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Emergency Triage, Treat, and Transport (ET3) Model

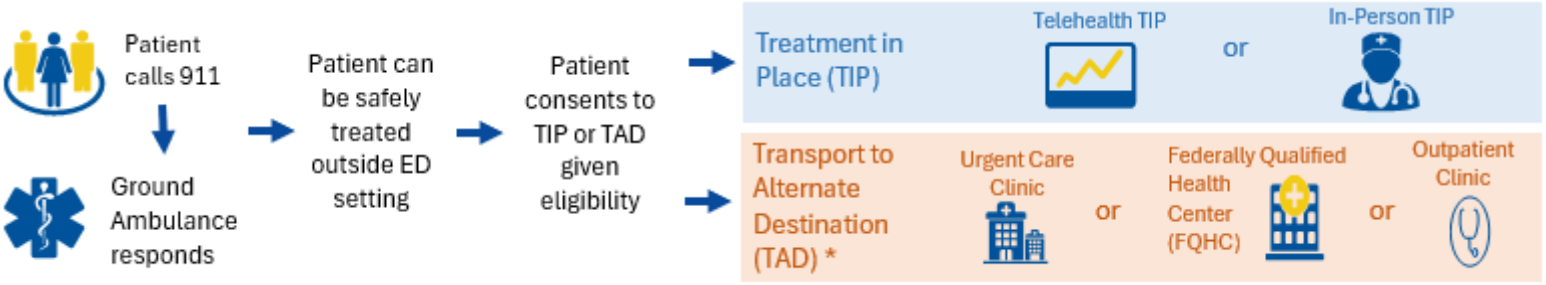
Evaluation of the ET3 Model (2021-2023)

MODEL OVERVIEW

The Emergency Triage, Treat, and Transport (ET3) Model was originally a five-year voluntary payment model designed to address emergency health care needs of Medicare Fee-for-Service (FFS) beneficiaries following a 9-1-1 call. The model tested two new ambulance services: Treatment in Place (TIP) and Transport to Alternative Destination (TAD). Ambulance suppliers & providers responding to a 911 call could initiate and facilitate TIP or TAD to eligible and consenting fee-for-service (FFS) Medicare beneficiaries instead of providing ground ambulance transport to an Emergency Department (ED).

The ET3 model began on January 1, 2021 after a one-year delay due to the COVID-19 public health emergency (PHE). The model ended early after three years due to low delivery of TIP and TAD interventions.

DELIVERY OF TIP OR TAD UNDER ET3 MODEL



* Examples of possible alternate destination partners (ADPs).

PARTCIPANTS & DELIVERY OF ET3 INTERVENTIONS

A low number of ET3 interventions was delivered under the model:

- Only 70 (38%) of 185 ambulance organization participants in the model delivered one or more ET3 interventions.
- On average, ET3 interventions accounted for less than 1% of an active participant's annual Medicare FFS ambulance transports.

Delivery of ET3 interventions was concentrated among a small number of participants:

- Over 90% of ET3 interventions were TIP, predominantly via telehealth.
- Eight higher TIP volume participants delivered >75% of TIP interventions.
- 75% of TAD interventions were delivered by Other Active Participants.

ET3 PARTICIPATION & INTERVENTIONS

Participant Category	# of Participants	# of Interventions	
		TIP	TAD
All:	185	3,161	257
Non-Active:	113	0	0
Active [§]:	70	3,161	257
Higher Volume (≥100 ET3 Interventions):	8	2,426	58
Other Active (<100 ET3 Interventions):	62	735	199

[§] Two participants were unevaluable. See report for details.

PARTICIPANT REPORTED CHALLENGES LIMITING ET3 INTERVENTION DELIVERY

PHE caused implementation challenges:

- Many participants were forced to delay ET3 implementation because of the PHE.
- Staff shortages due to the PHE among participants and partners reduced capacity to deliver model interventions.

Patients, health care providers, & EMS ambulance personnel tended to avoid TIP and TAD because of unfamiliarity & uncertainty.

- There were high rates of patients declining consent.
- It was challenging to recruit and retain partners. Prospective TIP/TAD partners unfamiliar with these services were unclear of their legitimacy or concerned about operational risks.
- EMS ambulance personnel sometimes disengaged from delivering TIP/TAD because of uncertainty from changes in operational processes.

DISTINGUISHING CHARACTERISTICS OF HIGHER VOLUME PARTICIPANTS

Perspectives of two large-sized higher volume participants:

- They had an organizational culture of innovation with a willingness to try new things.
- More staff bandwidth enabled relationship continuity with healthcare providers and facilitated recruiting partners.
- Training/retraining of EMS ambulance personnel for ET3 is important and may have mitigated disengagement.
- They designed their ET3 implementation with significant input from the personnel delivering the interventions, making delivery of interventions smoother.
- They required their EMS ambulance personnel to offer ET3 interventions to all eligible patients. This helped to standardize processes and overcome initial staff disengagement.

This document summarizes the evaluation report for the ET3 Model.
To learn more, download the model's evaluation report at https://www.cms.gov/priorities/innovation/innovation-models/et3

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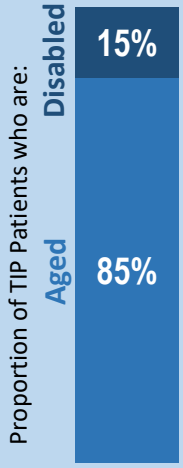
CHARACTERISTICS OF TIP & TAD RECIPIENTS

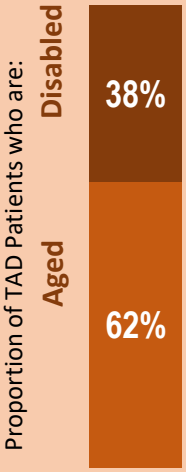
CHARACTERISTICS OF TIP PATIENTS



TIP PATIENTS WITH A DISABILITY:
- Predominantly dually eligible or recipients of low-income-subsidy (LIS) support.
- TIP patients with a disability exhibited higher prevalence of mental illness than aged TIP patients.

AGED TIP PATIENTS:
- Over two-thirds were aged 70 & above.
- One quarter were dually eligible or LIS recipients.
- Higher prevalence of chronic heart & endocrine conditions than disabled TIP patients.

CHARACTERISTICS OF TAD PATIENTS



TAD PATIENTS WITH A DISABILITY:
- Nearly all (>90%) were dually eligible or LIS recipients.
- 26% had high comorbidity (CCI ≥5).
- High severe mental illness: ≥48% with bipolar disorder, schizophrenia, other psychotic disorders.

AGED TAD PATIENTS:
- Over one-third (35%) were dually eligible or LIS recipients.
- Higher prevalence of chronic heart & endocrine conditions than TAD patients with a disability.

Aged and Disabled status was determined by the original reason for Medicare eligibility. Abbreviations: CCI, Charlson Comorbidity Index; DX, diagnosis; ext, external.

FINDINGS

Results are from a cross-sectional regression using a reference group composed of low acuity ED episodes. Differences are believed to be primarily due to the ET3 Model but may not be solely attributable to the ET3 interventions.

Follow-up ED Visits

- TIP recipients were more likely to have follow-up ED visits than matched low acuity ED episodes. Follow-up ED visits may have occurred per clinical direction from health care partners to patients, patient (or family/caregiver) initiative, or adverse events that may or may not be related to the preceding ET3 intervention.
- The rate of follow-up ED visits was non-significantly lower for TIP by higher volume participants compared to other active participants, suggesting higher volume participants may have more appropriately triaged patients into TIP versus ED transport.
- A larger portion of TAD patients had follow-up ED visits after receipt of services than TIP patients likely reflecting the higher acuity of TAD patients. More in-depth statistical analyses were not performed for TAD because of limited sample size.

Hospitalizations

- Statistical analyses found TIP interventions (N=3,161) were associated with an elevated risk of hospitalization within five days compared to TIP-matched low acuity ED episodes.
- Risk of hospitalization was lower after TIP by higher volume participants than TIP provided by other active participants. The lower risk of hospitalization for higher volume participants may reflect organizational processes such as training/retraining of EMS ambulance personnel or secondary clinician review of patients deemed eligible for TIP.

Spending

- Assuming a low acuity ED visit would have occurred in the absence of TIP, Medicare Parts A & B spending was moderately lower for TIP interventions compared to TIP-matched low acuity ED episodes.

KEY TAKEAWAYS

Low delivery of ET3 interventions: Less than 40% of 185 ET3 participants were active, delivering one or more ET3 interventions during the model. Among active participants, ET3 interventions made up less than 1% of a participant's annual Medicare FFS ambulance transport volume.

Multiple factors contributed to the limited delivery of ET3 interventions: Patients unfamiliar with ET3 in emergent situations often refused consent. Health care providers unfamiliar with ET3 were often reluctant to participate or accept patients. Some EMS ambulance personnel avoided delivering TIP/TAD.

Nearly all ET3 interventions were TIP and were provided mostly by higher volume participants: The eight participants who delivered 100 or more ET3 interventions included both large and small –sized ambulance organizations.

Differences associated with TIP interventions delivered: Overall, the risk of follow-up ED visits and hospitalization within five days was higher for TIP than matched low acuity ED episodes. Higher volume participants exhibited lower risks for these outcomes than other active participants possibly due to better processes for TIP.