

# **Beyond Service Volume: Validating the Trajectories of Care Metric for Long-term Veteran Referral Success**

## **Abstract**

### **Background**

With a growing emphasis on building successful health and social care networks, there is a pressing need for effective evaluation metrics. However, past research on quantifying service volume and evaluating referral processing metrics is insufficient for understanding client outcomes over time.

### **Objective**

Our paper introduces the trajectories of care (ToC) metric, a cost-effective approach for referral networks to evaluate service episodes and client outcomes. ToC refers to the dynamic pathways that clients follow while navigating services through the referral network system over time.

We answer four questions: (1) What are the typical ToC for veterans? (2) What demographic and dynamic case factors influence ToC? (3) Is there evidence of validity for the metric? (4) Are process metrics related to trajectories?

### **Methods**

Using a mixed-method design, we validate this metric through a series of analyses of client data from AmericaServes and Combined Arms. We categorize service types as basic needs, stressors, and nonessential needs and trajectories of service needs as either positive, neutral, or negative, providing insight into the factors that influence a client's ToC.

### **Results**

We generated a new measurement evaluating referral networks' performance and examined its effectiveness compared to existing metrics. We tested three types of validity (concurrent, expert, and discriminant); using Combined Arms client WHO-5 scores, we determined a relationship between clients' trajectory of care and mental well-being. We compared our results with the practical knowledge of intake specialists at AmericaServes. We then ran an analysis to discover the relations between clients' success rates and trajectories. The ToC metric is a powerful tool for making referral decisions.

### **Conclusion**

Our paper supports the ToC metric and advocates for reassessing referral networks to holistically account for the complex nature of co-occurring needs that impact veterans' health and overall quality of life.