Global Polio Eradication Initiative

Achieving Positive Synergies with Health Systems

May 2008
'Declares the commitment of WHO to the global eradication of poliomyelitis…

…emphasizes that eradication be pursued in ways which strengthen the development of EPI as a whole, fostering its contribution to the development of the health infrastructure and primary health care.'
Impact of Polio Eradication: 1988-2008

Countries stopped polio in an average of just 2.5 years.
Polio Eradication Strategies

- **Routine Immunization**
- **Immunization Days (NIDs)**
- **Surveillance**
- **Mop-ups**
### Strategy implementation in weak health systems

<table>
<thead>
<tr>
<th>Health System Element</th>
<th>GPEI Approach/Process (examples)</th>
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<tbody>
<tr>
<td>Health policy</td>
<td>Joint Nat/Int'l Advisory bodies</td>
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<td>Infrastructure</td>
<td>Heavily invest (ex. replaced 50% cold chain, Africa; 'built' a Global Laboratory Network)</td>
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<td>Human resources</td>
<td>Multi-faceted, task dependent (e.g. Campaigns = 'volunteers'+incentives; Surveillance = contracted staff)</td>
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<td>Information systems</td>
<td>Standard performance indicators for all processes; active surveillance capacity.</td>
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<td>Financing</td>
<td>Interagency Coordinating Comms (ICCs) Multi-year Budgets, etc.</td>
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<td>Supply chain mgnt</td>
<td>Pulse (campaign) approach.</td>
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Scale-up of campaign volunteers & surveillance staff relative to polio & AFP cases (1988-2003)

Distribution of 'polio-funded' staff (2005)

2002 Survey
>40% of staff time used on non-polio activities

National level (Moderate)
Provincial level (Moderate)
Down to district level (Weak systems)
DTP3 > 80%

Reported AFP Cases, Surveillance Officers, Est'd Polio Cases, Vaccinators
Building on the Polio Laboratory & Surveillance Network

Total investment in technical assistance, surveillance and lab network from 1988 to 2008: **$972.5 m (>15% of GPEI Budget)**
### Studying the Impact of Polio Eradication on Health Systems (>32 manuscripts)

<table>
<thead>
<tr>
<th>Issues</th>
<th>Number of Studies (at 2005)</th>
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<tbody>
<tr>
<td>General health systems</td>
<td>8</td>
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<tr>
<td>Health financing</td>
<td>6</td>
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<tr>
<td>Routine immunization &amp; other service delivery</td>
<td>8</td>
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<tr>
<td>Surveillance systems (other diseases)</td>
<td>6</td>
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<tr>
<td>Human resources</td>
<td>3</td>
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<td>Broader societal benefits</td>
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Impact of Targeted Programs on Health Systems: Case Study of the Polio Eradication Initiative*

• Positive synergies exist,

• Synergies not vigorously exploited,

• Probably improved health systems worldwide by (examples):
  – broadening vitamin A supplementation,
  – improving laboratory cooperation,
  – linking health workers & their communities

• Did not reduce funds for immunization,

• Little is known about opportunity costs.'

'Positive impacts are not automatic, they have to be deliberately planned.'

Recommendations:

– achieve greater synergies with routine EPI, expanded surveillance, micronutrient supplements & supervision.

– plan better to avoid disruptions & increase positive spin-offs.

– evaluate impact opportunity costs, policy setting & funding.

– improve linkages with institutions addressing health systems.

– future eradication initiatives: address these issues at outset, with goals, indicators & baseline data.
Roadmaps for Mainstreaming the Global Polio Eradication Initiative

4th Objective 'Mainstreaming the GPEI'
Polio mainstreaming is already happening

The new 'R.E.D.' strategy, using polio approaches, raised DPT3 >15% in Africa in 2003-6

Polio approaches to deliver bednets
Polio approaches to deliver other vaccines on Mekong
Polio approach to run measles campaigns
Polio system fights Avian Flu

Polio approaches to build a global VPD lab network
Some lessons learned…

• synergies to other 'vertical' programmes are more self-evident/easy than to health systems,

• limited opportunities & mechanisms for linking in a meaningful way to health systems institutions,

• eradication initiatives make unique demands on (& beyond) health systems,

• successful mainstreaming requires government leadership (even more than initiating GPEI!)
...and some next steps

• document (again) broader role & impact of the polio infrastructure on health systems.

• build on the foundation established in vaccine-preventable disease control & surveillance.

• develop solid mechanisms to work with closely related Areas of Work (esp. GIVS, GFIMS, IHR 2005).

• refine long-term resource requirements & potential financing streams.
Extra Slides
What is the 'polio infrastructure'?

- Norms & standards
- Operational guidelines
- Networks
- Human resources
- Physical assets
Examples: Polio & Health Systems Interface

Policy Formulation & Strategic Planning
- Joint national/international Technical Advisory Groups strengthen policy development & planning (south-south & north-south collaboration) (expanded to routine EPI & PHC).
- Multiyear planning & budgeting (expanded to GAVI and routine EPI)

Institutional Arrangements
- Planning & implementation of polio campaigns & case-based surveillance done through technical & financial investment in existing EPI & surveillance structures.

Financial resources (mobilization & use)
- Interagency Coordinating Committees, chaired by Minister, for transparent budgeting & efficient mobilization/use of resources (expanded to EPI, GAVI; model for the Global Fund).

Human resources (number, mix & quality)
- Tracking of HR capacity for routine immunization & other services.
- Annual training, systematic supervision (expanded to RED strategy for routine).

Service management & delivery:
- Reaching Every District (RED) strategy for EPI
- Surveillance based disease control (measles, etc)
WHO Technical Assistance

- > 3300 'polio-funded' disease control staff (US$55 m).
- developed in consultation with government.
- up to 50% of time is on other diseases.
- number & distribution reflect the strength of the health system:

![Map showing different levels of health system strength](image)

- **National level** (Moderate to strong systems)
- **Provincial level** (Moderate weak systems)
- **Down to district level** (Weak systems)
- **DTP3 > 80%**
Figure 3: Relationship between the number of vaccinators participating in polio NIDs, surveillance officers conducting AFP surveillance for acute flaccid paralysis (AFP) cases, estimated polio cases and reported non-polio AFP cases, 1988-2003
Survey of Polio-funded Staff, 2002

International staff (177 surveyed):

- 91% conduct EPI, other disease surveillance, etc.
- 44% of time devoted to non-polio activities

National staff (838 surveyed)

- 100% conduct EPI, other surveillance, etc.
- 22% of time on non-polio activities
Polio Staff Activities

*Use of staff time, 2002*

**International staff**
- Polio: 56%
- Admin/Mgt: 16%
- Other: 4%
- GAVI: 3%
- Routine EPI: 9%
- Other Campaigns: 4%
- Other surveillance: 8%

**National staff**
- Polio: 78%
- Admin/Mgt: 7%
- GAVI: 1%
- Routine EPI: 3%
- Other Campaigns: 3%
- Other surveillance: 7%

New polio staff survey planned for early 2008
Challenges to Transitioning the Human Resource Infrastructure

• right number of personnel
• right mix of skills
• right distribution
WHO Technical Assistance (IVB & POL)
(3500 POL-funded staff at Jan 2007)

Regional office support
Subregional office support

GPEI funds ~70% of WHO staff working on immunization globally.

Data in HQ as of 24 January 2007
Distribution of polio & measles funded staff (2007)

- Polio & measles funded
- Polio funds
- Measles funds

Scale-up of campaign volunteers & surveillance staff relative to polio & AFP cases (1988-2003)
## Timeline for Mainstreaming

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<th>Eradication &amp; Certification</th>
<th>OPV Cessation &amp; Verification</th>
<th>'Post OPV' Era</th>
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<td>Stop trivalent OPV.</td>
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<td>Stockpile.</td>
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