Experience from streamlining the network design for vaccines by outsourcing to the private sector

Netnaps suchonwanich
Deputy Secretary-General
National Health Security office
Dynamic of health insurance status in Thailand

Social security Scheme (SSS)
9 million (14 %)

Civil Servant Medical Benefits Scheme (CSMBS)
5 million (8 %)

Universal coverage Scheme (UC)
49 million (78 %)

Work in Formal sector → Quit → Become gov.officer → Dead

Quit → Fired → retired → Dead

Dead → Work in Formal sector

Stateless people

Retired → Dead

Dead
Proposed versus approved capitation rate

Baht per capita nominal term 2002-2010

2,895 Baht in 2014 equivalent to US$ 90 for a comprehensive package
Comprehensive design for UC fund

Annual budget for capitation

1. OP
2. IP
3. High cost Accident Emergency DMIS
4. PP
5. The disabled rehabilitation
6. Traditional Medicine
7. Depreciation cost
8. No fault liability
9. Preliminary assistance

B. AIDS
C. Renal failure
D. 2nd prevention For metabolic disease
E. Hardship
F. Human Resource support

Hardship
No fault liability
Depreciation cost
Preliminary assistance
Annual budget for capitation

For metabolic disease
Human Resource support
Hardship
Renal failure
AIDS
2nd prevention For metabolic disease
Hardship
No fault liability
Depreciation cost
Preliminary assistance
Annual budget for capitation
3 Perspectives for pharmaceutical procurement

- BUDGET
- PATIENT
- PHARMA
- NHSO

- access
- adequacy
- efficacy
The selection of new vaccine in EPI program

ACIP: The Advisory Committee on Immunization Practices
NEDL subcommittee: National essential drug list subcommittee
National Essential Drug List (NEDL)

**Concept**

cover drugs needed for protection & treatment of health problems of Thai people at essential level in an economic & cost-effective manner.

**Selection criteria**

<table>
<thead>
<tr>
<th>health need</th>
<th>safety</th>
<th>efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>compliance</td>
<td>quality</td>
<td>Cost-effectiveness</td>
</tr>
<tr>
<td>Treatment cost</td>
<td>affordability</td>
<td>Equity</td>
</tr>
<tr>
<td>Availability</td>
<td>Budget Impact</td>
<td></td>
</tr>
</tbody>
</table>
Drug’s journey to become the items in ED list in Thailand

- HITAP
- Approved benefit package
- Integrated team
- CPG/EPG and Protocols
- Price negotiation
- Distribution plan
- Monitoring and evaluation
- Feedback loop

NEDL sub committee

NHSO Board
The former EPI vaccines distribution channel

Imported vaccines

airport

Regional Disease Control

Local produced vaccine (Red Cross, GPO etc)

Disease Control Dpt.

Provincial Health Office

Primary care unit

Provincial Hospital

NHSO
National Health Security Office
The current distribution channel under GPO - VMI:

- Imported vaccines (arriving at the airport)
- Local produced vaccine (e.g., Red Cross, GPO)
- GPO
- Contracting hospitals
- Primary care unit

VMI (Voluntary Managed Inventory) is the mechanism for distribution.
NHSO has outsourced GPO to manage vaccine inventory and distribution for all providers.
Cold chain reform at GPO

Storage temperature: Cold Room
Optimize temperature 2-8 °C

Storage temperature: FREEZING ROOM
Storage temperature: -20 °C
Well organized vaccine storage at the hospitals

Placing Data Logger controlling for temp. sensitive vaccines: DTP-HB

Place in good manner with air flow arrangement and clearly labeled preventing for dispensing errors
Decreasing the purchasing budget for EPI vaccines after new warehouse designed (million Bht.)

New system began in the yr 2010
The decreasing of broken OPV from GPO’s logistics

GPO send OPV 20,000 – 30,000 vial per month

% broken OPV
Decreasing the wastage rate after changing the MMR packaging size

<table>
<thead>
<tr>
<th>Year</th>
<th>Wastage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>37%</td>
</tr>
<tr>
<td>2011</td>
<td>31%</td>
</tr>
<tr>
<td>2012</td>
<td>10%</td>
</tr>
<tr>
<td>2013</td>
<td>3%</td>
</tr>
</tbody>
</table>
Distribution problems from hospitals

% of trans

Sampling from 1000 – 1500 transaction/month

10-Aug 0.99
10-Sep 1.79
10-Oct 2.06
10-Nov 2.49
10-Dec 3.68
11-Jan 2.62
11-Feb 2.99
11-Mar 3.81
11-Apr 5.45
11-May 5.67
11-Jun 3.44
11-Jul 1.92
11-Aug 3.90
11-Sep 6.00
Challenges

1. Reducing the wastage rate
   - From opened vials
   - From un-opened vials (expired product)
   - From utilization diverted from target population

2. Improve Cold chain management, distribution best practice and whole chain monitoring and evaluation

3. Outbreak management