Innovative Prosecution Solutions Learning Community
Part IV: Social Network Analysis
Key Takeaways

As part of the Innovative Prosecution Solutions (IPS) Research and Evaluation Training and Technical Assistance team, RTI International has developed a webinar series to support the creation and ongoing engagement of a learning community of local researchers and practitioners interested in discussing evaluation-related topics, sharing methodological techniques, and addressing problem-solving challenges in carrying out applied research. The fourth webinar in this series was held on July 22, 2020. This webinar included a brief overview of the social network analysis methodology, a presentation of how research partners from two IPS grants have, or are planning to utilize, social network analysis, and an interactive discussion.

Some of the key take-aways from the discussion include the following:

Definition and applicability of social network analysis: Broadly speaking, social network analysis (SNA) is a methodology that shows the relationship or connection between individuals, as well as the strength of these ties. SNA can be beneficial to both IPS practitioners and research partners by helping them identify: 1) people of interest who may know each other; 2) how they may know one another; or 3) how strong or weak these relationships are.

Presentation #1 (Tracey Rizzuto, Ph.D., East Baton Rouge, LA Research Partner): SNA can help reveal associations between individuals that may not otherwise be apparent. For example, a SNA of an opioid overdose incident can identify how individuals are connected to one another (*e.g.,* victim and witness) and may be connected to a larger network (*e.g.,* gang or drug dealing network). Tracking these types of associations between the victims and others who are connected to a drug overdose incident can help identify the drug manufacturers and distributors who are bringing these substances into the community. The idea is that illicit drug dealing networks are comprised of individuals who tend to cluster together and behave in a manner that links them at specific places and points in time. Once the associates of a network have been identified, it then becomes easier to identify the network's leader, because that person tends to behave in unique ways. The identification of these associations and networks can help the IPS practitioners and research partners make more informed decisions about where to focus their deterrence efforts or other crime reduction resources. In East Baton Rouge, LA, Dr. Rizzuto and her team have utilized SNA to help identify specific individuals or groups of people who may be functioning as opioid manufacturers and distributors. The identification of these individuals or specific networks can help the IPS practitioners determine where to focus their attention and resources. In addition, these data can help determine if there is a linkage between the activities of specific individuals or certain networks or groups who are believed to be illicitly manufacturing or distributing opioids and opioid-related overdose deaths.

Presentation #2: (Angela Madden, Ph.D., Shelby County, TN Research Partner). Shelby County has additionally experienced high rates of opioid-related overdoses. The IPS site is planning to utilize data retrieved from a mobile device data extraction that is conducted at the scene of fatal and non-fatal overdoses known as U-Fed In-Field. Shelby County is also interested in identifying and prosecuting

distributors of illicit opioids. This site is planning to utilize phone numbers retrieved from the on-site phone dump to identify linkages between the overdose victim and other individuals or groups. In this way, these phone numbers will function as the nodes in the network that illustrate which individuals are somehow connected. The frequency of calls or communication with the victim will help to identify the person or persons who are most directly involved with distributing or selling these illicit opioid drugs.

Group Discussion and Q&A: Dr. Rizzuto confirmed that her team reviews the linkages or clustering of individuals on a quarterly basis and considers this data in the context of arrest records from the previous 12 months. While certain networks of people do not tend to change much over time, this data is retrospective in nature. Her team does account for the passage of time in the data when considering what the SNA reveals in terms of the strength of relationships between individuals.

Useful SNA Trainings: The following two trainings were recommended:

o Naval Postgraduate School class in Monterey, California. This is a week-long intensive, course. https://nps.edu/web/core
o University of Kentucky's workshop on SNA.
  ▪ http://links.uky.edu/conferences/links-center-workshop-social-network-analysis#:~:text=The%20LINKS%20Center%20for%20Social,than%2025%20instructors%20and%20TAs.