After 30 years of effort, the Global Polio Eradication Initiative (GPEI) is on the brink of success. When it is completed, this will be only the second time in history that an infectious disease in human beings has been totally eradicated.

When the GPEI was established following a World Health Assembly (WHA) resolution in 1988, there were estimated to be over 350,000 cases a year of polio and it was prevalent in 125 countries. The original target date for completion was 2000, but in that year there were still around 3,000 cases and it has taken another 17 years to reduce that to less than two dozen caused by the wild poliovirus, occurring in only Afghanistan and Pakistan in 2017. Several target dates have been missed along the way. In total, the successive phases of the programme have cost over US$ 15 billion and dealing with the long, erratic tail has been very expensive, with almost a third of the 30-year total being spent in just the last 5 years.

This has been the longest, largest, most complex and expensive global health initiative in history. There is a great deal to learn from the conduct of this Initiative that can inform future global health programmes, including the control of emerging infectious diseases and the questions of whether and how best to organize any future disease eradication initiatives. This article draws on work undertaken by the Global Health Centre at the Graduate Institutes, Geneva and highlights lessons particularly in relation to leadership, network governance and transitioning.

LEADERSHIP

An important aspect the GPEI has been that the leadership model established at the outset was a multi-agency partnership, rather than having a single organization with sole overall responsibility. The partnership initially involved Rotary International, which was the prime moving force in getting the target of polio eradication adopted, WHO, UNICEF and the US Centers for Disease Control and Prevention. Later, the Bill and Melinda Gates Foundation joined as a leading donor and fifth core partner of the governance body, the Polio Oversight Board. A much wider circle of stakeholders, including donors, governments and civil society organizations, are members of the Polio Partners’ Group, which meets regularly and inputs to the Polio Oversight Board. The GPEI has created a collective, synergistic dynamic that has been mutually reinforcing, with each core partner bringing particular strengths to the collective effort.

With hindsight, there are critics who argue that this model has had some drawbacks as well as successes. One criticism, in particular, relates to the fact that the originating WHA resolution in 1988 called for the polio eradication initiative to be undertaken in close conjunction with, and in ways that strengthened, the WHO Expanded Programme on Immunization (EPI). This might have been interpreted to mean that the polio programme was part of the EPI. But in practice the GPEI evolved as a separate programme and it has been argued that this actually led to resources being drawn away from the EPI, to the detriment of other immunization services and laying the ground for some of the transitioning problems discussed below.
NETWORK GOVERNANCE

One of the challenges of this mode of leadership is to develop a collective governance model. The structure that has been established for the GPEI is a form of network governance, with the GPEI secretariat, which is hosted by WHO, serving as a network administrative organization. Studies have suggested that, in general, the network administrative organization model can have a number of advantages over other potential forms of network governance. These include the need to balance efficient operation with inclusive decision-making; the need to balance and sustain both internal and external legitimacy – with the external legitimacy being especially critical when external funding and political support are required; and the need to balance flexibility with stability. This requires frequent reassessment of structural mechanisms and procedures in light of new developments, and a willingness to make needed changes even if they are disruptive.

Overall, the GPEI network governance model that has evolved is rather complex (Figure 1). Nevertheless, it has demonstrated that it is capable of sustaining effort over a long period and has been able to continue mobilising political, financial and human resources in the face of repeated setbacks. The flexibility and capacity of the GPEI to change was illustrated when progress appeared to be stalling about 2005 and an emergency meeting convened by the WHO Director General in 2007 called for more funds and more effort, but progress remained slow and uneven. The response of the partnership was to create an Independent Monitoring Board (IMB) in 2010, which has served as a further mechanism to identify weaknesses, as an independent critic of the programme and as a voice to urge new actions. The IMB has proved to be a game-changer in its approach, and the open publication of its annual reports has proven to be a major lever in galvanising attention to areas of weakness.

Among its other areas of input, the IMB argued that the continuing international transmission of polio should be declared a Public Health Emergency of International Concern (PHEIC) under the International Health Regulations and this was achieved in 2014. However, this in itself does not necessarily result in the desired outcomes. It is notable that in 2014 the Ebola crisis in west Africa was also declared a PHEIC – but the Ebola PHEIC ended in 2016 while the polio PHEIC is still in force.

One of the challenges with network governance remains the question of final accountability. The network governance structure can have the effect of blurring lines of accountability and responsibility. The GPEI is accountable to the Polio Oversight Board and the WHA and needs to respond to the published criticisms of the IMB. The proliferation of GPEI-related bodies has been seen by some actors to be overcomplicated or bureaucratic.

Further questions are: Who holds the polio partners themselves accountable for their decisions and performance? How are countries held accountable for their critical roles in undertaking the eradication efforts on the ground or in preparing for the next phase of transitioning?

TRANSITIONING

While still working intensively on the final eradication of polio, the GPEI has also begun an extremely important process of transitioning (Figure 2), in which the assets built up during the polio eradication programme are transferred to country ownership. Important assets include the trained vaccinators and national and local management teams and systems and the surveillance, laboratory analysis and response networks. Many of these have also contributed substantially to other health activities beyond the polio programme, including other immunization efforts. The value that these assets can bring to tackling emerging infectious diseases was illustrated during the Ebola outbreak in west Africa, when Nigeria was able to stop Ebola taking hold by repurposing its available polio technologies and infrastructures to conduct Ebola case-finding and contact-tracing.
There are several dimensions to the potential future value of the polio assets in countries. Vigilance remains vital to ensure resilience and containment to prevent the possible return of polio. But the assets can also contribute to strengthening health systems and immunization, as well as health security and emergency preparedness.

There is also need to capture the knowledge and experience gained from the world’s largest-ever global public health initiative and ensure that the lessons are taken up by global actors and used to inform future global health initiatives. Some of these lessons for the global actors concern long-term strategies. They include:

- Many people feel that the long tail of polio eradication could have been substantially shortened if there had been more effort right from the outset to tackle the most difficult-looking places as well as the easier ones. Picking the low-hanging fruit in the early stages has its advantages, as it demonstrates rapid progress and helps to sustain and increase political and financial support. But delaying tackling the hardest challenges means that they become exposed later on and there seems to be a disproportionately large cost in eradicating the last few cases.
- Transition planning should have started much sooner and been better co-ordinated with other global health initiatives. Many countries are challenged to find the resources to take over the polio assets and re-purpose them for other areas and in some cases this is being made even more challenging because they are — or soon expect to be — graduating from GAVI support.
- The closure of the GPEI is also causing a very substantial challenge — even crisis — for WHO, which has become accustomed to the very large stream of funding that has gone through the GPEI and which accounts for a major number of global, regional and national staff positions. It remains to be seen how the new Director-General of WHO will manage this severe challenge. The lesson is that success also has its potential downsides and also needs long-range planning to avoid adverse side effects.

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FOOTNOTES

2. For full details of the project and downloadable publications, see: http://graduateinstitute.ch/ghp/polio