

## Effects of Medicare Pharmaceutical Benefits Scheme' Safety Net program in Australia

### Objectives

Australians can obtain subsidized prescription drugs listed on the Medicare's Pharmaceutical Benefits Schemes (PBS). In addition, once patients' spending on medications reaches certain thresholds in a calendar year, they can obtain medications at reduced cost for the rest of the year under the PBS's Safety Net program. Currently, the PBS Safety Net threshold for patients with a concession card is \$262.8 and \$1,563.5 for general patients. We study how people respond to reaching their safety net. Specifically, how they change their medication consumptions after reaching the threshold, and whether they anticipate reaching the threshold and change their behavior before.

### Methods

We use 2011-2021 national Medicare PBS data linked with the Australian Census data. We identified general patients and concession card holders because their copayments and safety net thresholds differ. We calculated proportions of people reaching the safety net thresholds each year and examined their medication use patterns each month before leading to and after reaching the safety net thresholds. We also conducted difference-in-differences analyses to study the effect of reaching the safety net on their medication consumption, as well as anticipatory effects of the safety net program.

### Results

About one third of Australians did not fill any PBS prescriptions in 2021. Among those who filled at least one PBS script in 2021: 39% held concession cards, i.e., paying \$6.8 instead of \$42.5 copayment per monthly script; and about 11% reached the safety net in 2021, similarly for general and concessional patients. Proportions of patients reaching the safety net increased slightly over time, ranging from 8-11% per year from 2011-2021. In 2021, patients not reaching the safety net filled 23.5 scripts per year on average, while those reaching the safety net filled 75 scripts per year.

Individuals use more medications after reaching the safety net because medications are cheaper. But they don't differentiate type of medications: e.g., they stockpile both chronic essential medications and antibiotics for acute care; more concerning, they also stockpile large quantities of opioids. More interestingly, people also anticipate reaching the safety net and increase their consumption one to three months before leading up to reaching the thresholds. Other factors affecting the use of medications include gender, age, state, and whether they live in rural or disadvantaged areas.

### Discussion

A relatively small proportion of people reach the safety net. Reaching or anticipating reaching the safety net increases medication consumption. Safety net program could be improved by differentiate insurance coverage for high-value vs low-value drugs.