

# Assessment of Health Expenditure Estimation Efforts in Palestine



Report on International Cooperation  
Office Mission, June 17-24, 2005

Mission Seminar  
Ministry of Health  
Gaza, Palestine  
June 21, 2005

*Ravi Rannan-Eliya*  
Colombo  
Sri Lanka  
<http://www.ihp.lk>



# Outline

Assessment of current situation

International trends & standards

Assessment of recent household survey  
estimates of health expenditure

Next Steps

- Short term

- Long term



# Outline

## Assessment of current situation

International trends & standards

Assessment of recent household survey  
estimates of health expenditure

## Next Steps

Short term

Long term



# Background

- National Health Accounts - System for compiling and reporting total health sector expenditures (including private sector)
- Palestine NHA process
  - Small-scale, locally-initiated efforts since 2002?
    - MOH & PCSB
  - Limited sporadic contact with WHO/EMRO at regional meetings
  - Italian Cooperation support for health expenditure estimation since 2004
  - Recent controversies over health expenditure surveys



# Assessment of Current Situation

- High levels of interest, motivation and cooperation involving PCSB and MOH CIS
- Consensus that Palestine should work towards establishment of permanent, routinely updated system and not study
- High levels of technical competency
- Good level of availability of underlying data systems
- Substantive work done
  - Compilation of spending by MoH
  - Health Expenditure Survey July 2004



# Assessment of Current Situation

## ■ Lack of Road Map

- Limited knowledge and understanding of implications of international standards for process
- Significant data or analytic gaps - lack of experience in how to handle data inconsistencies
- No work plan leading to full NHA establishment

## ■ Organizational roles and functions to support sustainable NHA development not finalized

- Data collection delegated to individuals, with no overall coordination function
- Respective roles of MoH and PCBS not clarified
- Limited involvement & connection to policy formulation





# Assessment of Current Situation

## ■ What's possible

- Palestine has sufficient institutional capacity, technical human resources, routine data systems to establish and sustain a NHA system meeting international standards

## ■ Challenges

- Establish clear institutional arrangements & strategy
- Acquire technical expertise through guided learning-by-doing
- Funding?



# Outline

Assessment of current situation

**International trends & standards**

Assessment of recent household survey  
estimates of health expenditure

Next Steps

Short term

Long term





# International Trends

- NHA first developed in USA in mid-1960s to track Medicare costs
- OECD efforts to encourage routine reporting by OECD member states 1970s -
- Spread of NHA systems to developing world 1990s -
- Publication of OECD SHA standard 2000
- Endorsement of OECD SHA standard by WHO and World Bank
- WHO NHA Producers Guide
- Trend for MoH to mandate, but technical production in specialized research/statistical agencies

# A “System of Health Accounts” OECD (2000)



## Developed by OECD:

- To provide standard reporting tables for international comparison
- To provide an internationally harmonized boundary for health care activities
- To provide a consistent framework for analyzing health systems
- To provide a rigid framework for building NHA to permit consistent reporting over time

# Features of OECD SHA



- Provides explicit and comprehensive boundary of health and health-related production
- Analyzes health expenditures in three dimensions: sources, providers and functions
- Detailed sets of classifications for the uses of spending: providers and functions
- Linkages with other international classifications, including SNA, ISIC, ICD, etc
- Basis for adaptation to meet specific national requirements



# International Classification of Health Expenditure (ICHA)

- Health care by function (ICHA-HC)
- Health care by provider industry (ICHA-HP)
- Agents of financing health care (ICHA-HF)





# ICHA Classification of Functions

## **HC.1 Services of curative care**

**HC.1.1 Inpatient care**

**HC.1.2 Day cases of curative care**

**HC1.3 Outpatient care**

**HC1.4 Home care**

## **HC.2 Services of rehabilitative care**

## **HC.3 Services of long-term nursing care**

## **HC.4 Ancillary services to health care**

## **HC.5 Medical goods dispensed to out-patients**

## **HC.6 Prevention and public health services**

## **HC.7 Health administration and health insurance**



# ICHA Health-related Functions

- **HC.R.1 Capital formation of health providers**
- **HC.R.2 Education and training of health personnel**
- **HC.R.3 Research and development in health**
- **HC.R.4 Food, hygiene and drinking water control**
- **HC.R.5 Environmental health**
- **HC.R.6 Administration and provision of social services in-kind to assist living with disease and impairment**
- **HC.R.7 Administration and provision of health-related cash-benefits**





# ICHA-HC key elements

- Defines functional boundaries of health care
- Basic breakdowns of health functions
  - core health activities vs. health-related activities
  - personal services vs. collective services
  - Inpatient vs. outpatient
- Totals for health reporting
  - Total Current Expenditure on Health (HC.1-7)
  - Total Expenditure on Health (HC.1-7 + HC.R.1)
  - General Expenditure on Health (HC.1-7 + HC.R.1-7)



# Reporting National Spending

HC.1 Services of curative care  
HC.2 Services of rehabilitative care  
HC.3 Services of long-term nursing care  
HC.4 Ancillary services to health care  
HC.5 Medical goods dispensed to out-patients  
HC.6 Prevention and public health services  
HC.7 Health administration and health insurance

## HC.R.1 Capital formation

HC.R.2 Education and training  
HC.R.3 Research and development  
HC.R.4 Food, hygiene and drinking water control  
HC.R.5 Environmental health  
HC.R.6 Social services in-kind  
HC.R.7 Health-related cash-benefits

**Total  
Current  
Expenditure  
on Health**

**Total  
Expenditure  
on Health  
(TEH)**

**General  
Expenditure  
on Health  
(GEH)**



# Implications of OECD SHA for Palestine

- Quasi-global standard - benefits of international comparison for policy
- Need to establish conceptual framework for exercise - linked to SHA
- Challenge of estimating functional classification of spending
- Technically demanding - should base production in PCBS or equivalent agency, but retain ownership in MoH
- Could be first to develop sustainable SHA system in region



# Outline

Assessment of current situation

International trends & standards

**Assessment of recent household survey  
estimates of health expenditure**

Next Steps

Short term

Long term



# Household Survey Estimates

## ■ Need for caution in relying on surveys

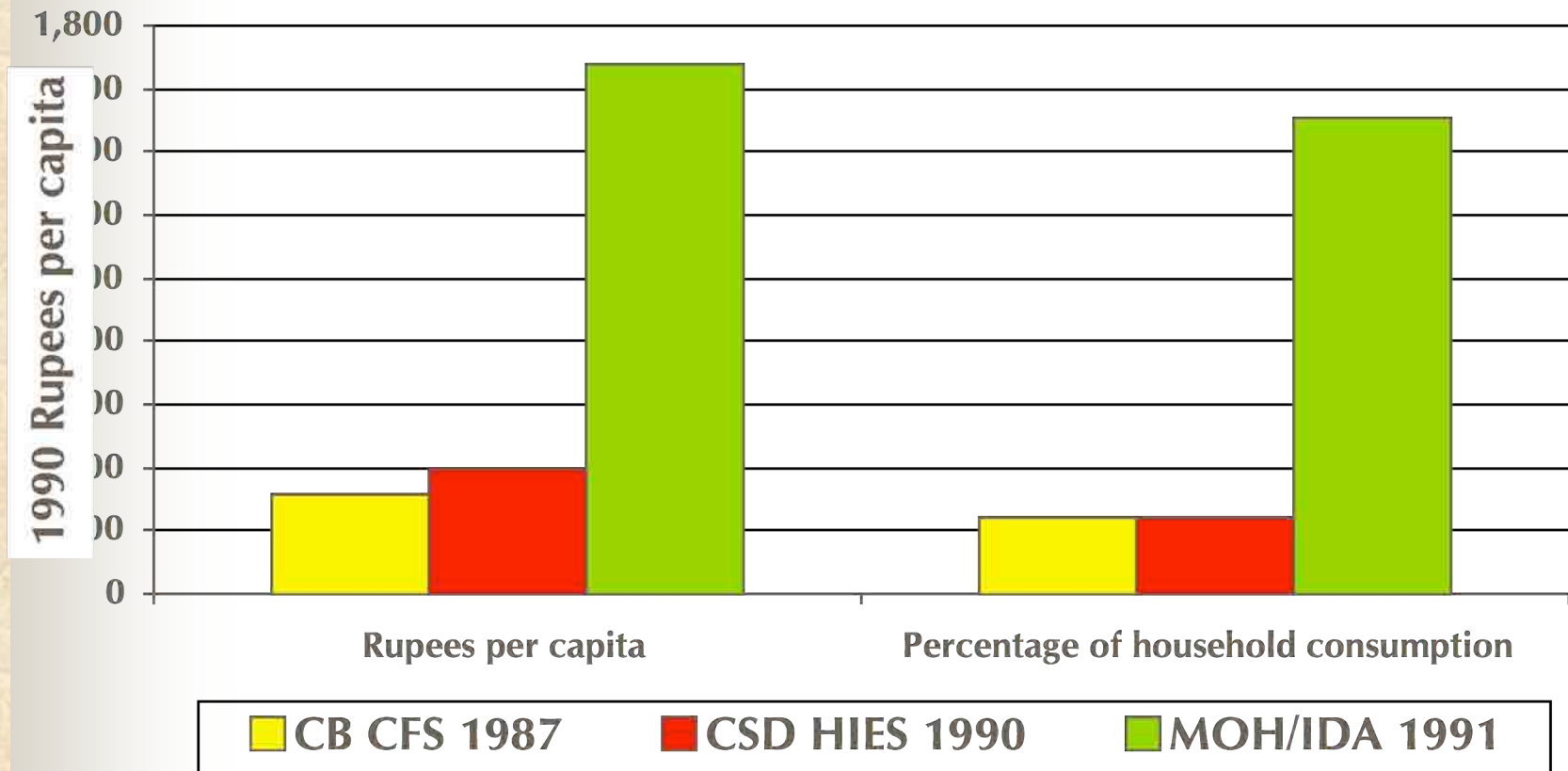
- ALL household surveys subject to non-sampling error - can bias estimates *upwards* or *downwards*
- Not possible to quantify non-sampling error by examining only household survey data
- Best practice NHAs rely on mix of production and consumption data - mostly production data, E.g., USA, Australia, Canada, Sri Lanka, Hong Kong

## ■ Other issues

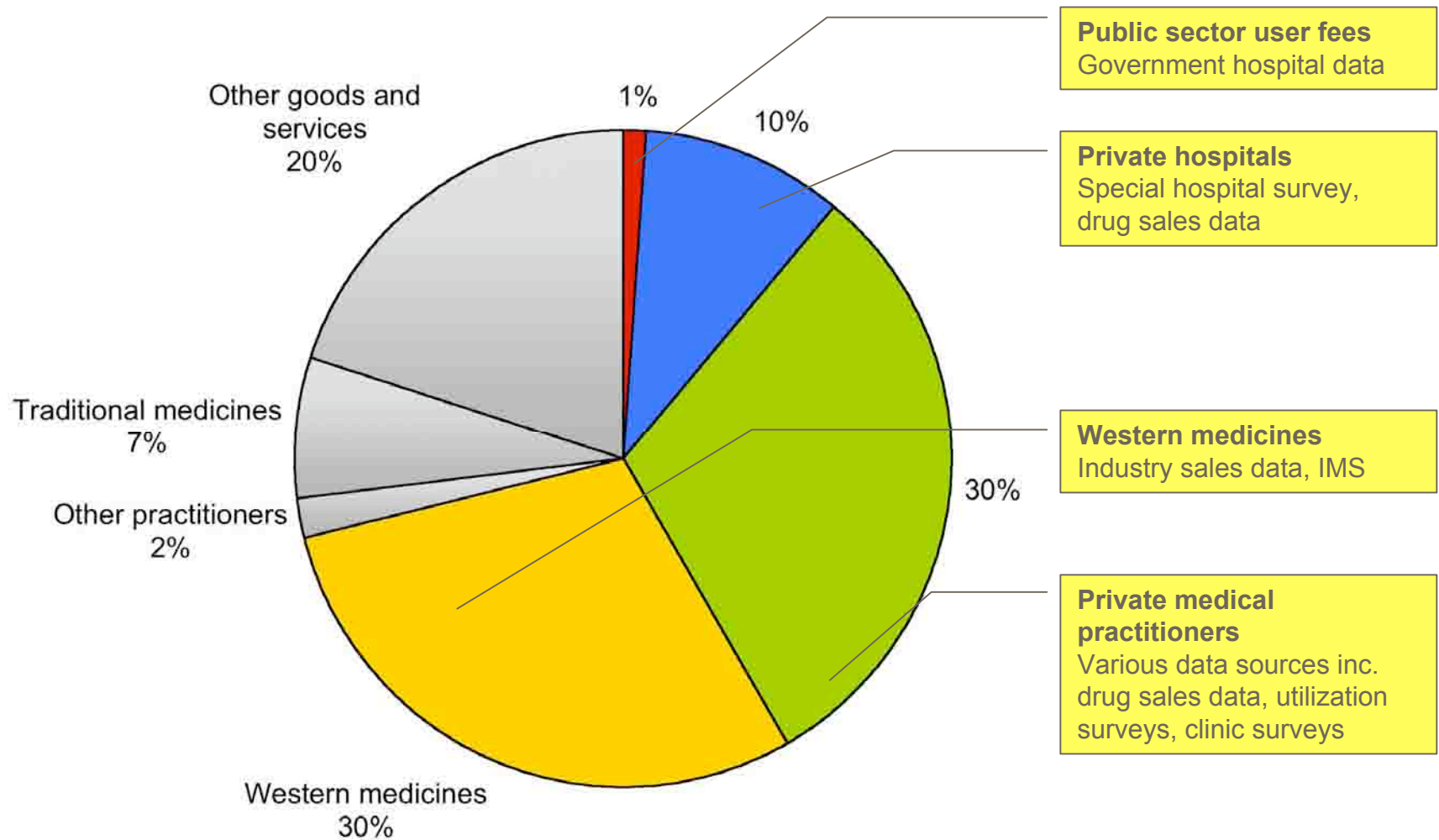
- Household surveys often not available on annual basis - costly to undertake
- Special health surveys often over-estimate, consumption surveys can under-estimate



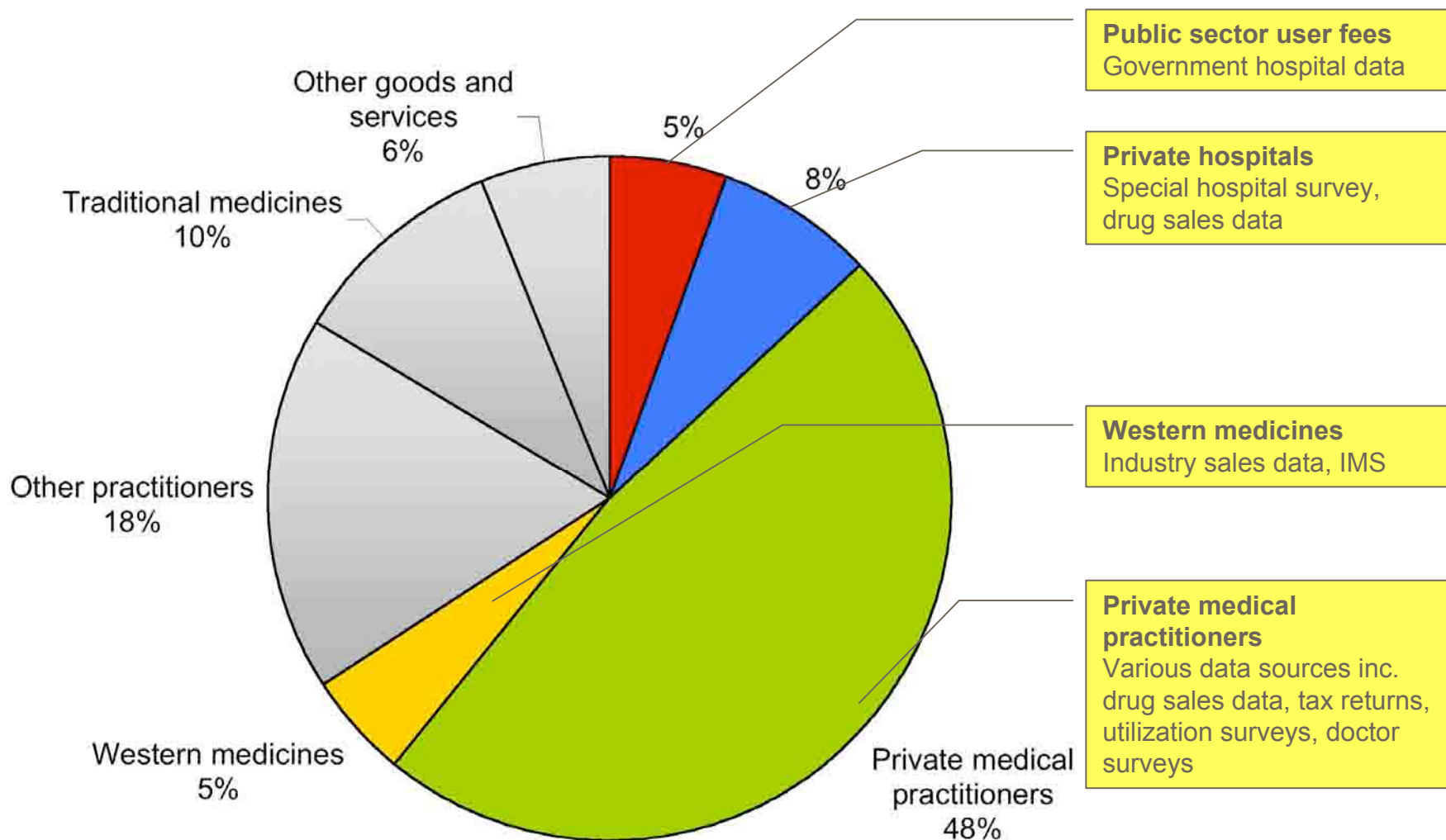
# Example of potential discrepancies







# Household Spending in Hong Kong





# Recent Palestine Survey Findings

- Household Health Expenditure Survey 2004
  - One month survey, reported totals include transport, insurance premia
  - Specialized survey - likely to be over-estimate
  - Household expenditure = US\$ 453 million (11.3% of GDP)
  
- Palestine Expenditure & Consumption Survey (PECS) 2004
  - 12 month survey, repeated every 2-5 years
  - Household expenditure = US\$ 265 million (6.6% of GDP)



# Triangulating the PECS estimates

- Household expenditure in PECS =  
Household Final Consumption in National  
Income Accounts
  - Adjust by scaling PECS expenditures using income  
accounts
- Two estimates (2004):
  - UNADJUSTED - US\$ 265 million (6.6% GDP)
  - ADJUSTED - US\$ 216 million (5.4% GDP)

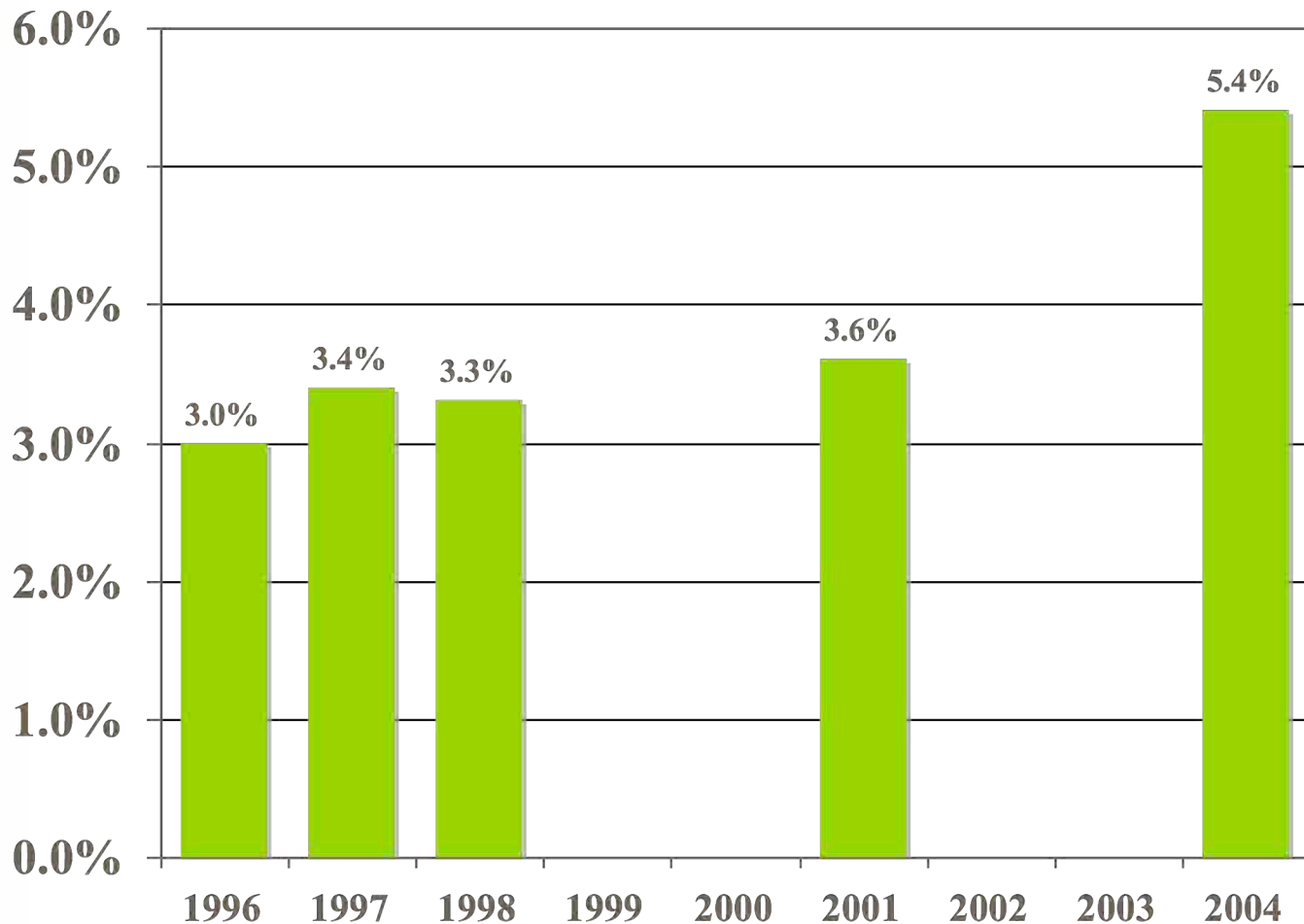


# Potential data for validation

- MOH records of patient payments
- MOH records of patient utilization volumes
- PCBS enterprise surveys of hospitals, doctors' offices
- Analyses of drug market sales
- Provider survey
  - Focus on estimates of utilization volume by provider
  - Avoid financial questions with doctors?
  - Potentially check prices at clinics



# Household out-of-pocket spending, % GDP (PECS 1996-2004)







## Preliminary conclusions

- Whatever the true level of household spending, it has been increasing over time
- Likely level closer to 5% of GDP
- The levels of 3-5% of GDP are very high by international comparison
- High expenditure levels suggest likelihood that many families face impoverishing expenditures - lack of social protection



# Outline

Assessment of current situation

International trends & standards

Assessment of recent household survey  
estimates of health expenditure

## Next Steps

Short term

Long term



## Short-term

- Compile PCBS data from enterprise surveys and develop preliminary estimate of household spending
- Decide whether to commit to long-term goal of NHA system meeting international standards
  - Establish clear strategy and institutional arrangements



# Long-term

- Assuming decision to establish NHA system
- Agree conceptual framework for NHA
  - Statistical standards
  - Classifications, definitions
- Work plan to fill in data gaps
  - Rely primarily on existing data
  - Other ministries, NGOs, donors, provider survey
- Functional analysis of expenditures



## Other policy analyses

- High level of spending suggests high incidence of catastrophic expenditures
  - Use PECS surveys to assess catastrophic impacts using World Bank guidelines
- Health Survey 2004
  - Revised more comprehensive final report, covering expenditures, utilization patterns and insurance status
- Distributional analyses of government expenditures, health status, health care use