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Letter to the Editor

RE: The Australian childhood immunization register—A model for universal immunization registers?

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To the Editor,

We read with interest Hull's et al. description of the Australian Childhood Immunization Register (ACIR) [1]. However, we would like to clarify a few facts. In Latin America, there are several examples of nominal immunization registries.

The immunization registry in Uruguay is probably one of the oldest registries in use. This registry was established in 1987, as an integral part of the country's National Vaccination Plan. This plan ensures free vaccines for all children in the country, whether the vaccine is delivered by public vaccination clinics or through the private sector [2,3]. As the ACIR, Uruguay's immunization registry has several of the features of an "ideal" registry [4]. The Uruguayan registry (1) includes enrollment at birth, when the BCG vaccine is administered or when the reasons for not given that vaccine are described; (2) includes a unique identifier which is the child's national identification number, in addition to other identifier data: full name, date of birth, maternity ward of birth, full name of the mother or guardian, street address (including neighborhood and police district), phone number and an alternative address and phone number; (3) records vaccination center identification code and vaccine dose and date; (4) allows aggregating data at various geographical levels; and (5) allows for recall-reminder letters and local radio announcements. This registry essentially can be considered a census of all Uruguayan children. In a recent evaluation using capture–recapture methods, more children were found in the immunization registry than in the civil registration database (registry denominator estimated at 100%, 95% confidence interval: 98.8–100%) [3]. Because this registry was developed over 20 years ago when Internet and electronic data transfer did not exist or was limited, data is still transmitted using paper forms. Coverage rates for DTP3 in children aged <1 year in Uruguay have been over 90% since 1990 [5].

Mexico established their nominal immunization registry in 1991, following a Presidential Decree that established the National Vaccination Council (CONAVA). CONAVA and the nominal registry (PROVAC) were created amid a large measles outbreak and in response to important differences found in coverage rates reported using the administrative method and the results of a coverage survey. The national health system, which incorporates data from all institutions providing health care in the country, initially included only children aged <5 years. In 1998, the registry was expanded to include children aged <8 years. Currently, the Mexican Registry is in the process of including teenagers to monitor new vaccine coverage rates such as for human papilloma virus (HPV). In addition to immunization, PROVAC currently includes data on weight and height. The Mexican system provides reports on vaccination coverage by vaccine, age group, geographical area, and nutritional status. The registry produces listings for follow-up of children with incomplete vaccination schedules [6]. Systematic comparisons between the number of children registered in PROVAC and census projections are done at each health jurisdictional level. Special efforts are made to include children born to mothers that seek care outside the health sector. Finally, periodic sub-national surveys are conducted to validate the coverage rates obtained through PROVAC. Reported vaccination coverage rates for DTP3 among children aged <1 year in Mexico have been over 90% since 1994 [5].

In mid-2007, Panama launched its own national electronic childhood immunization registry. Currently, this registry is being expanded to register seasonal influenza vaccination among older adults.

For the Pan American Health Organization (PAHO) – an international public health agency with more than 100 years of experience in working to improve health and living standards of the countries of the Americas and serving as the World Health Organization Regional Office for the Americas – improving immunization data quality is a priority. PAHO's Technical Advisory Group on Vaccine-preventable Diseases (TAG) regularly reviews all aspects of immunization programs in the Americas. PAHO's TAG provides recommendations on vaccination policy and strategies to improve countries' vaccination efforts, while promoting the sharing of experiences between countries [7]. The issue of immunization registries will be discussed during TAG's upcoming meeting in late August 2009, held in presence of PAHO Member States' immunization representatives. PAHO's Immunization team is seeking guidance on the aspects that countries of the Americas need to consider when developing a national immunization registry, in order to ensure a smooth transition from existing administrative systems, denominator exhaustiveness, proper data flow, training, and data completeness. After visiting Uruguay to learn from their experience, Honduras is well-advanced in the process of developing a national immunization registry. Peru has just started the process. Others will follow.

Conflict of interest

We report that we do not have any conflict of interest.

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M. Carolina Danovaro-Holliday*
Jon K. Andrus
Cuauhtémoc Ruiz-Matus
Comprehensive Family Immunization Project, Family and Community Health, Pan American Health Organization, 525 Twenty-third St, NW, Washington, DC 20037, United States

* Corresponding author. Tel.: +1 202 974 3856.
E-mail address: danovarc@paho.org
(M.C. Danovaro-Holliday)

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