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UNITED NATIONS EXPERT GROUP MEETING ON  
BASE FOR THE POST-2015 DEVELOPMENT AGENDA  
Population Division  
Department of Economic and Social Affairs  
United Nations Secretariat  
New York  
5-6 October 2015

ENGLISH

DEMOGRAPHIC EVIDENCE

DEMOGRAPHIC EVIDENCE FROM CIVIL REGISTRY  
HEALTH INFORMATION SYSTEMS AND OTHER  
INSIGHTS PROVIDED BY HEALTH PERSONNEL

HEALTH INFORMATION SYSTEMS,  
INCLUDING  
HEALTH PERSONNEL

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<sup>1</sup>The opinions expressed in this paper are those of the  
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reproduced without formal editing.  
Independent consultant, Health Statistics Division

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(figure 1). Only 34 co  
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such data altogether.<sup>2</sup>

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<sup>1</sup> AbouZahr C and others, “  
386, No. 10001, p1407–141

<sup>2</sup> World Health Organizatio

<sup>3</sup> World Bank and World H  
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**Figure 2. Age adjusted death rates for the 10 leading causes of death, United States of America, 2012 and 2013<sup>4</sup>**

When coupled with socioeconomic and geospatial information, cause-of-death statistics can help identify populations at higher risk of mortality overall and from specific causes. Such information is invaluable for the assessment and monitoring of inequities in health status and for the planning of remedial interventions. Because registration data collection is continuous, mortality statistics can be made available in real time to permit public health surveillance of emerging mortality trends. Information on unusual patterns of deaths by age, sex and causes may suggest to public-health officials that there is a need for intervention (figure 3).

#### D. THE HEALTH SECTOR AS A CONTRIBUTOR TO CRVS

Not only is the health sector a major user of the data emanating from the civil registration system, it is also a contributor to the effective functioning of CRVS. Health authorities have a responsibility to notify the registration authorities of all vital events of which they are aware. In addition, the health sector provides important additional detailed information on births and deaths, including, for example, births by gestational age, birthweight, parity, maternal age, and other socioeconomic characteristics. With regard to deaths, the health sector has the main responsibility of providing information on cause of death through medical certification of deaths and statistical coding according to international standards.<sup>5</sup>

The health sector fulfils its role in CRVS through the information collected routinely at national, district and community levels. Data are collected both through the Health Management Information System (HMIS), the national disease surveillance system (for diseases notifiable under the International

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<sup>4</sup> Kochanek KD and others, "Mortality in the United States, 2013". *National Center for Health Statistics Data Brief* No 178 (December 2014).

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generate key health and demographic indicators, especially for monitoring the MDGs. These have many

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updated targets, the health SDG includes new targets on noncommunicable diseases (NCDs), mental health, substance abuse, injuries, health impact from hazardous chemicals, water and soil pollution and contamination, and tobacco control. In addition, there are health-related elements included in several of the non-health SDG goals and targets.<sup>25</sup>

For monitoring progress towards the overarching high-level health goal, “*Ensure healthy lives and promote wellbeing for all at all ages*”, the World Health Organization (WHO) has considered several summary indicators, including life expectancy, premature mortality (before age 70 years) and healthy life expectancy.<sup>26</sup> If it could be measured reliably, *healthy life expectancy* would be a suitable single indicator that captures both mortality and years of life lived in less than good health (i.e. with a disability).<sup>27 28</sup> However, challenges remain with regard to the availability of data on population level functional status that are comparable over time and across population collected through regular surveys.<sup>29</sup> Notwithstanding the current limitations in country statistical systems, mortality remains more amenable to accurate measurement than morbidity.

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In addition, several disease-specific mortality indicators are under discussion for monitoring the individual health targets (box 2). Monitoring cause-specific mortality indicators requires the capacities and skills to implement the international standards for cause of death information, the International Classification of Diseases (ICD).<sup>31</sup> However, in most developing countries, physicians able to correctly certify cause of death are in short supply and poorly distributed. Moreover, most people die at home rather than in a health facility.<sup>32</sup> Work is currently under way to promote the routine implementation of verbal autopsy techniques in such settings. Verbal autopsy involves interviews with family members and care-givers of the decedent, along with examination of medical records where available, in order to come up with a probable cause of death.<sup>33</sup> Although verbal autopsy cannot match the exactitude of medical certification of cause of death at the individual level, it can produce cause-specific mortality fractions at the population level, thus improving the evidence base for public health decision-making.<sup>34</sup>

**Box 2. Disease-specific mortality indicators proposed for monitoring the SDG health targets (Sept 2015)**

The SDG framework requires that indicators be disaggregated to enable tracking of inequities (SDG10). This implies that the fertility and mortality indicators should be capable of disaggregation across multiple stratifiers, including geography, socioeconomic status, ethnicity and others. Whereas household surveys are useful vehicles for generating service coverage indicators by key socioeconomic stratifiers, they are less appropriate for producing disaggregated mortality statistics due to sample size limitations. This reinforces the need for administrative data sources that include complete counts of events rather than samples.

## G. THE WAY FORWARD

Monitoring the health-related SDGs will be challenging, especially for all-cause and cause-specific mortality targets, and will crucially depend on the availability of comprehensive CRVS systems and well functioning routine health information systems. The UN has defined principles and standards for CRVS<sup>35</sup>; the challenge is how to operationalize these standards in countries where resources are limited. Simplifying the process and providing a vital event registration service within existing structures with

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<sup>31</sup> World Health Organization. International Statistical CI

which people interact—for example, health facilities—can dramatically increase registration coverage. Well-functioning ICT infrastructure at the level where services are provided, including a reliable power source, internet, and cell phone coverage, can provide the enabling environment for developing local information and modern CRVS systems. Experience is growing with innovative solutions such as electronic registries, mobile applications, open source and integrated ICT solutions, electronic coding, and verbal autopsy tools. It is time to explore the potential of social media as a source of information about the occurrence of vital events.

Given the many institutions and government departments responsible for different aspects of CRVS, national coordination and oversight mechanisms are needed that include representatives from the civil registration office, ministry of health, nati

