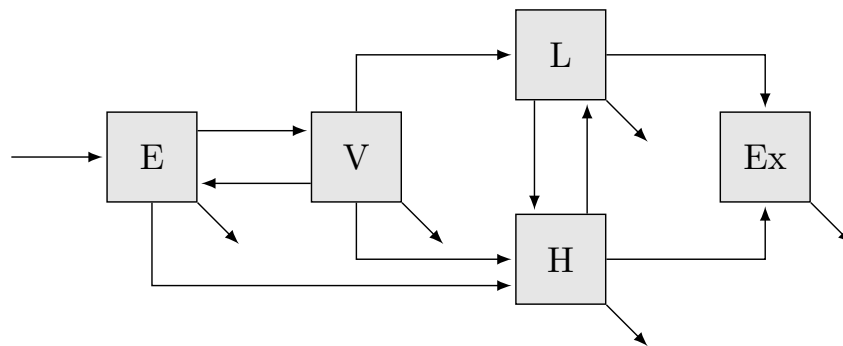


October 19, Update

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1 The Model



E : Non-PWID who are not at-risk of becoming PWID

V : Non-PWID who are at-risk of becoming PWID

L : PWID who initiate others at a low-rate

H : PWID who initiate others at a high rate

Ex : Former PWID in long term cessation

2 Where Are We?

So, based on meeting on October 18th, it seems reverting to the above model is where we should start! The last couple of months we have focused on how we might stratify the *V* population (which is great!!!) but should be thought of as extensions to our baseline model. So, to regroup ourselves, we shall return to this model.

2.1 The Research Question?

As per PRIMER, we are interested in the ways in which initiator factors influence the initiation rate into PWID. Thus, we need our initial, general model, to focus on initiators. Stratification of V is valuable, but it would first be best to utilize our model to give merit to the idea that initiator profile plays a dynamic role in initiation. So, before we begin stratifying V by risk factors (ie non-injection drug use, homelessness, etc), it is best to start with this more general model.

2.2 L and H ???

So, the issue still remains, how are we dividing L and H ...this is where we need to do some analysis of the data available from PRIMER. Stephanie and I are beginning an analysis which will look at exactly this! So, hopefully we will have answers sooner than later!

But for the moment, we have these variables as being relevant to initiating others :

- Younger Age
- Frequency of Injection
- History of MAT enrollment
- Duration of Injection Career
- Gender
- Incarceration History
- Non-Injection Drug Use

2.3 Current Next Step

I will code up the model above and will run some sensitivity analyses to determine how changing different flows impact overall initiation. Ideally, changing flows between L and H will significantly impact initiation rates, as, if so, this would indicate that harm reduction strategies among PWID will reduce overall initiation rates!!

By doing this analysis, we will begin to identify the points of intervention in the model!

2.4 Additional Notes About the Model

So, in order to keep track of the population of PWID, the model does not allow for backtracking from L , H , or Ex to E or V . This allows us to keep track of initiation rates, overall PWID population, cessation rate, and cessated population size!