

# Virtual Emergency Care as a Patient-Centered, Efficient, Cost-Effective Alternative Modality across Multiple VA Medical Centers

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## Introduction

- In early 2021, a network of 8 Veterans Health Administration (VHA) medical centers in Arizona, New Mexico, and California (VISN 22), implemented a Tele-Emergency Department (Tele-ED) to offer accessible, convenient, on demand, and synchronous virtual emergency care to our Veterans.

## Objectives

- Resolve high acuity presenting complaints within one hour from call center triage, without the constraints of a physical ED.
- Decrease out-of-network (OON) emergency and urgent care expenditures through the Tele-ED program.

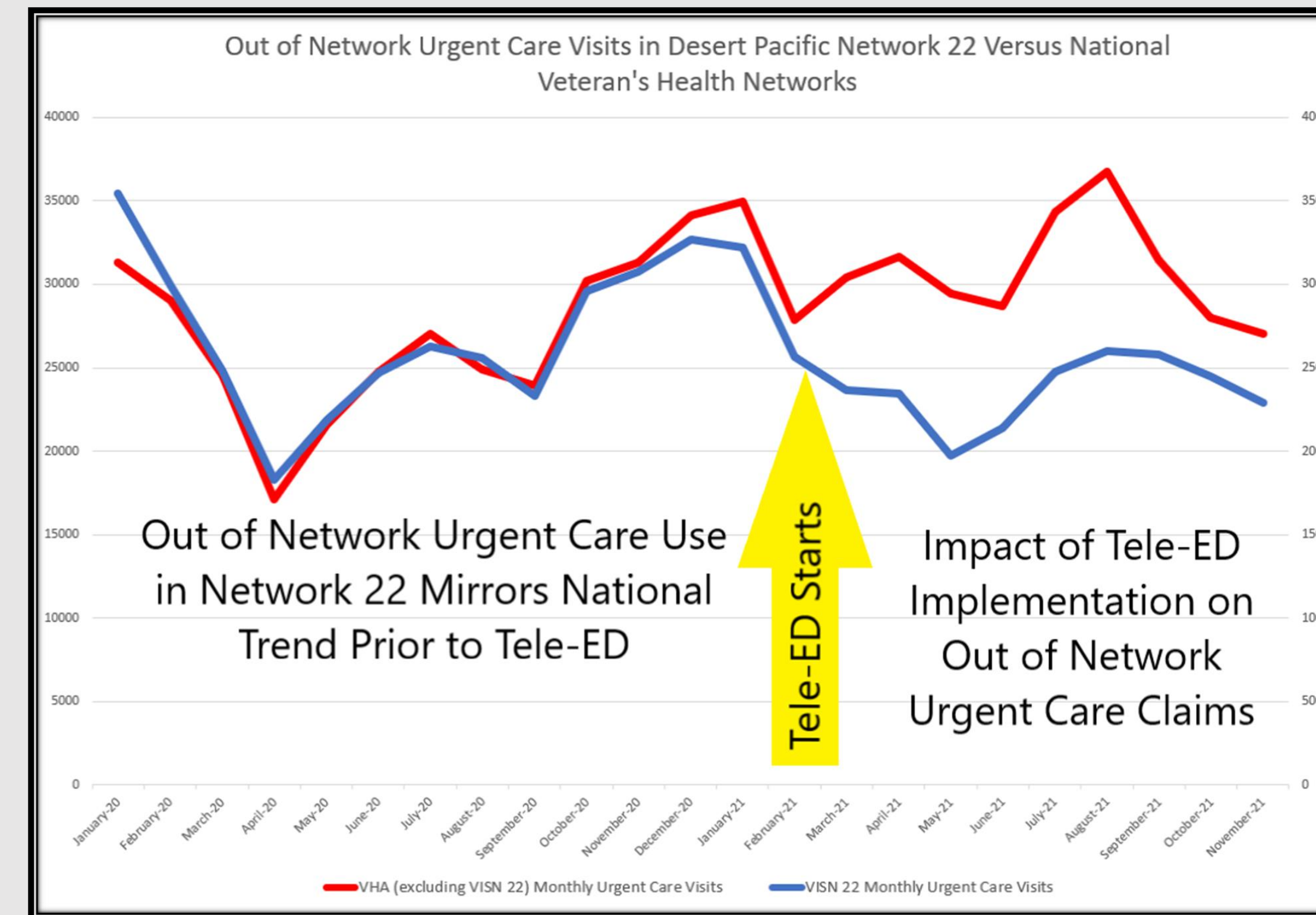
## Methods

- A multidisciplinary group of clinicians devised a Telehealth Service Agreement to outline clinician supervision, privileging, funding, staffing, and procedural workflows.
- Protocols were developed to ensure safe patient handoffs between the call center and the Tele-ED, emergency plans for patients in crisis, and handling of patients refusing advice to contact 911.
- A standardized order menu was built into each site's electronic medical record (EMR).

## Implementation

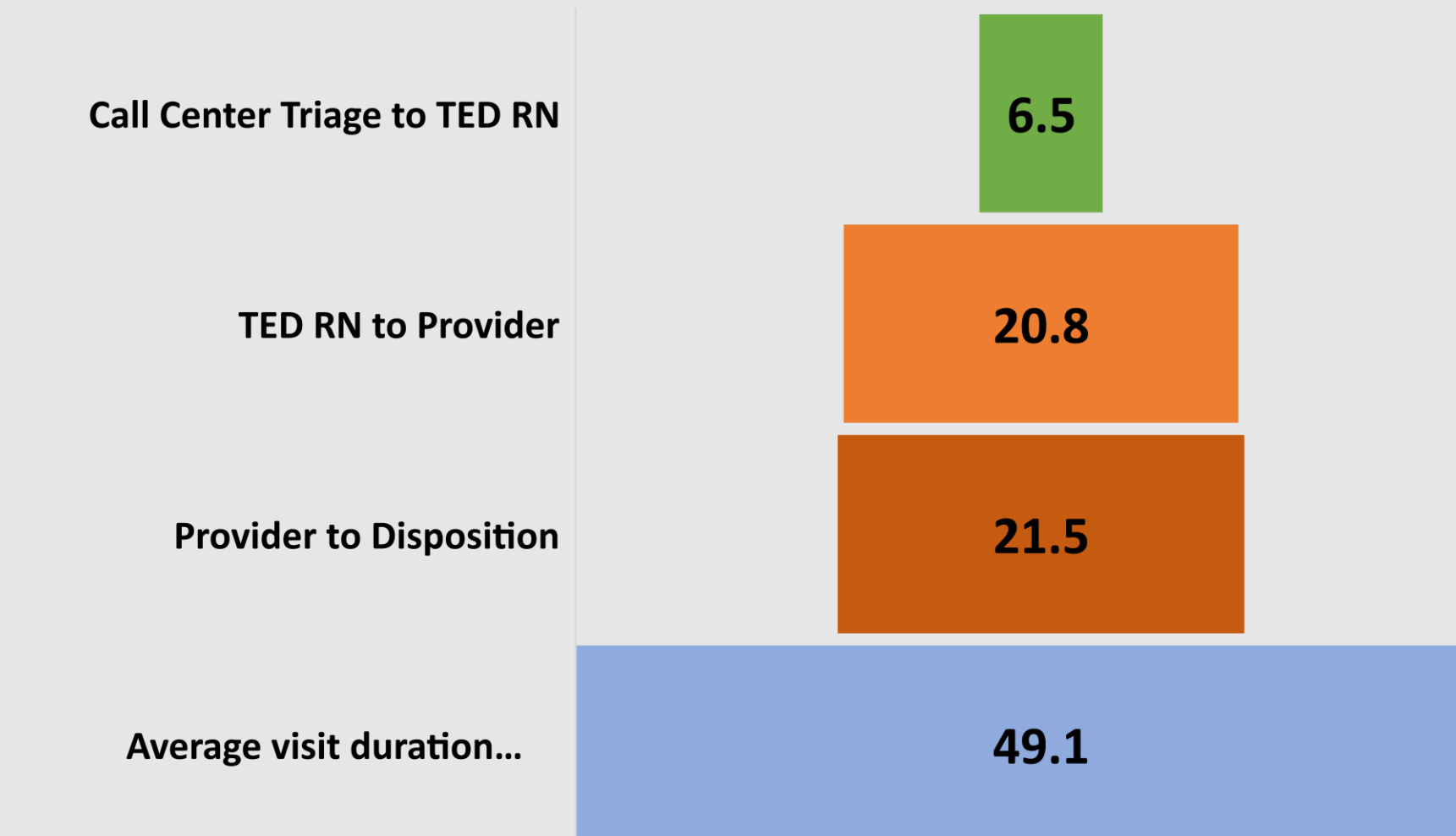
- More than 150 Emergency Medicine clinicians contribute to the labor pool for the 6 full-time equivalent employees (FTEE) – a distributed staffing model, allowing ED clinicians to participate to maintain their in-person diagnostic and procedural skills.
- All sites went live in a staged manner over the course of 4 weeks.

## Results: Tele-ED Impact on Out-of-Network Urgent Care Use



## Results: Average Visitation Duration and Unexpected 72-Hour Return Rates

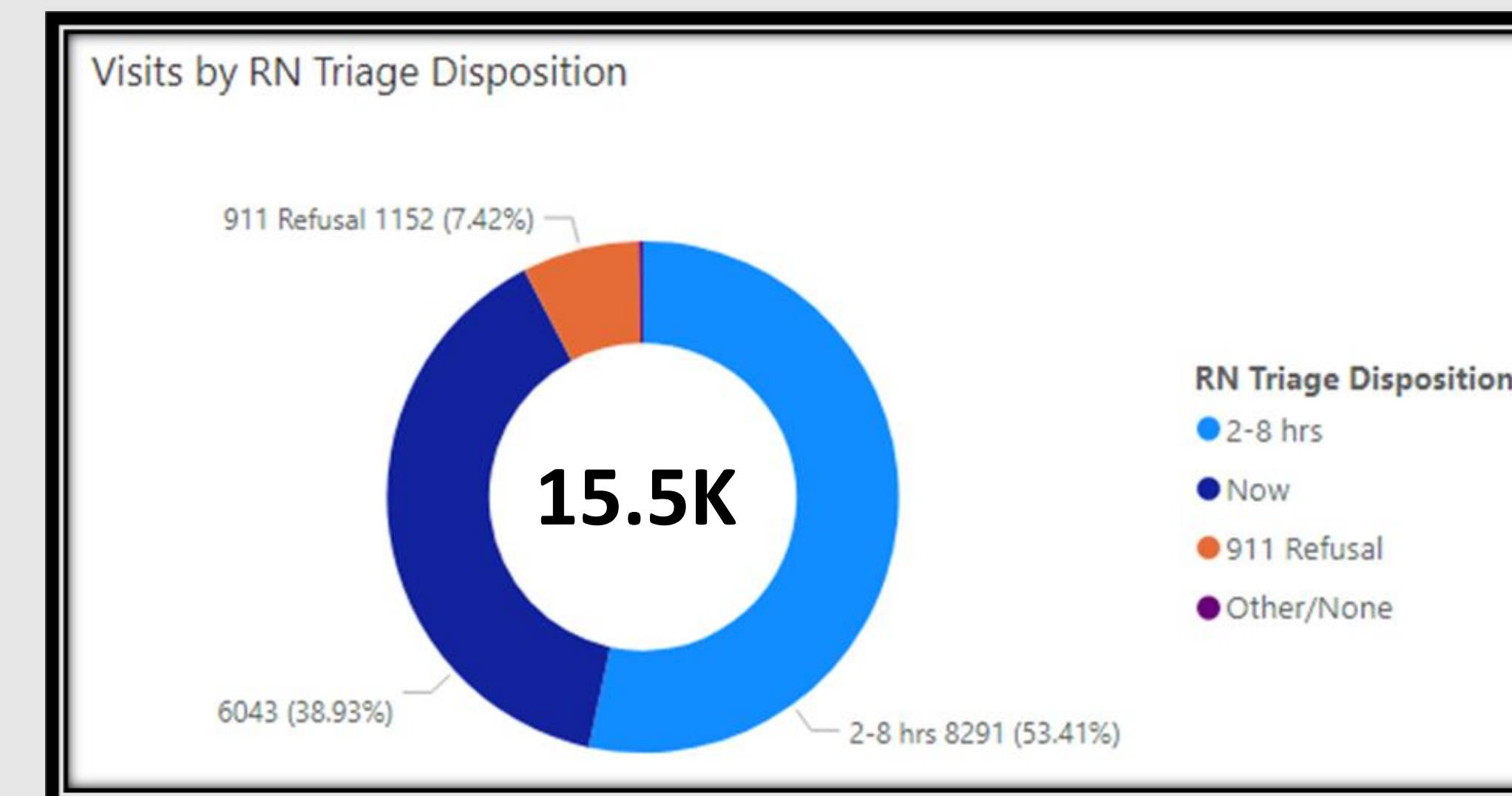
### Operational Time Intervals for Tele ED (min)



Year	Month	Count of Patient	%Return of Total
2021	December	42	3.38%
2021	November	52	4.36%
2021	October	32	2.79%
2021	September	53	4.23%
2021	August	73	5.59%
2021	July	38	2.91%
2021	June	51	3.54%
2021	May	52	3.73%
2021	April	51	3.39%
2021	March	40	3.39%
2022	February	28	3.02%
2022	January	36	2.68%
<b>Total</b>		<b>548</b>	<b>3.60%</b>

## Results: Visits by RN Triage Recommended Follow-Up Intervals and Outcomes From Tele-ED Evaluation

Tele-ED Clinician Encounters by Triage RN Recommended Follow-Up Interval  
March 2021 – February 2022

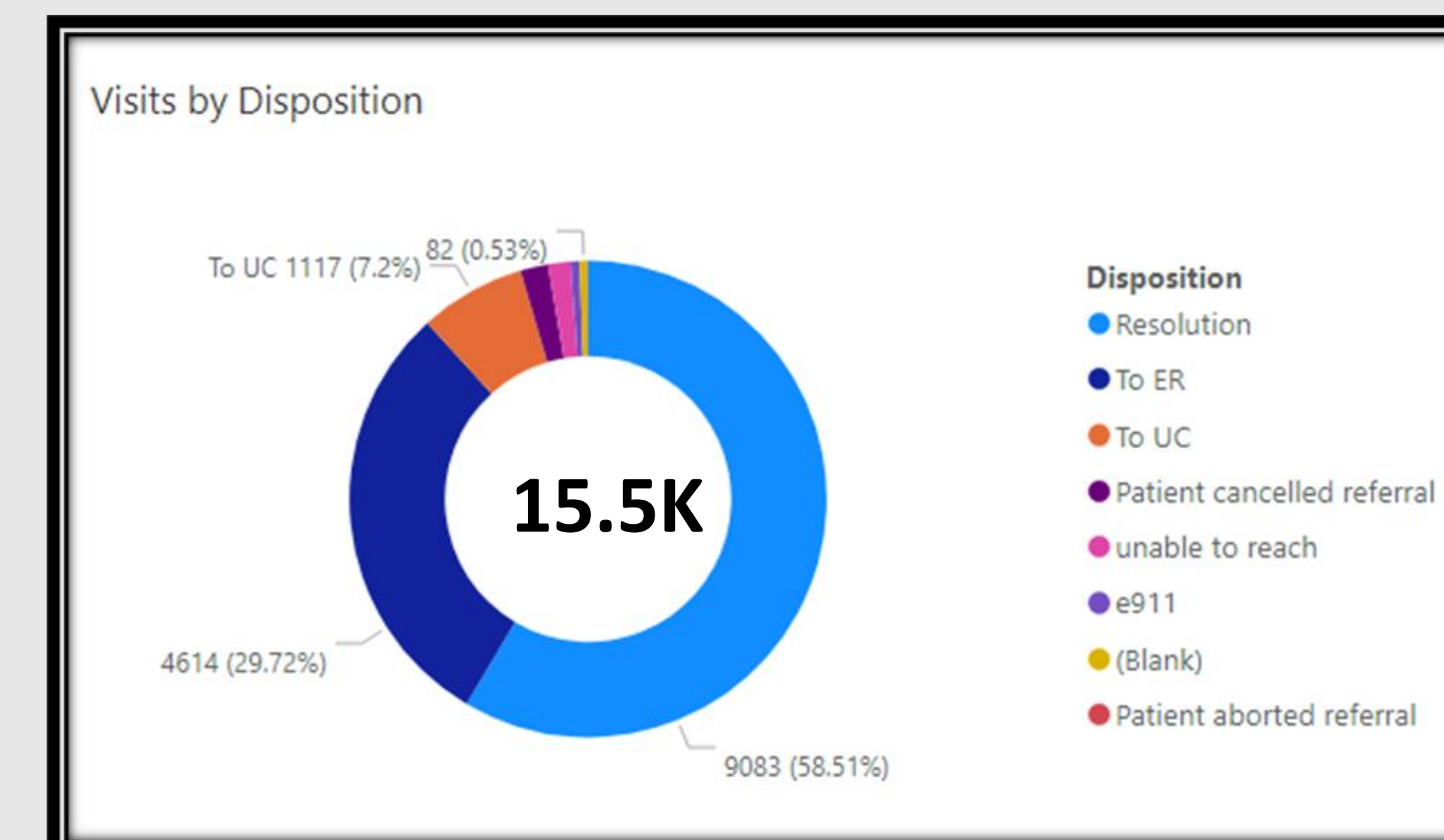


**911 Refusal** = Patients triaged by the Call Center RN to call 911 but refusing to do so. Patients handed off to the Tele-ED for further evaluation.

**Now** = Patients triaged to be seen in the ED in the next 0-2 hours.

**2-8 Hours** = Patients triaged to be seen in the ED in the next 2-8 hours.

Outcomes from Tele-ED Evaluation  
March 2021 – February 2022



## Results

- After 12 months of operations, 15,524 Veterans have been evaluated and treated: 58% have had their care resolved by Tele-ED, with a 3.6% rate of unscheduled in-person visits to the VA ED within 72 hours.
- The average visit duration is 49 minutes from call center triage to clinician completion of visit.
- VISN 22 OON UC and ED costs increased by only 25% and 30%, compared to 58% and 32% nationally (FY2020-2021).
- Conservative cost savings are estimated to be \$6.95M for the first 12 months of operation. Annual program costs are currently \$3.39 million.
- The Tele-ED project is projected to save the VHA and network \$3.56 million in the first year – a 200% return on investment.

## Discussion

- Early data suggest the program will provide a safe environment for Veterans to access the healthcare system, allow a finer determination of which Veterans are most likely to need in-person care, and reduce COVID transmission opportunities for patients and staff.
- Lower consumption rates for personal protective equipment, decreased OON expenditure, and decreased clinician burnout are additional benefits of this program.
- From a strategic perspective, VISN 22 has developed a patient-centered virtual 9<sup>th</sup> ED – if the need arises, operations can be rapidly expanded to provide emergency virtual care within VISN 22 for internal and external disasters such as pandemic surges.