, such as hospitals, so that individuals can apply for certificates directly following the vital event. While this has been successful in promoting birth certificate ownership in places as different as Brazil, South Africa, and Papua New Guinea, it also requires high usage of health facilities by the population, regular investment to staff registration units within facilities, and the political will to delegate authority to these officials. Some Indonesian cities have begun experimenting with this model. In Bireuen, for example, where a district decree promotes collaboration between the health and civil registration sectors, healthcare personnel help parents to prepare birth certificate applications for their newborns, and civil registration personnel regularly visit health facilities to collect applications and distribute completed certificates. In Solo (also called Surakarta), recent increases in birth certificate coverage have been partially attributed to the civil registration authority’s formal cooperation agreements with hospitals and birth centres, in which healthcare staff not only provide information to patients about birth registration, but directly input birth information into a modified version of SIAK.

To reach rural communities, or populations with low usage of health facilities, many countries have engaged local health providers—such as midwives, TBAs, and community health workers—in registration outreach or integrated birth registration within public health campaigns. UNICEF has worked with several countries to use the Expanded Program on Immunization (EPI), which undertakes regular mass vaccination campaigns for children, as an opportunity to register births. In Bangladesh, for example, EPI health workers collect standardized birth information during vaccination drives and submit these to local registry officials, who then issue birth certificates. The village police then deliver the birth certificates to the EPI post, where they are distributed to the applicants. Many countries, such as Kenya and Ghana, have used community health workers to expand birth and death reporting, often using SMS or web-based technology to improve not just the completeness but also the timeliness of these vital statistics. By also training community health workers to register births during routine child health campaigns and to supervise voluntary outreach workers as part of a larger strategy, Ghana was able to increase birth registration for children under five from 44 percent to 77 percent in just five years. Subsequent evaluations of Ghana’s civil registration system, however, have shown that in order to sustain these gains, outreach staff must be supervised and properly incentivized, as registration activities do not traditionally fall within the primary responsibilities of health providers. This model also risks deviating time and resources from primary health responsibilities, which are already under-resourced in many settings. Still, the approach has proved effective in a range of settings, and it has the potential to be adapted for death registration, as India has attempted.
As opposed to birth registration, death registration and especially cause-of-death certification are typically the responsibility of the health sector, and the health ministry usually takes an active role in leading efforts to strengthen these CRVS components. Because of the complexity of cause-of-death coding through the International Classification of Disease (ICD), these initiatives have largely depended on dedicated training activities to build the capacity of doctors and coding staff, as has been done in the Maldives and Sri Lanka, for example. Indeed, global assessments of CRVS systems have found ICD coder qualification and training to have the lowest average score, particularly in Asia and the Pacific. Standardized training materials and simplified ICD coding tools have been developed to this end. Some countries, like India, have experimented with training non-physician health workers to perform verbal autopsies, which are then relayed to physicians for ICD coding. In Indonesia, midwives in Sample Registration System (SRS) districts already perform verbal autopsies, though this has not been scaled up systematically outside of the SRS. Countries are increasingly implementing automated ICD classification systems, such as Automated Classification of Medical Entities (ACME), which can reduce the training needs for coding staff.

Many lower-income countries continue to struggle with data silos among ministries, but some, such as Bangladesh, Iran, and Thailand, have been able to link their population registries with their health databases using unique identification numbers, a process that Indonesia is currently undergoing. In addition to issuing regulations formally establishing relationships between the Ministry of Health and civil registration authorities, a common strategy used in places like Fiji and India has been to form coordination committees, whether nationally or subnationally, to promote buy-in around a common vision, while removing redundancies in the surveillance of vital events.

### Key Findings from 2016 Formative Study

This study found that civil registration in the three selected sites was far from universal or compulsory. One in three children had no legal documentation of their birth, and two in five marriages were considered illegitimate by the state. Almost one in five adults could not readily produce an ID or family card with their name on it, and death certificates were almost non-existent. When individuals did own documents, these were often internally inconsistent with one another. More than a third of respondents either had a marriage certificate but were listed as single on their family card, or were listed as married on their family card, but did not own a marriage certificate.

Unlike population registration authorities, which are only positioned at the district level, primary healthcare providers are accessible to most villages, and generally have strong relationships with local communities. Although the survey found that less than a third of mothers had given birth to their youngest children in a health facility, 95 percent sought the help of either a skilled birth attendant or a TBA. Moreover, 86 percent of mothers had received at least one session of antenatal care (ANC) during their pregnancy, and 84 percent of children had received at least one vaccine. Each of these interactions with the health system represents an opportunity for registering children early in their lives, especially when considering that midwives are already responsible for issuing Birth Notification Letters, which are required for birth certificate applications.

Yet, providers of basic services had brokered less than five percent of birth certificates documented in the study.

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1. This brief does not, however, advocate that TBAs replace the function of trained reproductive and maternal health providers, but simply highlights the potential of TBAs to be trained to assist with civil registration outreach.
sample. Health sector staff largely considered birth and death registration to be outside of their responsibilities, and many expressed either being under-resourced to offer registration support, or not wanting to impose on the Disdukcapil’s mandate. Nonetheless, hospitals provided information on birth certificates to 32 percent of mothers they treated in the sample, compared to midwives, community health clinics (Puskesmas), private clinics, and village health clinics, each of which gave information to between 16 and 22 percent of mothers they treated in the sample. TBAs, vaccinations staff, and Posyandu cadres each offered information to less than 10 percent of mothers they treated in the sample.

Midwives are responsible for recording all births and deaths in their service areas and reporting these upstream within the health sector, and this reporting channel is distinct from Disdukcapil’s birth- and death-registration mechanisms. These reports do not include individual-level variables, however, meaning that once they are sent, data generally can no longer be disaggregated or compared to other datasets. The health sector does not systematically share birth or death reporting with MoHA, and many government officials participating in the study were not aware of the 2010 Joint Regulation (No. 15) stipulating that MoHA and the Ministry of Health should share mortality data. Some villages, however, did have informal sharing arrangements, with midwives and TBAs reporting the births or deaths they attended to their village offices. Across all sub-districts, the majority (84 percent) of deaths took place at home, making it difficult for midwives to produce timely death reports. With no midwives in the three study areas being trained to conduct verbal autopsies, cause-of-death reporting was almost non-existent. Midwives also had no formal role in death certification, which currently is within the Disdukcapil’s authority.

Birth and death certificates are not required for accessing health insurance or social assistance programs in any of the three sub-districts. Key informants reported that facilitators and administrators of social assistance and health insurance programs did not have the responsibility for offering help or support to register the births or deaths of beneficiaries. Children of respondents who received no social assistance from the government had two times the odds of having a birth certificate compared to the children of beneficiary parents. This may be partly driven by the positive association between birth certificate ownership and wealth that has been found in previous studies.9

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**Recommendations**

Civil registration processes should be made more accessible for communities through integrated and mobile services that target health front points of services, including: community and village health clinics, Posyandu, family planning clinics, hospitals, and private clinics.

- Midwives, Posyandu cadres, family planning counsellors, and TBAs should be trained to (1) identify birth and death registration opportunities, (2) provide clear information on the benefits of birth and death registration, and (3) offer support to their patients in registering births and deaths, including making referrals to certifying authorities. These community health workers should be given standardized guidance on integrating birth and death registration within the delivery of basic health services.

- Birth and death certificate application procedures should be included in standardized health training materials, and these materials should be made available to all healthcare workers throughout the country.

- MoHA should work together with the health sector to incentivize primary healthcare workers to provide support for birth and death certification, especially in remote areas where community members may not have access to registration authorities. At the same time, support for registration should not interfere with the delivery of primary healthcare. This study found an urgent need for greater investment in staffing and maintaining capable primary healthcare staff in remote areas.

- When healthcare workers record births and death, the mechanism should support connectivity with Single Identity Number (NIK)-based processes so that birth and death data supplied by the health sector can be linked with SIAK.

- Civil registration services should be integrated into public health outreach campaigns such as National Immunization Week and National Health Day.

- Existing local regulations that promote collaboration between the health and civil registration sectors should be studied to develop model regulations for districts throughout the country.

**Death-registration strengthening should be coordinated with efforts to improve cause-of-death ascertainment. This will require closer collaboration between the MoH and MoHA, and the recognition that these two vital statistics are inextricably linked.**

- All deaths recorded by healthcare workers should be referred to the relevant registration authority. Deaths and cause of death should be registered using the Single Identity Number (NIK) so that cause of death can be paired with the Population Administration Information System (SIAK). As the universal health coverage scheme JKN (Jaminan Kesehatan Nasional) is instituted throughout the country, and integrated with local health insurance schemes, membership databases should also be linked to SIAK.

- Greater investment is needed in training doctors and other healthcare professionals in cause-of-death ascertainment using ICD-10. Midwives should be trained to conduct verbal and social autopsies to expand cause-of-death surveillance in areas with low use of health facilities. Trainings should not be a one-time event, but should be followed up with appropriate supervision, refresher trainings, and additional opportunities for professional growth. Special incentives should be created for health providers willing to work in remote areas to enable greater health surveillance and vital registration among these underserved communities. Plans to use automated cause-of-death programs, or other technological innovations for improving death notification and cause-of-death ascertainment, should appraise the capacities of facilities, human resources, and equipment in target communities.

- More investigation is needed to explore potential incentive models to build demand for death certificates. For example, the literature shows that making death certificates required for burial permission may be effective in increasing death registration in urban areas. However, this might not be relevant to many contexts in Indonesia, especially in the case of Muslim burials, which must take place within 24 hours of the death. Other incentive models involving BPJS Kesehatan and pension schemes like BPJS Ketenagakerjaan should be examined.

- Community-based mass awareness campaigns should be launched around the country to sensitize the public to the value and use of death certificates and the application procedures for acquiring one.
References


