Submission by the Global Polio Eradication Initiative (GPEI)

Australia’s Foreign Policy White Paper

28 February 2017

Summary of key recommendations:

1. The Global Polio Eradication Initiative (GPEI) strongly encourages the Australian Government to capitalize on its investments in polio to eradicate the disease (second disease to be eradicated in history and first SDGs to be achieved) and further accelerate the attainment of broader health benefits, particularly in routine immunization.

2. GPEI also encourages the Government of Australia to contribute to the successful transfer of polio assets to increase immunity levels and achieve future health goals.

3. GPEI strongly recommends the Australian Government to use the extraordinary progress achieved by the polio programme (350,000 cases a year in 1988 and 37 in 2016) to showcase to Australian citizens the impact (and the importance) of Australia’s Official Development Assistance. The value-add of GPEI (largest public-private public health partnership in history\(^1\)) is the focus on (i) leaving no one behind, (ii) combining country ownership, (iii) reaching the hardest-to-reach and (iv) increased transparency and accountability.

4. GPEI encourages the Australian government to position polio eradication within its broader efforts to strengthen routine immunization. Polio eradication efforts have been increasingly integrated with broader health interventions. Currently, polio vaccinators in the 10 countries with most significant polio assets already spend an average of 54% of their time on immunization practices and other health interventions, including nutrition and malaria prevention.

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Background:

Australia’s investment in the global polio eradication effort through the Global Polio Eradication Initiative (GPEI) should be continued because it is multi-faceted and has produced measurable, high impact results, despite working with some of the most vulnerable and underserved communities and some of the most fragile countries in the world. It fosters long-term sustainable development including ownership by the benefiting countries and is very much aligned with the ambitions of the sustainable development goals of leaving no one behind.

While the goal of polio eradication has been the complete eradication of a crippling disease and a known contributor to poverty, the results of that effort have been much broader and include:

- A trained network of health workers, volunteers and social mobilizers who undertake polio eradication activities and other value added interventions
- Maps and micro-plans which have identified and are used to reach vulnerable and neglected communities
- Standardized, real-time surveillance and outbreak response capacity
- Improved governance and accountability
- Enhanced emergency response capacity

Australia’s investment in the global polio eradication effort is exemplary and should be continued because it is multi-faceted and has produced measurable, high impact results, despite working with some of the most vulnerable and underserved communities in some of the most fragile countries in the world. It fosters long-term sustainable development including ownership by the benefiting countries and is aligned with the ambitions of the sustainable development goals of leaving no one behind.

The model of country support through the Global Polio Eradication initiative

The value-add of the GPEI is the power of an innovative multi-stakeholder partnership to reach a well-defined and time-bound goal. The virus finds and affects the poorest and hardest-to-reach, which is the focus of the initiative. GPEI regularly revises its assessment of critical priority action and country needs on the basis of a clear strategic plan agreed with countries through the World Health Assembly of the World Health Organization and of ongoing epidemiological and risk analysis. Progress is tracked and course corrections agreed at the country-level in endemic and/or most at risk countries and through a dedicated global governance, in which Australia participates.

1) The programme supports countries based on country-specific needs to achieve and maintain global eradication: Over 150 countries are participating in the effort to eradicate polio. Among those, low-income and lower-middle income countries benefit from direct support from the GPEI for risk mitigation support such as the vaccine switch, introduction of a new polio vaccine, disease surveillance, etc.

2) A smaller number of countries identified as being at high risk of polio outbreaks are receiving additional support for polio campaigns, providing polio vaccination and additional benefits.
These countries are spread across the low-income and lower-middle income groups. Out of the 20 most fragile countries of the world, 16 have had polio outbreaks in the last 5 years.

3) The three endemic countries (Nigeria, Pakistan & Afghanistan) have a comprehensive National Emergency Action Plan to interrupt transmission. Nigeria and Pakistan have significantly contributed to the costs with domestic resources.

4) As polio eradication is a time-bound initiative, and as we are getting closer to achieving eradication, some components of the support will gradually be phased out, and others will need to be transferred to benefit other health priorities. But phasing out too early would be a major risk that would jeopardize all the gains.

Progress toward Global Polio Eradication

The Global Polio Eradication Initiative was officially launched in 1988 with the adoption of a World Health Assembly resolution of the World Health Organization, which set the goal of polio eradication. At that time, polio was endemic in 125 countries and claimed a thousand new victims every day. As of February 2017, only 37 cases of wild poliovirus were reported globally.

The GPEI, working in close collaboration with national governments and local agencies, has effectively worked to address challenges, develop innovations and engage with local communities to address a wide range of complex challenges including reaching mobile populations, communities affected by active conflict and insecurity, natural disasters, and political instability, population density, geographic isolation and even targeted attacks on health workers.

A vast array of physical and intellectual assets has been developed, including a global surveillance network, thousands of trained health workers, and knowledge and expertise about how to engage communities to reach every last child. The GPEI has also developed cold chain - the system used for keeping and distributing vaccines in good condition which consists of a series of storage and transport links, all of which are designed to keep the vaccine at the correct temperature until it reaches the recipient. These resources have been honed and focused on stopping transmission of polio in the few pockets where it persists and protecting the hard-fought gains achieved throughout the world. Equally – and possibly more important – the GPEI is working with national governments and stakeholders to ensure the effective transfer of these assets to benefit broader health objectives long after polio has been eradicated. These resources provide a foundation and build upon previous investments by Australia in a way that will foster the long term objective of securing the future for children and youth.

Broader benefits accrued from Global Polio Eradication efforts:

There are several ways in which investments in polio eradication have expanded capacity in the following key areas:

- Increased capacity through trained volunteers, social mobilizers and health workers

Millions of vaccinators, tens of thousands of social mobilizers, and thousands of skilled technical staff who have been trained through the polio program are now also helping to prevent and treat other
diseases in some of the most fragile countries and underserved communities, with the principle of leaving no one behind.

- **Unprecedented access to communities untouched by health systems**

The Global Polio Eradication Initiative has used a range of innovative tactics to ensure every last child is vaccinated against polio, including those living in geographic isolation, areas of dense population, and those living in areas affected by insecurity. This includes house-to-house vaccination, mobile teams, health camps and permanent transit points to reach nomadic/displaced populations. As a result, polio eradication efforts have become the access point for other essential interventions. These labor intensive methods have required high levels of community outreach and engagement, particularly in areas affected by insecurity and/or areas where there may be concerns about the purpose of vaccination efforts. Extensive efforts have been undertaken to build trust and confidence by hiring and training health workers from the communities where the work is being conducted. These efforts have increasingly included the hiring and training of women as many of the communities served are culturally conservative. Women can enter homes where men are not allowed. One innovation that is proving effective is the Continuous Community Protected Volunteers. This involves using locally recruited staff – often female – working with a low profile but on a continuous basis within their own communities and promoting health practices beyond polio vaccination.

**Maps and Microplans to deliver health services to chronically neglected communities**

Maps and “microplans” — detailed logistical blueprints that guide the planning and implementation of vaccination campaigns, routine immunization outreach, and surveillance for polio cases – are essential tools to identify the size and location of target populations. In many countries, census data are inaccurate or imprecise. Global Positioning Systems (GPS) and Geographic Information Systems (GIS) have been used to identify and/or refine the mapping of communities to ensure effective campaigns as these maps determine campaign (or surveillance) logistics including the amount of vaccine required, the number of health care workers and supervisors to deliver the vaccine, and the cost of transportation to get the vaccine and health care workers where they need to go.

The improvements in mapping and micro-planning have been essential to reducing the pockets of virus transmission due to chronically missed children.

- **Standardized, real-time global surveillance and response capacity**

The polio surveillance system provides the partners of the GPEI with the data they need to monitor transmission of the virus (both wild and vaccine-related), quickly identify new cases, and detect importations of the poliovirus. The Global Polio Laboratory Network (GPLN) of 146 laboratories and trained personnel established by the GPEI also tracks measles, rubella, yellow fever, meningitis, and other infectious diseases and will do so beyond polio eradication. The GPLN is characterized by a globally standardized approach, rapid and reliable case confirmation, frequent reporting, continuous training and linkages between national and international staff.
The GPLN was a model for the rotavirus network in India, and has served as a model for both the rotavirus and measles virus networks in Africa.

Traditional Acute Flaccid Paralysis (AFP) surveillance has been complemented increasingly by environmental surveillance (ES) in endemic regions to help identify residual transmission in endemic and/or at-risk areas, providing early detection of emerging virus transmission.

**Routine Immunization**

Polio eradication efforts have been increasingly integrated with broader health interventions. Currently, polio vaccinators in the 10 countries with most significant polio assets already spend an average of 54% of their time on immunization practices and other health interventions, including nutrition and malaria prevention. The GPEI, for example, has distributed 1.3 billion vitamin A doses from 1988 to 2010 with an economic benefit of $17 billion.

**Governance – polio eradication as a model of ownership and accountability**

Polio eradication efforts are a model for effective governance. The countries which have faced the most significant barriers to polio eradication have also seen some of the most striking examples of how such challenges can be overcome when there is collective priority placed on an issue and support at all levels.

India may offer the best example of a country whose ownership – including government financing and accountability – evolved over time. India has primarily funded its polio eradication activities since the mid-2000s and is now working to fully integrate the vast array of human resources, infrastructure and lessons learned from polio eradication to benefit routine immunization with significant success. Routine immunization rates in the most challenging, populous states of Uttar Pradesh and Bihar, which were the last bastions of polio, have increased to above state averages from 36% to 79% in Uttar Pradesh; and from 69% to 85% in Bihar. These gains are particularly noteworthy given that the combined population of these states is roughly 300 million. The process of integrating human resources, infrastructure and key learnings from polio eradication has been embraced and led from within and is a model the GPEI is working to replicate in other key countries which have seen significant polio eradication investments.

In Nigeria, a federal, multi-sectoral task force including UN and civil society partners focuses on polio eradication. This is complemented by meetings and commitments by all state governors, and a further focus on high risk districts, where local officials are held accountable for actions. The President himself as well as officials from a range of ministries got directly involved in making interruption of transmission a reality. Dr. Ayodeji Oluwole Odutolu, Senior Health Specialist in the Africa Region at the World Bank, reflected on this and called it the “Politics of Purpose” noting that collaboration crossed party and sectoral lines, spanned both political and technical cadres and existed at all levels due to a shared sense of purpose and commitment.

The Pakistan programme has leveraged many of the lessons learnt in terms of ownership and local governance to make major progress in the last year and a half.
Focus on fragile and conflict affected areas

The countries which are the last reservoirs of wild poliovirus transmission share several common factors including insecurity, political instability, poor infrastructure, and geographic barriers. Polio eradication efforts have been at the forefront of identifying innovative ways to reach families and children in these most complex environments, often by working at both the most local level, and with complementary focus and accountability at the subnational and national level.

For example, in Nigeria and Pakistan, a particular approach was taken to identify and establish strategies to reach children in the highest risk states/districts (11 states in Nigeria; 12 districts in Pakistan). This strategy included more intense engagement of established religious and traditional community leaders to foster public confidence; and integration of expanded health services to address broader community needs.

It has also entailed the identification and training of lady health workers who are from the communities they serve. This is essential to reaching children during house to house campaigns these culturally conservative communities where men would not be allowed into a household. Women are playing a key role in reaching children in some of the most challenging and fragile environments.

Women are playing an increased, vital role in reaching families and children. In some of the highest risk areas of Pakistan, a new strategy to employ local women to administer the vaccine and make regular house visits was needed to reach chronically missed children. Indeed, by 2015, 80 percent of Pakistan’s new polio victims were less than 2 years old, and data analysis suggested that female teams were more effective at reaching the youngest children – who often remained inside the house. A path needed to be carved between the security and cultural barriers.

Launched in 71 of Pakistan’s highest risk areas (so-called Tier 1 districts of Karachi, Khyber Pashtunkwa and FATA), the Continuous Community Protected Vaccinator Programme recruited nearly 5,000 people –and over 80 percent women –in areas once deemed too difficult for women to work. Their current goal is to reach 700,000 children under the age of five during each of nine house-to-house rounds of house-to-house polio campaigns during the 2015-16 low transmission season.

The Continuous Community Protected Vaccinator Programme was developed in Karachi, where female teams now cover nearly 40% of the city’s 2.2 million children younger than five. This approach is particularly effective due to cultural sensitivities in Pakistan, where women are granted more access than men when it comes to door-to-door vaccination visits. A specific arrangement was negotiated locally to allow local women to vaccinate door-to-door without oversight by Karachi’s police force. In return for a no-security approach in these highly sensitive communities, the community itself guaranteed to provide local protection. This is a great example of addressing security challenges through light, community-owned security arrangements.

These women have been engaged with the households beyond polio immunization, to ensure routine immunization and nutrition. This is an additional, value-added element of this arrangement which offers a promising strategy for the post-polio era.
Additionally, the percentage of social mobilizers (people who are employed to explain the importance of immunization to families in communities) who are women increased from a quarter to half of the total in Pakistan, in particular, with similar models to engage women employed in other polio eradication priority countries including Nigeria and Afghanistan.

**Emergency Response Capacity**

As we approach eradication, any case of polio – and more recently – the identification of polio virus (wild or vaccine-related) in the environment – will trigger an immediate response protocol. These protocols are valuable as a model in themselves.

**2014 Ebola Response**

Emergency Operations Centers (EOCs) have been established in the last reservoir countries of Nigeria, Pakistan and Afghanistan. The purpose of these centers was to establish communication and coordination among the Ministry of Health and in-country partner agencies. There may be no greater evidence of the impact of this model than the critical contribution of the Nigeria EOC to quickly stop the spread of a potentially catastrophic outbreak of Ebola in Nigeria in 2014. The center operated an Incident Command System, which involved a plethora of actors, including government and donors, but bypassed bureaucracies. The EOC was therefore quick to make decisions and respond, as well as use real-time data and intense reviews to increase efficiency. “This platform has proven its worth in its ability to morph and mobilize rapidly into a public health emergency response system that delivers results, even outside its original mandate. (ODUTOLU)”

Polio knowledge and experience was also used in Sierra Leone to support case investigation, contact tracing, data collection, collation and analysis for the Ebola outbreak.

**Response to natural disasters**

GPEI resources have also been instrumental in responding to natural disasters including the 2010 floods in Pakistan and the 2015 Nepal earthquake. GPEI-funded staff supported rapid assessment of the extent of damage to health facilities; the establishment of early warning systems for disease outbreaks; and, the planning, delivery and monitoring of broad immunization activities in internally-displaced persons camps.