



A Comprehensive Look at Washington's Trauma Care Processes

Let's Get Cracking (Pistachios) With Facility
Comparisons

Indicator Selection Criteria

- 1 - Are simple to understand
- 2 - Are applicable to the care of most trauma patients in Levels I-III and some in Level IVs.
- 3 - Either reflect basic trauma care standards or emerging issues.
- 4 - Can easily be measured using existing WTR data.
- 5 - Are supportive of QI activities at the state, regional, and hospital levels.



Filters Chosen For Today's Discussion

- The % of EMS run sheets available for patients coming from the field.
- The % of patients from the scene with low field or ED systolic blood pressure (age appropriate systolic blood pressure thresholds) who receive full trauma team activations (FTTA).
- The % of pediatric (age<15) patients admitted.
- For FTTAs, surgeon arrived in a timely manner.
- First GCS in the ED documented.
- First ED temperature documented.
- Adult (age 15+) patients' field or any ED systolic blood pressure documented.



Filters Chosen For Today's Discussion, *Continued*

- Pediatric (age<15) patients' field or any ED systolic blood pressure documented.
- The % of patients stayed in the ED > 3 hours before a transfer.
- The % of minor injuries (ISS<9) that are transferred out.
- The % of serious injuries (ISS>15) that are transferred out.
- The % of splenectomies performed on pediatric (age<15) patients with spleen injuries.



How to Interpret Control Charts

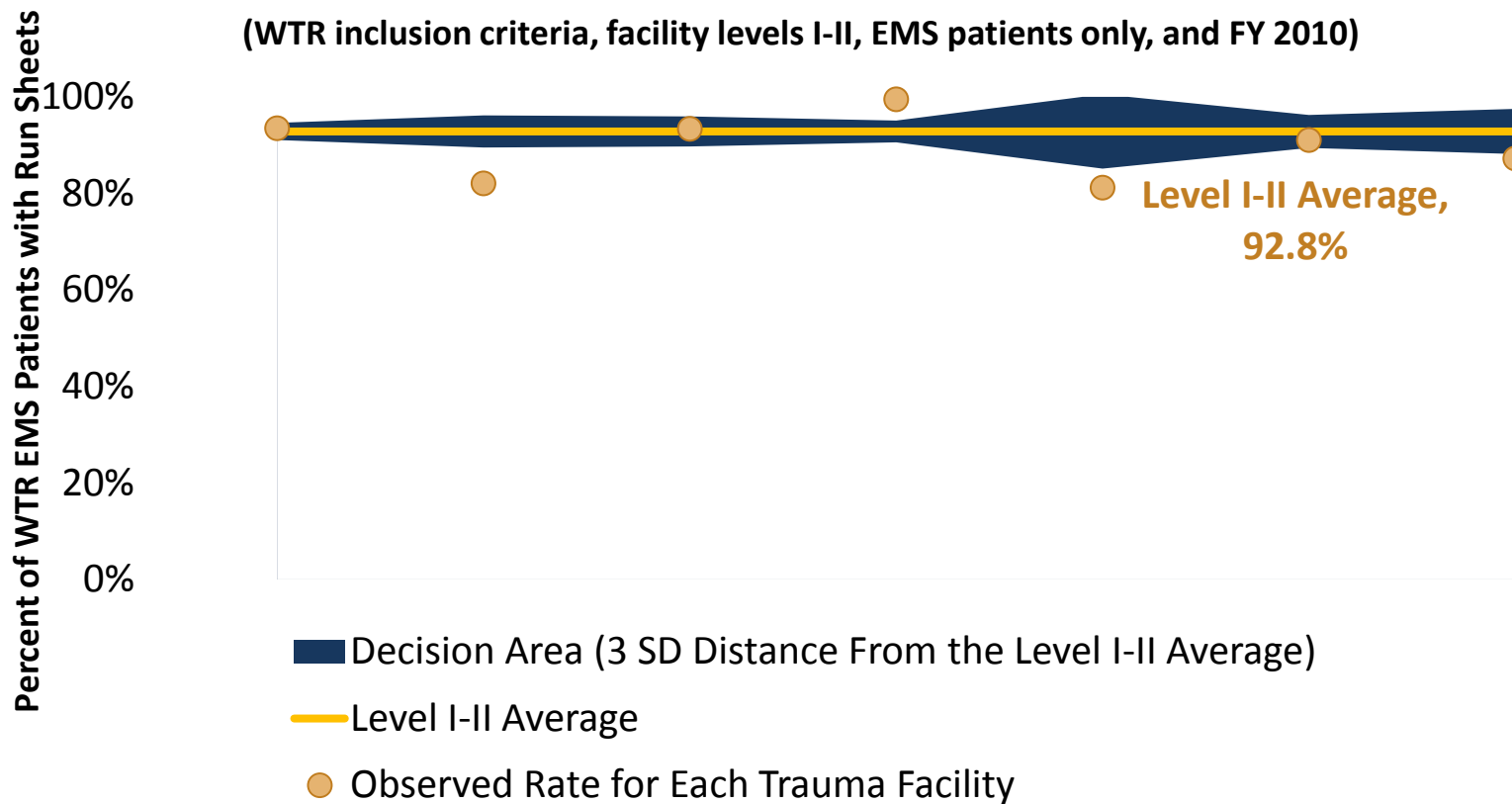
- The horizontal line in the middle is the grand average, and shows the percentage for all facilities in each level of trauma care.
- Each dot symbolizes a trauma facility.
- The dark blue area around the average line shows acceptable variation from the average.
 - If your facility dot is within the blue area, your facility's performance is similar to the average performance in your level of care.
 - If your dot is in the white areas above or below the blue area, your facility might be performing above or below the average depending on the specific filter under study.



EMS Run Sheets, Levels I-II

The percentage of EMS run sheets available for patients coming from the field

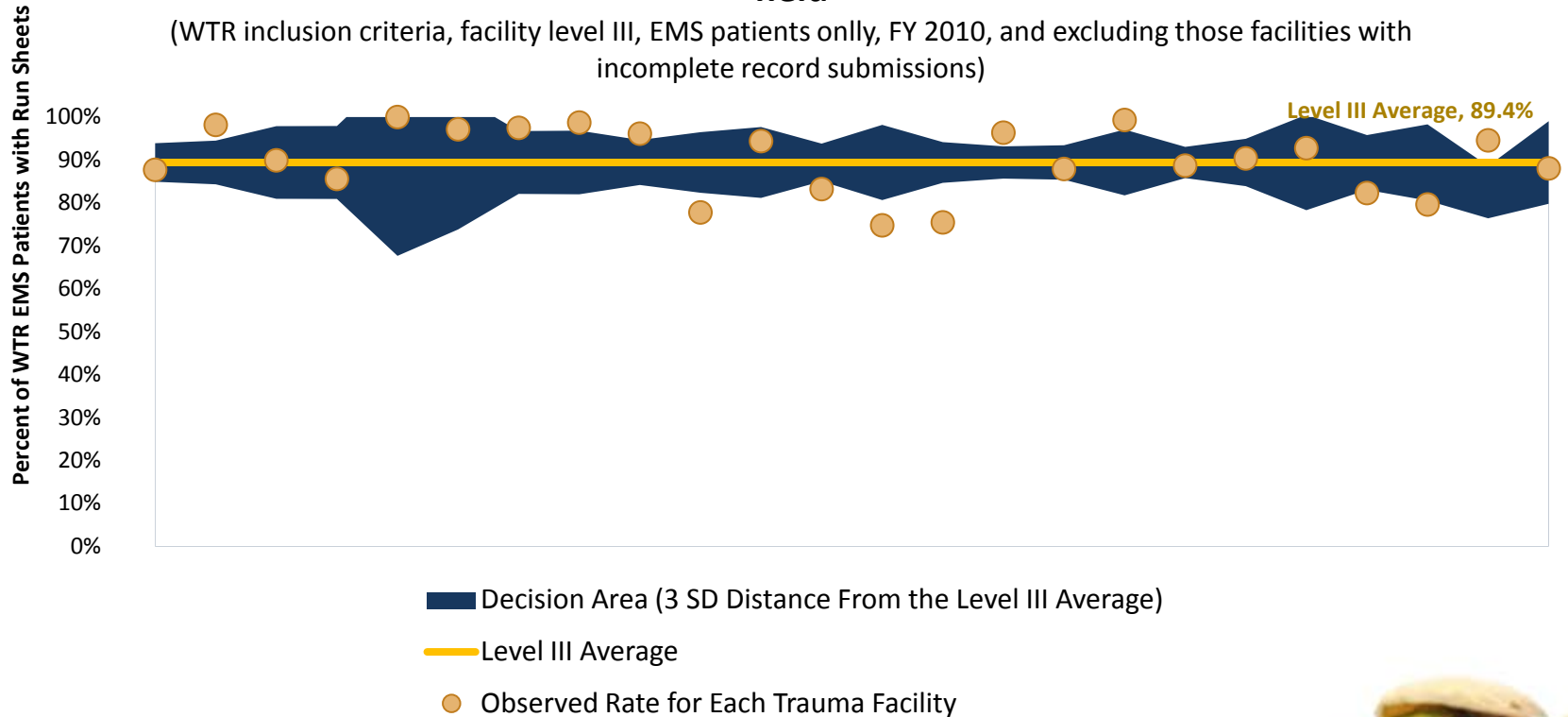
(WTR inclusion criteria, facility levels I-II, EMS patients only, and FY 2010)



EMS Run Sheets, Level IIIs

The percentage of EMS run sheets available for patients coming from the field

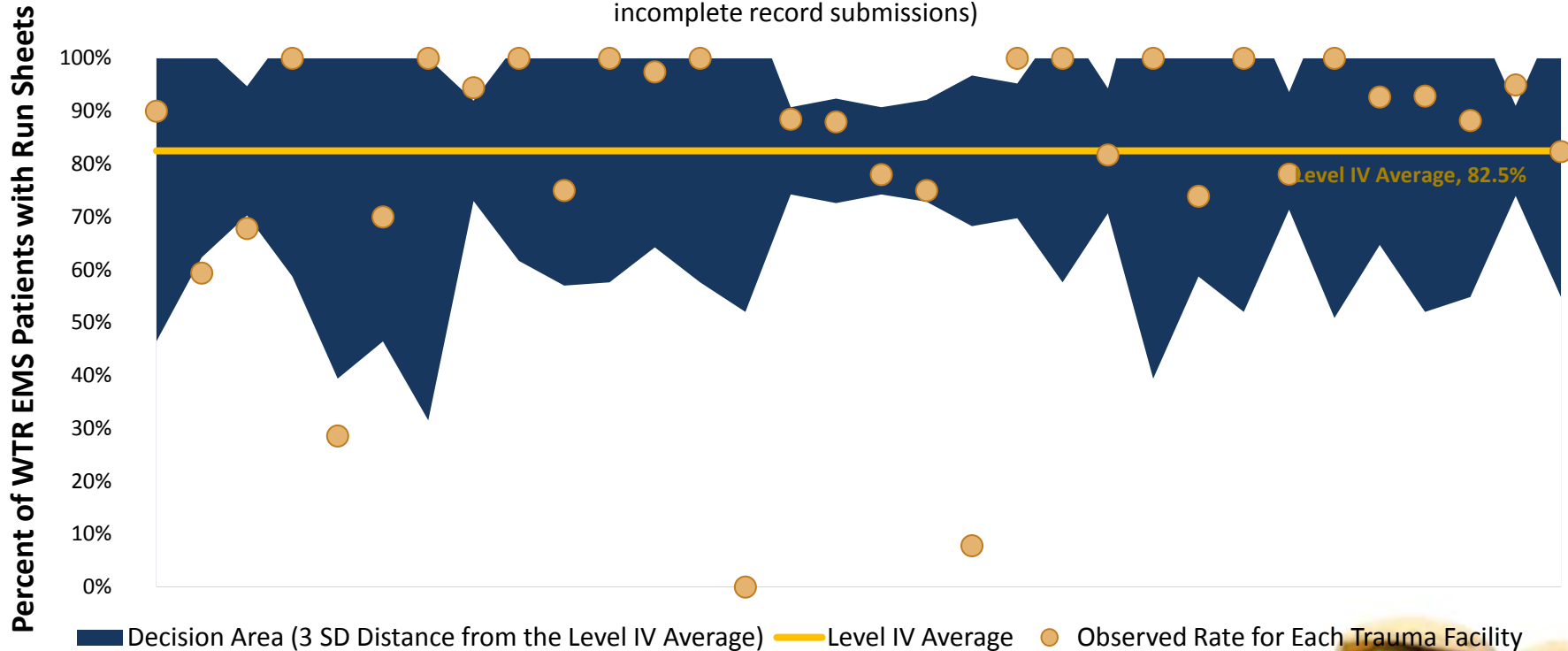
(WTR inclusion criteria, facility level III, EMS patients only, FY 2010, and excluding those facilities with incomplete record submissions)



EMS Run Sheets, Level IVs

The percentage of EMS run sheets available for patients coming from the field

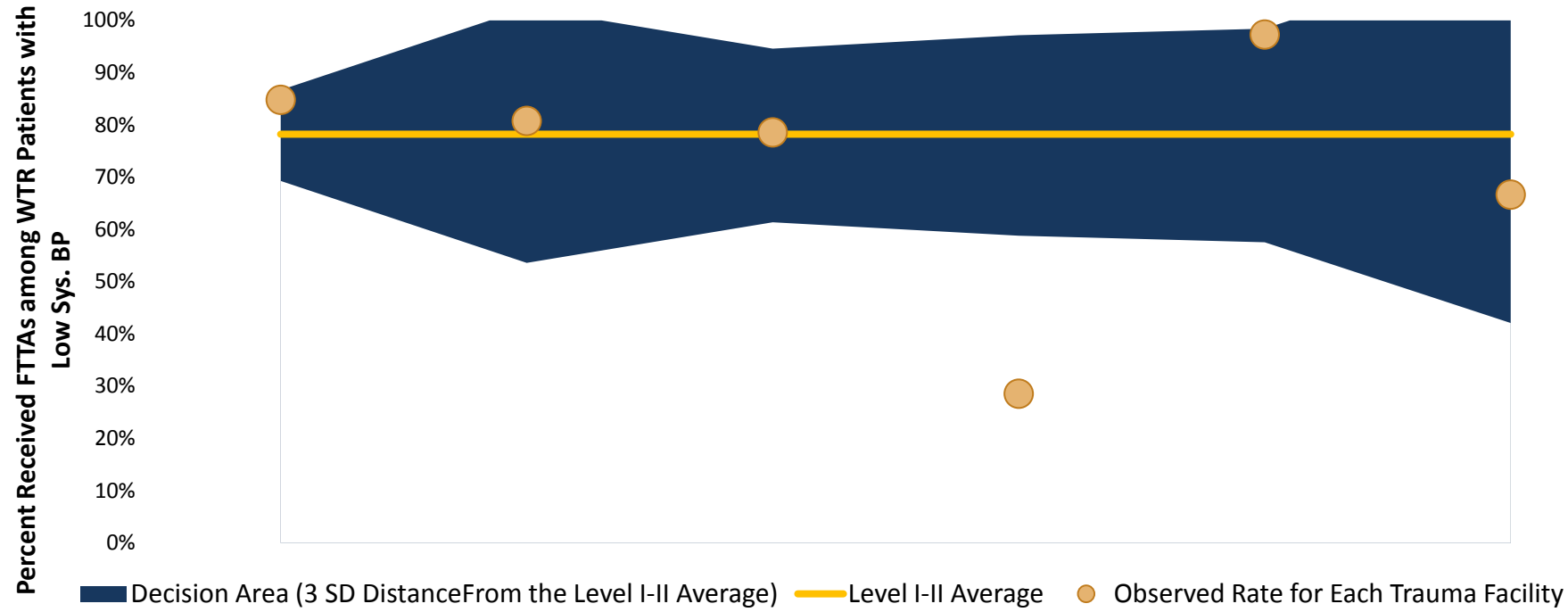
(WTR inclusion criteria, facility level IV, EMS patients only, FY 2010, and excluding those facilities with incomplete record submissions)



Full Trauma Team Activations, Levels I-II

The percentage of Injured patients with low field or ED systolic blood pressure who receive full trauma team activations

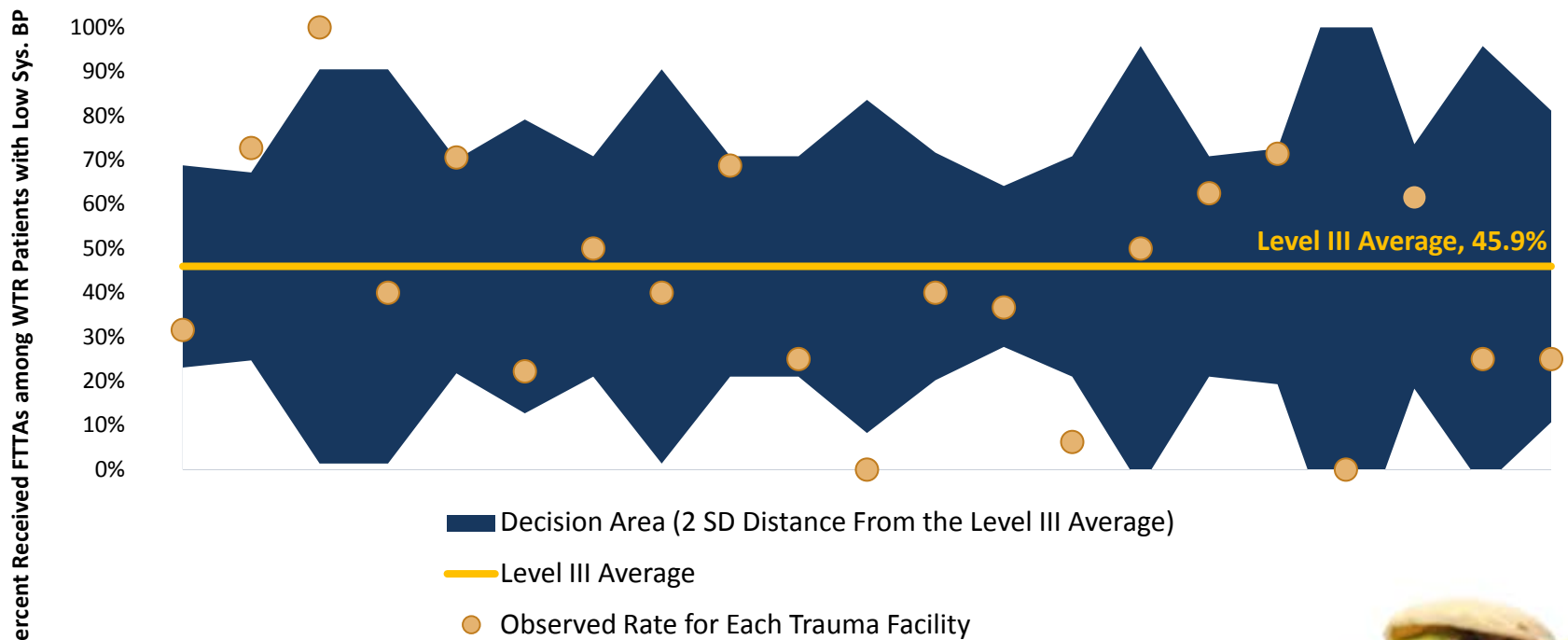
(WTR inclusion criteria, facility levels I-II, age-appropriate Sys. BP. thresholds, EMS patients, and FY 2010)



Full Trauma Team Activations, Level IIIs

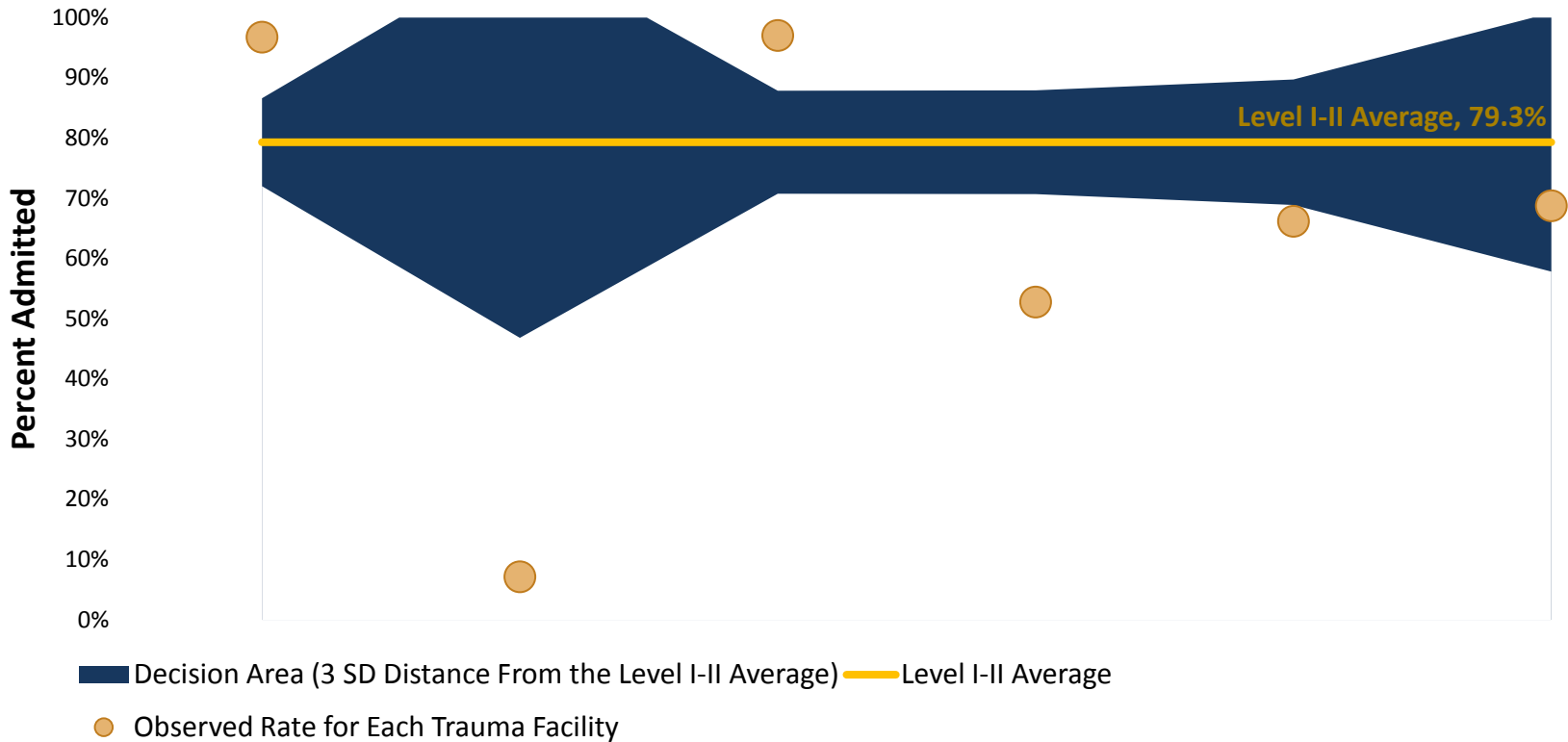
The percentage of injured patients with low field or ED systolic blood pressure who receive full trauma team activations (FTTAs)

(WTR inclusion criteria, facility levels III, age-appropriate Sys. BP. thresholds, EMS patients, FY 2010, and excluding those)



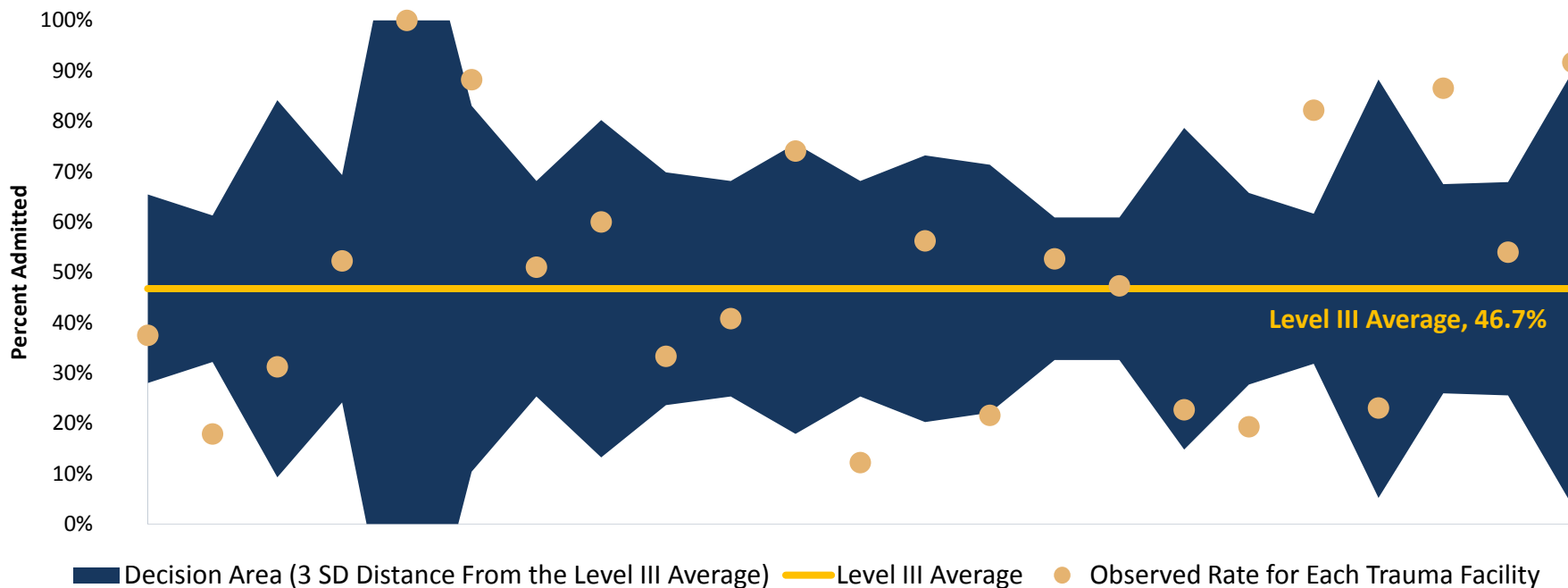
Pediatric Patients, Levels I-IIs

The Percentage of Pediatric (Age<15) Patients Seen in the ED Admitted
(WTR inclusion criteria, facility levels I-II, and FY 2010)



Pediatric Patients, Level IIIs

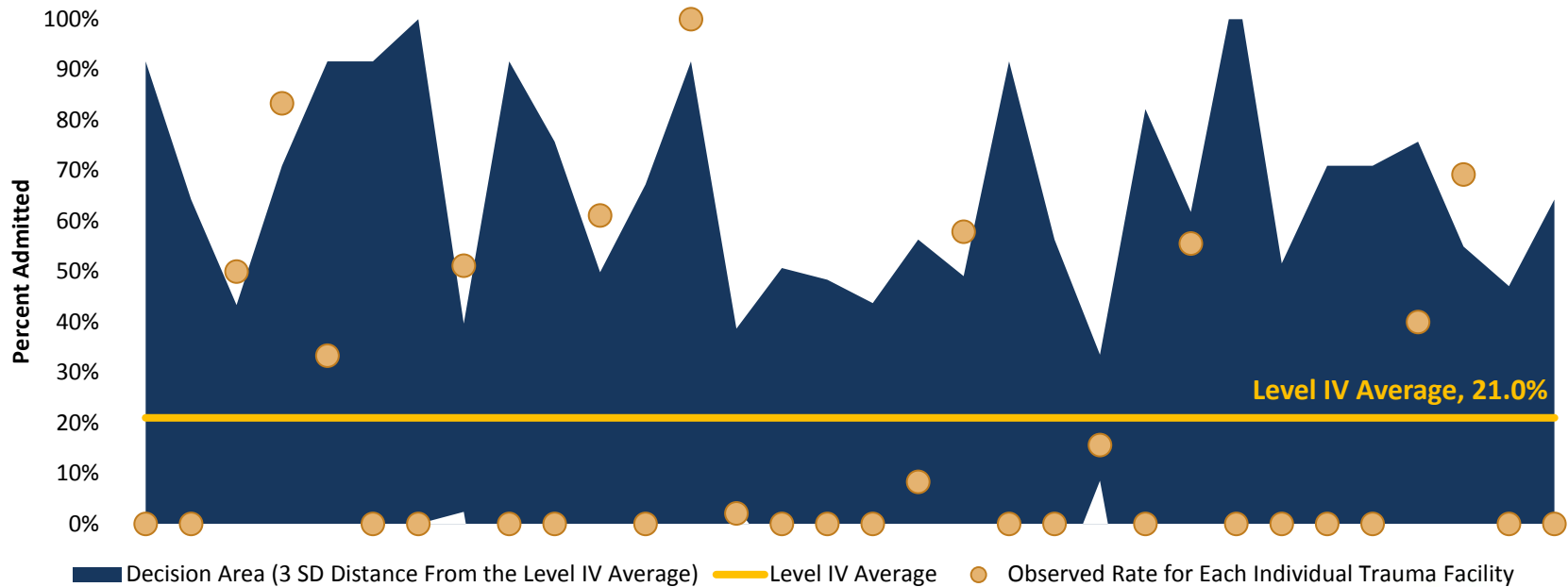
The Percentage of Pediatric (Age<15) Patients Seen in the ED Admitted
(WTR inclusion criteria, facility level III, FY 2010, and excluding those hospitals with incomplete record submissions)



Pediatric Patients, Level IVs

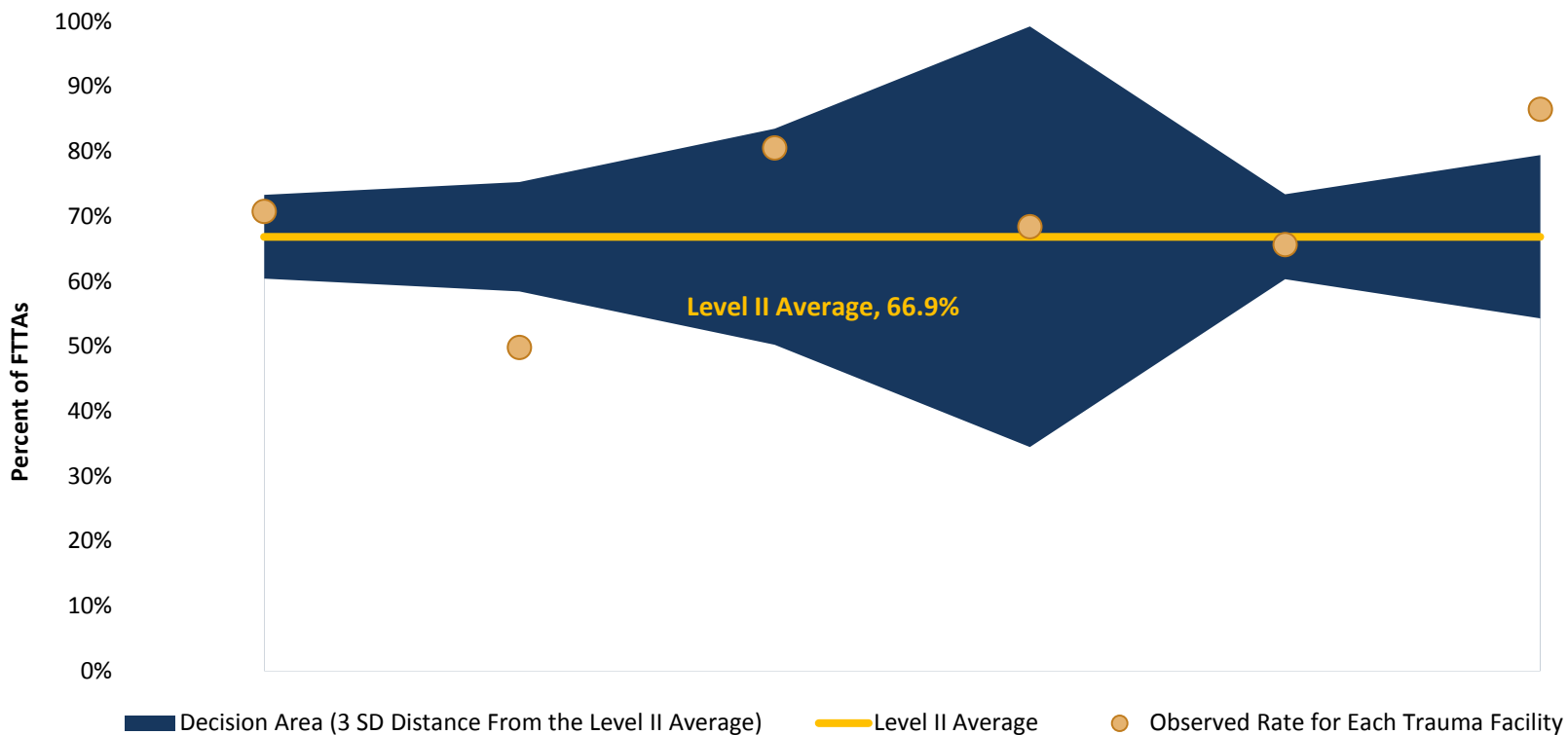
The Percentage of Pediatric (Age<15) Patients Seen in the ED Admitted

(WTR inclusion criteria, facility level IV, FY 2010, and excluding those hospitals with incomplete record submissions)



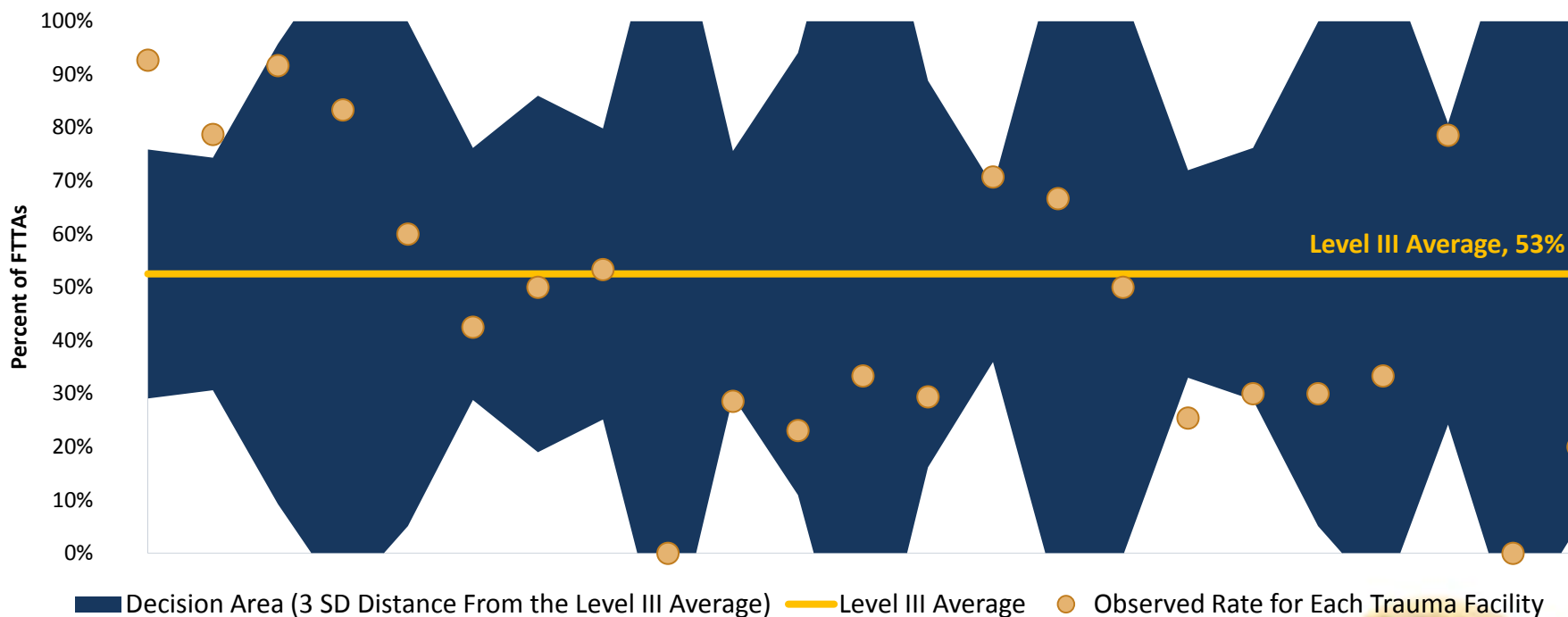
Timely Surgeon Arrival, Level IIs

The percentage of FTTAs that received surgeon within 20 minutes
(WTR inclusion criteria, facility levels II, and FY 2010)



Timely Surgeon Arrival, Level IIIs

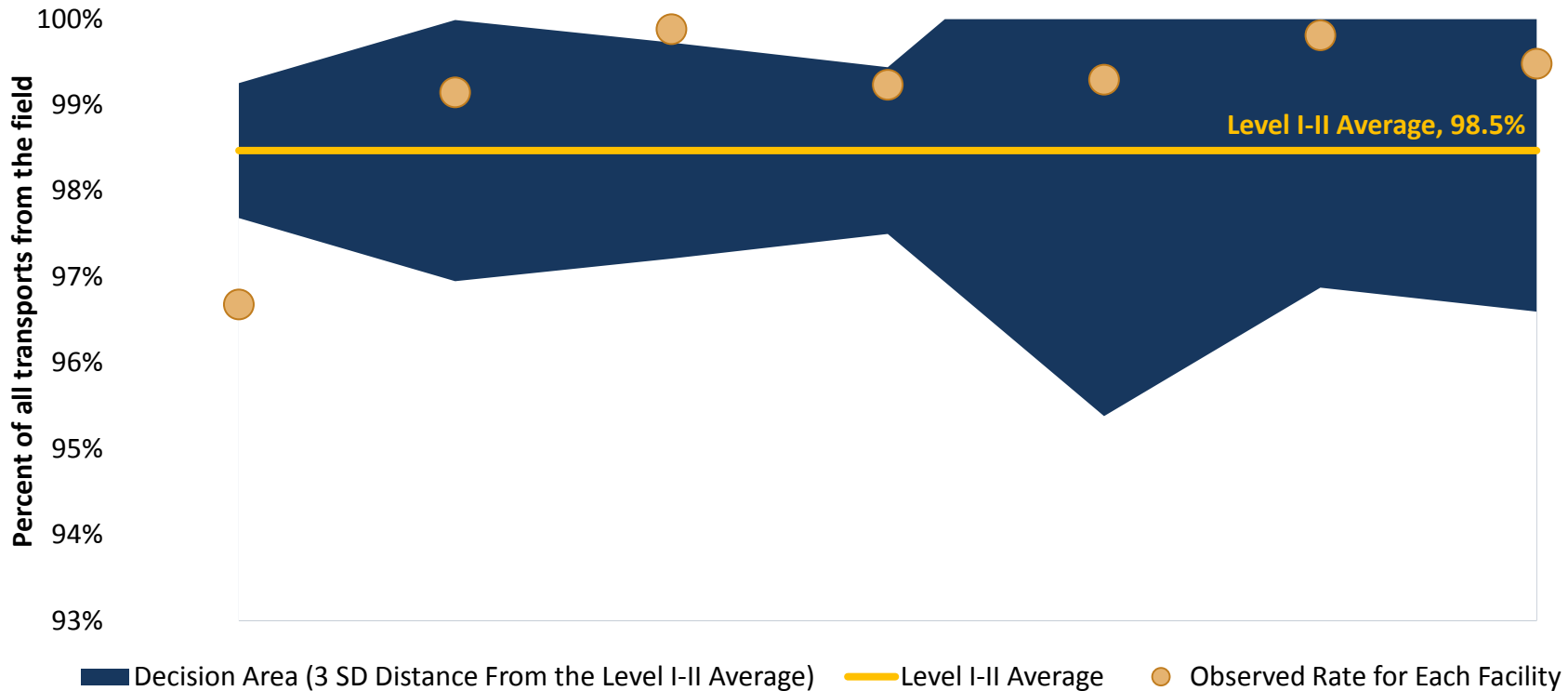
The percentage of FTTAs that received surgeon within 30 minutes
(WTR inclusion criteria, facility level III, FY 2010, and excluding those facilities with incomplete record submissions)



GCS in the ED, Levels I-II

The Percentage of WTR Patients With First GCS in the ED Documented

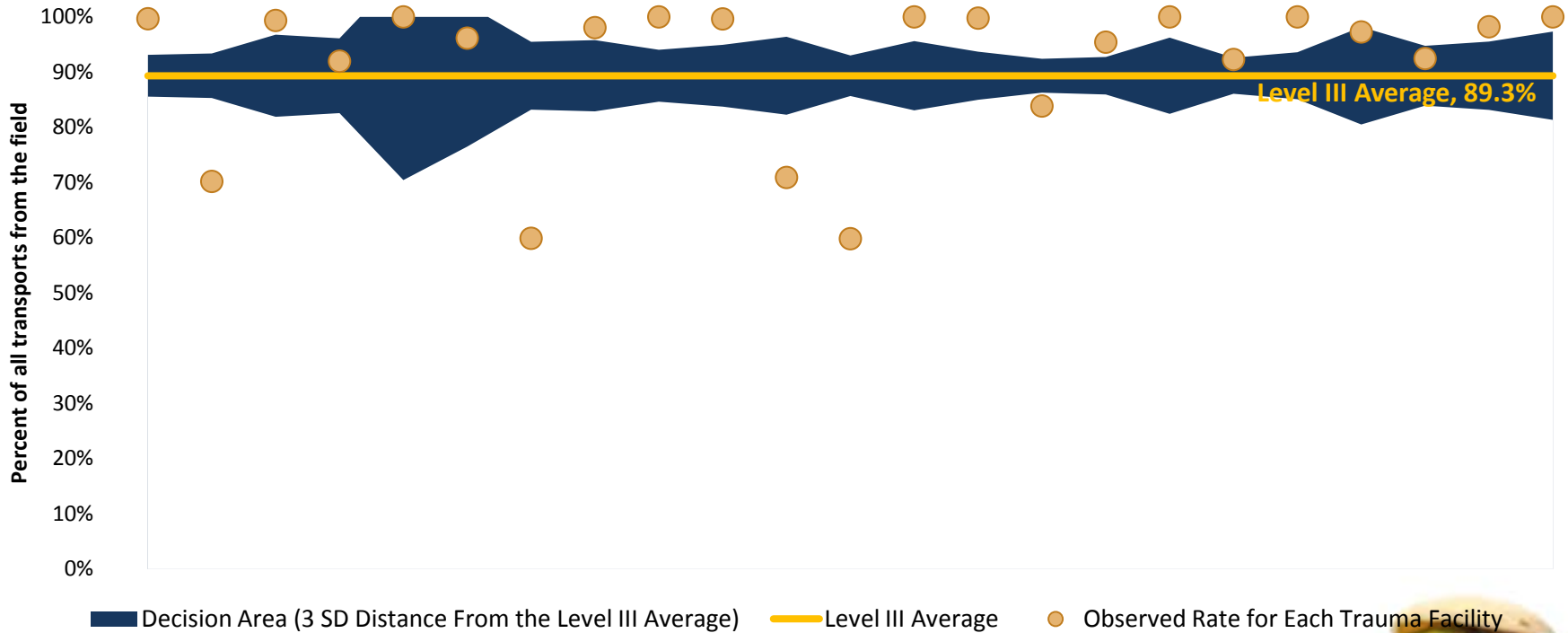
(WTR inclusion criteria, facility levels I-II, excluding transfer patients, and FY 2010)



GCS in the ED, Level IIIs

The Percentage of WTR Patients With First GCS in the ED Documented

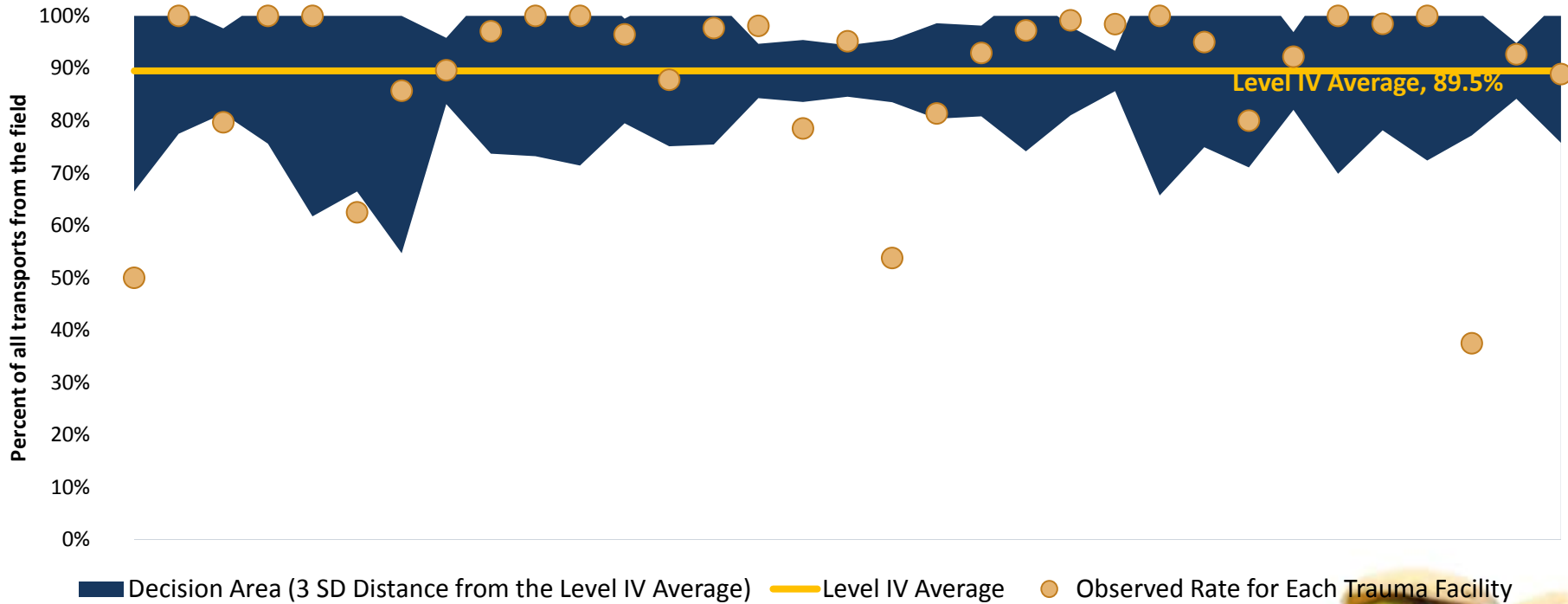
(WTR inclusion criteria, facility level III, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



GCS in the ED, Level IVs

The Percentage of WTR Patients With First GCS in the ED Documented

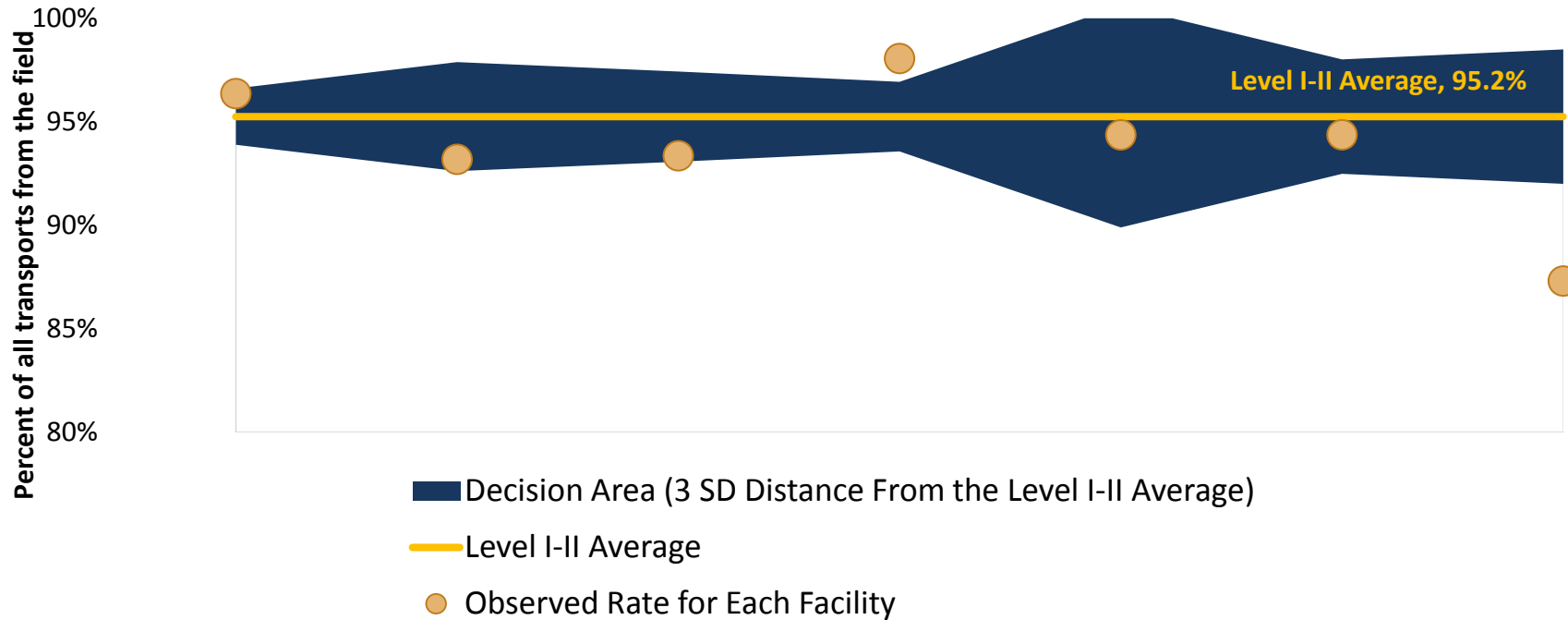
(WTR inclusion criteria, facility level IV, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



Body Temperature, Levels I-II

The Percentage of WTR Patients With First Temperature in the ED Documented

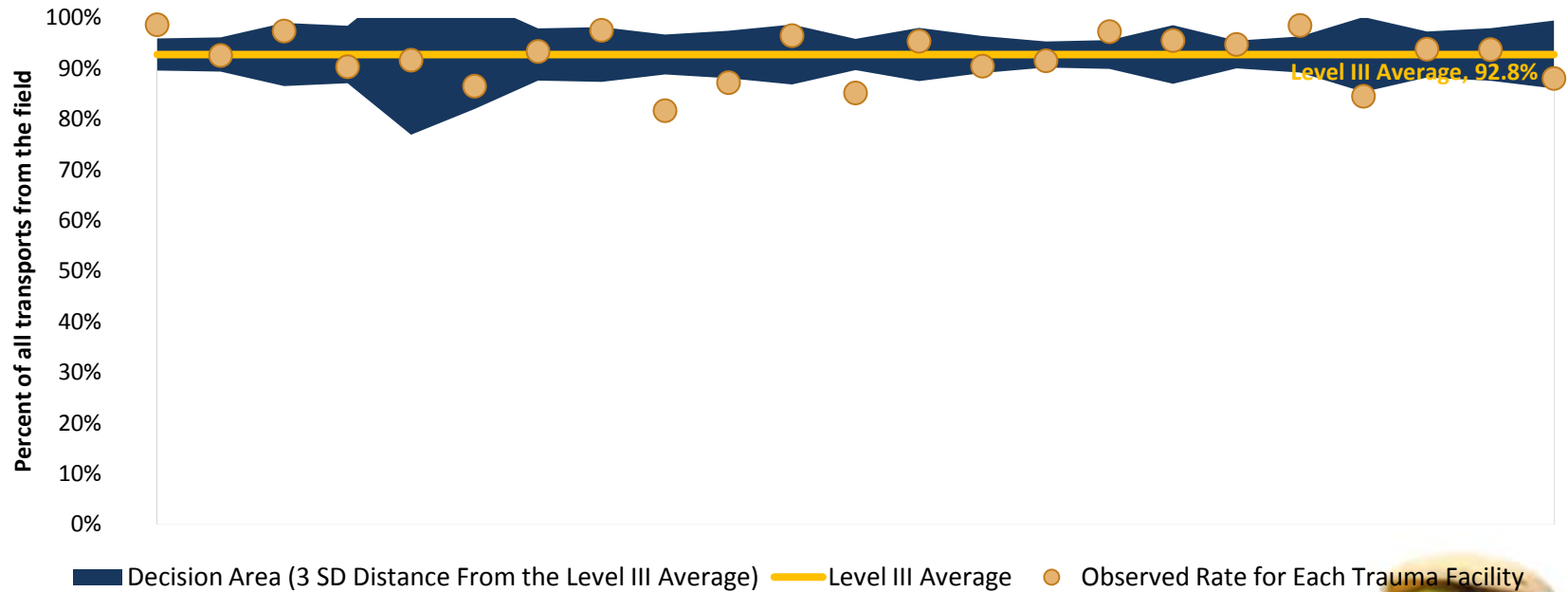
(WTR inclusion criteria, facility levels I-II, excluding transfer patients, and FY 2010)



Body Temperature, Level IIIs

The Percentage of WTR Patients With First Temperature in the ED Documented

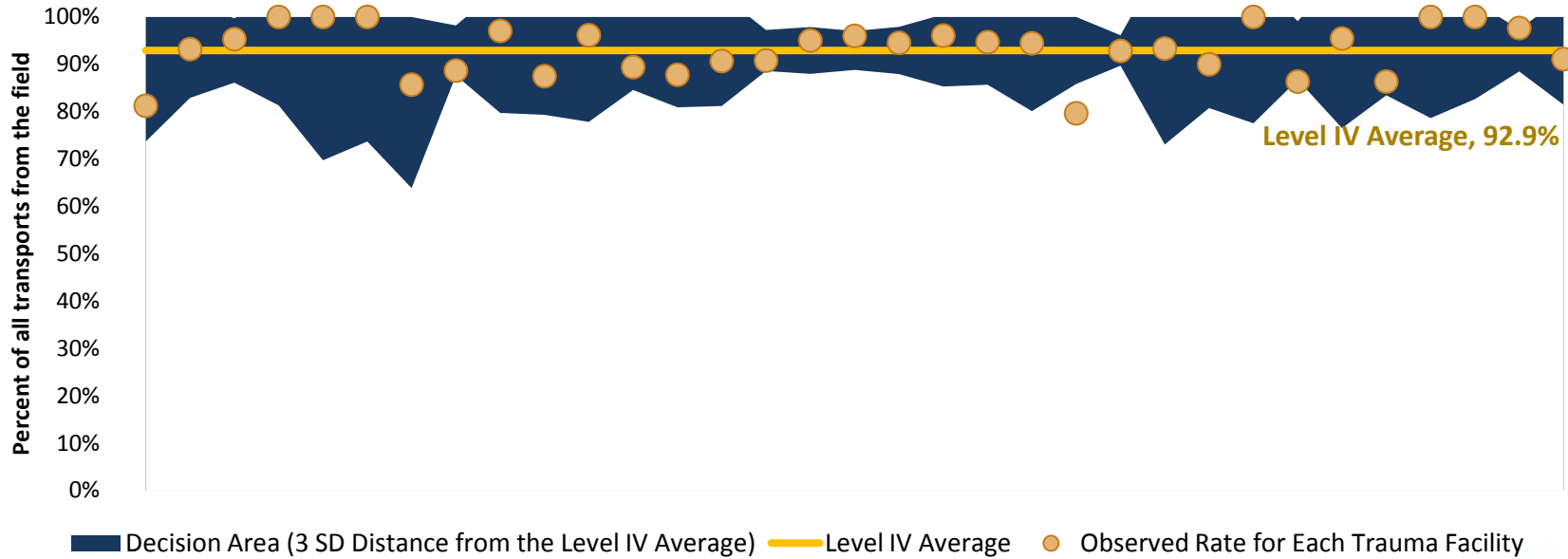
(WTR inclusion criteria, facility level III, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



Body Temperature, Level IVs

The Percentage of WTR Patients With First Temperature in the ED Documented

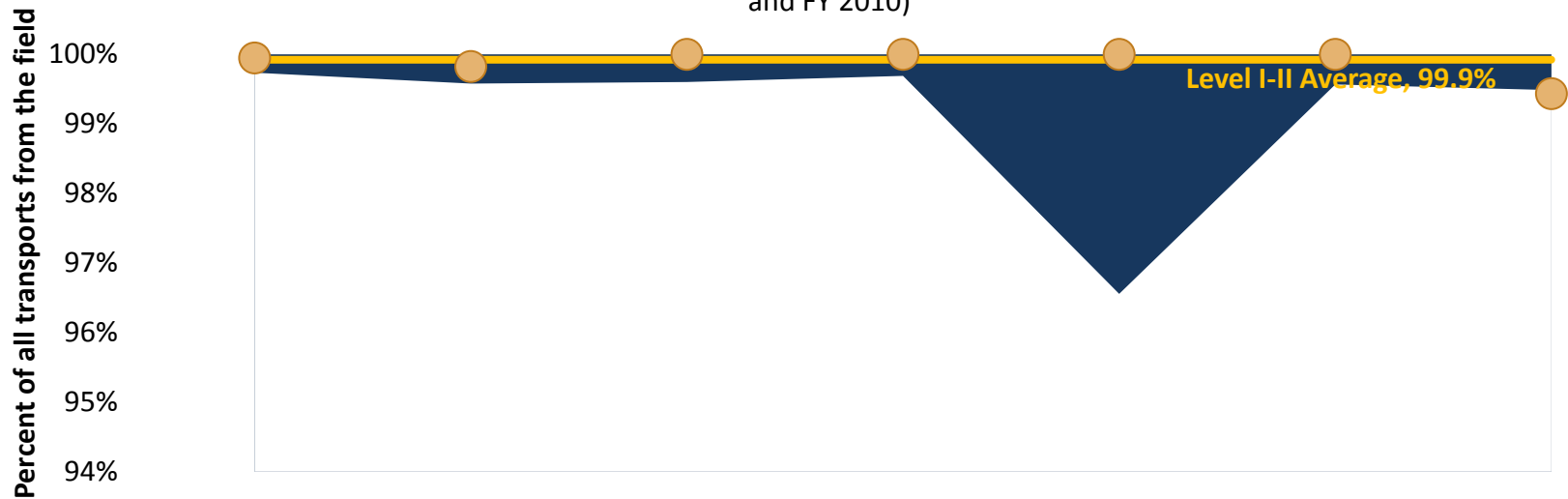
(WTR inclusion criteria, facility level IV, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



Adult Systolic Blood Pressure, Levels I-II

The Percentage of Adult (Age 15+) WTR Patients With Field or Any ED Systolic Blood Pressure Documented

(WTR inclusion criteria, facility levels I-II, excluding transfer patients, and FY 2010)



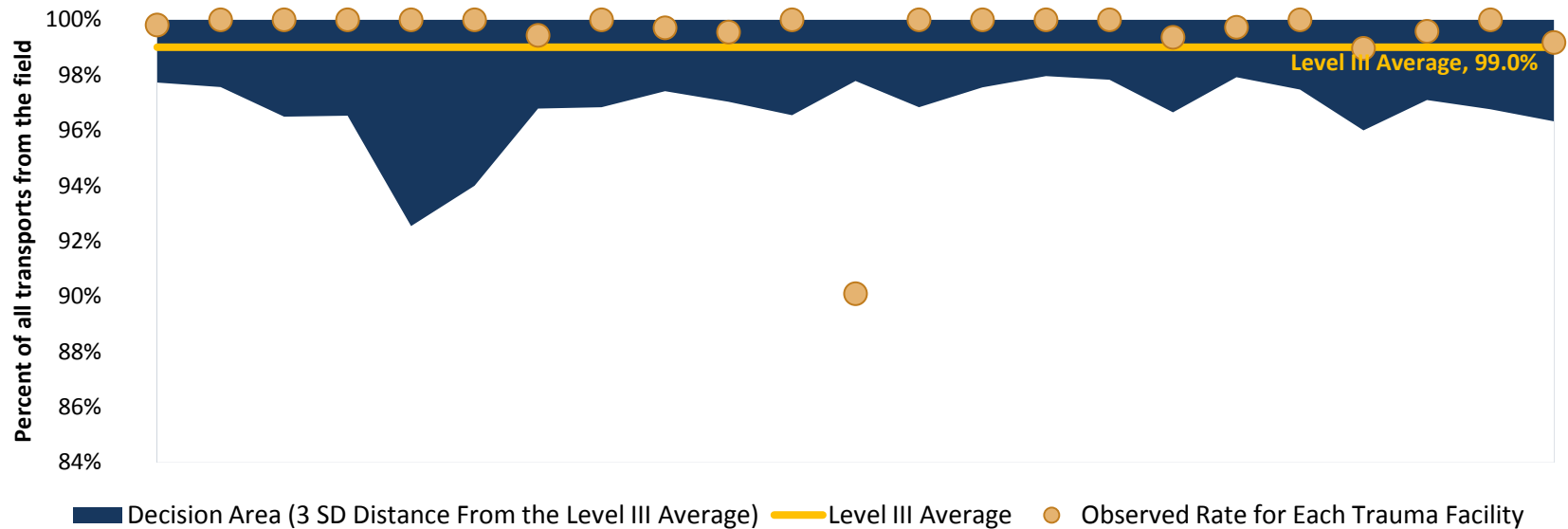
- Decision Area (3 SD Distance From the Level I-II Average)
- Level I-II Average
- Observed Rate for Each Facility



Adult Systolic Blood Pressure, Level IIIs

The Percentage of Adult (Age 15+) WTR Patients With Field or Any ED Systolic Blood Pressure Documented

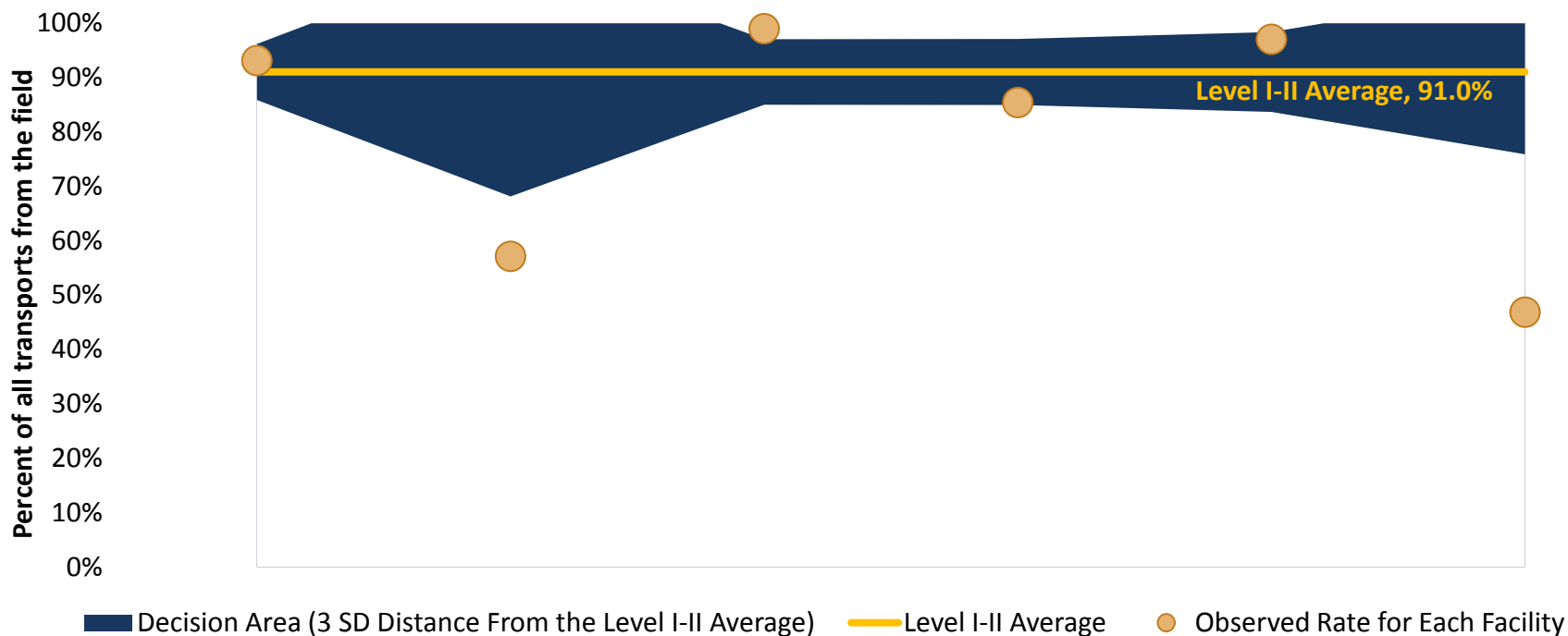
(WTR inclusion criteria, facility level III, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



Pediatric Systolic Blood Pressure, Levels I-II

The Percentage of Pediatric (Age <15) WTR Patients With Field or Any ED Systolic Blood Pressure Documented

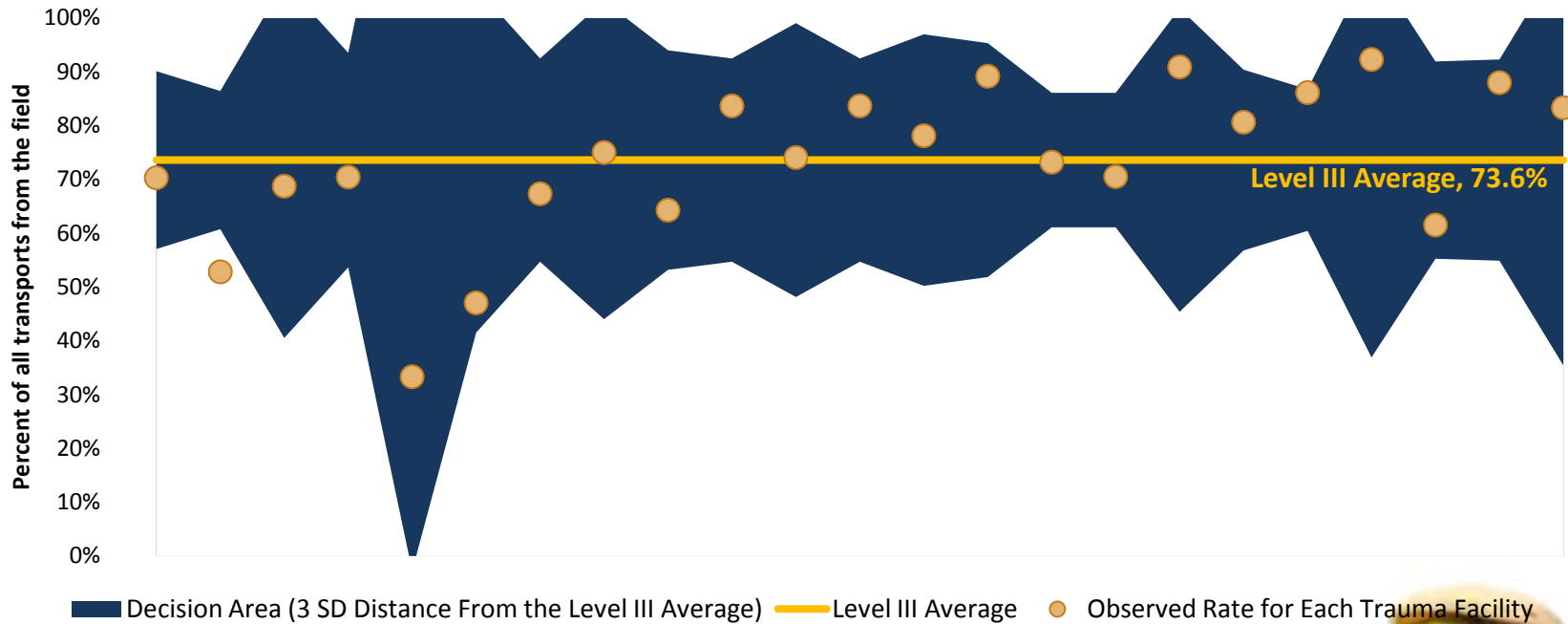
(WTR inclusion criteria, facility levels I-II, excluding transfer patients, and FY 2010)



Pediatric Systolic Blood Pressure, Level IIIs

The Percentage of Pediatric (Age<15) WTR Patients With Field or Any ED Systolic Blood Pressure Documented

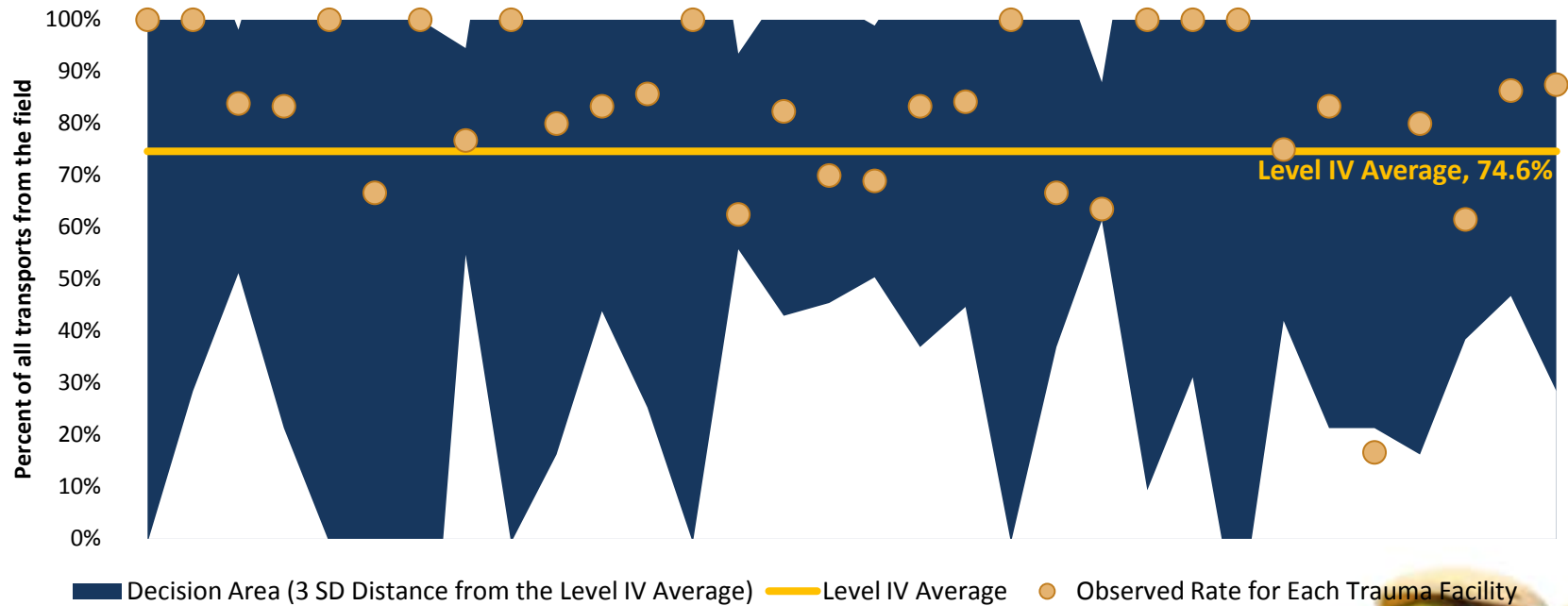
(WTR inclusion criteria, facility level III, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



Pediatric Systolic Blood Pressure, Level IVs

The Percentage of Pediatric (Age<15) WTR Patients With Field or Any ED Systolic Blood Pressure Documented

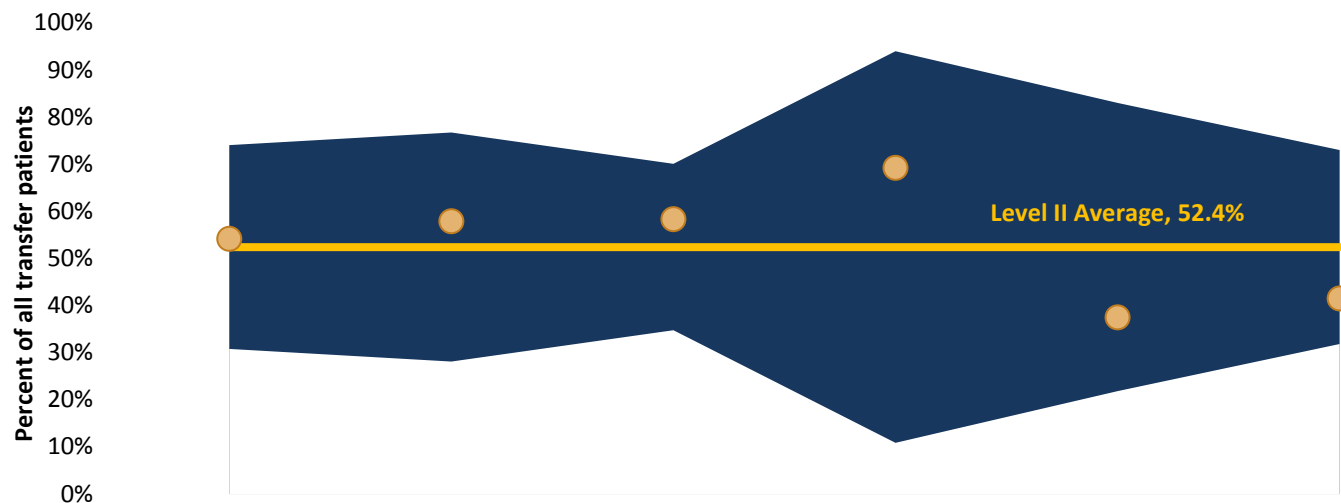
(WTR inclusion criteria, facility level IV, FY 2010, excluding transfer patients, and excluding those facilities with incomplete record submissions)



ED Length of Stay of Transfer Patients, Level II

The Percentage of WTR Patients Stayed in the ED Less Than 3 Hours Before a Transfer

(WTR inclusion criteria, transfer patients only, facility levels II, and FY 2010)



■ Decision Area (3 SD Distance From the Level I-II Average)

— Level II Average

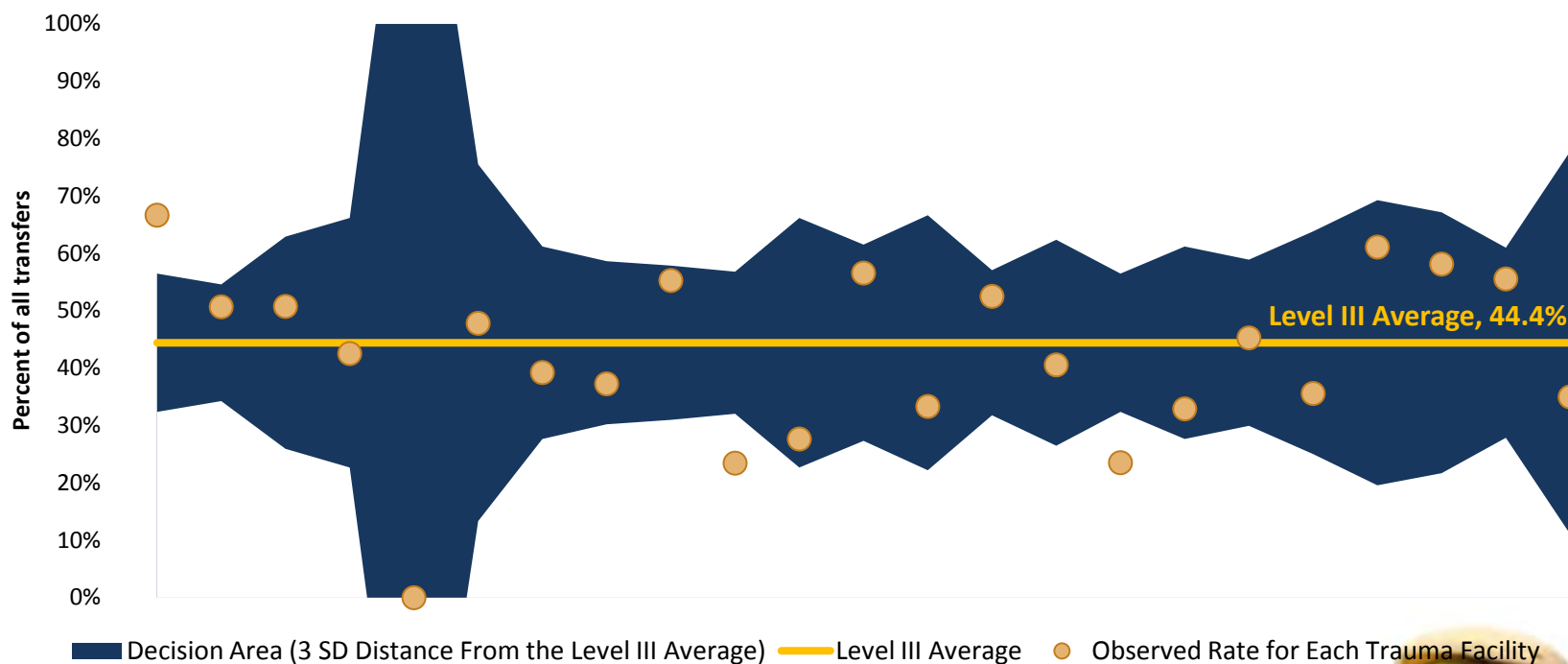
● Observed Rate for Each Trauma Facility



ED Length of Stay of Transfer Patients, Level IIIs

The Percentage of WTR Patients Stayed in the ED Less Than 3 Hours Before a Transfer

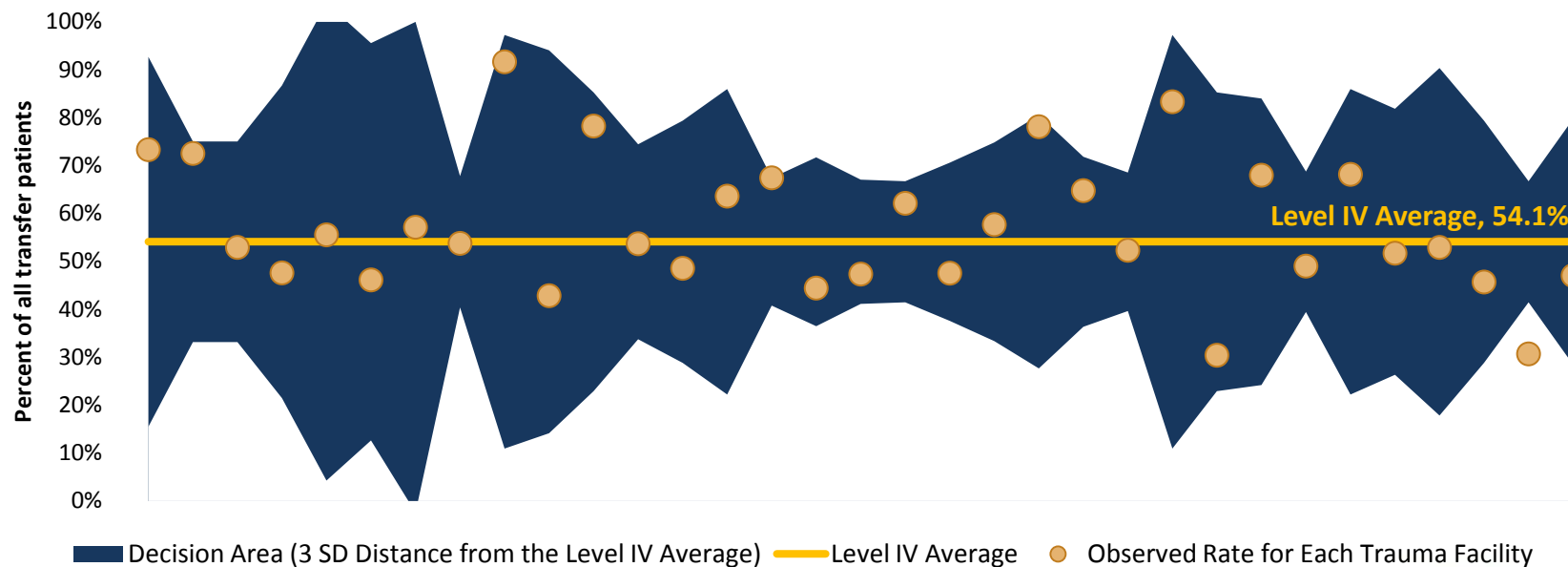
(WTR inclusion criteria, facility level III, FY 2010, transfer patients only, and excluding those facilities with incomplete record submissions)



ED Length of Stay of Transfer Patients, Level IVs

The Percentage of WTR Patients Stayed in the ED Less Than 3 Hours Before a Transfer

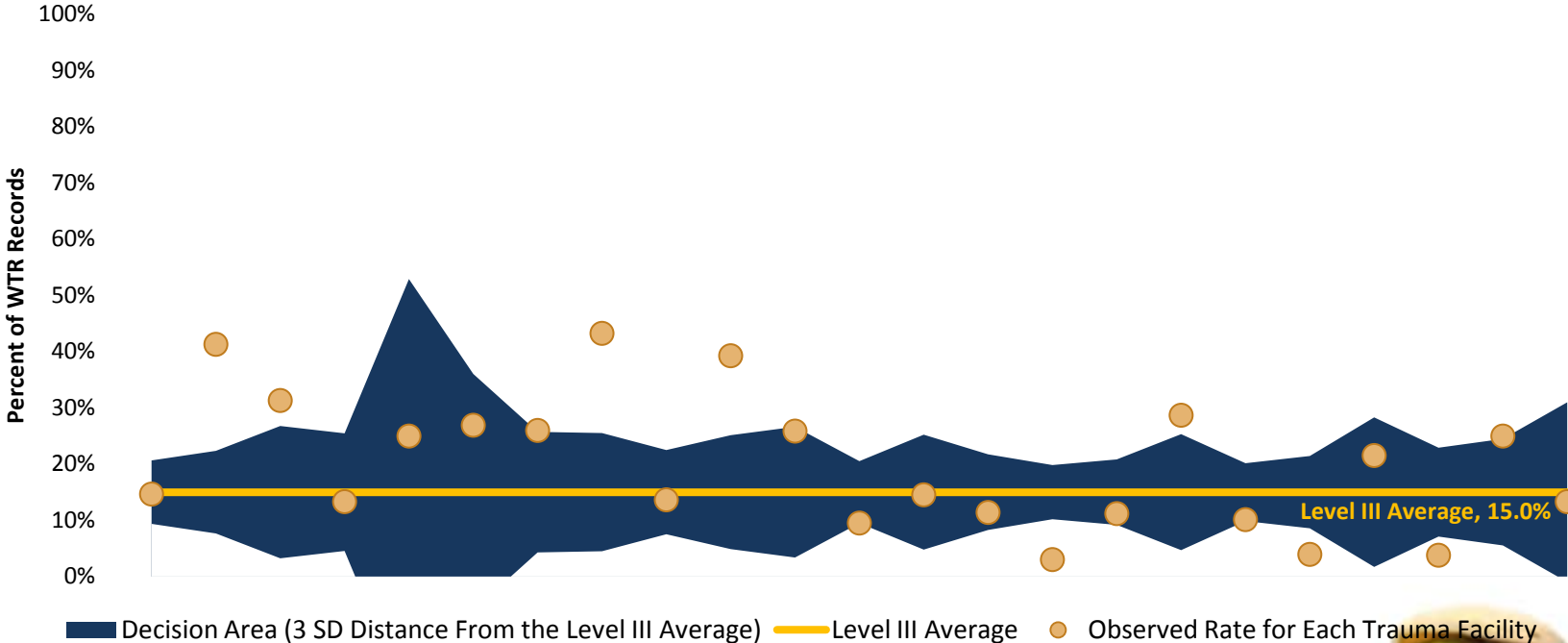
(WTR inclusion criteria, facility level IV, FY 2010, transfer patients only, and excluding those facilities with incomplete record submissions)



Minor Injury (ISS<9) Transfers, Level IIIs

The Percentage of Minor Injuries (ISS<9) in WTR That are Transferred Out

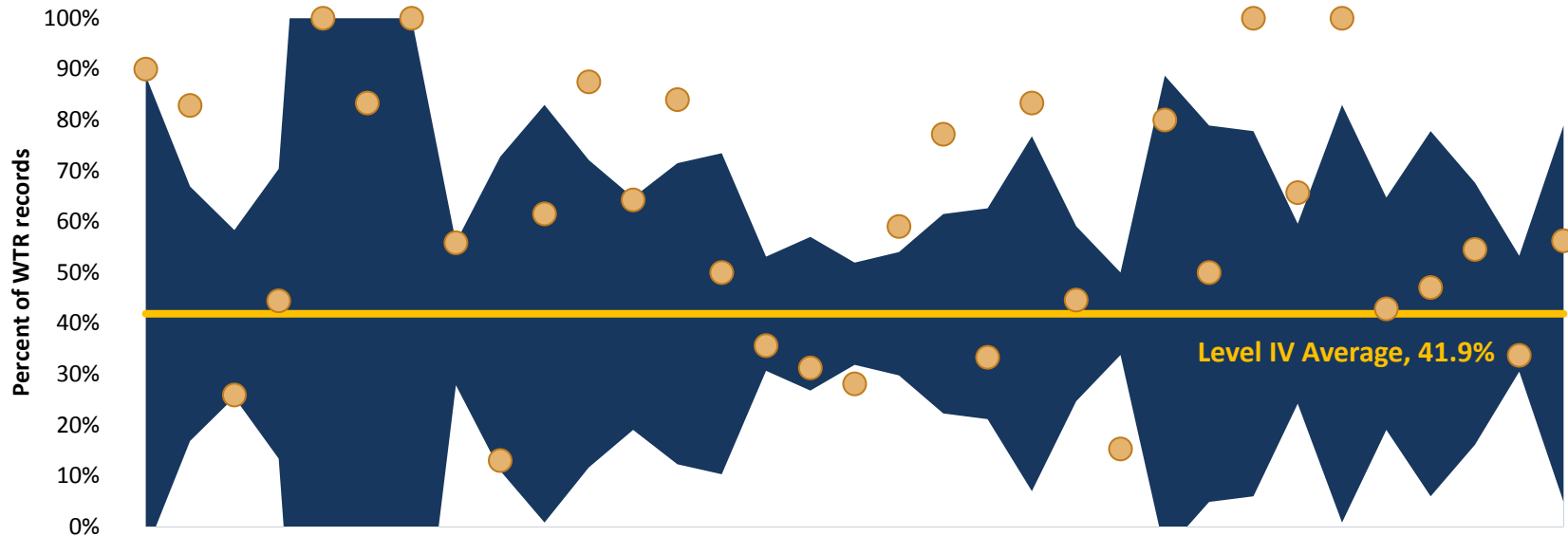
(WTR inclusion criteria, facility level III, FY 2010, and excluding those facilities with incomplete record submissions)



Minor Injury (ISS<9) Transfers, Level IVs

The Percentage of Minor Injuries (ISS<9) in WTR That are Transferred Out

(WTR inclusion criteria, facility level IV, and excluding those facilities with incomplete record submissions)

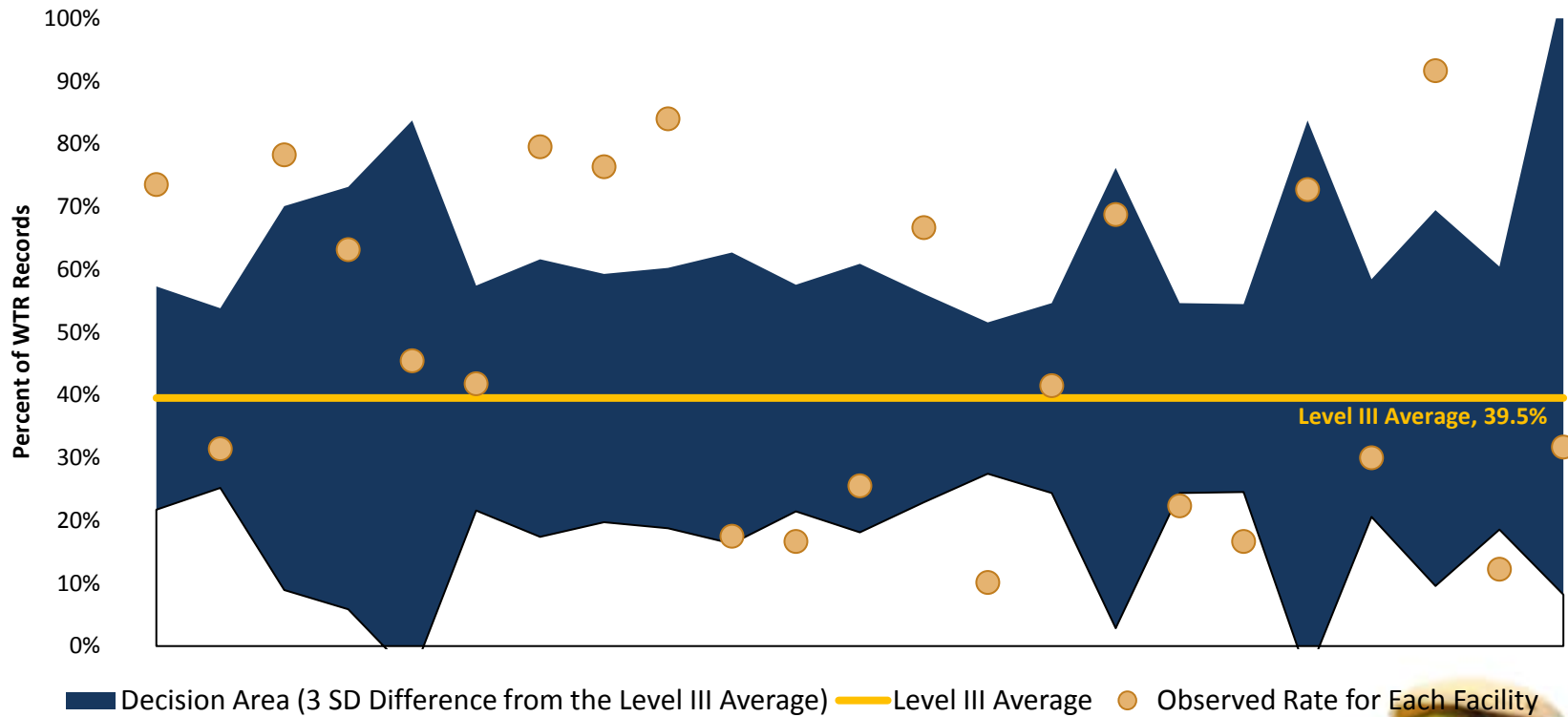


- Decision Area (3 SD Distance from the Level IV Average)
- Level IV Average
- Observed Rate for Each Trauma Facility



Major Injury (ISS 16+) Transfers, Level IIIs

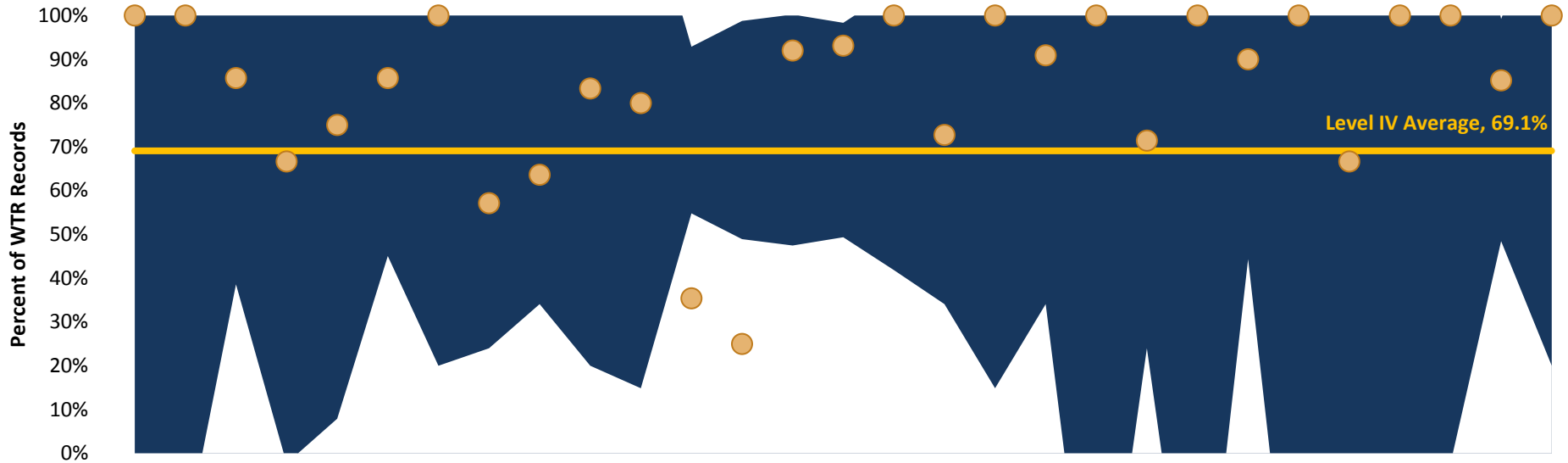
The Percentage of Major Injuries (ISS 16+) in WTR That Are Transferred Out
(WTR inclusion criteria, facility level III, and excluding those facilities with incomplete record submissions)



Major Injury (ISS 16+) Transfers, Level IVs

The Percentage of Major Injuries (ISS 16+) in WTR That Are Transferred Out

(WTR inclusion criteria, facility level IV, and excluding those facilities with incomplete record submissions)



- Decision Area (3 SD Distance from the Level IV Average)
- Level IV Average
- Observed Rate for Each Trauma Facility



Pediatric Spleen Management

(WTR inclusion criteria, FY 2010, and excluding those facilities with incomplete record submissions)

- *64 pediatric spleen injuries in all WA State trauma hospitals*
- *Out of which, 3 splenectomies*
 - *2 in level IIIs*
 - *1 in level IVs*





For additional information, contact Zeyno Shorter

Zeynep.shorter@doh.wa.gov