Temporal Patterns of Arrest in a Cohort of Adults Receiving Mental Health Services: The Massachusetts Mental Health / Criminal Justice Cohort Study

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Demographic Characteristics and Yearly Arrest Rates of Service Use Cohort Members

I. Trajectory Models: What Are They?
- Derived from the “growth curve” methodology
- Technically, “zero-inflated Poisson” models
- Statistically — An iterative process which attempts to define a solution consisting of a set of groups whose members have temporal activity patterns in common

II. Examining Temporal Patterns of Arrest: Trajectory Analysis
- 2,714 (of 3,000) were arrested once; 512 (of arrests) 2 or more times
- For those with multiple arrests (i.e., 2 or more, 1,112) we attempted to identify temporal patterns over the observation period
- Examined 1,112 most recent individuals who had 2 or more; obtained a solution in which five groups (and thus five groups of individuals reflecting these) proved to be the mathematically optimal model

III. Five-Group Trajectory Model

1. Trajectory Group 1: Mix of Offenses
- Mix of offenses
- Trajectory model

2. Trajectory Group 2: Minor Property Crimes
- Minor Property Crimes
- Trajectory model

3. Trajectory Group 3: Serious Property Crimes
- Serious Property Crimes
- Trajectory model

4. Trajectory Group 4: Violence
- Violence
- Trajectory model

5. Trajectory Group 5: Nuisance Crimes
- Nuisance Crimes
- Trajectory model

Implications
- Arson
- Receiving stolen property
- Uttering/passing bad checks
- Breaking and entering
- Arson
- Motor vehicle theft

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