Assessing private expenditures in HIV/AIDS: methods, tools, examples

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Overview

- Private expenditures
  - Third party spending
  - Household out-of-pocket
- Issues in estimating household expenditures for NHA
- Recommended approach
- Specific issues for HIV/AIDS
- Examples

Types of private expenditures

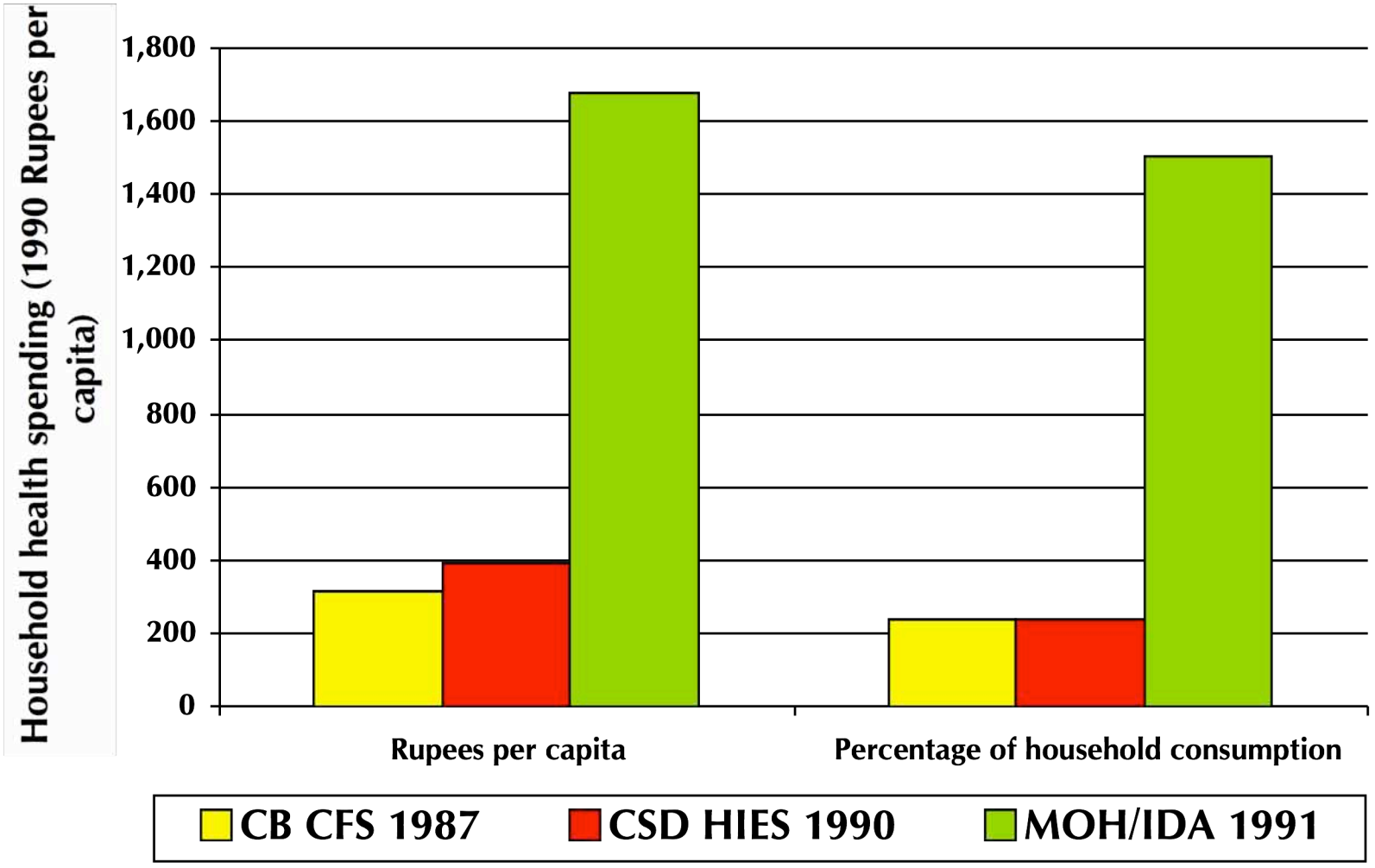
- Third-party spending
  - Commercial insurance
    - Collect data from insurance firms, claims databases
  - Employer expenditures
    - Employer surveys
- Household out-of-pocket spending
  - Co-payments to public providers
    - Government administrative data
  - Payments to private providers
    - ??

Issues in estimating household expenditures

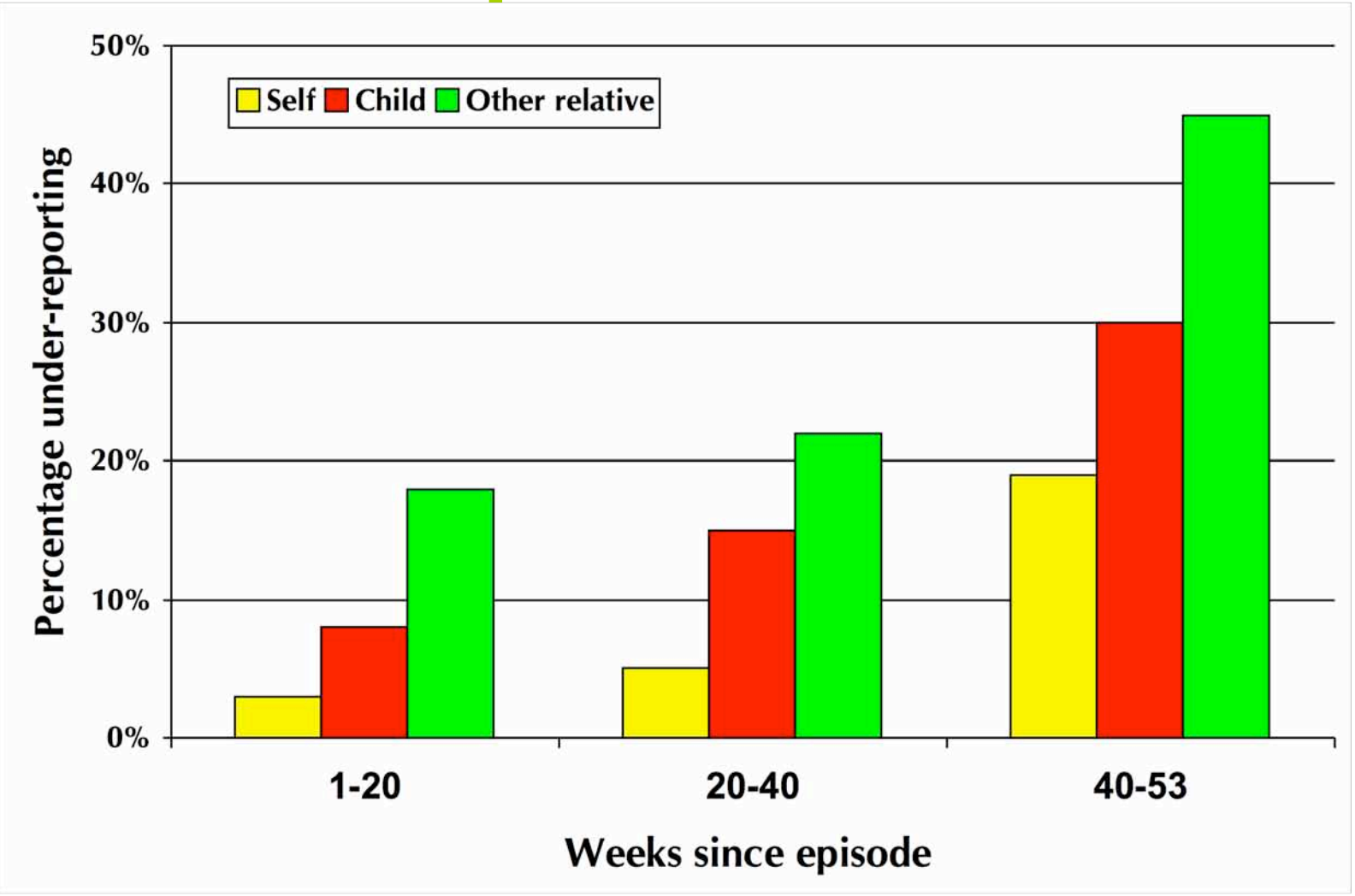
Issues in estimating household expenditures

- Substantial share of overall expenditures:
  - 25-75% outside OECD compared to 5-15% in OECD
  - Accuracy more important than in OECD
  - Important for policy because of impact on households
- Institutional records data often not available
- Problems with use of household survey data
- Challenges in estimating true level and final use of expenditures

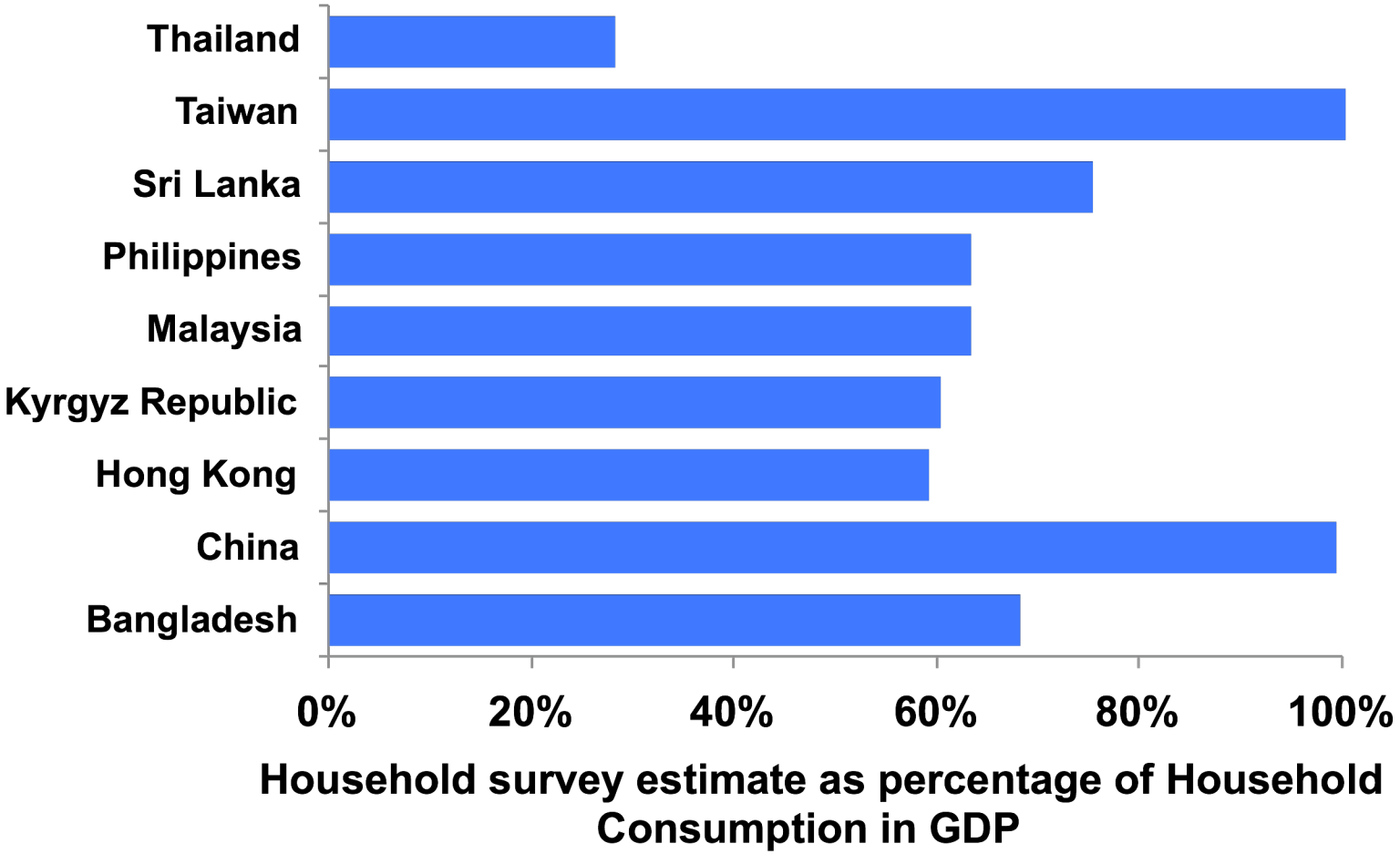
Problems of Household Survey Data



Recall loss for hospitalizations



Household expenditures: National Accounts vs. Household Surveys



Global experience with using household survey data

- Suffer from significant non-sampling errors
  - E.g.: recall loss, telescoping, etc.
  - National accountants use mix of data sources to estimate household spending
- Sampling errors if complete population is not covered
- Surveys may lack sufficient detail or samples to meet NHA requirements
- Surveys expensive and are not available every year

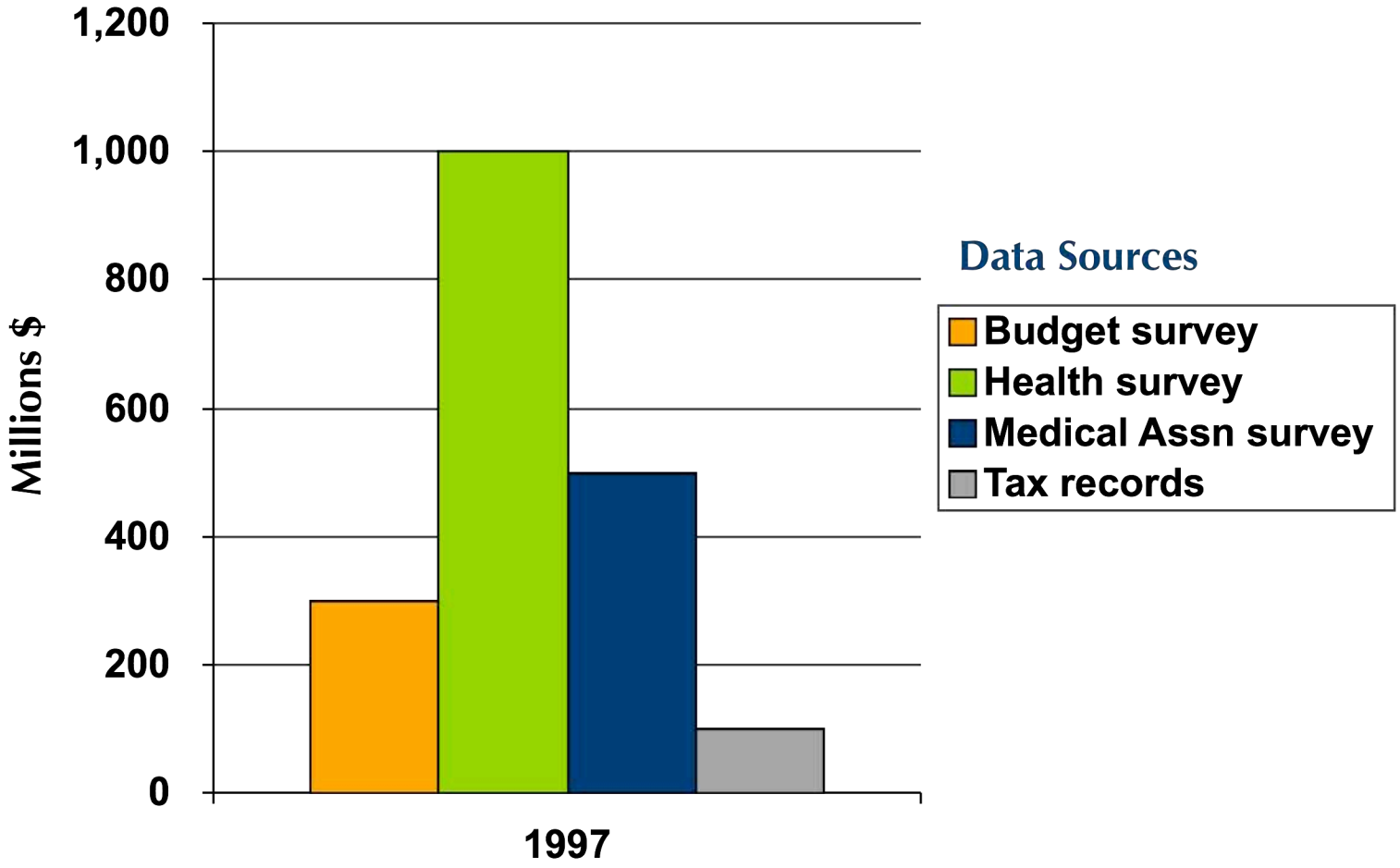
Recommended Approach

Integrative Approach

1. Divide the problem into separate components based on type of spending and available data sources, eg:
   - Purchase of medicines from pharmacies
   - Payments to private doctors
2. Compile data from both sides:
   - Household data
   - Provider data
3. Reconcile data sources by triangulating data sources
   - Take into account reliability and accuracy of data sources
   - Adjust for potential biases
   - Compare data across years

Integrative approach example

Problem: To estimate private clinic doctors revenues



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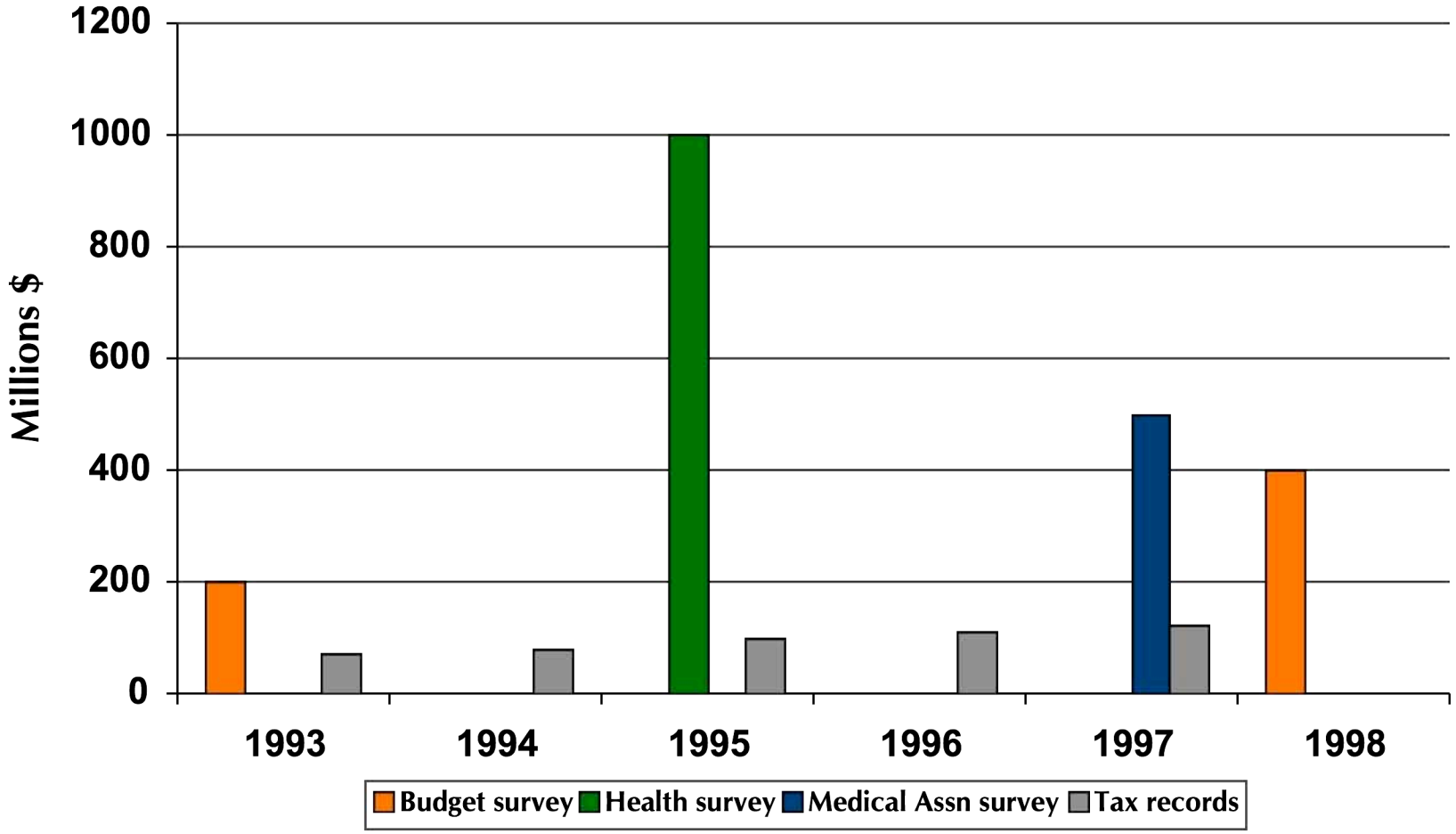

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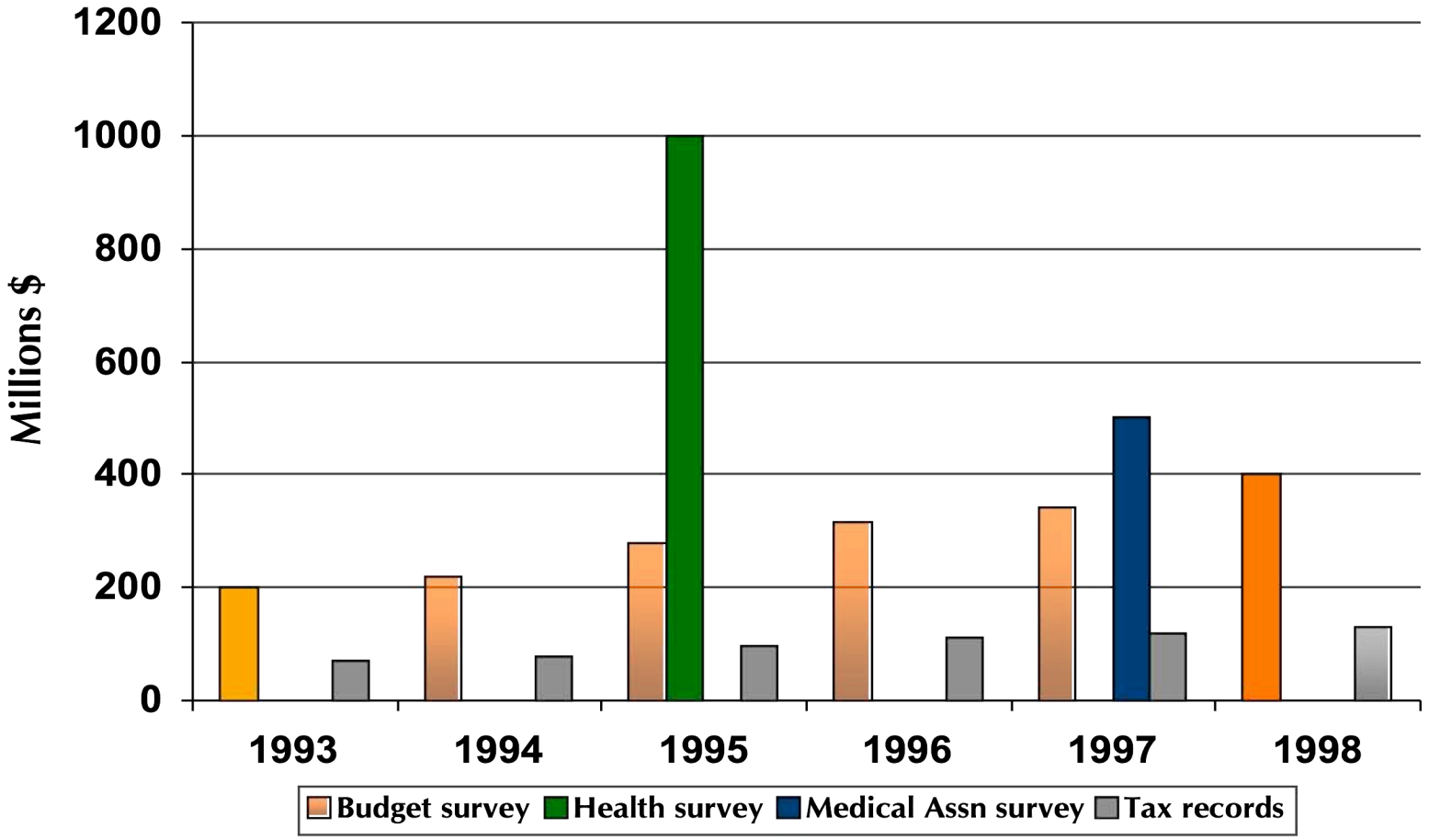

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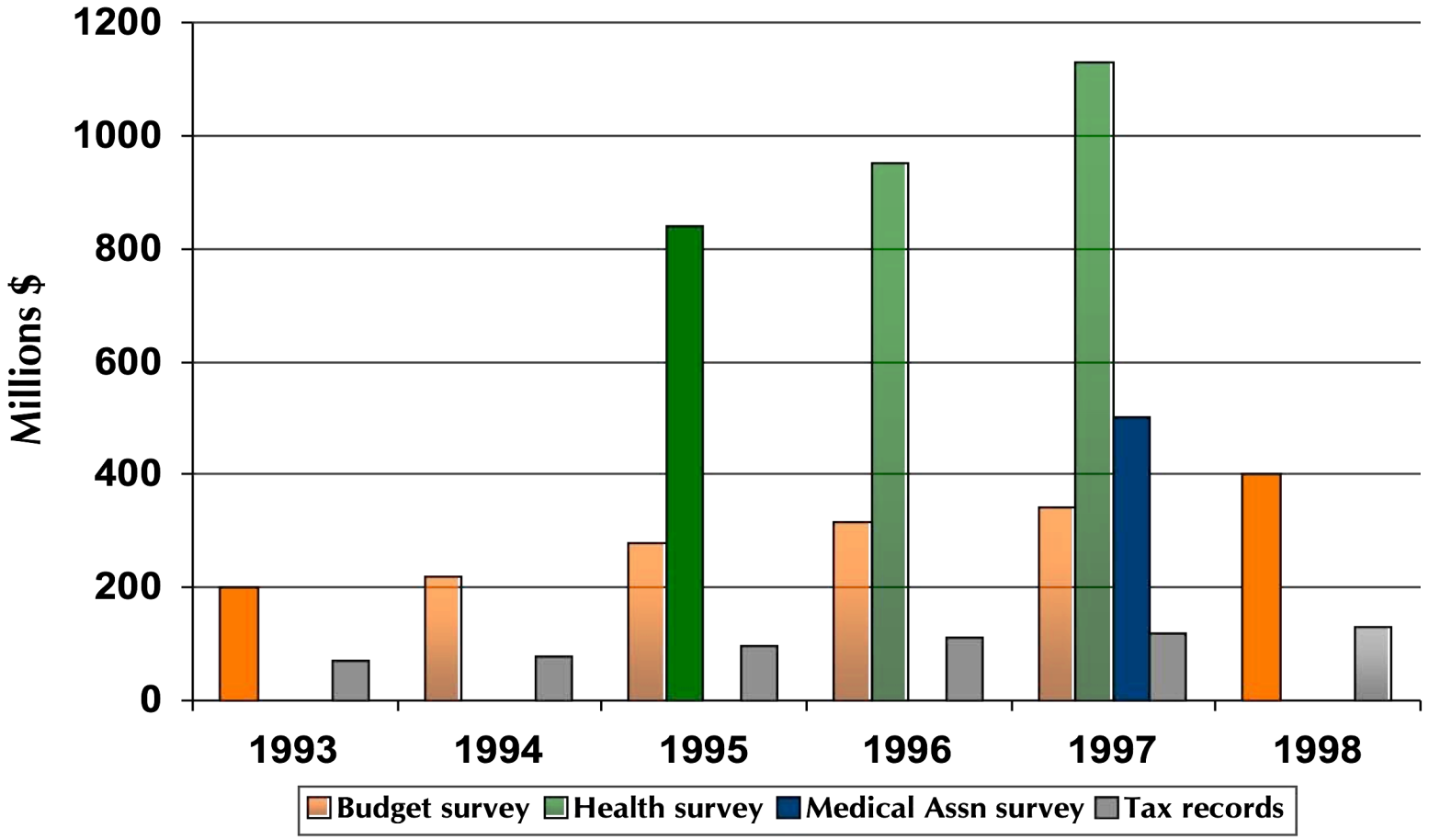

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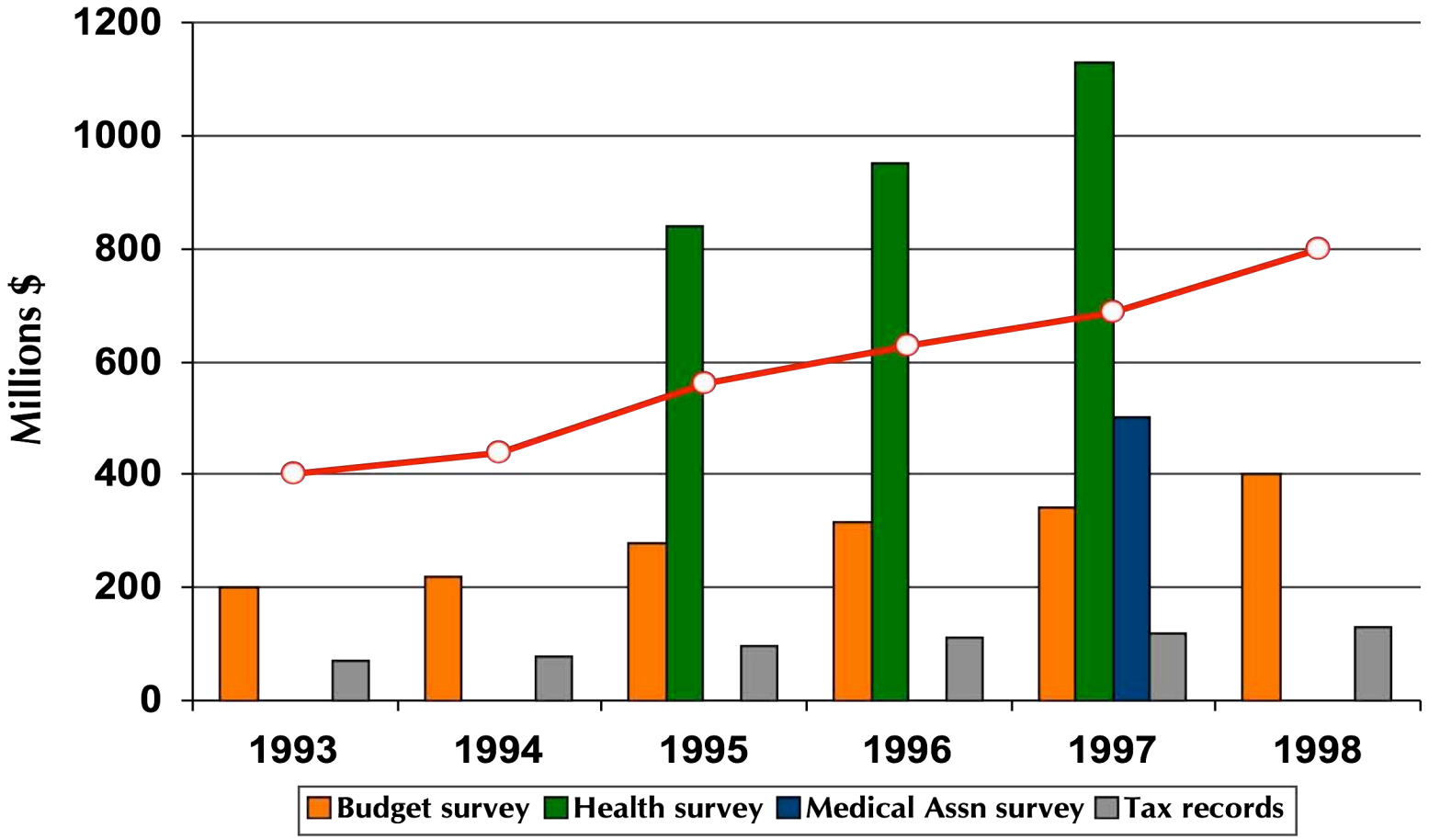

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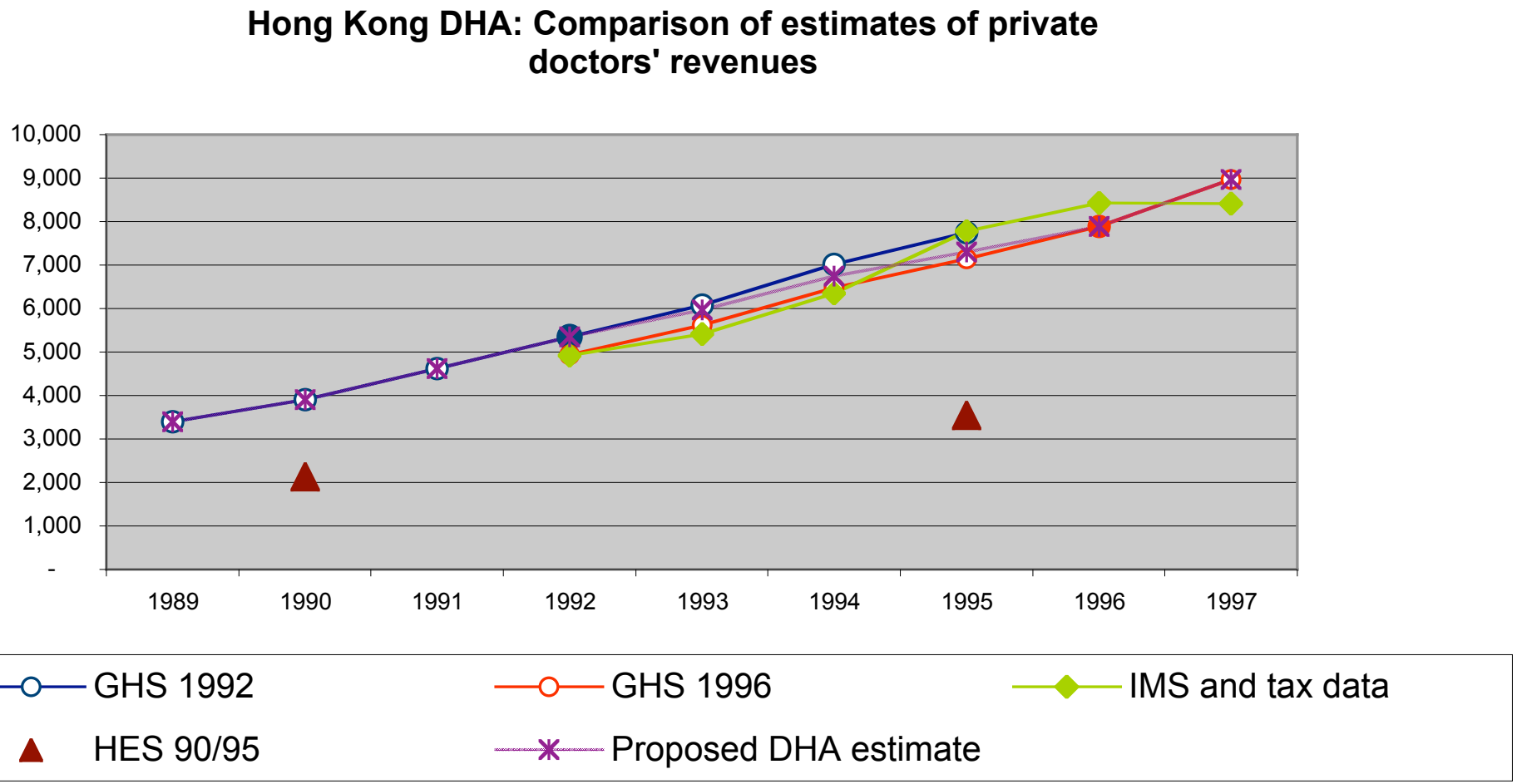
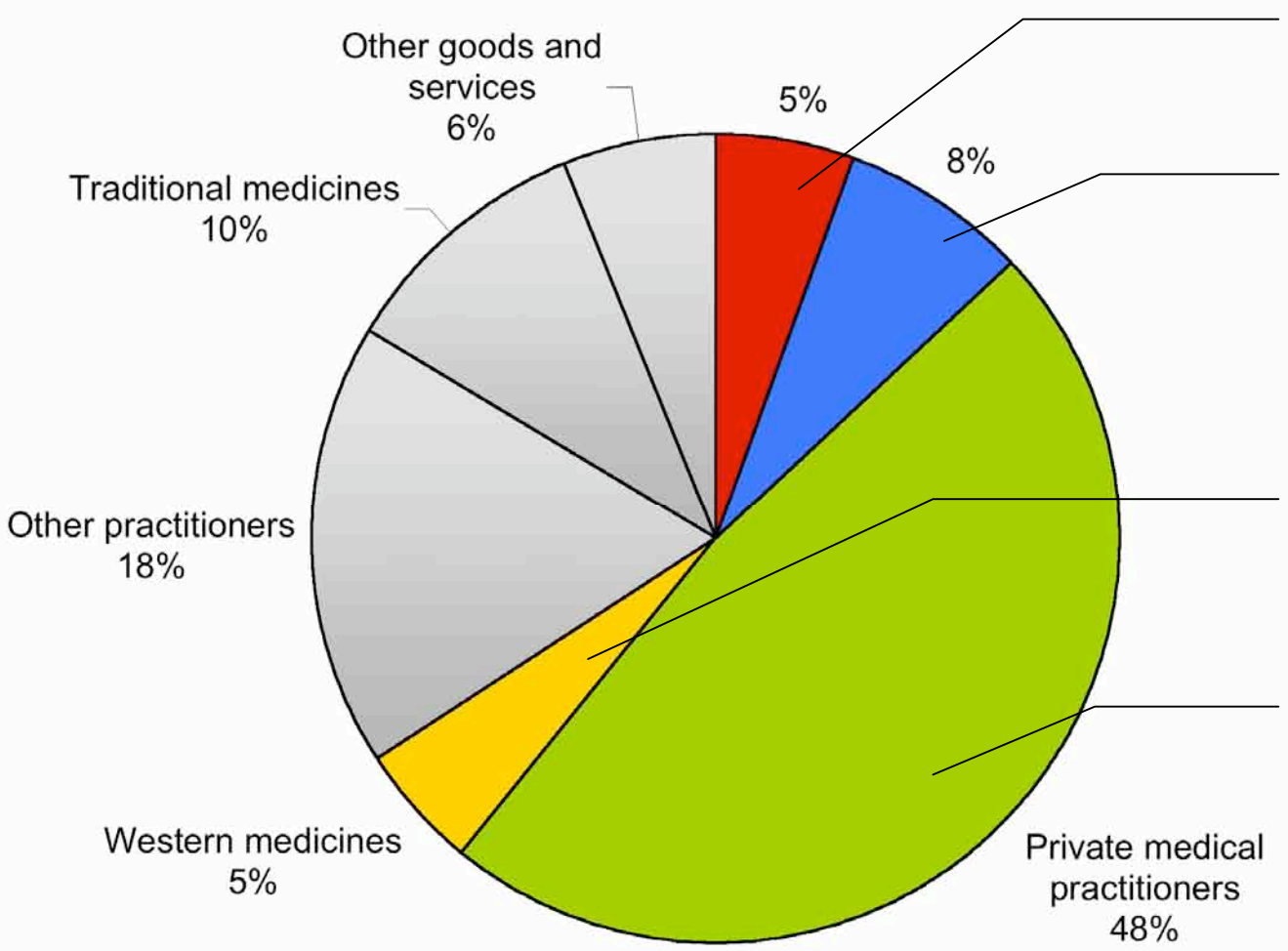


Household Spending in Hong



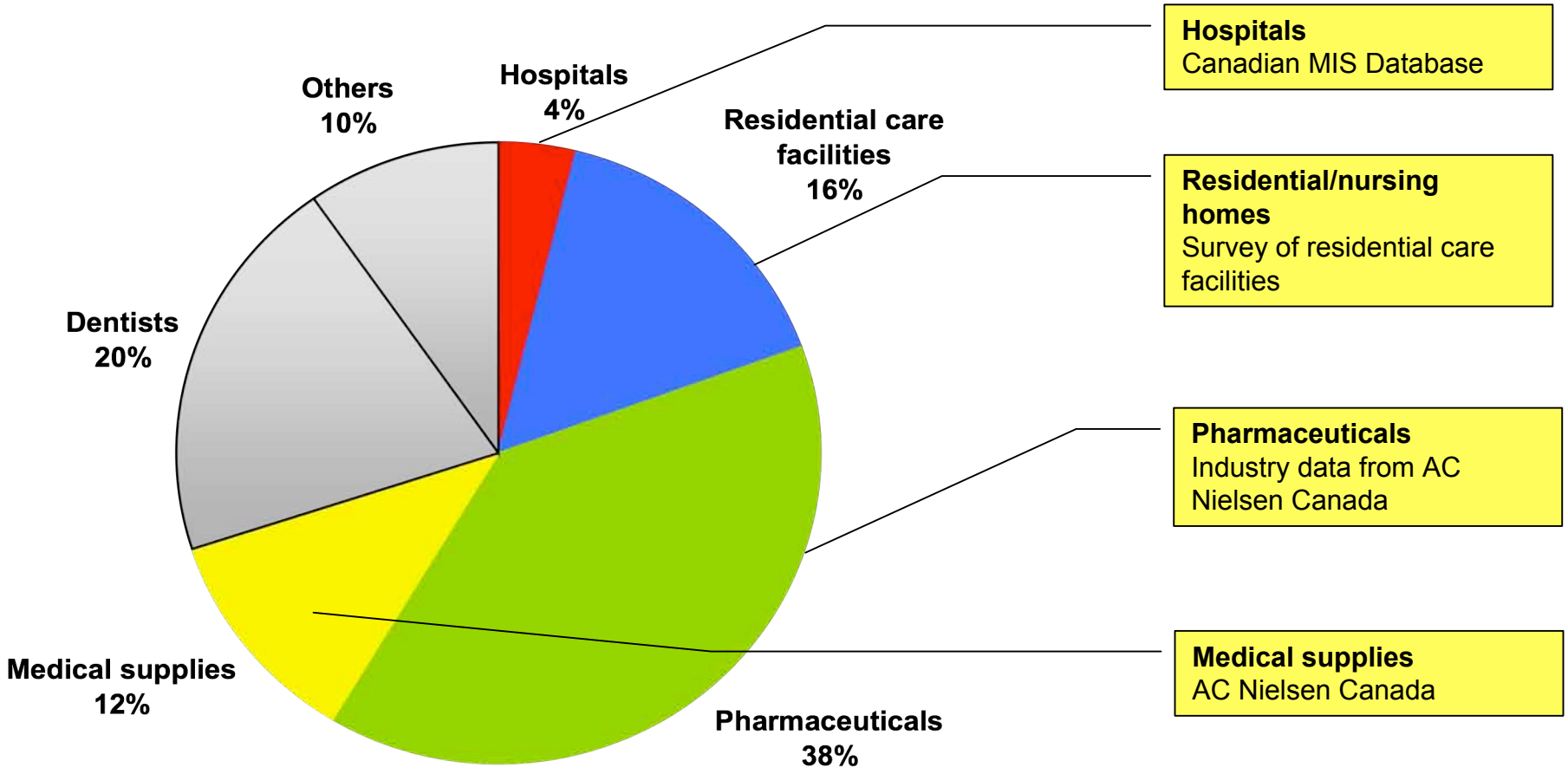
Public sector user fees
Government hospital data

Private hospitals
Special hospital survey, drug sales data

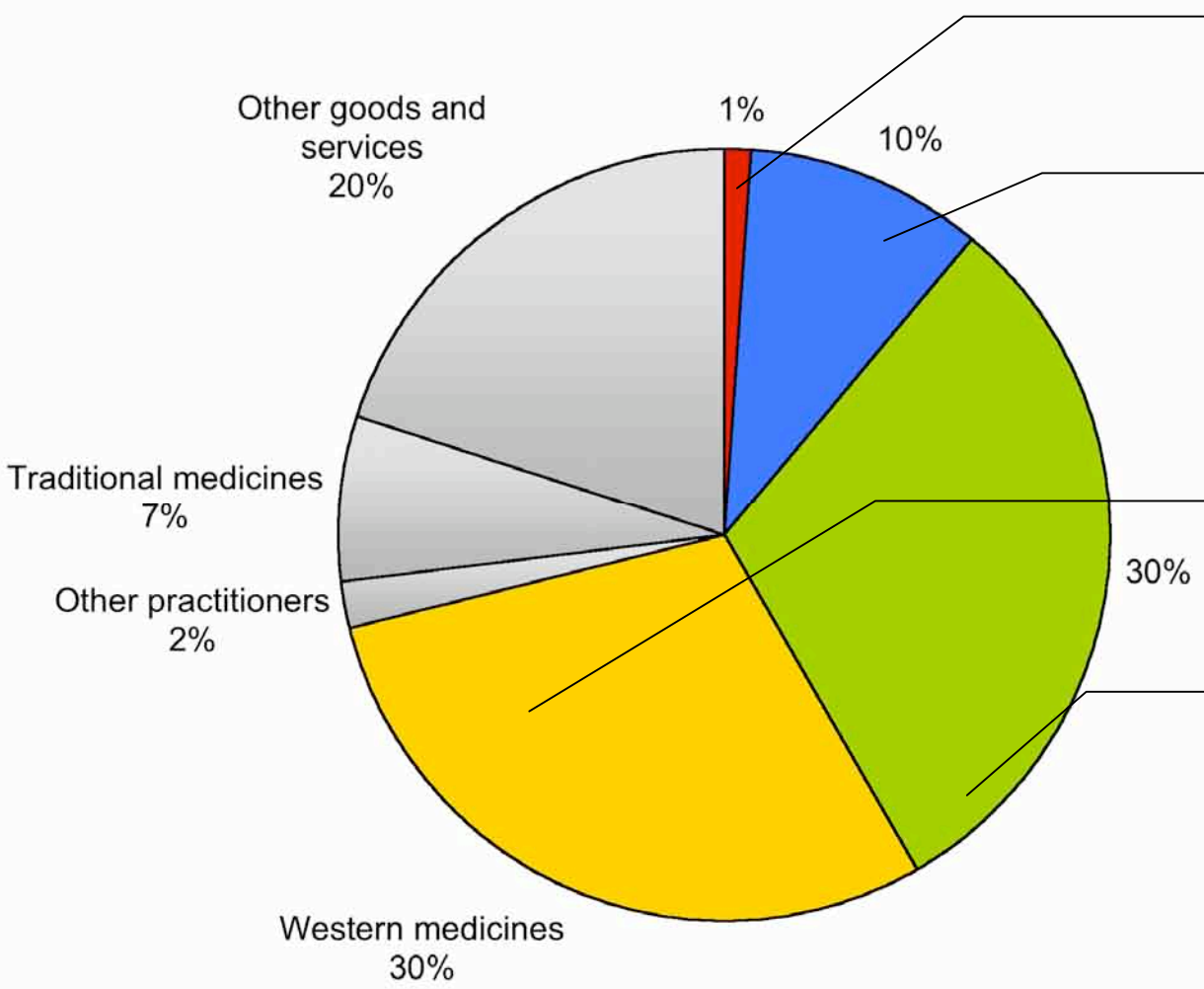
Western medicines
Industry sales data, IMS

Private medical practitioners
Various data sources inc. drug sales data, tax returns, utilization surveys, doctor surveys

Household Spending in Canada



Household Spending in Sri Lanka



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Specific Issues for HIV/AIDS

Issues for HIV/AIDS

- HIV/AIDS affects only a small percentage of population
  - > Samples too small in household or provider surveys
- Most PLWHA do not know their HIV status
- Stigma affects reporting
- Major treatment expenses related not to HIV, but consequences of HIV - opportunistic infections
  - Treatment may not be at specialized HIV facilities but in general healthcare facilities

Suggestions

- Most personal medical treatment expenses for PLWHA is outcome of Opportunistic Infections (OI)
- In low prevalence countries (<3%), use targeted surveys of PLWHA to measure OI expenditures
- Use integrative approach to measure expenditures for retail goods

HIV/AIDS - Opportunistic infections

- Thailand NASA
  - P * Q approach
  - Expenditure = Price x Quantity

- Application
  - Apply to Opportunistic infections
  - Categorize OIs
  - For each OI, obtain data on annual per capita frequency of OI and average household expenditure per episode
  - Requires patient surveys/clinical studies, and advisable to stratify by HIV/ART status

HIV/AIDS - Others

- Safer sex practices
  - Combine data using integrative approach:
    - Household expenditure surveys
    - Retail sales data for condoms
    - Production and import data for condoms
- VCT
  - Thailand NASA
    - P * Q approach
    - Expenditure = OOP payment x Quantity

HIV/AIDS - VCT

- Thailand NASA
  - P * Q approach
  - Expenditure = OOP payment x Quantity