Managing Financing and Costing of Health Care: Policy levers of strategic purchasing

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Five basic types of healthcare systems

**Free market**
(unique to the United States)
- Maintains safety net through public payment of premiums
- Offers services and insurance through private sector

**Bismarck**
(instituted in Germany and France)
- Provides insurance through competing social funds
- Offers multiple sources of provision

**Hybrid**
(instituted in the Netherlands and Japan)
- Requires private insurance for high earners and social insurance for all others
- Provides services through public or private sector

**Beveridge**
(instituted in the United Kingdom, Spain, Italy, Scandinavia and Portugal)
- Funds system through general taxation
- Provides services through public sector; treatment is free at point of care

**Ex-Semashko**
(instituted in Russia and former Eastern Bloc countries)
- Is decentralizing from Communist model and restructuring either to Beveridge or Bismarck system
Resource efficiency

The 2010 World Health Report on financing for universal coverage noted that: “Raising sufficient money for health is imperative, but just having the money will not ensure universal coverage. Nor will removing financial barriers to access through prepayment and pooling. The final requirement is to ensure resources are used efficiently.”

WHO World Health Report, 2010
Strategic purchasing requires the purchaser to engage actively in 3 main relationships between stakeholders

“Passive purchasing implies following a predetermined budget or simply paying bills when presented. **Strategic purchasing** involves a continuous search for the best ways to maximize health system **performance** by deciding which interventions should be purchased, how, and from whom.”

WHO World Health Report, 2000
STRATEGIC PURCHASING INVOLVES THREE SETS OF DECISIONS:

1. **Identifying** the interventions or services to be *purchased*, taking into account population needs, national health priorities and cost-effectiveness.

2. Choosing service **providers**, giving consideration to service quality, efficiency and equity.

3. Determining **how** services will be purchased, including **contractual arrangements** and provider payment mechanisms

World Health Organisation 2000; Figueras, Robinson et al. 2005
INCIDENCE OF CATASTROPHIC SPENDING ON HEALTH AND THE OUT-OF-POCKET SHARE OF TOTAL SPENDING ON HEALTH IN SELECTED EUROPEAN COUNTRIES
REAL-LIFE SITUATION
Universal Health Coverage

Health financing arrangements

- Revenue Raising
- Pooling
- Purchasing

Benefits

UHC intermediate objectives

- Equity in resource distribution
- Efficiency
- Transparency and accountability

UHC goals

- Utilization
  - Need
- Quality
- Universal financial Protection

Universal Health Coverage

Centre of Excellence in Finance
Health Systems Functions and components

Provision

1. Stewardship/regulation
   - Regulatory and legal framework
   - System governance, leadership, planning capabilities

2. Inputs Generation
   - Personnel
   - Pharma
   - Medical equipment

3. Service Provision
   - Public or private service providers

4. Benefits package
   (Personal and Population based health Services)

5. Demand

6. Financing
   - Revenue collection
   - Risk pooling
   - Strategic purchasing

7. Patients and population
   - Frequency of diseases, environmental factors, and behaviors determine demand for services

Health system objectives

Access to Services for Good health outcomes

Financial protection

Responsiveness (patient satisfaction)

Sustainability and Country competitiveness
What is Strategic Purchasing?

At the Simplest Level it is “Spending Well” in the Health Sector

Fuller Definition (WHO)

Strategic health purchasers use information and policy levers to decide which interventions, services, and medicines to buy, from which providers, using which contracting and payment methods to encourage efficient behaviors and decisions among both providers and service users.

Strategic health purchasing requires an institutional authority (either within the Ministry of Health or an independent purchasing agency) to:

- make purchasing decisions;
- enter into contracts with providers;
- flexibility to allocate funds to pay for outputs and outcomes

If done well, can achieve improved efficiency, quality, and responsiveness of care
HEALTH FINANCING FUNCTIONS

HOW: 1) REVENUES ARE COLLECTED; 2) FUNDS ARE POOLED; 3) SERVICES ARE PURCHASED

Focus is purchasing health services

Strategic purchasing considers:
1) WHAT is purchased (benefits package);
2) from WHOM (providers) and
3) HOW (form of payment)
4) How to hold system and providers accountable

Strategic purchasing enables Ministries of Health and Finance to align on health needs and mobilize funding as MoH can show MoF: how $ links to patients and health outputs (not just inputs). Since $ is not limited to buying inputs; it is more likely budget is spent, rather than being held up by management bottlenecks; and since $ is better spent, MoH can ask MoF for more funding; especially if it can show the increased cost-effectiveness of $ spent on PHC.
EVERYTHING MOF AND MOH DO TO ALLOCATE RESOURCES TO HEALTH IS A FORM OF “PURCHASING”…

INCREASINGLY, ALLOCATION OF FUNDS TO HEALTH IS MOVING FROM PASSIVE TO ACTIVE

Typical features

- “Passive”
  - resource allocation using norms
  - little/no selectivity of providers
  - little/no quality monitoring
  - price and quality taker

- “Strategic”
  - payment systems that create deliberate incentives
  - selective contracting
  - quality improvement and rewards
  - price and quality **maker**
STRATEGIC PURCHASING: FOUR (4) POLICY LEVERS TO DRIVE CHANGE

Passive purchasing

• Coverage is low or non-existent, because user fees too often exist, quality is poor, or provider/drugs not available
• Benefit package ad hoc (implicit)
• Input based financing for commodities / provider salaries etc
• Line Items tend to bias towards urban tertiary facilities

Strategic purchasing policy levers

1. **BENEFITS PACKAGE:** what to buy, in which form, what’s excluded?
2. **CONTRACTING:** from whom, at what price and how much to buy?
3. **PROVIDER PAYMENT:** at what price and how to pay?
4. **ACCOUNTABILITY** of providers and system for performance

Enabling functions

- Monitoring
- Provider autonomy
- ICT / data systems
- Quality accreditation & assurance

**Purchasing Outcomes**

- Quality
- Efficiency
- Access
5% of GDP per capita allocated for health

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP</th>
<th>GDP Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Sudan</td>
<td>243.11</td>
<td>$12.16</td>
</tr>
<tr>
<td>Burundi</td>
<td>312.46</td>
<td>$15.62</td>
</tr>
<tr>
<td>Malawi</td>
<td>325.54</td>
<td>$16.28</td>
</tr>
<tr>
<td>Central African R.</td>
<td>388.66</td>
<td>$19.43</td>
</tr>
<tr>
<td>Mozambique</td>
<td>426.09</td>
<td>$21.30</td>
</tr>
</tbody>
</table>
Per capita health expenditure

$1100

Canada $3,912
North America

US $6,714

Iceland $4,962

Ireland $3,868

Norway $6,267

Switzerland $5,878

Germany $3,669

Denmark $4,828

Austria $3,864

Finland $2,994

Eurasia

UK $3,361

Luxembourg $3,784

Netherlands $3,784

Belgium $3,565

France $4,056

Norway $6,267

Sweden $3,870

Slovenia $1,599

Italy $2,845

Portugal $1,830

Spain $2,263

Greece $2,733

Africa

McMan $500

Asia and Oceania

Middle East

UK

South Korea $1,187

Japan $2,690

Qatar $2,753

New Zealand $2,420

Australia $3,316

Caribbean and South America

Guatemala $542

Panama $728

El Salvador $1,002

Cuba $2,567

Per capita health expenditure

$1100
### Table 1: Comparison of fiscal context in health expenditure in surrounding countries in the region

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP per capita, current prices</th>
<th>GDP per capita, purchasing power parity</th>
<th>Total expenditure on health as % of GDP</th>
<th>General government expenditure on health as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>$4,583</td>
<td>$11,821</td>
<td>7.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>$4,540</td>
<td>$11,404</td>
<td>9.6%</td>
<td>6.4%</td>
</tr>
<tr>
<td>FYR Macedonia</td>
<td>$5,500</td>
<td>$15,203</td>
<td>6.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Kosovo</td>
<td>$4,140</td>
<td>$12,003</td>
<td>3.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Montenegro</td>
<td>$7,071</td>
<td>$17,439</td>
<td>6.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Serbia</td>
<td>$5,600</td>
<td>$15,164</td>
<td>10.4%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

BENEFITS PACKAGE

what to buy, in which form, what’s excluded?

High priority

Life saving medical procedures

Category 1: Copayment low or none

Cost-effectiveness

Evidence-based medicine

Budget cut-off threshold

Category 2: Copayment moderate

Category 3: Copayment high or service not in package

Removal of discomfort

Low priority
Paying Providers: There are a number of different output-based options to pay providers, each creates certain risks and incentives.

<table>
<thead>
<tr>
<th>Payment mechanism</th>
<th>Risk Borne by Payer</th>
<th>Provider Incentive to</th>
<th>Increase No of Patients</th>
<th>Decrease number of Services per payment units</th>
<th>Increase reported Illness severity</th>
<th>Select healthier patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee for service</td>
<td>All risk borne by payer</td>
<td>No risk borne by provider</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Case Mix Adjusted per Admission (e.g., DRG)</td>
<td>Risk of Number of Cases and Case Severity Classification</td>
<td>Risk of Cost of treatment for a given case</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Per admission</td>
<td>Risk of number of Admission</td>
<td>Risk of number of services per admission</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Per-Diem</td>
<td>Risk of number of days to stay</td>
<td>Risk of cost of services within a given day</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Capitation</td>
<td>Amount above “Stop Loss” ceiling</td>
<td>All risk borne by provider up to a given ceiling (stop loss)</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Global Budget</td>
<td>No risk borne by payer</td>
<td>All risk borne by provider</td>
<td>✗</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
</tbody>
</table>

Sources: Hsiao et al. 1999, Modifying data from WHO 1993, Bodenhiemer and Grumbach 1994
WHICH COUNTRIES? 19 / 27 COUNTRIES IN THE JOINT LEARNING NETWORK ARE MOVING TOWARDS STRATEGIC PURCHASING

<table>
<thead>
<tr>
<th>Lower income</th>
<th>Increasingly strategic purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line-item budgets; no defined benefits package/essential services package</td>
<td>Defined benefits package/essential services package; some contracting; and small-scale use of output-based payment</td>
</tr>
<tr>
<td>Liberia</td>
<td>Ethiopia</td>
</tr>
<tr>
<td></td>
<td>Mali</td>
</tr>
<tr>
<td></td>
<td>Senegal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower middle income</th>
<th>Defined benefits package/essential services package, contracting; large-scale use of output-based payment; other purchasing strategies (e.g. use of data, quality management, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Ghana</td>
</tr>
<tr>
<td>Kosovo</td>
<td>Indonesia</td>
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<tr>
<td>Yemen</td>
<td>Kenya</td>
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<td></td>
<td>Moldova</td>
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<td></td>
<td>Morocco</td>
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<td></td>
<td>Sudan</td>
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<td></td>
<td>Mongolia</td>
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<td></td>
<td>Nigeria</td>
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<td></td>
<td>Philippines</td>
</tr>
<tr>
<td></td>
<td>Vietnam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Higher-middle income</th>
<th>Defined benefits package/essential services package; some contracting; and small-scale use of output-based payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>Bahrain</td>
</tr>
<tr>
<td>Namibia</td>
<td>Mexico</td>
</tr>
</tbody>
</table>

Line-item budgets; no defined benefits package/essential services package

Defined benefits package/essential services package; some contracting; and small-scale use of output-based payment

Defined benefits package/essential services package, contracting; large-scale use of output-based payment; other purchasing strategies (e.g. use of data, quality management, etc.)
## COMMON PAYMENT MODELS

<table>
<thead>
<tr>
<th>Level of Sophistication</th>
<th>Global budget</th>
<th>Capitation</th>
<th>Fee-for-service</th>
<th>Case-based (e.g. DRG)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIC</strong></td>
<td>Health provider budget based on simple parameters (e.g. historical budget or projected volume)</td>
<td>Providers are paid one single rate for each enrolled individual. Enrollment is by assignment rather than free choice.</td>
<td>Providers are paid a fixed price per service delivered with or without a cap. Limited number of broad categories of services.</td>
<td>Providers are paid a fixed price per discharge with or without a cap.</td>
</tr>
<tr>
<td><strong>INTERMEDIATE</strong></td>
<td>Health provider budget based on simple parameters (e.g. historical budget or projected volume) with department-level case-mix adjustment</td>
<td>Providers are paid one single rate for each enrolled individual adjusted by age and sex. Enrollment is by assignment rather than free choice.</td>
<td>Providers are paid a fixed price per service delivered with or without a cap. Large number of more narrow categories of services.</td>
<td>Providers are paid a fixed price per discharge from each department with or without a cap.</td>
</tr>
<tr>
<td><strong>HIGH</strong></td>
<td>Health provider budget based on simple parameters (e.g. historical budget or projected volume) with patient-level case-mix adjustment</td>
<td>Providers are paid one single rate for each enrolled individual adjusted by age and sex; geography; chronic disease status. Enrollment is by free choice.</td>
<td>Providers are paid a fixed price per service delivered based on a relative value scale, with or without a cap.</td>
<td>Providers are paid a fixed price per discharge in each diagnosis category with or without a cap. Additional requirements may include adjustments for health facility type and outlier payments.</td>
</tr>
</tbody>
</table>
Capitation is Widely Used in OECD and LMICs

Source: Cashin 2017
NO ONE MODEL PERFECT...SO...

WORLD MOVING TO BLENDED PAYMENT MODELS: EXAMPLE FROM ESTONIA (similar in Croatia also)

Reduce financial risk of providers

Main payment method—efficiency and prevention incentives

Counteract adverse incentives of capitation to under-provide services

<table>
<thead>
<tr>
<th>Share of different payments in PHC budget (2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic allowance</td>
</tr>
<tr>
<td>Capitation</td>
</tr>
<tr>
<td>FFS</td>
</tr>
<tr>
<td>Performance payment</td>
</tr>
</tbody>
</table>

- Reduce financial risk of providers
- Main payment method—efficiency and prevention incentives
- Counteract adverse incentives of capitation to under-provide services
Diagnosis-Related-Groups (DRGs) is the payment mechanism towards which most develop systems are converging, having also positive implications in terms of efficiency.

Case mix/activity-based payment systems have been introduced in many countries, including Eastern Europe.

Benefits and drawbacks for implementing activity-based reimbursements:

- **Benefits**
  - Facilitates competition between providers
  - Improves responsiveness to patient needs
  - Improves cost transparency and increase efficiency within providers

- **Drawbacks**
  - Increases complexity in financial flows and data recording
  - Faces risk of significant increase in costs (due to increase in volume of activities) if not properly implemented and controlled
  - Leaves space for frauds (e.g., up-coding)
“DRGs”
OECD countries …plus… Emerging Economies

1. Croatia
2. Estonia
3. Ghana
4. Hungary
5. Indonesia
6. Kyrgyzstan
7. Macedonia
8. Mexico
9. Mongolia
10. Poland
11. Romania
12. Thailand
13. Tunisia
14. Turkey

- 14 countries with a DRG payment system
- 11 countries piloting a DRG payment system
- 9 countries exploring a DRG payment system
AGAIN: BLENDED PAYMENT MODELS FOR HOSPITAL CARE: INTERNATIONAL TRENDS GO BEYOND PAYING HOSPITALS WITH DRGS

<table>
<thead>
<tr>
<th>Country</th>
<th>DRG</th>
<th>Global Budget</th>
<th>Global Budget with DRG case-mix adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Belgium</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Denmark</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>England</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Finland</td>
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<td>France</td>
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<td>Germany</td>
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<td>Ireland</td>
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<td>Italy</td>
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<td>Norway</td>
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<td>Portugal</td>
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<td>Spain</td>
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<tr>
<td>Hungary</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Thailand</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Taiwan (China)</td>
<td>X (with FFS)</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
THE FRONTIER: Bundling Payments ACROSS Levels of Care

- New initiatives: Ex: Poland, China, Mongolia, India to move to integrated care models.
MANY COUNTRIES EXHIBIT UNSTRATEGIC PURCHASING

COVERAGE WITHOUT FINANCIAL PROTECTION

Philippines, Vietnam and Indonesia have all seen increases in population coverage but no decrease in OOP payments

China’s benefit package cap and fee for service payment meant greater coverage, but no change in financial protection

Thailand has had greater success

Strategic purchasing can have unintended consequences if not implemented effectively across a network of functions and institutions

- Many countries are working hard at expanding scheme coverage (effectively addressing revenue generation and revenue pooling functions), but in some settings this is leading to no improvements in financial protection (as represented by reductions in the OOP share of THE)
- It is likely that this is because of a lack of attention to issues of purchasing – the services covered are not the ones that people want; insufficient attention being devoted to quality of care; purchaser is not limiting extra billing or people are continuing to use “out of plan” providers or services.
- In these countries, the purchasing actions concerning the “what services” and “purchasing arrangements” are not being addressed.

Source: WHO country reports; SUSENAS; WHO China Health Services Report; Tandon, iHEA 2015
Employer & employee contributions

Ministry of Finance - Central Budget

Ministry of Health and Social Protection

Compulsory Health Insurance Fund

Capital Investment Grants

Goods & services; Social & health contributions; Salaries

Medical Service Packages

Capital Investment Grants

Goods & services; Social & health contributions; Salaries

Medical Service Packages

Capital Investment Grants

Goods & services; Social & health contributions; Salaries

Medical Service Packages

Capital Investment Grants

Goods & services; Social & health contributions; Salaries

Medicines

Formal and informal cost sharing for all services

Public Private Partnerships

Direct out-of-pocket payment

Treatment abroad

Pharmacies

Private hospitals, clinics, laboratories, etc.

Regional Hospitals

Local Hospitals

Tirana Polyclinics

Family Medicine Centers

Strategic purchasing

General taxes

3.4% payroll tax
THE ROAD AHEAD: WHAT DOES “GOOD” LOOK LIKE? 
FUNCTIONS MUST FORM COHERENT TASK NETWORKS ACROSS ACTORS AND INSTITUTIONS

Thailand: Purchasing functions and sub-functions form a system or network

- Monitoring, Research, Evaluation, Piloting
- Health Intervention and Technology Assessment Program
- Call Centre (to manage information about entitlements and complaints)

Government: Ministry of Health (or Other)

Purchaser (s): Single or Multi (using same set of rules) at State level

Citizens

Providers (Public and Private)

Governance/Board of Directors

Independent Healthcare Accreditation Institute for both Public and Private Sectors

Payment (capitation and DRG)

Service entitlements (PHC, hospital care, health promotion)

Information/Quality Metrics

Information

Accreditation

Source: K. Hanson, 2017
Under-funded health system

Internal and external inefficiencies
WHO? WHAT?
WHERE? WHEN? HOW?
WHY? WHICH? HOW MUCH?
HOW MANY? HOW LONG? HOW FAR?
WHAT FOR? WHAT NEXT? THEN
WHAT? WHY ME?
Thank you for your attention!