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Offsetting Effects of Prescription Drug Use on Medicare's Spending for Medical Services

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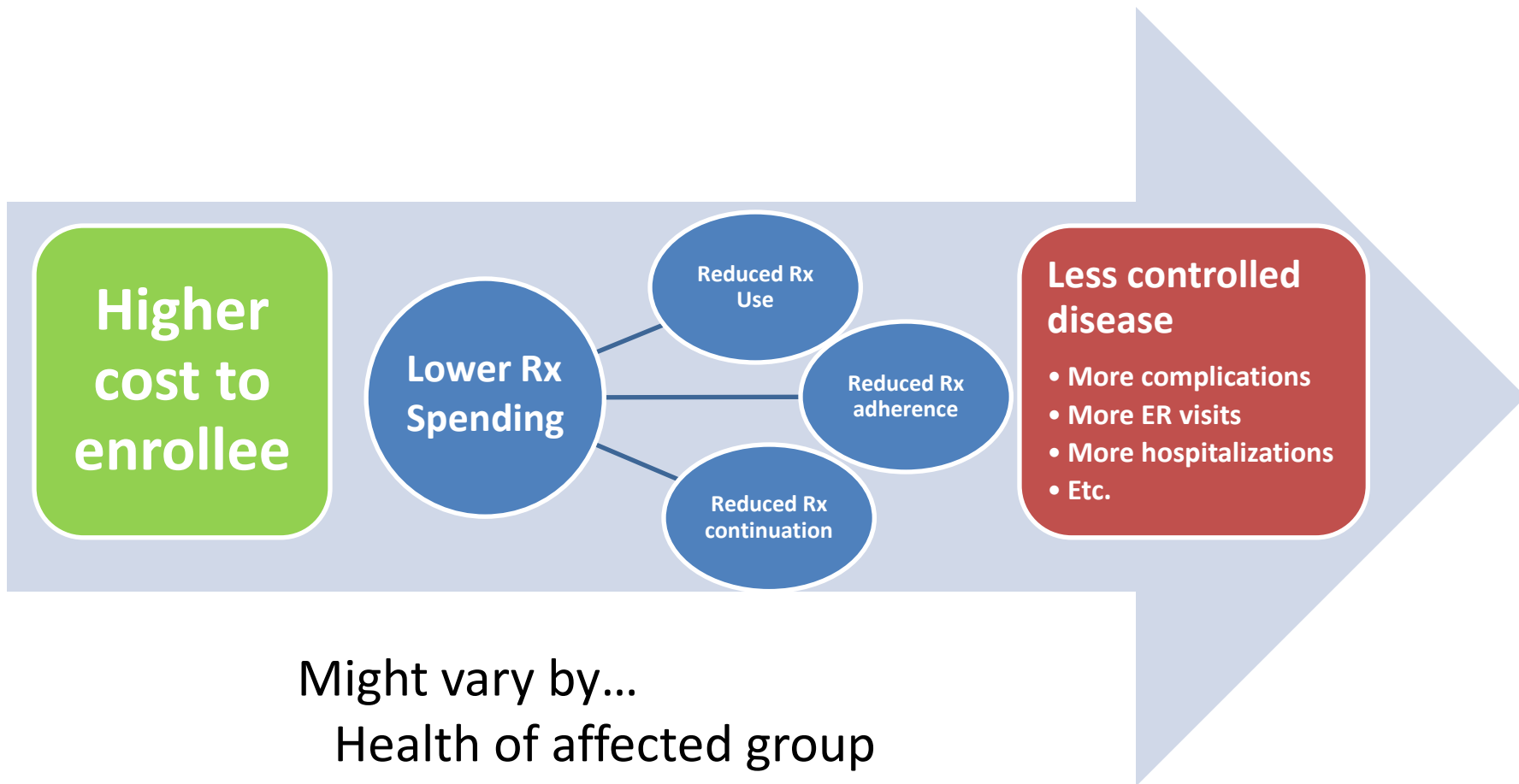
Overview

- Why did CBO revisit the effect of changes in drug use on medical service use?
- How does the use of prescription drugs affect medical spending?
- Methodology and methodological issues to consider
- Literature and results
- Example of applying the medical-drug “offset”

Why Revisit the Relationship Between Drug Use and Medical Spending?

- New evidence, advances in the literature
- Congressional interest in a range of drug cost-sharing proposals, e.g.:
 - Lower LIS generic copay and increase LIS brand copay
 - Increase manufacturer's discount in the coverage gap
 - Fill the donut hole

How a Drug Price Affects Medical Spending



Might vary by...

Health of affected group

Size of change in Rx price

Direction of change in price

Methodology:

Study Selection and Results Calibration

- Select studies:
 - Analysis of changes in overall drug use
 - Populations “applicable to” Medicare population
- Calibrate study results:
 - Adjust to be consistent with overall Medicare population
 - Adjust to be consistent with overall medical spending
 - Scale to be consistent with a 1 percent change in prescription drug use
 - Calculate average of calibrated, scaled results weighted by study quality

Issues to Consider

- Are effects symmetric to increases and decreases?
Linear?
- Can the factor be applied to subgroups of the Part D population?
- Can we apply the logic to specific drug classes (e.g. biologics)?

Estimates of the Size of the Offset

- One study estimated the impact of pharmaceutical policies on a broad population outside of Medicare (Gaynor, Li, & Vogt, 2007)
- Four studies estimated the impact of pharmaceutical policies on Medicare beneficiaries prior to Part D implementation (Chandra et al., 2010; Stuart et al., 2009; Shang and Goldman, 2007; Hsu et al. 2006)
- Three studies compared medical expenditures before and after Part D implementation (McWilliams et al. 2011; Afendulis et al. 2001; Zhang et al. 2009)

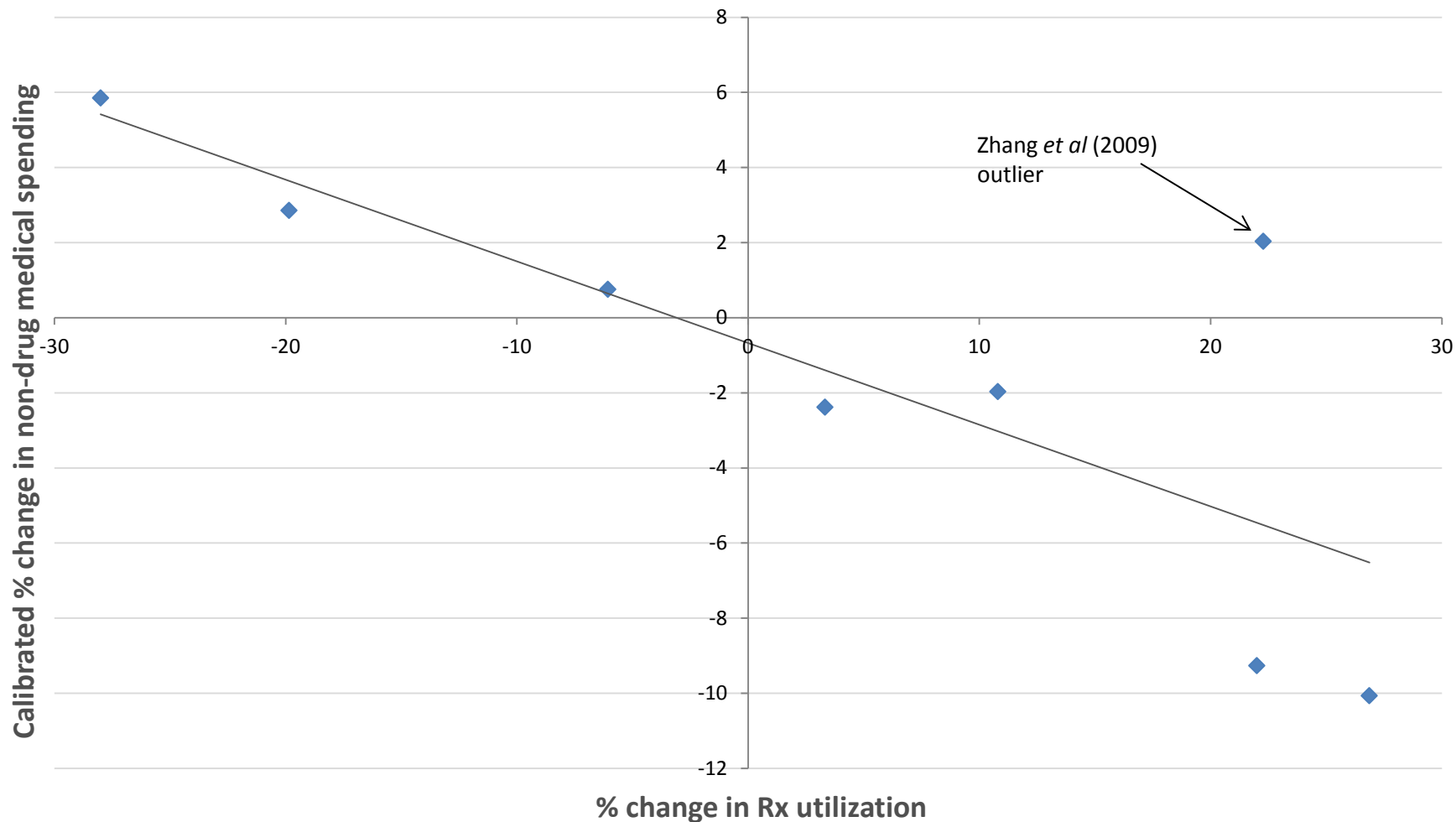
Effect of a 1 Percent Increase in Drug Use on Other Medical Spending

Scaled Results Range	-2/3 % to +1/3%
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Scaled Range Excluding Max and Min	-4/10% to -1/10%
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Weighted Average	-1/5 %
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The relationship between changes in drug utilization and non-drug medical spending appears to be symmetric and linear



Applying the Offset

■ When?

- For policy changes that are estimated to change the **quantity** of drugs consumed in the Medicare program
- **Not** for policy changes that affect other programs
- **Not** for policy changes that would not directly induce a change in the quantity of drugs consumed

■ How?

- First: estimate a proposal's direct effect on prescription drug costs
- Next: estimate the effect on the number of prescriptions filled
- Last: calculate any resulting offsetting effect on spending for medical services.

Applicability to Population and Drug Subgroups

- Population subgroups:
 - CBO will apply the factor to policies affecting broad subgroups (e.g., LIS or non-LIS population)
 - Narrower populations decided on a case-by-case basis (Study results may or may not be applicable)
- Drug subgroups:
 - Studies addressed changes in overall drug use
 - Effects within therapeutic classes will require further literature review for those classes

Example: Closing the Part D Coverage Gap

- Components of closing the gap:
 - 50% manufacturer’s discount on brand drugs in the coverage gap (for non-LIS beneficiaries only) began in 2011.
 - Part D Plans gradually responsible for more coverage until, in 2020, they pay for 25% of brand drugs & 75% of generics.
- Estimated effect:
 - Total consumption of drugs by non-LIS will increase by 5% by 2018.
 - By 2018, spending for medical services expected to fall by 1% for this population.
 - For 2013-2022 period, Medicare medical spending estimated to fall by \$35 billion (out of \$5.6 trillion).
 - Estimated cost of closing the gap for 2013-2022 period drops from \$86 billion to \$51 billion.