

Evaluating Alternative Strategies to Prevent Overdose Deaths and New HIV Infections in CT

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Purpose

- Epidemic of overdose deaths in CT and U.S.
 - 44% OENDs have problems with obtaining naloxone due to costs or supply chain
- Value also important for mitigating harm from other injection-related diseases
 - HIV and Hepatitis C
- Objective: Compare the value of distributing Naloxone to alternative strategies
 - Identify the cost of Naloxone at which distribution has favorable value over alternative strategies

Methods

Model Structure

Develop a dynamic Excel based Markov Model that is sufficiently complex (yet manageable) to reflect the processes, outcomes, and cost of the 5 competing strategies.

Parameterize Model

Use data from Connecticut DOH, literature, and if necessary an informed/expert guess

Internal Validation and Debugging

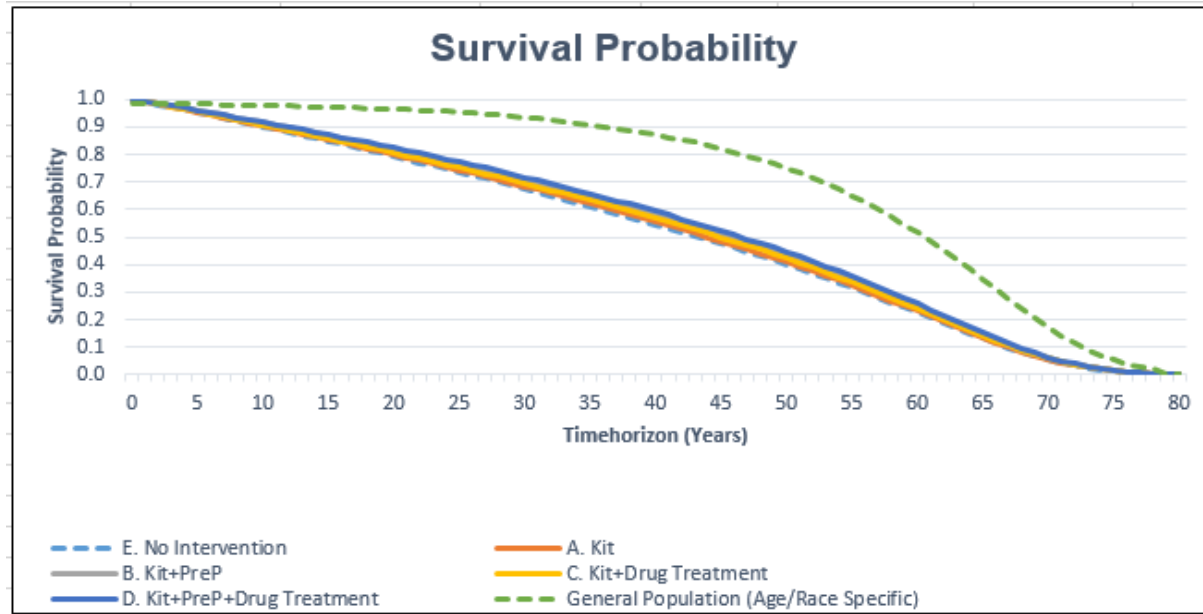
Test the internal structure, logic, and formulas to ensure no errors and model behaves as expected.

External Validation and Calibration

Test model output against observed data and calibrate if necessary to ensure predictions reflect reality.

Conduct Analysis to Meet Objectives

Progress to Date



Entering Cohort = 3000	Lives Saved @ 5 Years	Lives Saved @ 20 Years
No Intervention	Reference	Reference
Naloxone + PreP + Drug Treatment	25	94
Naloxone + PreP	24	78
Naloxone + Drug Treatment	9	42
Naloxone	8	23

How did we build this collaboration?

- Grew organically out of prior collaboration
 - Estimate value of HIV prevention strategies in CT
 - Determine cost savings from contracting organizations
- Funding from CIRA and CDC

Lessons for the Network

- Researchers co-formulate aims and deliverables with stakeholders
- Short concrete project with well defined deliverables before more ambitious project
- Research deliverables might come after other project deliverables
- CIRA/other seed funding is effective catalyst

Next Steps and Plans for Growth

- RO1 application to NIDA
 - Reducing morbidity and mortality from overdose, HIV, and hepatitis C in opioid-using persons