




Closing the Gap on Psychiatric Care in the Emergency Department

Seth Thomas, MD, FACEP

Today's Discussion

- Challenges faced by behavioral health patients and healthcare providers in the emergency department.
 - The clinical gap created by undifferentiated emergency care.
 - An integrated approach to behavioral health that bridges psychiatry and emergency medicine.
 - Success stories from this approach at two AMITA hospitals.
 - Q&A.
- 

About Me



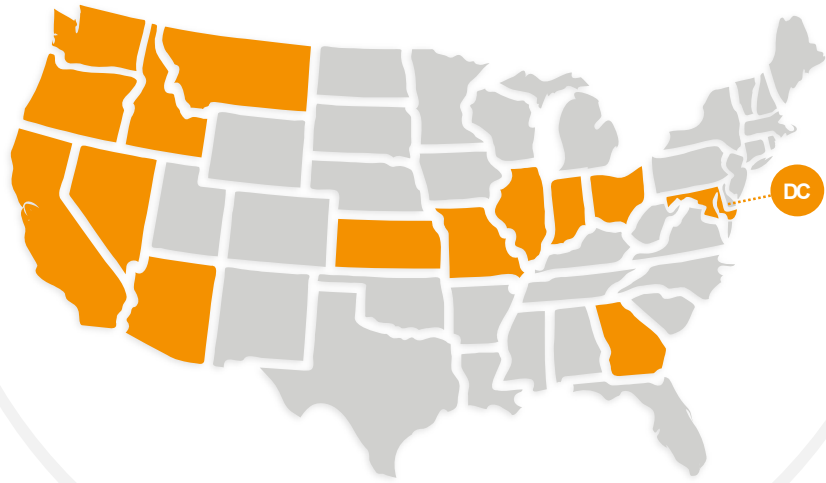
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Emergency Medicine, MSJMC

Director of Quality and Performance, Vituity

Vituity: Who We Are

We see over **6.4 million** patients annually.



2,500
Physician
partners

1,400
Advanced
providers

2,000
Scribes

300+
Practice
locations



Experts in the Delivery of Emergency Medicine

Developing Emergency Medicine Front-Line Solutions for Nearly 50 Years



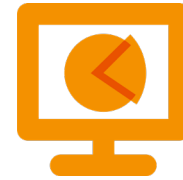
**Rapid Medical
Evaluation (RME)[®]**



**ED Revisit Reduction
Program**



**Patient Experience
Program**



Data Analytics



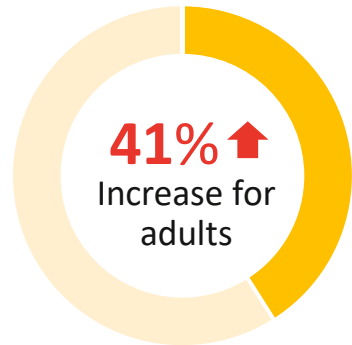
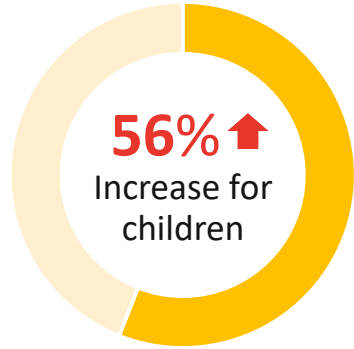
Team Care



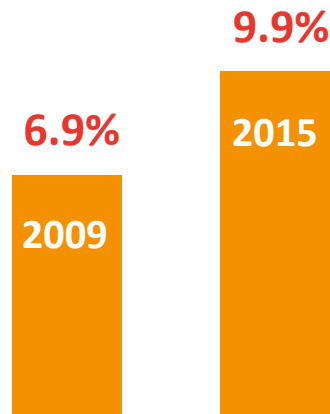
**Emergency Psychiatric
Intervention (EPI)**

Care Delivery Challenges

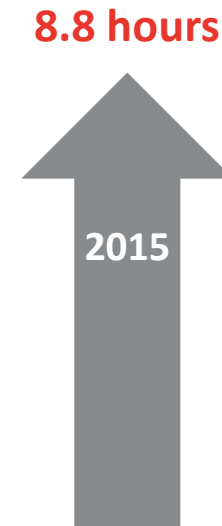
Behavioral Health Visits to the ED Are Climbing



Increase in mental health visits
to the ED from 2009-2015



Proportion of ED visits for
mental health for adults



30% increase in LOS for
mental health patients



Suicidal ideation and
intentional self-harm treated
in the ED up 414%

Bottlenecks and Inefficiencies

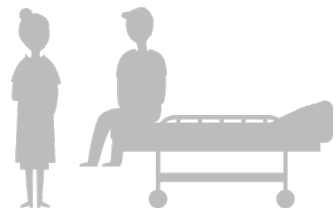
Psychiatric patients spend **3x longer** than other patients in the ED.



Longer LOS of
psychiatric patients



Prevents
2.2 bed turnovers



Boarding of
psychiatric patients



Financial Loss
\$2,264 per patient

Operational
and
Financial Impacts

Challenges to ED Care Coordination

- **A cycle of fear** among providers, patients, and families contributes to poor quality of care.
- **Lack of standardization** and implementation of effective care processes within the ED.
- **ED teams lack the right personnel** with the right processes and skills to provide effective care.
- **Families are excluded** in the current system of care in EDs.
- **Care settings do not coordinate** or communicate across a community.



Today's State: Undifferentiated Care



Patient presents to the emergency department.

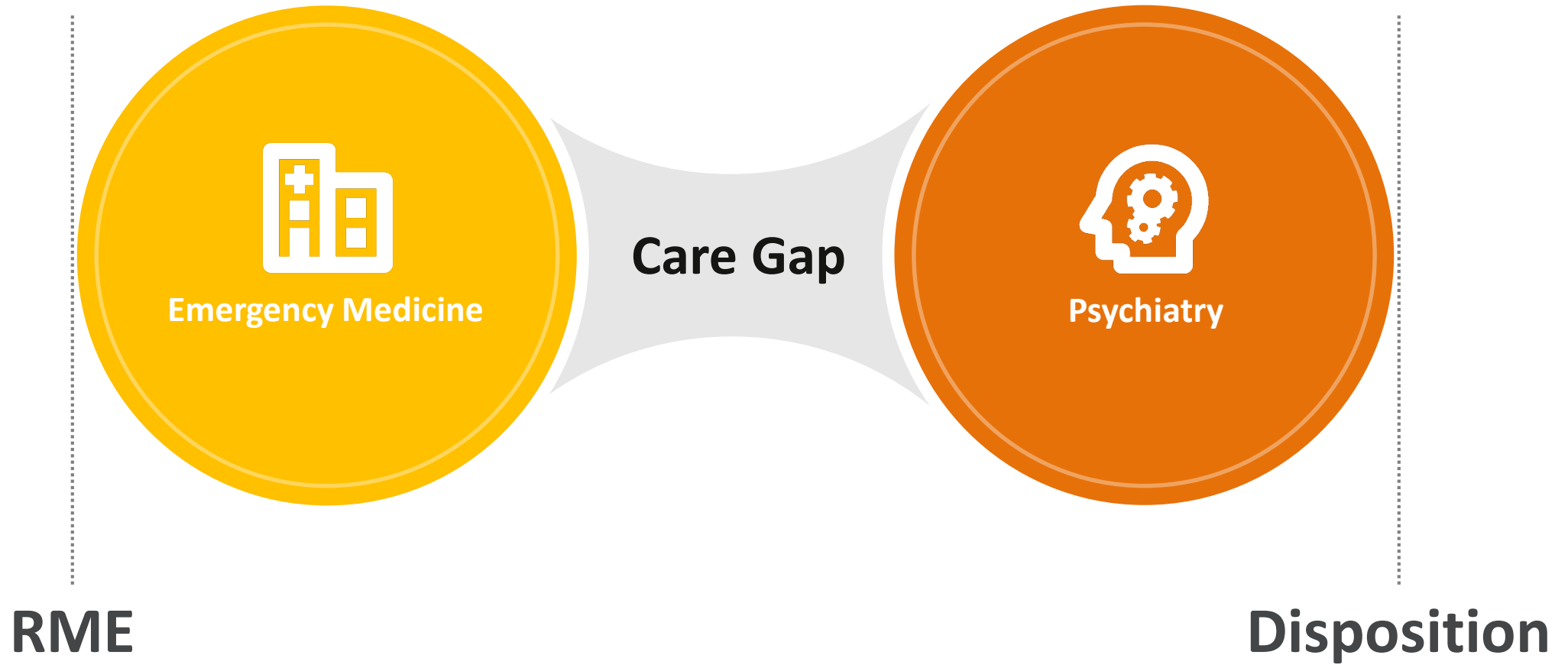


Patient receives undifferentiated, inefficient care by providers not trained in behavioral health treatment protocols.



Psychiatric Bucket

A Gap in Care



Desired Future State: Differentiated Care

Patients are assessed and differentiated by risk.

Patients receive specialized, appropriate, and efficient care.



An Integrated Approach

Vituity's Integrated Behavioral Health Solutions



Emergency Department Care Delivery

- **Clinical Services:** Physician leaders provide guidance, resources, and support to care for all ED patients.
- **Leadership Programs:** Coaching and leadership programs designed to solidify integration.



Comprehensive Training and Education

- **Best-practice toolkits:** Processes and best practices across a wide range of topics.
- **Educational courses:** Additional depth and context to the treatment of behavioral health conditions.



Psychiatric Care Delivery

- **Telepsychiatry:** Two-way video for 24/7, on-demand access to board-certified psychiatrists.
- **EmPath Units:** Hospital-based outpatient units provide a calm, healing setting for patients in crisis.
- **Inpatient Psychiatry:** Psychiatric hospitalist model ensures coordinated treatment, planning, and care.

Improving Healthcare for ALL Emergency Patients

Introducing Vituity's Emergency Psychiatric Intervention (EPI)

- Designed by Vituity experts in emergency and psychiatric care.
- Empowers ED providers to treat all patients — behavioral and physical.
- Trains providers to properly evaluate and treat behavioral health patients.



EPI Approach

1. Split-flow processing

- *Leverage risk stratification and early assessment.*

2. Elimination of overprocessing and serial processing

- *Eliminate non-value add steps, reducing redundancies and maximizing parallel work.*

3. Early and appropriate treatment

- *Educate and empower non-psychiatry staff to initiate timely treatment.*



EPI Workflow

Traditional ED Behavioral Health Patient Care



Behavioral health patient arrives at ED and is medically cleared.



Patient waits an average of **11.5** hours in ED for treatment. Symptoms may escalate and patient may need to be restrained.



Patient sees psychiatrist and begins treatment and disposition planning.

EPI



Behavioral health patient arrives at ED and is medically cleared.



ED staff rapidly risk stratifies (assigns **low, medium, or high** risk) to expedite care.



Emergency physician starts medication (if appropriate), and disposition planning begins with a care plan.

Vituity's EPI Toolkit

- Risk stratification tools
- Medical clearance tools
- De-escalation training
- Medication algorithms
- Reassessment guidelines
- Disposition best practices



AMITA Case Studies

Vituity and AMITA Health

- AMITA Health is an award-winning health system that delivers care to nearly 6.6 million residents in and around Chicago.
- Formed as a joint operating company by Adventist Midwest Health, Alexian Brothers Health System, and Presence Health.
- Since 2016, Vituity and AMITA Health have partnered to create a standard of excellence at 10 EDs (legacy Presence sites). Within 12 months, Vituity achieved the following:
 - Established strong leadership teams at practice locations.
 - Actively recruited and fully staffed EDs.
 - Reduced LWOS rates to less than 1% of patient arrivals.
 - Delivered training and tools for compassionate and effective behavioral healthcare to providers at all levels.



Protocols and Resources

- Documenting behavioral health patient, LOS, clinician, case worker, and referencing:
 - BARS Scale
 - Risk stratification matrix
 - AMITA Dashboard

BARS Scale

1 = Difficult or unable to rouse

2 = Asleep but responds normally to verbal or physical contact

3 = Drowsy, appears sedated

4 = Quiet and awake (normal level of activity)

5 = Signs of overt (physical or verbal) activity, calms down with instructions

6 = Extremely or continuously active, not requiring restraint

7 = Violent, requires restraint

Risk Stratification Matrix			
Diagnosis	Risk Level		
Depression/Danger to Self	Low	Moderate	High
Anxiety	Low	Moderate	High
Agitation or Danger to Others	Low	Moderate	High
Psychosis	Low	Moderate	High

Meet Your Presenters



John Martini, MD, FACEP
Quality Assistant Medical Director,
AMITA St. Joseph Chicago



Dillon Barron, MD
Physician Champion,
AMITA St. Francis

AMITA St. Joseph Chicago

- 20,000 annual ED visits.
- 24-bed ED.
- Inpatient psychiatric unit.

Before EPI

- ED treats more than 100 behavioral health patients monthly.
- Four-hour average discharge LOS for behavioral health patients.
- Lack of dedicated behavioral health leadership and resources.

EPI Initiatives

- 1) Utilize newer antipsychotics to reduce excessive sedation and time in boarding.
- 2) Develop tools for risk stratification and discharge resource materials to streamline process.



Initiative #1

Utilize newer antipsychotics to reduce excessive sedation and time in boarding.

Goals:

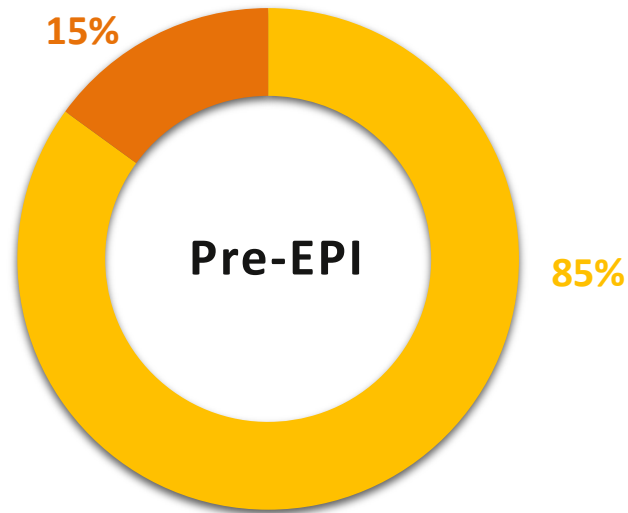
- **Intermediate:** Goal of > 25% use of newer agents after 30 days.
- **Long Term:** Goal of > 75% use of newer agents within 3 months.

Impact:

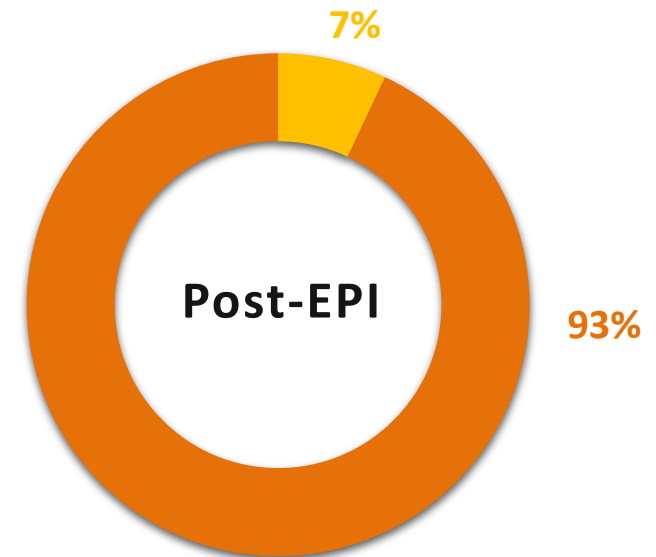
- New medications cause less sedation, which allows for quicker assessment.
- Less sedation = reduced length of stay, better throughput = ability to care for more patients = better patient experience.

Process Data

- 85% of patients were given haloperidol prior to the initiative.
- Post-initiative, newer generation antipsychotics were administered to 93% of patients; only 7% of patients were given haloperidol.



■ 1st generation antipsychotic ■ 2nd generation antipsychotics



■ 1st generation antipsychotic ■ 2nd generation antipsychotics

Initiative #2

Develop tools for risk stratification and discharge resource materials to streamline process.

Goals:

- **Intermediate:** Decrease discharge LOS to 120 minutes.
- **Long Term:** Decrease discharge LOS to 90 minutes.

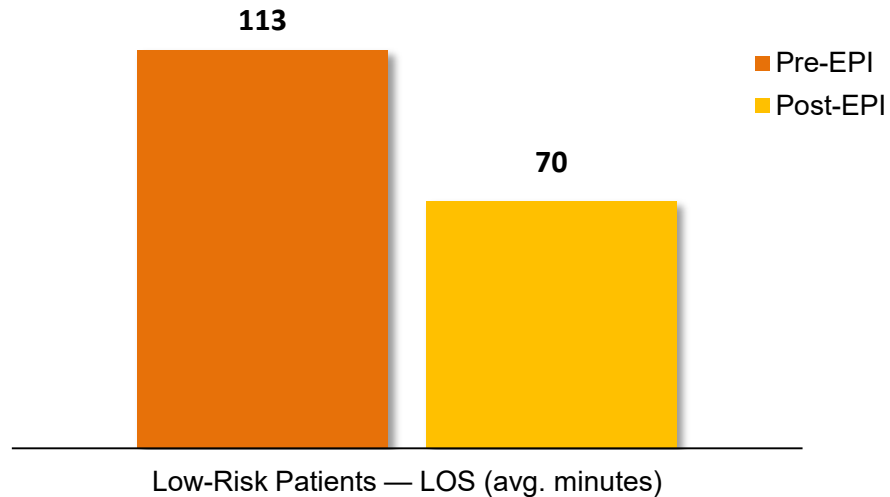
Impact:

- Patient care is delayed and costs increase, which impacts care of other patients.

Results

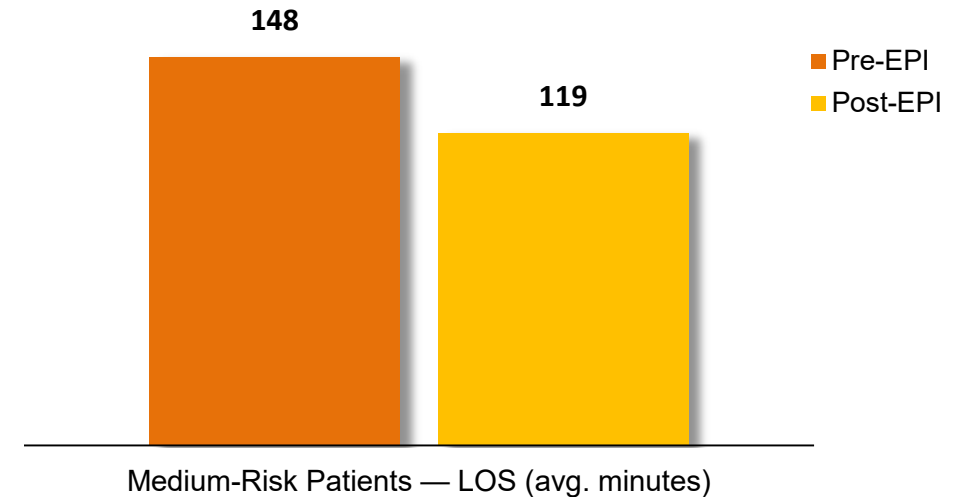
Low-Risk Patients

- Average LOS was 70 minutes.
- 27 cases of low-risk patients were identified.
- 38% reduction in LOS since the start of initiative.
- No unexpected bounce backs.



Medium-Risk Patients

- Average LOS was 119 minutes.
- 13 cases of medium-risk patients were identified.
- 20% reduction in LOS since the start of initiative.
- No unexpected bounce backs.



AMITA St. Francis

- 36,000 patients annually, averaging 100 daily.
- 26-bed ED plus fast-track area with 15 chairs.
- No inpatient psychiatric unit.

Before EPI

- ED treats more than 300 behavioral health patients monthly, discharging 60%.
- Five-hour average discharge LOS.
- Average of 50 violent episodes per month stemming from agitation, psychosis, or mania.

EPI Initiatives

- 1) Implement a new behavioral health pathway to reduce discharge LOS.
- 2) Develop early medication protocol to reduce time in boarding.



Initiative #1

Implement a new behavioral health pathway to reduce discharge LOS.

Goals:

- Reduce discharge LOS on all behavioral health patients < 150 minutes.
- Empower providers to discharge low-risk patients and provide medical clearance without lab workup by using validated tools.
- Reduce over-testing.

Impact:

- Improves patient satisfaction and permits more patients to be seen by care team.
- Lowers cost of care without compromising quality.

Behavioral Health Pathway

BEFORE EPI



Patient arrives at ED.



Labs are obtained on patient prior to evaluation.



Patient evaluated by physician.



Patient evaluated by crisis worker regardless of complexity.

AFTER EPI



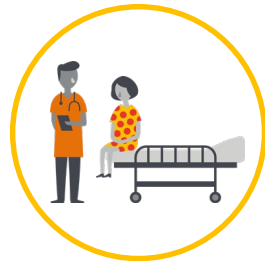
Patient arrives at ED and is immediately risk stratified.



Uses tools to determine which patients can be cleared without labs.



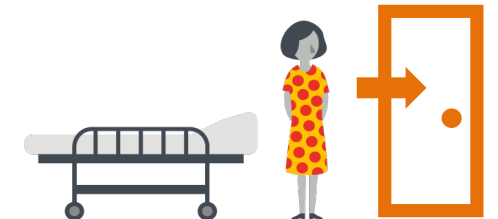
Crisis worker evaluates sober, non-medically complex patients without lab workup.



No diagnostic testing needed.

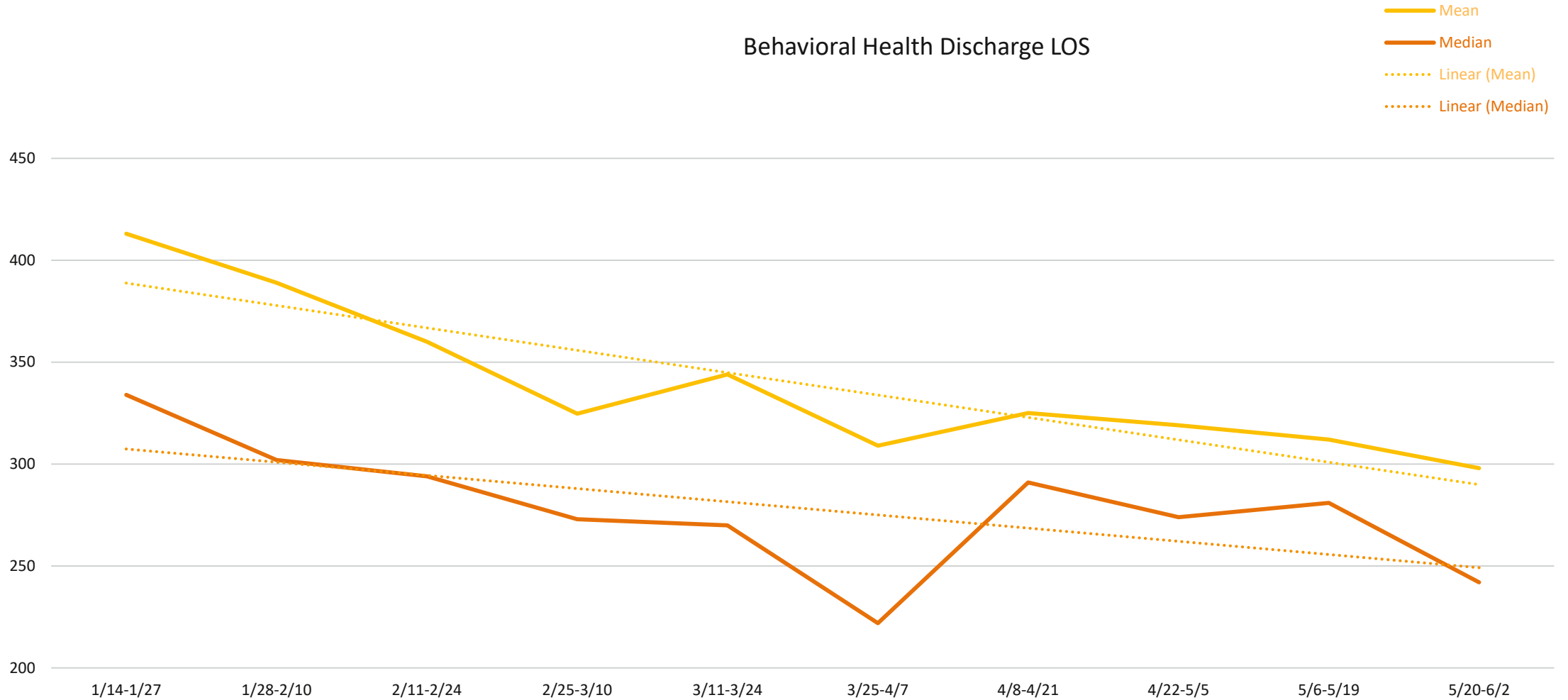


Providers empowered to discharge low-risk patients without full crisis evaluation.

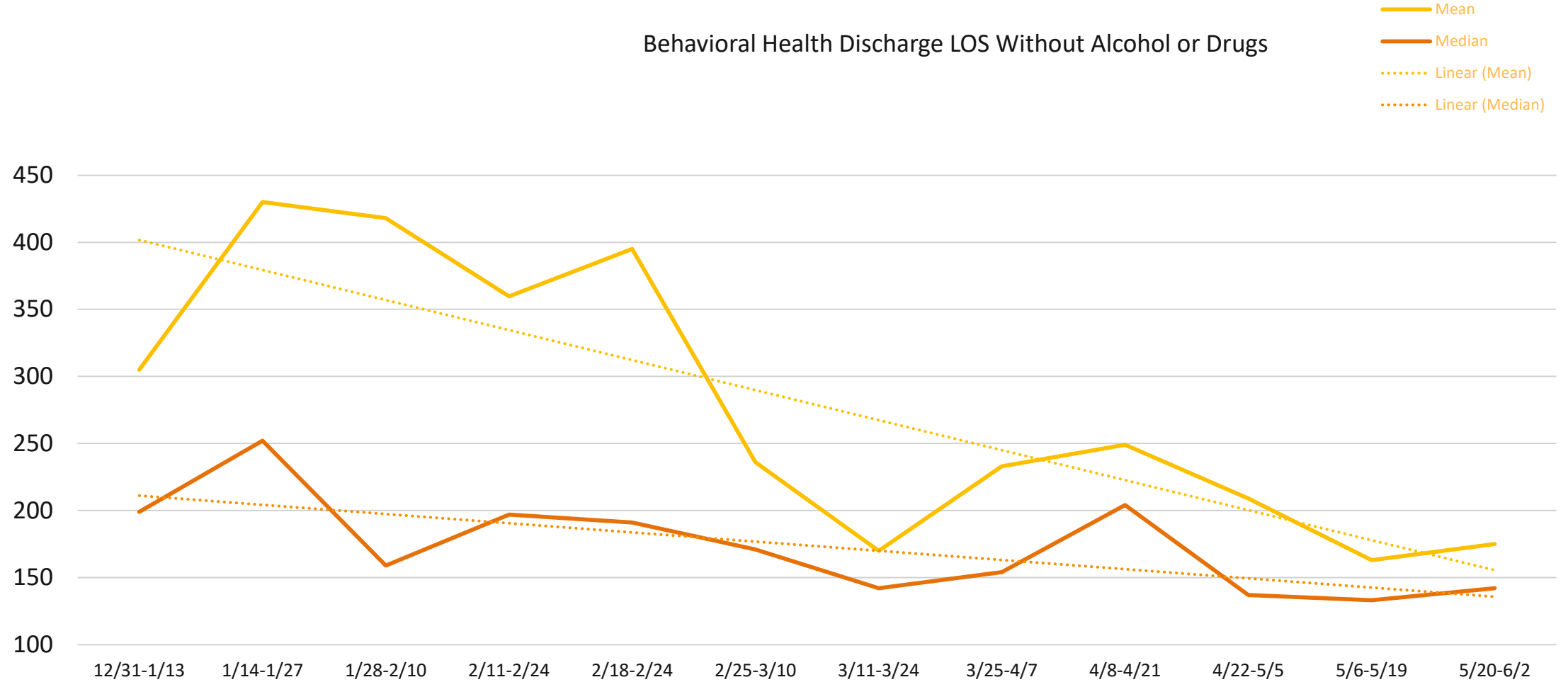


Results and Data: Discharge LOS

Behavioral Health Discharge LOS



Results and Data: Discharge LOS



Initiative #2

Develop early medication protocol to reduce time in boarding.

Goals:

- Decrease monthly use of IM haloperidol and physical restraints in favor of oral medications and verbal redirection.
- Medicate patients and begin their behavioral health resuscitation early.

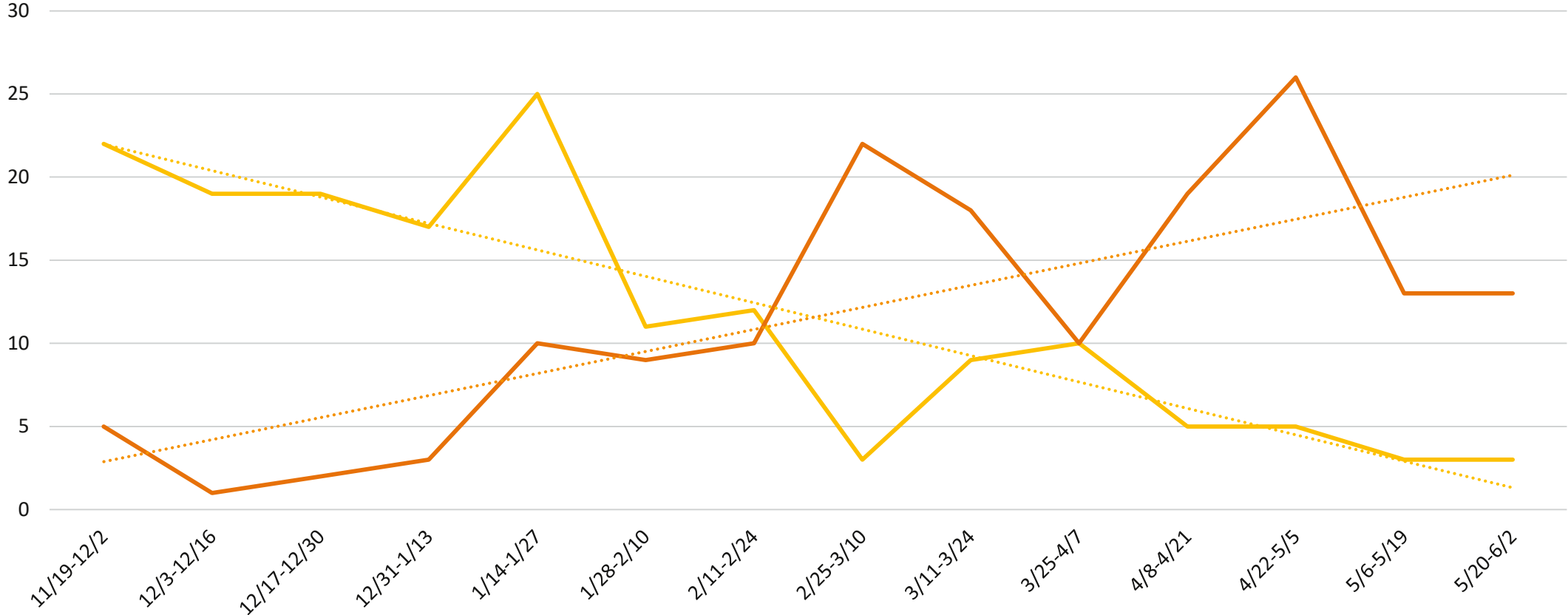
Impact:

- New medications cause less sedation, allowing for quicker assessment.
- Less sedation = reduced length of stay, better throughput = ability to care for more patients = better patient experience.

Results and Data: Medications

- # haloperidol IM
- # olanzapine
- Linear (# haloperidol IM)
- Linear (# olanzapine)

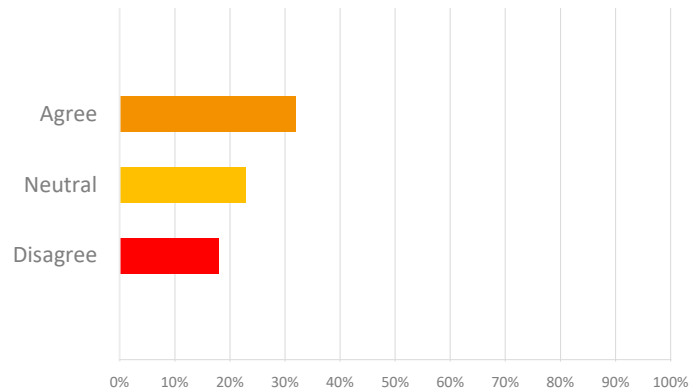
Haloperidol IM (1st Generation Antipsychotic) Versus Oral Olanzapine (2nd Generation Antipsychotic)



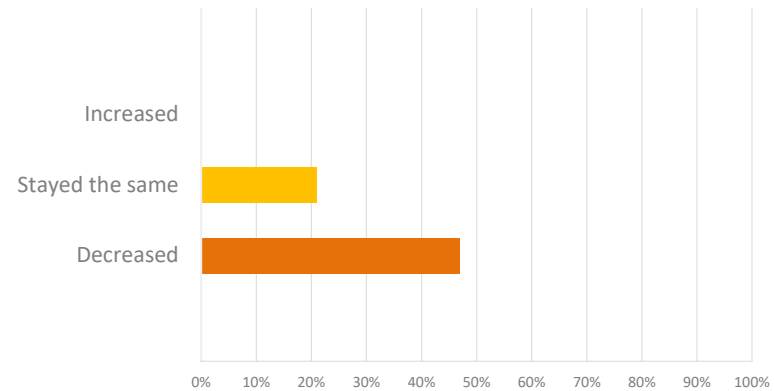
Increased Provider Satisfaction

Survey results of ED care team after implementing EPI.

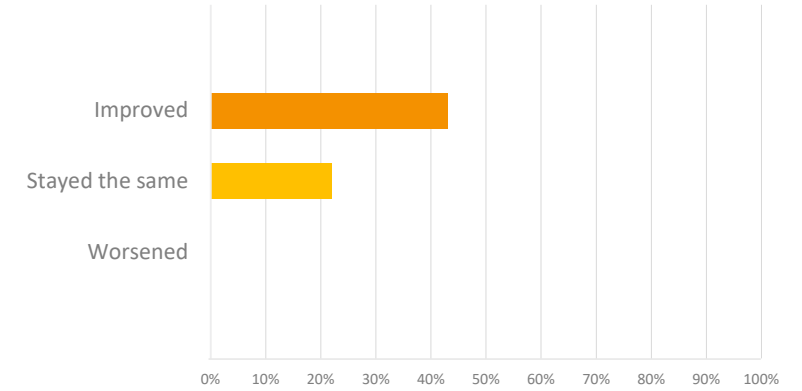
Do you feel safer in general in the emergency department?



The frequency with which we have utilized restraints on patients in the emergency department has changed.

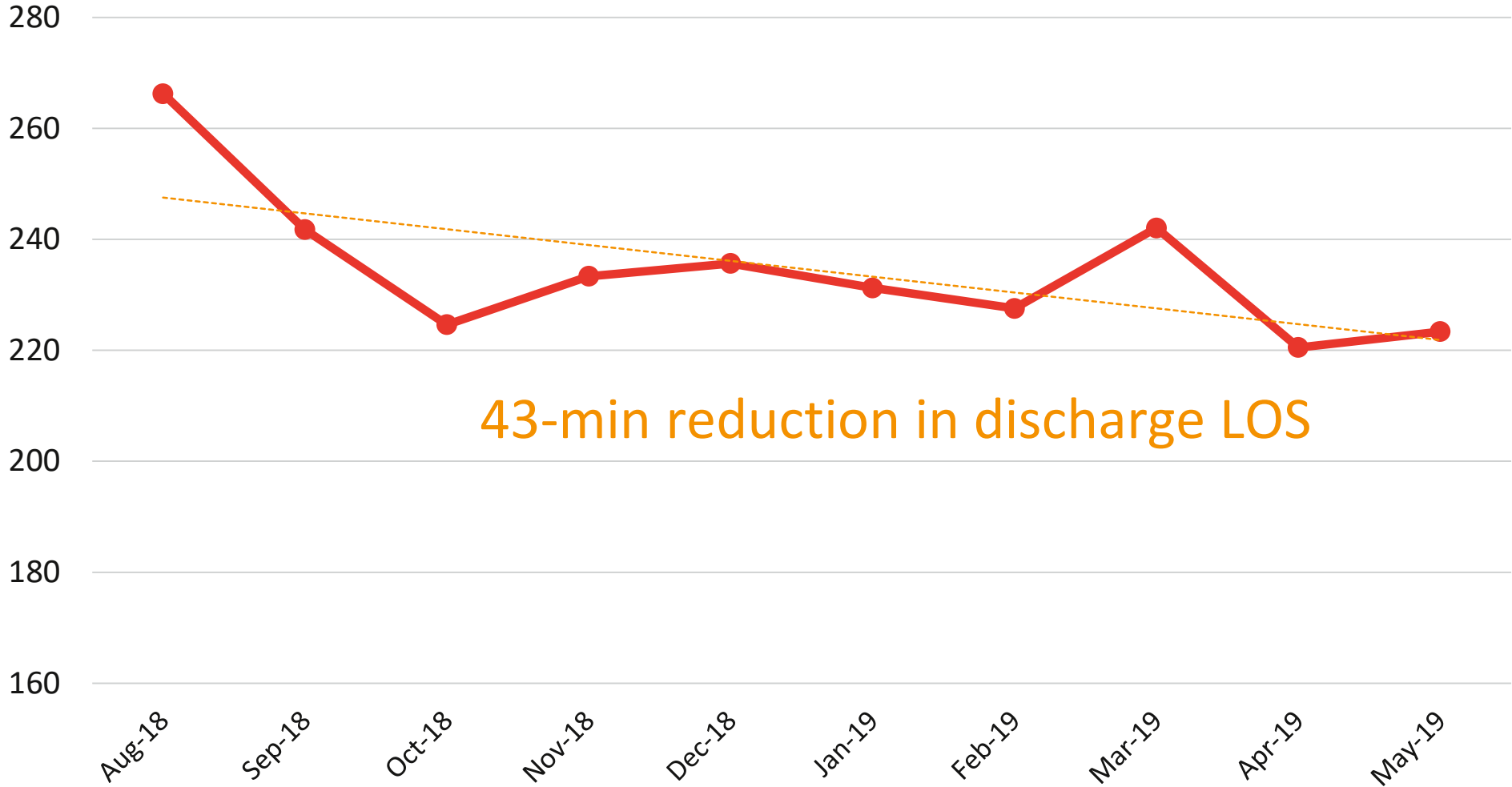


The overall quality of care of behavioral health patients in the emergency department has improved.



Summary

Aggregate Discharge LOS Across 4 AMITA Locations



43-min reduction in discharge LOS

Objectives Achieved!

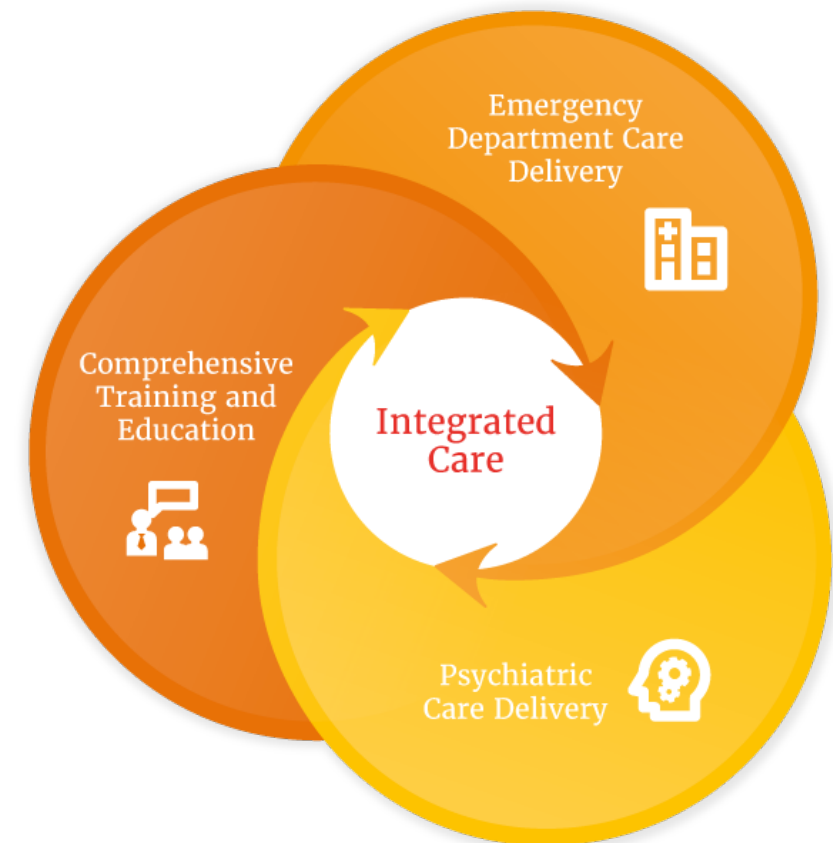
- ✓ Reduced length of stay — despite similar volume!
- ✓ Improved quality and experience.
- ✓ Improved safety.
- ✓ Improved resource utilization.



Fully Integrated Change Management

- **Hospitals and health systems** improve clinical quality, profitability, and satisfaction scores while elevating their brand.
- **EDs** achieve higher throughput and better care for all, with fewer behavioral patient admissions and a more stable, engaged staff.
- **Providers** gain new confidence in their ability to treat all patients.

Vituity's Emergency Psychiatric Intervention (EPI)





Thank you!

Visit: [vituity.com](https://www.vituity.com)

Email: solutions@vituity.com

Appendix

Goal-directed Interventions

