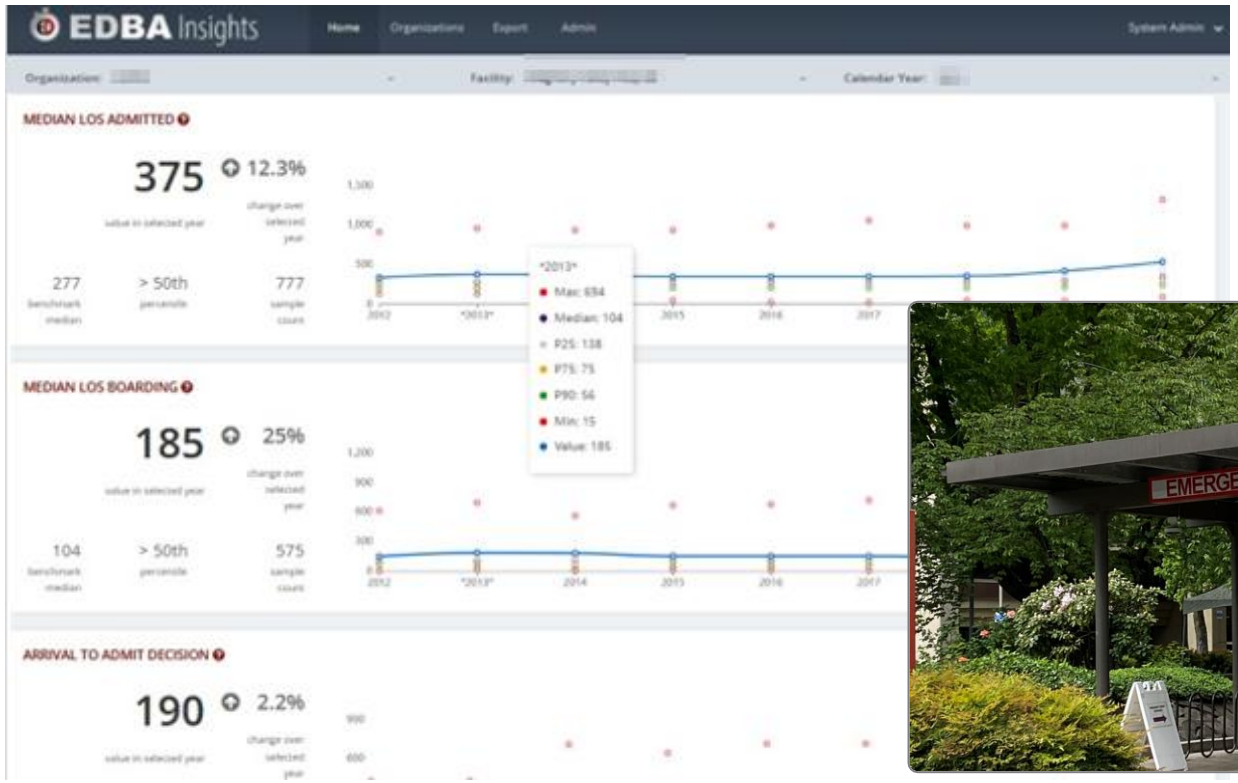
EDBA

Emergency Department Benchmarking Alliance

A NEW NORMAL

2024 ED PERFORMANCE MEASURES REPORT



2024 Data Performance Report, published July 2025

Emergency Department Performance Measures
2024 Data Guide from the
Emergency Department Benchmarking Alliance (EDBA)

This is the work of the EDBA, founded in 1994 and dedicated to quality emergency medical care, patient satisfaction, medical education, and community service.

The Emergency Department Benchmarking Alliance (EDBA) is a membership organization composed of high-performance Emergency Departments (EDs) that share a commitment to quality.

Since 2004 the Alliance has surveyed its members to collect ED performance data. Each year, the EDBA Data Survey includes a growing number of contributors representing a broad foundation of hospital-based EDs, with a separate data report for hospital-affiliated freestanding EDs of EDBA members.

The EDBA is non-proprietary. The data report is derived from data supplied by our members. It is designed to help our members improve their operations.

Many groups interested in hospital and emergency department performance now preferentially use the EDBA Data Survey to assess their ED operations. The 2023 EDBA Data Survey results were released to The Joint Commission, the AHA, the Centers for Medicare and Medicaid Services, and the CDC.

This 2024 EDBA report contained performance measures for a total of 1,148 EDs that managed over 49 million patients. ***Freestanding ED's (FSED's) are summarized in a separate report for 2024.***

There was stunning work done in many ED's during 2024. The boarding of admitted patients has crippled the operations of many ED's in the country, particularly those at high volume tertiary hospitals. This has produced significant stress on patients, staff, and ED operations. Boarding is the reason for the lengthy processing times for all ED patients, and these prolonged processing times are leading to an enormous number of patients who left before treatment was complete. Smaller volume ED's have been more successful in reducing boarding impacts and reducing LBTC rates.

So the data for 2024 shows that EDBA leaders have done an incredible job of reducing length of stay for admitted patients, especially in ED's with volumes under 40K. The reduction in these numbers was hard to believe as the EDBA members began to report it. The numbers and calculations have been checked multiple times. The average Boarding time across all ED's has been reduced to numbers that match 2014 and are so much better than times in the years 2021 and 2022. This is detailed in the section below on processing of admitted patients.

Critical Issue for ED Leaders: Volume Estimations for ED Visits in the US

There are three organizations that provide estimates of U.S. ED visits: the CDC, AHA, and EMNet. They use different survey techniques and different definitions of what constitutes an "Emergency Department". The 2001 to 2023 ED visit estimates from all are summarized in Table 1, which is the latest data available for the three organizations. Only the AHA and NEDI-USA estimates are currently available for 2023.

The Centers for Disease Control and Prevention (CDC) statistical survey of ED visits, which is part of the National Hospital Ambulatory Medical Care Survey, has been a wealth of information for emergency leaders about the trends in ED visits. The EDBA has worked with the CDC to incorporate the results of the Emergency Department Survey of the National Hospital Ambulatory Medical Care Survey (NHAMCS). The CDC uses census data and sampling to estimate ED volumes only in full-service, hospital-based ED's. The CDC estimated that 151 million visits took place in 2019, 131 million visits in 2020, and 140 million visits in 2021. Visits were estimated at 155.4 million in 2022. We believe the CDC data reliably shows visit trends, but the ED visit estimates are lower than actual. Importantly, the summary tables from 2022 were published in March 2024, and due to changes at the CDC, there is no predicting when the report on 2023 ED operations will be published.

The American Hospital Association (AHA) provides a data summary of community hospitals, which it defines as non-federal, short-term general and other specialty hospitals. The AHA does annual comprehensive data gathering from its members and surveys a stable number of ED's. The latest AHA data from 2024 counted visits at 142.2 million in 4,491 ED's.

The National Emergency Department Inventory (NEDI)-USA database is maintained by the Emergency Medicine Network (EMNet) at Massachusetts General Hospital in Boston, MA. NEDI-USA contains data on all U.S. EDs opened since 2001. According to NEDI-USA, there were 5,622 U.S. EDs and 150.5 million U.S. ED visits during the year 2022. All state-specific and national summary NEDI-USA data for the year 2022 can be found at this link: https://www.emnet-usa.org/research/studies/nedi/nedi2022/. The NEDI-USA survey is done every other year, and the interval year is estimated. There will be a link to the 2024 data will be added here when it becomes available.

	CDC	AHA	AHA	NEDI-USA	NEDI-USA
	NHAMCS Estimated ED visits	Total Emergency	Hospitals Reporting ED visits	Total Emergency	Reporting ED Visits
Year	**Visits (M)**	**Visits (M)**	**Sites**	**Visits (M)**	**Sites**
2001	108	105.6	4,663	101.1	4,884
2002	110	110	4,660	107.5	4,892
2003	114	111.1	4,619	113.9	4,900
2004	110	112.6	4,693	114.7	4,907
2005	115	114.8	4,885	115.5	4,914
2006	119	118.4	4,845	117.9	4,930
2007	117	120.8	4,810	120.3	4,946
2008	124	123	4,864	123.6	4,959
2009	136	127.3	4,821	126.9	4,972
2010	130	127.2	4,807	131	4,997
2011	136	129.4	4,655	135	5,021
2012	131	133.2	4,637	137.5	5,066
2013	130	133.6	4,624	140.5	5,128
2014	141	136.3	4,594	146.1	5,205
2015	137	141.5	4,551	151.7	5,281
2016	146	142.6	4,553	156	5,381
2017	139	144.8	4,678	159.5	5,417
2018	130	143.5	4,577	158.8	5,533
2019	151	143.4	4,549	159.9	5,591
2020	131	123.3	4,589	136.9	5,586
2021	140	127	4,590	144	5,580
2022	155	137	4,515	150.5	5,622
2023		142.2	4,491	160	5,650

Table 1. Emergency Departments and Emergency Visits 2001-2023, three sources.

EDBA Counsel on United States Emergency Department Volume Trends and Future Planning

The number of patients seen in United States Emergency Departments increased steadily from World War II, until the pandemic year 2020 when ED visits decreased for the first time in modern history. Volume estimates for ED visits are collected and analyzed by several organizations, detailed below and in Table 1, and the trends are similar. After the volume decreased in 2020, ED visits increased slowly and steadily with the needs of ED patients continuing to shift towards higher acuity and mental health care. It is possible, and even likely, that the significant changes in the pressures put upon the American health system following the coronavirus pandemic will result in significantly different methods of providing unscheduled and emergency care.

Four data sources indicate an ED volume loss in the US in 2020 that was between 13 and 14% as compared to 2019. ED volumes have risen since 2021, and initial information from the EDBA survey indicates this trend has continued into 2024, with ED volumes exceding pre-pandemic levels.

Health system, ED, and hospital leaders should plan for ED volumes that are stable or increasing slowly. The trend of EDs seeing older, sicker patients, combined with continued growth in retail clinics, tele-health, and other sources of care for lower acuity problems, has resulted in a net increase in patient severity/complexity for full-service ED's.

ED operations have been compromised since 2020, including impediments to hospital inpatient flow, ED boarding of inpatients, and impaired ED flow. The extreme medical and social impacts of the pandemic negatively impacted the efficiency of ED care, and resulted in higher walkaway rates, patient and ED staff dissatisfaction, and a gap in emergency services availability in the community. These operational challenges continued into 2024 in many ED's.

There is an ongoing need for dedicated hospital leadership to preserve ED flow, quality of care, and high-quality ED staff. That effort is supported by great ED data, and that is the function of this report, and the Emergency Department Benchmarking Alliance!

Initial Executive Highlights:
2024 EDBA Performance Measures Data Guide

Bullet Points

- ED volumes were higher in 2024 and are likely to exceed visits in 2019.
- Patient acuity has continued to increase.
- The percentage of patients who Leave the ED Before Treatment Complete (LBTC) was 2.6% across all full service ED's. This is higher than the baseline across many years, but less than the 4.9% rate in 2022.
- The percentage of patients transferred out of the ED to another hospital in the three years of the pandemic was higher than historical numbers. The increase in the rates of transfer occurred across all cohorts of ED's. The patient transfer system is still compromised by high inpatient census for staffed beds in many areas of the country.
- High ED boarding times were reduced and had less impact on ED operations in many smaller ED volume hospitals in 2024. Some are still facing significant boarding burdens, especially high volume ED's in busy hospitals.
- The median overall Length of Stay (LOS) for all ED patients increased to 187 minutes in 2024.
- The pandemic resulted in a significantly lower percentage of children presenting to EDs that are not designated as Children's Hospitals. With the return of non-COVID infectious diseases, pediatric volumes increased in 2022 but decreased in 2023 and 2024.
- There was no significant increase in the time that ED staff needed to greet patients and have those patients seen by an emergency physician or APP [door-to-provider time interval].
- Diagnostic testing in the ED saw increased use of CT scans, especially in ED's that function as Trauma Centers. Plain Xray's, MRI's, EKG's and Ultrasound procedures were performed at similar rates to prior years.
- The payors attacked the ED in 2022 and into 2023. The No Surprise Act (NSA) has increased the financial stress on ED's.
- Software attacks on hospitals take place on a regular basis. These severely impact ED and hospital operations.
- Behavioral health cases and ED violence are up significantly. There have been many more physical attacks on ED staff members.

Quick Data Summaries

Large ED Volume Losses in 2020 Reversed in 2021 and Volumes Increased in 2024

The EDBA members documented unprecedented volume losses in 2020 of around 14%. More patients were seen in ED's in 2024 than in the two prior years and are likely above ED volumes seen in pre-pandemic 2019.

Patient Acuity Increased, as Have Processing Times

Patient acuity mix is measured by physician level of service and by the percentage of patients that were admitted to the hospital from the ED. There are ongoing indications that patient acuity is increasing across all sizes and types of full-service ED's.

The cohort system used in the EDBA survey process has data comparators for adult and pediatric EDs, and for 20,000 volume bands. Higher volume EDs have higher acuity, higher use of diagnostic testing, and longer patient processing times. The trends related to these cohorts remain intact for 2024. Processing times remain highly correlated with ED volume.

The Pandemic Resulted in a Significantly Lower Percentage of Children Presenting to EDs that are not Designated as Children's Hospitals

For community ED's, ED visits by patients under age 18 decreased from about 16% in 2020 to about 12% in the data for 2024. The long-term trend is towards a smaller percentage of pediatric patients being seen in community ED's.

Patient Arrival by EMS Is Stable, and more of those Patients were Admitted versus Patients who Arrived Ambulatory

The lower volume of walk-in patients resulted in a relative increase in patients arriving by EMS. About 19% of ED arrivals in 2024 came by ambulance, and around 37% of those patients were admitted to a hospital.

There is Still Excellent Patient Intake Processing in EDs

Patient intake processing decreased with median "Door to Bed" time of 10 minutes, and "Door to Doctor" time of about 13 minutes. Long term trends remain intact, as these intake processing times decreased in most years since 2008, when the intake time was about 41 minutes.

Patients who Require Inpatient Boarding are a Significant Challenge to ED Operations

At least 65% of hospital admissions are processed through the ED, so this "front door" function is particularly important to the hospital. About 19% of ED visits result in hospital admission, which has been trending higher, and 2024 was no exception.

The time interval referred to as ***ED Boarding Time*** has been part of the hospital's required data submission to CMS since 2013 and posted on the "Hospital Compare" website. This is the time from "Decision to Admit" until "the Patient Physically Leaves" the ED. It

was expected that public posting of Boarding Time would motivate hospital administrators to improve this metric. Despite the work of ED and hospital leaders to reduce this time interval, the 2024 data have the Boarding Time interval at 109 minutes. The unfortunate reality for patients is that little progress had been made in reducing boarding time in EDs through 2020. In the year 2020, the average ED Boarding Time was 121 minutes. In the year 2021, the ED Boarding Time was 169 minutes, and in 2022 it increased to 182 minutes. There was massive improvement in 2023 and 2024, with the initial data reporting that across all ED's, there was a boarding time average of 110 minutes in 2023 and 108 minutes in 2024. This time interval is very cohort-dependent, ranging from 63 minutes in the smallest volume EDs, to 230 minutes in EDs that see over 100K patients.

The time from "Door to Decision" increased from 199 minutes in 2020 to 219 minutes in 2024.

Patient Processing Times Increased Significantly in EDs, with Increases in the ED Walkaway Rate

The overall length of stay for all ED patients was 187 minutes in 2024, about the same as the 182 minutes in 2019 (or the 186 in 2020). ED process times remain tightly correlated with volume of patients seen in the EDBA cohorts.
Boarding time also directly correlates with LBTC rates. The percentage of patients who leave the ED prior to the completion of treatment in 2024 was 2.6%. That number is still high, but less than a stunning 4.9% in 2022, and 2.7% in 2019. The cohort ranges in 2023 are from about 1.2% [smaller volume ED's] to 4.5% [larger volume ED's]. That metric tracks closely to ED volume and boarding time (higher LBTC with higher census). Even Freestanding ED's have faced challenges with increases in walkaway rates, which is detailed in a separate report for these facilities.

What is the impact of patients who walked away from the ED?

> *The overall rate of 4.9% in 2022 was unprecedented. In 2020, US ED's saw a total of 137 million patients. The walkaway rate of 2.8% that year meant that about 3.84 million ED visits ended prematurely. The increase in LBTC rates to 4.9% in 2023, for an estimated 155 million ED visits, means that about 7.6 million patients walked away. In 2024 the 2.6% walkaway rate on 160 million ED visits means that 4.2 million patients did not complete their ED visit. That is significantly more than the number of ED patients that left before their ED treatment was complete in 2020. Many high volume ED's still struggle with very high walkaway rates.*

Diagnostic Testing in the ED Evolved with the Pandemic Changes

There was increased use of CT scans across all groups of EDs during the pandemic. Plain Xray's, MRIs, EKG's and Ultrasound procedures were performed at similar rates to prior years. CT scans in 2024 were performed at a rate of about 37 procedures per 100 patients, versus 24 procedures per 100 patients in 2019. There is markedly higher use of CT scans in Level One and Two Trauma Centers versus non-trauma centers. Note: the EDBA defines the CT utilization rate differently from CMS. Please be aware of this distinction when discussing this data within your hospital.

The EDBA has Six Years of Data on Diagnostic Test Turnaround Times

This data element is the Turnaround Time (TAT) for select radiology and laboratory metrics. These are the reported median time intervals from order placed in EHR by ED provider to first result available to ED provider.

The intervals for completion of diagnostic tests are all median time elements reported in minutes. For imaging procedures, this marker may be when the "preliminary" or "final" results are available, depending on the EDs policy of decision-making for a given imaging modality. For lab tests, this data measure is the median interval from placement of an order for laboratory testing until results are available to the ordering provider, reported in minutes.

Six-year trending data suggest TAT in both lab testing and radiology reporting have improved in almost all categories for all ED's. Some hospitals remain challenged to improve their institutional processes. While still improved from baseline, 2024 data shows a slight increase in radiology processing times across all modalities.

The EDBA is now Reporting on the Percentage of Patients over age 64

This data element has been collected by the EDBA for the last four years. This data element is not reported for EDs that predominantly serve children. For the year 2024 the survey found that about 26% of patients were over age 64. Within the volume bands, the percentages are very tight. Only freestanding EDs had a significantly lower visit rate by senior individuals, at 15%, which is detailed in a separate report on these facilities.

Fractal Tables and Graphs are Available for Relevant Performance Measures in 2024

The EDBA is reporting fractals for important data elements that would benefit from this analysis.

Ongoing work: The EDBA Performance Measures Summits

The EDBA has been working to unify the definitions used across the industry. This is critical to the development of reasonable standards and performance measures for the industry. The sets of definitions published after the summits conducted in 2006, 2010, 2014, 2018, and 2022 are provided in the reference list (1, 2, 3, 4, 5, 6). The EDBA Summits have provided an opportunity for a dedicated group of Federal, regional, and emergency leaders to develop and influence the future of ED data collection and reporting. The fifth EDBA Performance Measures Summit in April 2022 provided more definitions on the timely issues around the processing of mental health and substance use patients.

The EDBA Report on Performance Measures for 2024

This 2024 data guide contains the results of a data survey report conducted annually by the EDBA. This is the only publicly available survey that measures ED performance in key areas that relate to staffing, design, flow, and value to the health system. The trend analysis of the data includes performance measures collected and reported annually since 2004.

The data set collected for 2024 included thirty-three operating statistics, collected at each site, and entered into EDBA Insights, a web-based data entry and benchmarking tool maintained by the Alliance. The EDBA Insights website is https://www.edba-app.org.

The 2024 report asked for additional descriptive statistics regarding the type of hospital, ED service units, and staffing.

This is the sixth year there is also an opportunity for members to report on median turnaround times for nine diagnostic tests that are critical to ED flow. The results of those survey elements are included in this report.

The significant volume drops that occurred in 2020 resulted in a collapsing of the volume cohorts to seven categories of full-service EDs based on annual volume seen, and the additional categories for specialty EDs and freestanding ED's. As volumes climb in the future, the higher volume categories will be separately reported again.

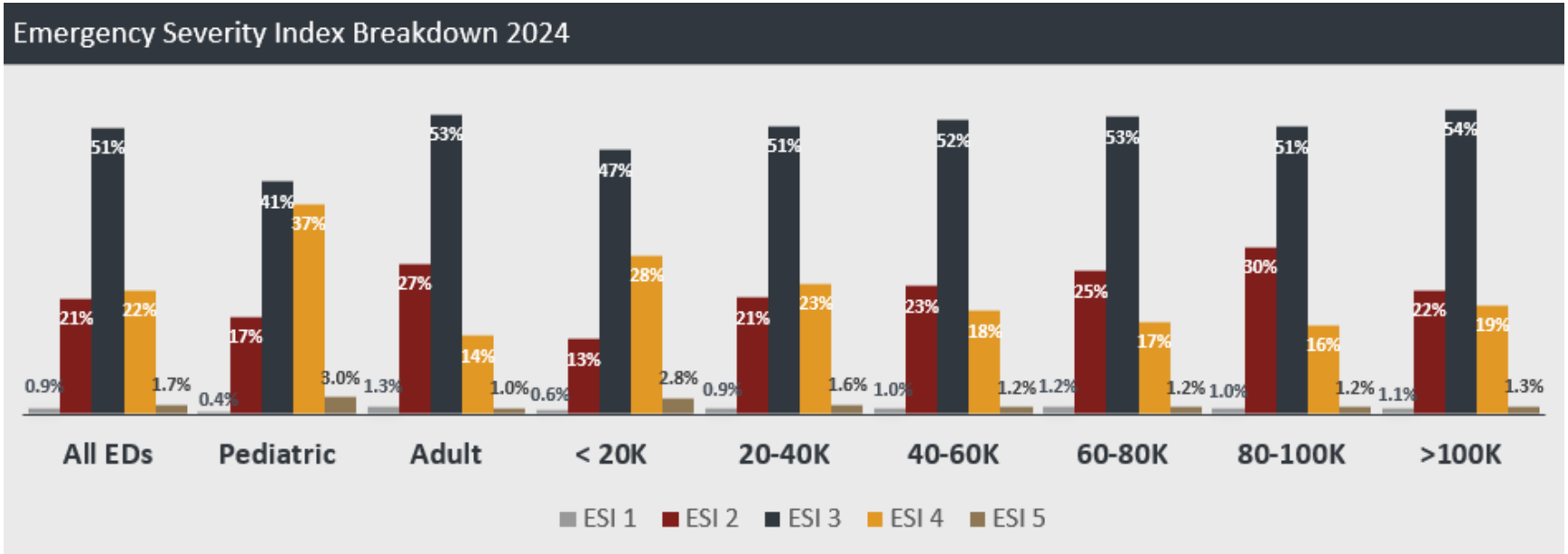
Categories of Full-Service EDs

- Highest volume EDs, serving over 100,000 patients per year (more than 274 Patients per Day).
- Very high volume EDs, serving between 80,000 and 100,000 patients per year (221 to 273 PPD).
- High volume EDs serving 60-80,000 patients per year (165 to 220 PPD).
- Average volume EDs serving 40-60,000 patients per year (110 to 164 PPD).
- Moderate volume EDs serving 20-40,000 patients per year (55 to 110 PPD).
- Low volume EDs serving under 20,000 patients per year (less than 55 PPD).
- Pediatric EDs predominantly serve patient populations under the age of 18, and those community EDs that see over 50% of patients under the age of 18.
- Adult EDs are those that see 5% or less patients under age 18 and define themselves as EDs that serve adult populations. These are ED's that serve communities that have another hospital that offers pediatric emergency services.
- Specialty ED's. This group of facilities is designed with services for a select group of patients and lacks the inpatient services of a full-service hospital. The data for this small number of hospitals is available but not included in this report.

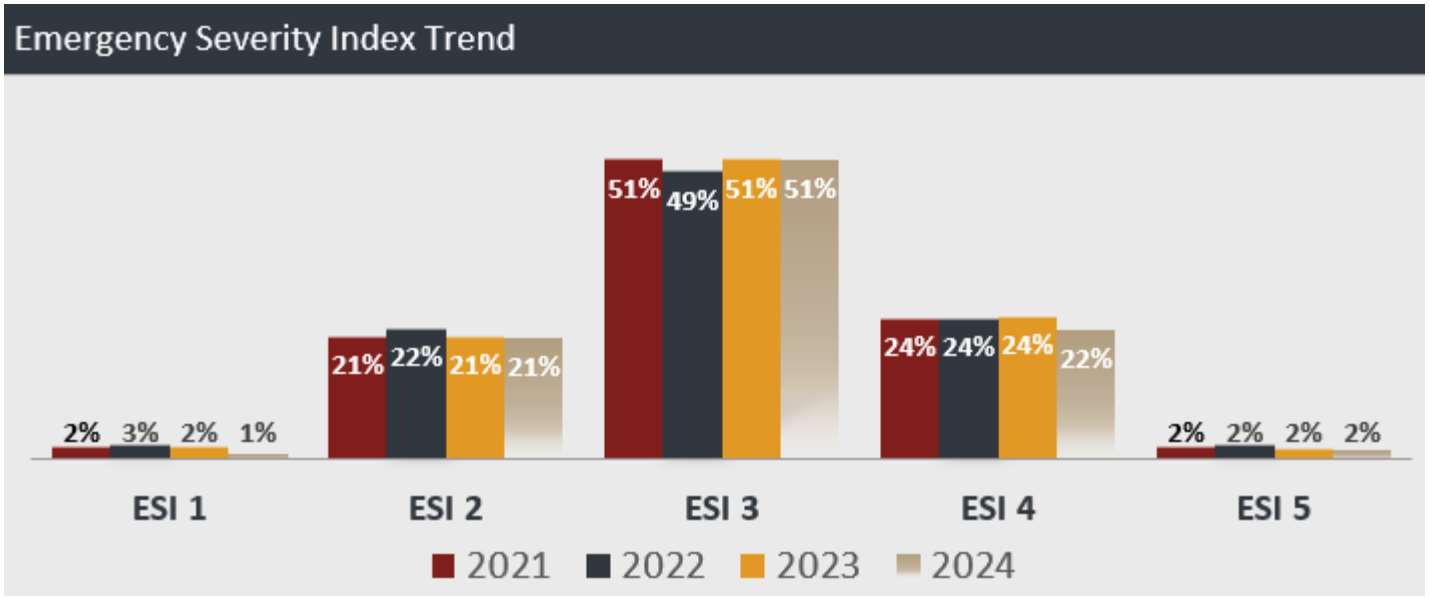
- Freestanding ED's. This group of facilities operates on a 24/7/365 timeframe, and transfer persons that need inpatient services to a full-service hospital. This cohort is summarized in a separate report.

Emergency Severity Index Data

The Emergency Severity Index (ESI) is a five-level emergency department triage algorithm, initially developed in 1999, that sorts patients into 5 groups from I (most urgent) to V (least urgent). It was previously maintained by the Agency for Healthcare Research and Quality but is currently maintained by the Emergency Nurses Association. The EDBA has collected data on the ESI level only over the last four years, and this data is displayed in Graph 1. The ESI percentages have not changed over the four years of data available, displayed in Graph 2.



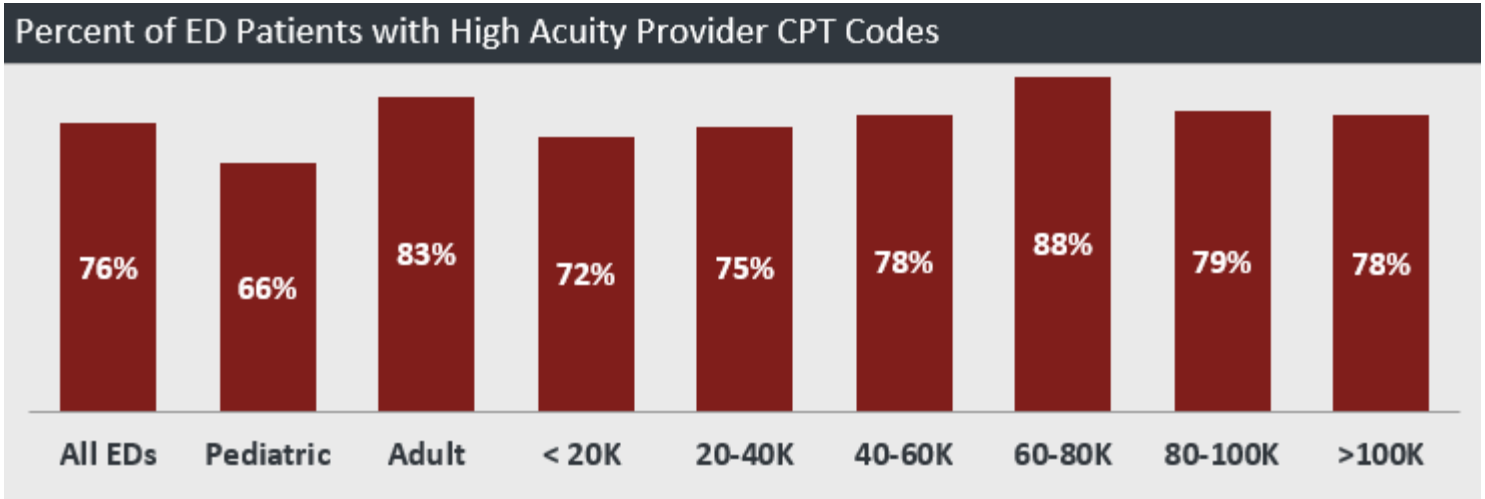
Graph 1. ESI data by Cohort for All Full Service ED's.



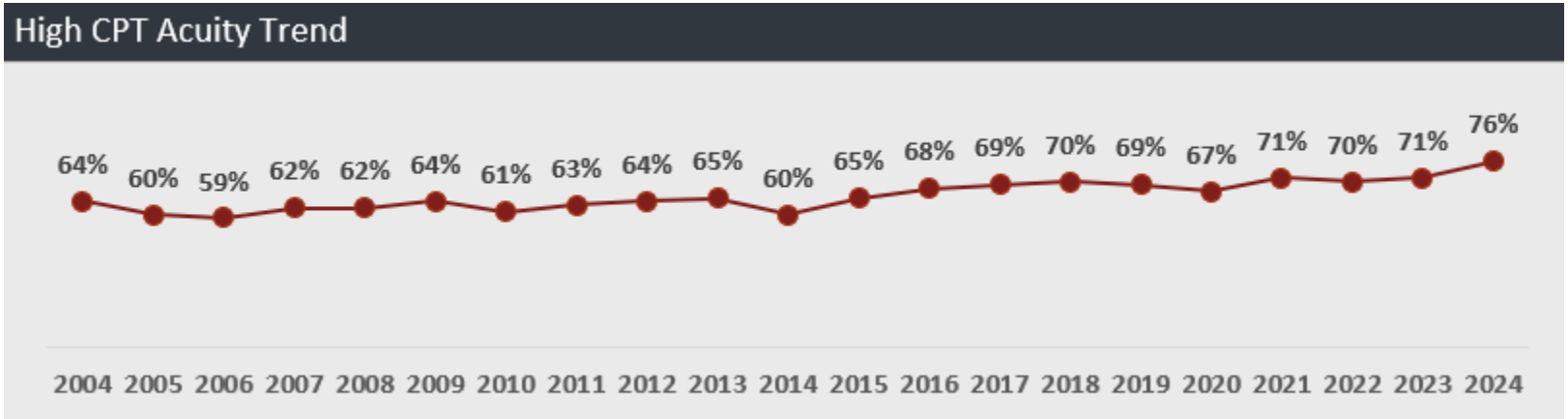
Graph 2. ESI data Trended by Year for All Full Service ED's.

Percentage of Patients Coded as High Acuity using Physician Common Procedural Terminology (CPT) codes

The percentage of patients seen that are coded using physician CPT codes that define higher acuity illnesses or injuries use codes 99284, 99285, and 99291. The EDBA utilizes physician CPT coding as an objective measure of patient use of higher-level services, despite concerns about the consistency in the use of these codes. The high acuity codes are applied much more frequently in adult patients than in pediatric patients. The acuity mix is presented in Graph 3. High acuity average is 76% across all EDs but is about 83% in Adult EDs and 66% in Pediatric ED's. The twenty-one-year trend of this data is displayed below (graph 4) and continues to increase.



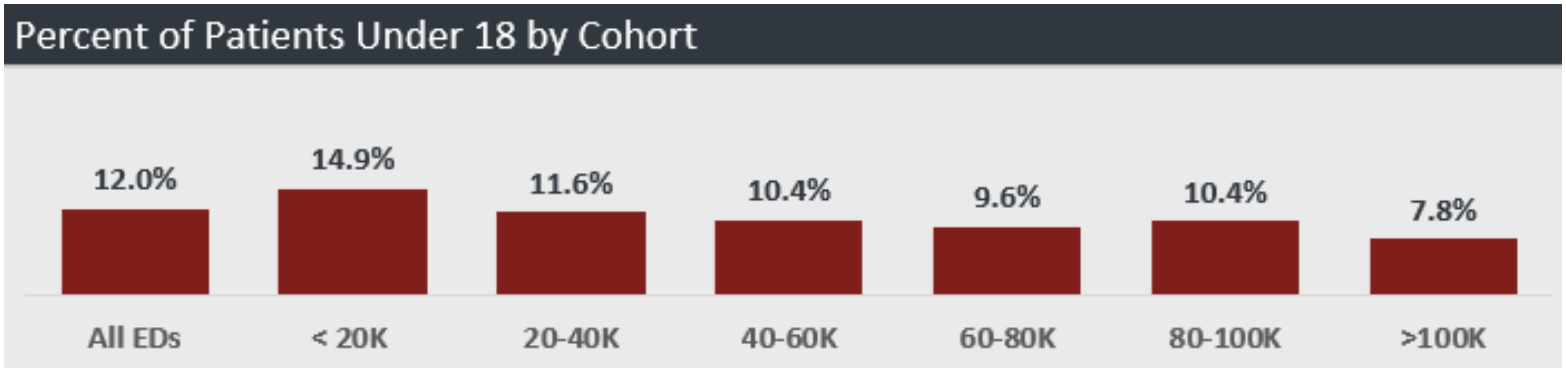
Graph 3. Percent of ED patients with CPT codes indicating high acuity, by cohort.



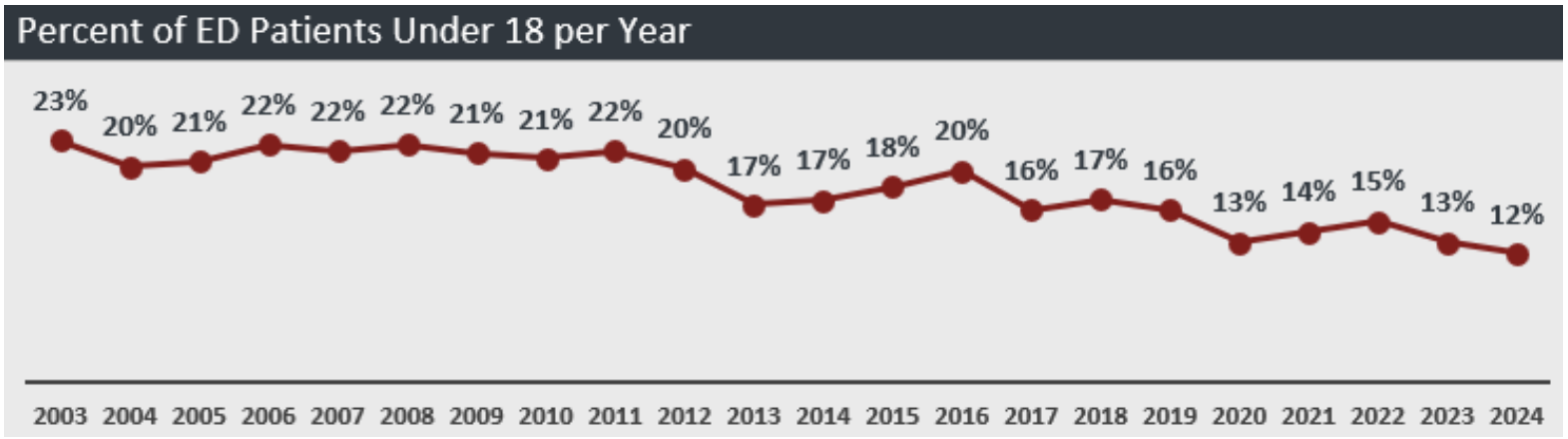
Graph 4. Percent of ED Patients with High Acuity CPT codes, trended by year.

Percentage of Patients Identified as Pediatric in General Service EDs

Graph 5 shows the percentage of patients seen in general service EDs that are under age 18 trended since the year 2003. The average has been declining, but saw a bump in 2022, as there were more numerous respiratory virus outbreaks during the year, including a well-publicized outbreak of RSV, that resulted in children visiting all types of ED's at a higher rate. The percentage of patients under age 18 seen in community EDs in 2024 totaled 12% of volume. There is a long-term downward trend in the mix of pediatric patients seen in the general ED population.



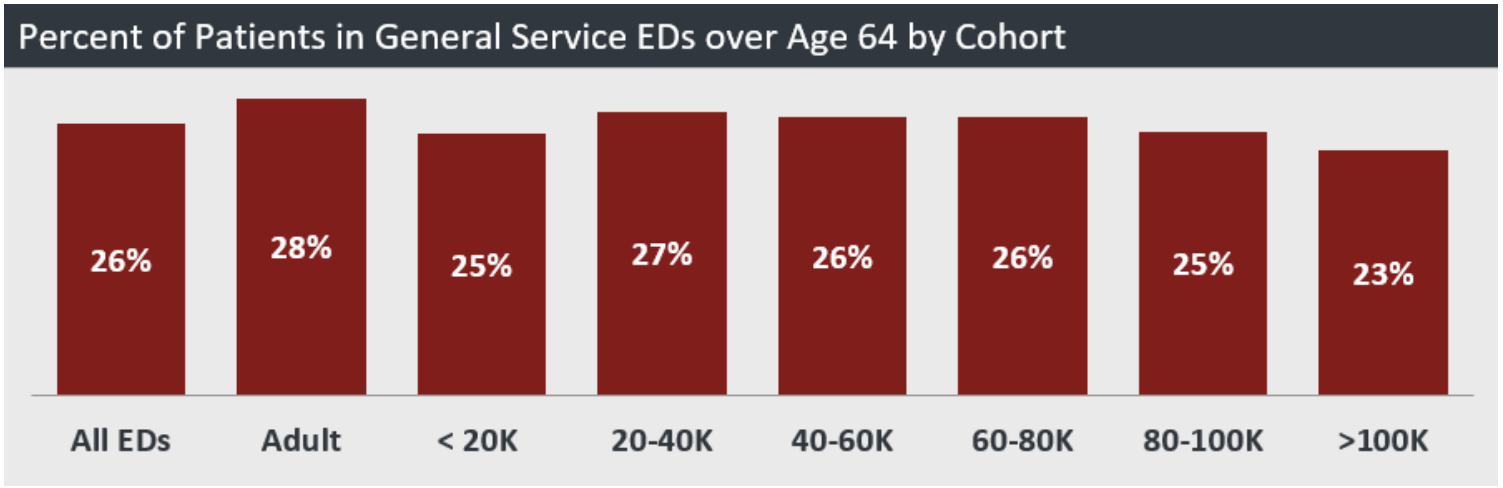
Graph 5. Percent of ED patients seen in ED's that are under age 18.



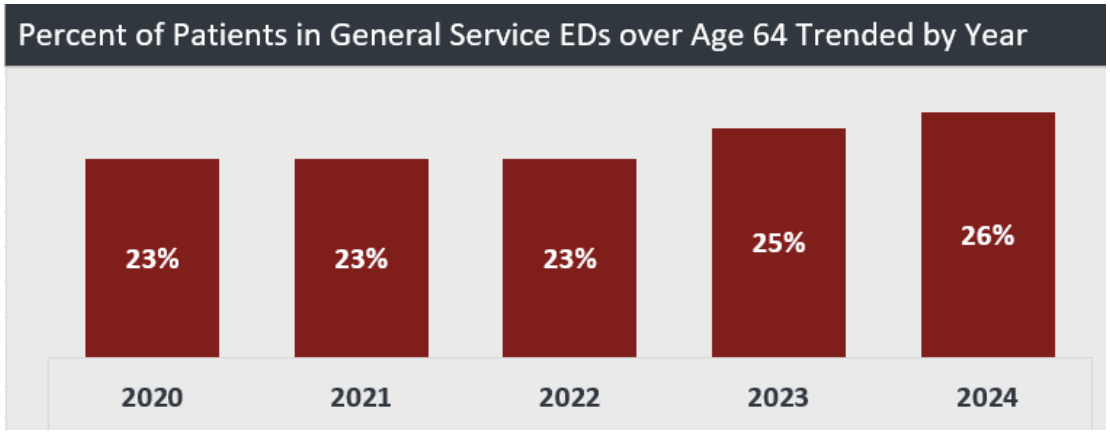
Graph 6. Percent of ED patients seen in general ED's that are under age 18, Trended Over 22 Years.

Percentage of Patients Over Age 64

The number and percentage of senior patients is increasing in the general ED population, matching U.S. population trends (Graph 8). Across all general service ED's, seniors represent about 26% of patients seen, and the cohorts have relatively the same mix, displayed in Graph 7.



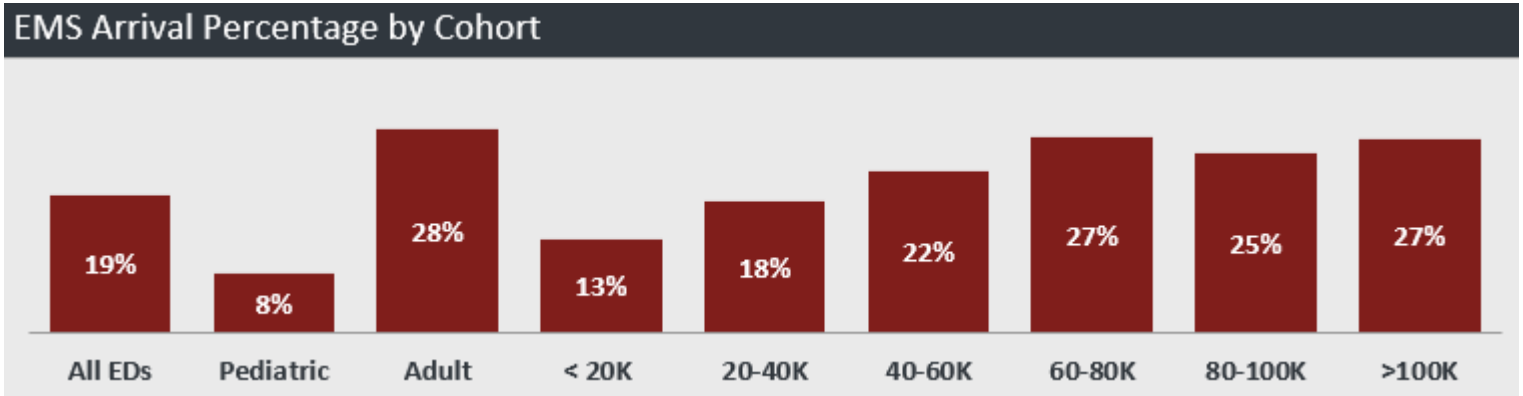
Graph 7. Percent of Patients in General Service EDs Over Age 64, by Cohort.



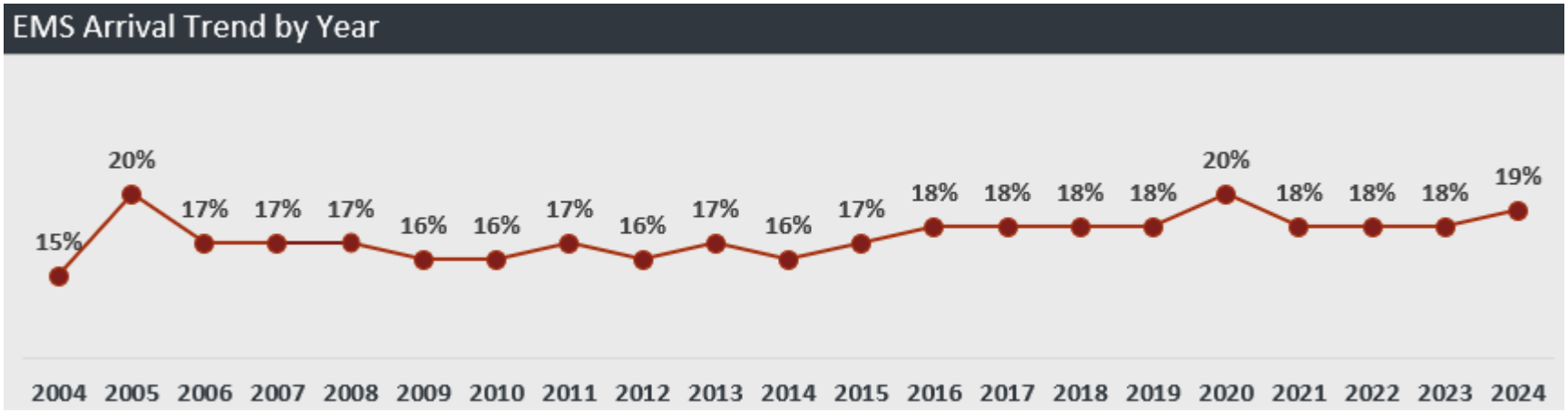
Graph 8. Percent of Patients in General Service EDs Over Age 64, Trended by Year.

Percentage of Patients that Arrive by EMS

Overall, about 19% of patients seen in the ED arrive via ambulance. There are clear differences in EMS arrival for pediatric and adult patients, and higher EMS arrival rates in large EDs (Graph 9). EMS is an important source of patients that will ultimately be admitted to a hospital. Across twenty-one years of data, the trend in ambulance arrivals to the ED is basically flat, displayed in Graph 10.



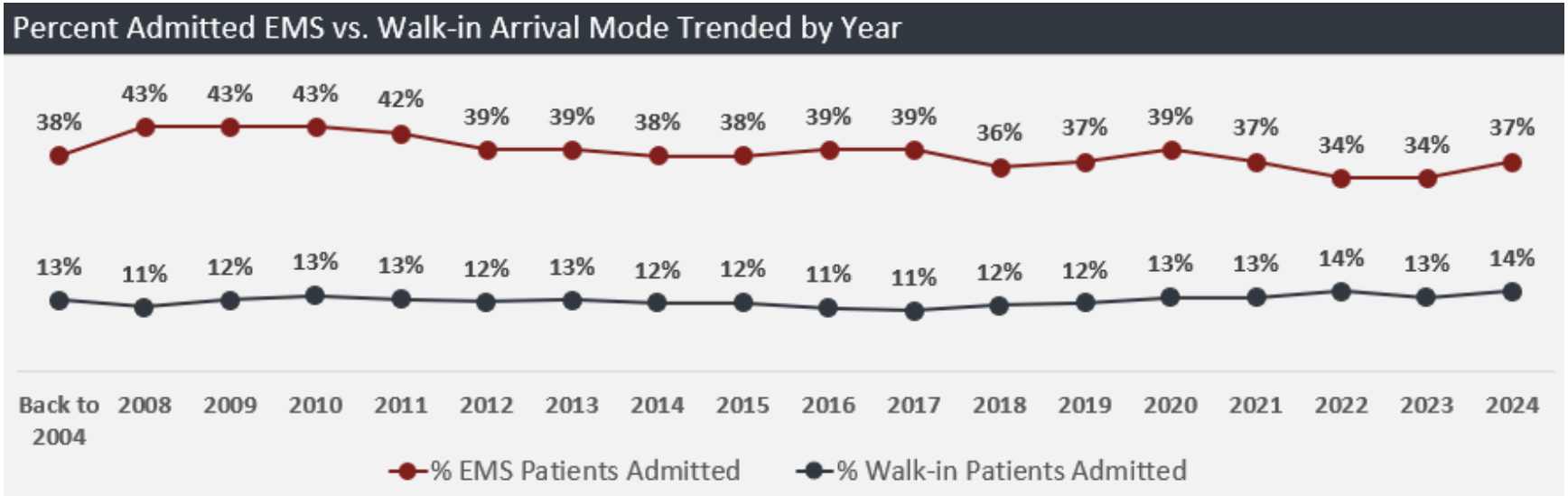
Graph 9. Percent of EMS Arrivals, by Cohort.



Graph 10. Percent EMS Arrivals Trended by Year.

Patients Arriving by EMS are More Likely to be Admitted than Patients who Walk In

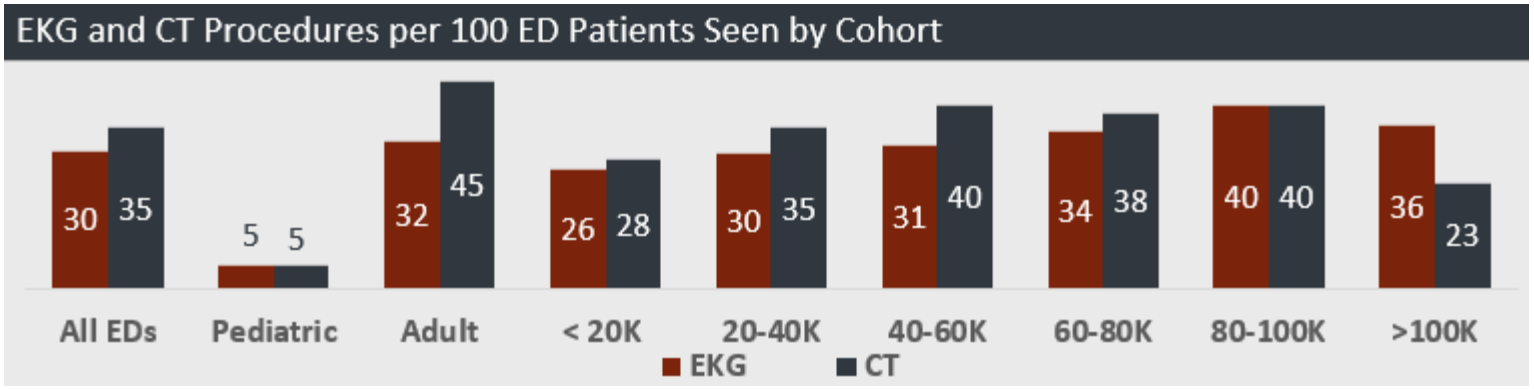
Patients arriving by ambulance are higher acuity and more likely to be admitted than walk-in patients. This admission rate for EMS patients has been between 34% and 43% for all the years of data reporting. In 2024, patients who arrive by EMS were admitted in about 37% of their visits, where patients who walk into the ED are admitted about 14% of the time (Graph 11).



Graph 11. Percent of Patients Admitted by Arrival Mode, Trended by Year.

Usage Rates of Diagnostic Services, Measured as Number of Units of Service per Hundred Patients Seen

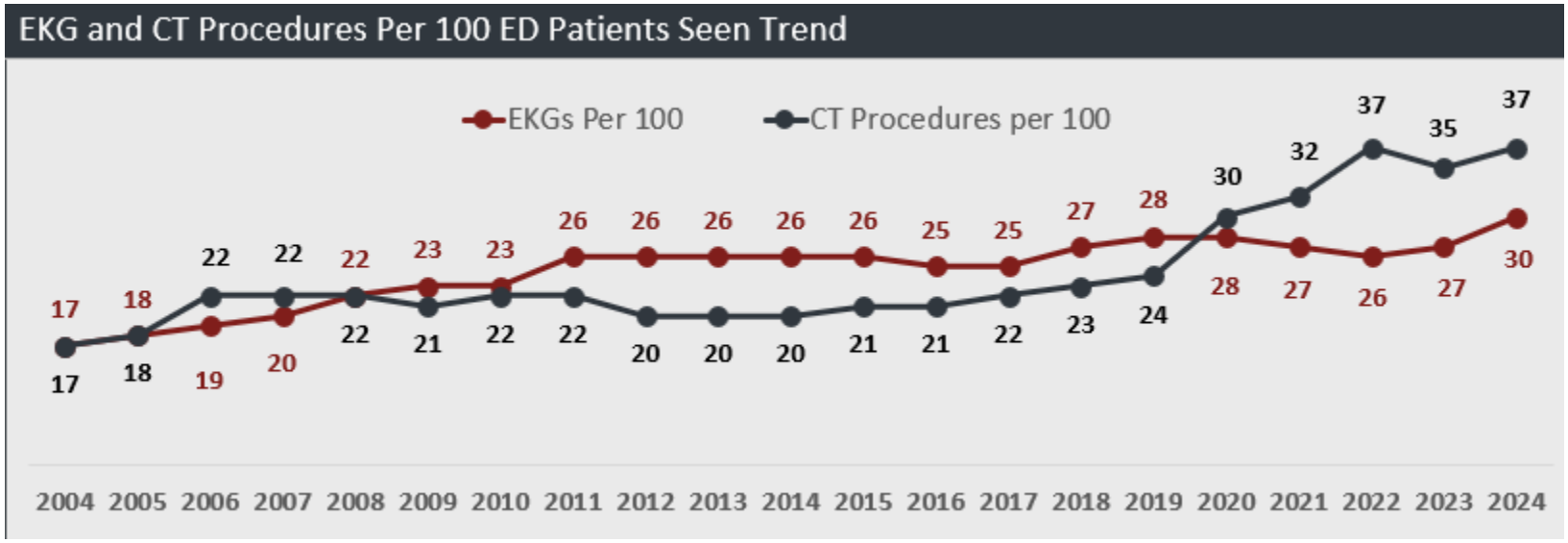
The EDBA respondents reported on data regarding EKGs obtained; X-ray imaging studies done; and advanced imaging by CT, MRI, and ultrasound performed. The number of procedures performed was then divided by the number of patients seen, and the number expressed as procedures per 100 patients seen. It was reported this way *so that it does not unintentionally get interpreted to reflect the percentage of patients that had those diagnostic tests performed*, which is a better comparative data point between hospitals. Readers of this data survey should not compare this result to the CDC NHAMCS survey. The CDC reports the use of these tests in the NHAMCS study using a different definition



Graph 12. EKG and CT Procedures per 100 Patients Seen, by Cohort.

Utilization of EKGs has remained steady for the last 6 years with a small uptick to 30 procedures per 100 patients as shown in Graph 13. There were 27 uses per 100 patients in 2023.

Utilization of CT scans increased slowly from 2004 to 2019 but then jumped significantly in 2020. There is now a significant upward trend as displayed in Graph 13.

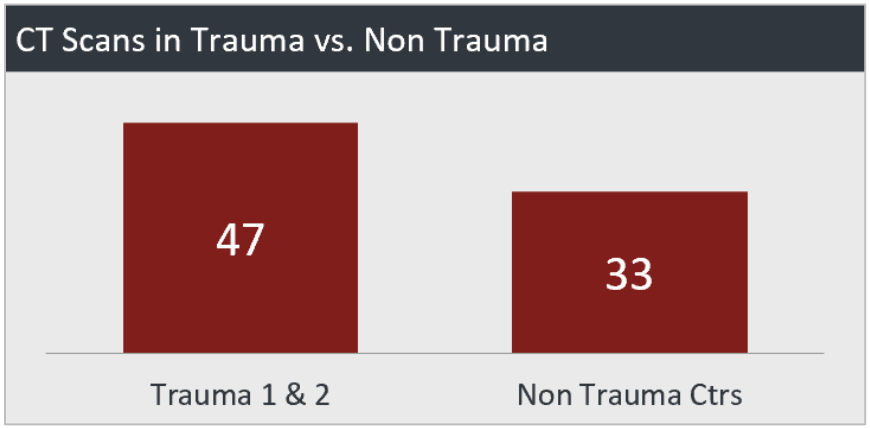


Graph 13. EKG and CT Procedures per 100 Patients Seen Trend.

Trauma Centers Utilize Diagnostic Imaging More Frequently than Non-Trauma Centers

Trauma centers will use multiple CT scan procedures to evaluate patients with critical injuries. Within the EDBA data set, the data has been sorted into separate cohorts of Trauma Centers.

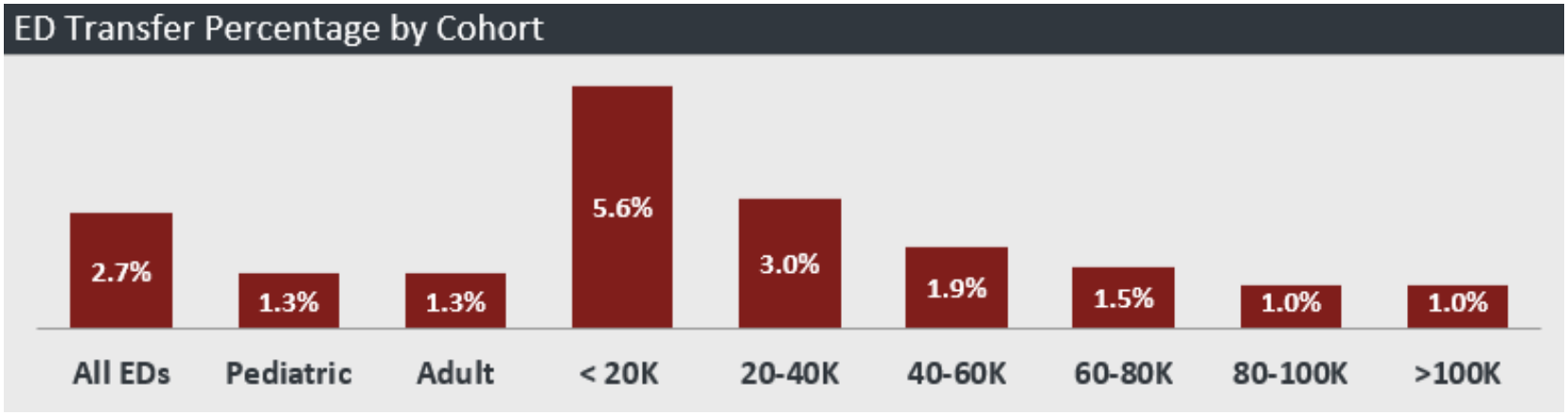
CT scans are used more frequently in Level I and II trauma centers than in non-trauma centers. There were 47 CT procedures per 100 patients in Level I and II trauma centers (up from 36 in 2021), and around 33 procedures in lower level and non-trauma centers which is also up from 29 in 2020 (Graph 14). ED leaders should be aware of the differences, and when called upon to study their utilization, should compare their experience to cohorts at a similar level of trauma designation and pediatric mix.



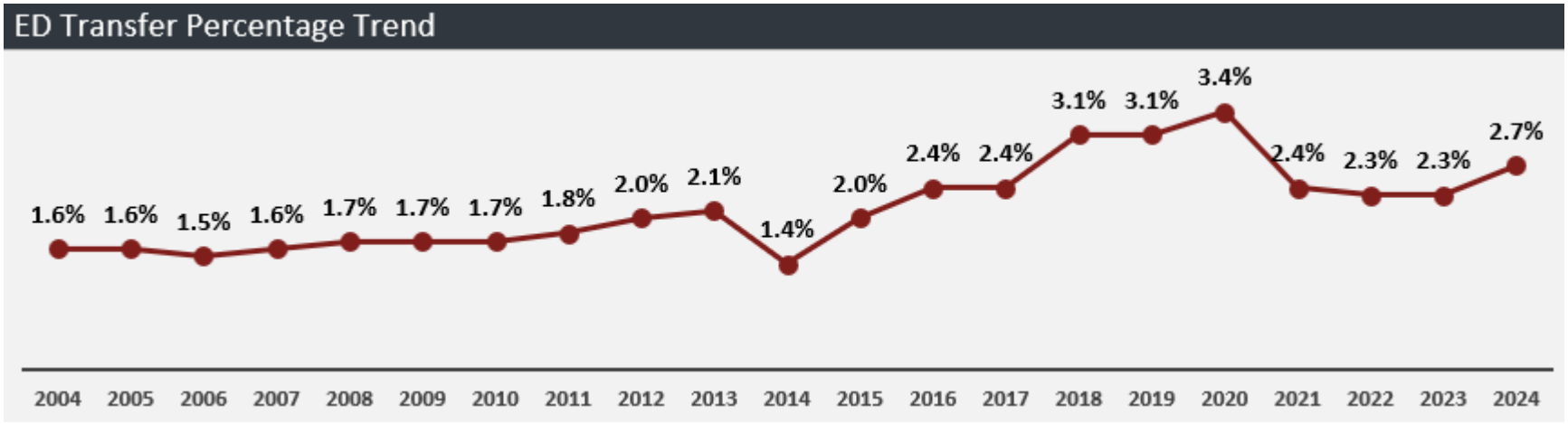
Graph 14. Number of CT Scan Procedures per 100 Patients Seen, in Trauma versus Non-Trauma Centers.

Percentage of Patients that are Transferred from the ED to Another Hospital

The average transfer rate for 2024 for all EDs is about 2.7% but varies significantly by type of ED (Graph 15). High volume EDs have a transfer rate of about 1.0%, where the rate is much higher in small volume EDs at 5.6%. Many rural hospitals are closing service lines and have been unsuccessful in recruiting physicians that are willing to care for complex patients. Rural facilities also cannot absorb a long-term patient as it influences the inpatient Length of Stay, which results in the financial penalty of decreased reimbursement. This encourages higher ED transfer rates. The ED transfer rate was relatively stable for the years from 2004 until 2015, but has moved to a higher level since that time. That likely reflects the number of mental health patients that are evaluated in one ED, and then transferred to another facility for inpatient care. The number of those patients, and their long lengths of stay a waiting transfer, occupy a significant amount of bed time and one-on-one care by ED staff members.



Graph 15. Percent of ED Transfers by Cohort.



Graph 16. Percent of ED Transfer, Trended over 21 years.

Percentage of ED Patients that are Placed in Admission or Observation Status in an Inpatient Area of the Hospital

The number is calculated from the patients that are placed in the status of “admitted” or “observation” status in a hospital, looking at the percentage that are processed through the ED (Graph 17). For 2024, about 19% of ED patients are placed in an inpatient unit across all full-service ED’s. The trend in admission rates since 2004 is displayed in the lower graph. The percentage of patients admitted had been decreasing across all ED’s since 2019. EDBA members report that in 2024 there was an uptick with 19% of ED patients admitted.

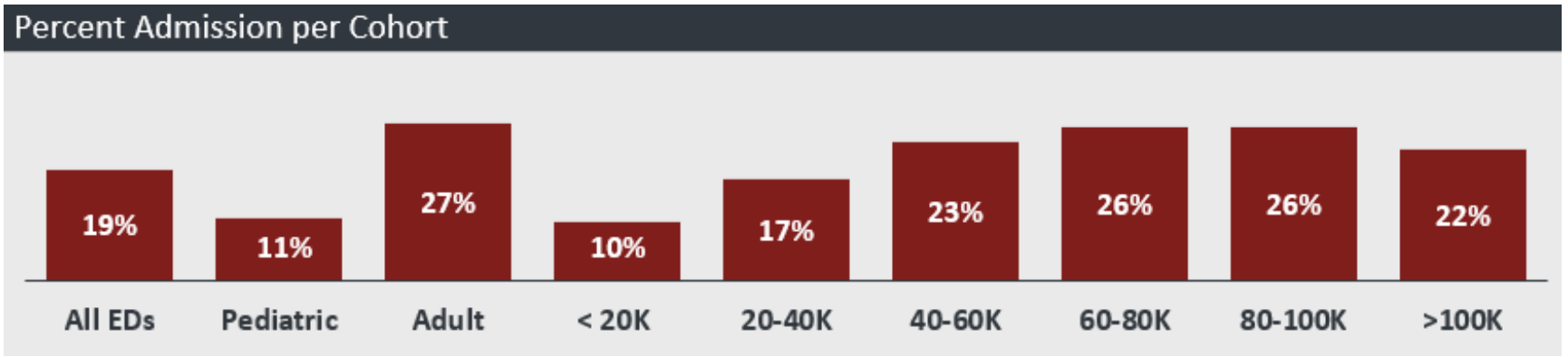
The ED admission rates from ED’s is bouncing over the last 7 years. It may be that a continuing and larger stream of patients is receiving extensive diagnostic and treatment services in the ED, and then opting for disposition to home, rather than admission.

But the variation between cohorts is noteworthy. Pediatric and small volume ED’s admit about 10% of patients, and adult and high volume ED’s admit 25% or more of their patients. Small volume ED’s still manage many high acuity patients that are not admitted at the same hospital but are transferred for admission to another hospital.

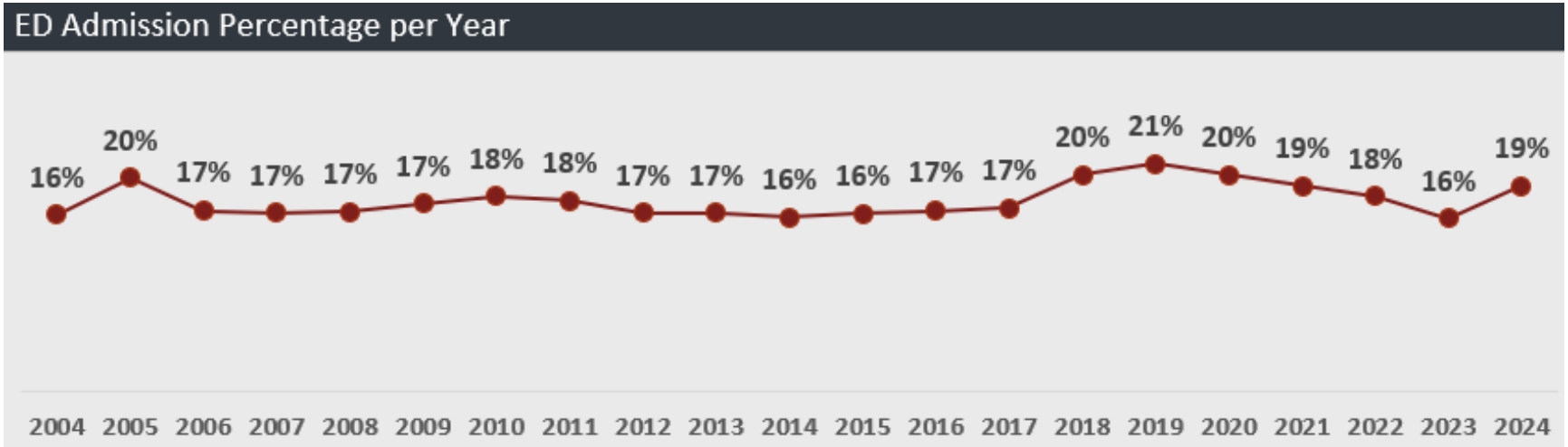
Boarding inpatients, transfer patients, and patients awaiting disposition for mental health disorders utilize many ED resources. In a separate report, we note that Freestanding ED’s have a much lower admission rate at 5%, and their data is not meshed with full-service ED’s for the overall calculations.

Throughout the history of the EDBA, there has been a consistent 65% of hospital inpatients admitted through the ED. There has been a loss of ability to calculate this number in many EDBA hospitals. For 2024, that number will not be published.

ED leaders in all sites can appreciate the difficulty of managing more admitted patients for longer periods of time. This challenges the ED staff to find open space for incoming patients and leads to difficulty in keeping walkaway rates from climbing.



Graph 17. Percent of Hospital Inpatients Processed through the ED, by Cohort.

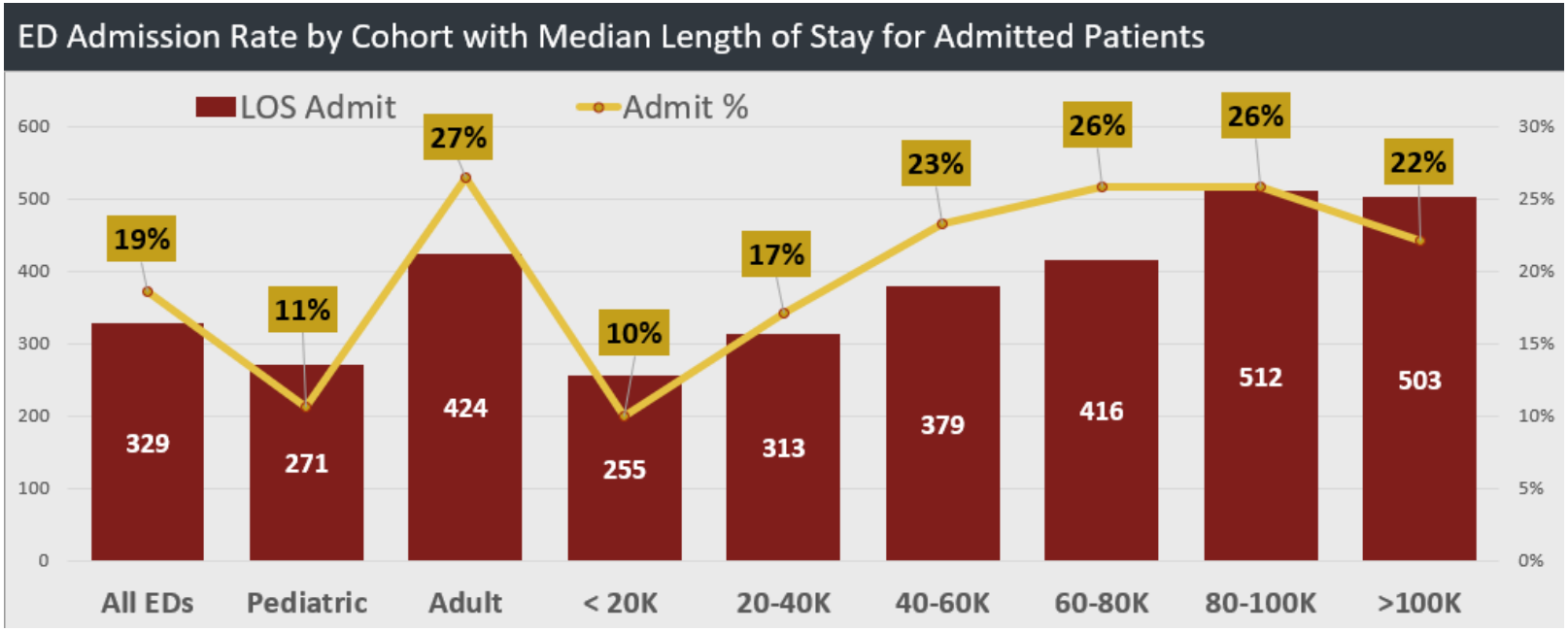


Graph 18. Percent of ED Patients Admitted, Trended by Year.

ED Admission Rate by Cohort, and Median Length of Stay for Admitted Patients

The percentage of patients that are seen in the ED and then placed in any inpatient area of the hospital ***either as "full admission" or "observation status."*** The highest admission rates are seen in adult EDs at 27%, and lowest admission rates in pediatric and small volume EDs, which had rates of about 10%.

The data in Graph 19 show the Median Length of Stay in the ED for admitted patients, and the admission percentage for that cohort. It is challenging for ED staff to process higher volumes of admissions. Higher volume and adult serving EDs tend to have longer median LOS in the ED and higher admission rates with variation by type of ED. Following EDBA historical observations, the data indicates increased LOS and Admit % in larger volume EDs, and slightly lower LOS and Admit % in smaller volume ED's.



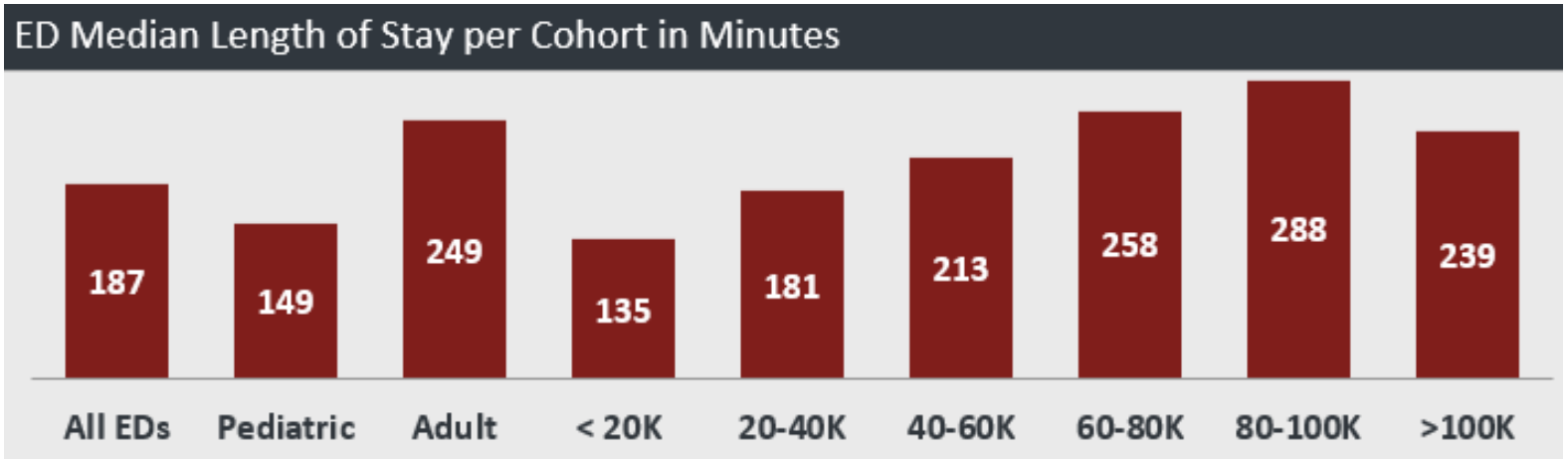
Graph 19. ED Admission Rate and LOS for Admitted Patients, by Cohort.

Median Length of Stay for all Patients, Reported in Various Patient Cohorts

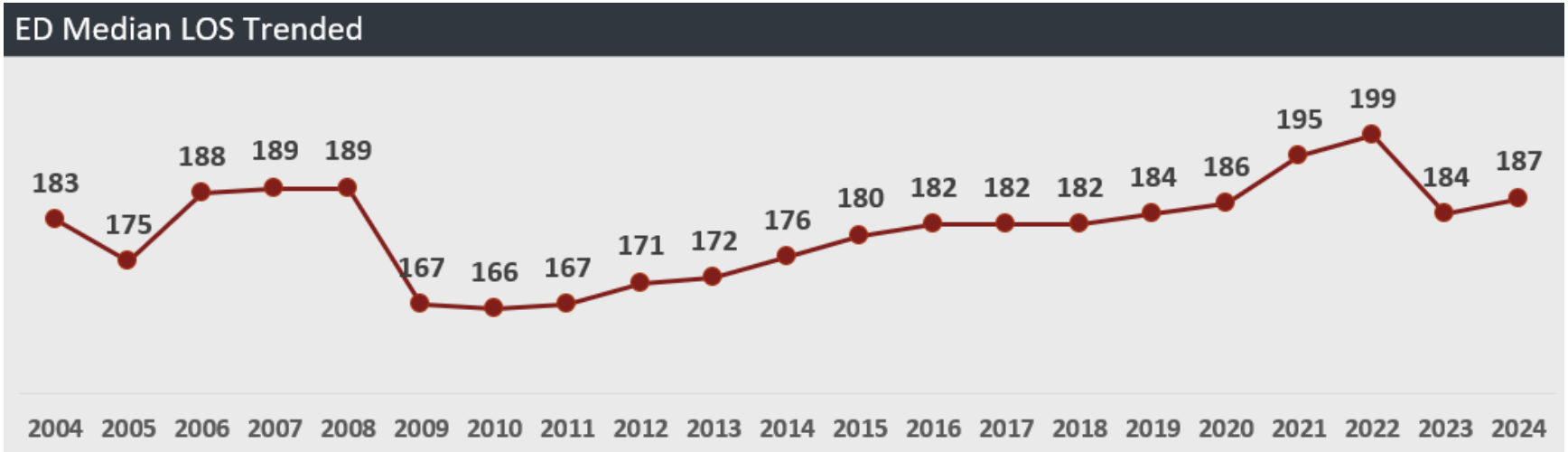
The number of minutes each group of patients spend in the ED is reported as a ***median***. The EDBA analysis of time markers for process flow has found that an arithmetic ***mean*** does not characterize the function of the ED as well as the ***median*** number because of the undue influence of outliers. ***So, the median statistic is utilized for all time parameters in the EDBA survey***.

CMS has been focused on studying the process flow for admitted patients, expressed as a median time. Hospital and ED leaders recognize this as CMS Clinical Quality Measure ED-1 (and NQF 0495).

The Median Length of Stay for all ED patients are displayed by cohort in Graph 20. There is a significant difference in the median length of stay by cohort. EDs that see lower acuity and lower volumes can move patients through much more quickly. The length of ED stay in the smallest EDs is 135 minutes. For the EDs seeing over 60K patients, the stay is almost twice that length at 261 minutes. Children seen in EDs also have shorter stays, with Pediatric ED's having a Median LOS of about 149 minutes.



Graph 20. Median Length of Stay by Cohort.



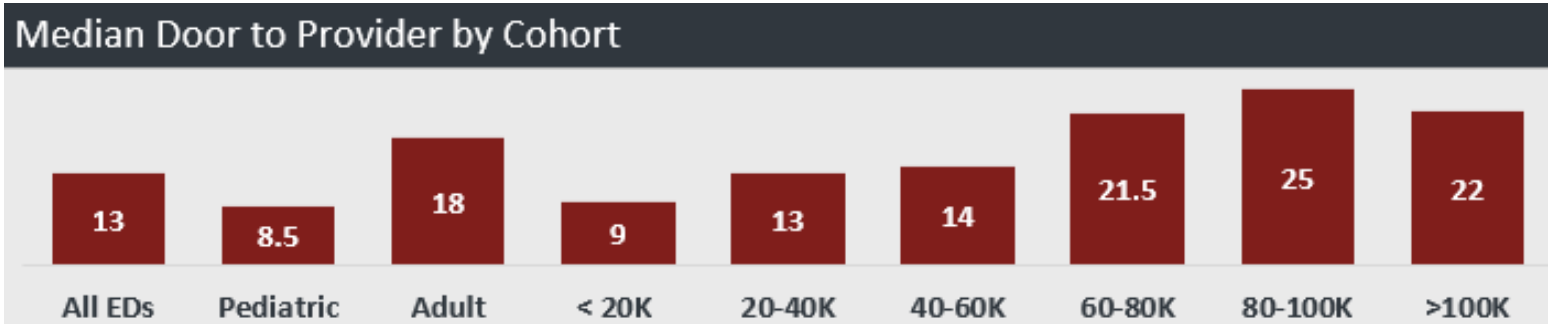
Graph 21. Median Length of Stay for all ED Patients, Trended by Year.

The median length of stay across all EDs increased significantly into 2022, when it peaked at 199 minutes. The yearly trend is displayed in Graph 21. Over many years the performance of all EDs was remarkably stable between 166 and 186 minutes, until jumping in 2021 and again in 2022. There was a movement back to the norm in 2023 at 184 minutes with a small uptick in 2024. This reflects a tremendous improvement in ED operations and significant leadership work.

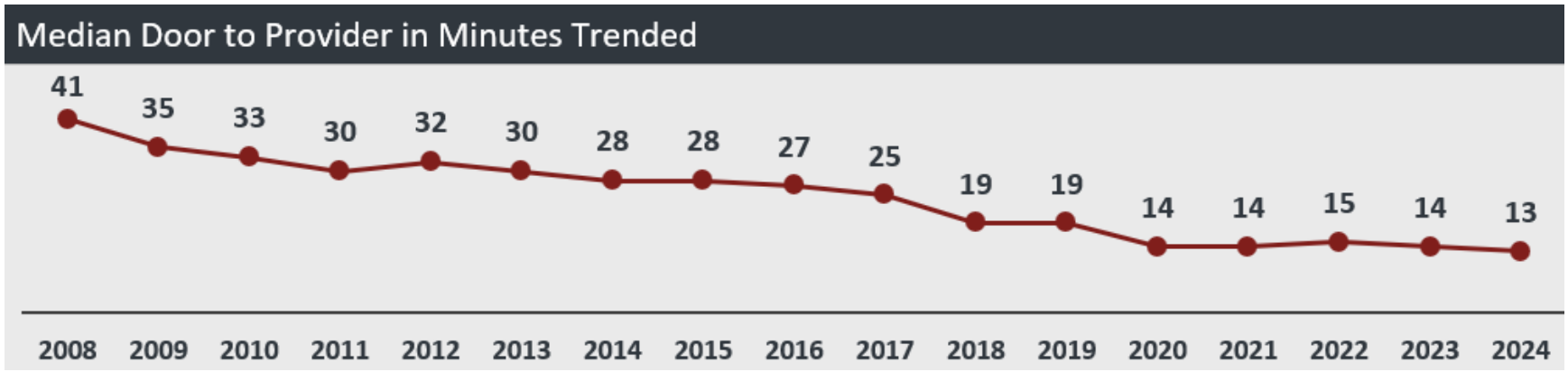
Door to Provider Time for all ED Patients

The number of minutes for patients to be placed in a treatment area and then seen by a responsible emergency physician or advanced practice provider (APP), is reported as a median. The start time for this interval is generally when the patient is first recognized as a patient by the ED staff, and a time of arrival is placed on the chart (Graph 22).

The "door to provider" time has continued its downward trajectory decreasing to 13 minutes in 2024. The trend since 2004 has been steadily downward, and represents remarkable work in reducing patient stay in the front area of the ED. The door to provider trend by year is displayed in the second trend chart below (graph 23), and data is available in the Performance Fractals by Cohort Report. There has been a correlation noted between door to provider and LBTC rates of patients from the ED.



Graph 22. Median Door to Provider, by Cohort.

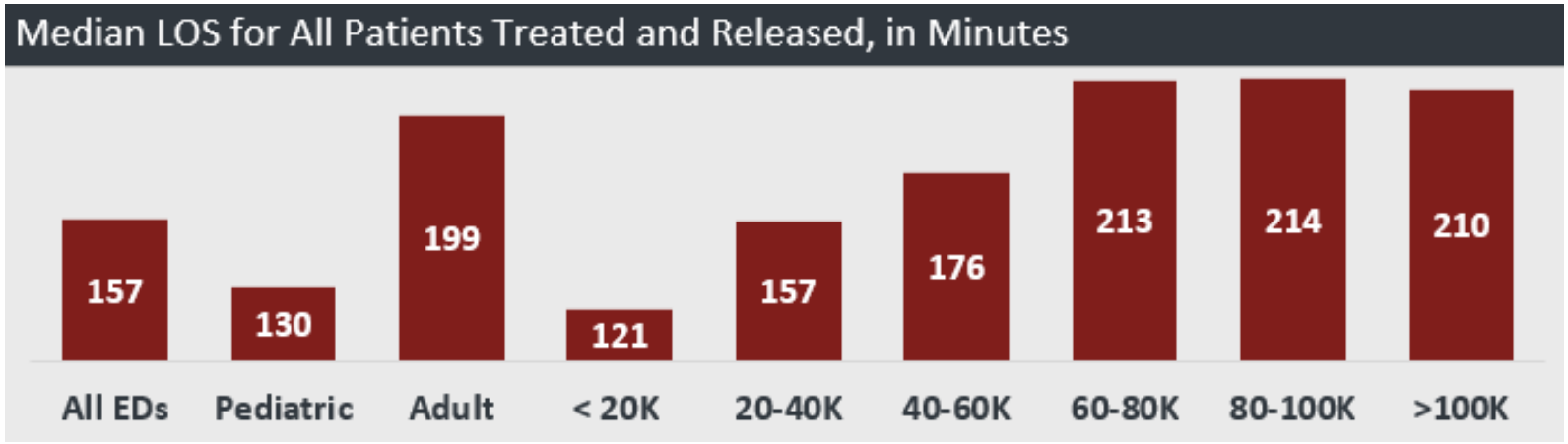


Graph 23. Median Door to Provider, Trended over 17 years.

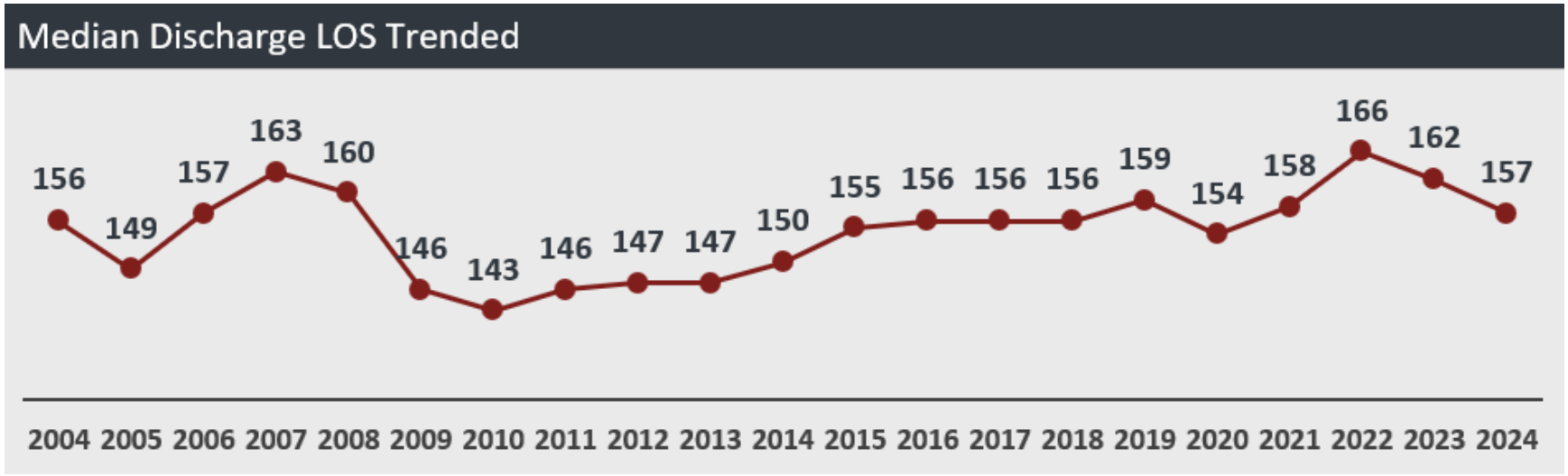
ED Median Length of Stay for Patients that are Treated and Released

The median length of stay for patients that are treated and released includes all aspects of moving those patients through the ED. Flow includes the total time from patient arrival and recognition as a patient, through the time of disposition. This group of patients generally have flow that is under the control of ED staff, and do not require the services of inpatient physicians. The data in Graph 24 shows the flow is again better in low volume and low acuity EDs and the Median Length of Stay for Treat and Release patients across all full-service EDs is about 157 minutes.

The trend in the processing time is reflected in the graph below. The trend shows that despite the delays in the admitted patient groups, ED patients who are being treated and released is near the baseline for the 5 years pre-pandemic. That is remarkable work by ED staff to accomplish that processing.



Graph 24. Median Length of Time, in minutes, for ED Patients that are Treated and Released, by Cohort.



Graph 25. Median Discharged Length of Stay, Trended over 21 Years.

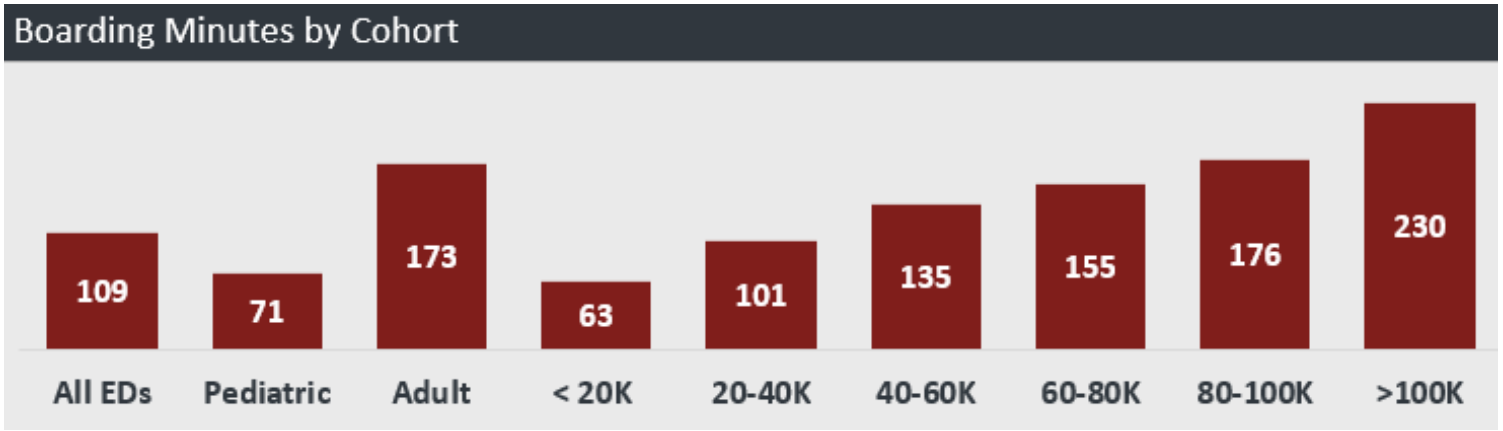
Managing the Admitted Patients: Successes in the ED's at Lower Volumes

The length of stay for admitted patients is crippling the operations of many ED's in the country, resulting in significant stress on patients, staff, and ED operations. Boarding is the reason for the lengthy processing times for all ED patients, and these prolonged processing times are leading to an enormous number of patients who are leaving before treatment is complete. Both the boarding and LBTC patients are a stressor for all ED staff members.

The data for 2024 shows that EDBA leaders have done an incredible job of reducing the length of stay for admitted patients, especially in ED's with volumes under 40K. The reduction in these numbers was hard to believe as the EDBA members began to report it. The numbers and calculations have been checked, rechecked, and then checked again. The average Boarding time across all ED's has been reduced to numbers that match 2014 and are so much better than times in the years 2021 and 2022. Congratulations to all the ED leaders who accomplished this remarkable turnaround. Many ED leaders will want to reduce this further, particularly in the ED's that have struggled with high volumes of boarded patients in the ED, but this is a great report on operational improvements in many hospitals.

Boarding Time

Boarding Time is published on the **CMS Hospital Compare** website. CMS requires all EDs to report publicly on Boarding Time for admitted patients. Boarding is the time measure ED-2 (NQF 0497), or in CMS language: Median time (in minutes) from admit decision time to time of departure from the ED for patients admitted to inpatient status. Currently, CMS has paused the collection and reporting of this measure. The data in Graph 26 shows that boarding time increases with the volume of the facility. Graph 27 shows the unbelievable progress made in reducing boarding time in EDs in 2023 and 2024.



Graph 26: ED Boarding Minutes, by Cohort.

Graph 27: ED Boarding Time from 2012 through 2023.

Median Length of Stay for Admitted Patients

The median length of stay for admitted patients includes all aspects of moving those patients through the ED. It includes the total time from patient arrival and recognition as a patient, through the time of decision to make an admission disposition, to the time of patient movement out the doors of the ED to the inpatient unit. Both time intervals are important and reflected in Graph 28, which demonstrates the relative distribution of time from arrival to admission.

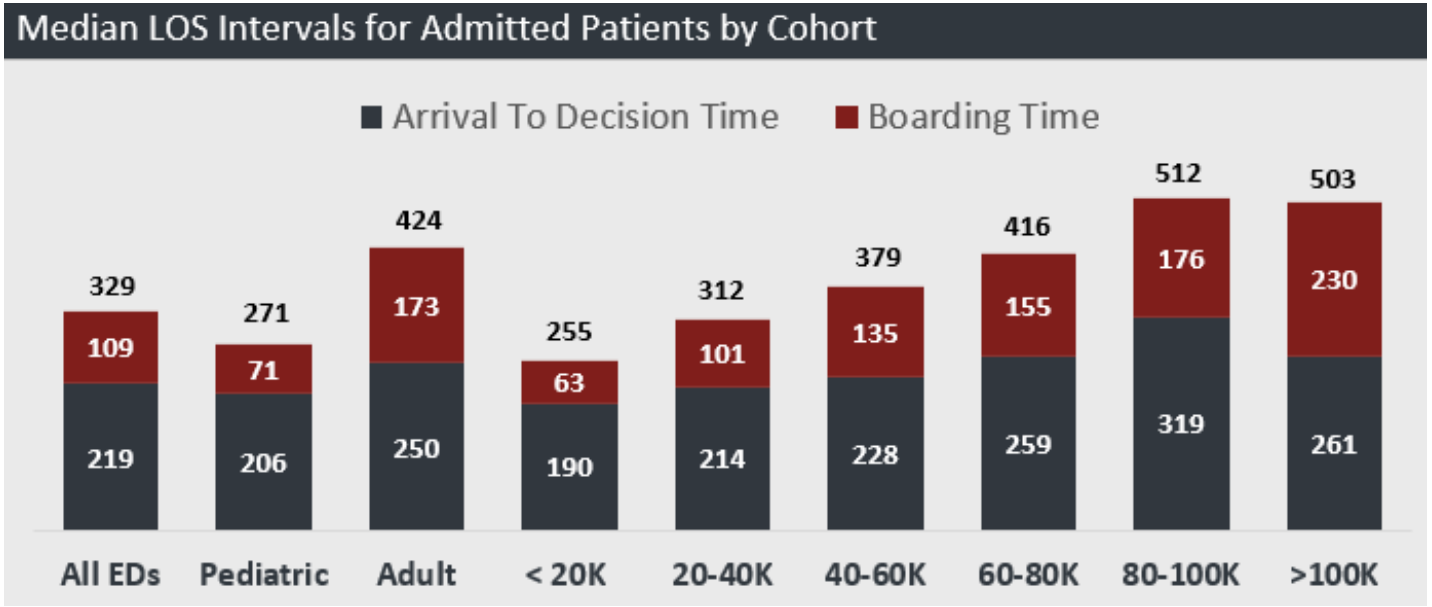
Some ED managers have reported that the definition of "Decision Time" has been changed in their facility, to make the "Boarding Time" number look shorter. This may be reflected in the data that is being reported for 2023 and 2024.

Reminder: boarding time begins the minute an admission order is placed. We use this timestamp because it is easily and consistently measured. Some hospitals delay this based on admitting team preferences and delays in placing an order. Other hospitals define boarding as starting at a time interval – usually 2 or 4 hours – after the admission order. For accurate comparisons, boarding time starts at the admission order. For optimal operations, this time should be short. The best-case scenario is boarding time of 30 to 60 minutes

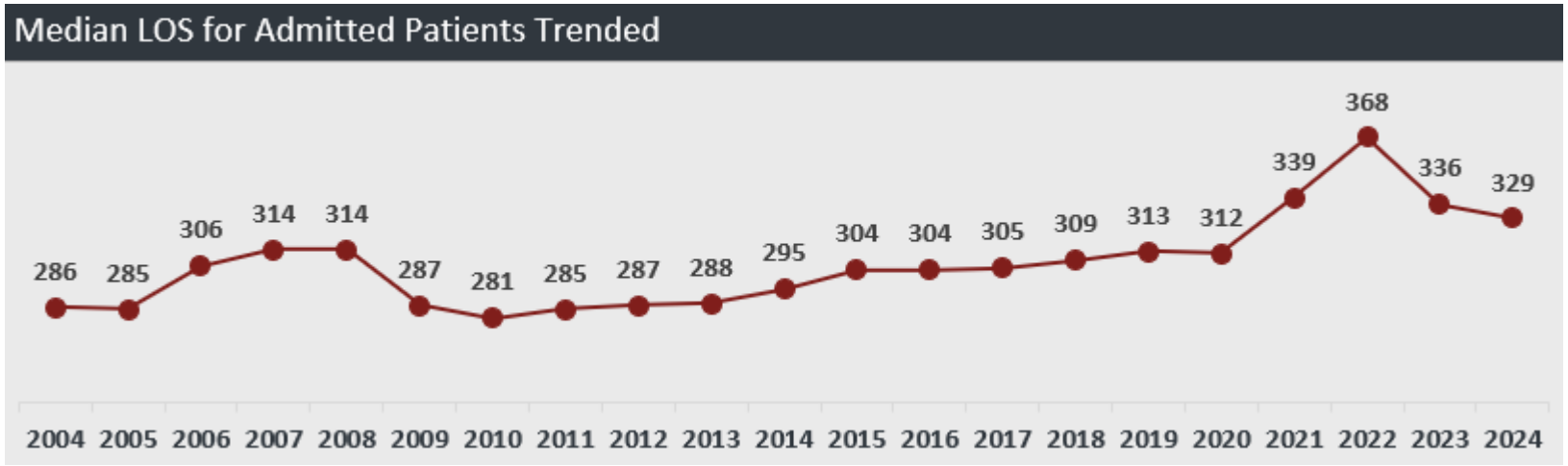
The boarding time interval demonstrates significant differences by ED cohort, as reflected in the red bars in Graph 28. Low volume ED's have significant advantages in the processing times of admitted patients. Their boarding times of about 63 minutes are one third of the median boarding time of EDs seeing over 80K volume, or an adult population. For the busier EDs, the median length of stay for admitted patients of about 512 minutes makes the boarding burden in the ED massively impactful. It is critical to ask for hospital administrations in high volume ED's to focus on moving patients to the inpatient units in a timelier manner, to reduce the impact on ED efficiency and the ED workforce.

The twenty-one-year trend in LOS for Admitted Patients still has the number at a higher level than prior to the pandemic, at 329 minutes, but it is moving in the right direction. Longer admitted patient processing times impact overall ED flow and walkaway rates.

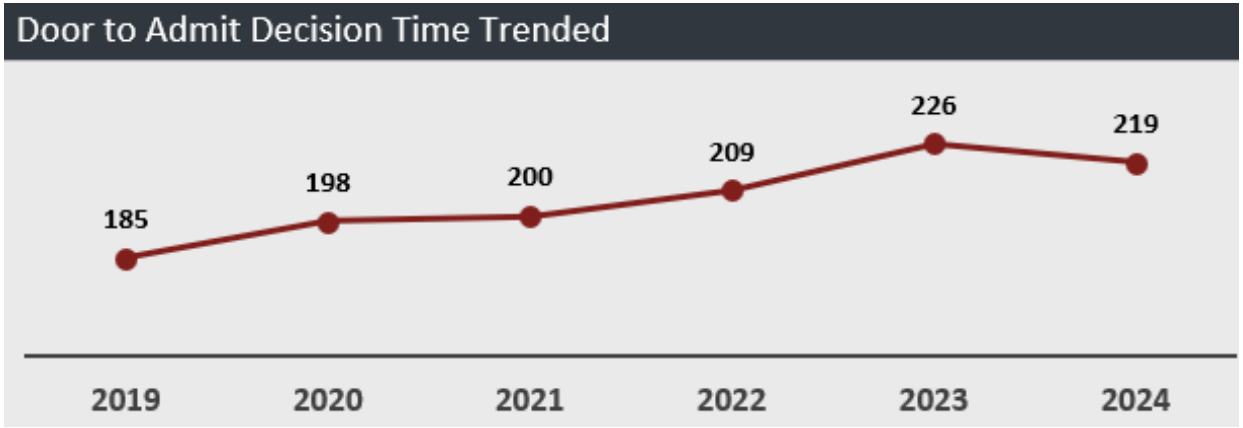
The EDBA now has 6 years of data on the Door to Admit Decision time interval. It is displayed in Graph 30. This time interval has increased over 6 years.



Graph 28. Median Time Intervals "Arrival to Decision" and "Boarding Time," for ED patients who are Admitted, by Cohort.



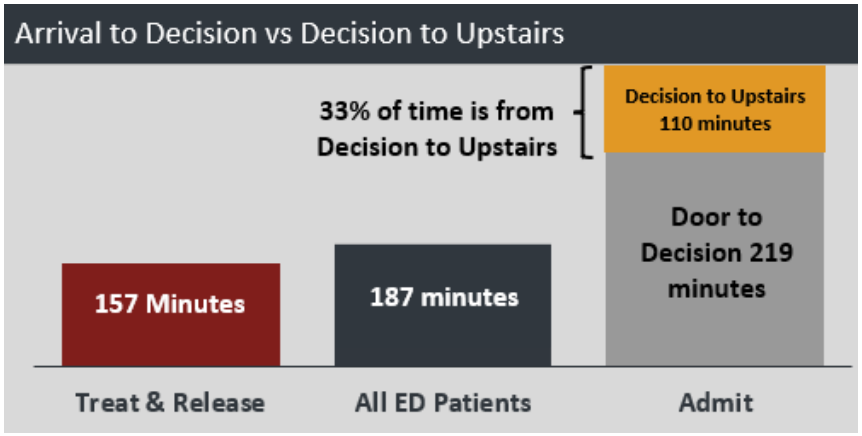
Graph 29. Median Length of Stay for Admitted Patients, Trended by Year.



Graph 30. Door to Decision Time trended over 6 years.

Smaller volume ED's have demonstrated the ability to shorten the time intervals for both elements of stay for admitted patients. There are opportunities for the ED to reduce the time from "arrival to decision" by the efficient use of diagnostic tests and early treatment, rapid decision-making by emergency physicians, and a hospital process that encourages early notification of and approval by admitting physicians (graph 30).

The overall structure of the Median Length of Stay for the admitted patient is depicted in Graph 31. The opportunity is present for ED managers to work with hospital leaders to impact that 33% of the admitted patient length of stay related to Boarding, as displayed in Graph 31.



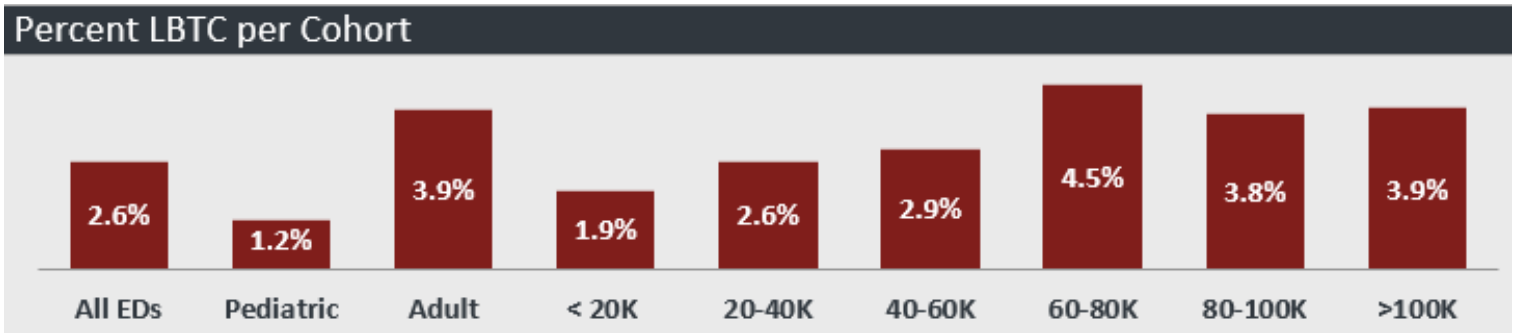
Graph 31. Arrival to Decision vs Decision to Upstairs.

Left Before Treatment Complete (LBTC) Rates Remain Uncomfortably High

A single statistic that compiles the annual total of patients who are recognized by the ED but leave prior to completion of treatment. This provides the most complete accounting for all patients who leave the ED before they are supposed to and includes those patients who leave before or after the Medical Screening Exam, those that leave against medical advice (AMA), and those that elope. The ability to reduce LBTC is volume-dependent, with lower rates in EDs at low volumes and those that primarily serve children (Graph 32).

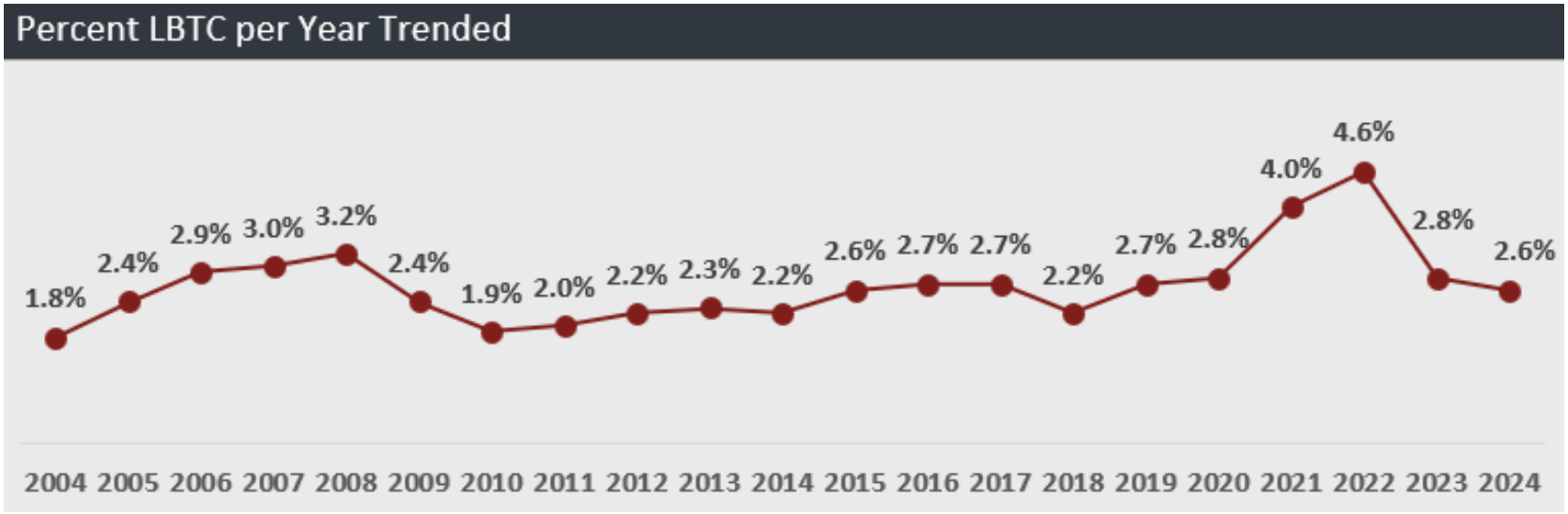
The reduction in LBTC rate to 2.6% in 2024 represents remarkable work in serving patients and fulfilling their needs, despite higher volumes.

The EDBA data indicates there is correlation between intake processing of patients, overall flow, and walkaway rates. Despite ED volume and acuity increases that challenge ED providers, especially in the pandemic time, improved operations have been evident in many ED's in 2023 and 2024.



Graph 32. Percent of Patients who Leave Before Treatment Complete (LBTC).

The LBTC rate had trended lower across EDBA hospitals until 2019, as displayed in Graph 33. In 2020 the average moved higher, jumped dramatically in 2021, and even higher in 2022. Incredible work has led to these rates falling to pre-pandemic levels.



Graph 33. Percent of patients who Leave Before Treatment Complete (LBTC), Trended over 21 years.

Design Elements for Renovation or New ED Design

These are the data elements displayed as "Patients seen per Patient Care Space" and "Visits per Square Foot."

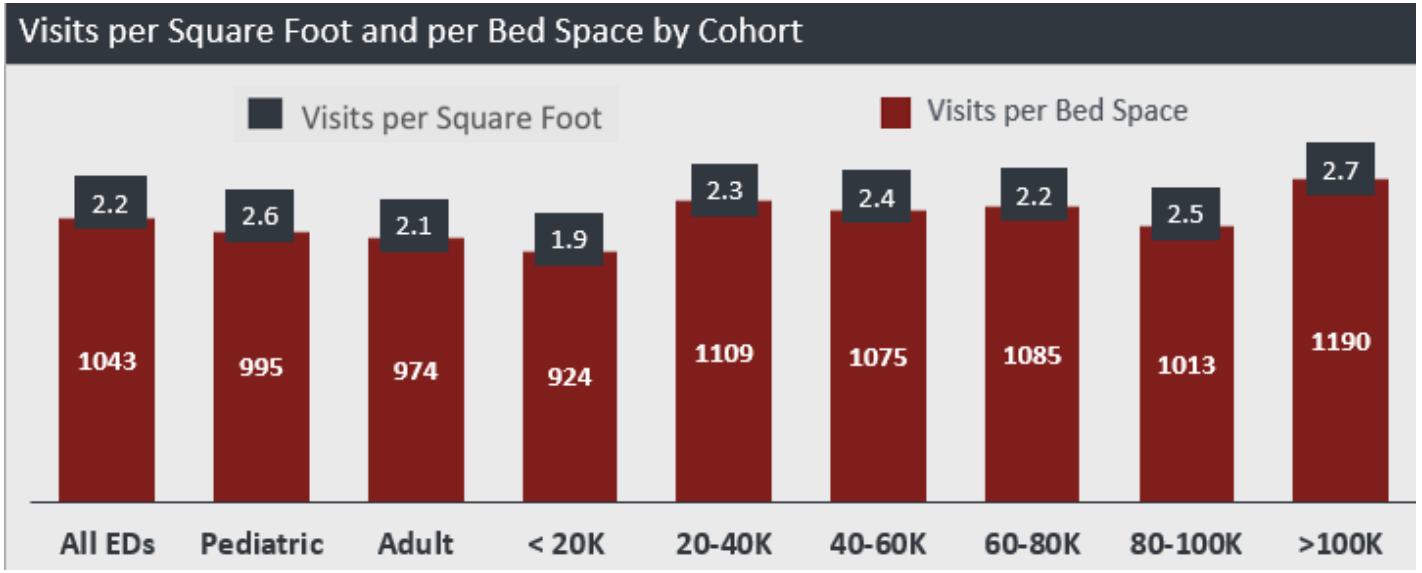
Many hospital CEOs will insist that the ED be built for 2,000 encounters per bed because that rate is espoused as fact by business consultants. Like many "facts" about the ED, this one is wrong.

Space Use Data

It is important to note that none of the bed utilization data includes the burden of inpatients that are occupying bed spaces and hallways in almost all ED's in the country. Many EDBA members are reporting on the management of ED patients in waiting rooms and other ad lib spaces.

At the current visit rates, U.S. EDs are designed to see 1,000 to 1,250 visits per patient care space. The average across all EDs in 2024 was 1,043 patient visits per care space. Results of both ED Visits per Patient Care Space and per Square Foot for 2024 are summarized in Graph 34.

Small EDs generally have a relatively smaller number of patients seen per care space. Pediatric EDs see patients more quickly, so have relatively higher utilization. For those EDs that have high numbers of visits per bed, the result is generally higher walkaway rates.



Graph 34. Visits per Square Foot and per Bed Space, by Cohort.

The EDBA also reports on the gross square footage contained within the ED, as approximated by the hospital facility managers. The Visits per Square Foot is then calculated by dividing the annual visits by the square footage. It is a crude proxy for how "space compact" an ED is. Most EDs are sized so that they see 2.1 to 2.5 visits per square foot. For those EDs that are very small relative to volume, the space compression can result in higher walkaway rates.

Emergency Department Staffing Ratios

The EDBA has hosted five summits to develop the most effective definitions of staffing and markers of care. The definitions developed and published by the EDBA consider four classes of ED staff: physicians, advanced practice providers (APPs), nurses (not differentiating the various levels of staff nurses), and the group composed of personnel that function in technical and clerical roles. The ED care team is ever-changing. Many ED's have teams that include pharmacists, scribes, medical assistants, social workers, trainees, and care coordinators as well as patient navigators, transporters, and ED-dedicated environmental services workers. These additional disciplines are NOT accounted for in the current EDBA staffing data. Only the original four classes of care providers.

For the last several years, the data has tallied the scheduled number of work hours in an average day for nurses, techs, clerks, physicians, and advanced practice providers providing clinical service. All staffing ratios have been calculated using the same

mathematical formula: ***Number of patients visiting the ED on an average day, divided by the number of scheduled hours for persons in a clinical role in an average day***—a common calculation for physician productivity. The 2024 Staffing Ratios are reported in Table 2.

Patients per MD hour decreased to 2.4 across all EDs in 2024, remaining lower than the 2.9 value pre-pandemic in 2019. RN ratios have stabilized at 0.5 hours per visit for the last few years with little change.

It is important to note that none of the RN and tech staff utilization data includes the burden of caring for boarded inpatients, patients waiting for transfer, and patients with acute mental health issues, that are occupying bed spaces and hallways in almost all ED's in the country.

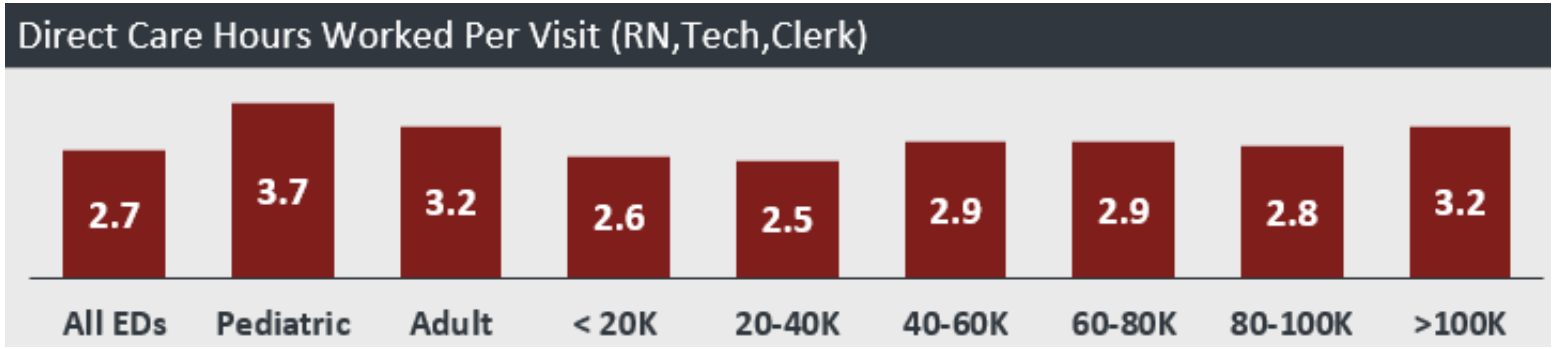
Explanation of APP Staffing Ratios

At the initiation of the EDBA studies in 1998, it was necessary to develop a formula that allowed comparison of staffing ratios where APPs were working in collaboration with emergency physicians (most patients seen with a physician). At that time, the shared role of ED patient management by physicians and APPs did not allow the same level of productivity of APPs as physicians. So, in calculating the overall productivity of the licensed independent practitioners (physicians plus APPs) in an ED, the APP hours were assigned a factor of 0.5 the number of physician hours. To maintain internal consistency for the last 27 years, we have retained this convention for reporting on staffing ratios in EDBA publications. The EDBA realizes this may not reflect the reality in all ED's, where APP's now are seeing patients independently, and the productivity of physicians and APP's are calculated independently. But for EDBA publications, we believe consistent data reporting is important to our members. This year's staffing ratio is summarized in Table 2.

ED Staffing Ratios and Fractals for 2024					
Facility Type	RN ratio	Tech Clerk Ratio	MD Ratio	MD+APP ratio	Direct Care Hours per visit
All EDs	0.5	1.7	2.4	1.9	2.7
Pediatric	0.5	1.5	2.2	2.0	3.7
Adult	0.4	1.3	2.4	1.9	3.2
< 20K	0.5	1.8	1.6	1.3	2.6
20-40K	0.5	2.3	2.6	2.0	2.5
40-60K	0.5	1.4	2.7	2.1	2.9
60-80K	0.5	1.4	2.7	2.0	2.9
80K & >	0.5	1.4	2.4	2.0	2.8
> 100K	0.6	1.4	2.7	2.2	3.2

Table 2. Staff Ratios of Four Identified ED Disciplines in 2024.

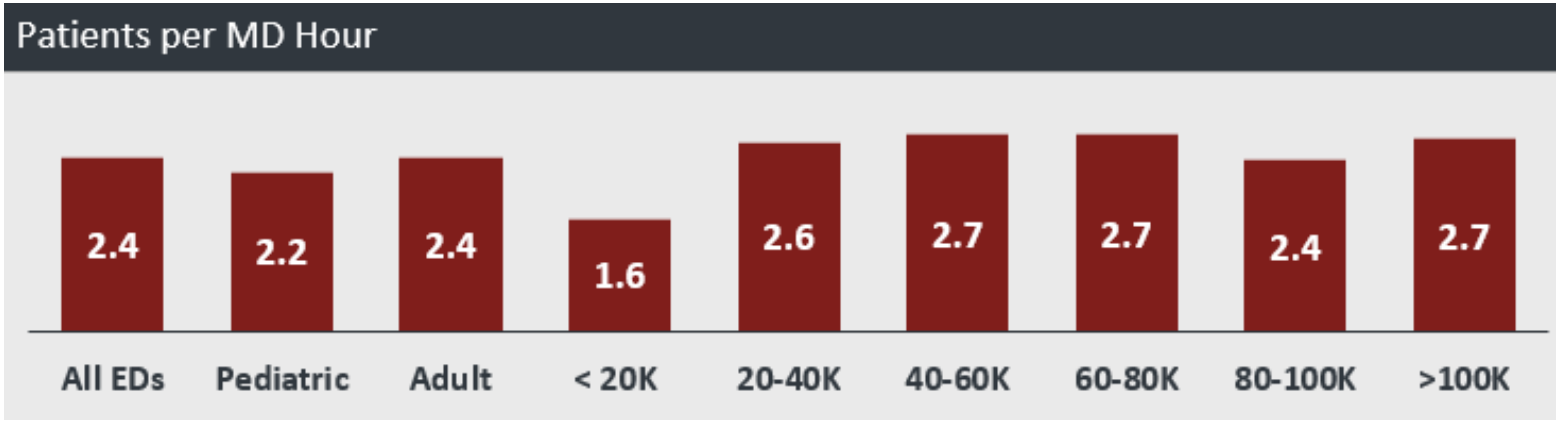
In addition to the ratios above, the EDBA has analyzed another staffing metric called ***Direct Care Hours Per Visit*** for the past three years. This metric is benchmarked by most major, proprietary labor management companies in today's market. This information (Graph 35) is presented for our members as a non-proprietary guide and comparative value.



Graph 35. Direct Care Hours Worked per Visit in 2024.

The EDBA asks for only "staffing hours for an ED's average day", thus our Direct Care Hours calculation does NOT include traditional "nonproductive" time

Overall, the worked hours per unit of service in the aggregate of all ED's have stabilized over the past two years following the volume drop with COVID. The higher volume bands are related to staffing shortages and steady patient volume as demonstrated in Graph 36.



Graph 36. Physician Productivity, in Patients per Hour.

Performance Fractal Tables

The EDBA does NOT calculate or publish "benchmarks". Instead, it reports on actual performance and allows individual ED leaders to find their appropriate comparative data. The EDBA does report important data elements that would benefit from comparison based on fractals. Appendix A to this report contains datafor elements of this report that are appropriately displayed as fractals.

Staffing Fractal Data Report

Please see data available on the ***EDBA Insights*** website https://www.edba-app.org for the most up to date staffing numbers. Note the website changes slightly with every new facility's data entry.

All staffing ratios have been calculated using the same mathematical formula: Number of ED patients on an average day, divided by the number of scheduled hours for persons in a clinical role in an average day. This matches the common calculation for physician productivity.

These staffing charts also include Freestanding ED's (FSED's), for comparison purposes for EDBA members.

RN Hours (Table 3) 2023	10%	25%	50%	75%	90%
Full-Service ED	60	96	192	312	499
Adult	129	236	445	551	790
Pediatric	114	138	228	351	486
>100	369	544	624	831	1014
80-100	273	381	487	606	654
60-80	252	312	396	510	652
40-60	167	226	264	323	455
20-40	84	108	144	180	220
0-20	48	48	69	84	109
Academic	171	251	384	577	759
Trauma 1 & 2	134	252	396	547	735
FSED	48	56	83	117	175

Tech Hours (Table 4) 2023	10%	25%	50%	75%	90%
Full-Service ED	12	24	60	120	168
Adult	48	69	126	178	295
Pediatric	33	42	60	115	184
>100	106	144	232	306	348
80-100	120	140	172	204	312
60-80	71	96	132	168	216
40-60	35	69	96	120	144
20-40	12	24	36	60	94
0-20	12	12	24	24	36
Academic	36	92	136	170	290
Trauma 1 & 2	33	82	132	186	297
FSED	12	12	24	48	84

Clerk Hours (Table 5) 2023	10%	25%	50%	75%	90%
Full-Service ED	12	24	24	26	60
Adult	23	24	36	69	130
Pediatric	20	23	24	24	25
>100	24	42	92	137	154
80-100	24	36	51	72	152
60-80	24	24	36	48	108
40-60	19	24	24	24	36
20-40	12	18	24	24	24
0-20	10	12	24	24	24
Academic	23	24	30	77	142
Trauma 1 & 2	24	24	36	66	131
FSED	11	20	24	24	24

MD Hours (Table 6) 2023	10%	25%	50%	75%	90%
Full-Service ED	24	24	33	52	80
Adult	26	40	65	93	115
Pediatric	24	24	38	59	122
>100	82	102	112	132	147
80-100	65	79	99	117	129
60-80	49	55	72	90	107
40-60	35	40	48	60	69
20-40	24	24	26	36	43
0-20	24	24	24	24	24
Academic	28	48	64	95	114
Trauma 1 & 2	24	48	69	96	116
FSED	24	24	24	26	36

APP Hours (Table 7) 2023	10%	25%	50%	75%	90%
Full-Service ED	10	12	23	36	52
Adult	12	20	35	55	80
Pediatric	11	16	23	29	38
>100	32	43	51	79	113
80-100	18	25	50	70	92
60-80	20	30	41	60	78
40-60	18	24	32	40	45
20-40	11	12	19	24	32
0-20	6	10	12	12	20
Academic	12	20	36	50	75
Trauma 1 & 2	13	24	36	52	81
FSED	8	11	12	24	40

Resident Hours (Table 8) 2023	10%	25%	50%	75%	90%
Full-Service ED	11	24	34	97	144
Adult	16	29	89	132	162
Pediatric	18	27	30	56	69
>100	16	24	121	171	235
80-100	43	59	104	135	162
60-80	20	36	72	119	146
40-60	8	16	24	68	106
20-40	8	12	24	24	56
0-20	8	11	24	24	24
Academic	12	44	88	132	160
Trauma 1 & 2	22	46	92	135	162
FSED	3	3	9	12	17

Scribe Hours (Table 9) 2023	10%	25%	50%	75%	90%
Full-Service ED	9	12	24	40	56
Adult	6	10	16	38	51
Pediatric	7	8	12	24	45
>100	10	14	24	26	67
80-100	20	28	38	48	77
60-80	12	27	40	60	80
40-60	9	16	31	43	54
20-40	8	12	16	24	39
0-20	7	8	12	12	24
Academic	12	16	36	54	61
Trauma 1 & 2	12	20	37	55	66
FSED	7	8	11	18	38

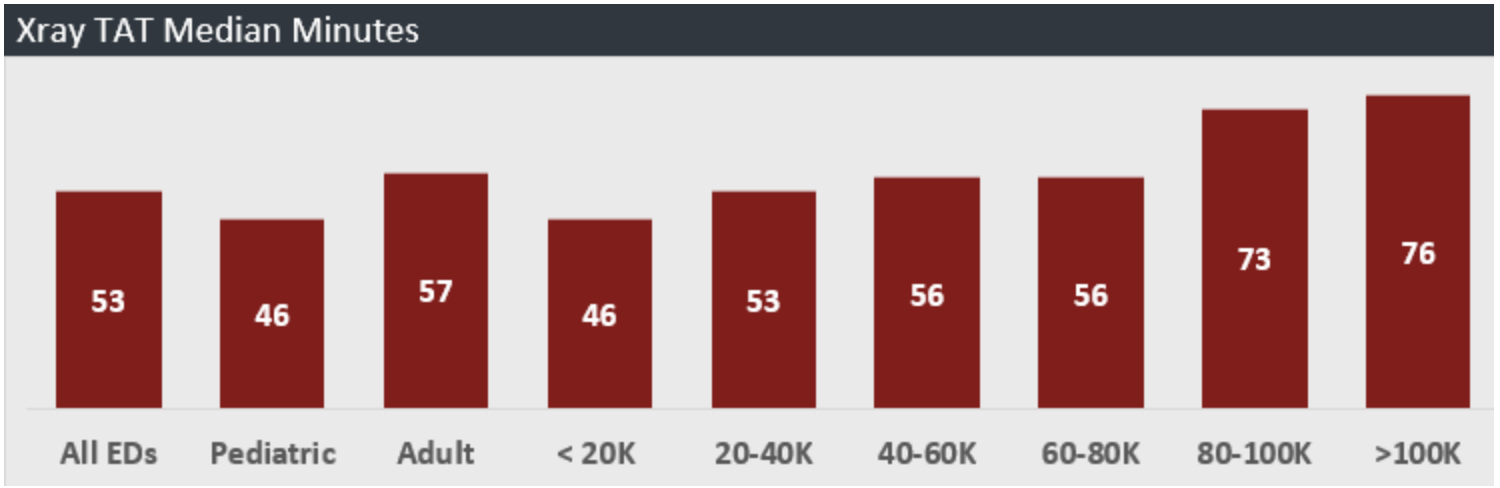
Ancillary Turn Around Time Data

Since 2019 the EDBA has collected and reported on turnaround times for testing in the ED. Trends are generally good.

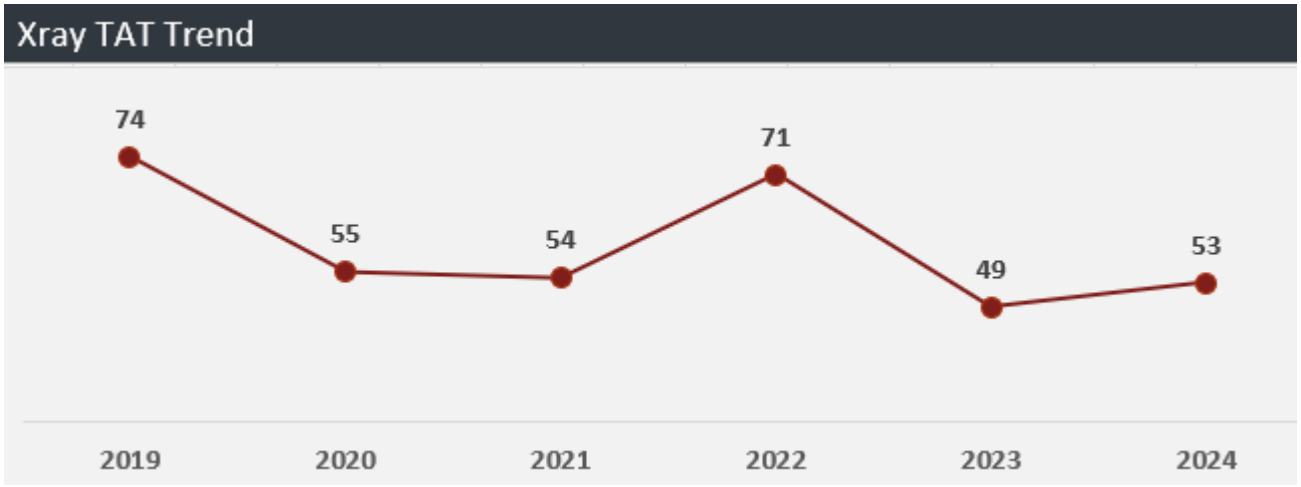
For radiology the turnaround time (TAT) for select metrics are reported as a median time interval from *"order placed in EHR by ED provider"* to *"first result available to ED provider"*. For imaging procedures, the results available time stamp may be when a "preliminary" or "final" report is complete depending on the EDs policy of decision-making for a given imaging modality.
The EDBA collected and reported data for:

- Plain Xray Imaging
- Ultrasound Procedures
- CT Procedures
- MRI Procedures (noted to have a long turnaround time)

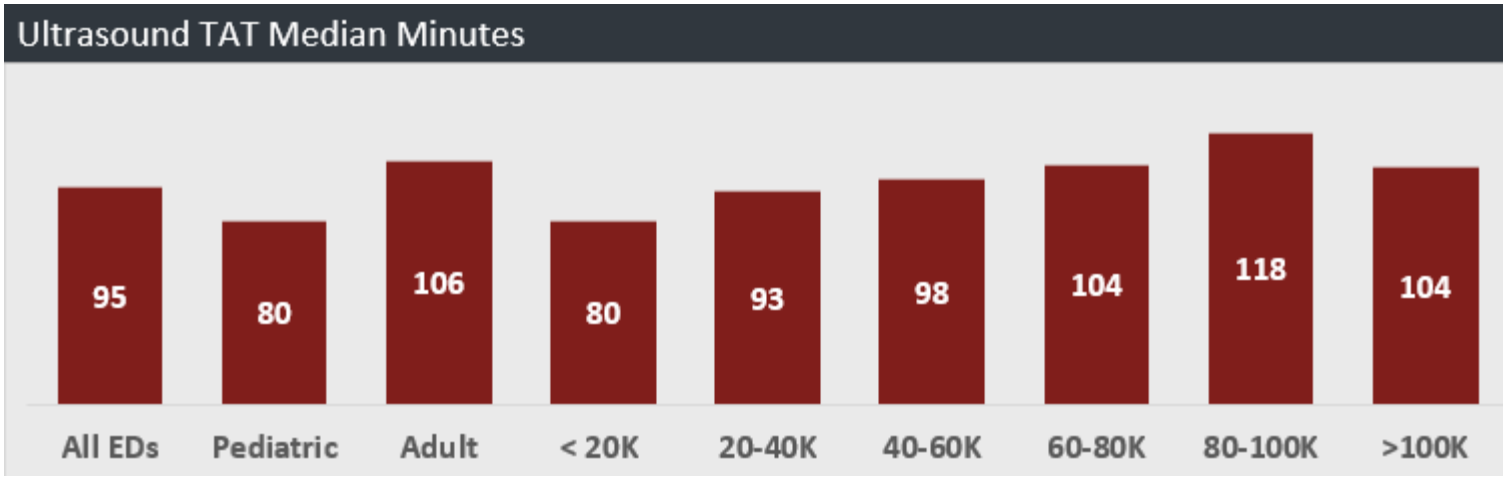
The intervals are all median time elements in minutes. The results displayed below compare the 2019 through 2024 data. Between 2019 and 2023 the TAT for imaging was decreasing. In 2024, we see a slight increase in TAT for all modalities likely due to increased patient volume and an increase in overall testing.



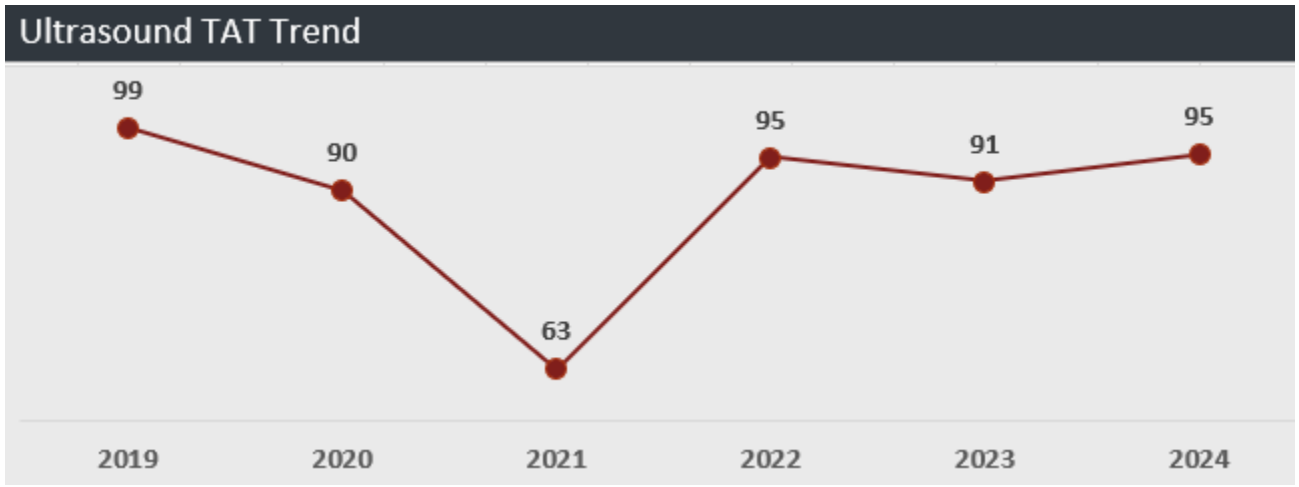
Graph 37. Xray Imaging Turn Around Time, by Cohort.



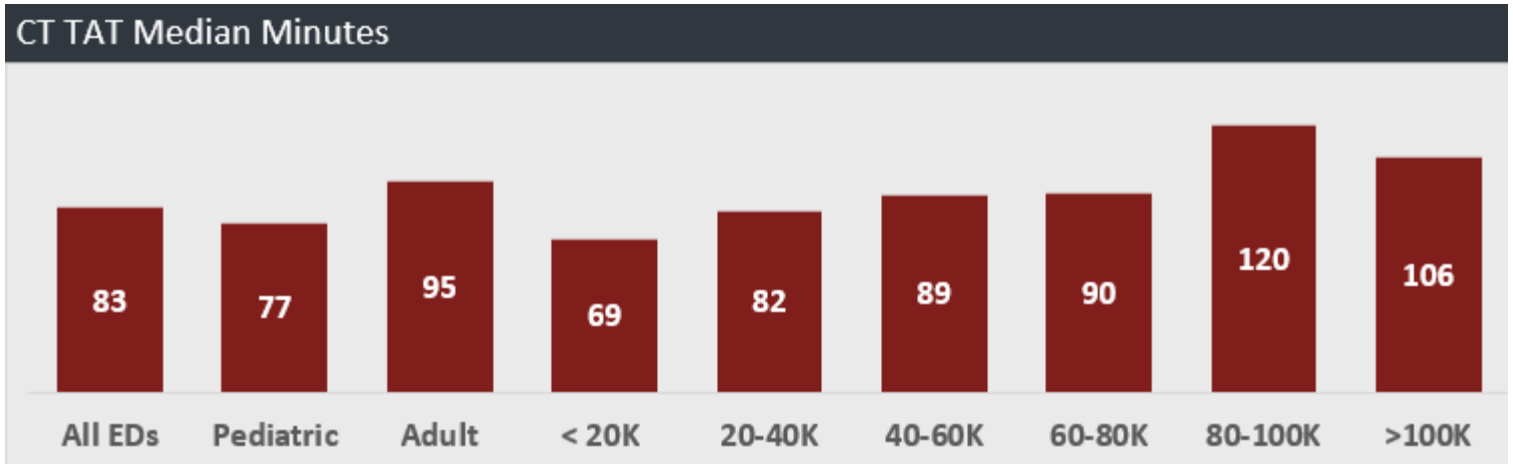
Graph 38. Xray Imaging Turn Around Time, Trended.



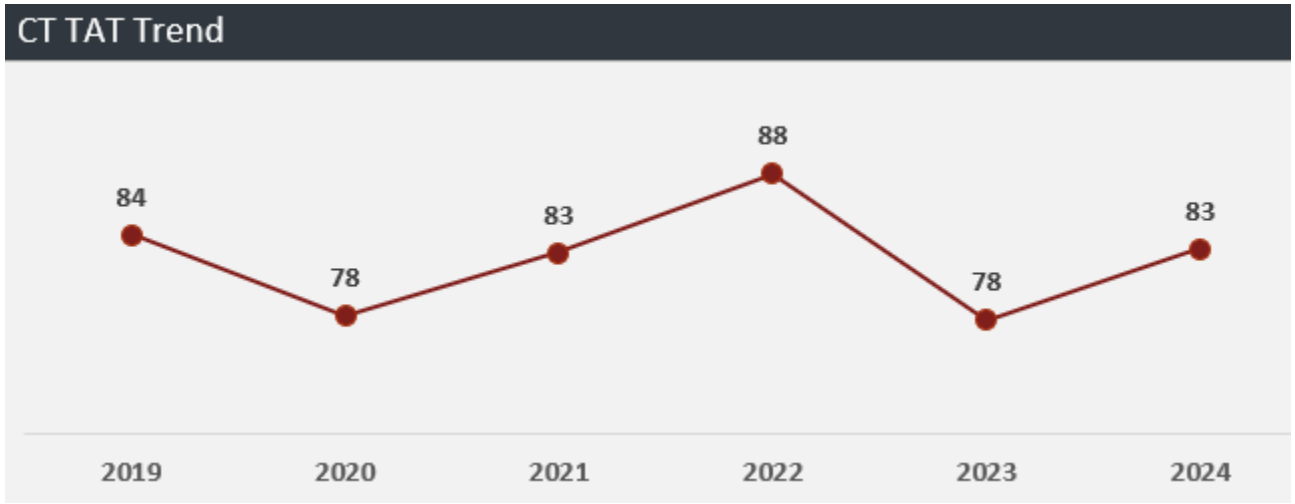
Graph 39. Ultrasound Procedures Turn Around Time, by Cohort.



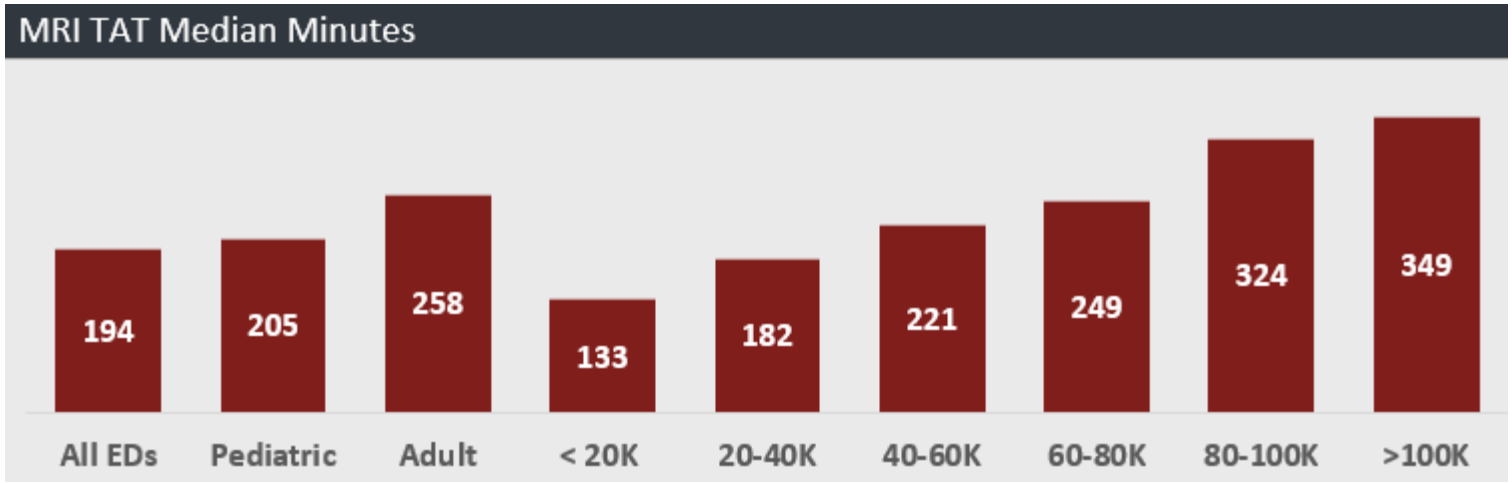
Graph 40. Ultrasound Procedures Turn Around Time, Trended.



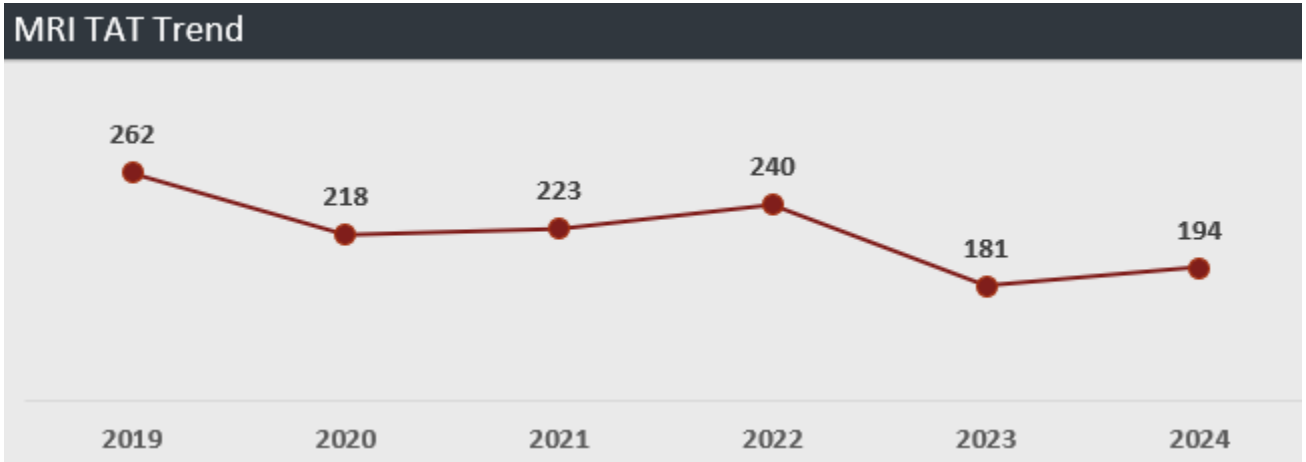
Graph 41. CT Procedures Turn Around Time, by Cohort.



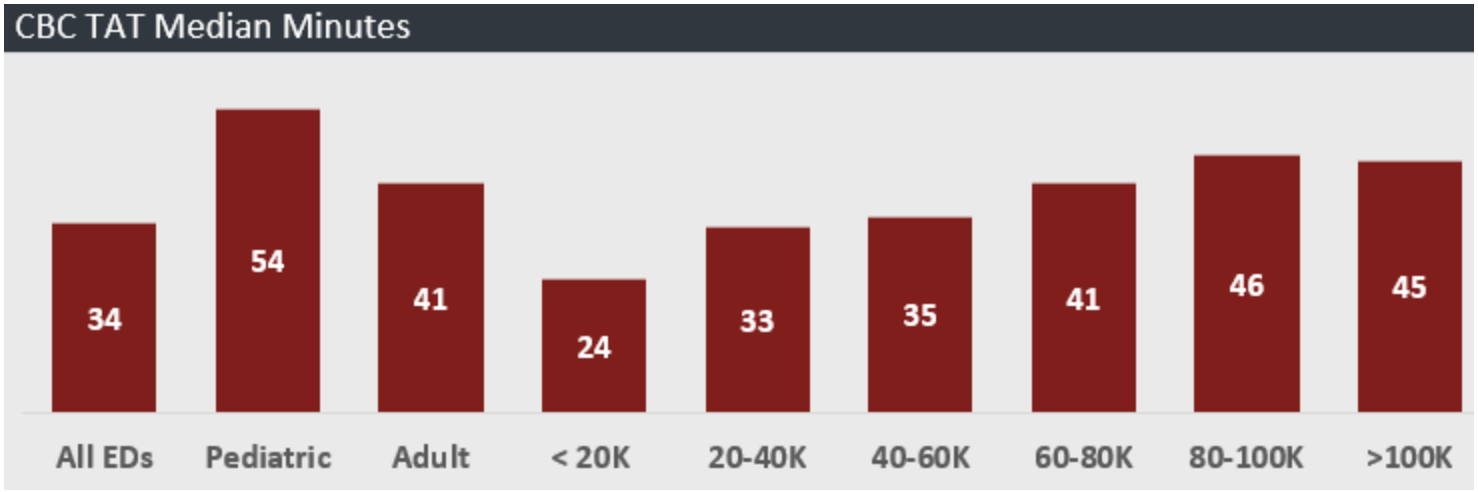
Graph 42. CT Procedures Turn Around Time, Trended.



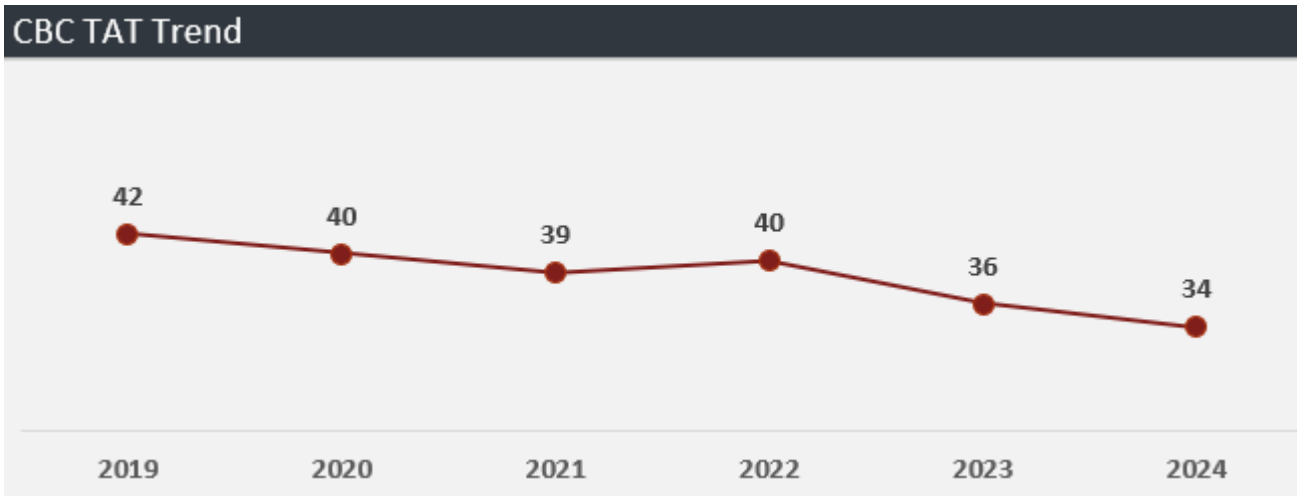
Graph 43. MRI Procedures Turn Around Time, by Cohort.



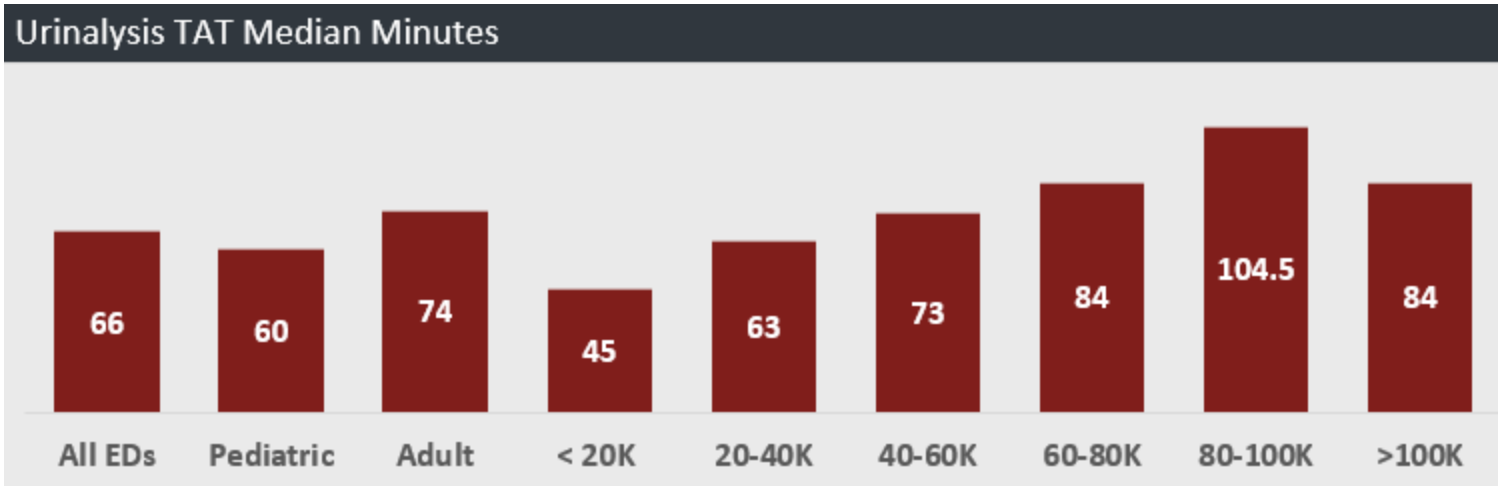
Graph 44. MRI Procedures Turn Around Time, Trended.



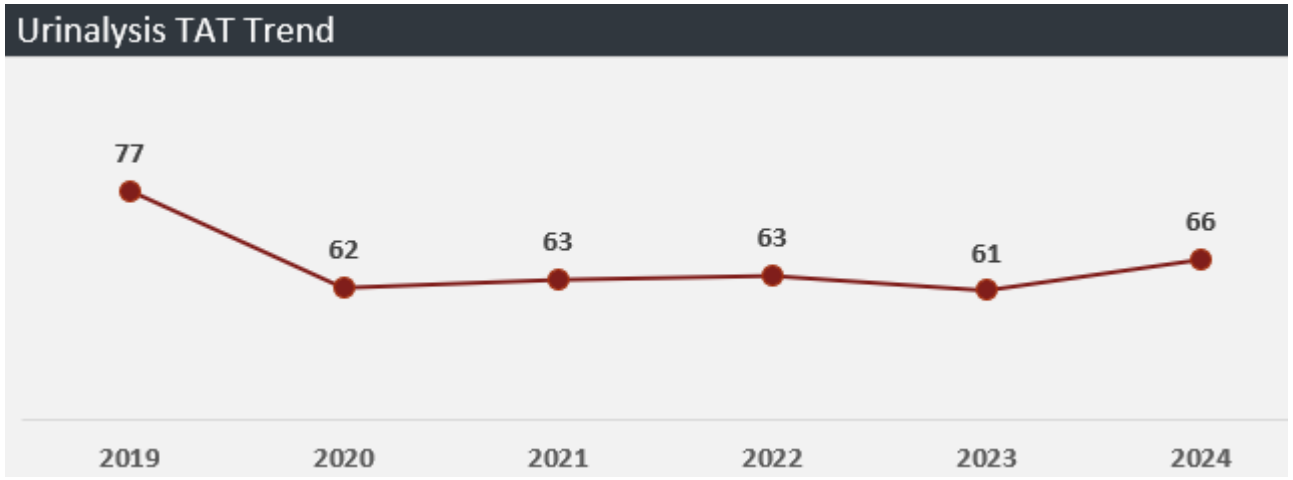
Graph 45. Order to First Result Available CBC Turn Around Time, by Cohort.



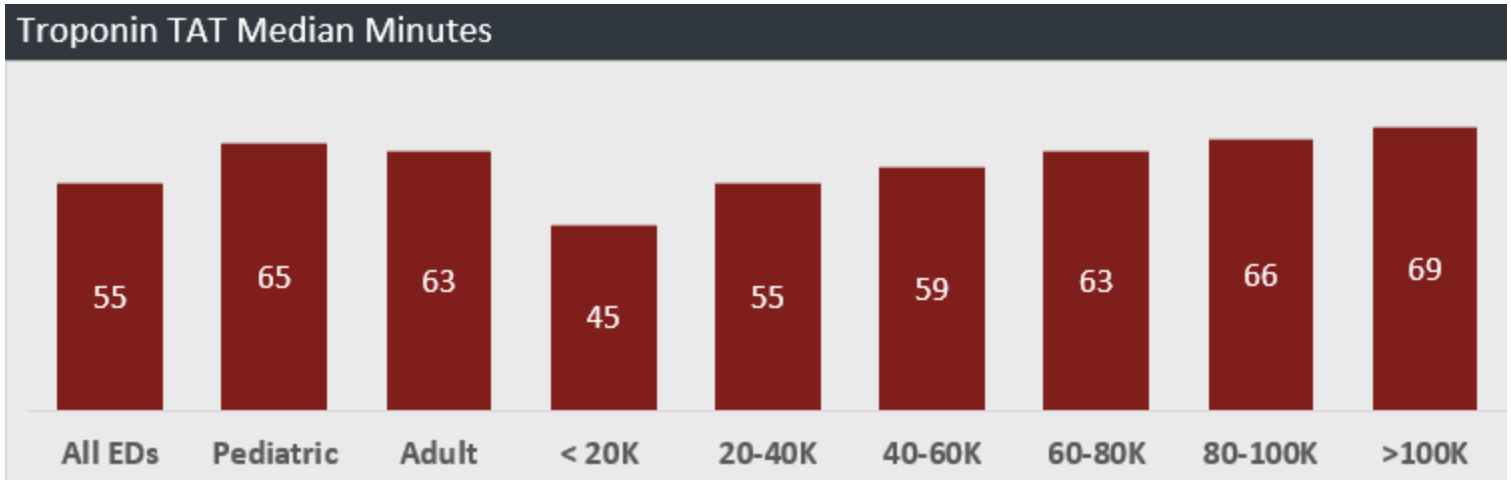
Graph 46. Order to First Result Available CBC Turn Around Time, Trended.



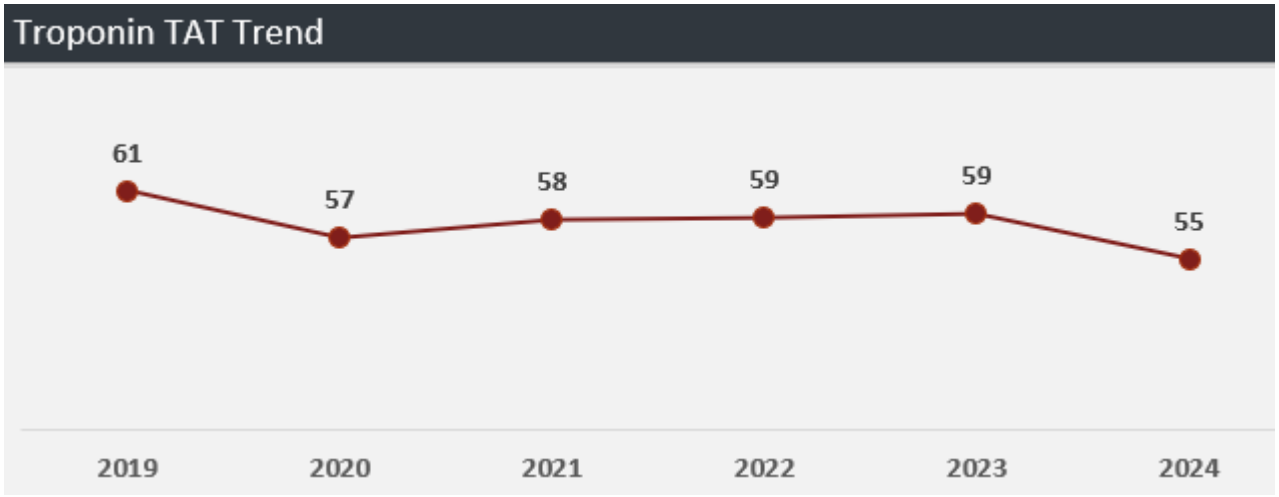
Graph 47. Urinalysis Turn Around Time, by Cohort.



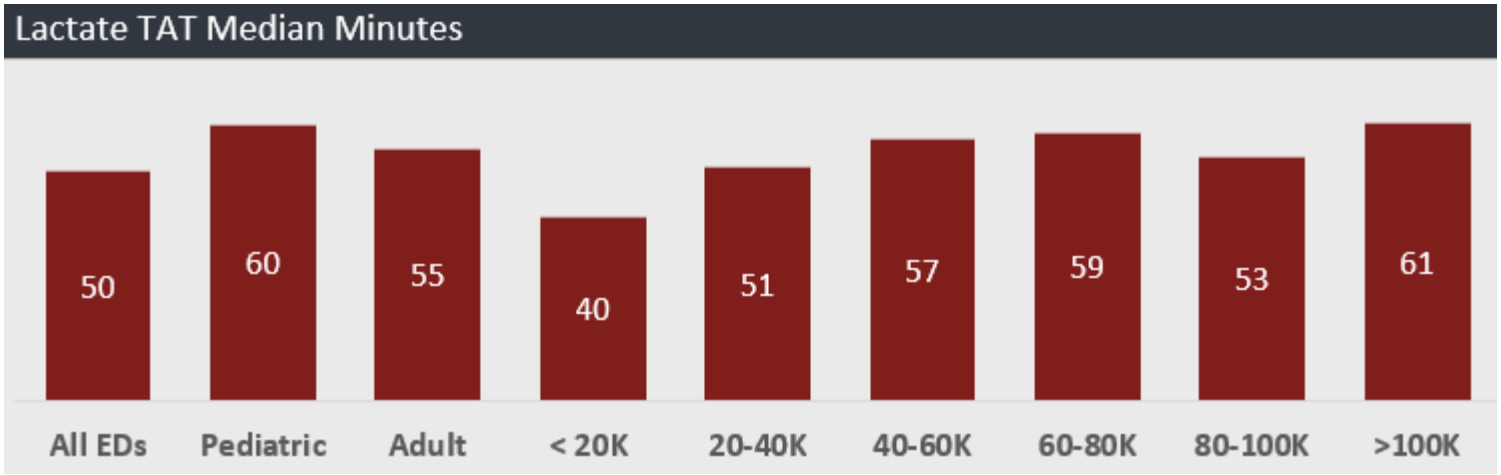
Graph 48. Urinalysis Turn Around Time, Trended.



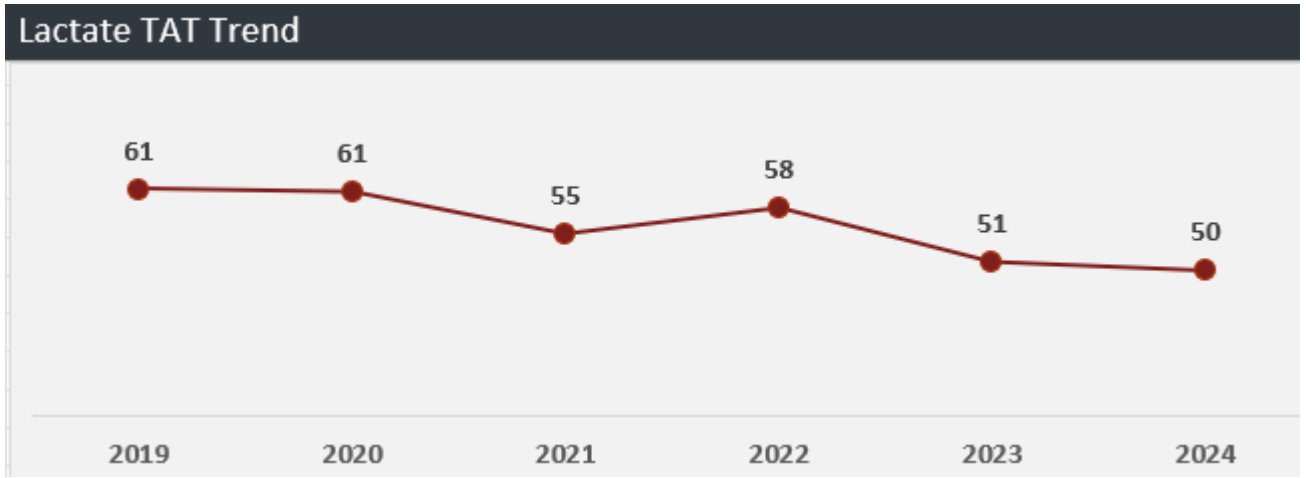
Graph 49. Troponin Turn Around Time, by Cohort.



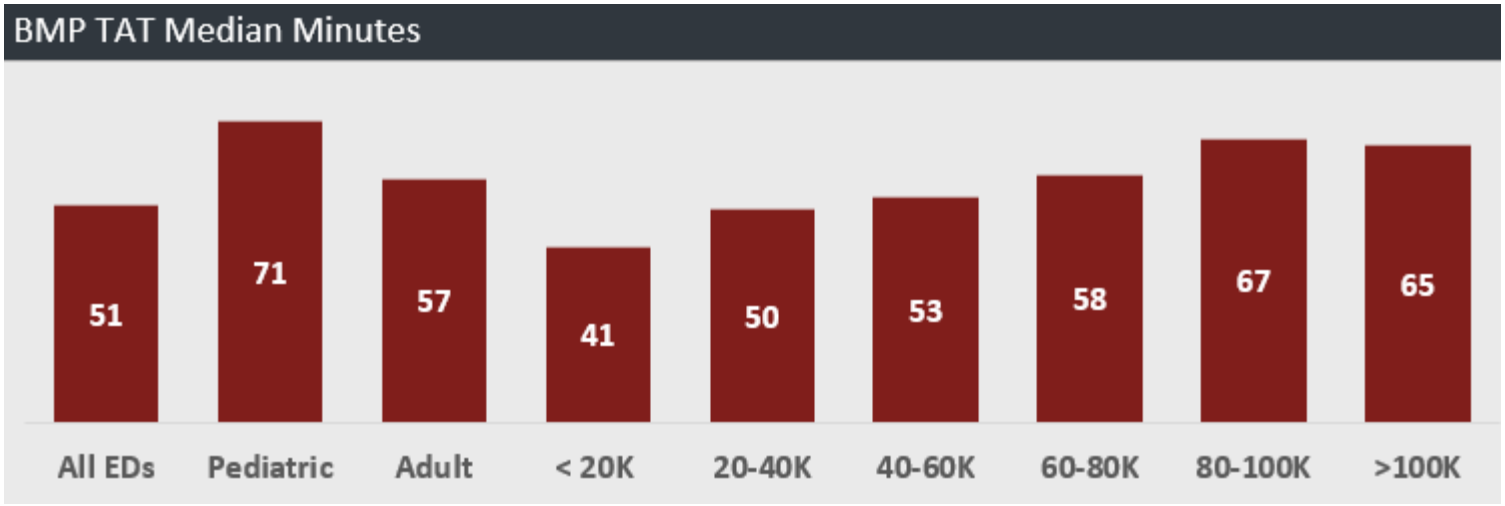
Graph 50. Troponin Turn Around Time, Trended.



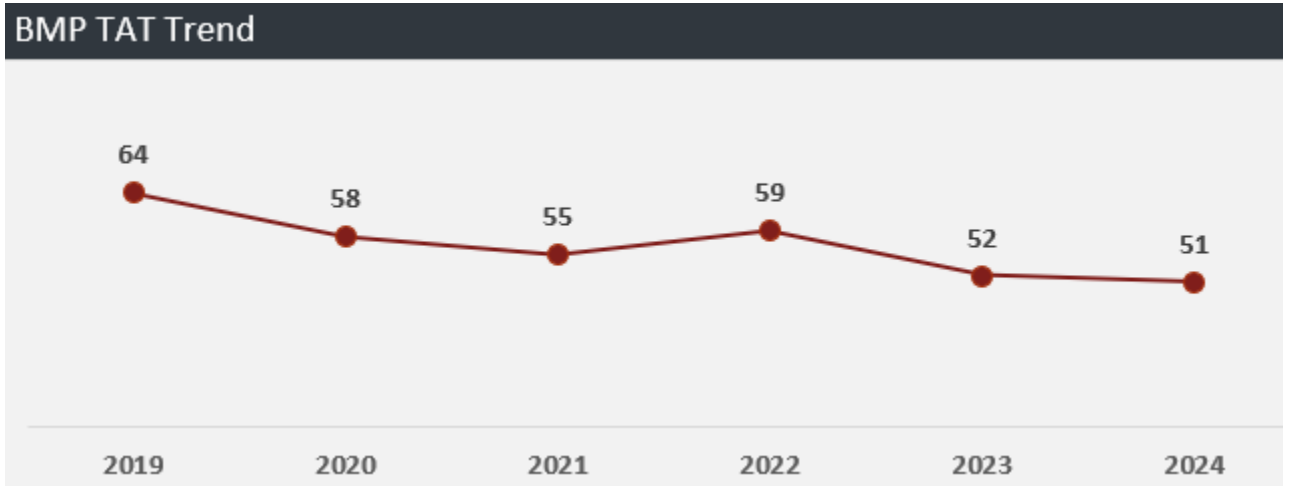
Graph 51. Lactate Turn Around Time, by Cohort.



Graph 52. Lactate Turn Around Time, Trended.



Graph 53. Basic Metabolic Panel Turn Around Time, by Cohort.



Graph 54. Basic Metabolic Panel Turn Around Time, Trended.

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Appendix A: EDBA 2024 Cohort Summary Tables

Table 1	Facility Count	Volume	Hi Acuity	Under 2	Peds	Over 64	ED Admit	O:E Ratio	Transfer	EMS Mix	EMS Admit
All EDs	1148	58,227,799	76%	2.5%	12%	26%	19%	0.98	2.7%	19%	37%
Pediatric	50	1,285,162	66%	27.6%	71%	0%	11%	0.88	1.3%	8%	28%
Adult	171	9,244,364	83%	0.6%	3%	28%	27%	1.05	1.3%	28%	44%
< 20K	285	3,400,265	72%	2.7%	15%	25%	10%	0.90	5.6%	13%	30%
20-40K	372	10,875,980	75%	2.4%	12%	27%	17%	0.92	3.0%	18%	35%
40-60K	241	11,900,496	78%	2.3%	10%	26%	23%	1.08	1.9%	22%	42%
60-80K	125	8,790,766	88%	2.8%	10%	26%	26%	1.01	1.5%	27%	43%
80K & >	45	4,040,804	79%	2.3%	10%	25%	26%	1.00	1.0%	25%	43%
>100K	29	2,733,139	78%	2.6%	8%	23%	22%	0.97	1.0%	27%	41%
FSED	340	5,956,823	61%	3.9%	16%	16%	5%	1.10	2.0%	4%	14%

Table 2	MLOS	MLOS TR	MLOS FT	MLOS Admit	Board Time	Door to Decision Time	D2B	D2D	LBTC	Transfer	ED Admit
All EDs	187	157	94	329	108.5	218.5	10	13	2.6%	2.7%	19%
Pediatric	149	130	111	271	71	206	15	8.5	1.2%	1.3%	11%
Adult	249	199	115	424	173	250	12	18	3.9%	1.3%	27%
< 20K	135	121	73	255	63	190	5	9	1.9%	5.6%	10%
20-40K	181	157	95	313	101	214	10	13	2.6%	3.0%	17%
40-60K	213	176	95	379	135	228	10	14	2.9%	1.9%	23%
60-80K	258	213	121	416	155	259	16	21.5	4.5%	1.5%	26%
80K & >	287.5	214	138	512	176	319	18	25	3.8%	1.0%	26%
>100K	239	210	139	503	230	261	14	22	3.9%	1.0%	22%
FSED	93	89	58	296	137	166	2	4	1.5%	2.0%	5%

Appendix A: EDBA 2024 Cohort Summary Tables *continued*

Table 3	RN Hours	Tech Hrs	Clerk Hrs	Doc Hrs	APP Hrs	Resident Hrs	Scribe	RN Ratio	Doc Ratio	Doc APP Ratio	Direct Care Hours
All EDs	192	63	24	34	23.5	31	24	0.5	2.4	1.9	2.7
Pediatric	156	58	24	40	18	49	8	0.5	2.2	2	3.7
Adult	444	132	36	65	36	89	20	0.4	2.4	1.9	3.2
< 20K	72	24	24	24	12	24	12	0.5	1.55	1.3	2.6
20-40K	144	36	24	27	19	24	18	0.5	2.6	2	2.5
40-60K	264	96	24	49	32	24	33	0.5	2.7	2.1	2.9
60-80K	396	132	36	72	41	73	48	0.5	2.7	2	2.9
80K & >	488	176	53	99	50	104	43	0.5	2.4	2.0	2.8
>100K	627	254	94	112	56	147	24	0.5	2.7	2.2	3.2
FSED	84	24	24	24	12	6	9.5	0.6	2.2	1.8	2.2

Table 4	BMP TAT	CBC TAT	CT TAT	Lactate TAT	MRI TAT	Trop TAT	US TAT	UA TAT	Xray TAT	Care Spaces	Beds
All EDs	51	34	83	50	194	55	95	66	53	32	24
Pediatric	71	54	77	60	205	65	80	60	46	32	21
Adult	57	41	95	55	258	63	106	74	57	61	35
< 20K	41	24	69	40	133	45	80	45	46	13	10
20-40K	50	33	82	51	182	55	93	63	53	28	21
40-60K	53	35	89	57	221	59	98	73	56	45	33
60-80K	58	41	90	59	249	63	104	84	56	65	49
80K & >	67	46	120	53	324	66	118	105	73	84	62
>100K	65	45	106	61	349	69	104	84	76	100	72
FSED	43	28	65	49	214	49	97	41	41	14	11

Appendix A: EDBA 2024 Cohort Summary Tables *continued*

Table 5	EKG per 100	Xray per 100	CT per 100	MRI per 100	US per 100	ESI 1	ESI 2	ESI 3	ESI 4	ESI 5	Hi Acuity
All EDs	30	46	37	1.4	7	0.9%	20.6%	51.0%	22.1%	1.7%	76%
Pediatric	5	34	5	1.5	7	0.4%	17.3%	41.4%	37.4%	3.0%	66%
Adult	32	53	48	2.5	7	1.3%	26.7%	53.3%	13.9%	1.0%	83%
< 20K	26	40	29.5	1.4	4	0.6%	13.4%	47.1%	28.2%	2.8%	72%
20-40K	30	44	36	1.2	6	0.9%	20.7%	51.3%	23.3%	1.6%	75%
40-60K	31	51	42	1.5	8	1.0%	22.8%	52.4%	18.4%	1.2%	78%
60-80K	34	52	42	2.1	9	1.2%	25.4%	52.9%	16.5%	1.2%	88%
80K & >	40	50	44	2.7	9	1.0%	29.7%	51.2%	15.8%	1.2%	79%
>100K	36	48	41	2.6	8	1.1%	22.0%	54.4%	19.4%	1.3%	78%
FSED	14	37	26	1.4	5	0.2%	9.1%	50.3%	34.2%	1.8%	61%

Table 6	Peds	Under 2	Over 64	ED Admit	O:E Ratio	EMS Mix	EMS Admit	ED Sq Ft	PPD	Visits Per Ft	Visits per Space
All EDs	12%	3%	26%	19%	0.98	19%	37%	15,000	89	2.2	1043
Pediatric	71%	28%	0%	11%	0.88	8%	28%	14,112	79	2.6	995
Adult	3%	1%	28%	27%	1.05	28%	44%	27,464	143	2.1	974
< 20K	15%	3%	25%	10%	0.90	13%	30%	6,921	34	1.9	924
20-40K	12%	2%	27%	17%	0.92	18%	35%	12,930	78.95	2.3	1109
40-60K	10%	2%	26%	23%	1.08	22%	42%	20,972	135	2.4	1075
60-80K	10%	3%	26%	26%	1.01	27%	43%	32,079	187	2.2	1085
80K & >	10%	2%	25%	26%	1.00	25%	43%	34,706	236	2.45	1013
>100K	8%	3%	23%	22%	0.97	27%	41%	39,103	293	2.7	1190
FSED	16%	4%	16%	5%	1.10	4%	14%	10,500	43	1.9	1232