



Ten months and counting

Report of the **Independent
Monitoring Board** of the
Global Polio Eradication Initiative

February 2012

A MISSION NOT AN ACTIVITY

On a campaign day in a small town in one part of the world, a vaccinator is asked "What are you doing?"

He replies: "I am giving out polio vaccine".

In another country in a small rural village, a different vaccinator is asked the same question and responds "I am part of the polio vaccination team" and hurries off looking stressed and frustrated.

In a third country in the heat of the mid-day sun, we meet a vaccinator who is just coming out of a small dwelling where she has successfully vaccinated a child whose mother for 20 minutes had refused.

She stops for a drink of water and we ask her: "What are you doing?" She looks at us and smiles broadly: "I am helping to make the world free of polio for ever"





INDEPENDENT MONITORING BOARD OF THE GLOBAL POLIO ERADICATION INITIATIVE

February 2012

The Independent Monitoring Board was convened at the request of the World Health Assembly to monitor and guide the progress of the Global Polio Eradication Initiative's 2010-12 Strategic Plan. This plan aims to interrupt polio transmission globally by the end of this year.

This fourth report follows our fifth meeting, held in London from 30 January to 1 February 2012. We will next meet from 15 to 17 May 2012, in London, and will issue our next report thereafter.

Our absolute independence remains critical. We have benefited from many engaged discussions with representatives of the programme and other interested parties. As ever, we are grateful to them. The views presented in this report are entirely our own.

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CONTENTS

Executive summary	6
An emergency response: from good to great	9
Country-by-country findings	13
Lessons from India	30
Looking for root causes, finding systemic solutions	34
Conclusion	49
Recommendations	50



EXECUTIVE SUMMARY

1. There are 10 months to go to hit the World Health Assembly's goal of stopping global polio transmission by the end of 2012. Currently the eradication programme is not on track to meet this goal.
2. Success in India – one of the four polio endemic countries – shows that unswerving political commitment, outstanding public health leadership, clear lines of accountability, intolerance of weak performance and the systematic enforcement of best practice can stop polio.
3. Elsewhere in affected countries, programmes are falling short in most, if not all, of the areas where India has excelled.
4. In these next 10 months every drop of vaccine will count, every vaccinator will count, every team leader will count, every laboratory specimen will count, every piece of data will count, every parent will count, but most of all every child will count.
5. Science has delivered to human civilisation the chance to eliminate one of the malevolent forces of nature, an invisible enemy that obliterates childhoods, maims bodies and scars families and communities. For only the second time in history, the world is poised to rid itself of a disease that has destroyed millions of lives. This opportunity must not be lost.
6. If the programme can make the shift in performance from good to great – drawing on the analysis in this and our earlier reports – then the next 10 months will be looked back on by future generations as the countdown to the final knock-out blow to the polio virus.
7. The programme's 2010-12 Strategic Plan aimed to stop transmission in two endemic countries by end-2011. Its success in India was magnificent. By sharp contrast, the other three endemic countries each had more polio cases in 2011 than in 2010.
8. Transmission was supposed to be stopped by end-2010 in the four 're-established' countries. This failed in Angola, Chad and DR Congo. A year on, polio retains a powerful grip in at least the latter two of these.
9. More positively, the plan aimed to stop outbreaks within six months. The programme has successfully done so in every case but one.
10. Six countries still have persistent transmission:
 - Nigeria's 2011 emergency plan had no meaningful impact. Its 2012 plan must be of a different order entirely. This needs urgent attention
 - Pakistan has deep problems, but has recently strengthened its approach



- Afghanistan has not got to grips with how to reach enough children in insecure areas
 - Angola looks promising, with no polio case since July 2011
 - Chad's programme is building visibly but slowly from a very low baseline
 - DR Congo moved in the right direction in 2011 but we retain substantial concerns, particularly about Katanga.
11. The reason that polio will not be eradicated on the programme's present trajectory is straightforward: performance is of variable quality and consistently falls below best practice in all the polio affected areas.
12. There is no single or simple solution to this problem of sub-standard performance but three big actions would transform the prospects of the elimination goal being met:
- Greater use of the key strategies of change management, including much greater emphasis on 'people factors'
 - Identifying and finding definitive solutions to systemic problems that are barriers to success
 - Taking to heart and fully adopting the lessons learned from India's success
13. Our previous reports have discussed these issues extensively. The programme's partners are starting to demonstrate that they understand these points and can act on them.
14. The programme continues to provide illustrations of the fact that it needs to persist with this change in thinking. As just one example: in the 18 months of our existence we have heard little strategic discussion of a key component of the polio eradication workforce: the humble vaccinator. In contrast, we know from multiple sources, and from firsthand experience, that too many of these workers are underrated, rarely thanked, frequently criticised, often under-paid, poorly motivated, and weakly-skilled. Being an excellent vaccinator means being well-organised, a good communicator, and having the tenacity to track down every last child. It is the programme's responsibility to value, train and inspire this immensely important group of people, arguably the most important in the programme. Their collective actions can drive the eradication effort to failure or elevate it to success.
15. The body of our report provides a number of other examples.
16. WHO's Executive Board has declared polio eradication a "programmatic emergency for global public health". These are strong words, but justified. Countries, partners and all who have a stake in polio eradication need to understand the severity of the situation. The impact of an emergency response will not come from what they say, but from what they now do.



An
emergency
response

From good to great



AT A GLANCE

A programmatic emergency has been declared by the WHO Executive Board

A massive price would be paid for failure

Major milestones missed

Key countries seeing more polio, not less

Drawn-out eradication risks damaging other global health priorities

AN EMERGENCY RESPONSE: FROM GOOD TO GREAT

We first termed polio eradication an emergency in our April 2011 report. We welcome the growing policy response. CDC, WHO and UNICEF are each invoking emergency procedures. The heads of each agency have grasped the importance of this change and are leading from the front.

We congratulate India on having not had polio transmission for more than 12 months, an achievement of great significance. Globally though, the emergency persists. In November 2011, the Strategic Advisory Group of Experts on Immunization (SAGE) concluded that failure to eradicate polio would constitute *“the most expensive public health failure in history”*. In January 2012, WHO’s Executive Board called polio eradication a *“programmatic emergency for global public health”*. In May 2012, the World Health Assembly will consider a similar resolution.

This is strong, uncompromising language but we believe it entirely justifiable that completing polio eradication be afforded emergency status. The world has come so far. Millions of people have toiled for billions of hours. Humankind is 99% of the way towards achieving this magnificent goal. The prize is enormous – hundreds of thousands of children spared paralysis or death every year, liberation from one of the major historical disease tyrannies. Managed well and given emergency priority, it is still feasible to stop polio transmission soon.

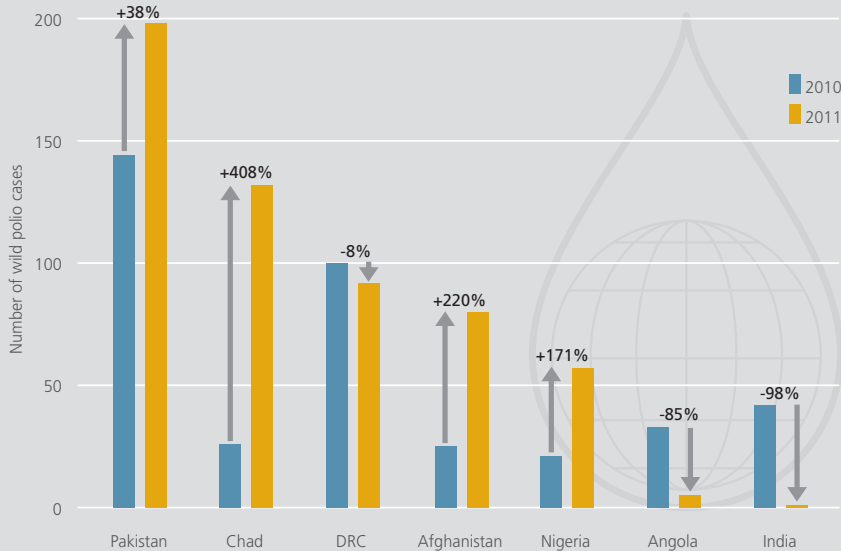
Polio eradication is an emergency because:

- The Global Polio Eradication Initiative’s 2010-12 Strategic Plan aims to stop transmission globally within the next ten months. Despite considerable investment, this plan is far off track. The plan’s end-2010 and end-2011 milestones have both been missed. Between 2010 and 2011, the number of polio cases actually increased in four of the six persistently affected countries (figure 1).
- The world has hovered tantalizingly close to eradication for the last decade. This stalemate is unsustainable. An annual expenditure exceeding one billion US dollars is currently containing polio cases at low levels. If the eradication effort does not succeed soon, this funding will dry up. Country workers risk becoming increasingly fatigued. Failure would unleash the virus, paralyzing hundreds of thousands of children. This prospect seems unthinkable.
- This programme is devouring financial and human resources. This has a very real opportunity cost. Every day and every thousand dollars spent on polio eradication is a day and a thousand dollars that could be spent on any number of other global health priorities. This is an acceptable price to pay when eradication is a prize within reach, but is not a situation that can be sustained for long.



AT A GLANCE

Figure 1: From 2010 to 2011, the number of polio cases increased in four of the seven persistently affected countries



Everybody understands what an emergency entails (figure 2). Labeling the programme an 'emergency' is an important first step but there must be a transformation in approach to match. For example, in situations where there is too much work to do, the solution is more staff, not accepting that it is inevitable that less work will be done. The front-line is where the programme will succeed or fail. The programme's sense of hierarchy must invert to reflect this. Those far from the front-line should be serving those close to it, not the other way round. Those in headquarters teams and regional centres must recognize that ultimately they are there to support those giving vaccines in villages, towns and cities. They are there to ensure that capacity, knowledge, skills and leadership are all in place at the front-line in every place where polio is – or could return. Tensions within or between organizations that impede progress should be regarded as unacceptable. Bottlenecks should be resolved without delay. Staff and budgets may need to be radically redeployed.

Stopping polio is not simply a matter of time and investment. It is a matter of unrelenting focus and rigour to drive the global and country programmes up to a level of performance that is fit for the task that confronts them.

An emergency response must involve all who have something to contribute. The programme must mobilise others to help, and others must step forward to do so. Polio eradication does not exist in a vacuum. There are other people and programmes with related or synergistic aims, which can be called upon to help. This is true at the front-line, and is true within each partner agency.

An emergency response also involves considering every measure that can help. This should include, for example, the possibility of using the International Health Regulations to limit the potential for spread from affected countries.

Some things are inexcusable in an emergency – human resource bottlenecks, lack of front-line focus, unresolved tensions

An emergency response requires the broadest possible mobilisation



AT A GLANCE

The programme responded well to our previous report

The realization is spreading – “not on track to succeed” equals “on track to fail”

In the next few months, the programme needs to move from good to great

Our previous report detailed global level dysfunctions. Improvements have been set in motion since that report. They are important in themselves. They also demonstrate willingness and ability to change. There has been a real energy of change at headquarters level, particularly within WHO and CDC. It is vital that this energy be maintained and its reach extended to regional and country levels.

Accepting and acting on criticism is not easy. A realization has washed uncomfortably across many people: that the programme has not been on track to succeed, and that “not on track to succeed” is the same as “on track to fail”. We congratulate them on their actions so far. These have been some challenging months, but the programme is strengthening as a result.

The Global Polio Eradication Initiative has just two possible outcomes. Polio will be eradicated from the world, or it will not. The programme will succeed spectacularly, or fail monumentally. This is an historic endeavor, whose challenge has proven itself enormous. The IMB is exacting in its judgment not because people are not trying or because performance is poor. Performance is just not yet good enough to stop transmission, as the numbers continue to show us. To succeed, the GPEI needs to transform itself into a programme that is truly world-class throughout. There is no escalation beyond emergency. It is now or never.

Figure 2: A true emergency response needs to jump to life throughout the programme

- All involved give the emergency a very high level of priority over other issues
- People at the top of every involved organisation pay close personal attention to the emergency and its resolution
- The necessary people and resources can be rapidly drawn in to help
- Time is of the essence, so actions need to be rapid
- The task in hand is more important than sensibilities; this is no time for organizational tensions, worrying about bruised egos, or being concerned by who gets the credit or blame
- If something might help to bring the emergency to a close, it should be tried
- The front-line is all-important; those not working on the front line work in support of those on the front-line
- Barriers that impede work to resolve the emergency are unacceptable, and are resolved rapidly



Country ^{by} country findings

Lessons from India



AT A GLANCE

Impressive success in India, which should inspire the programme as a whole

Six countries now have persistent transmission

End-2011 milestone

Cessation of all poliovirus transmission in at least 2 of 4 endemic countries

MISSED

The greatest challenge of global eradication is in specific parts of Pakistan and Nigeria

End-2010 milestone

Cessation of all 're-established' poliovirus transmission

MISSED

Ongoing milestone

Cessation of new outbreaks within 6 months of confirmation of index case

MISSED

Outbreaks strongly dealt with, in the main

Outbreaks illustrate the shared risk of polio – and shared responsibility to stop it

COUNTRY-BY-COUNTRY FINDINGS

A full year has now passed with no child being paralysed by polio in India. We warmly congratulate the Indian government and its partners on this deeply impressive achievement. This should be a great source of inspiration to the global programme. This monumental milestone – and the lessons that it offers – is discussed in a later chapter.

There are now just six countries with persistent polio transmission. Afghanistan, Nigeria and Pakistan have never interrupted transmission. Angola, Chad and DR Congo have 're-established' polio. As a group, they have not been able to come close to the level of performance of India.

ENDEMIC COUNTRIES

The GPEI aimed to stop transmission in two of the four endemic countries by the end of 2011. It failed to do so. Pakistan's previously weak performance is now showing signs of strengthening. From its previously strong performance that attracted considerable praise, Nigeria has slipped back in a quite alarming way. Afghanistan's programme is consistently performing at a reasonable level, but 'reasonable' will not stop transmission there.

Pakistan and Nigeria represent the gravest risk to global eradication. The challenge of global eradication is most greatly focused in specific parts of these two countries. Although other areas also present great challenges, a relatively tiny proportion of the earth's land surface area poses a disproportionate risk to the likelihood of success for the entire globe (figure 3).

COUNTRIES WITH RE-ESTABLISHED TRANSMISSION

More than a year has passed since these three countries missed their original deadline for stopping transmission. Angola may now be nearing success. DR Congo is making good progress. We also see progress in Chad, though much more is needed. This is a critical time for all three countries. Gains can be lost more easily than they were made.

OUTBREAKS

Since the start of 2010, 20 additional countries have had outbreaks of polio, some of them more than once. This is a painful reminder that polio vulnerability is not limited to the six countries with persistent transmission. The 2010-12 Strategic Plan aimed to stop any new outbreaks within six months. Just one outbreak (in Mali) has lasted longer than this. This milestone has therefore been missed. Despite this, we judge that the programme has generally performed strongly in dealing with outbreaks.

There have been a substantial number of outbreaks. Some have been real surprises. This illustrates the risk that many countries face until polio is eradicated. The risk is widely shared, and the responsibility for completing eradication should be also. The most stubborn challenges are increasingly concentrated in specific parts of the world. This does not lessen the responsibility that every country should feel.

Figure 3. Six Sanctuaries for the polio virus. A relatively tiny proportion of the earth's land surface area poses a disproportionate risk to the likelihood of success for the entire globe

Six Sanctuaries for the polio virus



1 Kano State, Nigeria

- Population: 9 million
- A volatile security situation, the greatest concentration of polio cases in Northern Nigeria.

2 Borno State, Nigeria

- Population: 4.5 million
- Lake Chad in the north east; a hotspot for polio
- A resurgence of wild type 3 in 2011.

3 Quetta City, Balochistan

- Population: 900,000
- A transportation hub, for trade and for polio - frequent interchange with neighbouring Afghanistan

4 Killah Abdullah District, Balochistan

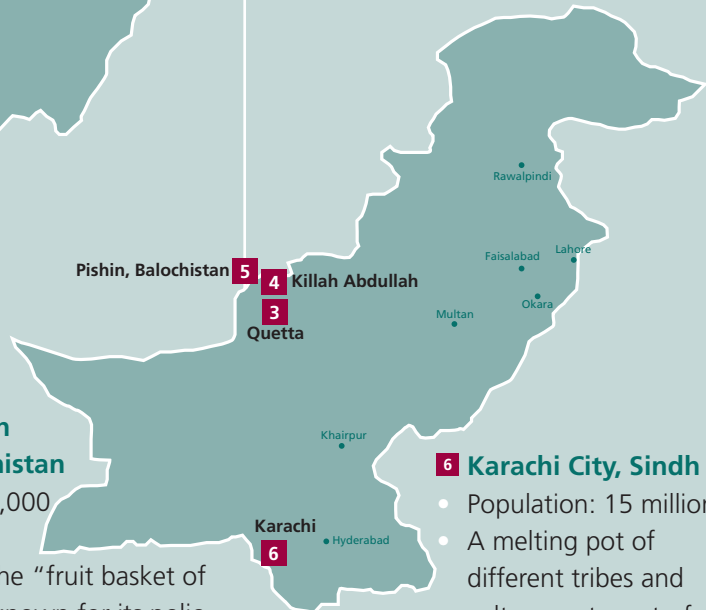
- Population: 400,000
- Persistent polio transmission – the “fruit basket of Pakistan” now known for its polio and paralysis more than its peaches and plums

5 Pishin District, Balochistan

- Population: 500,000
- Vaccination teams beaten, highest levels of vaccination refusals in Pakistan

6 Karachi City, Sindh

- Population: 15 million
- A melting pot of different tribes and cultures yet most of polio cases in Karachi are from Pashto speaking families





Afghanistan

The last year has been one of dismay and frustration for Afghanistan. Dismay at an alarming increase in the number of cases (25 in 2010, 80 in 2011). Frustration that Afghans remain vulnerable to the devastating effects of polio, despite considerable effort. Our previous reports have commended Afghanistan's programme for the quality of its leadership and for its embrace of innovation. The country must take heart. These qualities remain. They can form the foundation for improvement in 2012.

The expansion in 2011 has not just been in case numbers. Polio has also spread far outside its traditional reservoirs in the south. Cases reaching up near the northern border elevate the risk of exportation to neighbouring countries of Turkmenistan, Uzbekistan and Tajikistan.

The Afghan programme told us that the reasons for the recent jump in polio cases are unclear. This frankness is welcome. Afghanistan needs urgent assistance if it is to uncover the root cause of this problem. In line with the country's request, we recommend a rapid, independent review of the Afghan programme. This should address the increase in case numbers and the spread of cases beyond the traditional polio reservoirs of the south.

Nowhere in the world is polio eradication a more dangerous occupation than in Afghanistan. As many as 270,000 children in the southern region are inaccessible to vaccination teams. This is a daunting challenge. Some might think *"we cannot eradicate polio until the fighting ends"*. But whilst we all hope for an end to insecurity, polio eradication cannot wait for peace. The programme must focus unprecedented effort on gaining access to the

AT A GLANCE

An alarming increase in the number and geographical spread of polio cases in 2011 – for which Afghan officials have no explanation

Urgent external expertise needed to understand and meet the challenge of the recent polio surge

Fighting or no fighting – children must be vaccinated



AT A GLANCE

Innovations must be scaled up to help reach inaccessible children

Insecurity demands even greater programme performance

The lowest vaccination campaign awareness in the world is a major barrier to success

Non-delivery in a contract for vaccination campaigns is unacceptable

A joint approach between Afghanistan and Pakistan is essential to target clusters of cases in cross-border areas

children of the conflict-affected south. Some high-risk districts are missing 80% of children on vaccination days, mainly because of insecurity (figure 4).

We have heard of many innovative practices in Afghanistan. Vaccination posts are being set up at shrines, picnic sites and other places where children gather immediately outside conflict zones. These innovations must be scaled up, and must be driven forward. Insecurity across the global programme is discussed later in this report. This is particularly relevant to Afghanistan.

The considerable challenge of insecurity makes it more important – not less – to get everything else right. There are still many other elements of the programme that can be further improved. In Afghanistan's 13 high risk districts, only half of caregivers are aware of vaccination campaigns in advance. This must be improved. Polio communication networks work. If scaled up and their messages framed to empower and inform Afghan women they will increase vaccine coverage. There is also room for more communications innovation. Radio waves are not intimidated by fighting, so popular media can reach into homes that are otherwise difficult to access. Popular radio programs like *New Home New Life* and its many spin-offs reach more than 50% of all Afghan households several times a week. Could more be done with them?

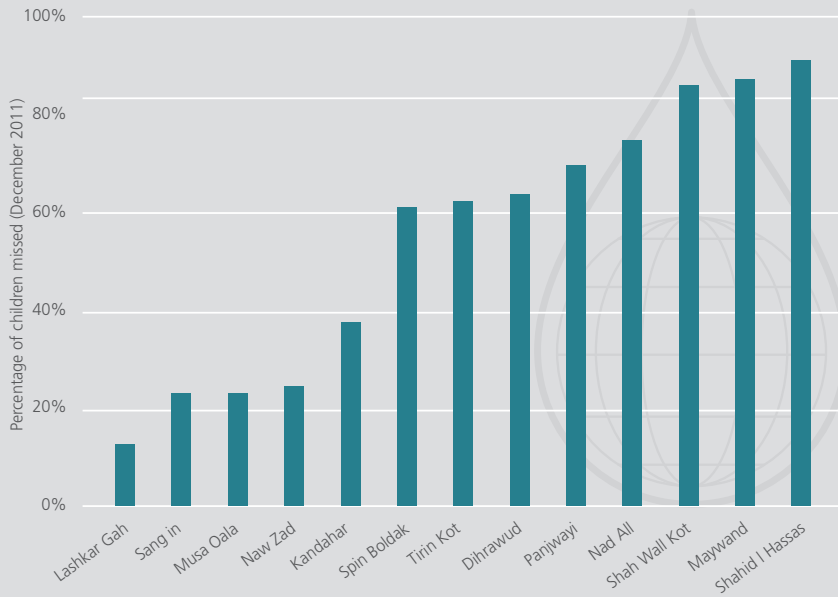
Outside Kabul, Afghanistan's health services are contracted out to NGOs, which deliver a 'Basic Package of Health Services'. The same NGOs are employed for vaccination campaigns. Their work is courageous and important. This must not blind us to the need for it to be high quality. The programme has terminated contracts with NGOs in which underperformance is not properly addressed.

The fate of Afghanistan is intertwined with that of Pakistan. Afghanistan cannot just wait for Pakistan to improve. The countries must join together in response. A genuinely joint approach to eradication in the border areas is essential. Cross-border vaccination was common in the past when access was easier. A way must be found to re-establish similar practices.

The last year has been difficult for Afghanistan. It must remain steadfast. The country cannot be dismayed into inaction. Afghanistan must exploit innovation and best practice in the south. It must heighten vigilance and vaccination coverage across the rest of the country. Hard work is needed in the months ahead if frustration in 2011 is to become triumph in 2012.



Figure 4. In Afghanistan's high risk districts, far too many children are missed





Nigeria

Though the south of Nigeria is free of polio, the north of the country is a dangerous hotbed of ongoing transmission. Nigeria's northern states hold the key to stopping polio in West and Central Africa. Surrounding countries have been repeatedly infected by virus exported from here.

We are gravely concerned by the poor performance of Nigeria's programme. We cannot understand why the previously lauded leadership could have failed so seriously. The country's plan for 2011 seemed to hold reasonable promise, but most of its 12 high risk states failed to implement key elements of the plan. keystones such as the Abuja commitments essentially fell apart for much of the year. Vaccination coverage has barely improved at all since the beginning of 2010. Rapid and considerable improvements are needed if the country is to stand any chance at all of extinguishing this terrible disease.

We have previously congratulated Nigeria on its performance in 2010. Case numbers fell by 95% compared to the year before. This provided hope that the country would be able to build on this success, but that dream was in tatters over the last year.

The core elements of the 2011 plan were clear, but have simply not been effectively enacted. The plan gave particular importance to Local Government Authority (LGA) polio task forces. In seven of the 12 high-risk states, more than half of these task forces entirely failed to meet during the last quarter of 2011. A lot of effort has gone into high-level advocacy, but this has shown no impact on the proportion of states or LGAs that have a functional task force. More importantly, it seems to have had minimal effect on the quality of vaccination days in most states and LGAs.

AT A GLANCE

Northern Nigeria is the lethal epicenter of polio in Africa

Nigeria's programme plummeted to unacceptable levels of performance in 2011

Vaccination coverage has not been improved since 2010

Hopes were raised based on a successful 2010: they now lie deflated

Despite efforts at the top of the chain, the 2011 plan had minimal effect where it matters – on vaccination campaign quality



AT A GLANCE

Surveillance is not working

Shockingly, Borno and Kano states have circulation of all three types of polio virus

Unless the high level of refusals is tackled, there is no hope of eradicating polio in Nigeria

Insecurity worsens the situation but for now it is a reality that must be manoeuvred around if the ambition really is to eradicate polio

The problems do not rest with vaccination alone. Plentiful genetic evidence demonstrates that cases of polio are not being detected. Rapid surveillance reviews have provided states with long lists of improvements that need to be made.

Of the 12 high-risk states, eight have persistent transmission. Six of these eight failed to meet their end-2011 Major Process Indicator targets set by the 2010-12 Strategic Plan. Every one of these eight states has a considerable way to go before it can feasibly become polio-free. We reserve particular concern for Borno and Kano. In Borno, not one of the LGAs infected in 2011 had a functional task force. In Kano, only one quarter did. By almost any measure that one chooses to examine, these two states have the worst polio vaccination coverage of any in Nigeria. They are perilously far from being able to stop transmission. Both states had type 1, type 3 and cVDPV cases in 2011, further evidence of disastrous weaknesses in their vaccination campaigns.

The issue of refusals has historically been a great concern for Nigeria, and remains so. Of all missed children in 2011, 24% were missed because their parents refused the vaccine. Even if every other problem with the programme could be sorted out, the refusals issue alone is sufficient to undermine success.

Though the situation looks dire overall, there are some glimmers of hope. An intensive local-level communications strategy seems to be having an impact. Refusals declined from 2010 to 2011, and parents' awareness of campaigns improved markedly. Additional methods are now being employed to understand and overcome reasons for refusal. This is crucial work. The programme has also taken steps to focus more attention on nomadic populations, although a pilot project in Kano demonstrated the very low level from which this work is starting. The project found several unreported cases of paralysis and no specific micro plans relating to nomadic communities.

The security situation in Nigeria is far worse than it was a year ago. We sympathise with the difficulties that this may present to the programme. The programme must strive for better performance to mitigate these challenges. As we discuss later, country programmes need to be able to deal with insecurity if they have a genuine ambition of stopping polio transmission. The elections last year were used as an excuse for deteriorating performance. We can see why they caused problems. But such external factors cannot present one surprise after another. They will not go away, so they need to be anticipated, mitigated, and innovative ways found to manoeuvre around them.



AT A GLANCE

Nigeria is not heading for success, unless its plan currently under development is made into something very special

In 2011 the majority of polio cases in Borno State were on or near Lake Chad, at the borders between four countries. This area may need a specific strategy to reach the mobile populations that traverse the lake.

We welcome the establishment of a Presidential Task Force in October 2011. This group has an important and considerable mission ahead of it. The country is in the final stages of agreeing its emergency plan. We have not yet seen this in detail. We are concerned that this plan may represent 'more of the same'. The 2011 plan had far too little impact. The 2012 plan needs not just to be a convincing improvement. It needs to be an improvement of such magnitude that it can realistically stop polio. The Presidential Task Force needs to convince itself that this is the case before the plan is finalised. From what we see of its outline, we are not at all convinced. The country needs to urgently look at what more it can do. This programme is not on a trajectory for success. This is the time to pull out all of the stops.



Pakistan

Pakistan's polio programme progressed strongly over its first 12 years. The country suffered 20,000 cases per year in the early 1990s. In 2005, it reported just 28. But transmission was never stopped. The number of cases rose again. Uniquely amongst the endemic countries, Pakistan has seen cases rise for the last three years in succession. Balochistan had six times as many cases in 2011 as in 2010. We have previously expressed severe concern about Pakistan's programme. We saw deep flaws preventing success and insufficient corrective action. In October 2011, we recommended that Pakistan fundamentally re-think its National Emergency Action Plan.

The programme has made real improvements over recent months. It has clearly identified some crippling systemic weaknesses. Its National Emergency Action Plan has been considerably revised, providing credible solutions to many of the problems identified. The programme has revitalized energy. A sense of meaningful accountability is starting to grow.

We should be in little doubt, though. Pakistan's problems remain deeply entrenched. The numbers are what matter, and these have not yet shifted in any meaningful way. CDC's objective assessment still shows vaccination performance to be weak, and risk of ongoing transmission to be high. The current solutions need to be rapidly and comprehensively implemented. The low season window is closing fast. If significant transmission continues beyond April it will be nigh on impossible to stop it during this year's high season. As time goes on, sustaining political commitment and energy will be a challenge.

AT A GLANCE

Polio transmission in Pakistan has never stopped

Four months ago we called for Pakistan's emergency plan to be re-thought

The new plan is considerably stronger

But no demonstrable impact on polio transmission, and time is running short



AT A GLANCE

Sindh and Balochistan are responsible for most of Pakistan's cases

Punjab's programme is stronger, but not yet strong enough

Insecurity impedes progress in FATA and KP: this needs greater focus

We are pleased to see a stronger plan but the numbers must start to go down if this is not to be another false dawn

Each of Pakistan's affected provinces faces different challenges. Two thirds of cases originate from two provinces – Sindh and Balochistan. In Sindh, the problem is particularly concentrated in four districts. Three of the four are in Karachi, the largest city in Pakistan. Similarly in Balochistan, polio is disproportionately seen in three districts. Almost 90% of cases are amongst Pashto-speaking people. Both provinces have suffered from ineffective management. Zonal supervisors have often fielded inappropriate vaccination teams, or no team at all. The programme has acted decisively, replacing this entire supervisory tier. Balochistan and Sindh remain crucial.

We have previously highlighted strong performance in Punjab, which had just nine cases last year. But nine cases is still nine too many. The province leapt more energetically than the rest into implementing last year's National Emergency Action Plan. It must now systematically work through the obstacles that are preventing nine from becoming zero.

In the Federally Administered Tribal Areas (FATA) and Khyber Pakhtunkhwa (KP), one concern predominates. A challenging security situation means that vaccination rounds are not reaching tens of thousands of children. We are not at all convinced that enough is being done to deal with this obstacle. As we discuss later, this is the case in several countries. We recognize the dedication of those working in these difficult circumstances. But this is a challenge that the programme needs to find stronger ways around if transmission is to be stopped. Security is not the only concern in FATA and KP. Cases are still arising in areas where access is not a problem. The management challenge is to focus on inaccessibility, whilst not allowing it to be an excuse for suboptimal performance in other domains.

Although the challenge is highly concentrated in a small number of areas, this is not to say that the rest of the country is clear. Environmental surveillance continues to detect polio transmission in all major cities in all provinces.

Pakistan's programme has been sliding in the wrong direction. Last year's emergency action plan gained little traction. The recently augmented action plan gives us greater cause for hope. The hard work started must be sustained and must show results. We congratulate the programme for this step up in its approach. We now need to see clear evidence of a step up in vaccination coverage, and a meaningful drop in case numbers.



Angola

In 2008, Angola reported as many as 10 polio cases a month. The country has since made strong progress. In 2011, only five polio cases were reported, in just two municipalities. After India, Angola is the only persistently affected country to record a significant decrease in case numbers between 2010 and 2011.

Polio eradication is within touching distance for Angola. It must strive to reach the finishing line. Success is not yet assured. It needs yet greater endeavour on the part of the country and its partners.

Polio will not be stopped for good in Angola unless the programme can further improve the quality of vaccination campaigns. In the November campaign, 59% of missed children were not vaccinated simply because no vaccinator turned up at their home. Luanda, the capital, has been the engine of transmission in the country. Here, the figure rises to 65%.

More than 12% of Angolan children have never received a single dose of OPV. We have raised concerns about Luanda before. Besides vaccination problems, there remain worrying surveillance gaps here. Without immediate action to address these inadequacies, the programme risks sliding backwards. Angola's recent progress could become a distant memory.

Angola's land borders total over 5,000 kilometres in length. They are far removed from the country's capital. Remote border communities face particular challenges. For example, access to communications is limited. Mass media campaigns permeate less well. Suitable transportation is a

AT A GLANCE

Encouraging progress in Angola in 2011

But success is not yet assured

65% of missed children in Luanda due to vaccinator no-show is a powder-keg for renewed transmission

Both vaccination and surveillance must be improved, particularly in Luanda

Border communities need tailored approaches to unique challenges



AT A GLANCE

Strong national leadership remains key

It is too early to withdraw staff from Angola – the job is not yet done

Angola must capitalize on its recent progress, and stop transmission in 2012

major issue. Reasons for refusal in border communities often bear more similarity to those in DR Congo than in the rest of Angola.

This requires Angola's community-based programme to be flexible in its approach on the ground. But local strategy does not negate the need for national leadership. National Government should fly the flag for these border communities. We are pleased to hear of planned co-ordination with DR Congo on vaccination campaigns in inaccessible border regions. This co-operation must be rapidly enacted.

The Angolan Government provides considerable financial support to the eradication programme. We commend this. But polio will only be stopped by strong partnership, by combined effort and expertise. We were concerned to hear that the recent drop in polio cases may cause international partners to withdraw staff from Angola. This would be short-sighted. Better to stick with the programme through to the end than risk resurgence. Resurgence would call these staff back sooner than they think.

The year 2012 could be an historic one for Angola. It holds the promise of a polio-free nation. Angola could be a role model for Africa, inspiring others on to regional polio eradication. Failure to capitalise on the progress made over the last 12 months would be a real set-back for the global programme.



Chad

In 2001, Chad stopped polio transmission. In 2011, the situation was very different. Chad housed more than a third of Africa's polio cases. Per head of population, it had many times more cases than any other country in the world (figure 5). Chad has a poor road system, with some roads consisting entirely of sand. It has a large lake, where travelling from one island to the next can take several hours.

In April 2011, we called the situation in Chad a public health emergency. We called for rapid deployment of additional technical support and a re-write of the country's plan for stopping polio.

In the other persistently affected countries, polio is heavily concentrated in specific areas. This is not the case in Chad. It has a truly national problem. Last year, three-quarters of all regions and half of all districts had polio. In technical terms, Chad qualifies as having 're-established' rather than 'endemic' transmission. This under-represents the power of the virus' grip in Chad. To all intents and purposes, we consider the country to have endemic transmission.

Chad presents a challenge of a different nature to the other affected countries. It has only minimal problems with security or with refusals. It is a country in which solid application of tried and tested techniques can work. The challenge is to apply them across the country, against a backdrop of a threadbare healthcare system and routine immunization coverage that may be the lowest in the world.

Chad's programme looks far stronger than it did nine months ago. It has a high quality second emergency action plan. The plan responds well to the

AT A GLANCE

Polio is deeply-rooted in Chad

Polio is endemic in all but name

Chad is different to other countries – poor healthcare and terrible routine immunization but few refusals or security concerns



AT A GLANCE

The programme has strengthened since we raised the alarm in April 2011

Meaningful impact is visible but slow

Island communities and nomads need particular attention: are helicopters out of the question?

The programme has decentralized in principle but not in practice

A more positive trajectory has been established; acceleration is now needed

recommendations of the Technical Advisory Group. It sets out specific actions with clear accountabilities and timelines. The country's partners have now mobilized almost one hundred technical personnel, most of whom are deployed in the field. The President meets with programme leaders monthly to examine progress.

These changes are showing some evidence of impact, although this is slow. There has been some improvement in vaccination coverage rates. But these vary wildly between areas and are far from the level required to stop transmission. Surveillance also needs considerable further strengthening. Notably, one third of stool samples are currently inadequate.

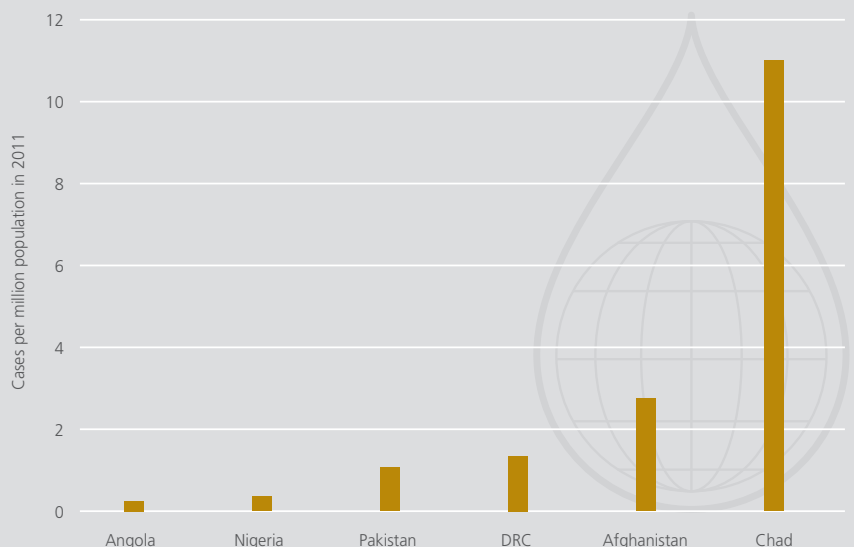
Although the challenge is a national one, there are some areas and groups that merit special attention. Children on the islands of Lake Chad are difficult to access. Nomads are over-represented amongst the cases. Strategies to reach these two groups need to be given sufficient attention now, to avoid them becoming lingering foci of transmission after the main national problems have been addressed.

It is an insightful thought that in a three day campaign, it can take four hours by boat to reach just one island population. Helicopters would be one "systemic fix" to this problem of inaccessibility but the cost and logistics would have to be looked at. Those involved in smallpox eradication speak of the vital role played by army helicopters in some inaccessible parts of the world.

The Chad programme has established six hubs across the country. These are not yet being used to full effect. They need to be adequately resourced and empowered, so that they can drive the eradication effort in their areas.

Chad's programme is heading in the right direction. The challenge now is pace. If the plan is strongly and energetically applied, it should be possible to stop transmission in 2012. All involved need to give their full commitment to this goal.

Figure 5: Relative to its population size, Chad has almost four times more polio cases than any other country





DR Congo

AT A GLANCE

DR Congo is almost four times the size of France. Its health care system is dysfunctional, its transport infrastructure inadequate, and it was recently ravaged by war. Eradicating polio from DR Congo was always going to prove tough. The country had 92 cases of polio in 2011, a minimal reduction from its 2010 total of 100.

Though progress has been difficult, we do see positive developments. Case numbers have waned very considerably in the latter half of 2011. The number of affected districts also dropped significantly. Despite the challenges, stopping polio is achievable. The country has proved this before. The pressure is now on to complete the job. The plan for 2012 must be clear: force the polio virus out of Katanga, whilst ensuring that it does not make unwelcome appearances elsewhere.

DR Congo is a huge country with districts of very low population density. The known problem of 'silent zones' persists. A lack of surveillance information here may just be due to a population size insufficient to record a statistical baseline, but it may be due to poor quality surveillance. We have also been told of difficulty accessing these areas to vaccinate children. DR Congo must gain a greater understanding of the situation and do so quickly. Polio can persist in relatively small areas. If any of these 'silent zones' contains polio and has poor vaccination coverage, it could act as a seed for further spread.

In the last three months of 2011, every polio case in DR Congo was in Katanga or across the provincial border in Maniema. The programme must throw everything it can muster at this region. It must learn from the very

Signs of progress in the latter half of 2012

"Silent zones" must find their voice – surveillance must be enhanced



AT A GLANCE

Religious refusals are a significant issue

Polio is less common in DR Congo than it used to be and this is breeding complacency in the population

best practice elsewhere in the global effort. Refusal rates (31% in Katanga) are amongst the highest in the world, due in large part to opposition from religious groups. Engagement with these groups must continue. Trust must be nurtured. Tribe-specific reasons for refusal must be better understood.

Complacency is setting in across the population of this vast country because having the first-hand experience of seeing a polio case is fortunately becoming rare. Short-term success can breed long-term failure. The public must be reminded of the dangers of polio – present and future. To bring life-saving polio vaccine to the doorsteps of Katanga has required the intense effort of thousands over the years. To fail to vaccinate now, with the goal so clearly in sight, is a travesty.

DR Congo is making progress. We congratulate the country for this. But it is only half-time. DR Congo must not take its eye off the ball. Our October 2011 report asked DR Congo to drag itself free of the “boom and bust” cycle. It would appear that DR Congo may now be entering a relative boom of performance. The challenge we pose to DR Congo is this – can it avoid a bust?



India

LESSONS FROM INDIA

A full year has now passed with no child becoming paralyzed by polio in India. We warmly congratulate the Indian Government and its partners on this deeply impressive achievement.

We genuinely believe that this milestone should be a source of great hope and inspiration for other countries, and for the global programme as a whole. Just a few years ago, there were doom-mongers aplenty. Many well-informed individuals were skeptical that polio could be stopped in India.

UNICEF's report to us provided a strong analysis of features that have made the India programme succeed. Different people will list different features, but the exercise of looking for them is important.

Without repeating UNICEF's analysis or delving into technical detail, we see four major features of the programme in India that are key ingredients in the recipe for success elsewhere.

AT A GLANCE

India has achieved a monumental milestone

This is a major boost for the global effort

India's success offers lessons to others



AT A GLANCE

1. Government ownership, from local to national

The support and expertise of partners has been vital, but government staff in India have energetically led its country's programme. When government grips the reins tightly, polio eradication programmes are better driven to success.

In India, the strongest early sign of government ownership was actually at local level. It built upwards from there. In latter years, national government ownership has been immensely strong. The government has allocated talented staff to the programme and focused them solely on polio. It has taken clear responsibility for the programme's performance. Not for the sake of demonstrating performance to others, but for the sake of achieving real and lasting success. When the one-year anniversary came, all who have been associated with India's polio programme wanted to celebrate. Of everybody involved, the government was the most inclined to restraint. It was the government that led in saying, "we have reached an important milestone, but this is not over yet." This, to us, demonstrated absolute ownership.

Mindful of the prize of national eradication, we hope that local, regional and national government in every polio-affected country can grip the reins of their programme ever more tightly. This will be important – no, vital – for success.

2. Tight-knit partnership

We have repeatedly heard that the various partners have worked well together in India, setting agency boundaries aside for the sake of stopping polio. In Bihar in particular, we have heard the partnership described as "seamless". Good efforts have been made towards this in other countries too, but 'seamless' is not a word that we have yet heard elsewhere.

3. Focus on quality improvement

The Indian programme recognized that stopping transmission involved improving vaccination campaigns until they were of high enough quality to reach enough children. It recognized this clear and explicitly. We see too much vagueness about this elsewhere.

This focus led to clarity. Clarity about the key areas, and the key population groups. Clarity and precision about what the plan is. Clarity about what progress is being made against the plan. India has demonstrated the value of a logical and systematic approach.

This focus led to attention being drawn to the important details that might otherwise be overlooked. It led to the quality of data being challenged and improved. It led to the programme wanting to learn from its trials and its errors, and improving as a result.

Local then national government ownership drove the programme's success

The partnerships between government, agencies and local populations became seamless

The programme focused explicitly on quality improvement

It exuded clarity where elsewhere in the world we see vagueness – about the problem, the plan and the progress

India patiently built up improvements, until they reached critical mass



AT A GLANCE

India showed the immense value of communication – in mobilizing demand for and acceptance of the vaccine; this force of mobilization is weak in other affected areas

Other countries can benefit - if India had known 10 years ago what it knows now, success would have come sooner

4. Demand

The disciplines of communications and social mobilization have rightly grown in prominence within the GPEI over recent years. Their demonstrable effectiveness in India has played a large part in this. It is clear that focusing on ‘demand’ as well as supply is vital. UNICEF’s collaborative ground-based operation in India has combined sophistication and scale.

We welcome the fact that other countries’ communications programmes are scaling up. Time is clearly a challenge. India’s programme took years to build – years that are no longer available.

Strategic communications has great potential to contribute more towards stopping transmission. Isolated communities and migratory populations need to be reached. Resistance to refusals needs to be overcome. Some people are still misinformed. Some decide not to vaccinate for reasons that are personal, local, and frequently changing. Communication practitioners need to be nimble and remain constantly engaged to understand these reasons. Exploration of new ideas should also continue. Professionally produced training films can serve as “multipliers” of learning, skills, and experiences. As one example, the strategic use of popular media to feature polio storylines is yet to be harnessed fully. This could spur a popular on-air buzz that creates enabling conditions for on-the-ground work.

Learning from India

This milestone has not come easily. It results from relentless drive and determination. The programme has learnt a great deal through innovation, through trial and error. If India knew ten years ago what it knows now, it would have been able to stop transmission more quickly. This should be heartening to other countries, which can benefit from that experience.

Of course, the programme cannot simply be copied from one country to another. Indeed, India’s programme is very different within the one country. It is no single national approach, but a collective of sub-programmes bound by an underlying ethos.



AT A GLANCE

India needs to stay vigilant – the re-infection threat remains

What India does now is also important to others

Next steps for India

India's programme needs to diligently maintain its high level of immunization coverage and of surveillance. It would be too easy for attention to wane as the time elapsed since the last case continues to grow. Without distracting from this, we hope that the programme can now find some energy for two endeavours in particular. The first is to assist other countries' programmes. We greatly welcome the intent to share expertise with Nigeria. Ultimately, the children of India will be completely safe from polio only when it is eradicated globally. The second is to use the infrastructure and learning built through the polio programme for other national public health priorities. The way in which this is done will be of great interest to other countries as they too move towards this monumental milestone.



Looking for **root** causes

Finding systemic solutions



AT A GLANCE

Systemic thinking is essential to the final phase of eradication

Highlighting the problems should not be disheartening – every systemic improvement elevates performance closer to stopping transmission

For example, when children are missed on vaccination day, the reasons are often treated as if they are local and context-specific, yet there is frequently a systemic problem

Identifying the 'causes of the causes' enables development of lasting systemic improvements

Systems thinking may seem like common sense, but it does not happen automatically

LOOKING FOR ROOT CAUSES: FINDING SYSTEMIC SOLUTIONS

Each of our previous reports has emphasized the importance of recognizing those common causes of sub-optimal performance that need effective action across the programme. Early progress is now being made on tackling many such systemic issues.

In this section, we explore a number of areas where broader systems-thinking could yield major gains. We have explored some of them before, and now return to review progress. Others are newly shared in this report.

People within the programme should not feel disheartened by our constructive criticisms. Up until now there has been little tradition of continuous quality improvement in the global management of the programme nor any deep discussion about how to effectively manage change. The programme is not on track as it is, and there is no single 'magic bullet' that will transform it. Every additional improvement that can be made elevates performance towards a level that can stop transmission.

Vaccination rounds provide one example of where programme-wide action is needed to improve performance. If children are regularly missed on vaccination rounds, anywhere, the result will be failure to eradicate polio. There are a myriad of causes for children being missed – a mother says the child is asleep; a microplan is inaccurate; vaccinators do not realise that they need to target children playing in the fields as well as those in houses; someone has falsely told the child's parents that the vaccine is harmful. Too often, the programme's approach has been to regard such causes as parochial, context-specific events that are different in different places. In our reports, we have urged the programme's leaders to dig deep in understanding these causes, to focus on the 'causes of the causes'. Moving to this perspective creates opportunities for bigger improvements that can provide more definitive solutions to problems.

A metaphor illuminates the difference in two approaches (either addressing the multiple 'single' causes or identifying and tackling the common systemic causes). Imagine that children kept falling into a river and drowning. We could try to save them by pulling them out of the water one-by-one but there are so many that some would surely drown. Another approach would be to walk further up the river to find out why the children were falling in. We might find a slippery river bank that is causing them to lose their footing. Building a fence around the river bank so that the children can play safely stops them falling into the river. Similarly, 'up-stream' solutions can be sought for the problem of children being missed by vaccination rounds in the polio eradication programme.

It is not the case that nobody in the programme has thought of this, but it has not been the shared way of conceptualizing what the programme needs to focus on. Confronted with a stream of immediate problems, systemic thinking requires a step back. This is not easy - polio eradication presents many pressing problems. The



AT A GLANCE

Headquarters meetings are starting to look at the 'causes of causes' of weak performance

This needs to be embedded in the management culture of the programme

Programme data are plentiful, but mainly flow upwards from district level, 'feeding the beast' above

Global leadership should be adding value to the data reported to them, to provide insights for front-line teams

Data streams and analyses remain poorly integrated between the partners

Why is one agency talking about Major Process Indicators but nobody else using this information?

challenge is to ask 'why?' Not just once, but over and over again, until the systemic problem – and then systemic solution – becomes clear. Walking upstream can yield rich rewards.

For example, looking at the problem of inaccessibility at country or regional level to come up with creative or innovative solutions could prevent thousands of children being missed in the future. Designing a training scheme to equip vaccinators with the skills to negotiate with mothers who are reluctant to allow their children to have the vaccine would create a special breed of vaccinators who seldom accept refusals. Again the benefit could be measured by substantial percentage falls in refusal rates rather than a few local gains in one place that are cancelled out by continuing failure elsewhere.

In response to our previous calls for more of this systems-thinking, the spearheading partners have responded well – particularly headquarters, and particularly WHO. Their weekly global update meeting is changing significantly. Previously, it mainly reviewed surveillance data. It is now shifting towards describing the root causes of obstacles and what is being done about them. The impact of this depends not just on these meetings, but on how well this approach is cascaded and embedded throughout the programme.



Smarter use of data

Data are essential to direct action. Used intelligently, they can provide a major boost to performance. This programme has lots of data, but are they being used as well as they could be?

We have two observations. The first is about data flow. Data are collected in every district every week. From there they are reported to state level, to national level, to regional level, to global level. At every stage, the data are collated and summarized. The global level data are published. It is as if the focus at every level is on 'feeding the beast' that sits above them.

Higher organizational levels should add value to the data, and pass this value back towards the front-line. Some country programmes disseminate a weekly update to all regions and districts, but often these merely collate data without adding much action-orientated insight. UNICEF and CDC produce useful analyses every quarter. We welcome the steps to share these with countries. More is needed along the same lines.

Our second observation is about data integration. The various data streams and analyses seem to exist in parallel rather than providing a rich unified body of intelligence. As one example of many, the CDC reports on Major Process Indicators, but we see nobody else in the programme talking about these. If these valuable analyses are useful to influence behaviours, we should be seeing them more widely used. If they are not useful, the programme should say so and specify what is needed.

The shift towards using data to create deep insights and actionable findings has begun and must be embedded in the management culture.



Best practice should be universally applied

The programme focuses great energy on actions above the front-line, such as political commitment and national planning. At the strategic level, the front-line details receive some focus, but far less. How to run a vaccination campaign is often taken to be a matter of routine, of operational rather than systemic concern.

Problems that do arise with vaccination days are vulnerable to the assumption that they are local and isolated. The broader value of observations can therefore be lost. For example: we visited an area of a town to monitor a vaccination campaign's progress. Vaccinators had diligently visited house after house, but they had walked straight through crowds of unvaccinated children in the street. A senior member of WHO staff asked that the vaccinators be called back. When they came back, the vaccinators protested that they had done the job that they were asked to do – they had visited every house. They were told that they also need to vaccinate the children in the street.

Thousands of vaccination teams had been deployed across the country. We saw fewer than ten of them. It is highly improbable that the vaccinators elsewhere were behaving completely differently from those that we saw, that elsewhere they were all vaccinating every child they met, not just going house to house.

It is too easy to dismiss these observations as being 'micro-level' and of purely operational concern. In most 'delivery systems', whether manufacturing or services, there is a 'best' way of doing things so that an excellent outcome is achieved. The key is to ensure that this best practice is used everywhere, every time.

'Campaign quality' refers exactly to issues like this. A strong delivery system that is understood by everyone and implemented consistently to the standard of the best would transform the current variable quality of the vaccine rounds.

Someone must spend time examining the issue and generating a solution that can be packaged for those at the front-line. The partners – particularly CDC – plan to draw more very qualified people into working on polio eradication. Rightly, many of them will be deployed in the field. But it is also important that some are retained at strategic level, based at headquarters, to take the time necessary to look at issues like this.

We note that there is no formal process for reviewing and improving the quality of vaccination campaigns. An area's field surveillance is subject to surveillance reviews. These generate a list of actions needed for improvement. Every laboratory undergoes a structured annual assessment. This too generates a list of actions, which is followed up the subsequent year. There is no systematic equivalent for vaccination campaigns.

AT A GLANCE

There has been a recent positive shift in approach here, but much more is needed

The details of how to run a vaccination day are often regarded as routine and not something where a commonly-agreed standard of best practice should be promoted

Best practice in campaign delivery applied everywhere would stop transmission

As CDC and other partners scale up, a small 'think tank' group examining these micro-issues could generate macro-improvements

Surveillance quality is subject to systematic review and improvement – why not campaign quality?



Valid campaign monitoring is vital

Monitoring of vaccination campaigns essentially audits their quality. The established method of monitoring campaigns is 'Independent Monitoring'. Its main downfall is that finding truly independent, objective Monitors is difficult. They often know the people who have been working in the vaccination campaigns, which can influence their judgement. The data produced by Independent Monitoring often show coverage as being far higher than it actually was. Over the last year, in an attempt to overcome this, Independent Monitoring has often been supplemented by a newer method of data collection. This newer method is called Lot Quality Assurance Sampling. It requires Monitors to visit a much smaller sample of children, in 'lots' which are selected at random.

WHO now proposes that LQAS become the primary method by which campaign quality will be audited. Others in the partnership have concerns about this. Some question the LQAS methodology itself. It is relatively new, and not all believe that it has yet proven itself. Others oppose a switch to LQAS not because of the methodology itself, but because they believe that a switch does not solve the essential problem – that Monitors are liable to be less than objective. They argue that this is the problem that needs to be tackled. They say that the method used (whether Independent Monitoring or LQAS) is relatively unimportant, because both are undermined if they are not properly applied.

Auditing vaccination campaigns actually has two goals. As described, the first is to determine what proportion of children were missed by a campaign in each area. The second goal is to determine why the children were missed. Determining where children were missed guides *where* improvements are needed. Determining why they were missed guides *what* improvements are needed.

Deficiencies in the quality of the 'why' data have been discussed for many months. Currently, Independent Monitoring captures this information under very broad headings. The categories of "child not available" or "other" provide no meaningful information about what intervention could be made to reach them in future. A child could be 'unavailable' because they are sick. A reluctant parent may report the child 'unavailable', covertly refusing the vaccine. Or a child may have been out of the house at the time the vaccinator team called, and the team failed to return later. It is disappointing that the programme has not been able to resolve this situation despite protracted discussions.

Currently, LQAS does not capture any information at all about why children were missed. If the programme switches to relying on LQAS, this vital information will have to be collected in some other way, or the LQAS approach amended. It is not clear how this will be done.

All in all, there are currently substantial uncertainties about the programme's policy on campaign monitoring. Obtaining these data is crucial, so this needs to be resolved. Some regard the current data as 'good enough', but they do have real flaws and an increasing number believe that they need to be improved.

AT A GLANCE

Campaign monitoring provides important information on how many children were missed, but has profound limitations

Two methods are in use – 'Independent Monitoring' and 'Lot Quality Assurance Sampling'

Which method should be used? The partners seem to disagree

Importantly, campaign monitoring also provides data on why children are missed

Weaknesses in these data are long-known, but the programme is failing to resolve them



AT A GLANCE

Productive debate is needed about the best way to monitor campaigns, generating some rapid decisions

Though squeezing a vaccine vial is easy, reaching every child is not

Being an effective vaccinator requires a number of key organizational and interpersonal skills and great tenacity

To parents, vaccinators are the face of polio eradication

Are vaccinators truly aware that they are part of a vital global endeavour?

Do vaccinators feel that they are valued? Not that we have seen

The programme needs to agree a way forward. In April 2012, we will ask what the plan is for using, improving or changing Independent Monitoring or LQAS. We will also want to specifically know what the method and timeline is for improving the collection of data about why children are missed. Reconciling differences and coming to these decisions is an important test of the programme's new architecture.



Valuing front-line staff matters

What is so difficult about delivering two drops of vaccine to a child? That is the somewhat scathing question that critics of the programme often ask. Yet it misses the fundamental point. The delivery of the drops into the child's mouth is not the skill of a polio vaccinator. It takes little skill to reach 40% of children in a community. It takes considerable skill to reach 90%. Houses must be visited in a logical sequence, even where there are no numbers or streets. The vaccinator must ask the right questions at each. "Do you have any children under five?" may get the answer "No", but asking about sleeping children, other families in the house, and visiting children may get the answer "Yes". If a parent or child is unavailable, the vaccinator must record this and ensure that they return.

To the parents who decide whether or not to vaccinate their child, vaccinators are the face of polio eradication. They encounter questions about the campaign and the vaccine. Do they know the answers? If a parent is unconvinced, can they convince them? Are they effective advocates for this and future vaccination rounds, building goodwill rather than bad feeling or confusion? Whilst doing all of this, are they able to keep accurate records? Being an excellent vaccinator requires considerable organizational skills, communication skills, knowledge, and the tenacity to get the job done (figure 6).

Then there is the question of motivation and commitment. There is nothing more inspiring than feeling you are part of something big that will relieve human suffering. People who are inspired will inspire others. Their enthusiasm will be infectious, their sense of mission will be strong.

The programme has a tendency to think about vaccinators as temporary workers at the bottom of the hierarchy, rather than as some of the most important people in the entire programme.

We spoke to two vaccinators and asked them whether anyone ever thanks them for their work. When they had stopped laughing, one of them said: *"I am shouted at, criticized and told that I am a fool. I do this job because I am desperate for money. I would rather be doing anything else but this"*.

That is not the experience of all vaccinators but it is not a rarity either. It is fair to say that in our 18 months of work as a Board, we have not heard a strategic discussion of the role played by this vital part of the programme's workforce.



AT A GLANCE

However many millions are spent, however many Presidents engaged, if too many of the programme's vaccinators are uninspired, demotivated and under-trained, failure will be assured

Failure to properly pay vaccinators kills the effectiveness of campaigns

The programme can engage vaccinators far better

Treat vaccinators as what they are – the most important people in the programme

It could be said that the hundreds of millions of dollars allocated, all the meetings with Presidents and Prime Ministers and the hundreds of highly qualified public health officials in global headquarters functions will count for nothing if a substantial minority of vaccinators do not know what is expected of them, do not have the skills to negotiate with a reluctant mother or are demotivated and uninspired by their work.

This is another example of going up-stream to design a systems solution. Rather than dealing with problems of vaccinator-performance piece-meal in hundreds of places, the global programme should ask itself: what is the standard we expect of vaccinators? How are we going to equip them with the skills to meet that standard? How do we ensure that they feel an important part of the eradication endeavours and are valued for their contribution? How will we know when we are fulfilling the goals implied by these questions?

Workers' effectiveness drops precipitously when there are problems with their pay. We welcome the initiatives taken to improve vaccinators' remuneration, and to ensure that it reaches them.

There is far more that can be done to understand vaccinators, to communicate with them, to motivate them, to give them the training that they require to excel in their role. We have observed vaccinator training sessions ourselves, and found them to be highly variable in quality. Some make effective use of role-play to rehearse likely encounters. Some contain no meaningful training whatsoever.

The programme has considerable experience of communicating with parents in ways that are meaningful and motivating to them. Why not apply the same thinking to vaccinators? The programme has an externally focused communications approach, but internal communications is lacking.

Once one realizes the value of motivating front-line staff, ideas for how to do so flow freely. Because the programme has paid little attention to this area, there is potential to realize considerable reward if it can do so now. The programme needs to take seriously, and think creatively about, better communicating with and motivating its vaccinators, the most important people in the programme.

Figure 6. A tale of two vaccination teams



Team A

Reaching a new street, Ravi and Kunal knock at the first house. "Good morning. We are polio vaccinators. Do you have any children under five?"

"No," comes the reply, "our youngest is seven". So Ravi and Kunal mark the house with chalk as they have been taught to do, and move on to the next.



THREE CHILDREN MISSED

At the next house, they receive a cooler reception. "Polio? Please leave. I have heard that this vaccine will harm my children" Ravi and Kunal are intimidated. They do not know much about the vaccine, so they cannot really argue with this forceful parent. They make a mental note to tell the social mobiliser about this house (though they later forget) and move onto the next.



TWO CHILDREN MISSED

As they walk to the next house, a small group of children is playing in the street. Ravi and Kunal know that their job is to concentrate on visiting every house, so they carry on.



FIVE CHILDREN MISSED

At the last house, nobody is at home. They move onto the next street, unfortunately forgetting to record this house on their tally sheet.



THREE CHILDREN MISSED

END RESULT: 13 children missed. One could be the source of a new transmission of polio

Team B

Reaching a new street, Amit and Shriya knock at the first house. "Good morning. We are polio vaccinators. Do you have any children under five?"

"No," comes the reply, "our youngest is seven" "And are there are any other families living here, or any guests or visitors?" "Yes, my sister is staying with us. She has three young children"

So Amit and Shriya vaccinate the three children at this house and move onto the next.

NO CHILDREN MISSED

At the next house, they receive a cooler reception. "Polio? Please leave. I have heard that this vaccine will harm my children" Amit and Shriya have seen this before. Shriya starts, "Madam, I too am a mother. I too want everything that is best for my child. Do you think that I would do anything that would harm yours?"

It takes some time, but Amit and Shriya talk to the mother about her concerns. They show her the vaccine, dispel her fears. They are ready to call on the social mobilisers if the need arises, but in this case they can handle the discussion themselves. The mother allows them to vaccinate her two children. They move onto the next house.

NO CHILDREN MISSED

As they walk to the next house, a small group of children runs by them in the street. Amit and Shriya know that the aim is to vaccinate every child in the whole of the country today, so they stop to see these children. Three of them already have the finger mark to show they have been vaccinated, but they vaccinate the five who do not.

NO CHILDREN MISSED

At the last house, nobody is at home. They move onto the next street, record this house on their tally sheet and return here at the end of the day to vaccinate the three children inside.

NO CHILDREN MISSED

END RESULT: No children missed; this district has a good chance of becoming free of polio.



Clear accountability is vital

Our last report highlighted a lack of meaningful accountability throughout the programme. The partners accepted this criticism. WHO is focusing on developing a clear accountability framework. CDC is also working to develop management skills training. There will be a clear litmus test of this work's effectiveness:

- Are local-level staff absolutely clear what is expected of them? Are they held accountable for meeting these expectations?
- Are staff throughout the organisation able to manage and influence others effectively, to hold them to account through the means available to them?
- Are key managers who are not performing in their roles allowed to remain in them?

We have previously expressed dismay about people remaining in post when they are widely known to be performing poorly. It will always be difficult to act. But this is an emergency, with much at stake. There has been improvement here, but we continue to hear examples of staff who are widely known to be performing poorly, yet remain in crucial jobs. The power of the blocker is considerable. One individual can counteract the positive work of dozens of others, particularly if in a key leadership role.

We welcome the move to define tighter terms of reference for consultant appointments and for STOP team members. Setting out clear expectations helps everybody to do their job better. This applies down the chain. Imagine a district-level polio eradication officer observes a supervisor who is not doing his job in the way that the eradication officer would expect. If both already have a document that sets out clearly what the supervisor should be doing, they have the basis for a meaningful conversation about performance. If they do not, the likely result is a general admonishment from one side and excuses from the other.

Visiting a country with re-established transmission, one IMB member was told by several district administrators that some vaccinators were not performing adequately. Yet there was no explicit evaluation of vaccinator performance, nor a clear method for responding to poor performance. This is a necessary part of the system, in tandem with the enhanced focus on motivation and training for vaccinators that we have discussed already.

AT A GLANCE

We have highlighted weak accountability as being an endemic problem in this programme

Accepting the criticism, the partners are taking steps to address this

We have said it before: there can be no excuse for tolerating poor performance

Setting more precise expectations for consultants and STOP team members will be valuable – the same should be applied to all staff



Working with the context, not hoping it will change

To succeed globally, the programme must be able to stop transmission in areas that are plagued by security problems. We applaud the commitment of those who work in these difficult areas. The value of their work needs to be intelligently optimized. It is a sad fact, but a fact nonetheless. Insecurity is here to stay. There will not be a window of opportunity in which every polio-affected country is free of security concerns that limit accessibility to children.

Transmission has been stopped in insecure areas before. In Somalia, Sudan, Angola and DR Congo, for example. The programme needs to fully apply what was learnt there, whilst recognizing that the current challenges seem to be proving greater still.

We have heard about innovative approaches to operating in areas of insecurity; about the use of access negotiators, partnerships with NGOs, about the value of engaging the leaders of opposing groups to gain support for vaccinations. But the current strategies are not stopping transmission.

We cannot shake the feeling that the programme is hoping that this context will change. That it can 'get by' whilst insecurity is a problem, and that somehow this will be enough. It will not. Sad though it is, the context needs to be accepted for what it is.

Another backdrop to polio eradication in some parts of the world is political change. We have been shocked to hear the virtual acceptance that eradication efforts will falter in the run-up to, and during, an election. It is almost as if an election is seen as an adverse force of nature as negative as the polio virus itself.

The programme needs to become even more sophisticated in its understanding of these obstacles and its strategies for operating in these environments. These are further areas that would benefit from specific systemic focus, such that the programme has a core of people who become absolute world-leading experts on how to deliver a programme in the face of insecurity and in the face of political change. Stopping transmission depends on it.



Openness to innovation breeds success

Considerable advances were made thanks to innovations like finger marking, campaign monitoring and the bOPV vaccine. But our previous report observed that innovation, despite its demonstrable value, is not sufficiently cherished. The programme is facing the most difficult challenges in its history, making it more important than ever to help good ideas prosper. Innovation can help tip the balance from being stuck at 99% to reaching 100%.

Innovation does not naturally flourish in a complex web of bureaucracies. It needs to be helped along. We observed a tendency to informally debate ideas excessively, rather than formally deciding to pilot them. We observed that innovations existing within the programme are not always well diffused.

AT A GLANCE

The programme is not performing at a level that stops transmission in every area of insecurity

Insecurity and conflict will always be present therefore sustainable ways round it need to be found

The current strategies are not stopping transmission

Sadly, we cannot just hope that the challenge will pass

Regarding an election as justification for poor performance is unacceptable

The programme needs to develop world-leading expertise in dealing with the reality of seemingly insurmountable barriers

Although past innovations have been invaluable, the programme has done too little to foster innovation recently

The programme is inherently conservative, sticking to what it knows best



AT A GLANCE

Innovation can help tip the balance from 99% (stalemate) to 100% (success)

An Innovation Working Group is a welcome initiative

This Working Group needs to smooth the path for innovations: creative minds should be allowed to flourish

Embedding openness to minor innovation is as important as pushing through major innovation

Many innovations are out there that can be captured and spread

Good early progress has been made, and must not now be stalled by bureaucracy

And we observed that the focus of innovation and research is primarily on the technical elements of the challenge, rather than on the equally important operational elements such as people management or vaccination campaign organisation. We suggested that a 'strand of systematized innovation' needed to run through the programme.

The partners' response seems to fit our observations well. They have established a specific Innovation Working Group. This is formally examining what innovative ideas should be piloted and developed.

The important thing now is the footing on which the working group becomes established. Some degree of process is necessary, but not to the extent that it stifles the spirit of innovation. The function of this group needs to be as a path-smoother. Its success will be judged by the ease with which good ideas advance from concept to pilot, and promising pilots advance to widespread implementation. It needs to consider all aspects of the programme as having potential for innovation. Innovations in areas not yet explored may offer more than those well-rehearsed.

It is useful to select a fairly small number of high potential ideas and accelerate these through the process of trial and scale-up. Equally though, whether this falls to the Innovations Working Group or not, the programme needs to think more about the broader aspects of innovation – about how to ensure that good ideas are captured when they arise at the front line, about how to spread ideas that have no need for a formal trial. Building upon a strong base of tried and tested ideas, the challenge is to set free the spirit of innovation throughout this programme.

We have seen interesting small innovations in the field. A supervisor in Zamfara, Nigeria distributes 'treasure hunt' cards randomly in his area before the polio campaigns begin, and challenges his vaccination teams to bring them all back at the end of the third day. A vaccinator offers a token prize to children who can locate five other children in the area who have not yet been vaccinated. The impact of each is small but tangible. Neither requires great effort. Ideas like these could be better captured and spread.

In part, an innovative programme is one that is open to ideas. For example, some may think is excessive to wonder if Chad might need to employ helicopters to reach remote islands. But smallpox eradication required just this in some parts of the world.

There is promising progress here. The programme has previously seemed to accept innovation-related suggestions from us, only to lose interest or slow to a halt. We must see energetic follow through this time.



Seeking synergies

The programme is highly focused on polio eradication. An immense goal such as eradication will not be reached if its pursuers are distracted by other aims. But there is a balance to be struck. The programme does not exist in a vacuum. There are other programmes that have synergistic aims. Those who pursue polio eradication must not be blinkered to this.

We welcome the fact that CDC has established a small group to examine opportunities for cross-fertilisation between the polio programme and the Expanded Program on Immunisation (EPI). The fact that polio was ever split programmatically from EPI is a matter of some controversy. We would not suggest fundamentally re-visiting this decision at this late stage. Routine immunisation is going to remain an important contributor to the goal of polio eradication. Linkages remain between the two programmes. We would encourage that they are strengthened.

Similarly, we would welcome further strengthening of the programme's links with the Global Alliance on Vaccinations and Immunisations (GAVI). Again, the two programmes have much in common. There has been progress here, but more would be useful. The value of synergistic relationships holds at every level. Near the front-line, partnerships with NGOs have become an increasingly important part of the programme.

There are many other programmes facing similar or overlapping challenges to those faced by this programme. At global, national and local level, the programme could be doing more to identify them, learn from them and work with them.

The emergency mission of eradicating polio needs to become far more widely owned. Concern for finishing polio eradication can no longer simply rest with those who have 'polio' in their job title. This is true within the partner agencies, who must consider at every level what synergies can be found with other programmes, and what additional support given to polio eradication. It is particularly true at the community level. Those involved in delivering parallel services need to be drawn in to help reach every last child with vaccine.



Partnerships need active maintenance

One day soon, we hope that people will look back on polio eradication and talk about what made it work. When they do, the word 'partnership' will quickly come up. The programme has shown that partnerships can achieve performance that individual agencies never could. Effective partnership does not come easily. It does not flourish without devoted attention.

We have previously discussed some of the issues in this programme's partnership. We are pleased to see movement in the right direction. The partners held productive meetings in the wake of our last report. The programme's new global architecture is a strong step. It is important that

AT A GLANCE

Focus on polio eradication is commendable, but must not blinker the programme to the related causes that surround its field of operation

Further strengthening of links with EPI and with GAVI would serve the polio programme well

The programme is not on its own, and should reach out more to its natural allies – from global to local level

Polio eradication must become an emergency for everybody who can help, not just those with 'polio' in their job title

Tight-knit partnership is crucial, but does not come easily

Recognising the need to do so, the programme is taking steps to strengthen its partnership – but this must go further



AT A GLANCE

Data must flow freely: this is one programme, not five

It is a waste if partners' capabilities are under-utilised because of territorial behaviour

The polio eradication emergency is of global importance

Polio eradication is the important, exciting story that remains largely unknown and untold

When the public is engaged, the programme reaps reward

Novel techniques to involve the global public offer great promise – financial and otherwise

the partnership continues to work on getting this right. As the decision-making structures become more inclusive, those who are included have a real responsibility. Inclusive structures have many benefits. Their principal risk is that they slow pace. The partnership cannot afford to succumb to this.

Partnerships work when every agency makes the contribution that it best can make, and the other agencies work to help it do so. Two particular issues concern us: first, there are concerns about sharing data between partners. We have heard about these issues from several different sources over recent months. Data are the lifeblood of the programme. Ways simply must be found to allow it to flow freely between those who can use it to the benefit of the programme. This is not necessarily straightforward, but it is vital. We hope that these issues can be rapidly resolved.

Second, the programme has a number of partners whose technical capabilities overlap. This requires productive coordination to make best use of this asset. This could be done far better. We see findings obtained by one partner not being properly considered by the partnership. We see situations in which professionals from one partner agency are held back in their ability to contribute by other agencies acting defensively. We have noted some improvement in recent months. We hope to see further improvement still.



Igniting the public imagination

Polio eradication is a truly global concern – not only because it has the mandate of the World Health Assembly. If it fails, the fallout will be global. Many more countries will become infected, hundreds of thousands of children paralysed. If eradication succeeds, the world will see great collective benefit. The right to celebrate should also be shared across the world.

Public understanding about polio is poor. When we talk to people about eradication, few know that it could be imminent. Even some otherwise well-informed health professionals believe it has already happened. Almost none know about the knife-edge between success and failure on which this programme perches precariously. The programme can do far more to bring the public in, to engage them as partners and contributors to this exciting programme. This is a global initiative, but it is not yet a global movement.

The global public can be funders, fundraisers and advocates. The deeply committed people of Rotary International recently completed their \$200m fundraising challenge six months ahead of schedule. In 2011, the Global Poverty Project raised \$118m for polio eradication. It heightened popular awareness of the polio programme, particularly in Australia. The Australian Government increased its financial commitment substantially. The Global Poverty Project used approaches that this programme has not previously used, and from which this programme intends to learn. The potential to capture public imagination is nothing new. In the 1930s, Franklin D. Roosevelt engaged America in the 'March of Dimes', which funded polio



AT A GLANCE

Anchored to the World Health Assembly's polio resolution, the programme should launch a revolutionary approach to ignite the global public imagination

vaccine development. The bad news is that there is still a sizeable funding gap. The good news is that there are still avenues that have been relatively under-explored.

In May 2012, the World Health Assembly will consider a resolution that calls polio an emergency. If there was ever an opportunity to engage the global public, this is it. This very special situation needs very special communication. We recommend that the programme develops and executes an exceptional communications and engagement strategy, the like of which has never before been seen in global health.



Conclusion

Recommendations



CONCLUSION

We congratulate the programme on India's monumental milestone of detecting no polio cases for a year. To have achieved this is deeply impressive. It should considerably boost confidence in the programme's ability to stop transmission elsewhere.

India's achievement stands out because the programme is otherwise far off track. Considerable programmatic improvements are still needed if global transmission is to be stopped in the near-term, let alone by the end of 2012.

Our previous report set out frank criticisms of the programme as a whole. This was not easy for people in the programme to hear, but it needed to be said. We admire the response that we have seen so far. At headquarters level the partners, with the particular leadership of WHO and CDC, have grasped the nettle.

Changes have been set in motion that offer the potential for considerable improvement. We must be absolutely clear that these have not yet made any noticeable difference to the front-line, where it matters. The changes must not lose pace. They must now become embedded at regional and country levels if they are to have the impact that is much-needed.

We have provided some new observations about problems within the programme. Tackling these represents an opportunity to heighten performance towards the high bar that is required to stop transmission. The programme must have sufficient appetite for improvement that it can accept these new observations and act on them. If there is currently insufficient capacity to do so, the principles of an emergency dictate that the necessary capacity be found.

We have highlighted grave concern about the situation in Nigeria and in Pakistan. These two countries represent the most potent threat to the possibility of global eradication.

This is absolutely an emergency situation. Though it is devastating to even comprehend, failure remains a real possibility. In countries and in partner agencies, completing polio eradication requires that all of the features of an emergency response become live. The World Health Assembly must ensure that polio eradication receives true global priority. The challenge is monumental. The programme must excel. No obstacle must now be allowed to stop this programme achieving its vital goal.



Recommendations

We have provided observations throughout the body of this report that we hope usefully guide the programme as its emergency response gets underway. We also make seven specific recommendations.

We recommend that:

1. Nigeria's 2012 action plan be given urgent special focus by its Presidential Task Force to create a strategy that can credibly stop transmission
2. An independent review be rapidly undertaken in Afghanistan to determine the reasons for rising case numbers in 2011 and to propose solutions
3. The heads of the spearheading partner agencies ensure that the positive changes started at headquarters level extend their reach to regional and country level; we urge them also to ask their teams to demonstrate to them regularly that systemic problems have been identified and solutions rapidly implemented
4. The May 2012 World Health Assembly should form the basis for a supreme communications strategy that ignites global public engagement in polio eradication and mobilizes the broadest possible support for this goal
5. Vaccinators become the focus of an internal communications drive to engage, train and motivate them to success
6. The programme develops 'think tank' capacity to examine and develop solutions for: i) systemic operational problems of vaccination days, and ii) how to better operate in insecure areas
7. The partners agree how campaign monitoring is to be improved to provide the strongest possible data on missing children, including actionable insights on why children are missed. We ask to be appraised of the plan by April 2012

