

Expanding Naloxone Accessibility: A Lifesaver or a Risky Setback?

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Naloxone in Opioid Crisis

Governments have responded to the **opioid crisis** by **expanding naloxone access**, a life-saving opioid antagonist. While effective in reversing overdoses, broader availability introduces trade-offs such as potential moral hazard and increased misuse.

How Biden's New Opioid Initiative Could Create More Drug Addicts
White House set to make naloxone available over the counter. Experts say it won't help the opioid crisis.



This policy is like **cancer**.
The Washington Free Beacon, 2024

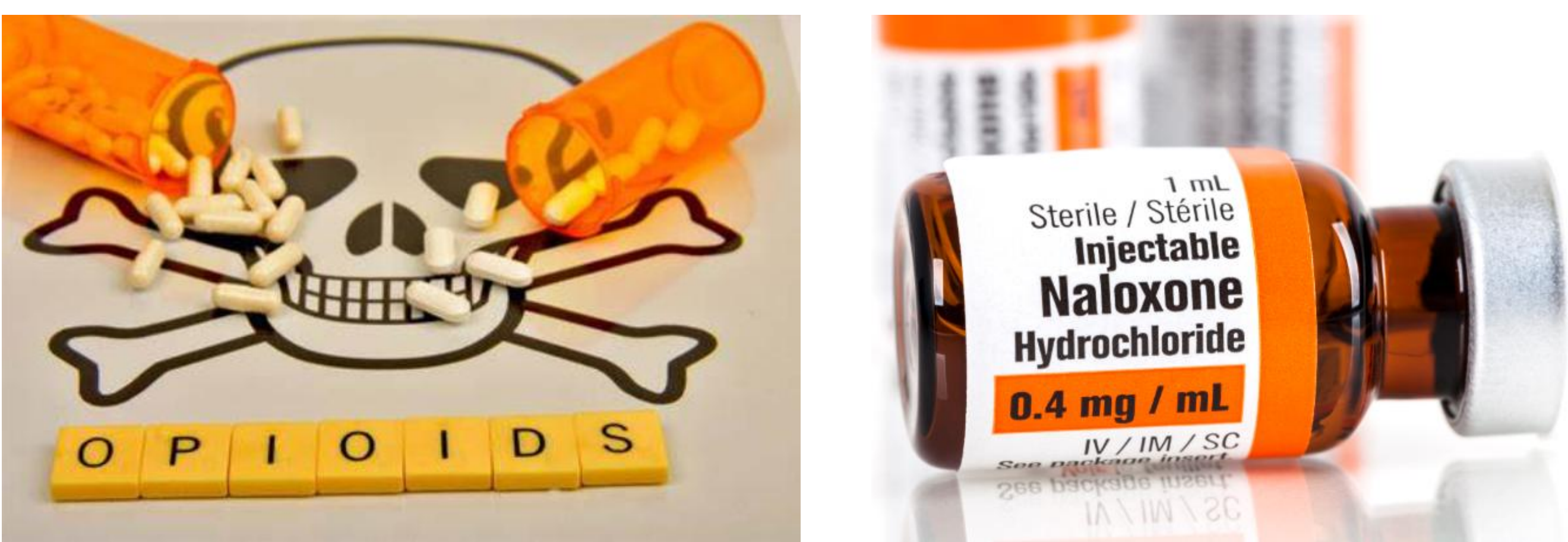
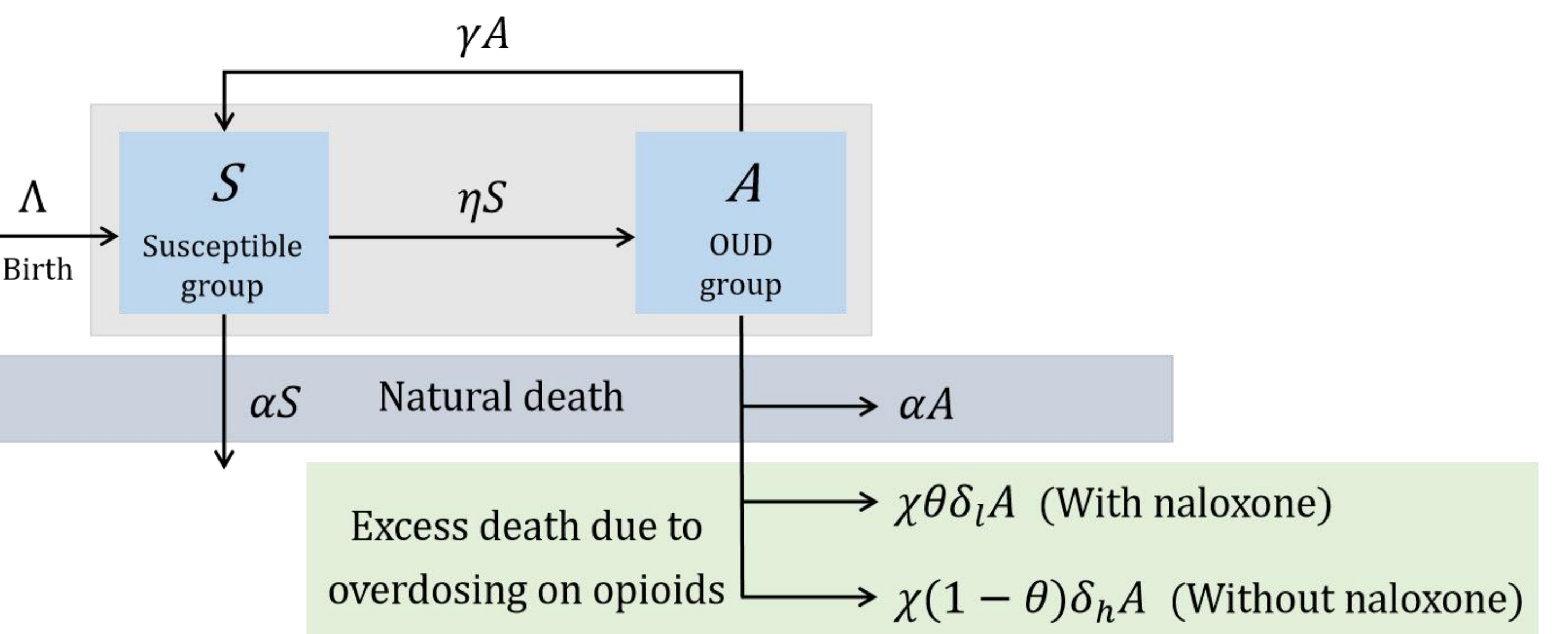
Moral Hazard Has No Place in Addiction Treatment
March 1, 2024



This policy is **excellent**.
The New York Times, 2024

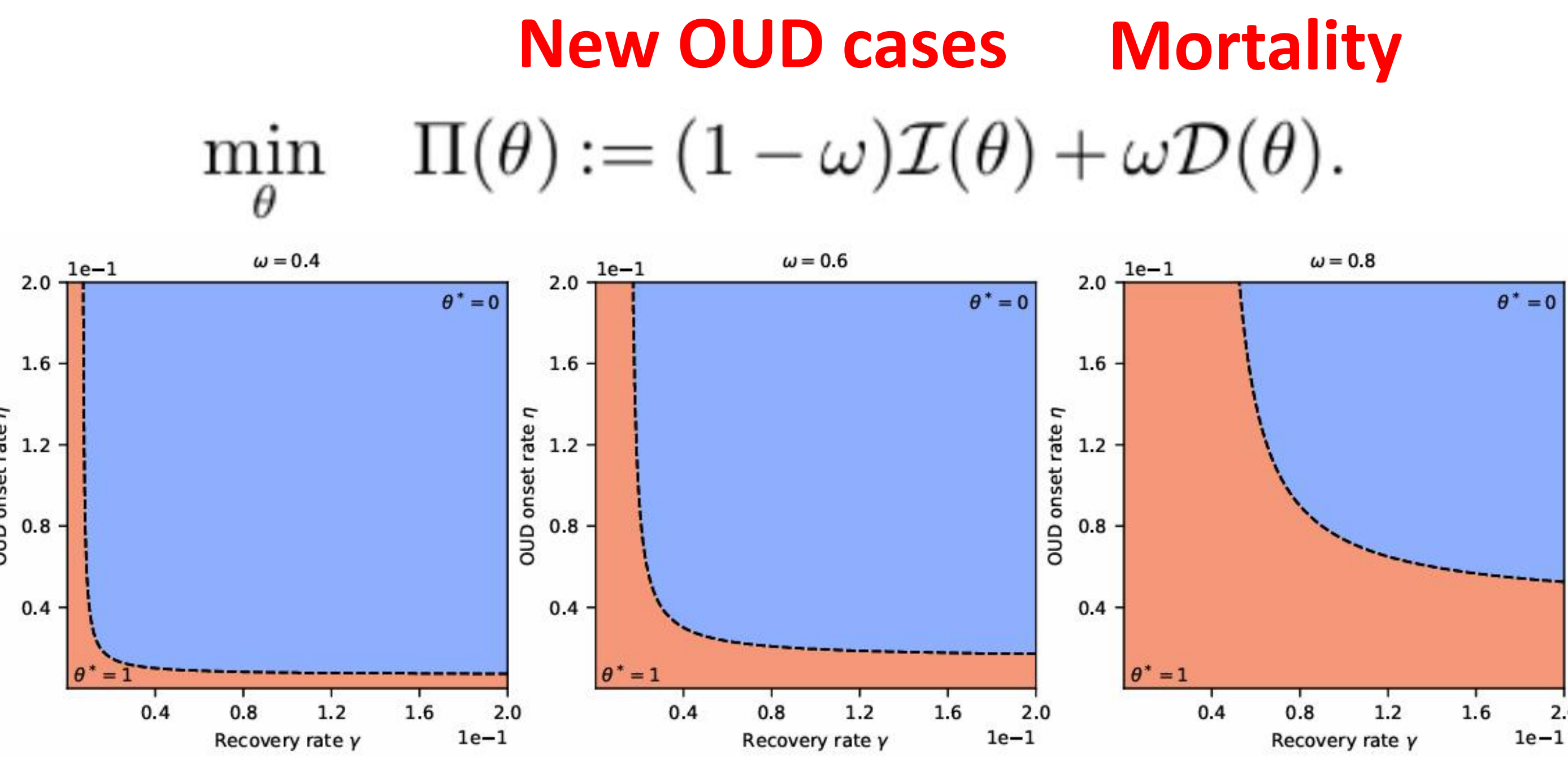
Compartmental Model

We develop a **compartmental model** to examine the effects of naloxone accessibility on the opioid epidemic, capturing transitions between susceptible individuals and those with opioid use disorder (OUD).



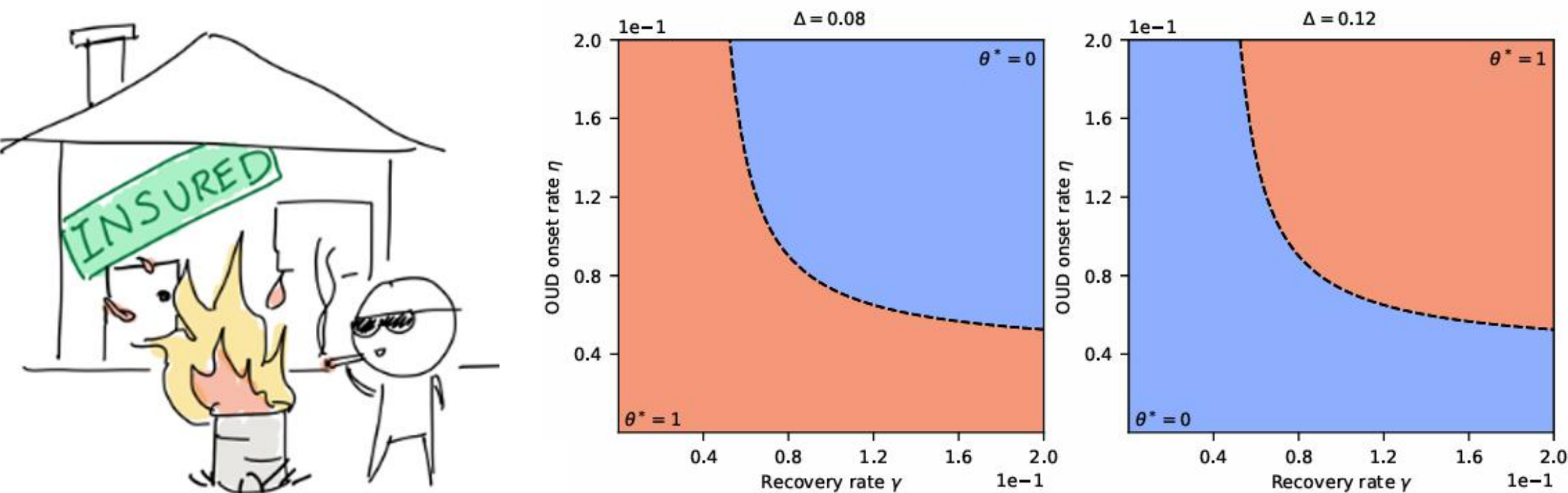
Accessibility Optimization

We propose an optimization problem that minimizes the weighted averages of new OUD cases and overdose mortality to capture the trade-off and derive the optimal accessibility of naloxone.



Accounting Moral Hazard

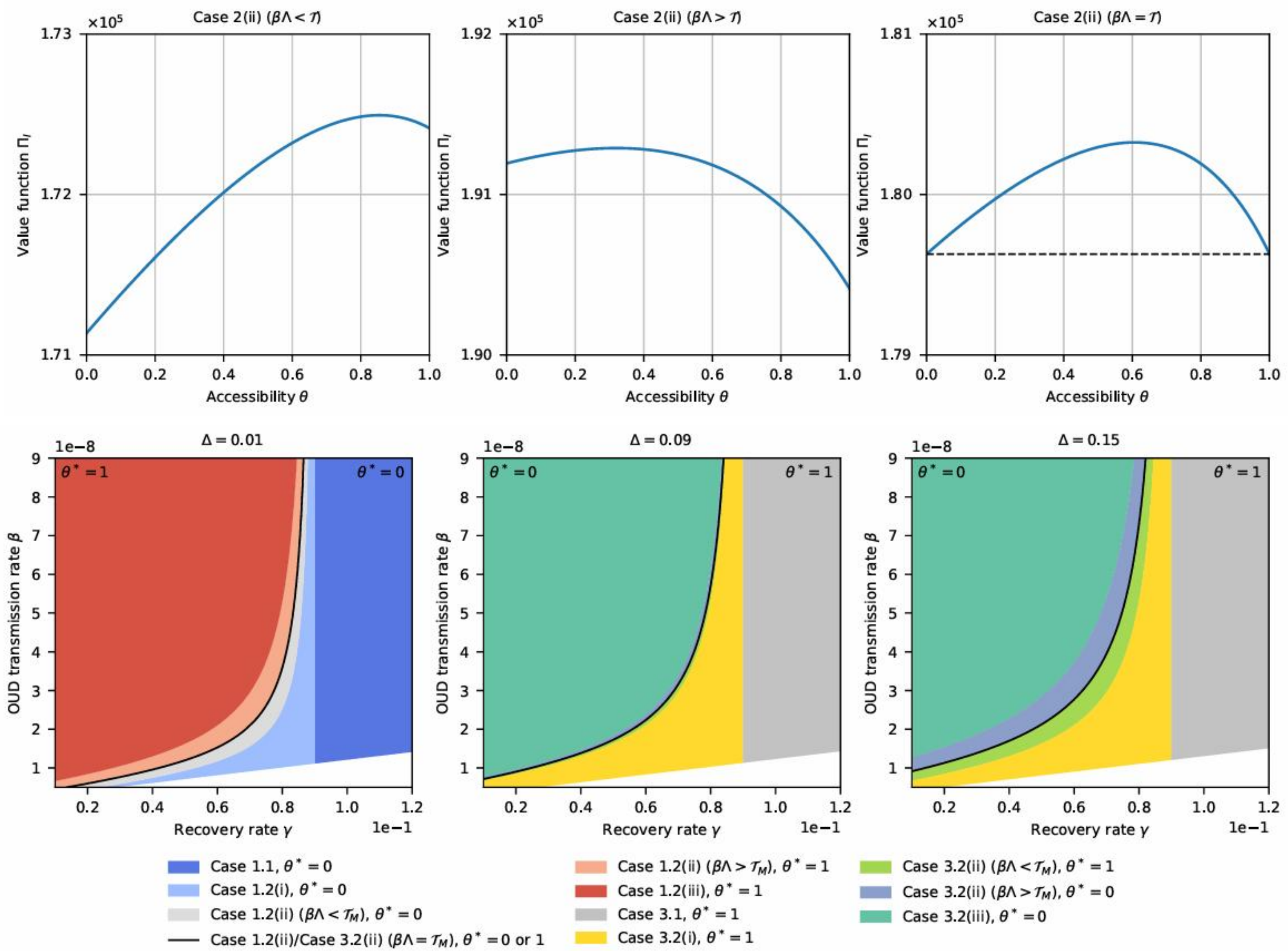
The **moral hazard** phenomenon, an economic concept, also known as the Peltzman effect.



Bang-bang Solution

Considering Social Infection

Opioid misuse often originates from peer influence, community exposure, or familial networks.



Common solution properties: a bang-bang structure and the **reverse effect** of moral hazard on the optimal solution structure.

Operational Insights

Naloxone solves the surface issue of overdose deaths without tackling the underlying cause of opioid proliferation. The government must balance preventing overdoses with limiting new OUD cases. **Full accessibility in many cases is not optimal.**

Opinion
Everyone should have Narcan in their homes
March 29, 2023
5 min 934



The Washington Post, 2023