Health benefits plans for UHC: Opportunities and challenges for efficiency

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Director of Global Health Policy
Center for Global Development
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Structure of presentation

1. Why health benefits plans (HBP) for UHC
2. Defining HBP
3. How could HBP help with efficiency
4. Some common pitfalls
5. HBP policy cycle
   - Tour through a few steps
Balancing coverage with available financing is the UHC imperative

Direct costs:
What proportion of the costs are covered?

Services:
Which services are covered?

Population:
Everyone is covered?

Current pooled funds

Competing priorities & interests at many levels in ad hoc or inertial process of resource allocation = implicit rationing

Many ‘priorities’...

Asthma management in general practice
A chronic disease health priority

American Heart Association Urging Action at UN Summit on Non-Communicable Diseases
Organization Calls for More Focus on Cardiovascular Diseases - the World's No. 1 Killer

Palliative Care: A Public Health Priority in Developing Countries

Reproductive cancers: high burden of disease, low level of priority

...many interests

MSF asks India to make affordable hepatitis C medicines as Natco resists expensive US drug patent
• 12-04-2014
• By Sehat
• Bookmark

The new drug war

Hard pills to swallow

Drug firms have new medicines and patients are desperate for them. But the arguments over cost are growing

Jan 4th 2014 | NAIROBI AND NEW YORK |
Health spending doesn’t always grow

Reforms following 2010 IMF Stand-by Agreement rapidly reduced public spending on health 6% GDP cap

Former Minister of Health, Andreas Loverdos: “The Greek public administration...uses butchers’ knives [to achieve the cuts].”

Interview with T. Telloglou, Skai TV (2011)

<table>
<thead>
<tr>
<th>Change in Budget or Spending</th>
<th>Health or Health-related Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>↓ Mental health funding (-20%; ‘10-’11)</td>
<td>↑ Prevalence of major depression (3.3% to 8.2%; ‘08-’11)</td>
</tr>
<tr>
<td>↓ Pharma spending (€4.4 to 2.9 BB; ‘10-’12)</td>
<td>↑ Drug shortages, upfront payment for medicines</td>
</tr>
<tr>
<td>↓ Hospital funding (-26%; ‘09-’11)</td>
<td>↑ Growing waiting lists, shortage of equipment</td>
</tr>
</tbody>
</table>

Source: Kentikelenis et al., “Greece’s health crisis: from austerity to denialism,” The Lancet, 2014
Defining health benefits plan

• Minimum attributes:
  – Total size is constrained by available funds
  – Completely or partially constrains products and services available through health system
  – Comprises a portfolio of products and interventions
    • Not a single technology, not a vs. b

• Not:
  – Ad hoc rationing or implicit resource allocation (using budget until $ runs out then user fees or no provision, or constraining supply capacity)

• A technical but also political, procedural, institutional, fiscal, ethical and legal undertaking
  – Informing all relevant health system functions in order to be effective
Many LMIC establish HBP in both health insurance schemes and tax-funded systems.

### Low- and Middle-Income Countries with Health Benefit Plans

<table>
<thead>
<tr>
<th>World Bank developing country group</th>
<th>Countries</th>
</tr>
</thead>
</table>
| Central and Eastern Europe          | **Health insurance schemes:** Azerbaijan, Bulgaria, Croatia, Estonia, Georgia, Hungary, Kyrgyz Republic, Lithuania, Macedonia, Moldova, Poland, Romania, Russian Federation, and Slovenia  
**Tax-funded systems:** Armenia, Kazakhstan, Slovak Republic, and Tajikistan |
| Latin America and Caribbean         | **Health insurance schemes:** Argentina, Chile, Colombia, Dominican Republic, Nicaragua and Uruguay  
**Tax-funded systems:** Argentina, Bolivia, Brazil, Honduras, Nicaragua, Peru |
| Asia                                | **Health insurance schemes:** Lao PDR, Philippines, and Vietnam  
**Tax-funded systems:** Cambodia, China, India, Malaysia, and Thailand |
| Middle East and North Africa        | **Health insurance schemes:** Egypt, Israel, Lebanon, Malta, Syria, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen  
**Tax-funded systems:** Bahrain, Djibouti, Jordan, Morocco, Oman, Qatar, and Saudi Arabia |
| Sub-Saharan Africa                  | **Health insurance schemes:** Ghana, Kenya, Namibia, Nigeria, Senegal, South Africa, Tanzania, and Uganda  
**Tax-funded systems:** Uganda and Zambia |


*check UNICO update to list*
How health benefits plan help with efficiency?

- Maximizes health, enhances value for money
  - Introduces greater evidence into public spending decisions
  - Incentivizes the development of cost-effective new technologies
  - Informs pricing negotiations
- Informs provider commissioning or payment
- Informs budget expansions or as input to sizing of fiscal transfers
- Cuts costs, reduces waste and harm
- Provides the means to regulate private health insurance
- Enhances equity and reduces care variations
- Improves accountability between payers, providers and patients
Maximizes health: remember the Tanzania Essential Health Interventions Project (1997-2002)?

• Prospective follow-up study in two districts with 741,000 population (DSS + verbal autopsy)
• Essential health benefits package defined based on district-level cost-effectiveness data
• District Health Management Teams (DHMT) allocated budget based on per capita cost of package and population size
• DHMT can deploy resources flexibly
• Accompanied by training, tools, support

Maximizes health:
Chile’s AUGE increases production and utilization of high-value services

- Identification of 56 (now 80) prioritized health problems (based on multiple criteria)
- 75% burden of disease
- Associated clinical guidelines based partially on cost-effectiveness (446)
- Associated interventions (8005)
- Guarantees of access, financial protection, timeliness of care
- Rest is still provided but without guarantees
Maximizes health:
Chile’s AUGE increases production and utilization of high-value services

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>10% drop</td>
<td>11% drop</td>
</tr>
<tr>
<td>Type 1 diabetes</td>
<td>7% drop, especially among patients older than 30 years; steepest drop seen among ISAPRE beneficiaries</td>
<td>48% drop</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>13% increase, especially among older adults (older than age 65); steeper increase (72%) among ISAPRE beneficiaries, possibly because of better access to care or—to some extent—to population aging</td>
<td>Hospital death rate dropped 5%—a noteworthy finding given that this is an older, higher-risk population</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>8.9% combined increase for all age groups; 11.4% observed increase among patients younger than age 15 (target population of AUGE); eightfold increase among ISAPRE beneficiaries</td>
<td>98% drop in fatality in all cases; no data are available to distinguish that rate between the population of AUGE beneficiaries for this disease (younger than age 15)</td>
</tr>
<tr>
<td>Depression</td>
<td>26% increase for the entire population, 45% increase among adolescents; fivefold increase among ISAPRE beneficiaries</td>
<td>98.6% drop</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>24% global drop, a large part of which comes from children and adolescents who are beneficiaries of FONASA</td>
<td>56% drop</td>
</tr>
</tbody>
</table>

SOURCE Bitran et al 2010 based on Ministerio de Salud, Egresos Hospitalarios, 2002–6. NOTES AUGE is the health reform plan in Chile. ISAPRE is Instituciones de Salud Provisional. FONASA is Fondo Nacional de Salud
Enhances value for money:
Thailand’s HTA-informed universal coverage package

<table>
<thead>
<tr>
<th>Drugs under consideration</th>
<th>ICER (Baht/QALY)</th>
<th>Coverage decisions</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>pegylate interferon alpha 2b plus ribavirin for treatment of chronic hepatitis C subtype 1 4 5 &amp; 6</td>
<td>cost-saving</td>
<td>Yes</td>
<td>2011</td>
</tr>
<tr>
<td>pegylate interferon alpha 2a plus ribavirin for treatment of chronic hepatitis C subtype 1 4 5 &amp; 6</td>
<td>cost-saving</td>
<td>Yes</td>
<td>2011</td>
</tr>
<tr>
<td>lamivudine or tenofovir for treatment of chronic hepatitis B</td>
<td>cost-saving</td>
<td>Yes</td>
<td>2011</td>
</tr>
<tr>
<td>simvastatin for primary prevention of cardiovascular disease</td>
<td>82,000</td>
<td>Yes</td>
<td>2009</td>
</tr>
<tr>
<td>Galantamine for treatment of mild-to-moderate Alzheimer's disease</td>
<td>157,000</td>
<td>No</td>
<td>2010</td>
</tr>
<tr>
<td>donepezil, rivastigmine for treatment of mild-to-moderate Alzheimer's disease</td>
<td>180,000-240,000</td>
<td>No</td>
<td>2010</td>
</tr>
<tr>
<td>osteoporosis drugs (alendronate, residronate, raloxifene) for primary and secondary prevention of osteoporotic fractures</td>
<td>300,000-800,000</td>
<td>No</td>
<td>2009</td>
</tr>
<tr>
<td>atorvastatin, fluvastatin, pravastatin for primary prevention of cardiovascular disease</td>
<td>negative dominant</td>
<td>No</td>
<td>2009</td>
</tr>
<tr>
<td>recombinant human erythropoietin (rHuEPO) treatment in chemotherapy-induced anemia</td>
<td>negative dominant</td>
<td>No</td>
<td>2008</td>
</tr>
<tr>
<td>adefovir, entecavir, telbivudine, pegylate interferon alpha 2a for treatment of chronic hepatitis B</td>
<td>negative dominant</td>
<td>No</td>
<td>2011</td>
</tr>
</tbody>
</table>
Enhances value for money:
Thailand’s UC decisions have more than paid off economic evaluation costs

Annual cost of HITAP: 37 mn Thai baht (0.007% of THE in 2010)

<table>
<thead>
<tr>
<th>Description</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of cervical cancer (2007)</td>
<td>• <strong>Health gains:</strong> 1500 averted new cases and 750 female deaths per year</td>
</tr>
<tr>
<td>• Assessed possibility of universal coverage of the HPV vaccine using cost-effectiveness analysis</td>
<td></td>
</tr>
<tr>
<td>• Compared multiple scenarios to conclude that the most cost-effective strategy would be improving screening accessibility rather than universal vaccination</td>
<td></td>
</tr>
<tr>
<td>New drug regimen in PMTCT of HIV (2010)</td>
<td>• <strong>Cost savings:</strong> 6 million international dollars, approximating 0.02% of the total health expenditure budget in 2007</td>
</tr>
<tr>
<td>• Assessed value-for-money of three-ARV regimen vs. current AZT monotherapy and single dose of nevirapine</td>
<td></td>
</tr>
<tr>
<td>• Solved social debate regarding feasibility and value for money of a new drug regimen in PMTCT of HIV</td>
<td></td>
</tr>
<tr>
<td>• <strong>Health gains:</strong> 101 paediatric HIV infections averted annually</td>
<td></td>
</tr>
<tr>
<td>• <strong>Cost savings:</strong> 2.6 million USD over a lifetime</td>
<td></td>
</tr>
</tbody>
</table>

Cost savings from the cervical cancer screening assessment alone more than covered HITAP’s operating costs (0.01% of THE budget in 2007)

Informs provider commissioning or payment:
China’s provider payment method reform

- Over use:
  - Source from 6000 prescription survey
    - Antibiotics 42%
    - Hormones 15%
    - Vitamins 69%
  - NDRC deputy director address in 18th NPCSC
    - IV injection 10.4 billion bottles in total 2010, 8 bottles/person, far above the 2.5 to 3.3 bottles international level

Source: Kun Zhao, PMAC 2016 Presentation
Informs provider commissioning or payment: China’s provider payment method reform (FFS \(\rightarrow\) DRG)

<table>
<thead>
<tr>
<th>LOS</th>
<th>Priority: 100% covered by NCMS. Min cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selected: 30-40% covered by NCMS. Potential cost</td>
</tr>
<tr>
<td></td>
<td>Ceiling reimbursement price established</td>
</tr>
<tr>
<td></td>
<td>If savings: shared by hospital and doctors</td>
</tr>
</tbody>
</table>

Necessary

Optional

OOP costs capped @ lower levels
Informs budget expansions and sizing of fiscal transfers: Mexico’s Seguro Popular package

Example Mexico/Seguro Popular:

«...[The benefits package was meant to help correct this inequity by guaranteeing the allocation of a specific amount of money per person. By establishing the content and cost of the Seguro Popular Benefits Package, it was possible to make the resource requirements evident. This in turn helped to mobilize additional resources. As a result, the differences in per capita spending were reduced to 1.2 x.» (Knaul et al, 2012).

Source: Giedion, U. 2013
Quick assessment to revise medicines list using the following criteria:

- Medicines listed for indications outside the terms of their marketing approval (ie off-label).
- Medicines listed for indications or in settings in which they may not be cost effective.
- Medicines considered cost effective in other jurisdictions but unlikely to be cost effective at current Romanian prices.
- Medicines for which subsidy is not supported by clear evidence of positive risk/benefit, irrespective of registration status.
- Medicines that may not reflect a high priority for subsidisation in a resource-limited environment.

For example:
According to Romanian treatment protocols, 
**bevacizumab** may be prescribed for first-line treatment of metastatic breast cancer.

**Recommendation:** As the use of **bevacizumab** in breast cancer is no longer an approved indication, the subsidy should be discontinued.
Provides the means to regulate private insurers:
South Africa’s private medical schemes

• Regulator: Council for Medical Schemes
  – Protect members of medical schemes (42% of THE)

• Open enrollment, community rating, mandatory minimum benefits
  • Regulation 15D(b)
    “... managed health care programmes use documented clinical review criteria that are based upon evidence-based medicine, taking into account considerations of cost-effectiveness and affordability, and are evaluated periodically to ensure relevance for funding decisions”

• Regulation applied by the Council for medical schemes and independent appeal board

(Medical schemes are not for profit)
Where things can go wrong – common pitfalls

• Legislating specific benefits
• Setting up high cost drugs packages or funds
• Omitting primary care and prevention, fragmenting care
• Forgetting about transparency and process, allowing indefensible inclusions
• Permitting erosion of value over time
• Missing local data on costs
HBP of an imaginary country where the Ministry of Health (many years ago) defined a cost-effectiveness threshold of U$D 10,000 per QALY in order to consider a technology as cost-effective and allow its incorporation into the benefit plan.

This limit is imposed by the constrained health care budget.

New health technology with a cost-effectiveness ratio of U$D 25,000/QALY

Cost-saving (e.g. polio-Sabin vaccine)

Very cost-effective (e.g. U$D 1,000 per QAL)

Relatively good cost-effectiveness (e.g. U$D 5,000 per QALY)

Cost-effective (e.g. U$D 7,500 per QALY)

Cost-effective (but at the limit, e.g. U$D 8,000 or 10,000 per QALY)

Technologies that will be displaced offered less “value for money”. The benefit gain from the new treatment is greater than the benefit foregone.

Source: Andrés Pichon-Riviere, 2013. La aplicación de la evaluación de Tecnologías de Salud y las evaluaciones económicas en la definición de los Planes de Beneficios en Latinoamérica.
## Ghana’s NHIS

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Comprehensive service coverage</td>
<td>• Inclusion list is not clearly defined</td>
</tr>
<tr>
<td>• Covers both formal and informal sector</td>
<td>• Costly</td>
</tr>
<tr>
<td>• Poor and vulnerable catered for in broad exemption policy</td>
<td>• Has been in use for 10 years without reform</td>
</tr>
<tr>
<td>• Does not require co-payment and co-insurance</td>
<td>• Encourages provider and subscriber moral hazards</td>
</tr>
<tr>
<td></td>
<td>• Disease management protocols are not defined</td>
</tr>
<tr>
<td></td>
<td>• Excludes preventive care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Possibility of developing an all-inclusive maternal health package of services</td>
<td>• Depletion of fund reserves</td>
</tr>
<tr>
<td>• Common non communicable diseases can be managed with all inclusive package of service</td>
<td>• Political pressure and interference</td>
</tr>
<tr>
<td>• Review of portability feature</td>
<td>• Advocacy for increased coverage from patient groups and civil society</td>
</tr>
<tr>
<td></td>
<td>• Pressure from provider groups</td>
</tr>
</tbody>
</table>
In Uganda, a package of services costing $41 dollars was expected to be delivered at a per capita actual expenditure of $12.50. Source: Tashobya et al 2003
Erosion of value:
number of inclusions increase but funding only adjusted for inflation

## Lack of transparency and formal process

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Examples of good process</th>
<th>Examples of poor process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>NICE is held accountable by parliament and media on the recommendations it makes.</td>
<td>In Mexico, there are no systematic adjustment processes for CAUSES or FPGC. In Colombia, the executive branch doesn’t explain why certain inclusion decisions were made and whether the BP actually focuses on sanitary goals.</td>
</tr>
<tr>
<td>Transparency</td>
<td>In Chile, the costing update studies are published and publicly available.</td>
<td>Colombia, the original technical priority-setting studies used to design the HBP were lost and nobody really knows how decisions are made and on what criteria. In Uruguay, none of the documents explaining how the universal package was designed is publicly available.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Colombia periodically updates its benefits package.</td>
<td>Dominican Republic has never updated its BP since its inception in 2001.</td>
</tr>
</tbody>
</table>

Source: Giedion and Guzman 2015, forthcoming.
Weak availability of local data on costs -- Whereas efficacy is global, cost-effectiveness and affordability (and preferences/values) are local

Cost-utility of Trastuzumab expressed as number of GDP per QALY

Bolivia is a middle-income country, but it would cost more than 38 times their annual GDP per capita to purchase a QALY with Trastuzumab

Source: Andrés Pichon-Riviere, 2013. La aplicación de la evaluación de Tecnologías de Salud y las evaluaciones económicas en la definición de los Planes de Beneficios en Latinoamérica
## Choosing badly costs lives

<table>
<thead>
<tr>
<th>Country</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>• Avastin paid for for all indications (incl FDA unlicensed ones)</td>
</tr>
<tr>
<td></td>
<td>• Regional variation in immunization with parts of the country with &lt;50% coverage</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>• &gt;50% of insulin budget goes to analogues</td>
</tr>
<tr>
<td></td>
<td>• Switching to human insulin can double the number of patients on treatment</td>
</tr>
<tr>
<td>HIV</td>
<td>• 40-50% of eligible patients NOT on treatment in Africa</td>
</tr>
<tr>
<td></td>
<td>• 2\textsuperscript{nd} and 3\textsuperscript{rd} line ART for &lt;5% of patients, consumes a large share of the total ART budget</td>
</tr>
</tbody>
</table>
Health Benefits Plans: On-Going Cycle of Inclusion and Exclusion

1 SET GOALS and general criteria

2 OPERATIONALIZE criteria
   DEFINE principles and methods

3 SELECT topics (triage)

4 COLLECT new data/evidence
   COLLATE existing evidence

5 APPRAISE evidence – apply methods and criteria

6 DELIBERATE around appraisal, evidence

7 RECOMMEND / DECIDE

8 ALLOCATE resources

9 IMPLEMENT payment, mgt, provision, measurement

10 ADJUST based on new data, learning, feedback

CONSIDER:
- Data / M&E
- Governance
- Politics
- Ethics
- Communication, communication, communication

CONTEXT
- Donors
- Health system
- Markets
- Political institutions
- Regime
- Rights
- Technology
- Wealth

Source: Glassman, Giedion, Smith (2016)
Strategies to start the design and reform...

• Macro choices that frame scope of HBP, linked to goals:
  – By type of service or product
  – By population group
    » How coverage choices interact with HBP (fragmented systems vs universal)
    » Capacity to benefit
    » Appropriateness criteria
      • Example: Avastin® in Ontario only prescribed for rectal cancer – up to 12 cycles
  – By level of complexity or facility
  – By disease
  – By level of subsidy (co-payments, deductibles, coverage caps)

• Also: structuring coding of HBP products and interventions, link to budget/payment reform?
  – ICD, DRG, etc.
  – International coding system for public health and prevention?

For example:
Uruguay: list organized by type of care, 1 unique list for low and medium level care, one list for high complexity-cost.
Colombia: organized by type of services and associated products in chapters: ambulatory care, hospitalization, oral health, etc.
Chile: by health conditions and care guidelines
Strategies to start the design or reform...

- India: all services and products currently reimbursed by insurer (RSBY) are included in HBP; all new inclusions will follow new process?
- Romania: eliminate all never-evaluated and/or experimental products as first step
- DR: eliminate all neighbors’ and NICE “no” products
- Thailand: eliminate product (glucosamine) from list for safety reasons

[CONTRAST THESE TO GREEK EXAMPLE!]
In summary

• HBP that will influence efficiency are much more than lists or technical analyses
  – Good list is necessary but not sufficient
• They are widely used, but require continual adjustments and reform to enhance effectiveness and assure sustainability
• Guidance and support from international community mainly focused on cost-effectiveness methods and capacity-building
  – Need to consider full set of issues
THANK YOU!

• CONTACT ME:
  – aglassman@cgdev.org
  – @glassmanamanda

• MORE RESOURCES:
  – Priority-setting in health: building institutions for smarter public spending
  – International Decision Support Initiative @ NICE International
    • http://www.idsihealth.org/
    • Coming in 2016: “What services should health systems provide? Health benefits plans in low- and middle-income countries” with Ursula Giedion and Peter Smith.
What’s already out there?


But also literature and experience in priority-setting and resource allocation in general is relevant, but not tightly linked to process and practice of HBP...