

Public Health Spending and Out of Pocket Costs in India

Ms. Nidhi Sharma, Assistant Professor

Department of Economics(Management),MERI College, GGSIPU,INDIA

In India, out of pocket expenditure (OOPE) is one of the biggest correlates of household poverty, and understanding the macroeconomic health financing scenario under Ayushman Bharat will continue to be critical in monitoring progress towards UHC. This paper investigates the relationship between growing Government Health Expenditure (GHE) and declining out of pocket risks by household, and also looks for clusters of household out of pocket risks by provider. Using aggregate data from the National Health Accounts (NHA) Estimates for India (2022-23), the study applies a decadal (2013-14 vs. 2022-23) comparative descriptive design under the WHO SHA 2011 framework, covering GHE, OOPE, and Social Security Expenditure (SSE) shares of Total Health Expenditure (THE); a log linear elasticity specification is set out as a framework for future estimation using the full annual series but is not estimated here, given the two point evidentiary base. GHE nearly tripled in nominal terms to ₹3.85 lakh crore (1.43-1.48% of GDP), and its THE share rose to 43.7%. OOPE fell from 64.2% to 43.4% of THE, and SSE rose from 6.0% to 9.9%. Retail pharmacies and outpatient dispensing still account for over 21% of current health expenditure. These patterns are associational rather than causal: the window spans the COVID-19 pandemic, figures are nominal, and recent evaluations of PM JAY specifically report mixed financial protection effects. Public financing expansion has coincided with a substantial narrowing of OOPE exposure, but attribution to any one channel is not warranted given the descriptive design; extending risk pooling to outpatient and pharmaceutical costs, and re-estimating with the full annual series and household microdata, are identified as the priority next steps.

Keywords: Out of Pocket Expenditure (OOPE); Government Health Expenditure (GHE); Health Financing; National Health Accounts; Universal Health Coverage; India.

JEL Classification: I13, I18, H51, H75, O15.

Highlights

- Reassesses India's decadal health financing shift using NHA 2022-23 data.
- Government share of health expenditure rose to 43.7%, narrowing the private financing gap.
- Out of pocket spending fell from 64.2% to 43.4% of THE, a window that includes COVID-19.
- Recent PM JAY specific evaluations show mixed financial protection effects, not uniform gains.
- Outpatient and pharmacy costs remain the main uncovered residual household burden.

1. Introduction and Background

Poor Health System Performance, specifically High Out of Pocket Expenditure (OOPE), has been a longstanding concern in developing country health systems; India has long been an extreme case in the literature. Millions of households have been pushed below the poverty line each year due to medical emergencies, and primarily because of the catastrophic inpatient costs and unhedged outpatient pharmaceutical expenses (Berman, Ahuja & Bhandari, 2010; Selvaraj & Karan, 2012). While a majority of health spending in India has been indirect and out of pocket – direct payment for services at the point

of use health shocks have been a separate and ongoing source of poverty compared to other consumption shocks (Ghosh, 2011).

To overcome this challenge, the Government of India has adopted the National Health Policy (NHP) 2017, which has an explicit fiscal target to increase public health expenditure to 2.5 per cent of GDP, and has outlined financial risk protection as a key component of health system reform (MoHFW, 2017). The major policy step taken in the country so far towards Universal Health Coverage (UHC) are the subsequent health system transitions, including the scaling up of Ayushman Bharat. This includes the Pradhan Mantri Jan Arogya Yojana (PM JAY) for hospitalization coverage and the network of Health and Wellness Centres (now renamed Ayushman Arogya Mandirs) for primary care (Patel et al., 2015; Nandi & Schneider, 2020).

These public investments have not yet been shown to have significantly altered national financing patterns, and need to be accompanied by empirical tracking, beyond programme level enrolment and utilization data. The ten year old series of the National Health Accounts (NHA) Estimates for India 2022 23, prepared by the National Health Systems Resource Centre (NHSRC) under the WHO System of Health Accounts 2011 (SHA 2011) framework, provides the empirical basis for such an assessment (World Health Organization, 2011; NHSRC, 2025). The decadal series used in this paper defines the financing transition, although it is emphasized again that the two point comparison presented here is associational and not causal, and that a more complete causal analysis would need the annual series and the level of data on the individual households (Section 7).

2. Literature Review

This review is organized thematically around the four strands of literature most directly relevant to the present study: (i) the evidence base on out of pocket expenditure and household impoverishment in India; (ii) the design and performance of public health insurance schemes; (iii) evaluations of PM JAY specifically, where recent findings diverge; and (iv) cross country evidence on the relationship between public financing share and financial risk protection. The final subsection situates the present study within this literature and states its contribution.

2.1 Out of Pocket Expenditure and Household Impoverishment in India

A rich body of research has shown how out of pocket health spending deepens poverty in India. Early studies using National Sample Survey data revealed that medical payments pushed tens of millions of families below the poverty line each year. Strikingly, it was not hospitalisation alone but the steady burden of medicine purchases that emerged as a lasting driver of catastrophic costs (Berman et al., 2010; Selvaraj & Karan, 2012). Balarajan, Selvaraj, and Subramanian (2011) argued that this crisis was rooted in a financing system shaped by low public investment and a largely unregulated private sector. The result was a structure where households carried a far heavier share of health risk than those in economies with similar income levels. This strand of literature establishes the baseline problem this paper's decadal comparison is intended to speak to: whether the financing shift observed since 2013 14 is consistent with a narrowing of this impoverishment channel.

2.2 Public Insurance Schemes and Financial Risk Protection

A parallel literature has examined the design and early performance of public insurance schemes, from the state level and central Rashtriya Swasthya Bima Yojana (RSBY) to the more recent PM JAY. Earlier work in this line generally found that hospitalization focused insurance schemes reduced inpatient OOPE for covered episodes but had limited effect on outpatient spending, since benefit packages are typically restricted to secondary and tertiary in patient care (Prinja et al., 2017; Nandi & Schneider, 2020). This design feature, coverage concentrated on inpatient care with outpatient and pharmaceutical costs left largely unpooled, recurs as a theme across the more recent scheme specific evaluations reviewed next, and directly motivates this paper's provider level disaggregation of current health expenditure in Section 4.2.

2.3 Evidence on PM JAY: Diverging Findings

More recent facility and state level evaluations specific to PM JAY complicate the picture in Section 2.2 further, and point in different directions depending on setting and design. Using a household survey of over 57,000 PM JAY eligible individuals across six states and multivariate regression analysis, Parmar et al. (2023) found that PM JAY enrolment was associated with a 13 per cent relative reduction in OOPE and a 21 per cent reduction in catastrophic health expenditure, though this benefit was concentrated entirely among hospitalizations at private facilities and accompanied by a shift in care seeking away from public hospitals, implying that the measured gain is bound up with increased private sector utilization rather than a uniform reduction in cost exposure across the health system. By contrast, Garg, Bebart, and Tripathi (2024), following beneficiaries in Chhattisgarh across two household survey waves four years into implementation, found no association between AB PMJAY enrolment and reduced out of pocket or catastrophic expenditure, and reported that private facilities empanelled under the scheme kept billing enrolled patients informally even after reimbursement rates were revised upward. Taken together, these study level findings diverge rather than converge: one identifies a real but private sector specific financial protection effect, while the other finds none in a different state and survey design. This divergence illustrates why an aggregate, NHA level decline in the national OOPE share cannot be mechanically attributed to PM JAY's hospitalization insurance design without further disaggregation.

2.4 Government Health Expenditure Share and Financial Risk: Cross Country Evidence

Cross-country studies, as well as India-specific analyses using the WHO SHA 2011 framework, highlight a clear lesson, a sustained rise in the government's share of total health spending is essential for reducing catastrophic and impoverishing costs. It is not, however, sufficient on its own (World Health Organization, 2010; Ministry of Health and Family Welfare, 2021). This body of work offers a macro-level counterpart to the scheme-specific findings in Section 2.3. It strengthens the plausibility of a link between higher government health expenditure (GHE) and lower out-of-pocket spending (OOPE) at the aggregate level, even though it does not pinpoint the precise mechanism by which any single financing channel produces that effect.

2.5 Positioning of the Present Study

Taken together, Sections 2.1 to 2.4 highlight a tension that this paper seeks to address. On one side, aggregate NHA data show a decline in the national share of out-of-pocket spending (Section 2.4). On the

other, scheme specific micro evidence on PM-JAY (Section 2.3) points in a different direction. Insurance design literature further suggests that outpatient and pharmaceutical costs remain structurally under covered, regardless of how well schemes perform (Section 2.2).

This contrast implies that the macro level shift documented in Section 4 is not driven by PM-JAY alone. Instead, it likely reflects the combined influence of multiple financing channels: state fiscal effort, primary care investment through Health and Wellness Centres, and broader social security expansion.

The present study extends this literature by using the most recent NHA release (2022–23). It disaggregates current health expenditure by provider to identify categories of spending that continue to expose households to financial risk the central concern of Section 2.1. It also situates its descriptive findings alongside causally identified micro evidence, rather than attributing the observed trend to any single scheme.

3. Data Sources and Methodology

3.1 Data

This study uses secondary, aggregate time series data drawn from the National Health Accounts (NHA) Estimates for India, 2022–23, published by the Ministry of Health and Family Welfare through the National Health Systems Resource Centre. The NHA series is constructed according to the WHO System of Health Accounts 2011 (SHA 2011) framework, which classifies health expenditure along three axes (financing schemes, financing agents, and healthcare provider/function), enabling internationally comparable decomposition of Total Health Expenditure (THE) into government, private, and out of pocket components (World Health Organization, 2011). The analysis draws on the 2013–14 and 2022–23 estimates as decadal reference points, supplemented by the intervening annual series where relevant to trend interpretation.

3.2 Research Questions

- RQ1: Is the expansion of Government Health Expenditure (GHE) associated with a reduced share of Out of Pocket Expenditure (OOPE) in India's Total Health Expenditure (THE)?
- RQ2: What is the functional distribution of Current Health Expenditure (CHE) across providers (e.g., hospitals versus retail pharmacies), and where do residual financial leakages persist?

3.3 An Estimating Framework for Future Work (Not Estimated Here)

To characterize the elasticity of household OOPE with respect to public health spending, a log linear specification can in principle be written as:

$$\ln(OOPE_t) = \beta_0 + \beta_1 \ln(GHE_t) + \beta_2 \ln(SSE_t) + \varepsilon_t$$

where $OOPE_t$ denotes out of pocket health expenditure in year t , GHE_t denotes government health expenditure, SSE_t denotes social security health expenditure (public insurance schemes such as PM JAY), and β_1 would be interpreted as the percentage change in OOPE associated with a one per cent increase in public health funding, holding social security expenditure constant. We set this specification out explicitly as the appropriate estimating framework for the full annual NHA series (2013–14 through 2022–23 and

beyond), but we do not estimate it in this paper: the headline NHA comparison used here spans only two reference years, which is insufficient to identify β_1 or β_2 with any statistical precision, and any coefficients recovered from a two point series would not be meaningfully distinguishable from the raw percentage point changes already reported in Section 4. Section 4 therefore reports level and share comparisons only, and Section 7 sets out the annual series estimation this framework is intended to support.

3.4 Interpretive Caveats

Three features of the data and design bound the claims that can be drawn from Section 4 and should be read alongside the results throughout.

Nominal versus real values. Unless otherwise noted, all rupee figures reported below (GHE, per capita spending, primary care expenditure) are nominal, current price values as published in the NHA release; they are not adjusted for inflation. Based on published Indian CPI series, cumulative consumer price inflation over 2013 14 to 2022 23 is on the order of several tens of percentage points; the real terms increase in per capita government health spending is therefore materially smaller than the 2.7 fold nominal figure reported in Table 1, although the qualitative direction of the shift (a rising public share of THE) is a share based measure and is not itself affected by the choice of deflator. We recommend that any subsequent version of this paper accompanying Table 1 with a constant price restatement, using the CPI or the GDP deflator published by MoSPI for the relevant years.

GDP base year revision. The NHA source reports two GDP share figures for 2022 23 (1.43% and 1.48%). The most plausible explanation is a difference in the GDP base series used as the denominator, since India's national accounts undergo periodic base year revisions issued by the Ministry of Statistics and Programme Implementation (MoSPI); however, we have not traced this specific discrepancy to a named MoSPI notification and present this as our working interpretation rather than a confirmed source. A GDP base revision would change the denominator without changing nominal GHE, and could therefore move the computed GDP share independent of any change in underlying fiscal effort. We report both figures as published rather than resolving them, and recommend that the specific base year documentation be confirmed against the original NHA release before this explanation is treated as final.

The COVID 19 window. The 2013 14 to 2022 23 comparison window spans the COVID 19 pandemic (approximately fiscal years 2019 20 through 2021 22), a period in which government health expenditure rose sharply for pandemic response while private, discretionary, and outpatient spending was independently suppressed by lockdowns and reduced elective care seeking. Both channels would mechanically raise the measured GHE share of THE and depress the measured OOE share in ways that are plausibly transitory rather than structural. Because this paper compares only the 2013 14 and 2022 23 endpoints, it cannot distinguish a smooth, policy driven structural trend from a pandemic era step change that has since partially plateaued or reversed. We flag this explicitly as a limitation on the structural interpretation offered in Section 5, and recommend that future work using the full annual series report the year by year trajectory so this can be assessed directly.

4. Results

4.1 Decadal Shift in Key Financing Indicators

Table 1 summarizes the principal NHA indicators for 2013 14 and 2022 23, read alongside the caveats in Section 3.4. Government Health Expenditure nearly tripled in nominal terms, rising from ₹1.30 lakh crore to ₹3.85 lakh crore, while its share of GDP rose from 1.15 per cent to 1.43 per cent (1.48 per cent under the revised GDP base), an advance toward, but still short of, the 2.5 per cent NHP target. The government share of Total Health Expenditure rose from 28.6 per cent to 43.7 per cent, narrowing the gap with private financing considerably.

Indicator	2013 14	2022 23	Note (associational, not causal)
Government Health Expenditure (GHE), nominal	₹1.30 lakh crore	₹3.85 lakh crore	Nearly threefold nominal rise; not deflated (see Section 3.4).
GHE as % of GDP	1.15%	1.43% (1.48%, revised GDP base)	Gradual rise; still below the 2.5% NHP target.
GHE as % of Total Health Expenditure (THE)	28.6%	43.7%	Public share approaching, not yet at, parity with private financing.
Out of Pocket Expenditure (OOPE) as % of THE	64.2%	43.4%	Lowest recorded OOPE share in the NHA series; window spans the COVID 19 years (see 3.4).
Per capita Government Health Spending, nominal	₹1,042	₹2,786	2.7 fold nominal rise; real terms rise materially smaller (Section 3.4).
Social Security Expenditure (SSE) as % of THE	6.0%	9.9%	Includes PM JAY and other pooled public insurance; not separable in NHA aggregates.
Primary Healthcare Share of Current Health Expenditure (CHE)	~₹0.5 lakh crore	~₹1.4 lakh crore (~46% of CHE)	Combined public + private CHE; may partially overlap with pharmacy dispensing (see 4.2).

Table 1. Key National Health Accounts indicators, India, 2013 14 vs. 2022 23. Source: National Health Systems Resource Centre, National Health Accounts Estimates for India 2022 23. Figures are nominal unless otherwise stated; see Section 3.4 for interpretive caveats.

Correspondingly, OOPE as a share of THE fell from 64.2 per cent to 43.4 per cent, its lowest recorded level in the NHA series, while per capita government health spending rose 2.7 fold in nominal terms, from ₹1,042 to ₹2,786. Social Security Expenditure, which captures pooled public insurance financing including PM JAY, expanded from 6.0 per cent to 9.9 per cent of THE. As discussed in Section 3.4, this window includes the COVID 19 pandemic years, and the reported changes should be read as reflecting the combined effect of structural policy shifts and pandemic era demand and supply disruptions, which this two point design cannot separate.

4.2 Functional Distribution of Current Health Expenditure

Disaggregating Current Health Expenditure (CHE) by provider indicates that primary healthcare's share rose from roughly ₹0.5 lakh crore to ₹1.4 lakh crore, now accounting for approximately 46 per cent of combined public and private CHE, consistent with reallocation toward preventive and early stage care under the Health and Wellness Centre component of Ayushman Bharat. Despite this shift, retail pharmacies and outpatient dispensing continue to account for more than 21 per cent of Current Health Expenditure, identifying non hospitalization medical costs, principally outpatient consultations and prescription medicines, as a substantial residual component of household OOPE that inpatient focused insurance coverage does not reach. A full provider by provider breakdown of the remaining CHE share would be needed to establish whether this category exceeds any single hospital based provider category; we do not have that disaggregation available in the published tables used here and flag it as a data gap rather than assert a ranking. We note that the NHA provider classification does not permit us to confirm whether pharmacy dispensing recorded within primary care facilities is counted under the primary care share, the retail pharmacy share, or both; the two figures should therefore be read as describing distinct but potentially overlapping categories rather than as strictly additive components of CHE, pending clarification from the underlying NHA provider tables.

5. Discussion and Policy Implications

5.1 The Decadal Shift, Read Cautiously

The data are consistent with a gradual substitution of public financing for direct household payment in India's health system. The decline in OOPE from 64.2 per cent to 43.4 per cent of THE is compatible with expanded public insurance coverage and increased state level funding having reduced the incidence of catastrophic health shocks at the household level, a pattern broadly consistent with the risk protection objective set out in NHP 2017. Given the caveats in Section 3.4 (nominal reporting, a GDP base revision affecting one indicator, and a comparison window spanning the pandemic) and given the mixed micro level evidence on PM JAY specifically (Parmar et al., 2023; Garg et al., 2024), we present this as an association rather than a demonstrated causal effect of GHE on OOPE.

5.2 The Outpatient Deficit

The persistence of retail pharmacy and outpatient spending at over 21 per cent of CHE reveals a structural asymmetry in coverage design. Because PM JAY and comparable public insurance schemes are architected primarily around inpatient (secondary and tertiary) care, outpatient consultations and medicines remain largely outside pooled financing arrangements. This is consistent with the broader insurance design literature on hospitalization focused schemes in India (Prinja et al., 2017) and suggests that further reductions in aggregate OOPE will depend disproportionately on extending risk pooling to outpatient and pharmaceutical expenditure rather than on further expansion of inpatient coverage alone.

5.3 Primary Care Prioritization

The allocation of approximately 46 per cent of combined public and private current health expenditure to primary care reflects a potentially productive long run policy shift. Strengthening diagnostic and consultation capacity at the primary level is associated, in the broader health systems literature, with earlier detection and management of chronic and communicable conditions, which in turn can reduce downstream secondary and tertiary care costs and, by extension, catastrophic expenditure risk (World Health Organization, 2010). We flag this as a plausible mechanism rather than an estimated effect within this paper's own data.

6. Conclusion and Recommendations

India's health financing architecture shows, over the decade examined, a shift toward increased public financing and a lower recorded OOPE share of Total Health Expenditure, evidenced by the near tripling of nominal Government Health Expenditure. Reading this alongside the caveats above (nominal reporting, the COVID 19 window, and mixed scheme level evidence on PM JAY), we treat this as a documented association rather than an established causal effect. To meet the National Health Policy target of 2.5 per cent of GDP and to approach genuine Universal Health Coverage, the evidence here points to three priority areas for future policy:

- Extend scheme coverage to include outpatient consultations and prescription drugs, rather than concentrating public insurance benefit packages on inpatient hospitalization alone.
- Increase fiscal allocations from state governments, which reportedly finance a majority of public health spending, to reduce inter state disparities in per capita public health investment; this figure should be independently verified against the same NHA release before final submission.
- Integrate primary health centre workflows with digital health records (e.g., the Ayushman Bharat Health Account, ABHA) to reduce diagnostic duplication and strengthen continuity of care between primary and referral levels.

7. Limitations and Directions for Future Research

This study uses published NHA estimates at the aggregate level. It does not draw on household microdata, so it cannot measure catastrophic spending or impoverishment directly at the household scale. Only two reference years are compared. This means the analysis cannot

separate a gradual structural trend from a sudden pandemic era shift. The figures are reported in nominal rupees, not adjusted for inflation.

The log linear model described in Section 3.3 is not estimated here. That model requires the full annual NHA series, while this study focuses on two decadal points. With only two observations, elasticity parameters cannot be identified with precision.

Future research should:

- **Estimate elasticity model** using the complete annual NHA series, deflated to constant prices, alongside NSS consumption data.
- **Examine state heterogeneity** in financing transitions, and formally verify the state financing share cited in Section 6.
- **Separate pandemic years** (2020–21 and 2021–22) to distinguish structural trends from pandemic shocks.
- **Evaluate household protection** under PM JAY and Ayushman Arogya Mandirs, using panel or quasi experimental designs. This should build on and reconcile facility and state level findings reported by Parmar et al. (2023) and Garg et al. (2024).

CRedit Author Statement

Conceptualization, Methodology, Formal analysis, Writing original draft, Writing review & editing.

Funding

This research did not receive any type of specific grant from funding agencies in the public, commercial, or not for profit sectors.

Declaration of Competing Interest

The author declares no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability

This paper uses publicly available secondary data from the National Health Accounts Estimates for India, 2022–23, published by the National Health Systems Resource Centre, Ministry of Health and Family Welfare, Government of India, and accessible via the NHSRC website. No new data were generated for this study.

Ethics Statement

Not applicable. This study uses only publicly available, aggregated secondary data and did not involve human participants, identifiable personal data, or animal subjects.

Originality Statement

This manuscript is original work and has not been submitted elsewhere for publication, in whole or in part. All factual claims drawn from secondary sources are attributed by in text citation to the original source, and all descriptions of prior studies (Section 2) are presented in the authors' own words rather than reproduced verbatim; no quotation exceeds standard fair use limits. Data figures are drawn from the publicly published National Health Accounts Estimates for India, 2022 23, with the source cited at first use and under Table 1. The authors will run this manuscript through the journal's standard similarity detection screening (e.g., iThenticate/Crossref Similarity Check) prior to submission, consistent with Elsevier's originality requirements.

References

- Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. *The Lancet*, 377(9764), 505 515.
- Berman, P., Ahuja, R., & Bhandari, L. (2010). The impoverishing effect of healthcare payments in India: New methodology and findings. *Economic and Political Weekly*, 45(16), 65 71.
- Garg, S., Bebart, K. K., & Tripathi, N. (2024). The Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PMJAY) after four years of implementation is it making an impact on quality of inpatient care and financial protection in India? *BMC Health Services Research*, 24, 919.
- Ghosh, S. (2011). Catastrophic payments and impoverishment due to out of pocket health spending. *Economic and Political Weekly*, 46(47), 63 70.
- Ministry of Health and Family Welfare, Government of India. (2017). *National Health Policy 2017*. New Delhi: MoHFW.
- Ministry of Health and Family Welfare, Government of India. (2021). *National Health Accounts Estimates for India 2017 18*. New Delhi: National Health Systems Resource Centre.
- Nandi, S., & Schneider, H. (2020). Using an equity based framework for evaluating publicly funded health insurance programmes as an instrument of UHC in Chhattisgarh State, India. *Health Research Policy and Systems*, 18, 50.
- National Health Systems Resource Centre. (2025). *National Health Accounts Estimates for India, 2022 23*. New Delhi: Ministry of Health and Family Welfare, Government of India. Retrieved from <https://nhsrindia.org/national-health-accounts-records>
- Parmar, D., Strupat, C., Srivastava, S., Brenner, S., Parisi, D., Ziegler, S., Neogi, R., Walsh, C., & De Allegri, M. (2023). Effects of the Indian National Health Insurance Scheme (PM JAY) on hospitalizations, out of pocket expenditures and catastrophic expenditures. *Health Systems & Reform*, 9(1), Article 2227430.
- Patel, V., Parikh, R., Nandraj, S., Balasubramaniam, P., Narayan, K., Paul, V. K., Kumar, A. K. S., Chatterjee, M., & Reddy, K. S. (2015). Assuring health coverage for all in India. *The Lancet*, 386(10011), 2422 2435.
- Prinja, S., Chauhan, A. S., Karan, A., Kaur, G., & Kumar, R. (2017). Impact of publicly financed health insurance schemes on healthcare utilization and financial risk protection in India: A systematic review. *PLOS ONE*, 12(2), e0170996.
- Selvaraj, S., & Karan, A. K. (2012). Why publicly financed health insurance schemes are ineffective in providing financial risk protection. *Economic and Political Weekly*, 47(11), 61 68.

- World Health Organization. (2010). The World Health Report 2010: Health Systems Financing: The Path to Universal Coverage. Geneva: WHO.
- World Health Organization, OECD, & Eurostat. (2011). A System of Health Accounts, 2011 edition. Paris: OECD Publishing.