ON THE ROAD TO UNIVERSAL HEALTH COVERAGE: LESSONS FROM A MULTI-COUNTRY STUDY IN EAST ASIA

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INSTITUTE OF HEALTH POLICY & MANAGEMENT

Health Equity and Financial Protection in Asia – HEFPA
The partners, study countries, and principal investigators

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- Institute of Tropical Medicine Antwerp, Belgium
- University of Macedonia, Economic and Social Sciences, Greece
- International Institute of Social Studies, Erasmus University Rotterdam, the Netherlands
- Oxford University, United Kingdom
- World Bank Development Research Group, United States
- Centre for Advanced Studies, **Cambodia**
- Shandong University, **China**
- SMERU Research Institute, Jakarta, **Indonesia**
- University of the Philippines, **Philippines**
- International Health Policy Programme, **Thailand**
- Centre for Community Health Strategy, **Vietnam**

Principal Investigators:

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***Eddy van Doorslaer*, Erasmus University**
***Owen O'Donnell*, Erasmus University & University of Macedonia**

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Background to project

- Universal Health Coverage (UHC) is more than getting everyone into a ‘’financial protection’ scheme, or giving them a legal right to health services
- UHC is about ensuring that everyone – irrespective of their ability to pay – can access the health services they need, without suffering undue financial hardship in the process
- So UHC has two angles:
  - Making sure everyone who needs care gets it; and
  - Financial protection
- The HEFPA project set out to explore the effectiveness of a number of UHC strategies in East Asia
- The project pooled the skills of researchers from 6 East Asian countries, several European universities and the World Bank’s research department

Outline

- We have you covered – or do we?
  - Expanding coverage of financial protection schemes is a common strategy to achieve UHC
  - But there's a 'missing middle' in coverage
    - ✓ The cases of the Philippines and Vietnam
- We have you covered – now what?
  - Making sure coverage leads to use of services and financial protection
    - ✓ The cases of Cambodia, Indonesia and Thailand
- Provider incentives and out-of-pocket spending
  - Setting provider incentives so they contribute to the twin goals of UHC
    - ✓ The case of China

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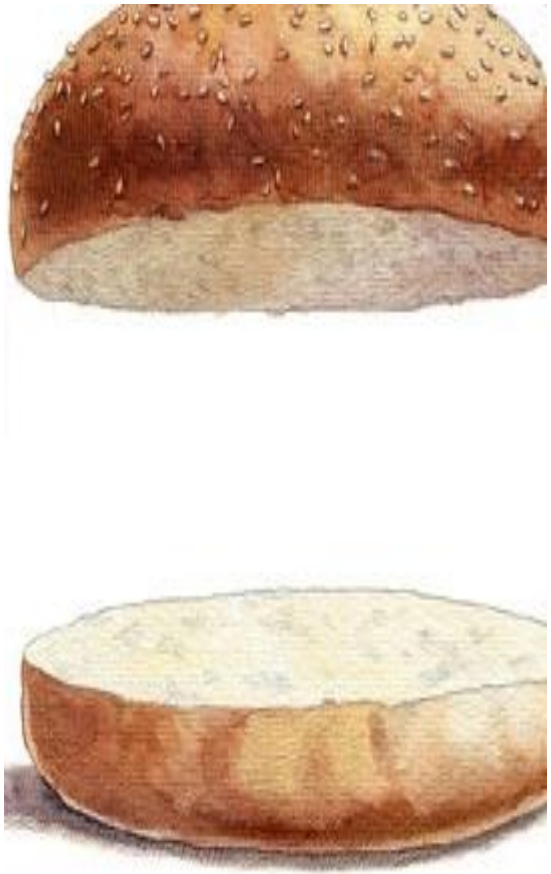
UHC's 'missing middle'



Top covered

- Tax-financed or compulsory insurance schemes for public sector employees & dependents
- Compulsory insurance schemes for formal private sector employees (& dependents)

The 'missing middle'

- Non-poor informal/self-employed workers & dependents
- Often low take-up of (subsidized) voluntary insurance & adverse selection problems

Bottom covered

- Tax-financed schemes for the poor and other indigent groups

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Reasons for low take-up

- Too poor – *ability* to pay for insurance < premiums
- *Willingness* to pay for insurance < premiums
  - Lack of information about scheme
  - Low or underestimated probability of getting sick
  - Limited risk aversion
  - Small benefits – out-of-pocket spending may not be much affected by coverage
  - Low care quality (providers may even reduce quality if not paying OOP)
- Premium subsidies and better information should increase ability and willingness to pay for insurance
- HEFPA experimented how effective these measures are in increasing insurance take-up

Case 1: The Philippines – background

- National, premium-based health insurance (PhilHealth)
- Benefits
  - Family-level coverage
  - Covers inpatient care (reimbursement ceilings apply)
- Membership
  - Compulsory membership for formal sector
  - Full premium subsidy for indigent (also outpatient)
  - Voluntary membership for non-poor informal sector households
- Two-tier premium schedule
  - 42 US$ per year for monthly income < 7,000 US$
  - 84 US$ per year for monthly income > 7,000 US$
- Missing middle: only 10% of those eligible for voluntary insurance (the middle) are members

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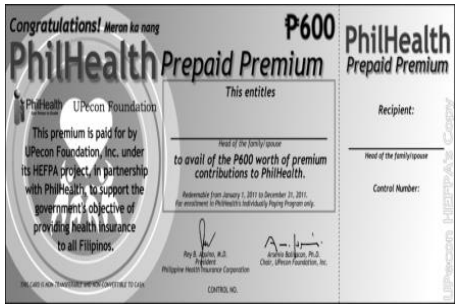
Case 1: The Philippines – experiment

- Research question: effectiveness of an intervention package to increase uptake of voluntary health insurance/covering the 'missing middle'
- Sample: 1,124 uninsured households eligible for voluntary health insurance (non-poor, informal = missing middle)
- Treatment: Random assignment of intervention package, mid 2011

Premium voucher = 50% subsidy for 1 year; valid until 31 December 2011



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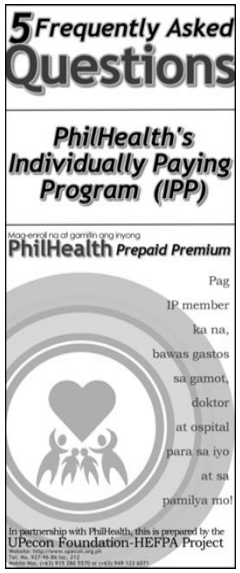
Information kit



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SMS enrollment reminder

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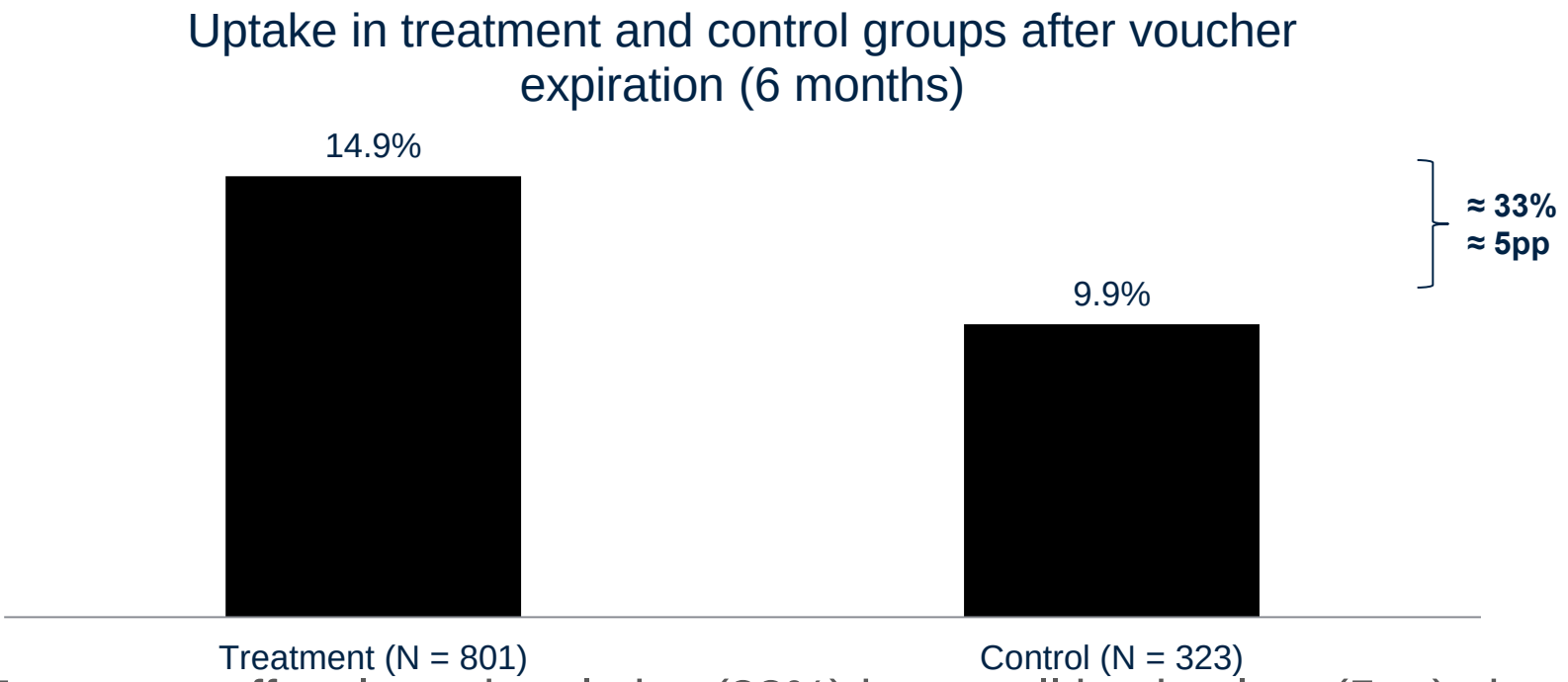
Case 1: The Philippines – results



- Treatment effect large in relative (33%) but small in absolute (5pp) size
- 85% of missing middle remain uncovered after treatment

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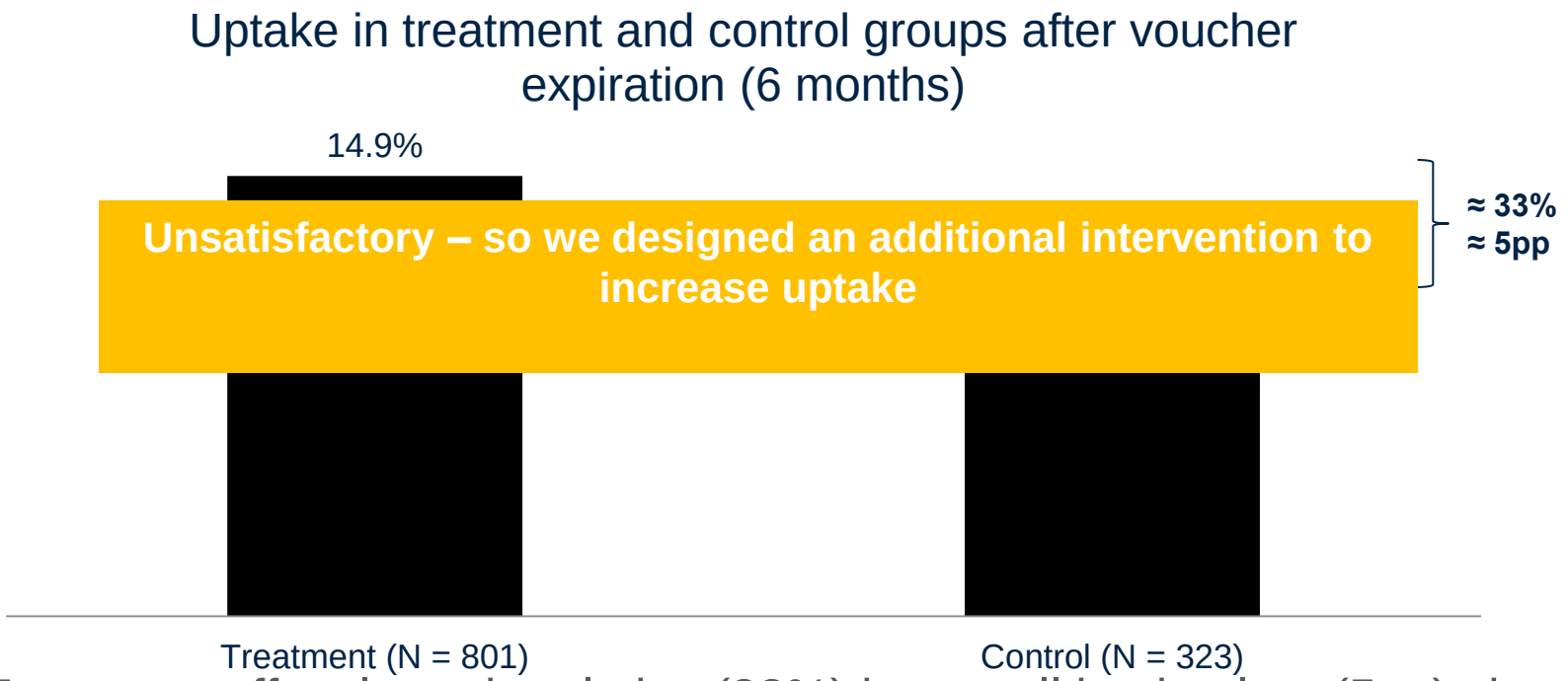
Case 1: The Philippines – results



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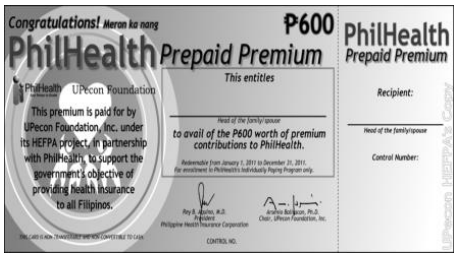
Case 1: The Philippines – 2nd experiment

- Sample: 628 households who received original treatment but did not enroll after 6 months
- Treatment: Random assignment of extended intervention packages A & B

A (Treatment)

Premium voucher = 50% subsidy



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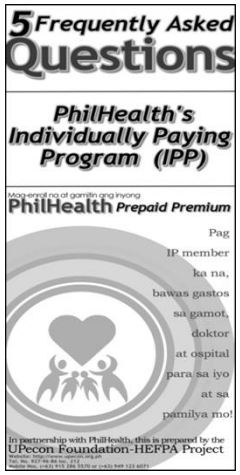

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SMS enrollment reminder

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Partially completed enrollment form

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Assistance in completing and submitting enrollment form

B (Control)

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Case 1: The Philippines – 2nd experiment

- Sample: 628 households who received original treatment but did not enroll after 6 months
- Treatment: Random assignment of extend… s A & B

Experiment tests additional effect of this on take-up

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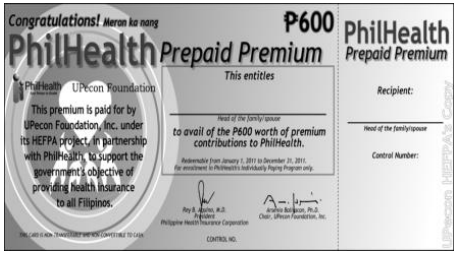

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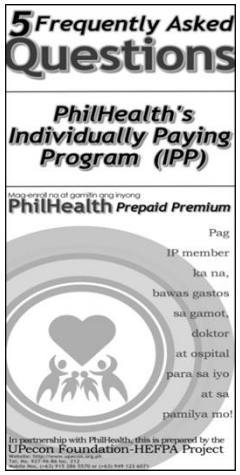

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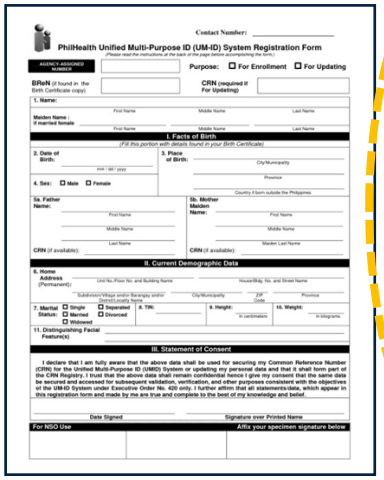

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Assistance in completing and submitting enrollment form

B (Control)

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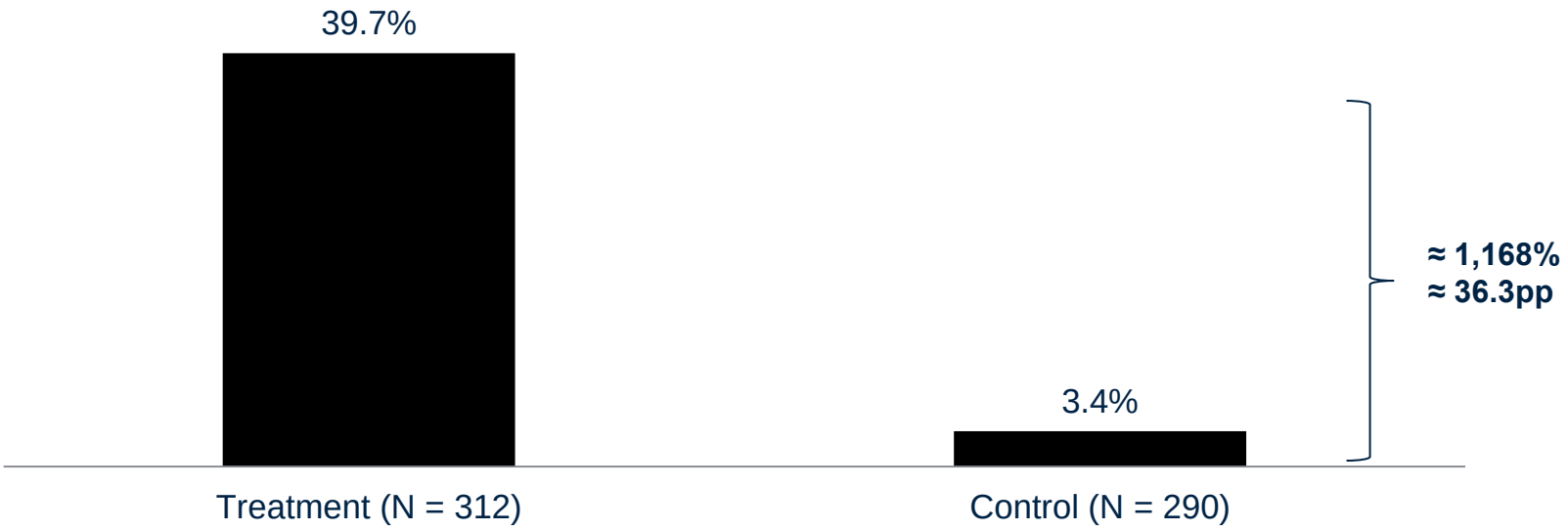
Case 1: The Philippines – 2nd results

Insurance uptake in intervention packages A (treatment) and B (control) after 2 months



- Assistance in enrollment form completion and mailing increases uptake of 'missing middle' by 36.5 ppts (>11-fold improvement over the control group)
- But 60% of 'missing middle' still remained uncovered

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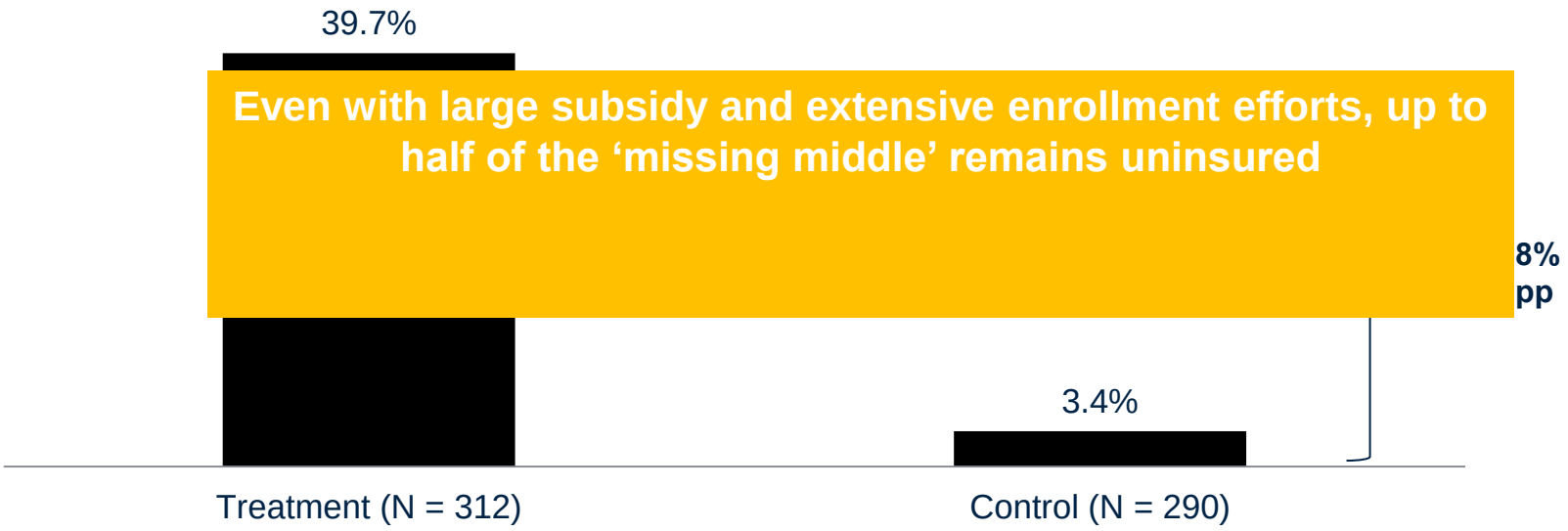

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Case 2: Vietnam – background

- Tax-financed cover for current and retired civil servants, war veterans, party officials, and other “persons of merit”
- Mandatory payroll-based cover for formal sector workers
- Tax-financed cover for poor and otherwise disadvantaged, children <6, elderly >80
- Voluntary public insurance for the rest with
  - Premium ~ US$21/year, sliding scale based on number of household members enrolled
  - 70% premium subsidy for near-poor
- Benefits: comprehensive (at least in theory)
- Missing middle: only around 4% of people who qualify for voluntary insurance & are not near-poor are insured, despite financial incentive for community insurance agents to enroll them

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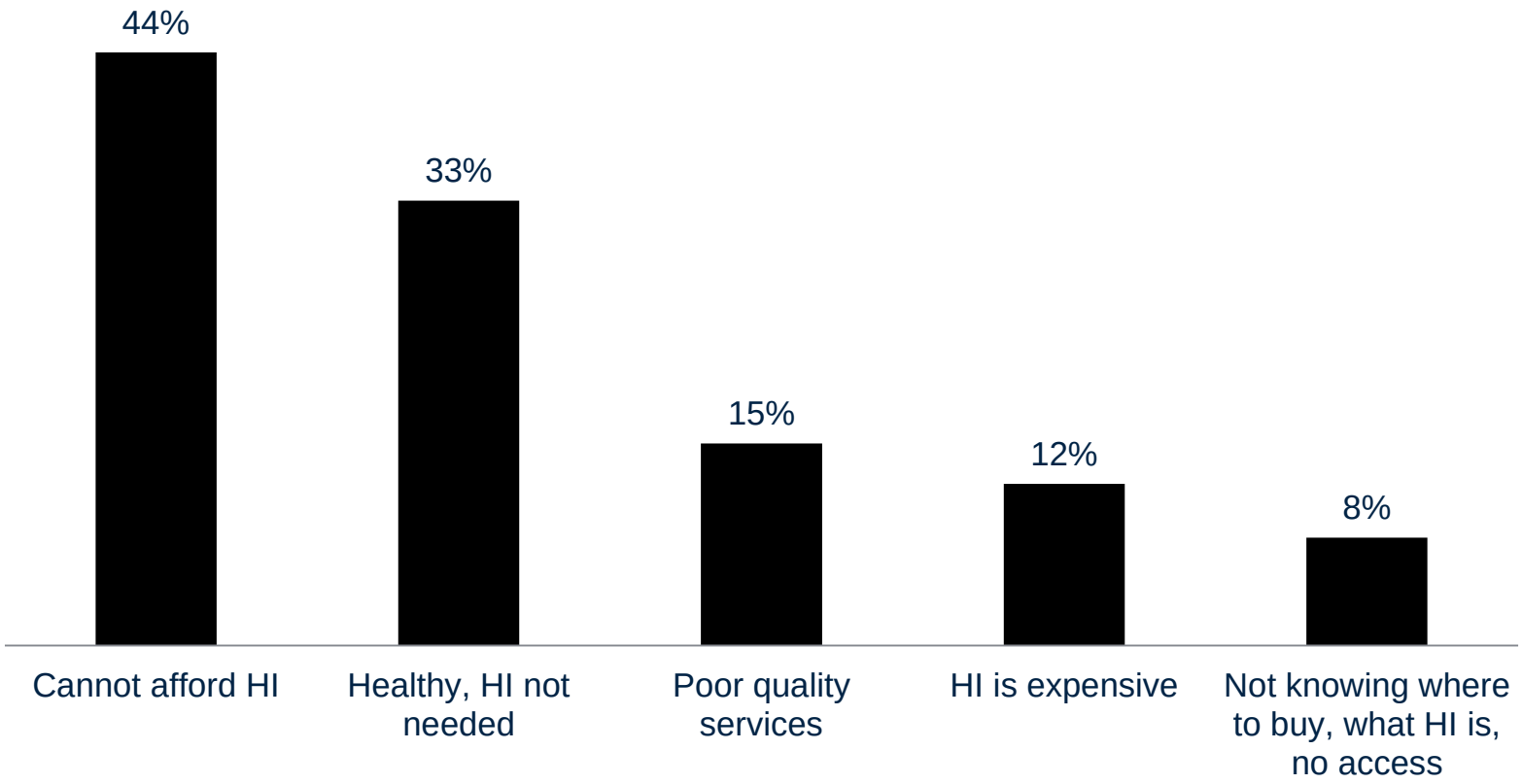
Case 2: Vietnam – reasons for non-enrollment



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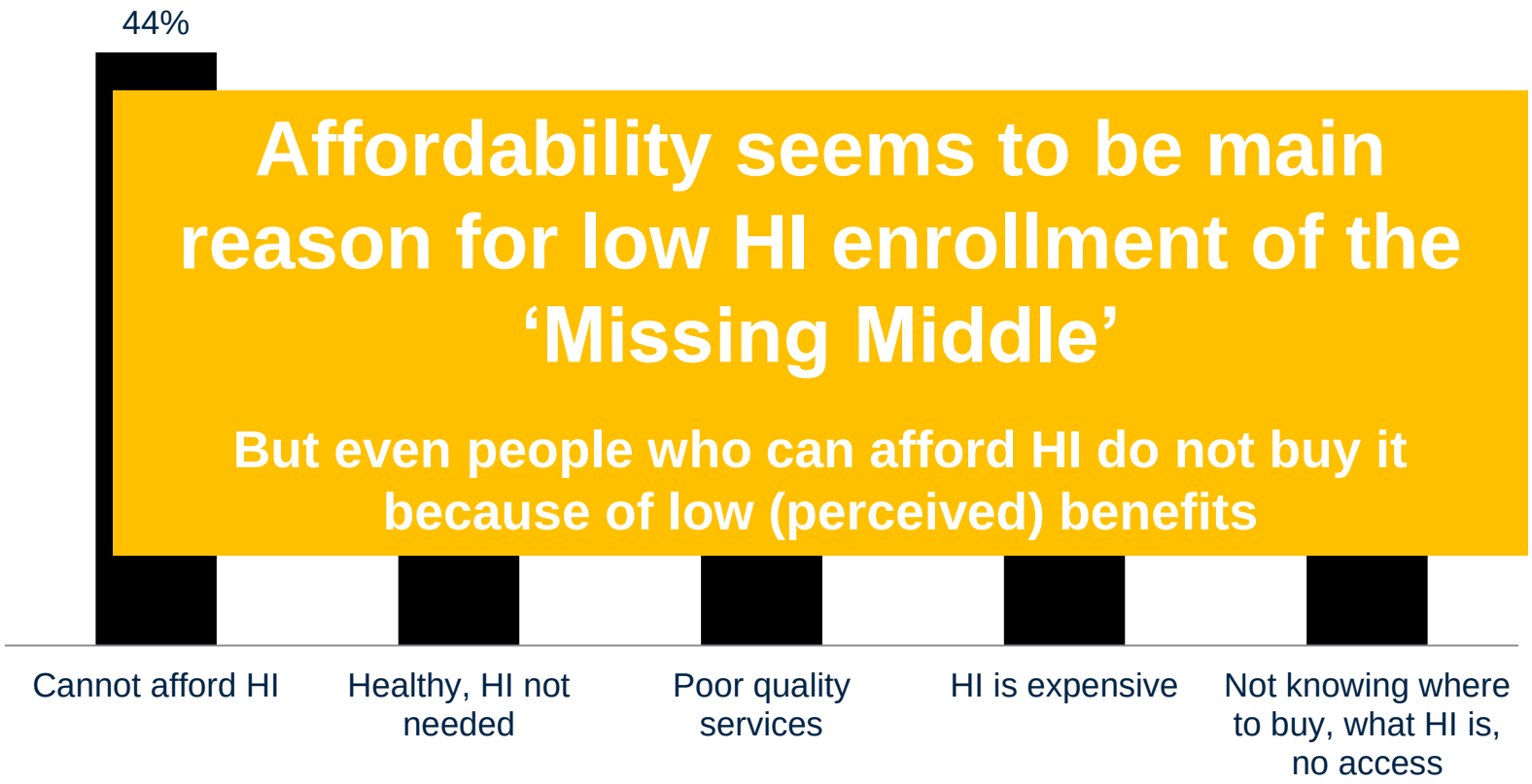

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Case 2: Vietnam – experiment

- Research question: effectiveness of subsidies and information leaflets in increasing uptake of voluntary health insurance/covering the missing middle
- Sample: 10,028 uninsured ‘Missing Middle’ individuals from 2,621 households,
- Treatment: Random assignment to 3 treatment groups, 1 control group
  - Treatment 1: 25% premium voucher, valid 8 months
  - Treatment 2: information leaflet
  - Treatment 3: 25% premium voucher + information leaflet
  - Control: nothing


Chúc mừng bạn! Bạn được hỗ trợ 25% tiền đóng bảo hiểm tự nguyện (trị giá 112,050 đồng/người/năm 2012 trước 30/4/2012 và 141.750 đồng kể từ 1/5/2012)*. Bạn chỉ phải đóng 336,150 đồng/người/năm nếu đóng trước 30/4/2012 và 425.250 kể từ 1/5/2012.

Bạn hãy dùng phiếu này khi đóng tiền bảo hiểm để nhận được hỗ trợ.

Tên người hưởng lợi .....
Địa chỉ người hưởng lợi.....
Tên và chữ ký của phòng vấn viên .....
Tên Chữ ký Ngày

* Do lương tối thiểu tăng sau 1/5 nên mức đóng tiền BHYT tăng theo
(Chú ý: Phiếu này không được tẩy xoá, không được dùng cho người khác; Hạn dùng của thẻ: chỉ dùng cho mua bảo hiểm năm 2012)

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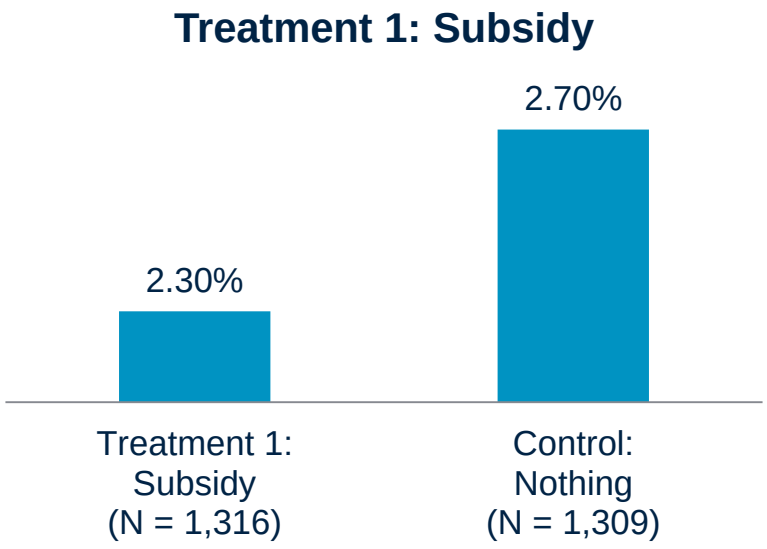
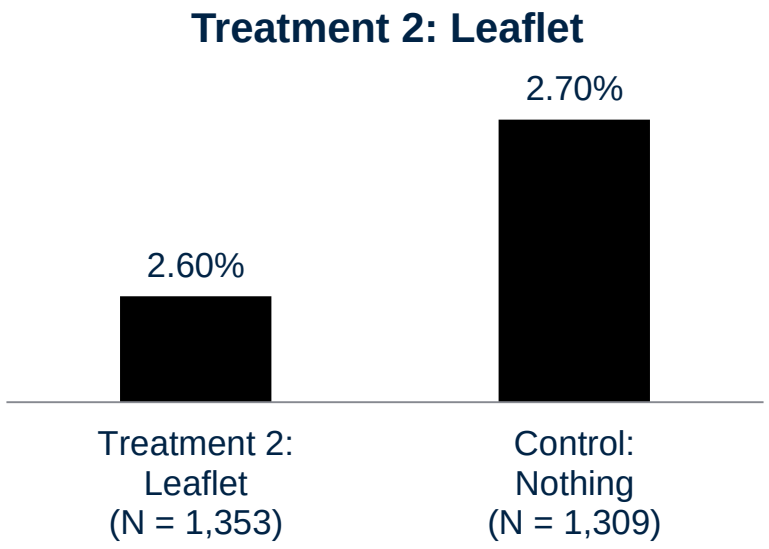
Case 2: Vietnam – results





- Subsidy alone does not increase uptake
- Leaflet alone does not increase uptake

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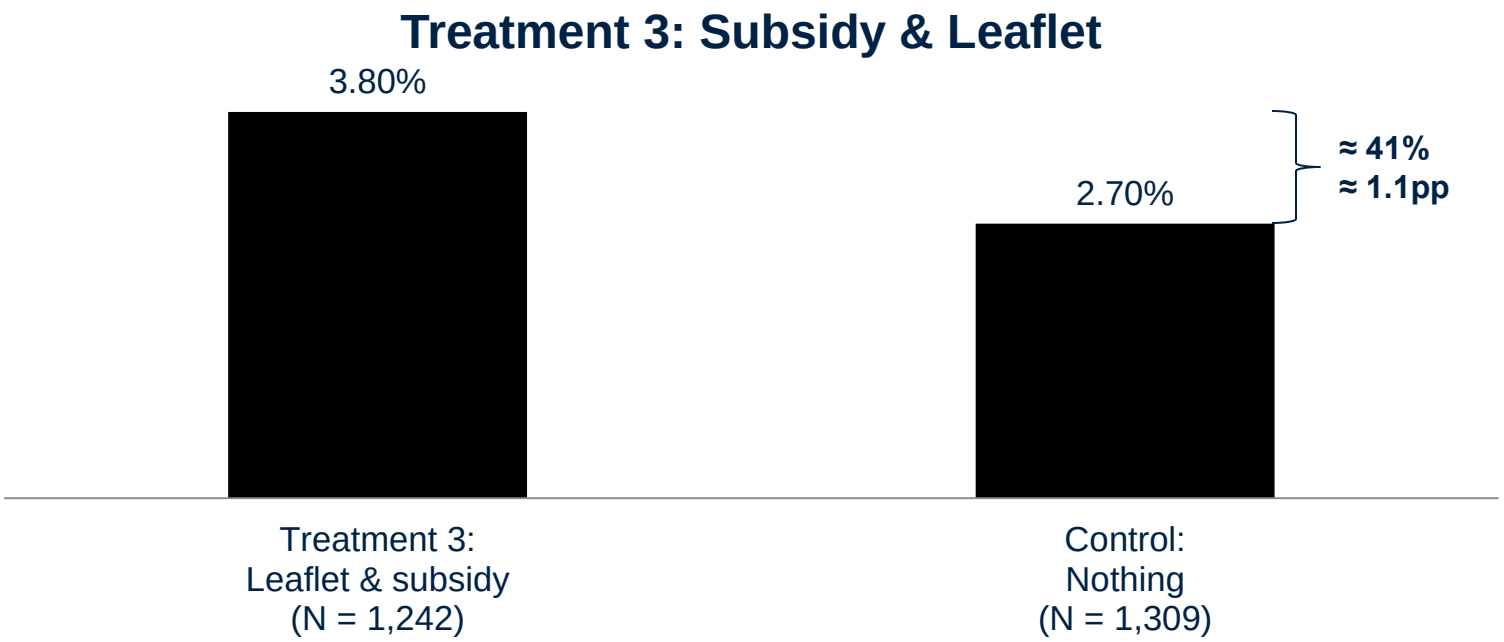
Case 2: Vietnam – results



- Combination of leaflet + subsidy increase uptake by 41% compared to no intervention - but effect small in absolute size (1.1pp) & not statistically significant

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We have you covered – or do we?
Conclusions

- Even with large premium subsidies and extensive enrollment efforts, voluntary health insurance will not achieve Universal Coverage
- Actually, you won't get anywhere near UHC if you do not subsidize almost fully
  - This is in line with the evidence from other countries
  - In China and Rwanda however, "voluntary" schemes achieved near universal enrollment a decade after their introduction
  - But backed up by strong positive & negative incentives for local authorities to enroll people
- Thailand has taken the 'easier' route – covered the middle with a tax-financed entitlement in 2001

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  - Setting provider incentives so they contribute to the twin goals of UHC
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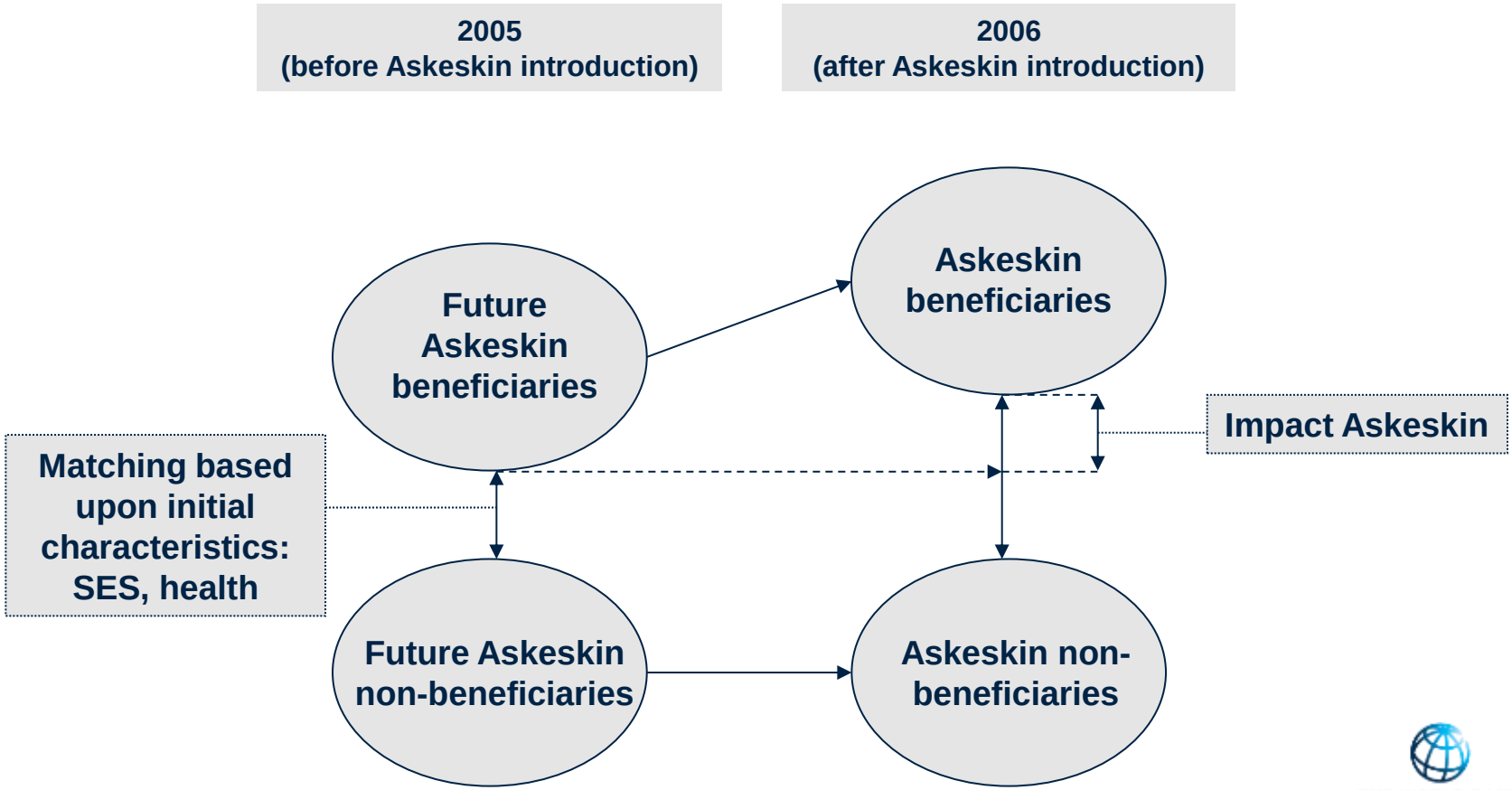
Case 3: Indonesia – background

	Askeskin (later Jameskesmas)
Target population	Poor and near-poor. Late 2000's: 76.4 million people or ~33% population
Agency running the program	MOH
Geographic coverage	National
Benefit package	Comprehensive. Generic drugs. No co-payments
Funding of program	Publicly financed out of general taxation. Central government. No household contributions.
Eligible providers	Public and private; primary care consists of public facilities only, and 30% network hospitals are private
How providers are paid by the program	Capitation based payment for basic health services, and diagnostic related groups (DRGs) to hospitals

Case 3: Indonesia – evaluation design

- Nationwide reform: difference-in-differences method on panel data matched for initial characteristics (PSM)



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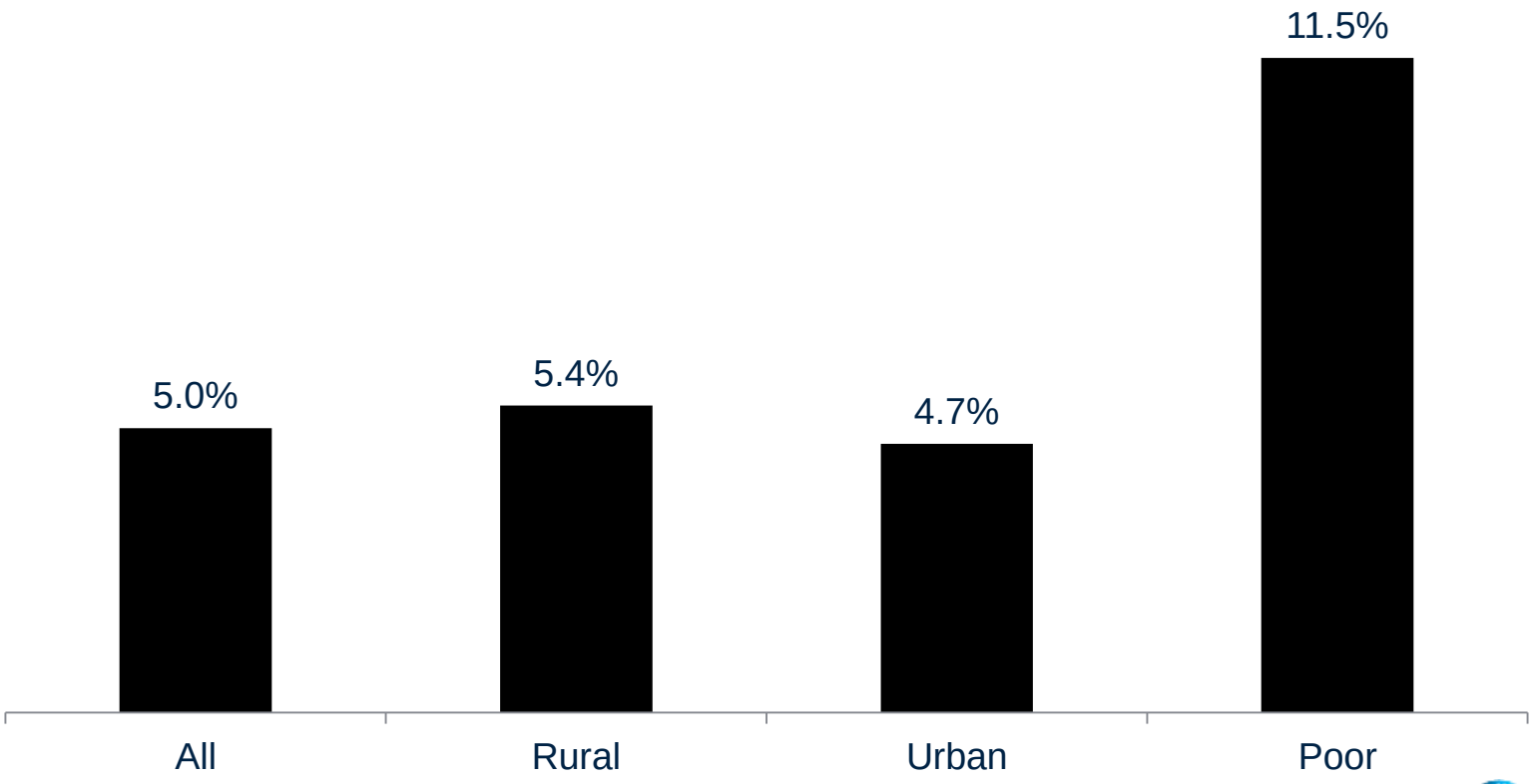
Case 3: Indonesia – results: ambulatory care



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Case 3: Indonesia – results: financial protection

	OOP spending (budget share)	Catastrophic spending (15% share threshold)
Quartile 1 (poorest)	0.0030	0.0065
Quartile 2	**0.0064***	0.0164
Quartile 3	0.0011	0.0003
Quartile 4 (richest)	0.0072	-0.0073
Rural	0.0005	0.0031
Urban	**0.0100***	0.0108
Total	**0.0031+**	0.0051

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Case 4: Thailand – background

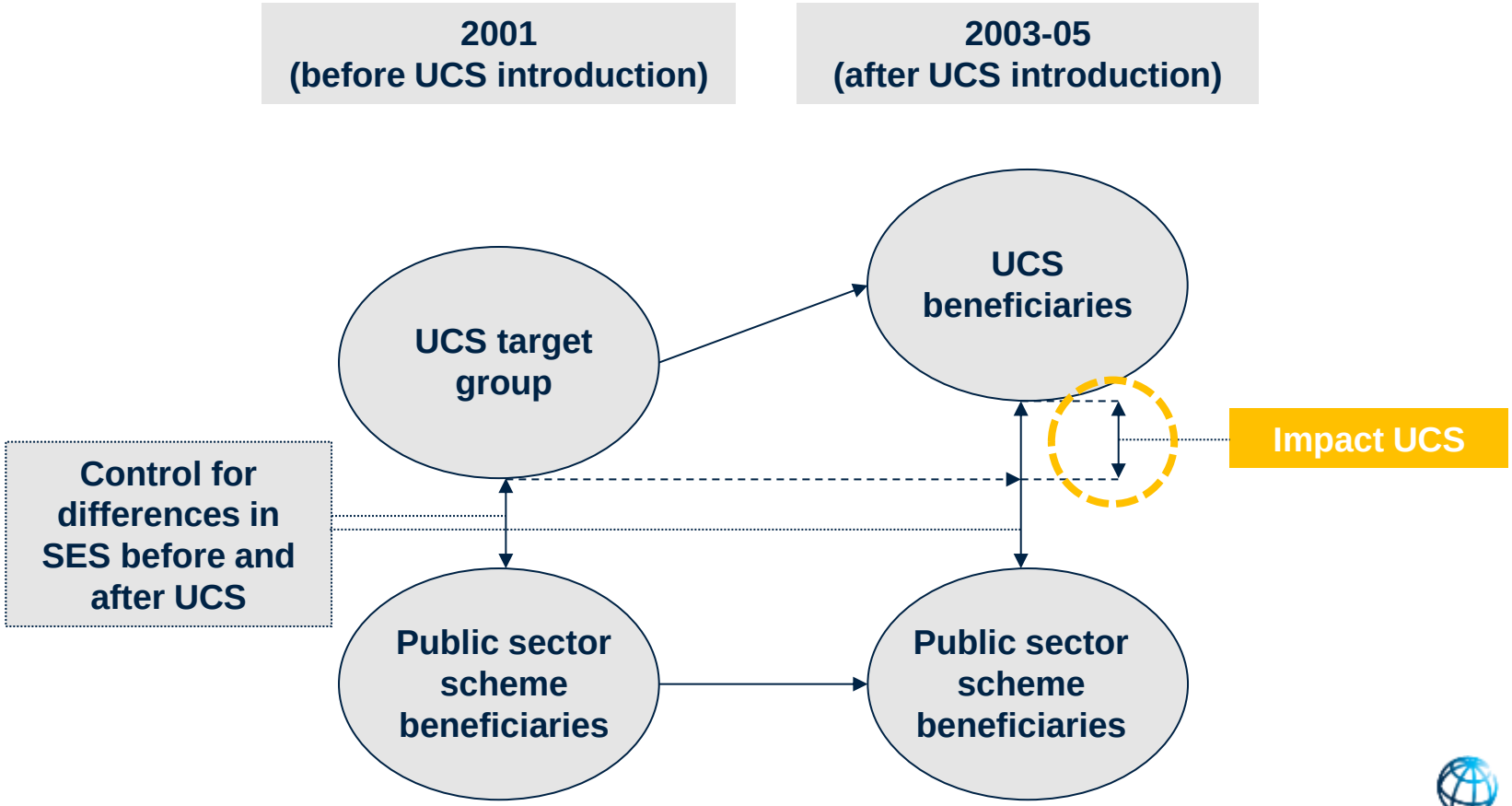
- Universal Coverage key in Thai Rak Thai party's 2001 election campaign that it wins by landslide
- Universal Coverage Scheme (UCS) roll-out begins 04/2001, is complete within a year
- UCS entitles everyone not insured through formal sector schemes to mainly tax-financed healthcare
- Covers uninsured 'Missing Middle' and replaces public voluntary health insurance scheme and free healthcare scheme for the indigent
- Entitlement comprehensive: OP, IP, medicines (stepwise inclusion of some initially excluded high cost treatments)

Case 4: Thailand – study questions

- Giving entitlements is easy, but is coverage effective in reality?
  - UCS budget: initially 18 US$ per beneficiary (excl. salaries)
  - Shallow/ineffective coverage may fail to reduce OOP spending and/or increase utilization – like in China, Colombia, Mexico, Indonesia,…
- Research question: has UCS increased utilization and reduced OOP spending?

Case 4: Thailand – evaluation design

- Nationwide reform: difference-in-differences method



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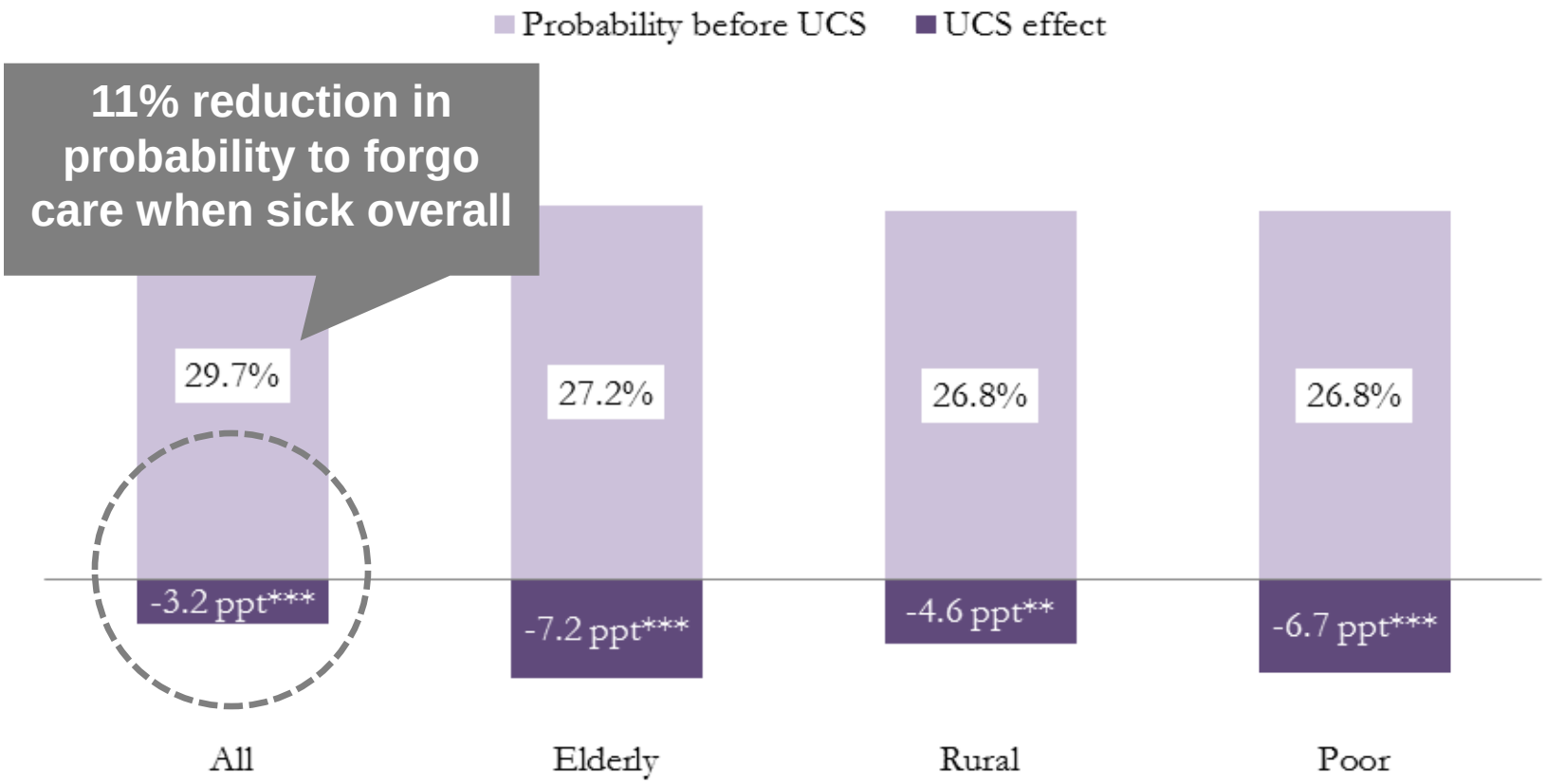
Case 4: Thailand – results

- Not using ambulatory care when sick



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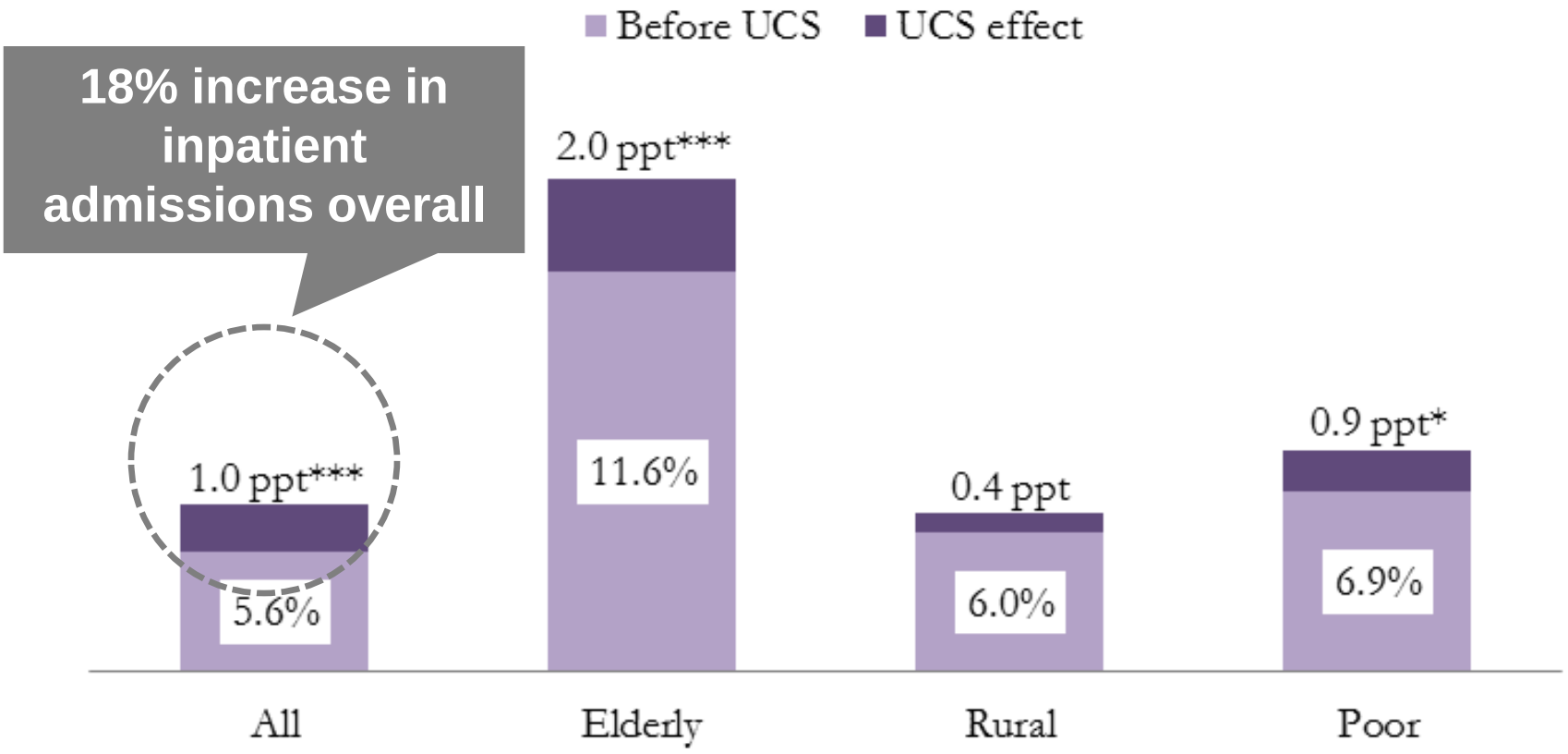
Data: Thai Health and Welfare Survey (HWS)

Case 4: Thailand – results

- Inpatient admission



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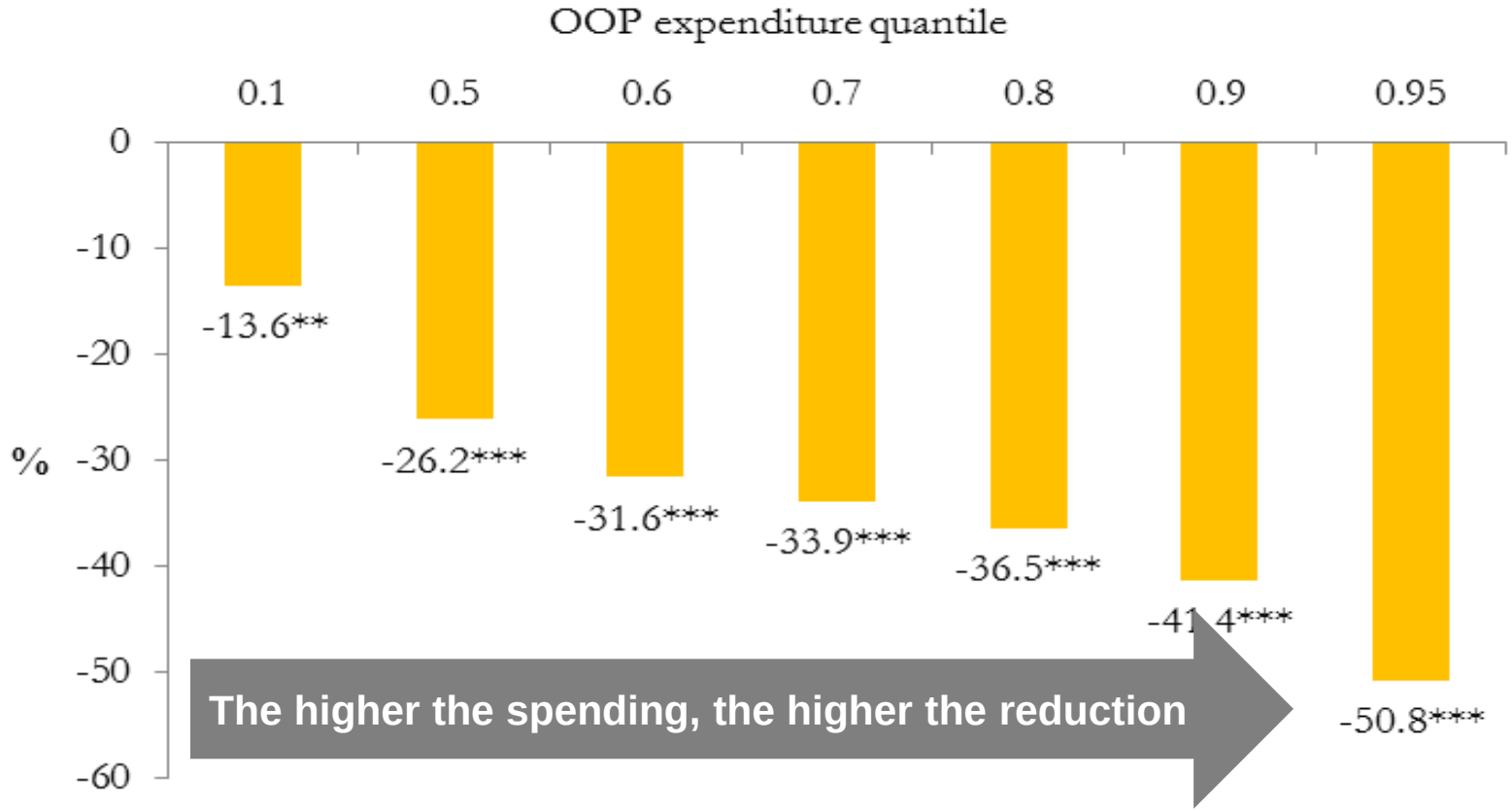
Data: Thai Health and Welfare Survey (HWS)

Case 4: Thailand – results

- Results – OOP spending



*p<.1, **p<.05, ***p<.01
Data: Thai Socioeconomic Survey (SES)

We have you covered – now what?
Conclusions

- Expanding insurance coverage has had mixed results
  - Expanding insurance coverage has improved financial protection and increased utilization in Thailand
  - In Indonesia, it increased utilization but did not improve financial protection. Similar to results for China
- When insurance coverage does improve financial protection, it doesn't necessarily eliminate financial protection concerns
  - In Thailand, among the UC scheme target subpopulation, even after the scheme was rolled out
    - ✓ 67% still reported out-of-pocket spending
    - ✓ the share of consumption absorbed by out-of-pocket health spending was 2%
    - ✓ catastrophic spending was 4.5%

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Case 5: China – background

- Out-of-pocket payments are a cost to a family, but a source of income to a health provider
- Out-of-pocket spending persist even after health insurance coverage expansions because providers rely on them for their income
- Where providers are paid fee-for-service (FFS), as in China, there's a strong temptation to focus on treating more patients, doing more tests, prescribing more – and more expensive – drugs, etc.
- Shifting from FFS toward payment methods such as capitation and salaries, and combining these with incentives for delivering good quality care, may be a more effective approach to reducing out-of-pocket spending
- It may also help curb unnecessary care, thus helping a country ensure everyone gets the care they need

Case 5: China – study details

- In two provinces – Shandong and Ningxia – the HEFPA team helped local government officials shift from FFS to capitation
- They also randomly assigned some township health centers to a payment regime where facilities earned points according to the quality of the care they delivered
- Given the problem of overprescribing, many of the indicators focused on prescribing patterns – use of antibiotics, intravenous drugs, steroids, etc.
- The points were used to calculate how much of a facility's capitation budget that was withheld at the start of the monitoring period would be 'returned' to it to at the end of the monitoring period
  - In Shandong, performance was compared to pre-announced targets, and the maximum a facility could earn was 100% of its capitation budget
  - In Ningxia, a facility's performance was compared to average performance in the county, so above-average performers got a supplement to their capitation budget

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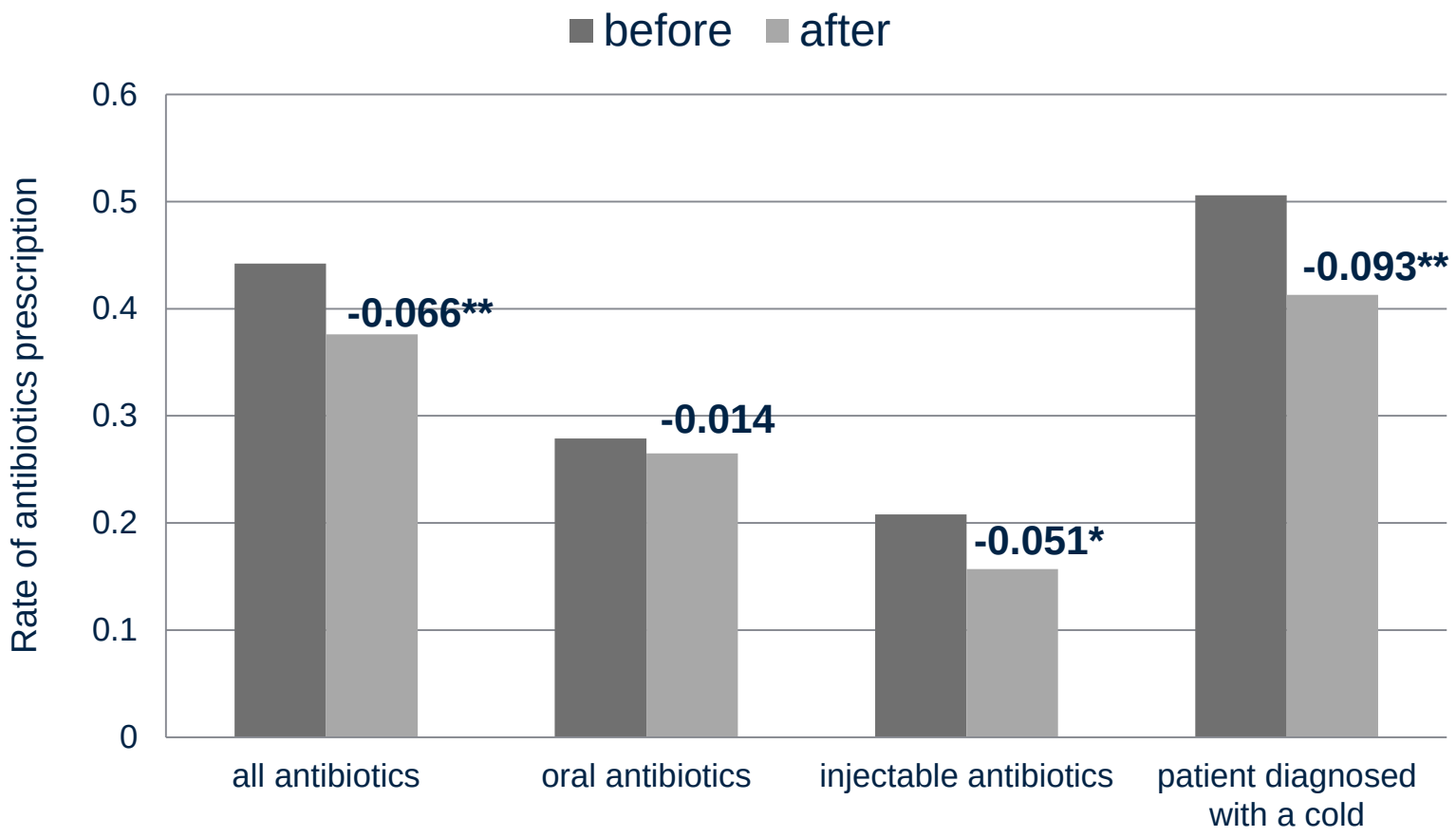
Case 5: China – results

- In Ningxia, pay-for-performance (P4P) led to improvements in prescribing behavior (e.g. fewer antibiotics, and fewer injected antibiotics)
- In Shandong, P4P improved the quality of care in the first of the two study counties, but not in the second
  - The reason for the difference is linked to the fact that payments in the Shandong experiment were based on performance relative to targets
  - By the time the study started most facilities in the second county had already achieved their targets; by contrast, those in the first had not and thus had an incentive to continue to improve their prescribing quality indicators
- Neither experiment reduced out-of-pocket spending
  - Only in village posts in Ningxia did P4P reduce the amount that a patient paid out-of-pocket during a visit, and even then the reduction was just 3%

Case 5: China – results

- Effects of capitation+P4P on prescription of antibiotics for diseases normally not requiring antibiotics – THC (Ningxia)



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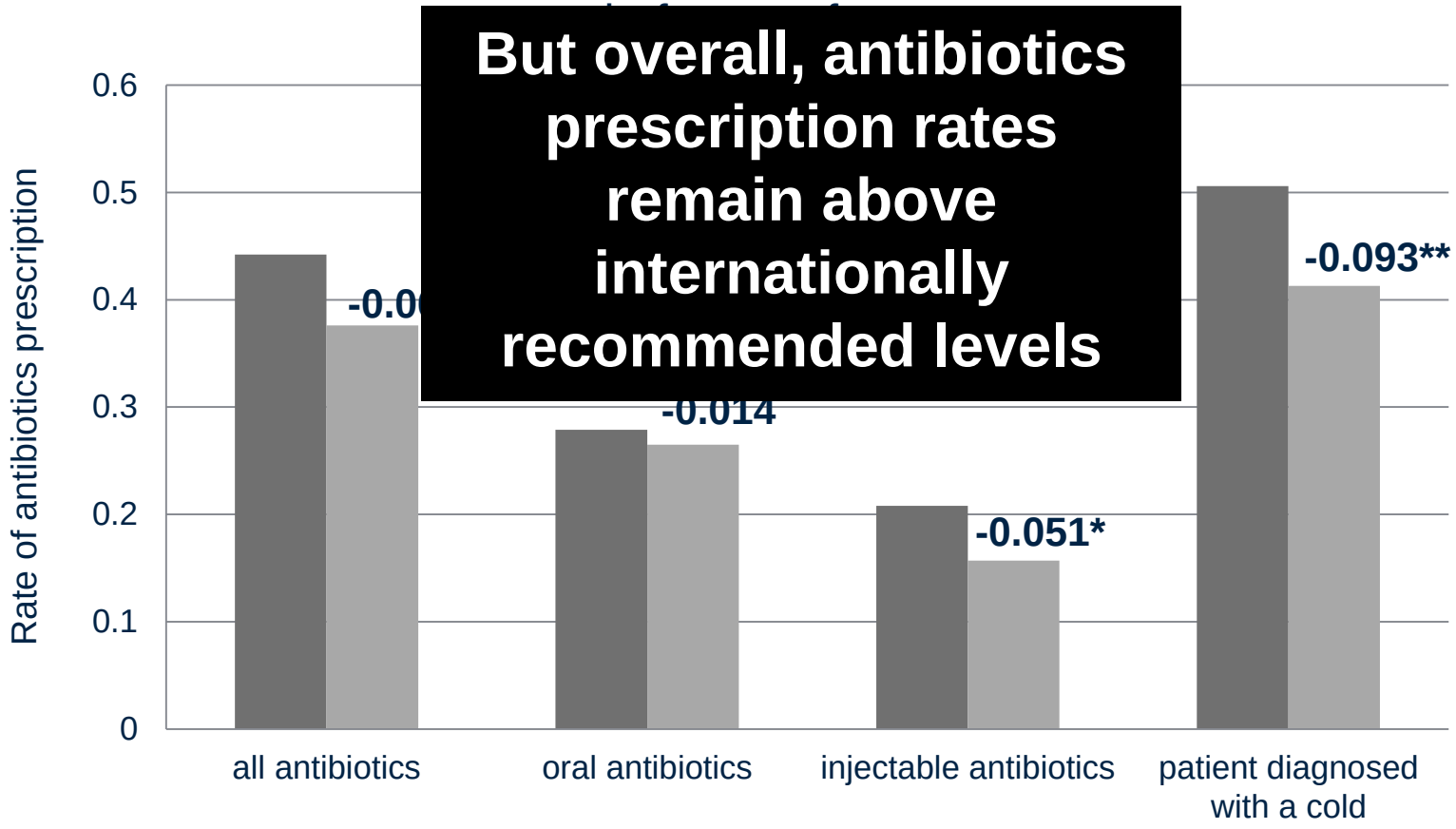
Case 5: China – results

- Effects of capitation+P4P on prescription of antibiotics for diseases normally not requiring antibiotics – THC (Ningxia)



Provider incentives and out-of-pocket spending *Conclusions*

- Grappling with provider incentives may be just as – if not more – important in the UHC agenda than working on demand-side interventions
- P4P holds some promise as a potential UHC policy instrument. But the China results suggest caution is warranted:
  - Even with P4P, antibiotic use was still far above international levels, and
  - Out-of-pocket spending was not reduced

HEFPA study conclusions

- Subsidized health insurance doesn't look like it's the answer to UHC's 'missing middle' problem
  - Subsidies and information had some effects on enrollment, but left vast majority unenrolled
  - Reducing transactions costs associated with enrollment more important
- Expanding insurance coverage has had mixed results
  - In Thailand, it raised utilization and reduced out-of-pocket spending. In Indonesia, it only raised utilization
  - Even in Thailand, insurance expansion did not eliminate financial protection concerns
- Grappling with provider incentives may be just as important in the UHC agenda as working on demand-side interventions
  - P4P holds some promise as a potential UHC policy instrument. But in China, reduction of unnecessary care was small, and out-of-pocket spending was unaffected

More on HEFPA from:

- HEFPA website:
  - http://www.bmg.eur.nl/english/research/eu_projects/hefpa/
- Blog post:
  - http://blogs.worldbank.org/developmenttalk/we-just-learned-whole-lot-more-about-achieving-universal-health-coverage
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