Development and implementation of vaccine policy

Country: Israel
Partner Institute: The Myers-JDC-Brookdale Institute, Jerusalem
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Current Process Stages

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<th>Pilot</th>
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<th>Change</th>
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1. Abstract

All infants and children have traditionally been eligible for receiving the vaccine schedule determined by the Ministry of Health. The advent of a number of new and expensive vaccines on the market in recent years, in a period of decreased public funding, resulted in financial barriers to the provision of universal access to these vaccines. In 2009, the pneumococcal vaccine was adopted, in keeping with a staggered program for introducing the new vaccines.

2. Purpose of health policy or idea

In recent years a number of new and expensive vaccines have been developed by the international biomedical industry. Until recently, these vaccines had not been added to the list of vaccines for which Israel provides universal coverage. Persons wishing to receive these vaccines have had to pay for them on an out-of-pocket basis. This has been counter to Israel's traditional commitment to universal accessibility for vaccines.

The new vaccines include: the rotavirus vaccine which protects against the most severe type of diarrheal disease in children, the pneumococcal vaccine, which protects against serious pneumococcal bacterial disease in infancy, and the HPV (Human Papilloma Virus), which protects against cervical cancer in women. All of these new vaccines require two to three doses to be effective, with costs approaching several hundred Euros for each vaccine.

In Israel, vaccine implementation policy for infants is the responsibility of the Ministry of Health, and is developed with the help of a Vaccination and Infectious Diseases Advisory Committee (henceforth, "the advisory committee") which has existed in its current form since 1992. The advisory committee has recently facilitated the addition of new vaccines to the recommended schedule through a new policy adopted in February 2007, when it proposed a multi-year program of phased adoption of new vaccines, with the sequencing determined by feasibility, epidemiologic and ethical considerations. This was a departure from the previous mode of operation in which the committee would make recommendations limited to a single vaccine and with a one-year time horizon. These single vaccine recommendations had not been implemented, due to budgetary constraints and the pressures inherent in the annual governmental budget-setting processes.

As a result of the new policy of adopting a multi-year plan for introducing new vaccines, the varicella vaccination was introduced in 2008, as was a pertussis booster for second graders; in 2009 the pneumococcal vaccine was introduced. Future plans include introducing the rotavirus vaccine in 2010 and the HPV vaccine in 2011. The advisory board thus facilitated the structuring of a mechanism for introducing new vaccines, taking into account both scientific and financial considerations. The introduction of the pneumococcal vaccine in 2009 is an important milestone as it demonstrates that the phased introduction plan continues to be implemented beyond its first year.
Israel's complex and competitive budgetary environment this is no small accomplishment, and bodes well for continued implementation of the plan in the years ahead.

This program of gradual introduction of new vaccines aims at restoring the policy of a universal vaccination policy for all children. It also complies with the goals of the National Health Insurance Law of 1995 which include universal healthcare coverage and the principle of equity in health service provision.

The high costs of the new vaccines had resulted in barriers to access; demand for a high co-payment for the new vaccines by non-governmental providers had resulted in harm to the principle of equity. The staggered introduction of the new vaccines seeks to remove these access barriers.

Main objectives
In order to maintain the universal coverage for vaccines, the Ministry of Health has introduced a staggered program for introduction of the new vaccines into the “basket of services” provided within the framework of the National Health Insurance Law.

Type of incentives
A staggered program enables the government to consider the funding of vaccines in a multi-year context, thereby avoiding a situation where vaccine adoption is repeatedly delayed due to short-term budgetary considerations.

Groups affected
1. Infants and young children – greater access to vaccines, 2. Families – no longer need to pay high copayments to access the vaccines, 3. Well-baby health centers operated by the government and the health plans – can now provide vaccines that they feel are important to child health

3. Characteristics of this policy

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<thead>
<tr>
<th></th>
<th>traditional</th>
<th>innovative</th>
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<tbody>
<tr>
<td>Degree of Innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of Controversy</td>
<td>consensual</td>
<td>highly controversial</td>
</tr>
<tr>
<td>Structural or Systemic Impact</td>
<td>marginal</td>
<td>fundamental</td>
</tr>
<tr>
<td>Public Visibility</td>
<td>very low</td>
<td>very high</td>
</tr>
<tr>
<td>Transferability</td>
<td>strongly system-dependent</td>
<td>system-neutral</td>
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The policy is rather innovative, at least in Israel, where most programmatic/budgetary decisions continue to be made on a year-to-year basis with limited planning horizon.

The policy is not controversial, as there is widespread understanding among policymakers of the importance of preventive services; the introduction of the new vaccines was more a result of inefficient prioritization mechanisms (and thinking in “silos”) than of strong differences of opinion about the priority to be given to vaccinations in national healthcare spending.

The system impact is fundamental as the new policy of planned and phased adoption constitutes a model for how to secure financing for important public health initiatives despite the continuing pressures on the overall MOH budget; the implications go well beyond the specific issues of vaccines.

Public visibility is very low because prevention tends to be less visible than cure (unless there is an urgent threat of a major pandemic or environmental disaster).
The new policy may be transferable to some other countries, but certainly not all, as the problem that the policy addresses in Israel may be somewhat unique to Israel. It is not clear how many other countries have separate funding streams for financing of new curative technologies v. new preventive services, where the former generates much more public interest and enthusiasm than the latter. Transferability may also depend on the extent to which different countries can translate multi-year programs into annual budgetary allocations.

4. Political and economic background

To understand the political and economic factors that had held up introduction of the new vaccines, and how the new policy addresses them, one needs to be aware of the division of labor in Israel between the government and the health plans in service provision, and the differences in how these two sets of services are funded.

In Israel, most health services (including ambulatory care, hospital care and medications) are supplied through four existing health funds. Other services, including mental health, public health and maternal-child services are provided by the Ministry of Health.

The set of services provided by the health funds is detailed in the "second appendix" of the 1995 National Health Insurance Law, with clear guidelines regarding their provision, including the public's right to these services, and the stipulation that they be provided within a reasonable time and distance. The law includes a provision for determining how much money the government will provide the health plans so that they will be able to provide these services and how this amount will updated over time to take into account price changes, population growth, improved efficiency and technological improvements. The adjustment for health care price changes is determined by a formula while the magnitude of the other adjustments is determined by the cabinet after negotiations involving the Ministry of Health, the Ministry of Finance, the health plans and other parties. Once the cabinet determines how much money will be allocated for new technologies in the coming year, a distinguished public panel assesses the projected costs and benefits of a large number of new technologies (mostly medications). The panel then prioritizes them, and provides the Minister of Health with its recommendations of which new technologies should be added to the benefits package, in light of the budget for new technologies established earlier by the cabinet. Since its initiation in 1998, this process has generated a great deal of public interest and political support, resulting in the allocation of large sums of money and the addition of hundreds of new technologies.

In contrast, the services provided by the MOH, including vaccines, are included in a "third appendix" to the NHI law. The funding available for these services is constrained by the budgetary resources available to the MOH in any given year. In contrast with the mechanisms for updating the funding of service provided through the health plans, no such mechanism exists for services provided by the Ministry of Health. Thus, each year public health services (as part of the overall MOH budget) must compete with education, defence and infrastructure funding, in a budgeting process managed by the Ministry of Finance and ultimately decided by the cabinet. This process has adversely impacted on the funding levels of all services provided directly by the MOH including mental health, maternal-child services and vaccination implementation.

As a result, in the decade following the passing of the NHI law in 1995, almost no new vaccines were introduced in Israel, despite their introduction into a number of western countries and repeated recommendations of the advisory committee. A key exception was the introduction of the Hepatitis A vaccination in 1998. Relatively minor changes were made in 2002 when the wholesale pertussis vaccine was replaced by the acellular pertussis (aP) vaccine, and in 2005 when the aP vaccine was added to the Td vaccine administered in second grade.

Interestingly, an attempt was made by a sympathetic health minister in 2002 to earmark part of the government's allocation for new technologies to services provided by the MOH, including the adoption of new vaccines. This created an uproar in the public and the Knesset, with concern that this would mean less availability of life-saving drugs through the health plans via the new technology prioritization process noted above. The minister stood his ground and the action was upheld by the Supreme Court.

The new strategy of a multi-year plan with staggered adoption has helped the MOH secure governmental support for new vaccines, despite the ongoing pressures on the overall MOH budget in the annual governmental budget battles. It
has advanced efforts to reduce the extent to which Israel lags behind other countries in the adoption of new vaccines. It does so, in part, by subsuming an annual and highly competitive budgeting decision, under a broader, more consensual, programmatic decision. Still, the fundamental problem - the absence of a mechanism for expanding funding for services provided directly by the MOH - remains unaddressed.

5. Purpose and process analysis

Origins of health policy idea

In the USA the vaccine schedule for children and adolescents is published twice a year following recommendations of a special committee of the CDC (Central Disease Center), the AAP (American Academy of Pediatrics) and the AFP (American Academy of Family Practice). Similar committees exist in other countries. When Israel established its own advisory committee it drew on the experience of those countries.

The pneumococcal vaccine was introduced in the USA in 2000 and the rhinovirus and HPV vaccines were introduced there in 2007; similar developments took place in other industrialized countries. These served as a prod to Israel to add these vaccines.

The plan to prioritize the vaccinations being considered for adoption may have been inspired by Israel's own process for prioritizing new technologies, which is used primarily to prioritize new medication but is also used to consider new medical accessories.

An interesting question is why the Ministry of Health decided to fund the new vaccines via the general MOH budget rather than trying to get them funded via the already established prioritization process for new technologies. According to the MOH's Associate Director-General this was done out of a belief that separate funding streams should be maintained for the (mostly curative) services provided by the health plans and the (mostly preventive) services provided by the MOH. It is not clear whether there was also a concern that preventive services such as vaccinations would not fare well in the competition with life-saving and other drugs, within a process oriented primarily to curative care.

Initiators of idea/main actors

- Government: The issue of vaccine coverage has always been controlled by the Ministry of Health, while the restriction of funding by the Ministry of Finance has resulted in less availability of necessary funds.

- Providers

- Patients, Consumers: The lobby for an issue such as vaccine policy is smaller and less visible than the lobby of patients with a certain type of cancer pressing for a new drug for their disease to be introduced.

- Scientific Community

- Media: The media give prominent coverage to the discussions of the Basket of Services committee. Cancer patients who have been refused new drugs for their disease will appear with their families on TV. Parents of healthy infants are not newsworthy.

- Political Parties: Comment (max. 255 characters): The issue of private payment for health services is a strong political issue, with parties with strong social-democratic programs opposing payment for essential services by the consumers.
Innovation or pilot project
Else - No model project, but phased introduction taking place this year

Stakeholder positions

Ministry of Health - The MOH must balance the funding of new vaccines for the entire child population against other pressing needs of the health system, such as new drugs against cancer, or the need for more hospital beds. For many years it had viewed vaccines as a high priority, but because of the separation in funding streams between government-provided services and health plan-provided services, prioritization processes took place within two separate "silos", with sub-optimal results. The MOH has supported the multi-year phased adoption policy because this policy enables it to overcome the short-term budgetary pressures that have inhibited expansion of MOH services more generally.

Ministry of Finance - The MOF has been receptive to the multi-year phased introduction policy because it both forces prioritization among vaccines and because it makes it easier to plan the budget for future years.

The well-baby centers and the public health nurses who staff them, as well as Israeli scientists who work on public health issues, are very supportive of the new policy as it helps them advance their mission of improved child health.

Parents support the policy because it improves child health and reduces the need for them to fund new vaccines on an out-of-pocket basis.

The left wing and religious parties have supported the policy because of their concern for access to care for low-income groups. Right wing parties are less concerned about such barriers and hence less concerned about out-of-pocket payments for health services.

The issue of vaccine access has not generated interest in the electronic media, which is more drawn to technologies for severely ill patients; apparently the latter generate higher ratings. In contrast, in the print media, the issue has gotten some attention on the part of several journalists who understand and appreciate the importance of prevention to public health.

Actors and positions

Description of actors and their positions

Government

Ministry of Health
very supportive strongly opposed
Ministry of Finance
very supportive strongly opposed

Providers

Well-Baby Centre
very supportive strongly opposed
Public Health Nurses
very supportive strongly opposed

Patients, Consumers

Parents
very supportive strongly opposed

Scientific Community

Infectious disease / vaccine specialists
very supportive strongly opposed
Public Health specialists
very supportive strongly opposed

Media

Television
very supportive strongly opposed
Written media
very supportive strongly opposed

Political Parties
Influences in policy making and legislation
No legislative process has accompanied vaccine policy

Legislative outcome

Actors and influence
Description of actors and their influence

Government
Ministry of Health  very strong  strongly opposed
Ministry of Finance  very strong  none

Providers
Well - Baby  Centre  very strong  none
Public Health Nurses  very strong  none

Patients, Consumers
Parents  very strong  none

Scientific Community
Infectious disease / vaccine specialists  very strong  none
Public Health specialists  very strong  none

Media
Television  very strong  none
Written media  very strong  none

Political Parties
Left wing and religious parties  very strong  none
Right wing parties  very strong  none

Positions and Influences at a glance

Adoption and implementation
Vaccination implementation for infants and children up to age 5 is carried out through a network of maternal and child health centers covering all children in Israel. At present, parents pay a global semi-annual co-payment for well-baby care (including vaccines), which granted full vaccine coverage, while covering only a small part of the costs involved. This co-payment is due to be cancelled at the end of 2009. Most of these well-baby centers are operated by the Ministry of Health, but approximately 20% of Israel's infants are cared for in centers run by the health plans and another 20% in centers run by the municipalities of Jerusalem and Tel Aviv. All vaccines which have been approved for inclusion in the national vaccine program are provided by the MOH free of charge to all the well-baby centers, including those run by the municipalities and the health plans.

Vaccinations of older children are carried out in the schools as part of the school health services, which are funded by the Ministry of Health. Historically, these were provided by nurses employed directly by the MOH's public health service, but in recent years the MOH has contracted with an independent NGO to provide these services.
To date, a two-dose vaccination schedule for varicella (for one-year olds and first graders), and a booster for pertussis in the eighth grade was introduced in September 2008 and the pneumococcal vaccine (for ages 2, 4, and 12) was added in July 2009.

The rotavirus vaccine is scheduled for introduction in 2010, and the HPV vaccine in 2011-2012. In order to reinforce the decisions regarding future introduction of vaccines, an international conference on the pneumococcal vaccine took place in 2008, and a similar conference for rotavirus took place in 2009. These conferences are presented as “Updates prior to the introduction of the new vaccine”.

Information about the new vaccines is disseminated among healthcare professionals via meetings of the relevant professional associations. Information is disseminated to the general public via the MOH website and the news media.

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**Monitoring and evaluation**

The meetings of the advisory committee periodically review progress of the program. Evaluation is also carried out by the Preventive Services division of the Ministry of Health. Thus in the past, following introduction of universal vaccination against Hepatitis A, the incidence of the disease decreased to very low levels.

Vaccination rates are monitored by the MOH’s epidemiology division.

**Review mechanisms**

Mid-term review or evaluation

**Dimensions of evaluation**

Process

**Results of evaluation**

Initial efforts have been made to review the effect of financial constraints and public awareness on the acquisition of the new vaccines. Within the HMO’s, some surveys have been implemented to assess knowledge and practices of the public regarding the new vaccines. In its meeting in February 2009, the advisory committee decided to adhere to
previous decisions regarding the nature and timing of introduction of the new vaccines. It also proposed using the
period before the proposed introduction of the HPV vaccine to further assess research regarding the strains involved
in precancerous and cancerous lesions of the genital tract in Israel, and the prevalence of auto-immune diseases in
adolescents before introducing the vaccine.

6. Expected outcome

The failure to introduce the new vaccines synchronously with trends in other economically developed countries
resulted in the health plans using subsidies for the vaccines as a marketing strategy. Some of the plans have included
them, along with co-payments, in their supplemental insurance packages, in which most, but not all of their members
are enrolled. In 2008, Maccabi Health Services, the second largest health plan, agreed to provide some of the
vaccines with a low co-payment to all its members as part of the basic benefits package.

Thus, until new vaccines are added to the basket of services provided by the government, they can only be acquired
in conjunction with out of pocket payments; this creates access barriers to low income families.

The staggered introduction of the new vaccines will allow some of the new vaccines to be supplied to poorer
populations without additional payment. The fact that the poorer sectors in Israel are also those with the largest
numbers of children make the need for equity promoting measures in vaccine provision even more critical. Thus the
staggered introduction of new vaccines will increase health system equity. The framing of a policy for new vaccincines
over a period of five years allows time to educate health providers and the public regarding the new vaccines, and
allows for planned budgeting by the Ministries of Health and Finance.

The new vaccines (varicella, rotavirus and HPV) are all given in multiple doses, making the proposed vaccine
schedule more complicated for both providers and consumers to understand. The pediatric and public health nursing
community must be educated to be able to persuade parents regarding the importance of these new vaccines. Among
the general public, the significant increase in the number of shots might result in more parents questioning the need
for vaccines. A coordinated campaign to encourage comprehensive vaccination coverage is planned by the three
professional pediatric organizations in Israel (The Ambulatory Pediatric Society, The Society for Clinical Pediatrics and
the Israel Pediatric Association) together with the Ministry of Health in April 2009 to try and maintain the high rate of
vaccine coverage in Israel (94%).

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<tr>
<th>Quality of Health Care Services</th>
<th>marginal</th>
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<tr>
<td>Level of Equity</td>
<td>system less equitable</td>
<td>system more equitable</td>
</tr>
<tr>
<td>Cost Efficiency</td>
<td>very low</td>
<td>very high</td>
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The policy enhances system equity by removing a cost barrier to an important health service. It is also very cost-
efficient as vaccines contribute greatly to improved health at low cost.

7. References

Sources of Information

Author/s and/or contributors to this survey
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