



D'Aniello Institute for
Veterans & Military Families

JPMorgan Chase & Co., Founding Partner

Separating the dimensions of network performance for coordinated care networks

Zachary Bridgewater

Joshua-Paul Miles

Catherine Annis

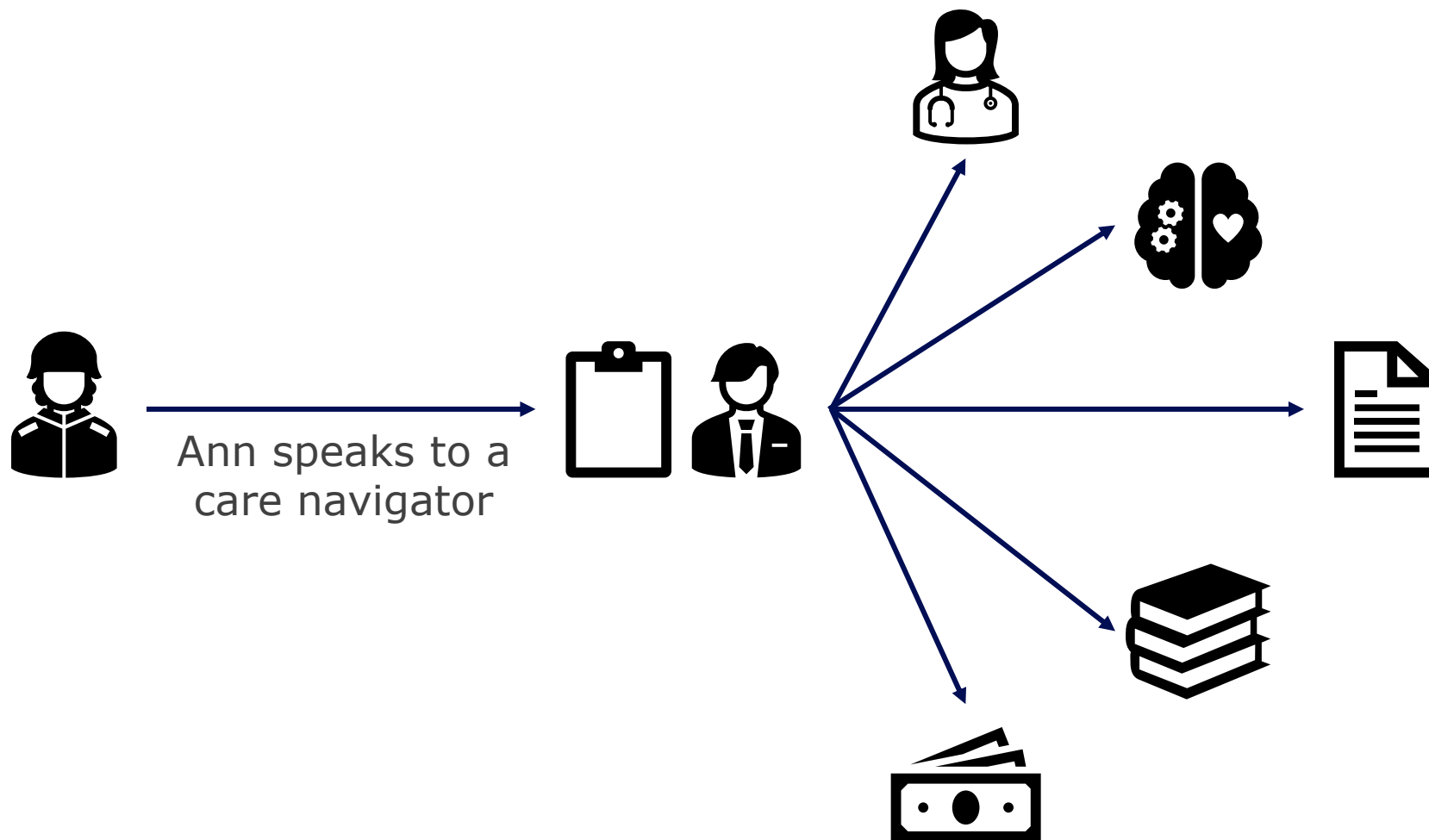
Gilly Cantor

Michelle Shumate

Overview

- A semi-fictitious story
- Performance measures in care and service delivery
- Study methodology
- Preliminary results
- Next steps

Ann's care journey



The navigator reaches out to different organizations that could provide Ann the services she is seeking

The navigator also uncovers an additional need (benefits enrollment).

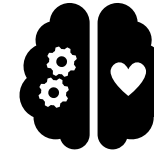
Ann's care journey



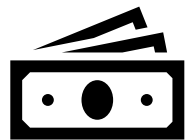
It took a couple weeks, but Ann found a doctor she likes who offers the care she needs



The county VSO is now working with Ann on her benefits application, but she'll likely wait several months for a determination



Ann has met with several different therapists and is still searching for one she feels will get her military experiences



The navigator helped Ann find a local budgeting class in just a couple days



Ann applied to a local community college and should start classes in a little over a month

How can we evaluate coordinated care networks?

Performance in Service & Care Networks

Evaluation is context-dependent

Healthcare

- Cost of services
- Patient count
- Drug efficacy
- Wait time
- ER visits
- Inpatient time
- Pain level

Mental Health

- Cost of services
- Patient count
- Drug efficacy
- Screener scores
- Suicidality

Housing

- PIT count
- Literally homeless count
- Shelter count
- Bed count

The context of coordinated care networks

Coordinated care networks (CCNs) typically are:

- groups of organizations providing **different services**
- by referring clients with **concurrent needs**
- via a **central navigator organization**
- and that use a **common intake** to identify needs

Carboni et al. (2022); Shumate (2021)

Effectiveness and levels of analysis

Community

- Cost to community
- Public perception that problem is being solved
- Changes in the incidence of the problem
- Aggregate indicators of client well-being

Network

- Network membership growth
- Range of services provided
- Absence of service duplication
- Cost of network maintenance

Organization / Client

- Cost of services
- Service access
- Client outcomes

Drawn from Provan and Milward (2001)

The value of operational approaches

Referral management systems are more commonplace (Goldberg & Nash, 2021)

Most referral management systems collect and store data relevant to coordinating care (SIREN, 2019)

Organizations and staff have greater control over and can respond more quickly to data related to their daily operations (Carboni et al., 2022)

What metrics already exist?

Type	What does it assess?	Examples
Quality Control	Interaction between a client and members of the network	<ul style="list-style-type: none">• Types of questions asked• Was an appropriate referral made?
Demand	Who is seeking what services and from where	<ul style="list-style-type: none">• Count of clients requesting services• Client demographics• Client geography
Supply	What services are available and to what extent	<ul style="list-style-type: none">• Count of providers• Capacity of available services
Referral	The efficacy of the system at referring clients to services	<ul style="list-style-type: none">• Count of rejected referrals• Wait time until services start• Count of resolved referrals
System Impact	Broader changes to community experience and system utility	<ul style="list-style-type: none">• Cost of care• Community health outcomes

Drawn from Shumate (2021)

Our research objectives

Type	What does it assess?	Examples
Referral	The efficacy of the system at referring clients to services	<ul style="list-style-type: none">• Count of rejected referrals• Wait time until services start• Count of resolved referrals

1. Identify **distinct performance patterns** among CCNs tracking referral metrics
2. Generate **recommendations for practitioners** building out their evaluation efforts

Study Methodology

Sample information

Network model: AmericaServes

Timeframe: 2015-2023

Platform: Unite Us

Networks: 11

Clients: 28,697

Requests: 71,991

Performance data in Unite Us

Time to service: the time in days between when a request began and the client received a response

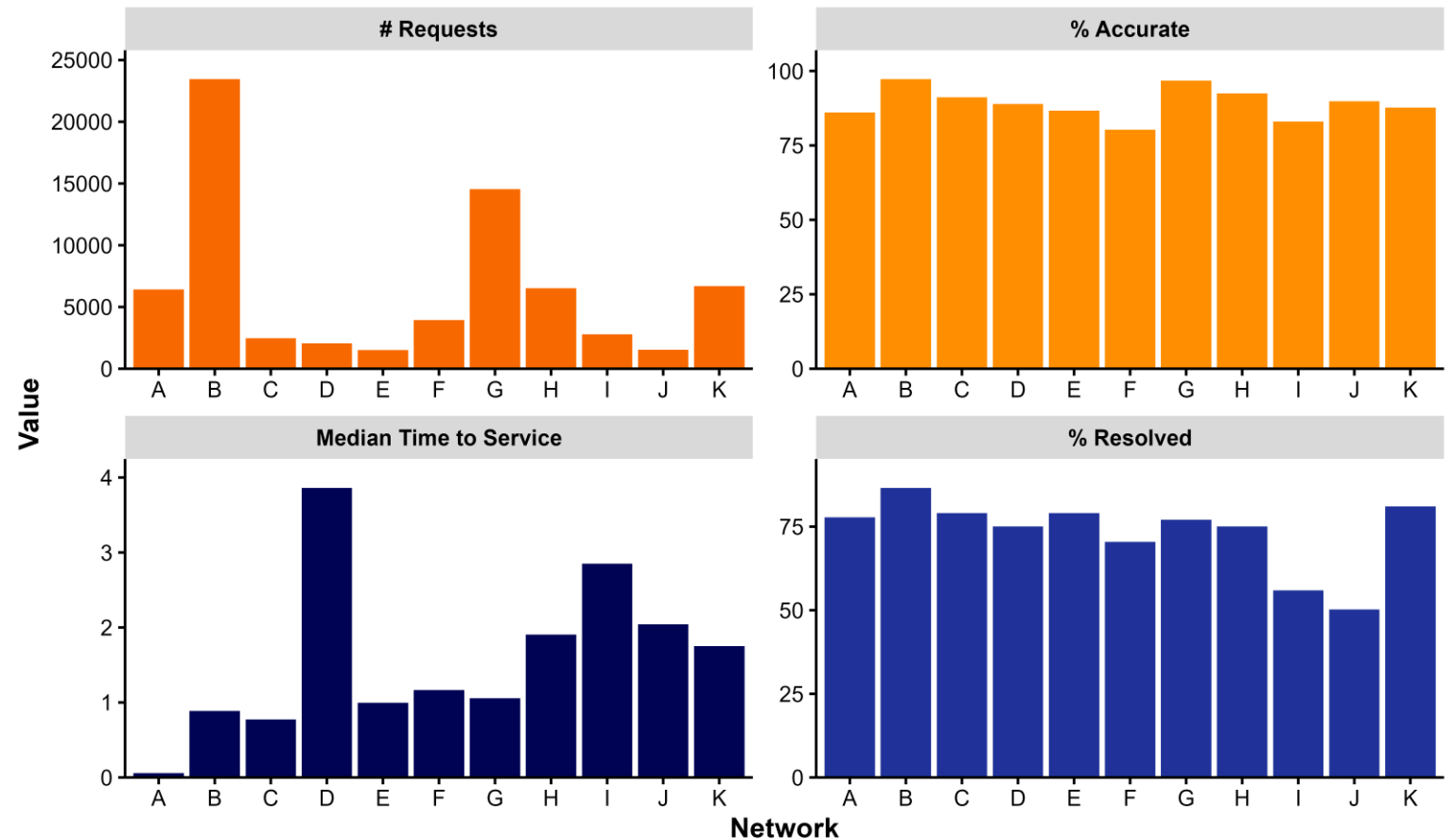
Accuracy: whether a request experienced one or more rejections (accurate requests = 1)

Resolution: whether a request resulted in services provided to the client (resolved requests = 1)

Sample descriptives

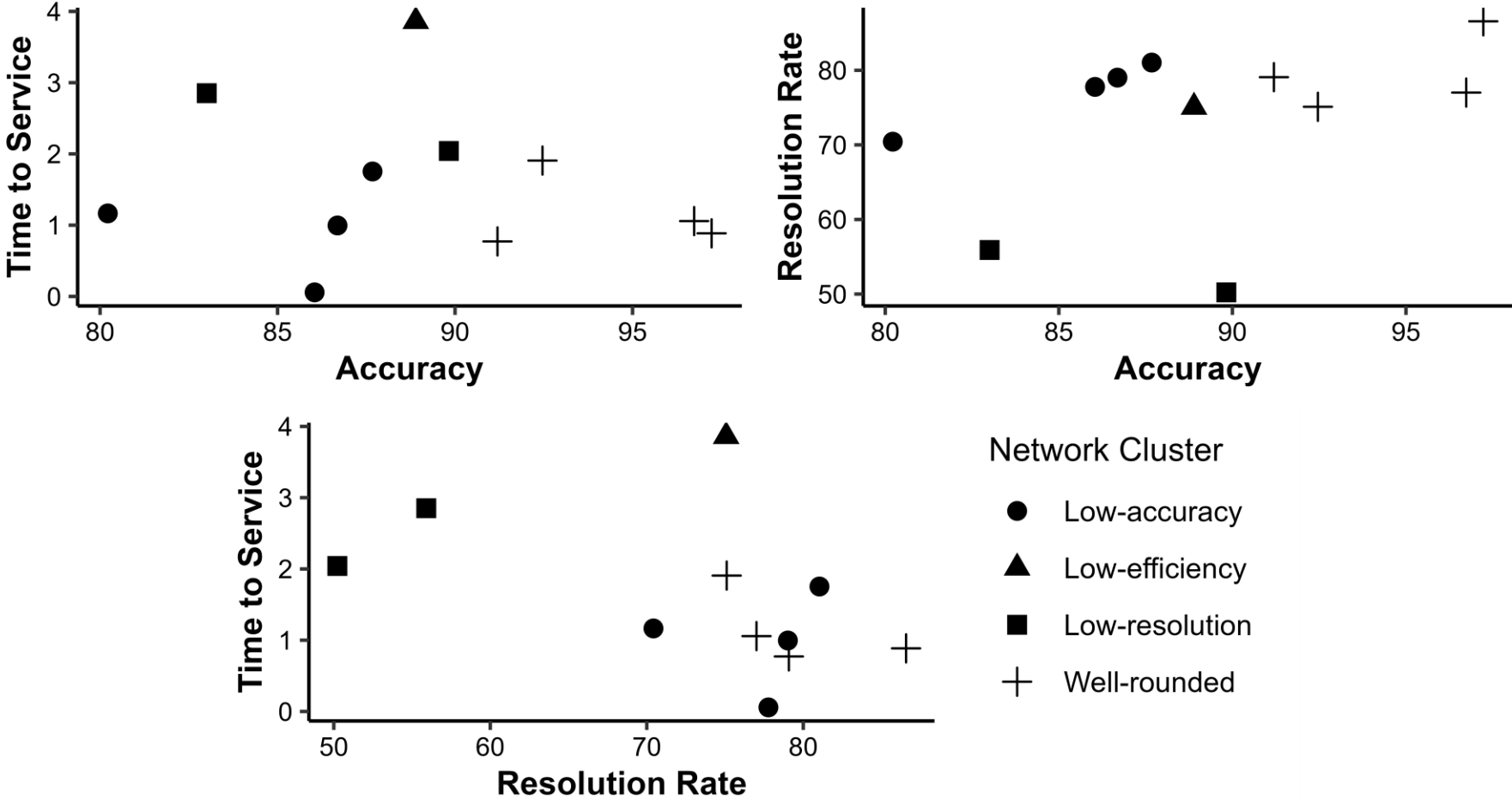
Overall

- **# Requests:** 71,991
- **Median Time to Services:** 0.99 days
- **% Accurate:** 93%
- **% Resolved:** 79%



Preliminary Results

Cluster analysis



Correlation matrix

Network	TTS x Accuracy		TTS x Resolution		Accuracy x Resolution	
A	-0.08	***	-0.03	†	0.43	***
B	-0.02	***	-0.03	***	0.13	***
C	-0.17	***	-0.11	***	0.25	***
D	-0.06	*	0.01		0.19	***
E	-0.16	***	0.00		0.23	***
F	-0.10	***	-0.01		0.43	***
G	-0.07	***	-0.07	***	0.17	***
H	-0.10	***	-0.07	***	0.16	***
I	-0.04		-0.17	***	0.16	***
J	-0.04		0.03		0.27	***
K	-0.14	***	-0.16	***	0.02	*
Overall	-0.08	*	-0.06	***	0.22	***

Recommendations for practitioners

Decide network goals. Speed, accuracy, and resolution appear to be distinct performance markers.

Collect data on those goals. Data is an asset – it can enable more targeted, actionable interventions.

Review network procedures. Aggregate performance ultimately builds from small, daily efforts.

Revisit data framework. Regularly review collected data and its utility for network purposes.

Next steps for research

Explore **distinctiveness of performance metrics**

Examine performance **variations arising from service differences**

Develop framework for **comparing coordinated care networks**



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Thank you!

zabridge@syr.edu

ivmf.syracuse.edu

315.443.0141

[f](#) [t](#) [@](#) [in](#) [v](#) [@IVMFSyracuseU](#)