NUHS
National University Health System

CLINICAL OUTCOMES BOOK

NATIONAL UNIVERSITY HOSPITAL (NUH)
NATIONAL UNIVERSITY CANCER INSTITUTE, SINGAPORE (NCIS)
NATIONAL UNIVERSITY HEART CENTRE, SINGAPORE (NUHCS)
NATIONAL UNIVERSITY CENTRE FOR ORAL HEALTH, SINGAPORE (NUCOHS)

Contents

Foreword

Professor Thomas Loh
Group Chairman,
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Group Chief Value Officer
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Health System

This inaugural Clinical Outcomes Book represents a major landmark on the National University Hospital's (NUH) Value-Based Healthcare journey and highlights our commitment to improving the quality of care to our patients at a sustainable cost to the nation. Healthcare systems around the world are being challenged to deliver better outcomes, greater value, and deeper trust simultaneously. In this context, transparency, collaboration, and outcomes-driven improvement are no longer optional; they are essential. This publication represents our response to that challenge.

As the first of its kind in Singapore, the Clinical Outcomes Book signals an important shift – from focusing primarily on activities and processes that improve efficiency of care, to placing outcomes that matter most to patients at the centre of accountability. By making our outcome results transparent, we hope to strengthen public trust and create a common foundation for learning and improvement within the healthcare system.

This Clinical Outcomes Book is not a destination, rather, it is a starting point – one that challenges us to build on what we have achieved, continue strengthening collaboration with our patients across institutions and deepen our focus on patient-centred outcomes. It is our aspiration that this work will not only elevate care within our NUHS cluster but also contribute meaningfully to the advancement of appropriate and value-based healthcare nationally.

We would like to extend our sincere appreciation to the clinical leaders, healthcare professionals and all our healthcare colleagues whose dedication and perseverance has made this publication possible. Their commitment exemplifies our shared resolve to deliver better value, better outcomes, and better partnerships with the communities we serve.

This Clinical Outcomes Book is not a destination, rather, it is a starting point – one that challenges us to build on what we have achieved.

The Clinical Outcomes Book represents a significant step forward in transparency and accountability within our healthcare system.

Preface

Professor Aymeric Lim
Chief Executive Officer
National University Hospital

Adjunct Professor Mark Edward Puhaindran
Chairman, Medical Board
National University Hospital

Ten years ago, NUH took its first tentative steps on its Value-Based Healthcare journey. As we look back, we can see how far we have progressed, but we are still far from our destination. This Clinical Outcomes Book marks a significant "stepping stone" in our mission to provide the best value and patient-centred outcomes – equivocal to any of the better hospitals in the world. It marks a certain maturity where – for the first time – we have published a comprehensive and transparent account of our clinical outcomes; achieved through the collective effort of all our staff across the NUHS cluster.

Over the past decade, our clinical teams have worked with unwavering commitment to embed value-based principles into everyday practice. Through multidisciplinary collaboration and a steadfast focus on outcomes that matter most to patients, our teams have demonstrated measurable sustainable improvements in the quality and safety of care. Their collective efforts form the foundation of the achievements documented in this publication.

The Clinical Outcomes Book represents a significant step forward in transparency and accountability within our healthcare system. By sharing these outcomes, we reaffirm our commitment to building trust with our patients, caregivers, and stakeholders, and to fostering a culture of continuous partnership, learning and improvement. Our belief is that this publication, a transparent account of our patients' clinical outcomes will act as a catalyst in striving for better care and better outcomes.

This work serves as both a reflection of what has been accomplished and a signpost for the future. It provides a structured view of our current performance, while informing strategic priorities and setting the direction for continued advancement of value-based and patient-centred care. More importantly, it reinforces our aspiration to deliver care that is evidence based, of a consistently high quality and impactful for those we serve – our patients.

We do not intend to rest on our laurels; we remain committed to enhancing Appropriate and Value-Based Care (AVBC) – continuing to measure what matters, to learn from our outcomes and to work collectively across disciplines to further improve the care experience and health outcomes of our patients.

The Clinical Outcomes Book is a testament to the dedication of our clinical teams and a reaffirmation of our shared resolve to deliver greater value in healthcare.

Cancer

Breast Cancer

Colorectal Cancer

Diffuse Large B Cell Lymphoma Cancer (DLBCL)

Lung Cancer

Prostate Cancer

Breast Cancer

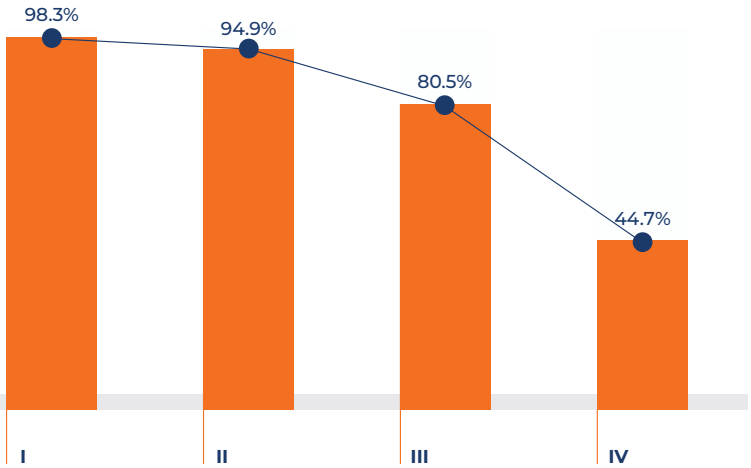
5-Year Cancer-Specific Survival (%) for Breast Cancer

DEFINITIONS

The 5-year cancer-specific survival rate reflects the percentage of patients diagnosed with breast cancer at National University Cancer Institute, Singapore (NCIS) in 2018 who remain alive at the 5th year, stratified by their stage at diagnosis.

INTERPRETATION

Breast cancer demonstrates excellent survival outcomes across early stages at NCIS, with 100% survival for stage 0 disease and 98.3% for stage I. Stage II maintains strong survival at 94.9%, whilst stage III shows 80.5% survival. Advanced stage IV disease presents more challenging outcomes with 44.7% 5-year survival, reflecting the impact of metastatic disease on prognosis.



Colorectal Cancer

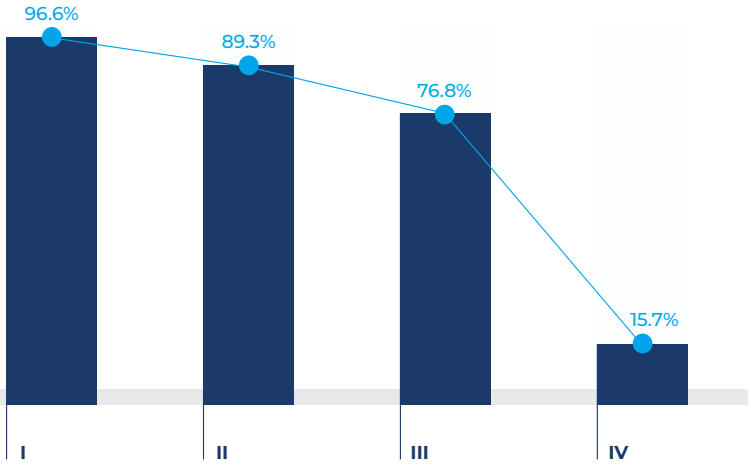
5-Year Cancer-Specific Survival (%) for Colorectal Cancer

DEFINITIONS

The 5-year cancer-specific survival rate reflects the percentage of patients diagnosed with colorectal cancer at National University Cancer Institute, Singapore (NCIS) in 2018 who remain alive at the 5th year, stratified by their stage at diagnosis.

INTERPRETATION

Colorectal cancer shows excellent outcomes for patients treated at NCIS for early-stage disease, with 100% survival for stage 0 and 96.6% for stage I. Stage II maintains good survival at 89.3%, whilst stage III demonstrates 76.8% survival. Metastatic stage IV disease shows significantly reduced survival at 15.7%, highlighting the importance of early detection and treatment.



Diffuse Large B Cell Lymphoma Cancer (DLBCL)

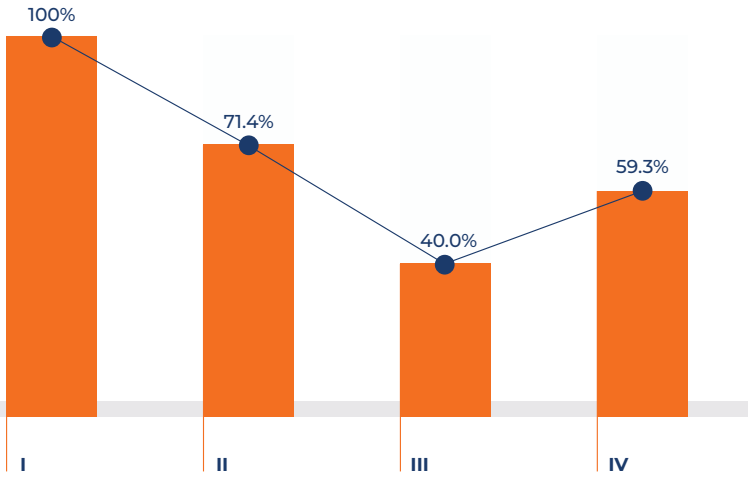
5-Year Cancer-Specific Survival (%) for DLBCL

DEFINITIONS

The 5-year cancer-specific survival rate reflects the percentage of patients diagnosed with DLBCL cancer at National University Cancer Institute, Singapore (NCIS) in 2018 who remain alive at the 5th year, stratified by their stage at diagnosis.

INTERPRETATION

DLBCL cancer demonstrates exceptional survival outcomes across localised and regional stages for patients treated at NCIS, with 100% survival for stage I, 71.4% for stage II, and 40.0% for stage III. Even advanced stage IV disease maintains relatively favourable survival at 59.3%, reflecting effectiveness of available treatments.



Lung Cancer

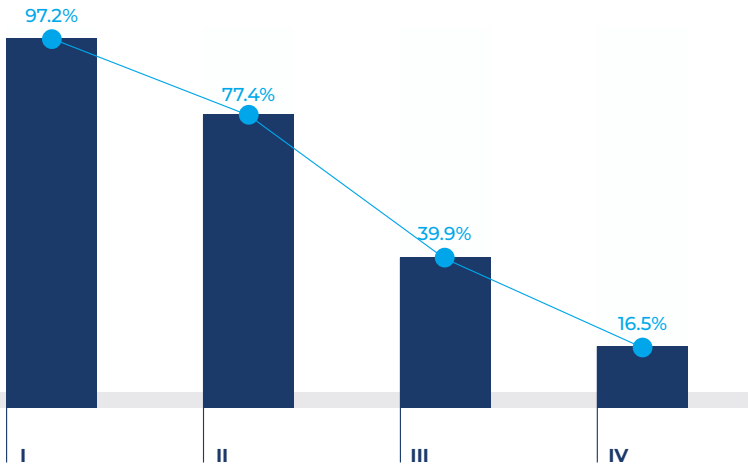
5-Year Cancer-Specific Survival (%) for Lung Cancer

DEFINITIONS

The 5-year cancer-specific survival rate reflects the percentage of patients diagnosed with lung cancer at National University Cancer Institute, Singapore (NCIS) in 2018 who remain alive at the 5th year, stratified by their stage at diagnosis.

INTERPRETATION

Lung cancer demonstrates excellent survival for patients treated at NCIS with early-stage disease with 97.2% survival for stage I. However, survival decreases substantially with advancing stage, showing 77.4% for stage II, 39.9% for stage III, and 16.5% for stage IV. These outcomes underscore the critical importance of early detection in lung cancer management.



Prostate Cancer

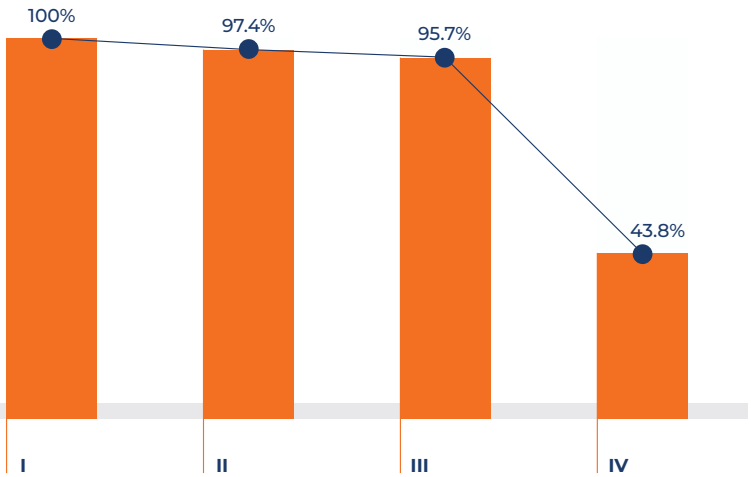
5-Year Cancer-Specific Survival (%) for Prostate Cancer

DEFINITIONS

The 5-year cancer-specific survival rate reflects the percentage of patients diagnosed with prostate cancer at National University Cancer Institute, Singapore (NCIS) in 2018 who remain alive at the 5th year, stratified by their stage at diagnosis.

INTERPRETATION

Prostate cancer demonstrates exceptional survival outcomes across localised and regional stages for patients treated at NCIS, with 100% survival for stage I, 97.4% for stage II, and 95.7% for stage III. Even advanced stage IV disease maintains relatively favourable survival at 43.8%, reflecting effectiveness of available treatments.



Cardiology

Transcatheter Aortic Valve Replacement (TAVI/TAVR)

Congestive Heart Failure (CHF)

Coronary Artery Bypass Graft (CABG)

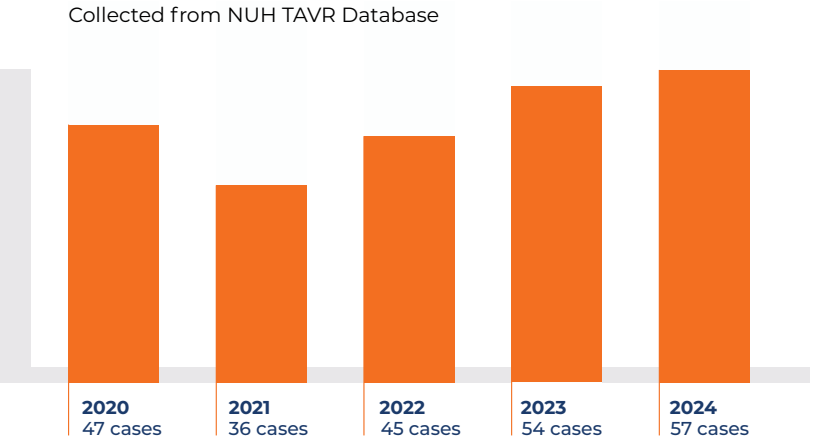
Transcatheter Aortic Valve Replacement (TAVI/TAVR)

Number of Patients with Transcatheter Aortic Valve Replacement

DEFINITIONS

Transcatheter Aortic Valve Replacement (TAVR)
A minimally invasive procedure that replaces a narrowed or diseased aortic valve with a man-made valve.

Patients with TAVR
Collected from NUH TAVR Database



INTERPRETATION

The number of TAVI/TAVR procedures performed per year increased over the past five years, benefiting more patients.

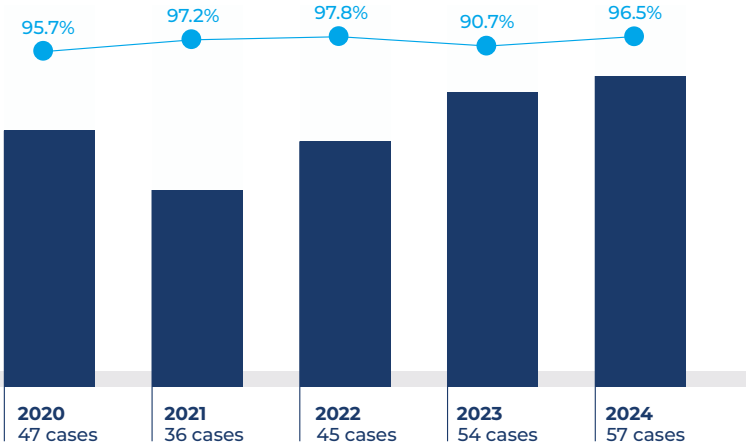
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive during the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at above 95% for most years.



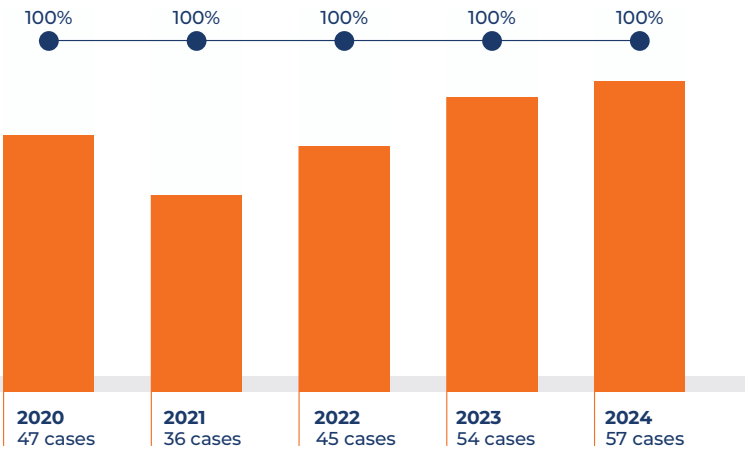
No Conversion from Transcatheter to Open Surgery

DEFINITIONS

Patients undergoing transcatheter surgery should not require intraoperative conversion to open surgery. This measure reflects surgical proficiency and appropriate case selection.

INTERPRETATION

There were no instances of transcatheter procedures converted to open surgery.



Postoperative Complications and Quality of Care

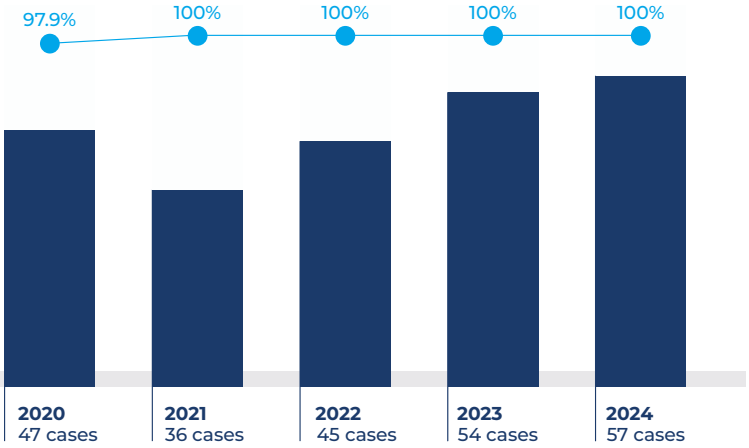
DEFINITIONS

1. **No Major Vascular Complication Post-Procedure**
   The patient did not experience any major vascular complications at the catheter access site or other vascular territories post-TAVI.

2. **No Stroke Post-Procedure**
   The patient did not experience a clinical stroke following the TAVI procedure. Stroke is a serious but known complication due to embolic events during valve deployment.

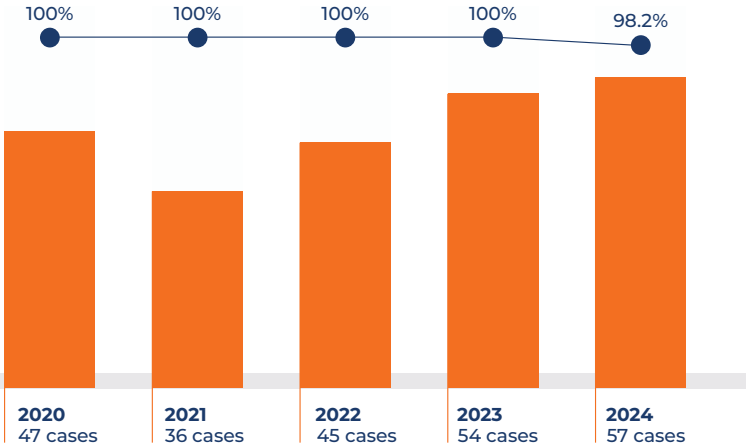
INTERPRETATION

No incidents of major vascular complications since 2021.



INTERPRETATION

Near-zero incidence of stroke over the past five years.



Congestive Heart Failure (CHF)

Number of Patients with Congestive Heart Failure

DEFINITIONS

Congestive Heart Failure

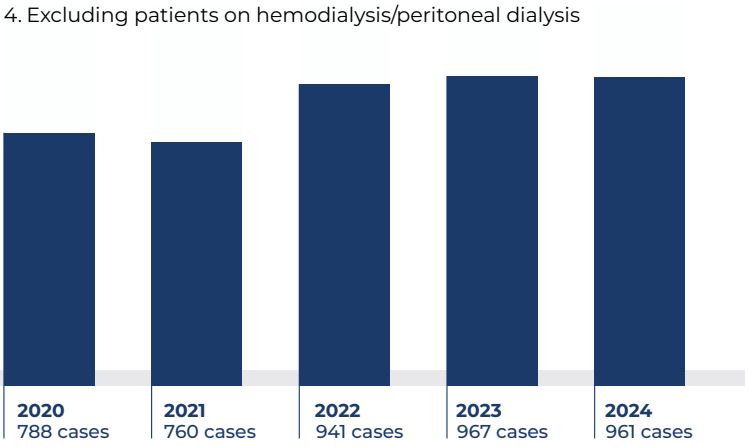
Heart failure, also known as congestive heart failure, is a syndrome caused by an impairment in the heart's ability to fill with and pump blood. Although symptoms vary based on which side of the heart is affected, HF typically presents with shortness of breath, excessive fatigue, and bilateral leg swelling.

Patients With Congestive Heart Failure

1. Diagnosis Codes: I500, I509, I501, I110
2. With Non-Cardiac Procedures
3. Patients ≥21 years old
4. Excluding patients on hemodialysis/peritoneal dialysis

INTERPRETATION

The number of cases per year has increased by about 200 from 2020 to 2024.



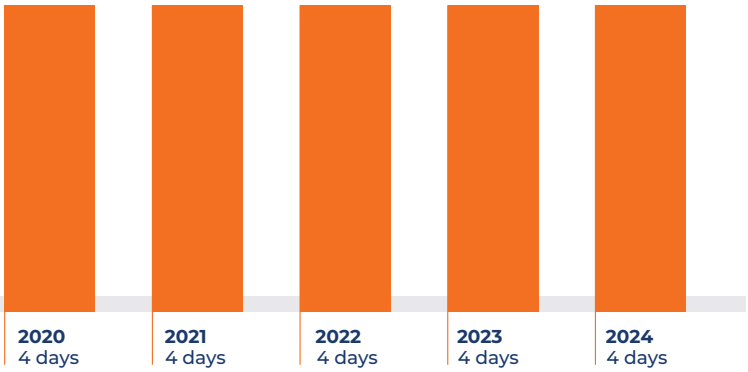
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for congestive heart failure patients has remained stable at four days, over the past five years.



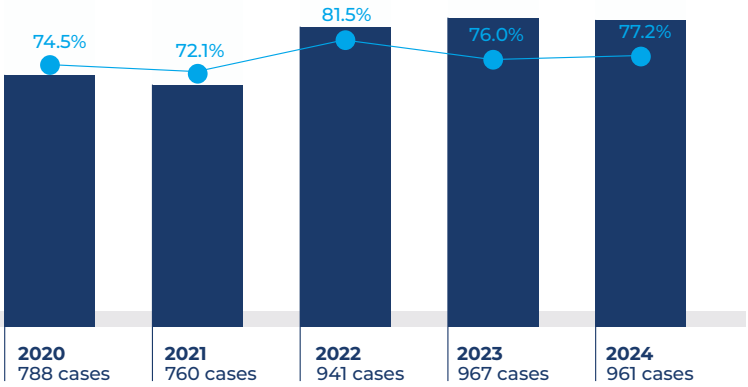
Survival Rate (In-hospital and One-Year Post Discharge)

DEFINITIONS

The proportion of patients who survive throughout the hospital stay and to one year post discharge, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission or within one year of discharge.

INTERPRETATION

The survival rate of congestive heart failure patients, within one year of discharge, has improved over the past five years.



No Complication during Admission or 30 days from the Initial Discharge

DEFINITIONS

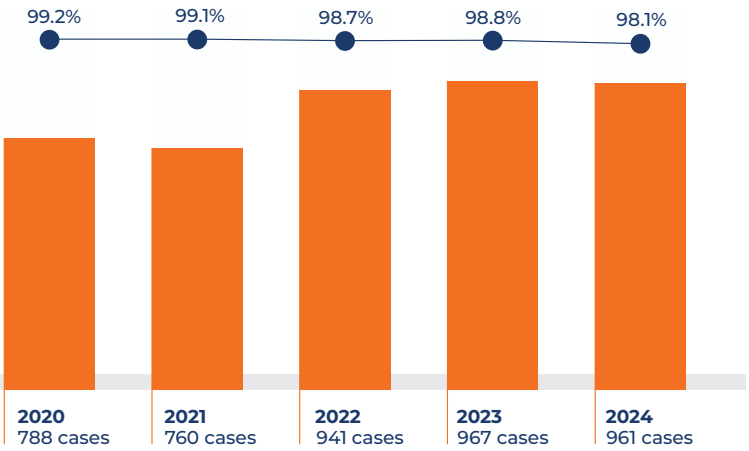
A COMPLICATION is defined as

- Any secondary diagnosis recorded during the index admission that was **not present on admission**, and/or
- Any primary diagnosis recorded during a **readmission within 30 days** of the initial discharge.

Patients should experience **no such complications** during their hospital stay or within 30 days following discharge.

INTERPRETATION

The percentage of patients, who have no complications within 30 days of discharge, has maintained at above 98% consistently over the past five years.



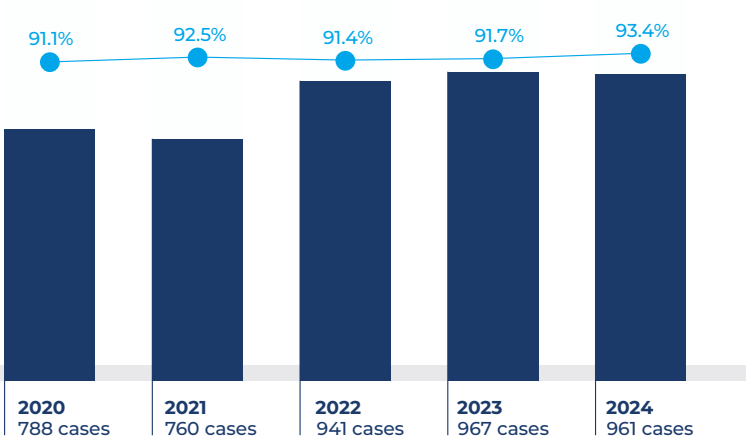
No Emergency Readmission within 30 days and 6 months (Cardiac Related Causes)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for heart failure related reasons within 30 days or 6 months following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

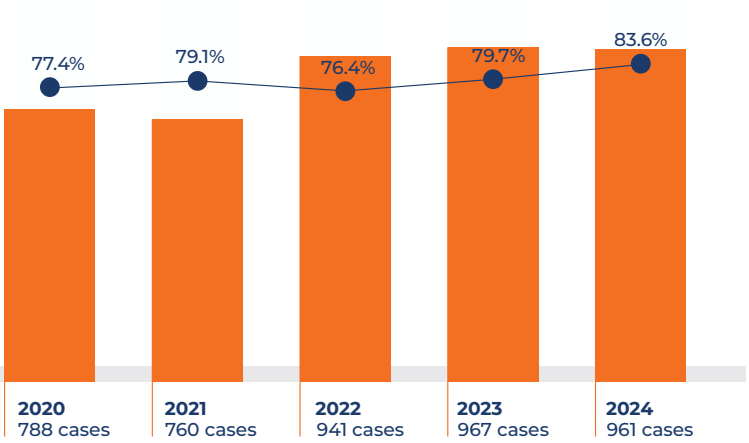
INTERPRETATION

The 30-day cardiac-related readmission rate has consistently remained below 10% over the past five years.



INTERPRETATION

The 6-month cardiac-related readmission rate has improved over the past five years.



Appropriateness of Care: Discharge Medications for LVEF ≤40%

DEFINITIONS

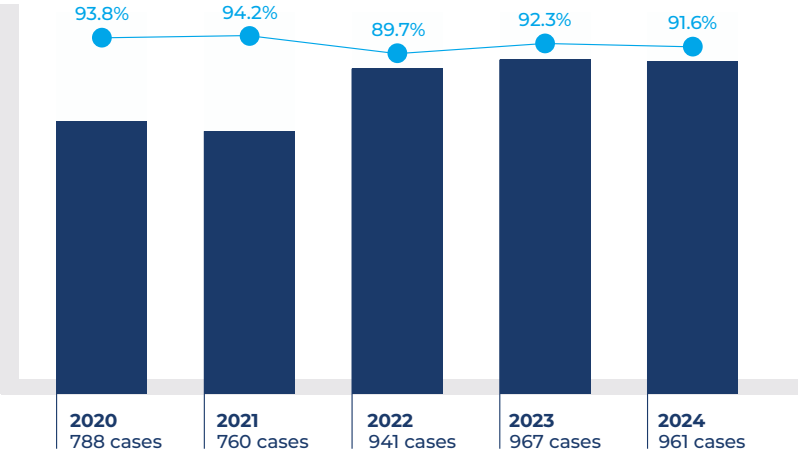
For patients with a **LEFT VENTRICULAR EJECTION FRACTION (LVEF) ≤40%,** the following evidence-based medications should be prescribed at discharge unless contraindicated

- ACE inhibitors (ACEi), angiotensin receptor blockers (ARB), or angiotensin receptor–neprilysin inhibitors (ARNI)
- Beta-blockers

This measure reflects adherence to guideline-directed medical therapy (GDMT) for heart failure with reduced ejection fraction (HFrEF) to improve clinical outcomes and reduce rehospitalization.

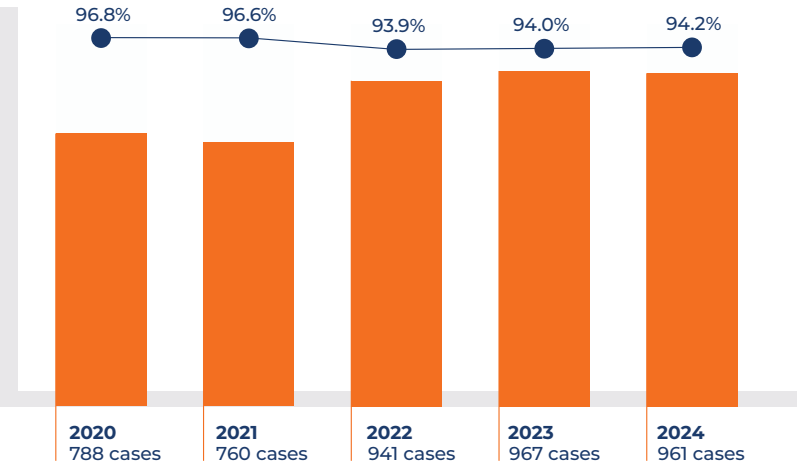
INTERPRETATION

The percentage of cases prescribed ACEi, ARB or ARNI on discharge has maintained at around 90% over the past five years.



INTERPRETATION

The percentage of cases prescribed beta-blockers on discharge has maintained at above 94% over the past five years.



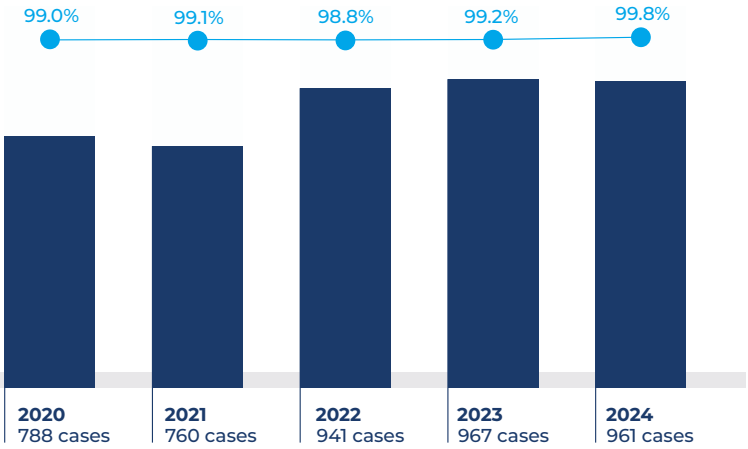
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at around 99% over the past five years.



Coronary Artery Bypass Graft (CABG)

Number of Patients with Coronary Artery Bypass Graft (CABG)

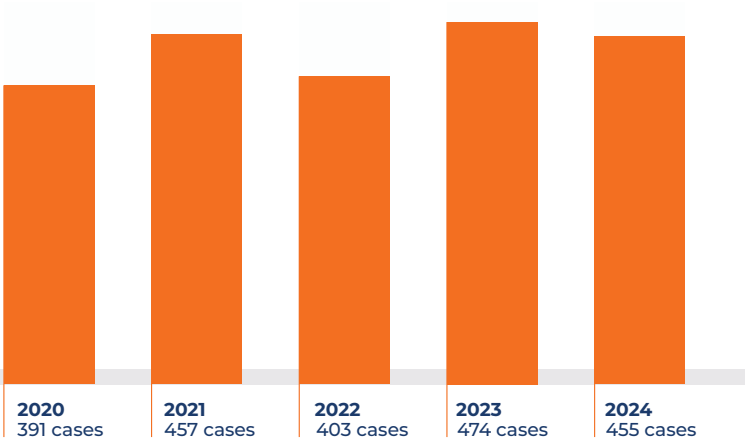
DEFINITIONS

Coronary Artery Bypass Graft (CABG), also known as coronary artery bypass surgery, is a surgical procedure to treat coronary artery disease, the buildup of plaques in the arteries of the heart. It can relieve chest pain caused by CAD, slow the progression of CAD, and increase life expectancy.

Patients With Coronary Artery Bypass Graft were collected by MOH TOSP Code (Single or multiple TOSPs): SD/LD812H, SD/LD742H, SD/LD722H.

INTERPRETATION

The number of patients undergoing CABG ranged from 390-480 a year, over the past five years.



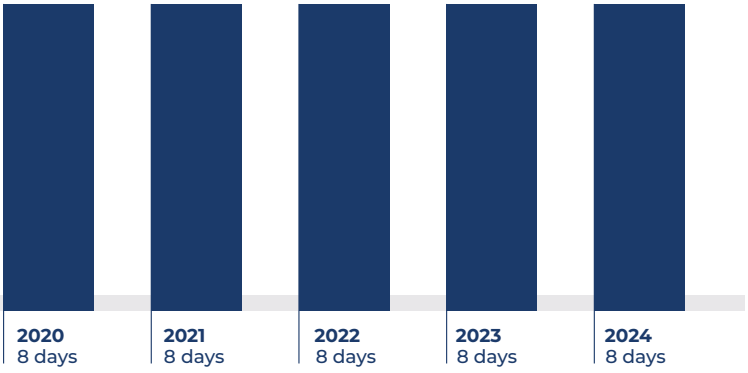
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for patients undergoing CABG has remained stable at 8 days, over the past five years.



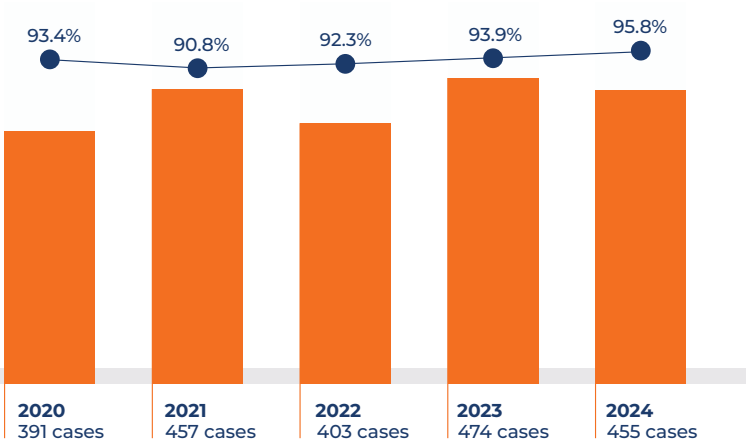
ICU Length of Stay

DEFINITIONS

Length of stay in intensive care unit (ICU) should be within 3 days.

INTERPRETATION

The percentage of patients who stayed in the ICU for less than 3 days has increased over the past five years.



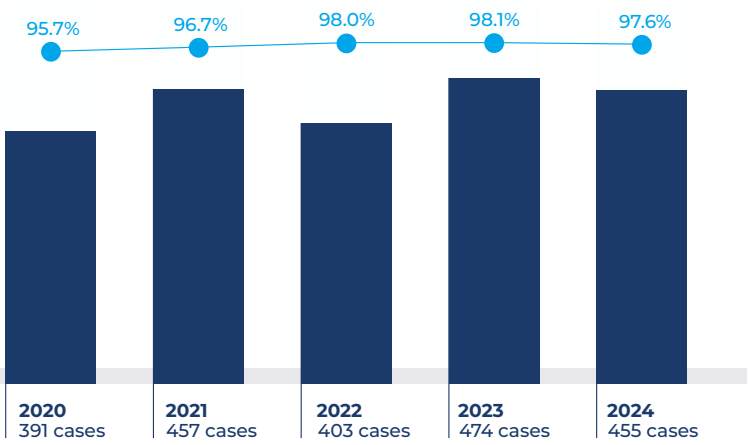
IMA Grafts

DEFINITIONS

In Coronary Artery Bypass Grafting (CABG), the Internal Mammary Artery (IMA) is considered the gold standard conduit for bypassing the left anterior descending (LAD) artery.

INTERPRETATION

The percentage of patients who underwent CABG, and had an IMA graft, has held at around 98% consistently over the past five years.



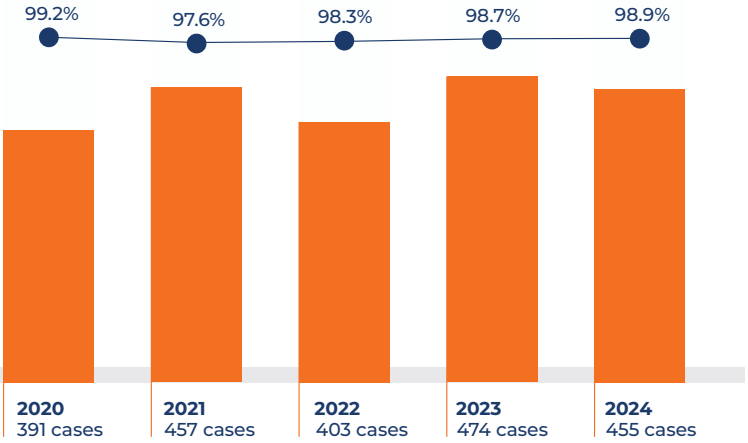
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at above 98% for most years.



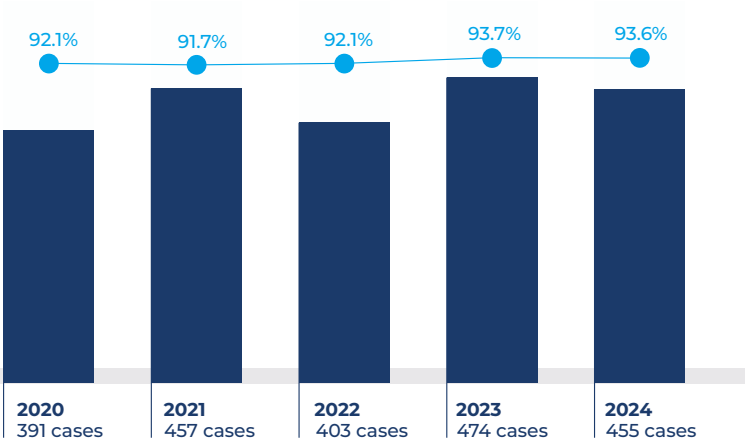
No Emergency Readmission Within 30 Days (Cardiac-Related Causes)

DEFINITIONS

Patients should not be readmitted via emergency to the hospital within 30 days from the initial discharge due to cardiac-related reasons, defined using diagnosis codes and cardiac procedures.

INTERPRETATION

The 30-day cardiac-related emergency readmission-free rates has consistently remained above 90%, with a slight improvement over the past five years.



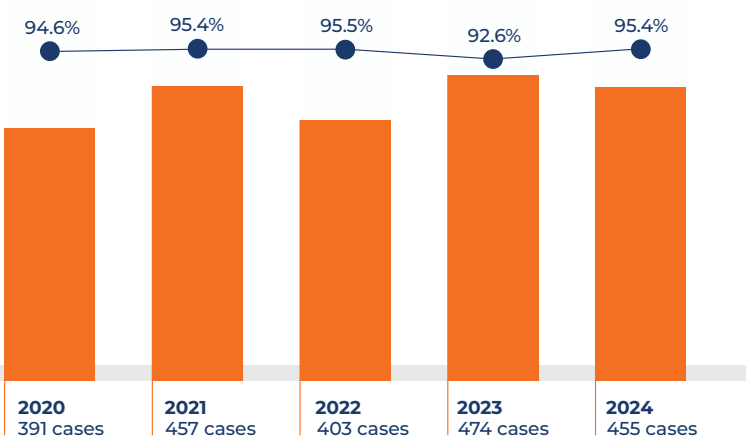
No Return to Operation Theatre (OT) Within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 10% over the past five years.



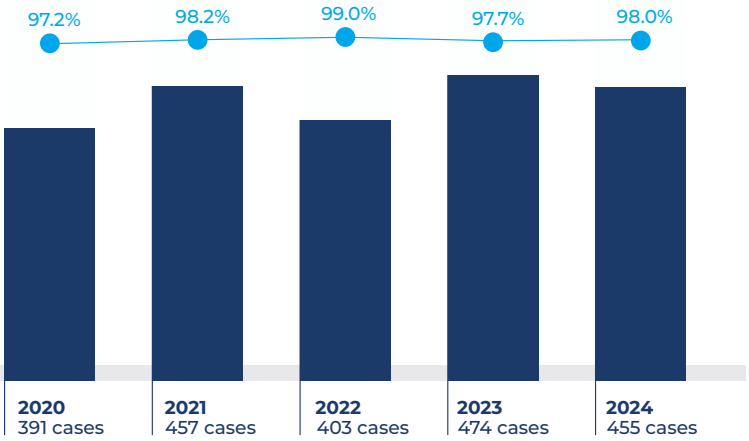
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at around 98% over the past five years.



Dentistry

Dental Implant

Dental Implant

Number of Patients with Dental Implant

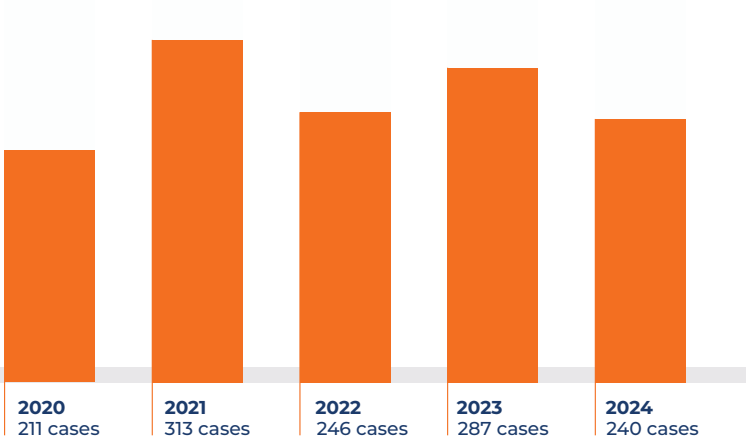
DEFINITIONS

Dental Implant
A dental implant is a surgical fixture, usually made of titanium, that is placed into the jawbone to act as a replacement for the root of a missing tooth.

Patients With Dental Implant
Collected by MOH TOSP Code: SB816M

INTERPRETATION

Dental implant cases rose sharply from 211 in 2020, to a high of 313 in 2021. Since then, numbers have varied, coming in at 246 in 2022, rising again to 287 in 2023, and settling at 240 in 2024.



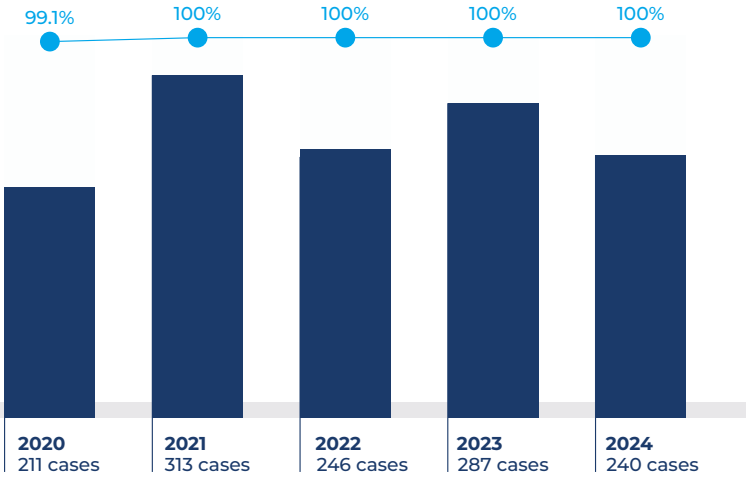
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with outpatient day surgery services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at 100% over the past five years.



General Surgery

Appendicectomy (Emergency)

Hernia

Haemorrhoidectomy

Colorectal Resection (For Colorectal Cancer)

Laparoscopic Cholecystectomy (Non-Emergency)

Laparoscopic Cholecystectomy (Emergency)

Tonsillectomy

Appendicectomy (Emergency)

Number of Patients with Appendicectomy (Emergency)

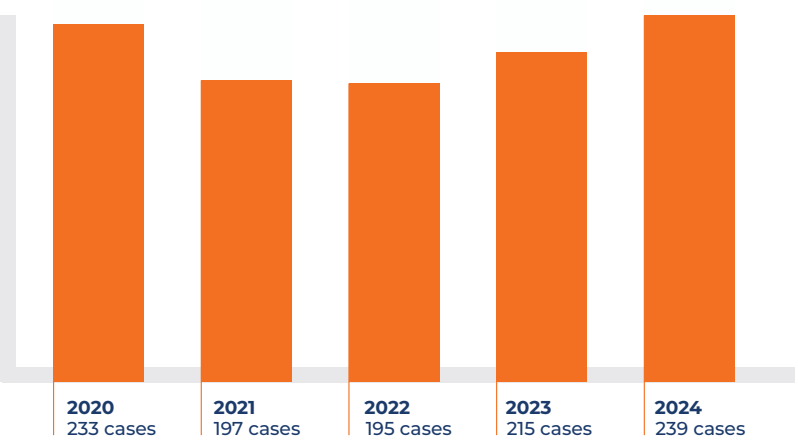
DEFINITIONS

Appendicectomy
An appendicectomy, also known as an appendectomy, is a surgical procedure to remove the appendix. It is typically performed to treat appendicitis, an inflammation of the appendix that can cause serious complications if left untreated.

Patients With Appendicectomy (Emergency)
Collected by TOSP: LF849A, SF849A
Priority: Emergency
Age ≥18 years

INTERPRETATION

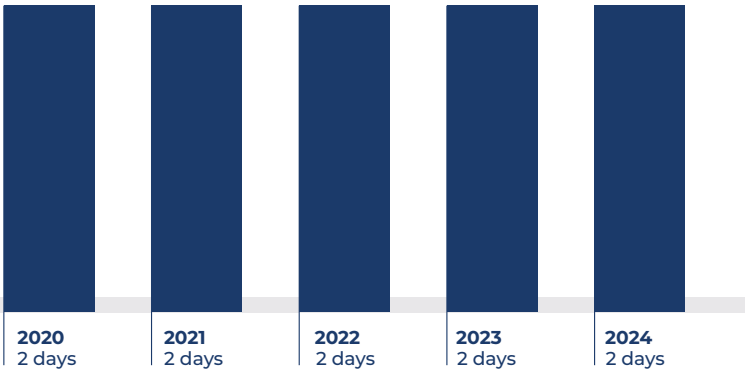
Approximately 200 emergency appendicectomies are performed in NUH each year, over the past five years.

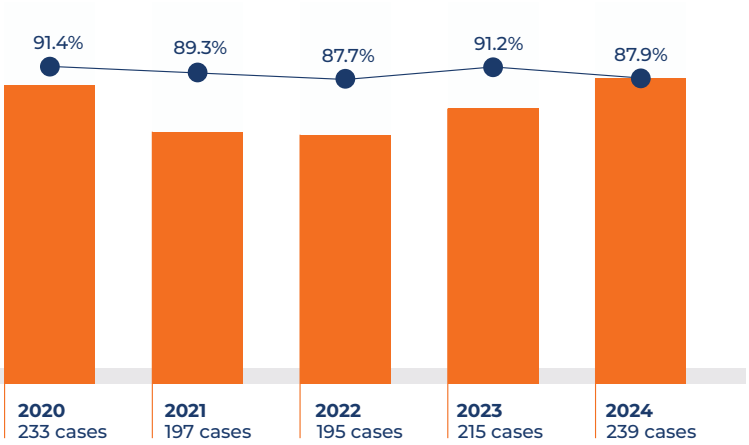


From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.





INTERPRETATION

The median Length of Stay was 2 days. More than 85% of patients were discharged within 3 days, over the past five years.

Appropriateness of Care

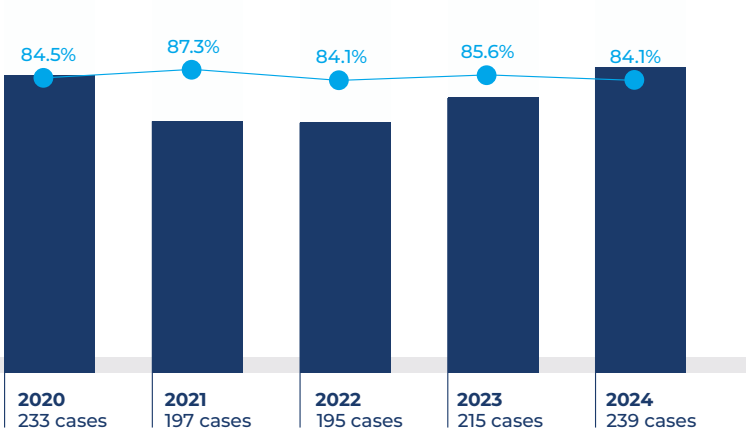
DEFINITIONS

First Dose of Antibiotics ≤ 4hrs

First dose of antibiotics should be prescribed within 4 hours of completed CT scan time/ admission time or surgery start time.

INTERPRETATION

The percentage of patients who were given their first dose of antibiotics within 4 hours held consistently at around 85%, over the past five years.

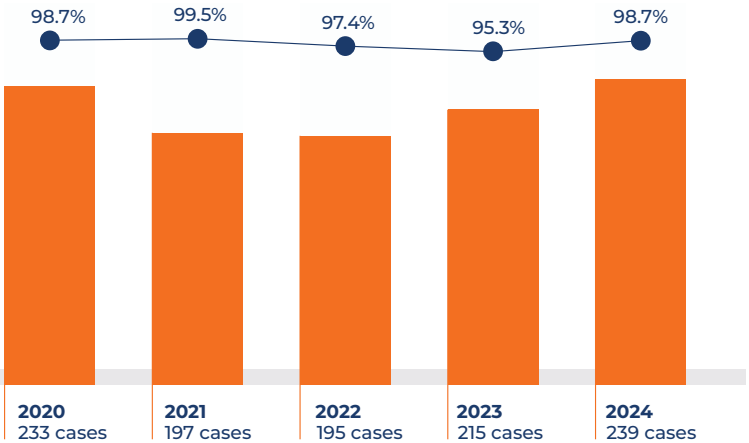


No Post Ops Antibiotics Given

Patient should not have a superficial wound infection, or be given post-operative antibiotics during the episode.

INTERPRETATION

The percentage of patients who were not given post-operative antibiotics held consistently at above 95%, over the past five years.



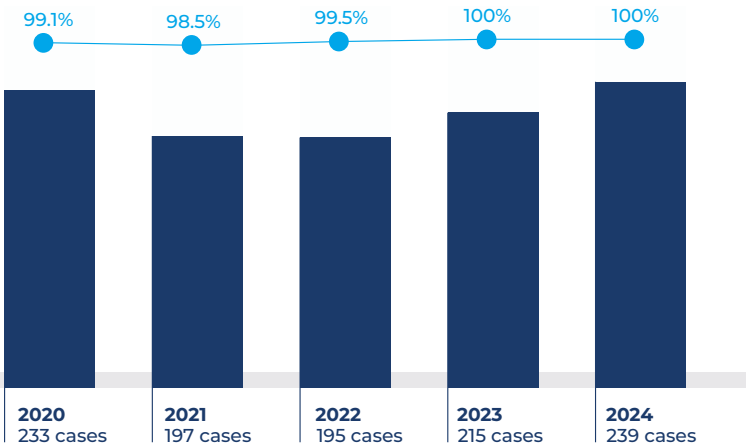
No Return to Operation Theatre (OT) Within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 2% over the past five years.



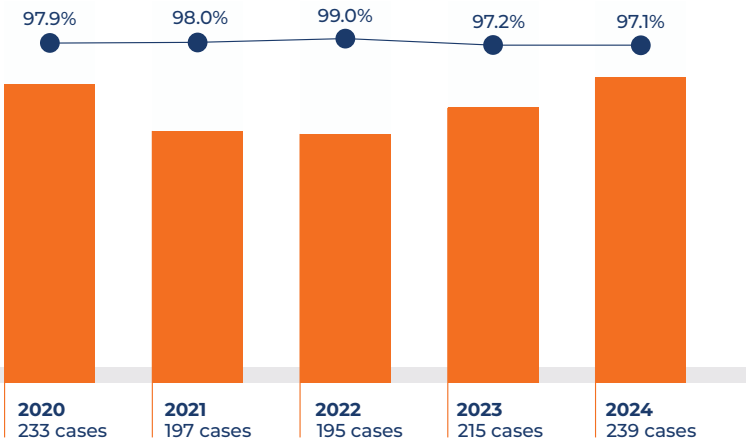
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has consistently remained above 97%, over the past five years.



Hernia

Number of Patients with Hernia

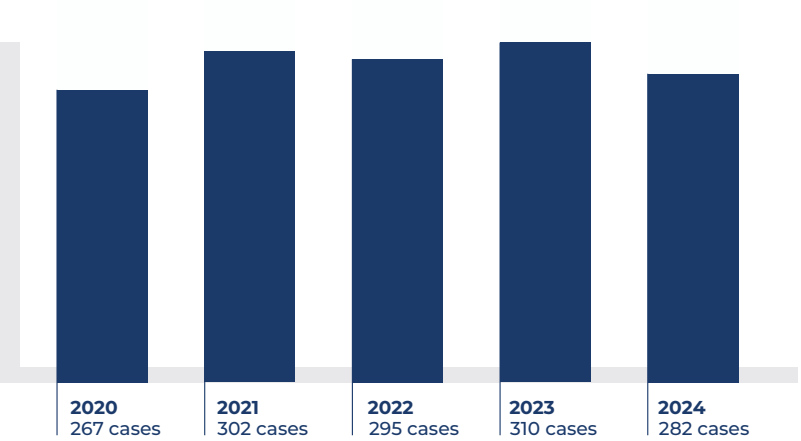
DEFINITIONS

Hernia is the protrusion of an organ or tissue through an abnormal opening in the surrounding muscle or connective tissue. Surgical repair (herniorrhaphy) of inguinal or femoral hernias involves the reinforcement of the abdominal wall at the groin.

Patients With Hernia were collected by MOH TOSP Code (Single TOSP): LF/SF819A, LF/SF820A

INTERPRETATION

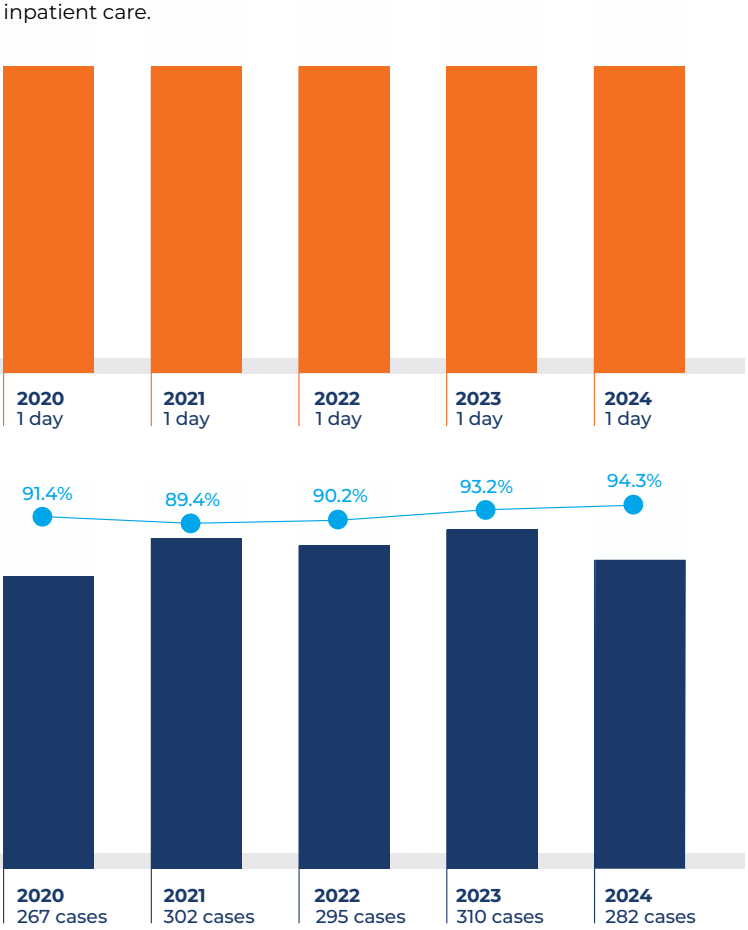
Approximately 300 hernia surgeries are performed in NUH each year, over the past five years.



From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.



INTERPRETATION

The median Length of Stay was 1 day. Around 90% of patients were discharged within 1 day, over the past five years.

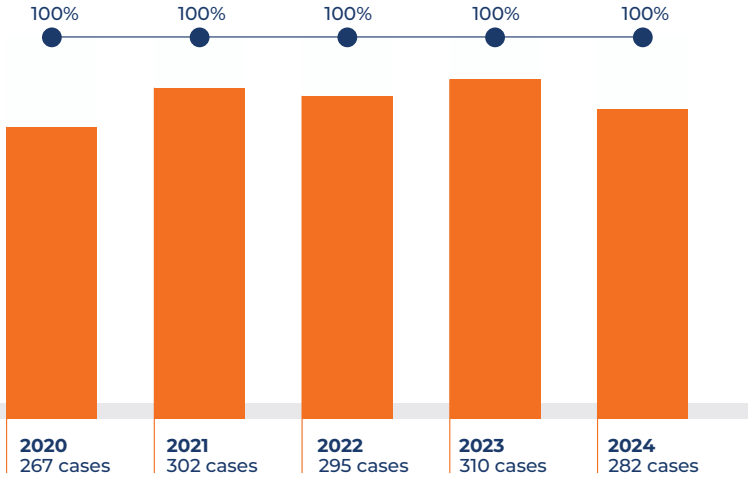
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at 100% for the past five years.



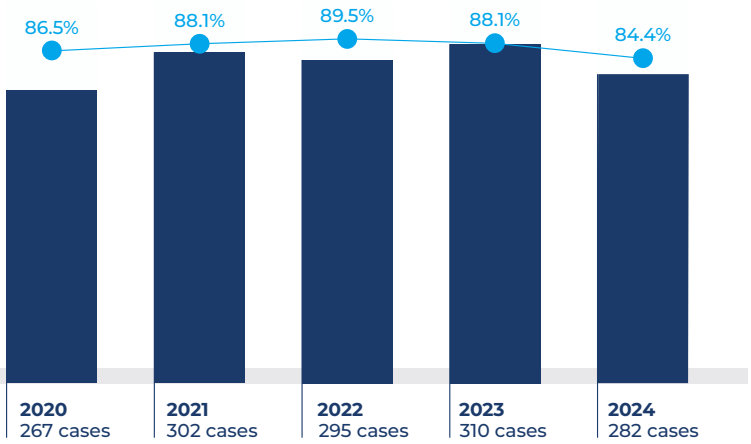
No Day Surgery Turned Inpatient

DEFINITIONS

Patients with day surgery should not be hospitalized.

INTERPRETATION

The percentage of day surgery patients who did not require an inpatient stay, remained high at above 84%, over the past five years.



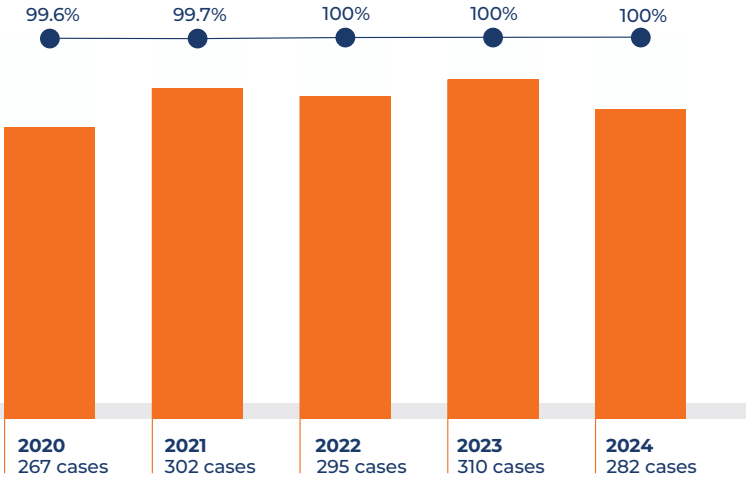
No Blood Transfusion

DEFINITIONS

Patients should not receive blood transfusion during admission.

INTERPRETATION

No patients undergoing hernia surgery required a blood transfusion, over the past three years.



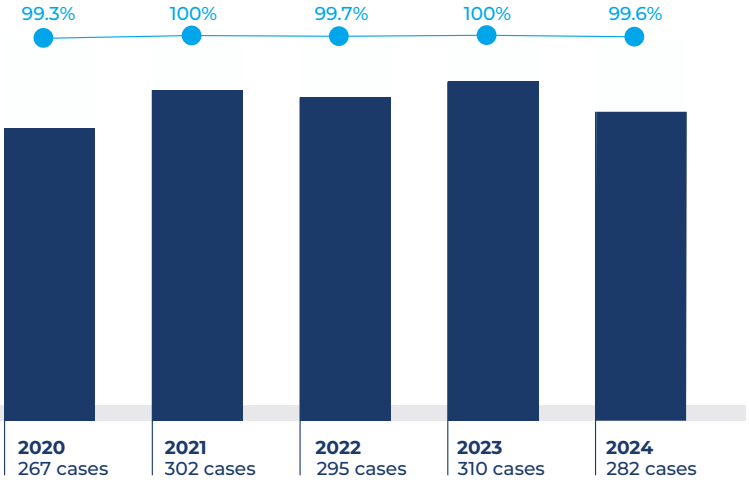
No Conversion from Laparoscopic to Open Surgery

DEFINITIONS

Patients undergoing laparoscopic surgery should not require intraoperative conversion to open surgery. This measure reflects surgical proficiency and appropriate case selection.

INTERPRETATION

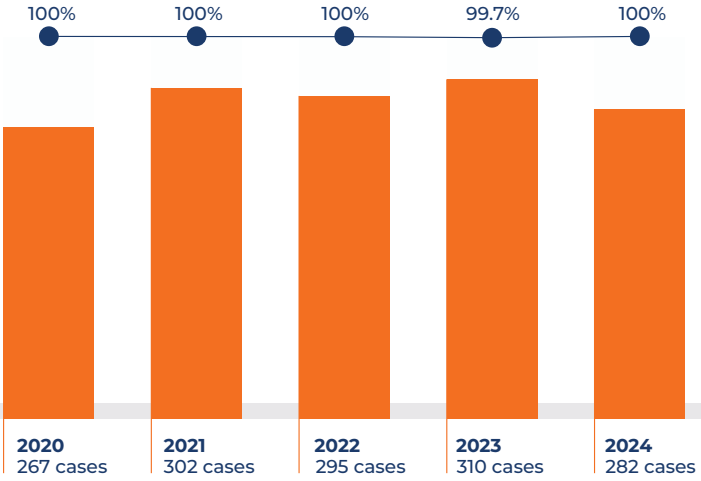
The percentage of patients who underwent laparoscopic surgery and did not require intraoperative conversion, remained consistently above 99%, over the past five years.



No Intensive Care Unit (ICU) Transfer

DEFINITIONS

Patients should not be transferred to Intensive Care Unit (ICU) during admission.



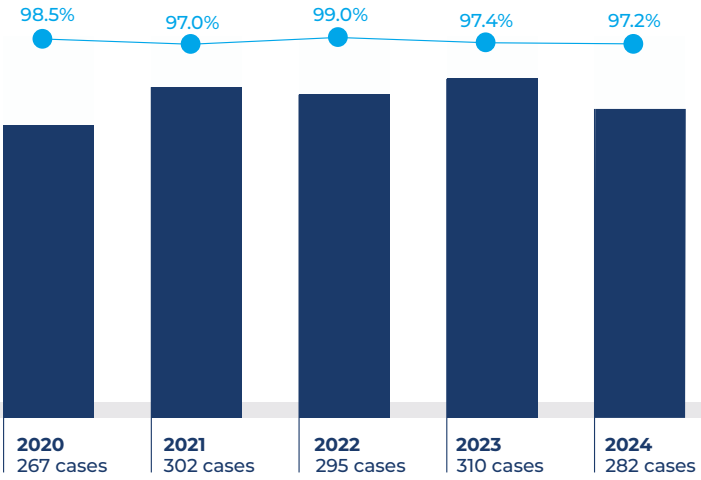
INTERPRETATION

The percentage of patients who did not require a transfer to ICU during their admission remained consistently above 99%, over the past five years.

No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.



INTERPRETATION

The 30-day emergency readmission-free rate has consistently remained above 97%, over the past five years.

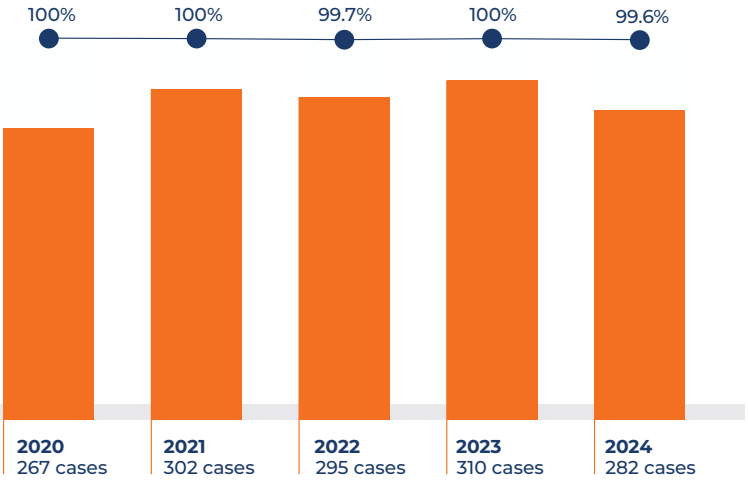
No Return to Operation Theatre (OT) Within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 1% over the past five years.



No Complication during Admission or 30 days from the Initial Discharge

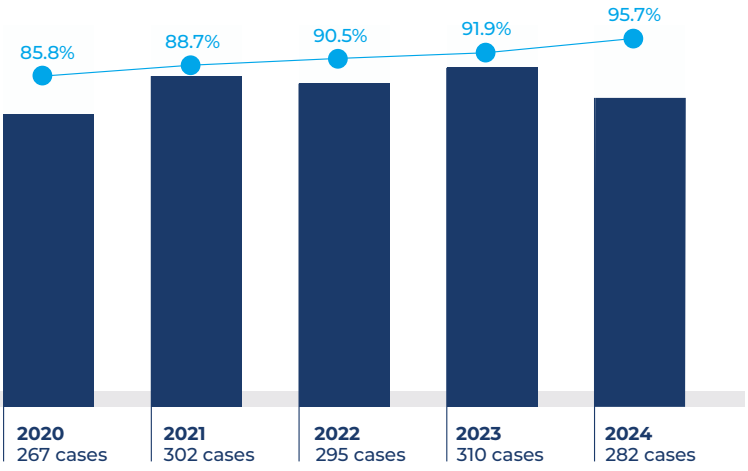
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The post-operative complication-free rate has improved from 85.8% in 2020, to 95.7% in 2024.



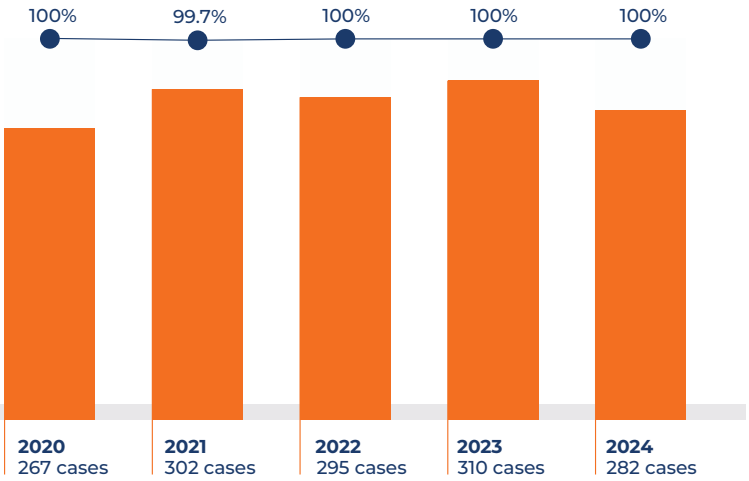
No Hernia Recurrence within 90 Days

DEFINITIONS

Patients should not experience hernia recurrence within 90 days post-discharge based on TOSP code, CT scan, and Ultrasound.

INTERPRETATION

No patients who underwent hernia surgery, experienced hernia recurrence, over the past five years.



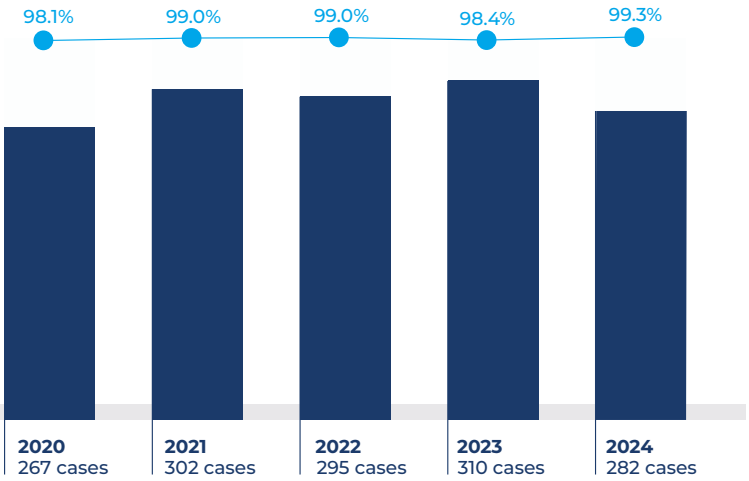
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at above 98% over the past five years.



Haemorrhoidectomy

Number of Patients with Haemorrhoidectomy

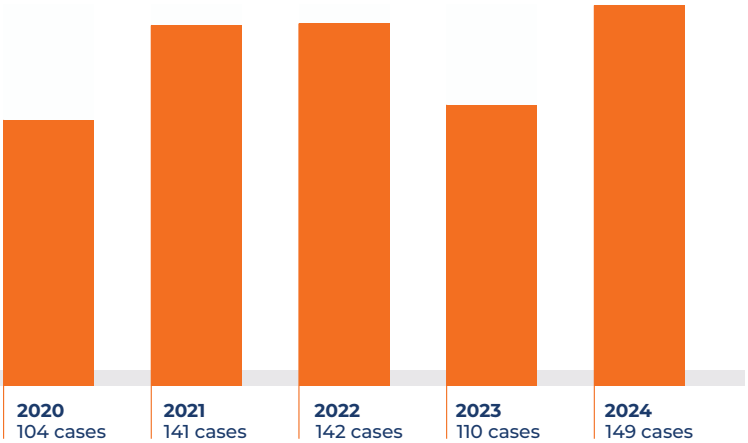
DEFINITIONS

Haemorrhoidectomy is a surgical procedure to remove internal or external haemorrhoids that are symptomatic or severe.

Patients With Haemorrhoidectomy (1 Day) were collected by TOSP codes (single or multiple of the following codes): SF836A; LF836A; SF837A; LF837A; SF838A; LF838A; SF721A; LF721A, SF702R, LF702R. Priority of surgery is elective.

INTERPRETATION

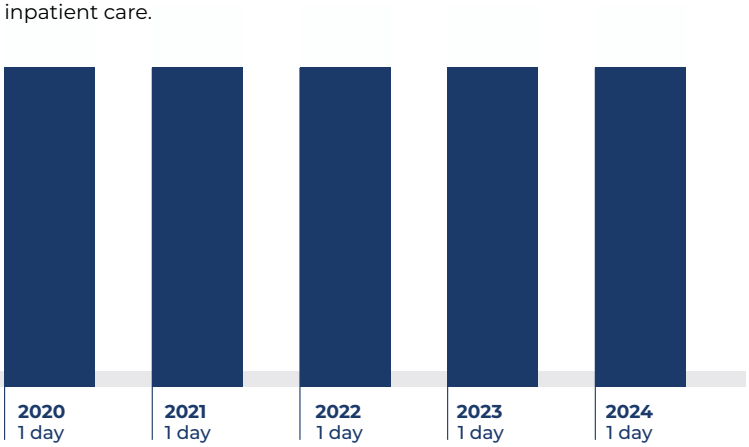
The number of Haemorrhoidectomy cases in NUH increased from 141 cases in 2021 to 149 cases in 2024, after dropping to 110 cases in 2023.

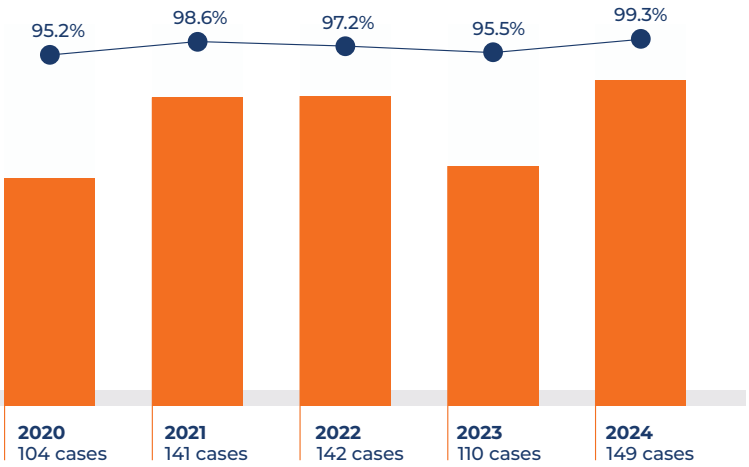


From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.





INTERPRETATION

The median Length of Stay was 1 day. Above 95% of patients were discharged within 1 day, over the past five years.

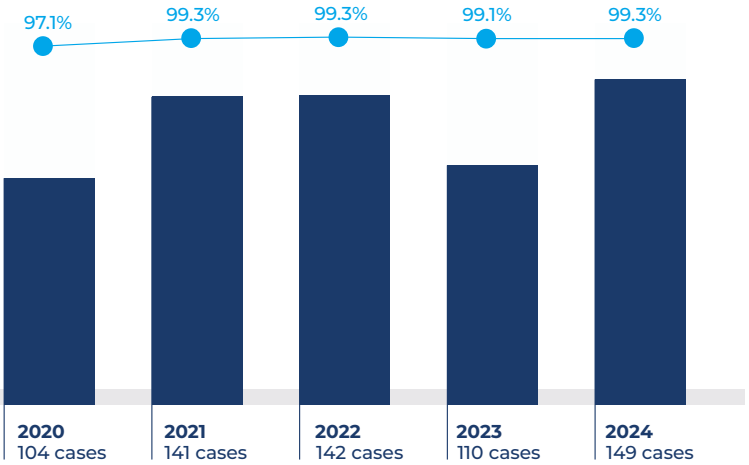
No Return to Operation Theatre (OT) Within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 1% over the past four years.



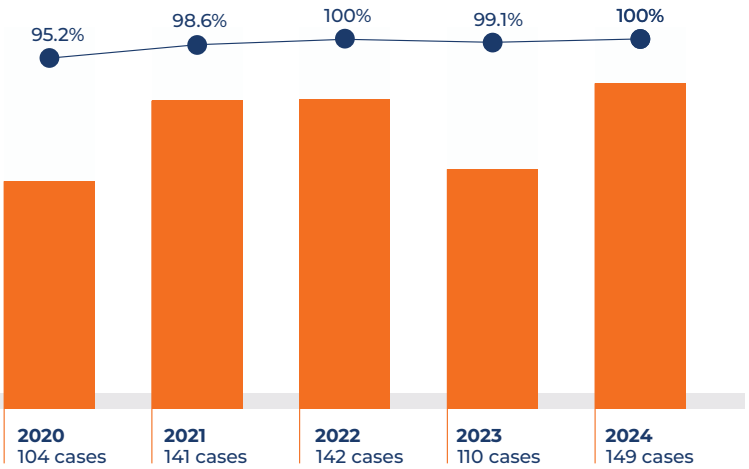
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at above 98% over the past four years.



Colorectal Resection (For Colorectal Cancer)

Number of Patients with Colorectal Resection (For Colorectal Cancer)

DEFINITIONS

Colorectal Resection (For Colorectal Cancer) refers to the surgical removal of a segment of the colon or rectum for the retreatment of colorectal cancer.

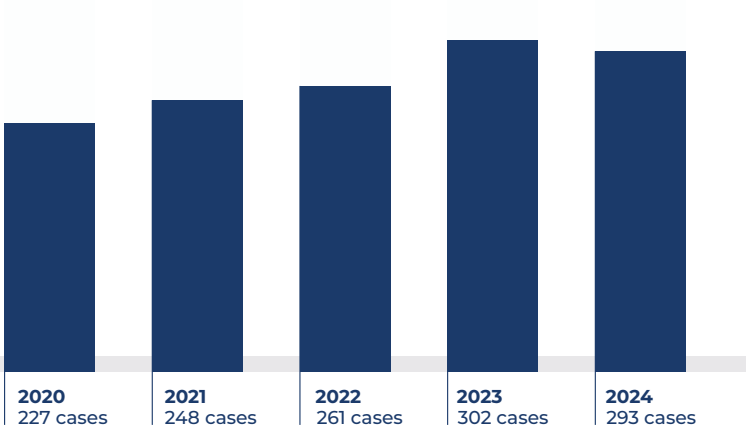
Patients With Colorectal Resection
Collected by MOH TOSP Code and Primary Diagnosis codes (ICD-10). It includes emergency cases.

TOSP codes (single or multiple)
SF709A, LF709A, SF804C, LF845A, SF848A, SF845A, LF848A, LF707I, SF806C, LF701C, LF703R, LF712C, LF800C, LF801C, LF802C, LF803C, LF804C, LF805R, LF806C, LF808R, SF701C, SF703R, SF712C, SF800C, SF802C, SF803C, SF805R, SF806R, SF807R

Primary diagnosis code
C19, C184, C20, C185, C187, C180, C182, C186, C188, C183, C172, C181

INTERPRETATION

Cases have increased since 2020 to 2023 with a slight decline in 2024.



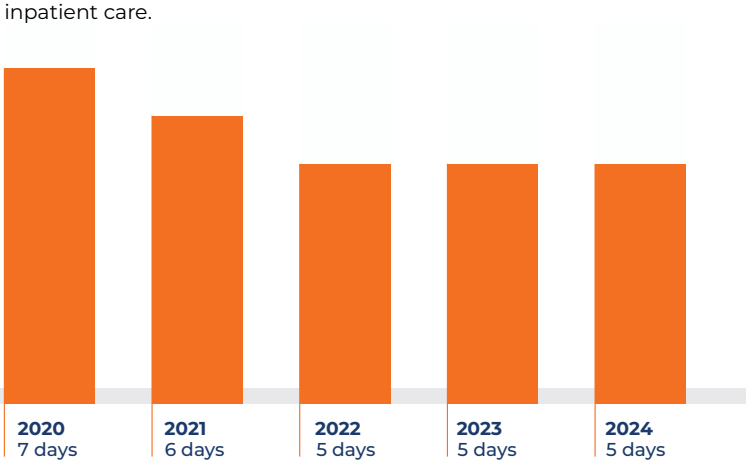
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay has decreased from 7 days to 5 days, over the past five years.



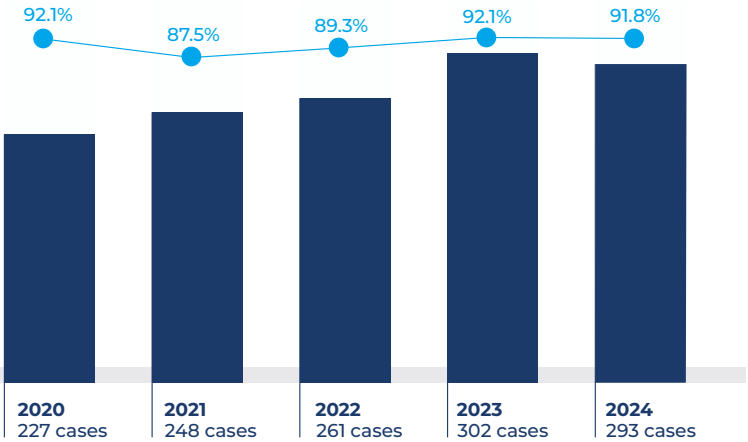
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has improved over the past four years.



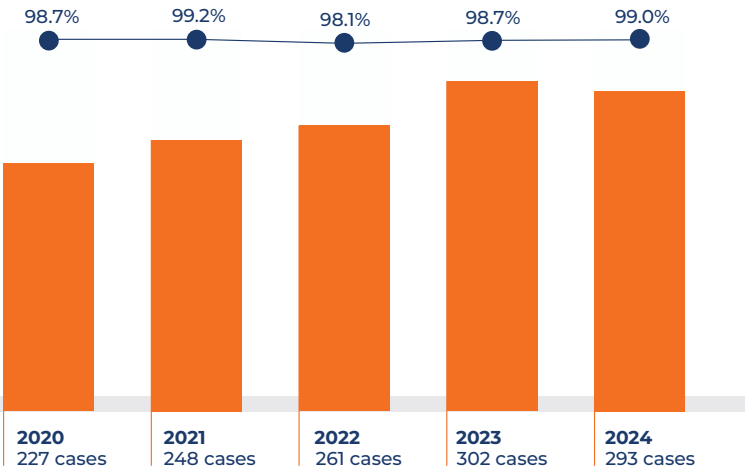
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at above 98% for the past five years.



No Complication during Admission or 30 days from the Initial Discharge

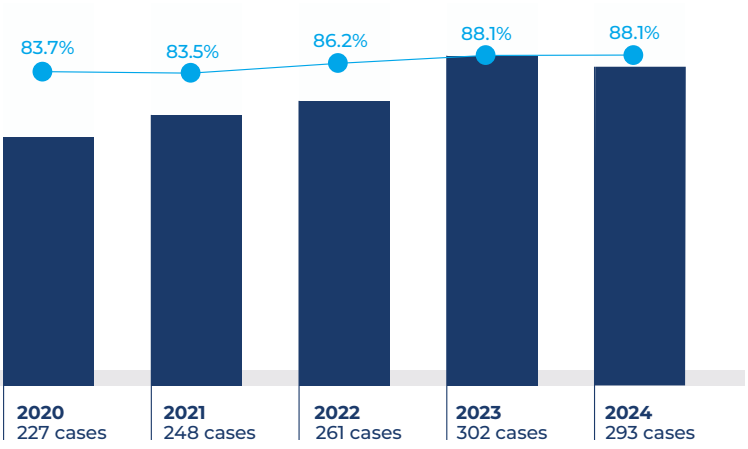
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The post-operative complication-free rate has improved from 83.7% in 2020, to 88.1% in 2024.



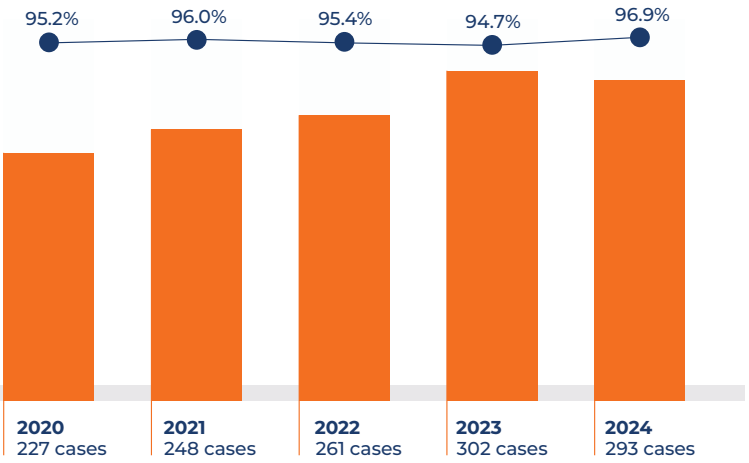
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained around 4% over the past five years.



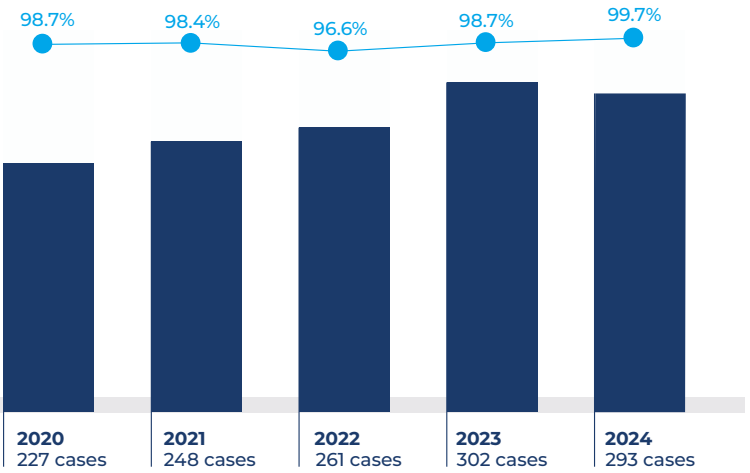
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has increased to 99.7% in 2024, showing an improvement over the past five years.



Laparoscopic Cholecystectomy (Non-Emergency)

Number of Patients with Laparoscopic Cholecystectomy

DEFINITIONS

Laparoscopic Cholecystectomy is a minimally invasive surgical procedure to remove the gallbladder, commonly for symptomatic gallstones or biliary colic.

Patients With Laparoscopic Cholecystectomy

Collected by:

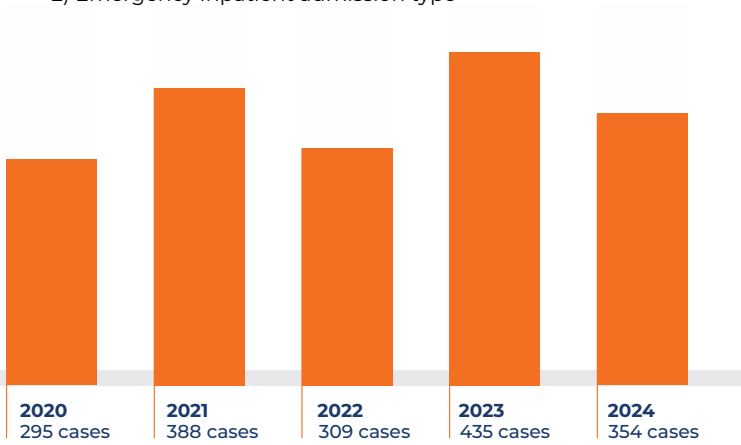
(A) By MOH TOSP Code (Single or multiple TOSPs): LF/SF704G, LF/SF706G, LF/SF801G

(B) Inclusion criteria: Elective cases only (by "Priority" of TOSP codes)

(C) Exclusion criteria: 1) Absconded/AOR discharge Aged < 18 years; 2) Emergency Inpatient admission type

INTERPRETATION

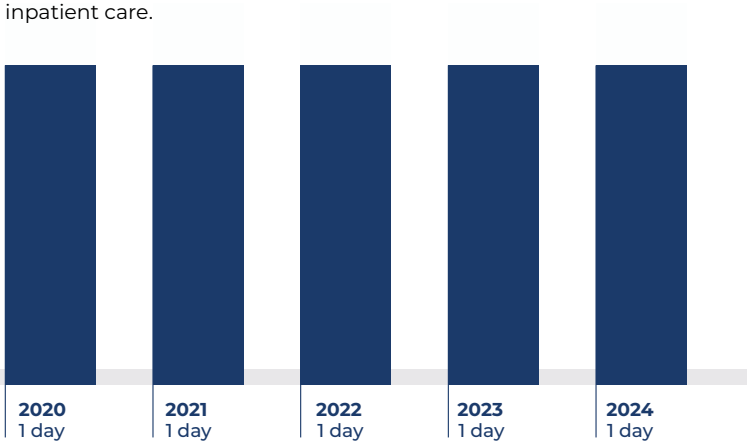
The number of laparoscopic cholecystectomy cases in NUH fluctuated over the five years from 2020 to 2024, from 295 to 435 cases.

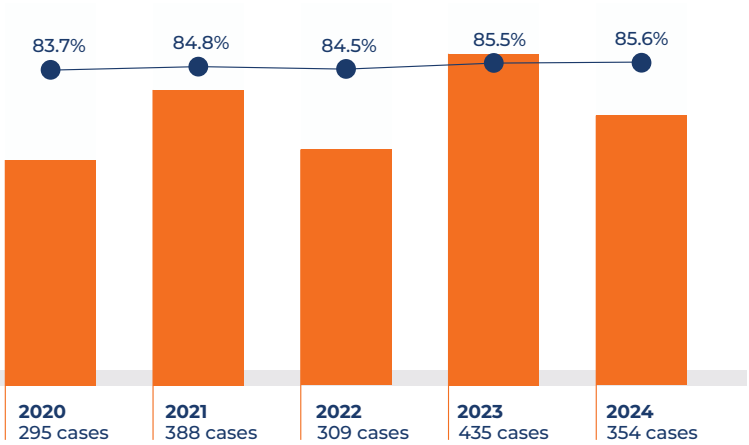


From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.





INTERPRETATION

The median Length of Stay was 1 day. Above 83% of patients were discharged within 1 day, over the past five years.

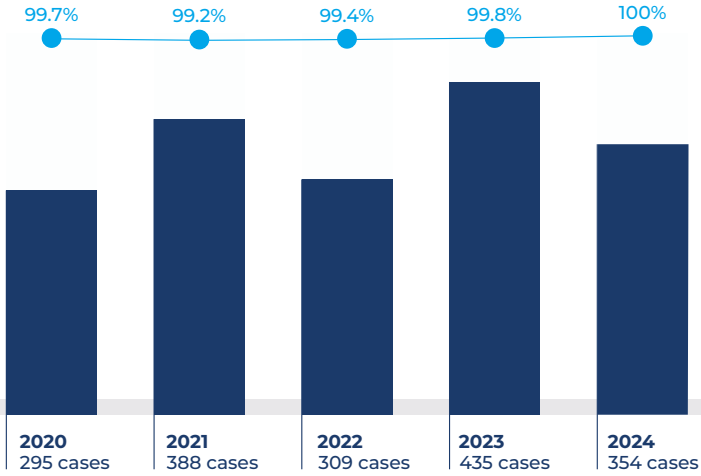
No Conversion from Laparoscopic to Open Surgery

DEFINITIONS

Patients undergoing laparoscopic surgery should not require intraoperative conversion to open surgery. This measure reflects surgical proficiency and appropriate case selection.

INTERPRETATION

The percentage of patients who underwent laparoscopic surgery and did not require intraoperative conversion, remained consistently above 99%, over the past five years.



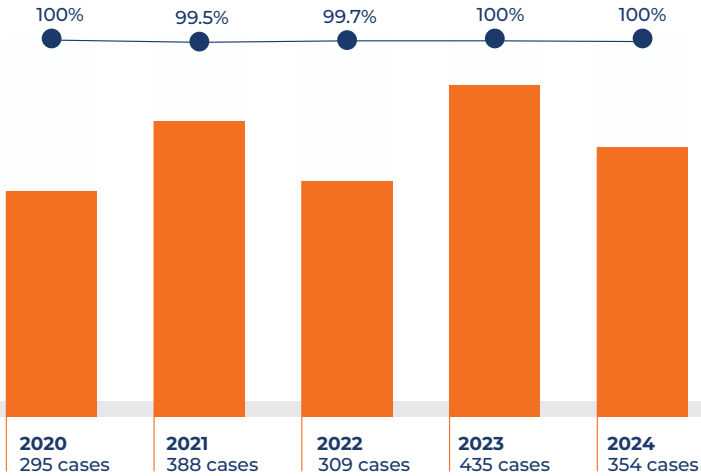
No Intensive Care Unit (ICU) Transfer

DEFINITIONS

Patients should not be transferred to Intensive Care Unit (ICU) during admission.

INTERPRETATION

The percentage of patients who did not require a transfer to ICU during their admission remained consistently above 99%, over the past five years.



No Complication during Admission or 30 Days from the Initial Discharge

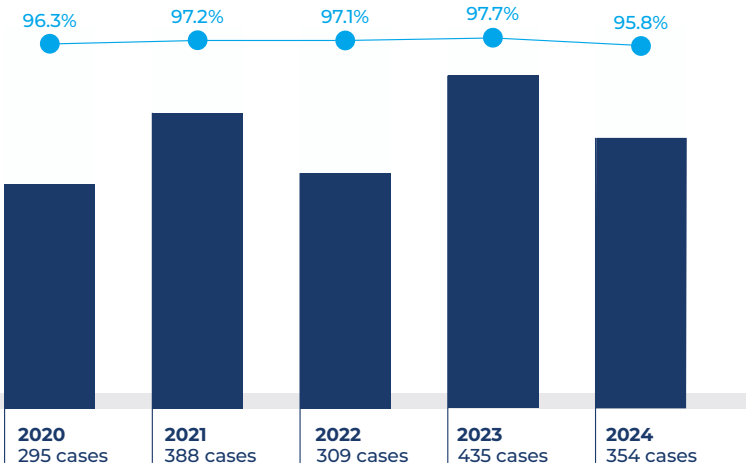
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The post-operative complication-free rate has remained consistently above 95%, over the past five years.



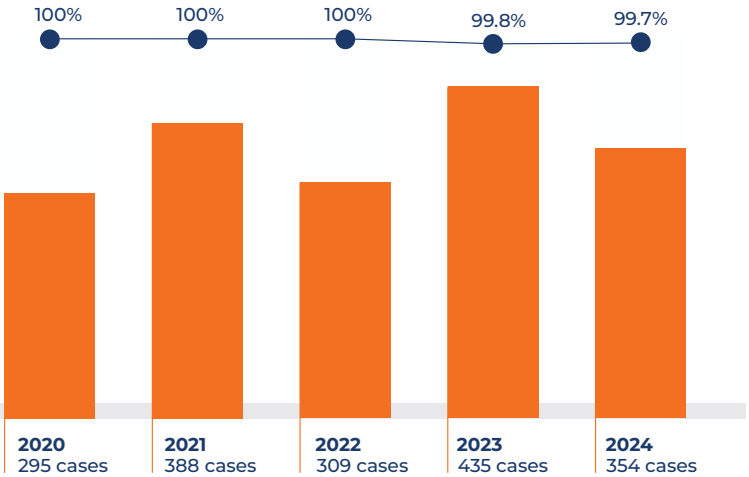
No Biliary Intervention Within 30 Days Post-Cholecystectomy

DEFINITIONS

Biliary intervention i.e., ERCP/PTC/Surgery/Pancreatitis under emergency admission within 30 days post-cholecystectomy.

INTERPRETATION

The percentage of patients who did not require biliary intervention within 30-days post-cholecystectomy, remained consistently above 99%, over the past five years.



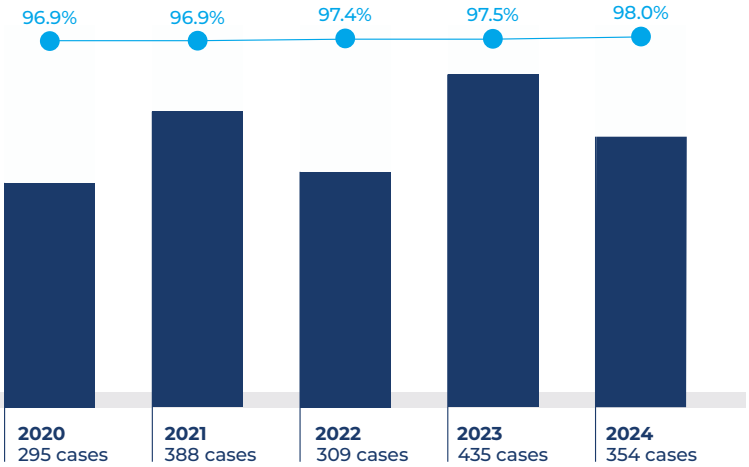
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistently above 96%, with slight improvement, over the past five years.



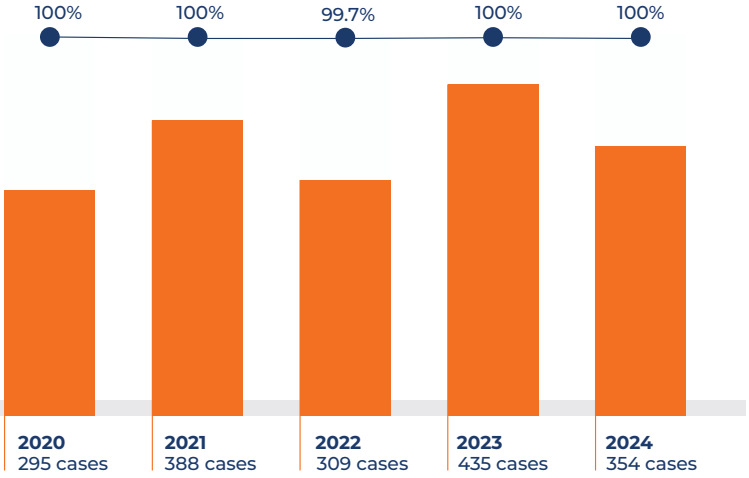
No Return to Operation Theatre (OT) Within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 1% over the past five years.



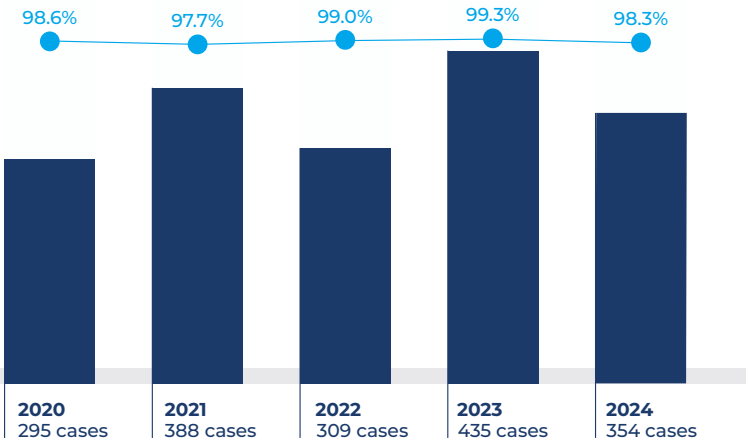
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at above 98% over the past five years.



Laparoscopic Cholecystectomy (Emergency)

Number of Patients with Laparoscopic Cholecystectomy (Emergency)

DEFINITIONS

An **Emergency Laparoscopic Cholecystectomy** is the minimally invasive surgical removal of the gallbladder performed urgently due to acute conditions such as cholecystitis.

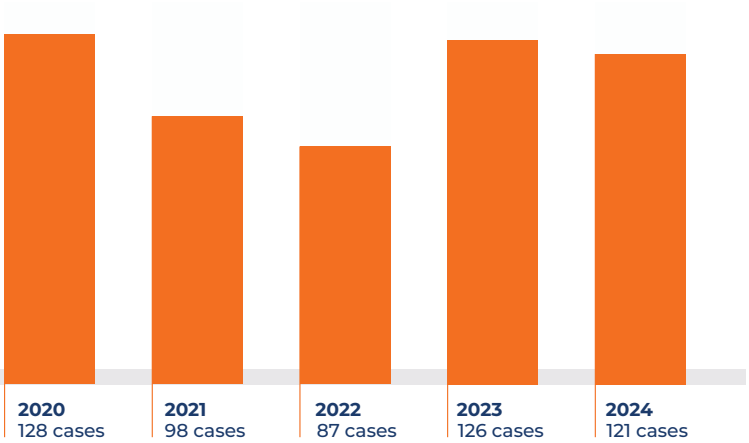
Patients With Laparoscopic Cholecystectomy (Emergency) were collected by:

(A) By MOH TOSP Code (Single or multiple TOSPs): LF/SF704G, LF/SF705G, LF/SF706G, LF/SF707G, LF/SF801G, LF/SF701B, LF/SF704B, LF/SF707B, LF/SF708B, LF/SF710B, LF/SF711B, LF/SF712B

(B) Only cases that came through Emergency Department

INTERPRETATION

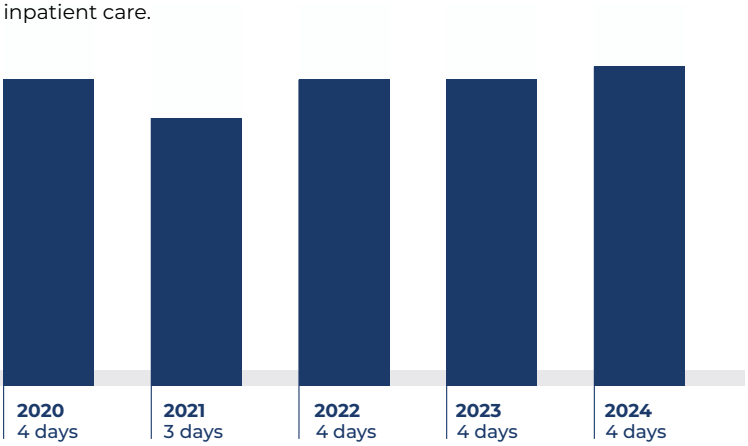
The number of emergency laparoscopic cholecystectomy cases in NUH was around 120 while less than 100 cases were observed in 2021 and 2022.

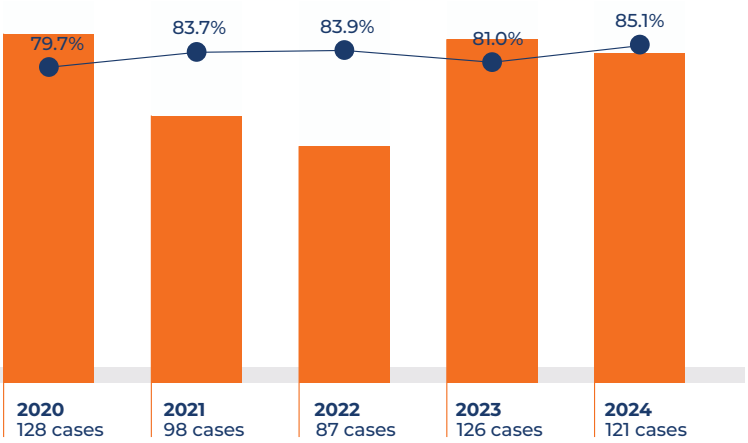


From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.





INTERPRETATION

The median Length of Stay was around 4 days, over the past five years.

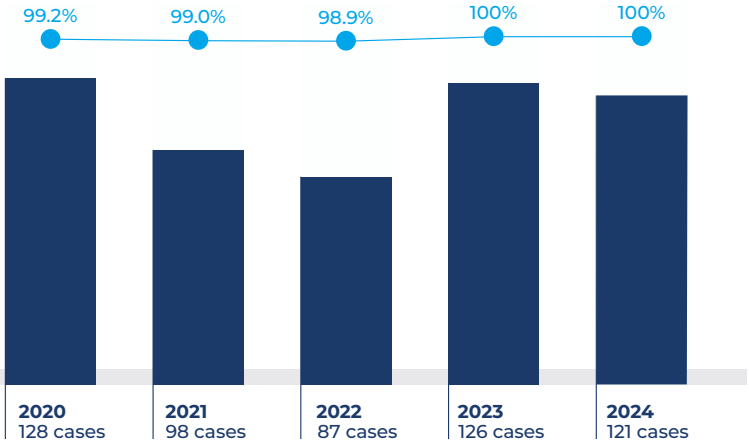
No Intensive Care Unit (ICU) Transfer

DEFINITIONS

Patients should not be transferred to ICU during admission.

INTERPRETATION

The percentage of patients who did not require a transfer to ICU during their admission remained consistently above 98%, over the past five years.



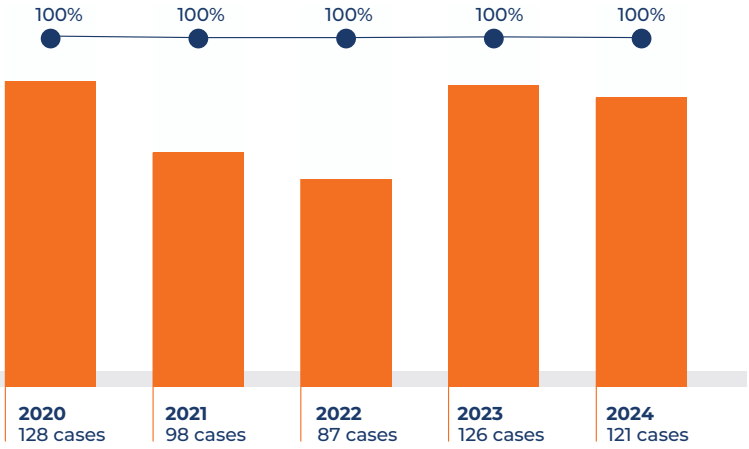
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at 100% for the past five years.



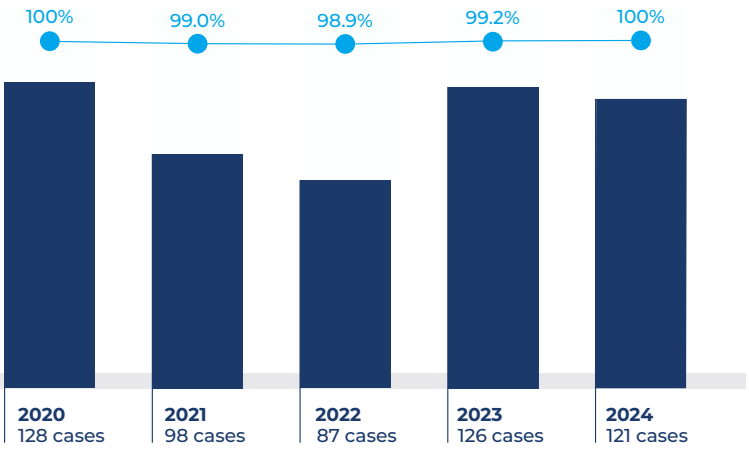
No Blood Transfusion

DEFINITIONS

Patients should not receive blood transfusion during admission.

INTERPRETATION

The percentage of patients who required a blood transfusion, remained low at below 2%, over the past five years.



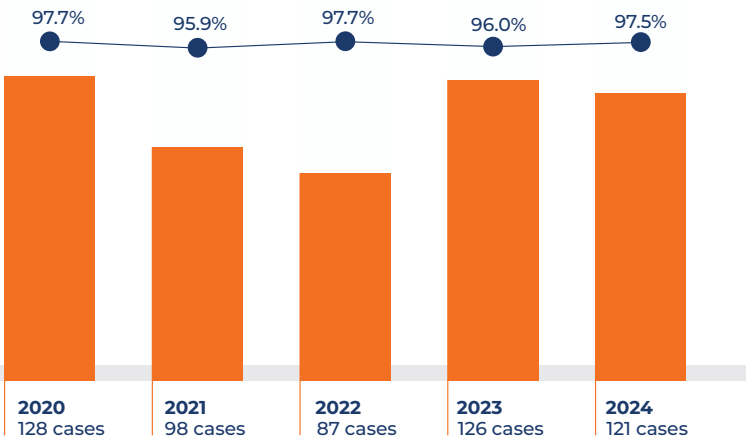
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital through the emergency department for any reason within 30 days from their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistently above 95%, over the past five years.



No Complication during Admission or 30 Days from the Initial Discharge

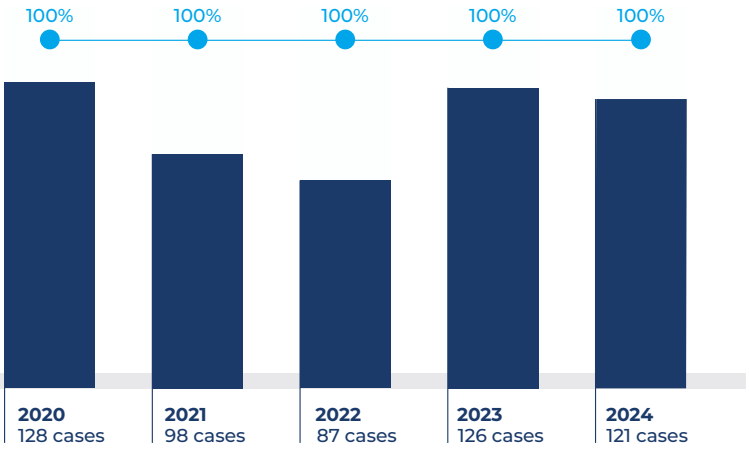
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The post-operative complication-free rate has remained consistently at 100%, over the past five years.



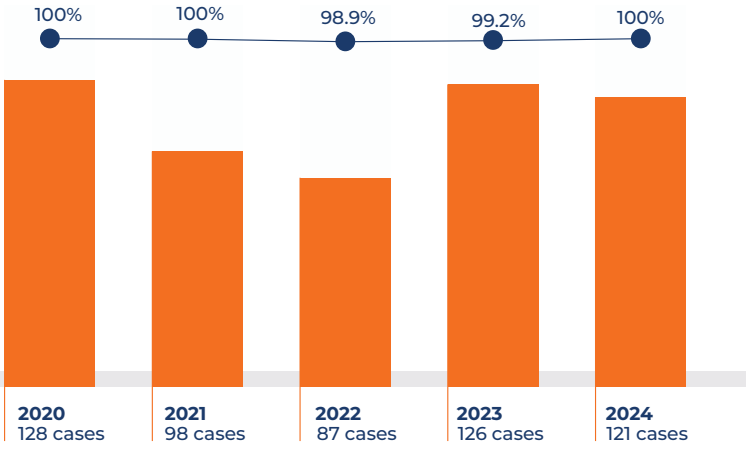
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 2% over the past five years.



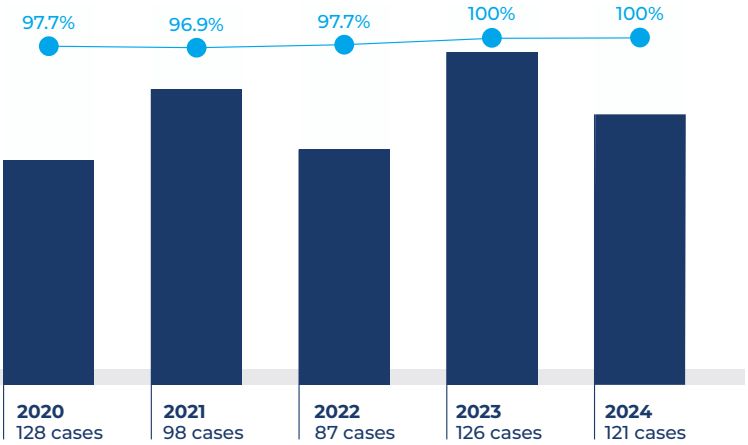
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at above 96%, with improvement to 100% in 2024, over the past five years.



Tonsillectomy

Number of Patients with Tonsillectomy

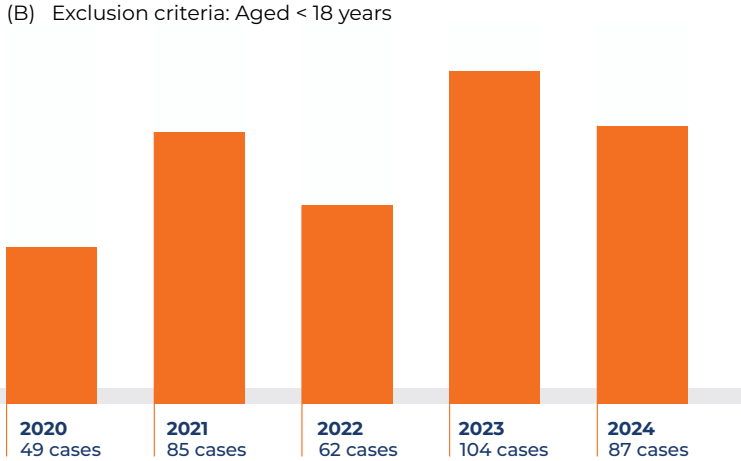
DEFINITIONS

Tonsillectomy is the surgical removal of the palatine tonsils, typically indicated for recurrent tonsillitis or obstructive sleep apnoea.

Patients With Tonsillectomy
Collected by:
(A) MOH TOSP Code (Single only): SM705T & LM705T
(B) Exclusion criteria: Aged < 18 years

INTERPRETATION

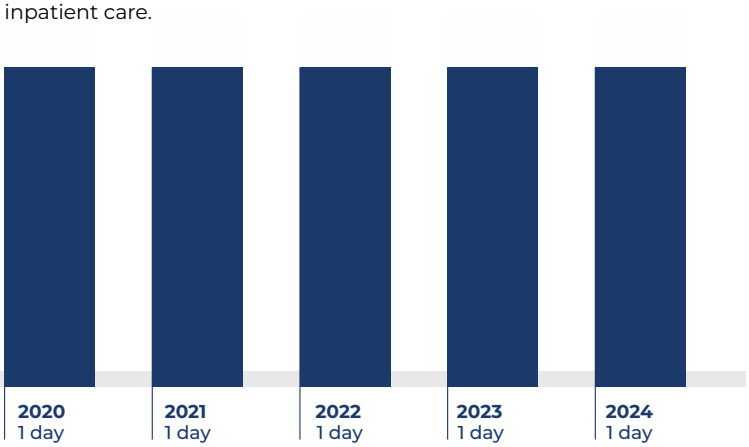
Across five years, the number of cases increased, with fluctuating trends from year to year.

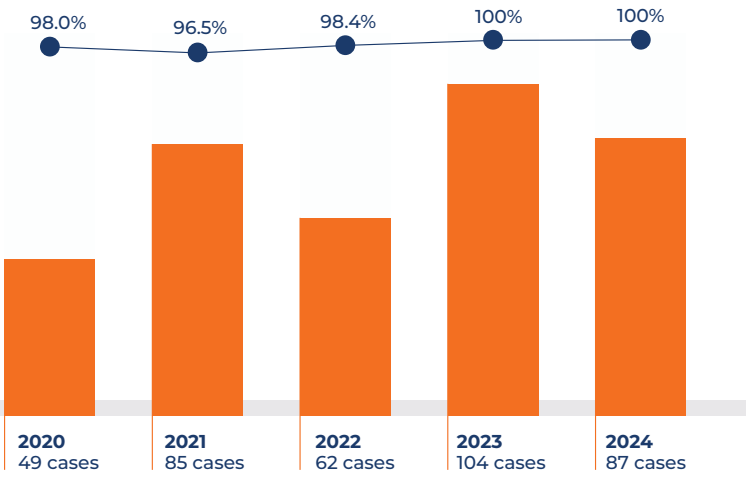


From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.





INTERPRETATION

The median Length of Stay was 1 day. Above 96% of patients were discharged within 1 day, over the past five years.

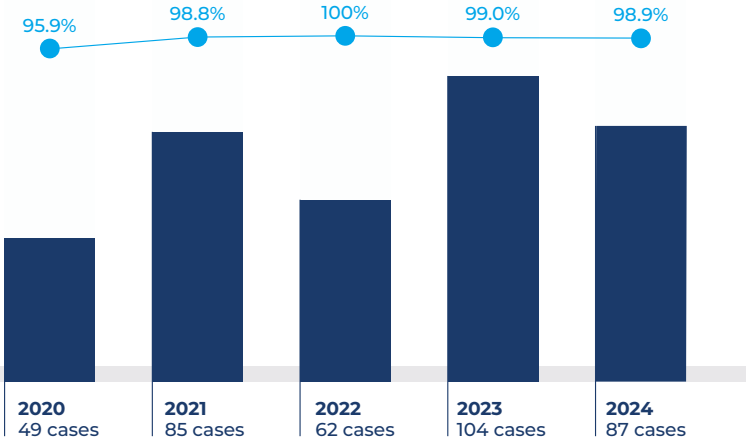
No Blood Transfusion Within 30 Days

DEFINITIONS

Patients should not receive blood transfusion within the same episode and/or 30 days from the initial discharge.

INTERPRETATION

The percentage of patients who required a blood transfusion, remained low at below 5%, over the past five years.



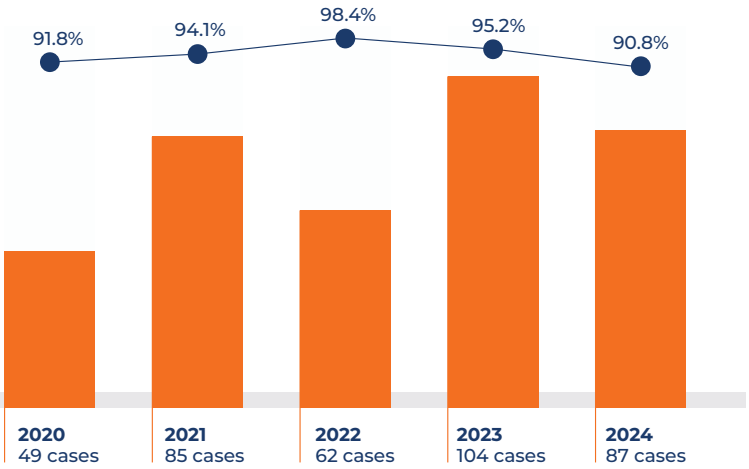
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital through the emergency department for any reason within 30 days from their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistently above 90%, over the past five years.



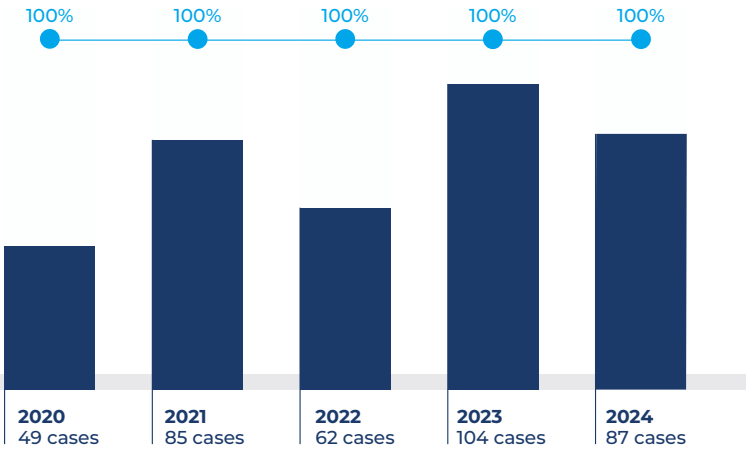
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at 100% for the past five years.



No Complication during Admission or 30 days from the Initial Discharge

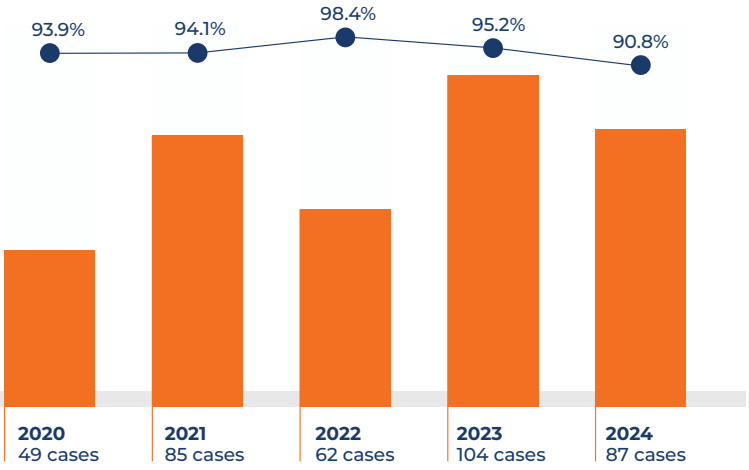
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The post-operative complication-free rate has consistently held at above 90%, over the past five years.



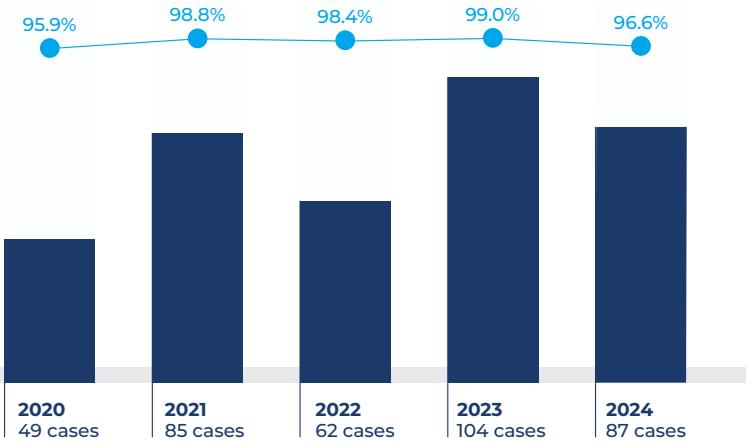
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 5% over the past five years.



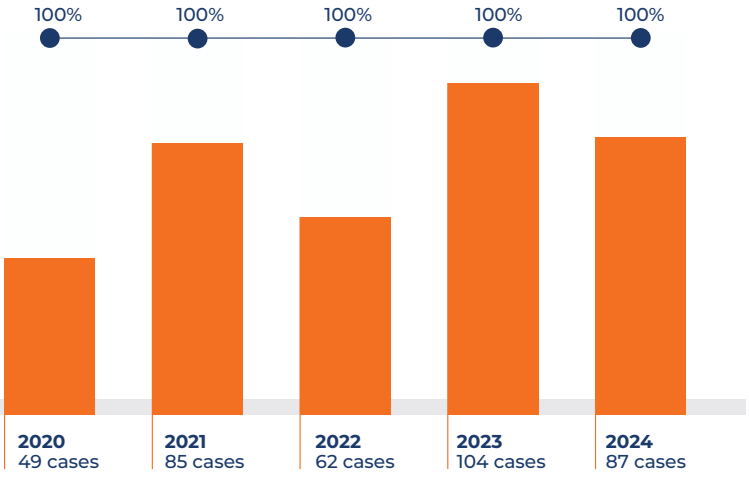
Patient Experience Score (PES)

DEFINITIONS

Patient experience score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at 100% over the past five years.



Medicine

Community Acquired Pneumonia (CAP)

Sepsis

Chronic Obstructive Pulmonary Disease (COPD)

Community Acquired Pneumonia (CAP)

Number of Patients with Community Acquired Pneumonia (CAP)

DEFINITIONS

Community-Acquired Pneumonia (CAP) refers to pneumonia that develops in individuals outside of a healthcare setting, such as a hospital. It is a common infection of the lungs, with various pathogens like bacteria, viruses, and fungi potentially causing the illness.

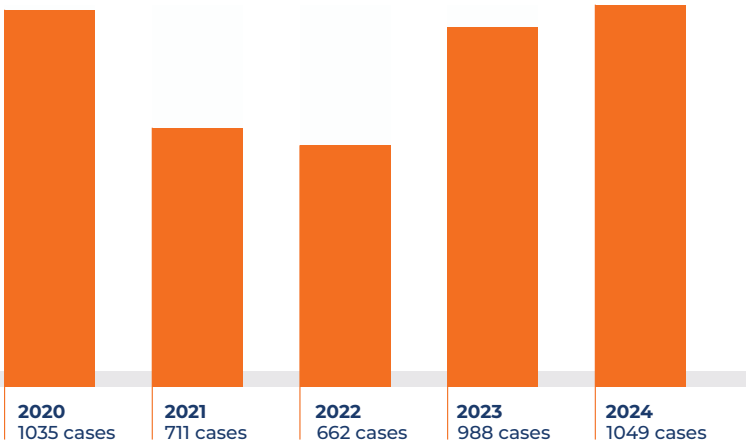
PATIENTS WITH CAP:

Collected by:

1) Primary diagnosis codes: J100, J110, J120, J121, J122, J128, J129, J13, J14, J150, J151, J152, J153, J154, J155, J156, J157, J158, J159, J160, J168, J170, J171, J180, J181, J188, J189, J690
2) Department OU: General Medicine & Respiratory
3) Case type: AE turn IP
4) Age ≥ 18 years
5) Exclusion: COVID19 Diagnosis B972

INTERPRETATION

The annual incidence of CAP at NUH has remained relatively stable, averaging approximately 1,000 cases per year. The reduction observed in 2021–2022 is likely attributable to diagnostic reclassification, whereby patients presenting with pneumonia symptoms during this period were more frequently assigned a COVID-19 diagnosis code, which was excluded from this analysis.



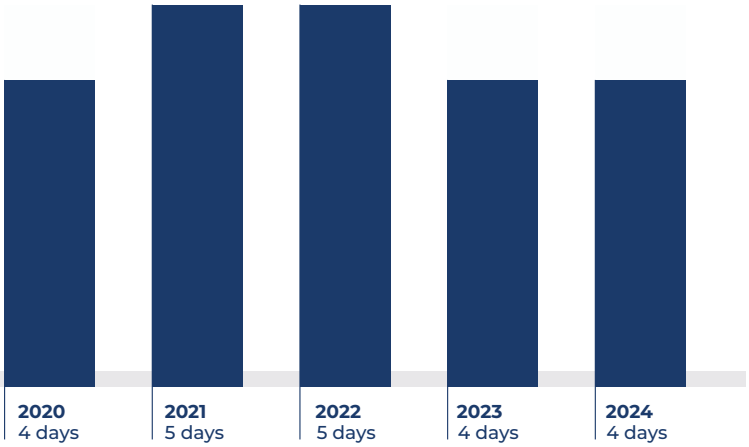
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay was 4 days. LOS was slightly longer in 2021 and 2022, when a mandatory requirement of two negative swab tests prior to discharge was in place for all patients.



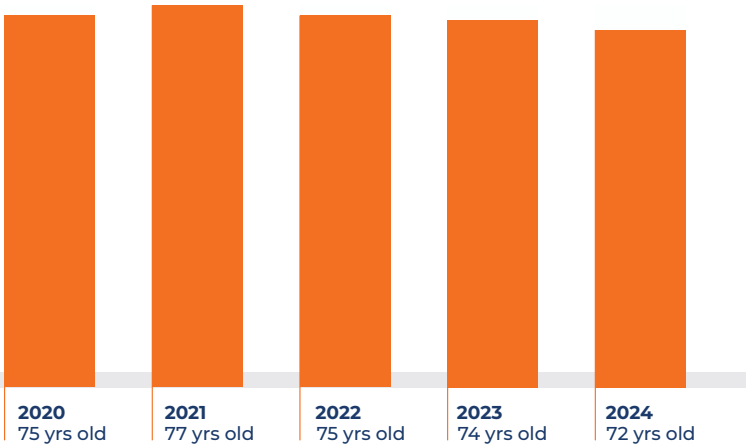
Admission Age

DEFINITIONS

Age of the patient calculated at the point of admission during the specific encounter.

INTERPRETATION

The median age was 72 years old in 2024. Median age peaked at 77 in 2021 and has been on a declining trend since.



No Complication during Admission or 30 days from the Initial Discharge

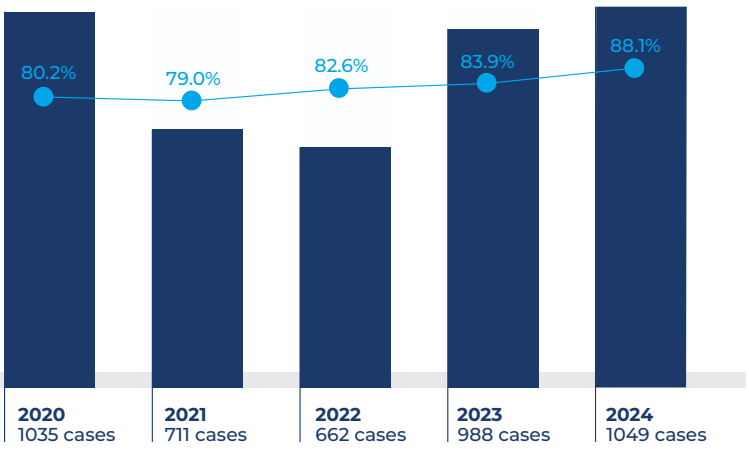
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The percentage of patients, who had no complications during admission or within 30 days of discharge, has increased from 80.2% in 2020 to 88.1% in 2024, following a consistently increasing trend over the past five years.



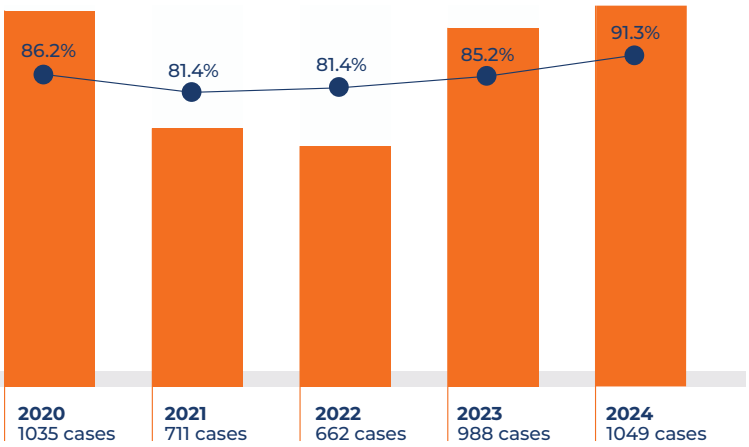
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at above 80% for most years, dipping slightly during 2021–2022 before recovering to 91.3% in 2024.



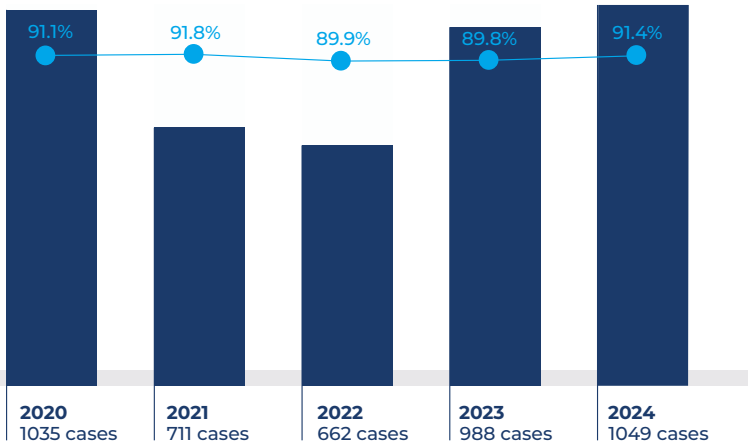
No Emergency Readmission Within 30 Days (Related Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for related cause within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day related-cause emergency readmission-free rate has remained consistent around 89-91%, over the past five years.



Sepsis

Number of Patients with Sepsis

DEFINITIONS

Sepsis is a life-threatening condition where the body's response to an infection becomes extreme, leading to tissue and organ damage. It is a medical emergency that requires prompt treatment, as it can rapidly progress to septic shock, multiple organ failure, and even death.

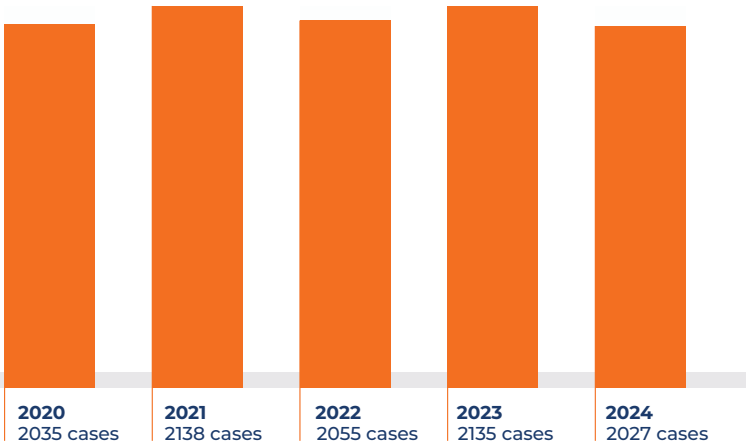
Patients With Sepsis:

Collected from Base patient: Angus Sepsis

1) Angus Sepsis = If Organ dysfunction and Infection are TRUE or If Explicit Sepsis is TRUE
2) Patients with either Antibiotic given within 48 hours or Blood Culture taken within 48 hours
3) Excluding patients discharged from Extended Diagnostic Treatment Unit (EDTU) and Age < 16 years old
4) Exclude Patient with B972 Diagnosis

INTERPRETATION

The annual incidence of sepsis at NUH has remained relatively stable, averaging approximately 2,000 cases per year, for the past five years.



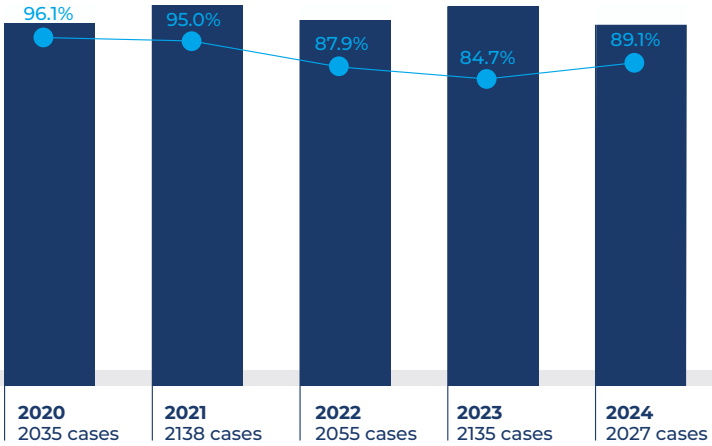
Appropriate Antibiotic Use and De-escalation

DEFINITIONS

Appropriate Antibiotic Use And De-Escalation:
Patient should be given Antibiotic appropriate to his/her condition and promptly de-escalated according to hospital's guidelines.

INTERPRETATION

Compliance with appropriate antibiotic use and de-escalation declined steadily from 96.1% in 2020 to 84.7% in 2023, before recovering to 89.1% in 2024.



In-Hospital Survival

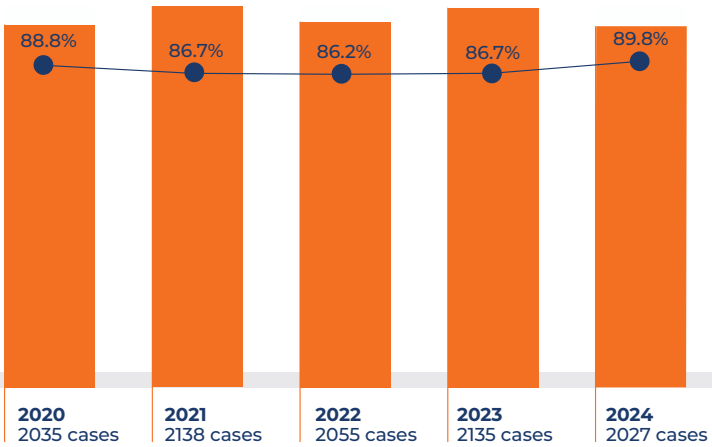
DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival for Sepsis has held between 86% and 90%, over the past five years.*

** This compares favourably to an international standard of 82%, based on a multicenter study from Australia and New Zealand.*



Chronic Obstructive Pulmonary Disease (COPD)

Number of Patients with COPD

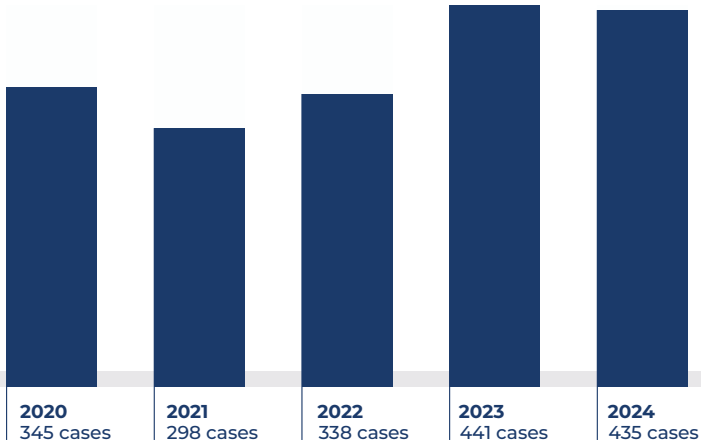
DEFINITIONS

COPD, or Chronic Obstructive Pulmonary Disease, is a progressive lung disease that makes breathing difficult due to damaged airways and reduced airflow.

Patients with COPD:
Collected by DRG Code: E65A and E65B

INTERPRETATION

The annual incidence of COPD in NUH has climbed from 298 cases in 2021, to 435 cases in 2024, showing an increase over the past four years.



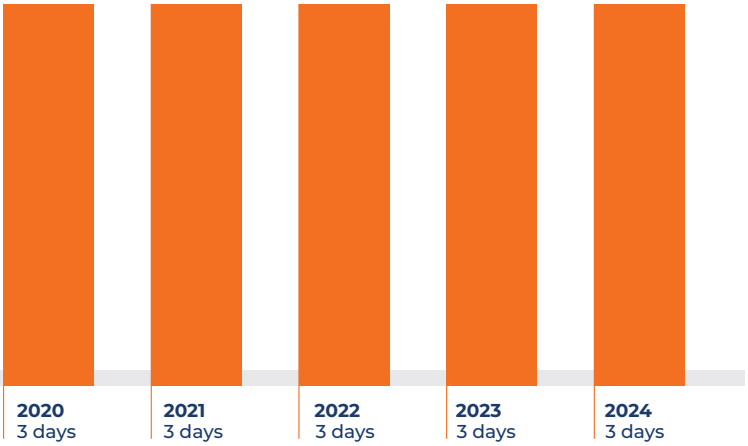
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay was 3 days. This has remained stable over the past five years.



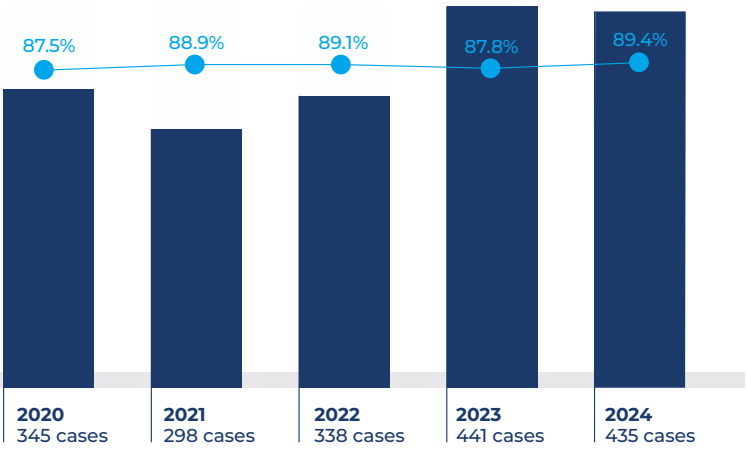
No Emergency Readmission Within 30 Days (Related Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for related cause within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day related-cause emergency readmission-free rate has remained consistent around 87-89%, over the past five years.



Neuroscience

Stroke

Hyper Acute Stroke

Stroke

Number of Patients with Ischemic Stroke

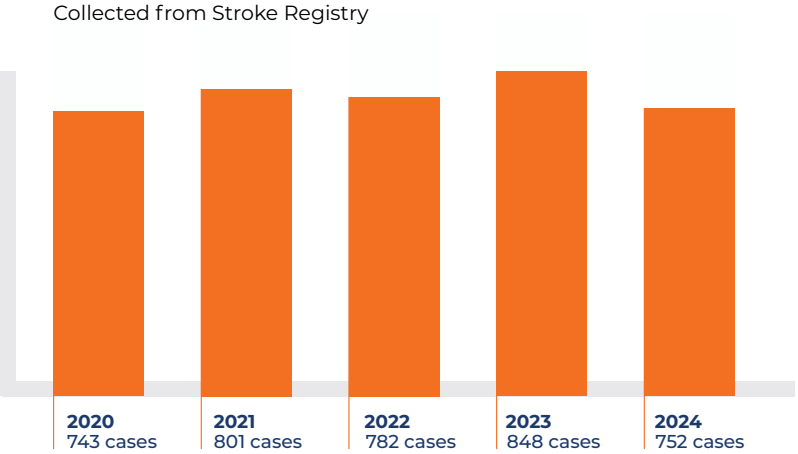
DEFINITIONS

Ischemic Stroke is defined as the sudden onset of a neurological deficit resulting from either cerebral ischemia. Stroke care quality is assessed through timely diagnosis, evidence-based treatment, and coordinated rehabilitation services to improve patient outcomes and reduce long-term disability.

Patients With Stroke:
Collected from Stroke Registry

INTERPRETATION

The annual incidence of ischaemic stroke in NUH has remained stable, with case numbers staying within a consistent range of 743 to 848, over the past five years.



From Admission Length of Stay

DEFINITIONS

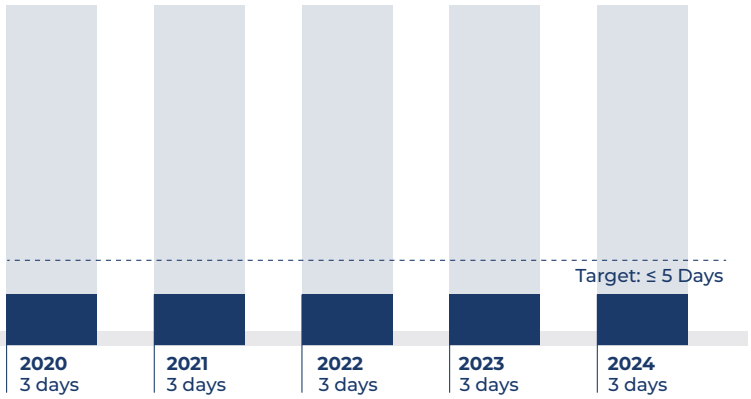
The total number of calendar days from the date of hospital admission to the date of discharge to the rehabilitation centers. This measure reflects the overall duration of inpatient care.

The length of stay for patients admitted with stroke should align with stroke severity as follows:

- Mild stroke: within 5 days
- Moderate stroke: within 10 days
- Severe stroke: within 20 days

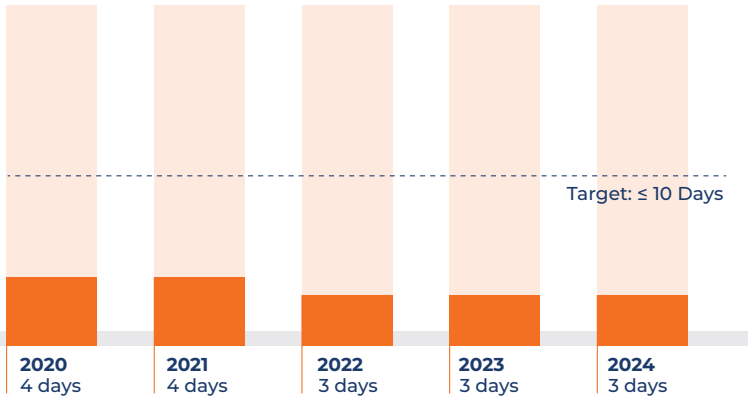
INTERPRETATION

The median Length of Stay for mild stroke cases was 3 days. This has remained stable over the past five years.



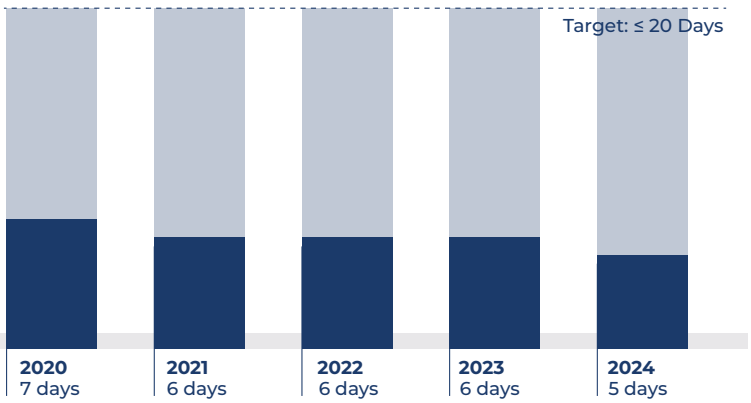
INTERPRETATION

The median Length of Stay for moderate stroke cases was 3-4 days. This has remained stable over the past five years.



INTERPRETATION

The median Length of Stay for severe stroke cases remained consistent at 6 days from 2021 to 2023, with a slight decrease to 5 days noted in 2024. This has remained stable over the past five years.



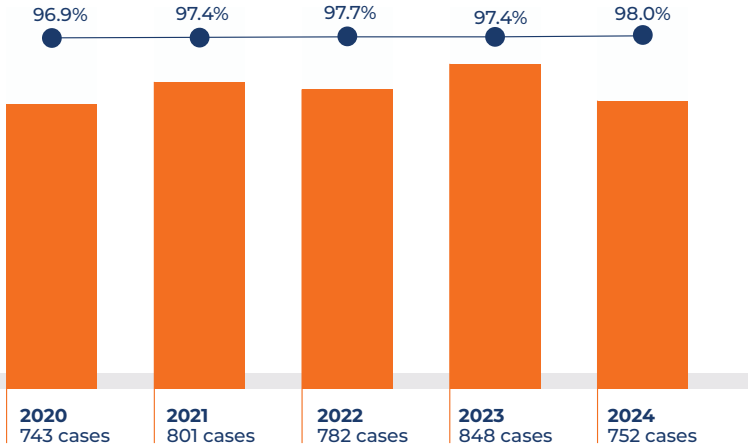
No Emergency Readmission Within 15 (or 16-90) Days (Stroke/TIA)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department due to stroke or TIA within 15 (or 16-90) days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

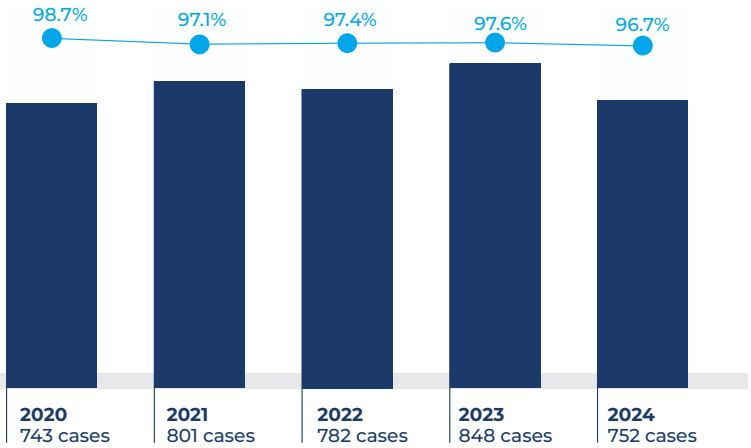
INTERPRETATION

The 15-day stroke/TIA related emergency readmission rate has remained consistent between 1-3%, over the past five years.



INTERPRETATION

The 16-to-90-day stroke/TIA related emergency readmission rate has remained consistent between 1-3%, over the past five years.



Hyper Acute Stroke

Number of Patients with Hyper Acute Stroke

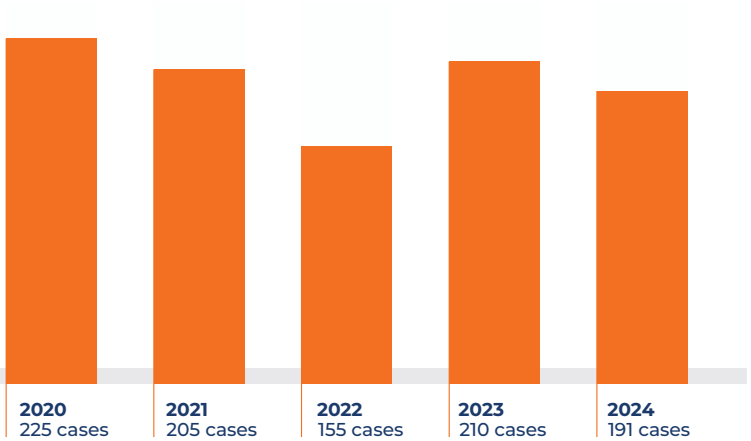
DEFINITIONS

Hyper Acute Stroke refers to acute ischemic stroke.

Patients with Hyper Acute Stroke:
Collected from Stroke Registry

INTERPRETATION

The annual incidence of hyper-acute stroke in NUH has remained relatively stable, ranging from 225 cases in 2020 to 191 cases in 2024, apart from a dip to 155 cases in 2022.

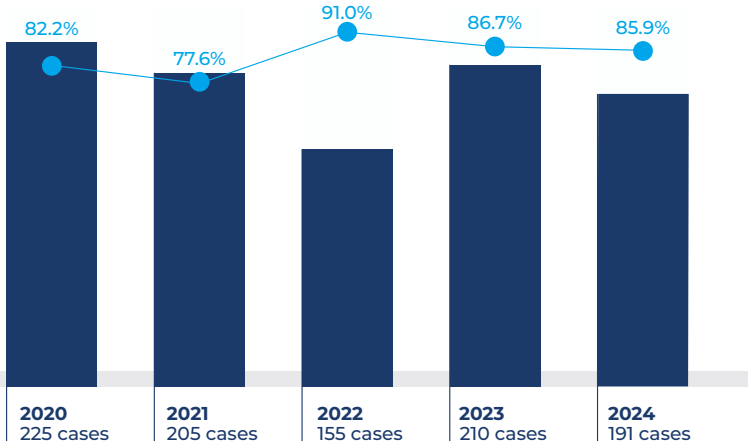


From Admission Length of Stay

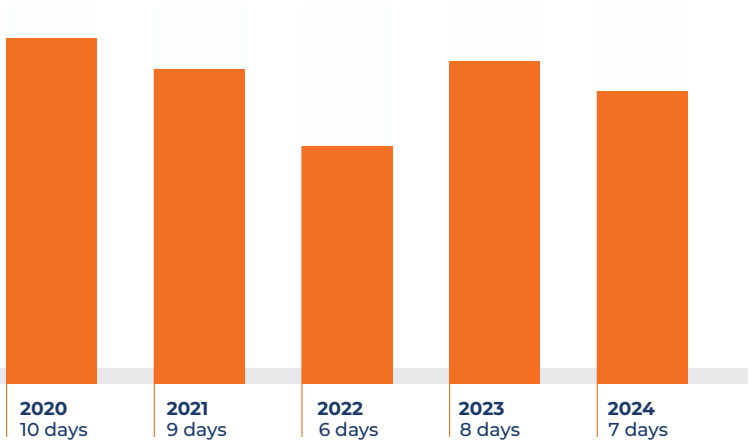
DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge to rehabilitation centers. This measure reflects the overall duration of inpatient care.

Length of Stay, LOS ≤ 20 days



From Admission LOS (Median)



INTERPRETATION

The median Length of Stay for hyper-acute stroke cases ranged between 6 and 10 days. More than 80% of patients were discharged within 20 days over the past five years.

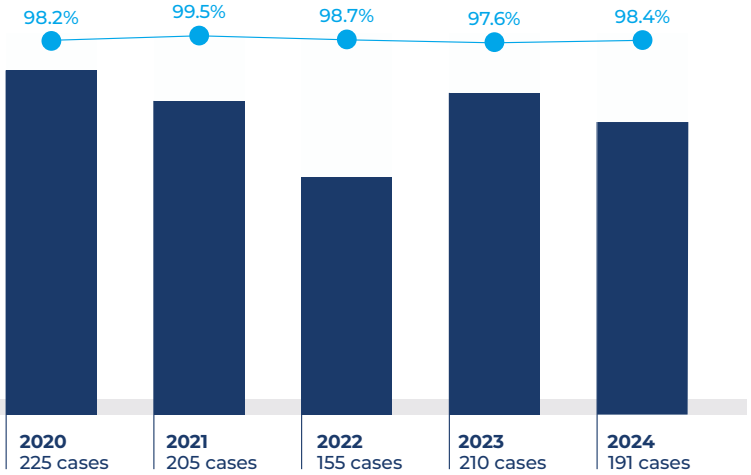
No Emergency Readmission Within 15 (or 16-90) Days (Stroke/TIA)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department due to stroke or TIA within 15 (or 16-90) days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

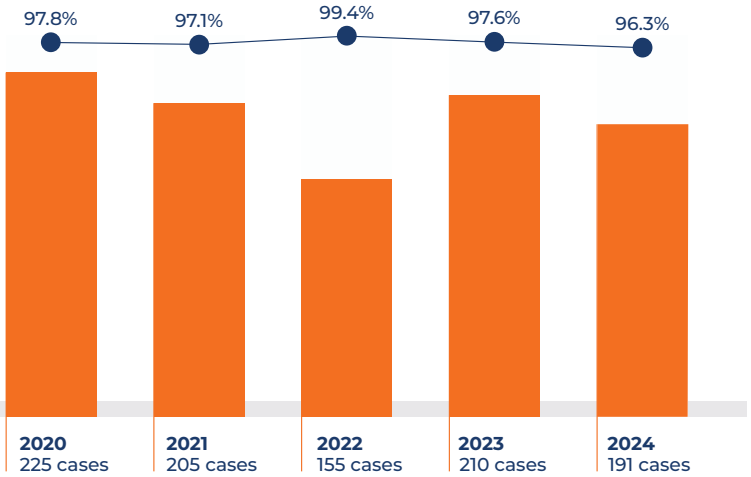
INTERPRETATION

The 15-day stroke/TIA related emergency readmission rate has remained consistent between 1-3%, over the past five years.



INTERPRETATION

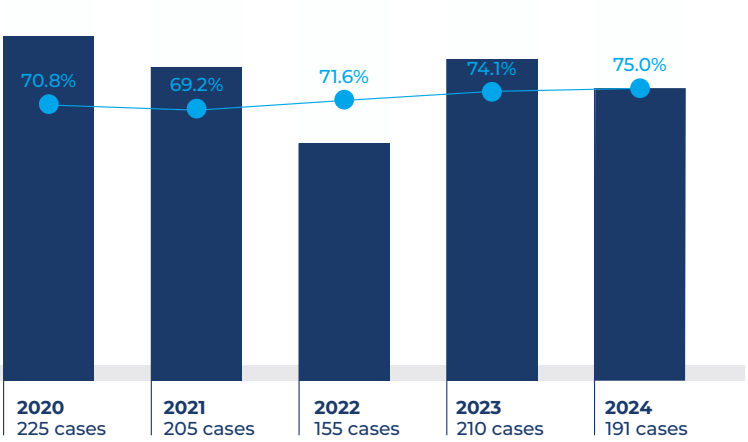
The 16-to-90-day stroke/ TIA related emergency readmission rate has remained consistent between 1-3%, over the past five years.

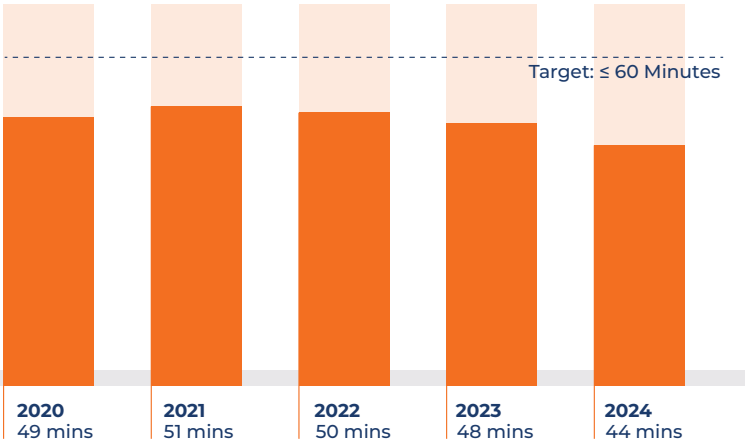


Door-to-Needle Time for Intravenous Thrombolysis

DEFINITIONS

For patients with hyperacute ischemic stroke eligible for intravenous thrombolysis, **Door-To-Needle Time for Intravenous Thrombolysis** refers to the time from **emergency department (ED) arrival** to the **administration of thrombolytic therapy (e.g., tPA)** and should be **60 minutes or less,** according to the international guideline by American Heart Association / American Stroke Association (AHA/ASA).





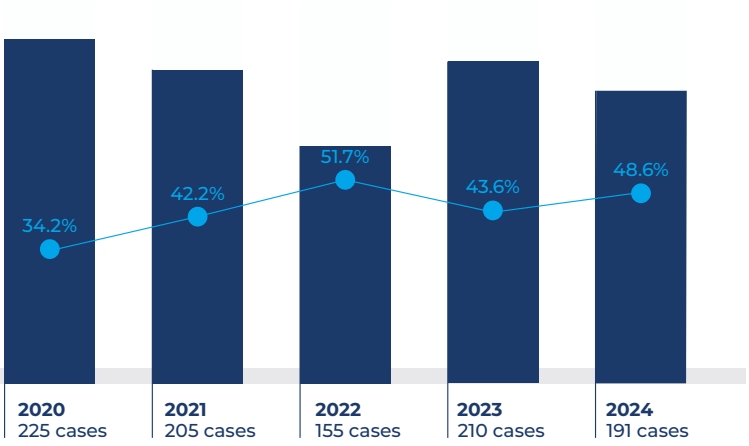
INTERPRETATION

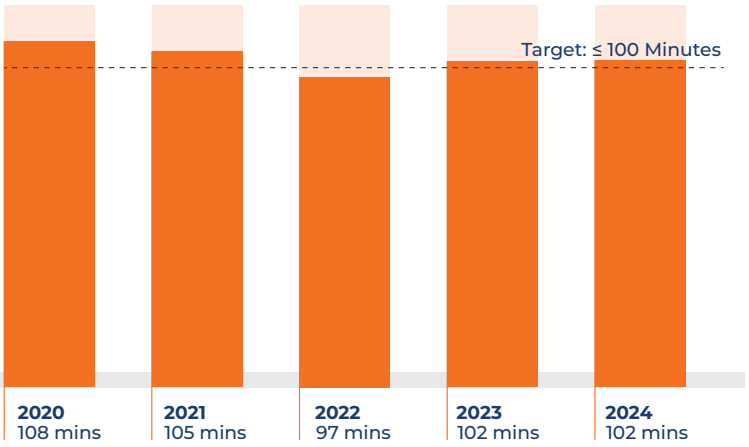
The rate of patients achieving Door-to-Needle time within 60 minutes has risen from 70.8% in 2020 to 75.0% in 2024, with the median Door-to-Needle time improving from 49 minutes to 44 minutes over the same period.

Door-to-Groin-Puncture Time for Endovascular Treatment

DEFINITIONS

For patients with hyperacute ischemic stroke undergoing **endovascular thrombectomy,** **Door-To-Groin-Puncture Time** refers to the time from **emergency department arrival** to **groin puncture** (initiation of endovascular access) should be **100 minutes or less.** This measure ensures expedited access to mechanical clot retrieval in eligible patients with large vessel occlusion.





INTERPRETATION

The rate of patients achieving Door-to-Groin-Puncture time within 100 minutes has improved from 34.2% in 2020 to 48.6% in 2024, with the median Door-to-Groin-Puncture time improving from 108 minutes to 102 minutes over the same time period.

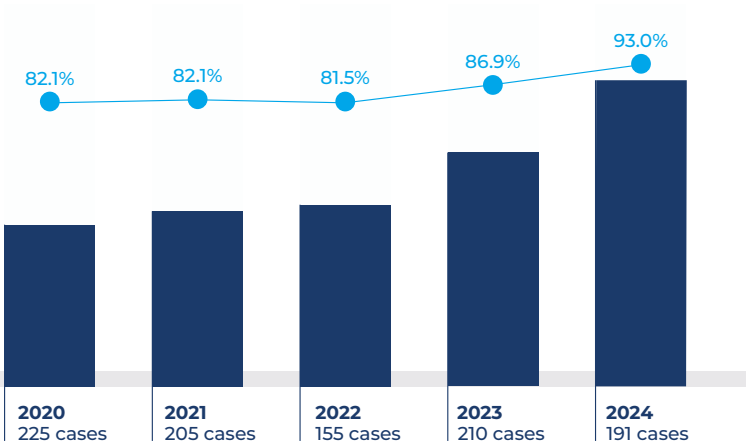
Endovascular Recannalisation Rates (mTICI 2C/3)

DEFINITIONS

The **Modified Treatment in Cerebral Infarction (mTICI) Score** was developed from the original thrombolysis in cerebral infarction (TICI) scale in 2013 as a tool for determining the response of thrombolytic therapy for ischemic stroke. In neurointerventional radiology it is commonly used for patients post endovascular revascularization. Like most therapy response grading systems, it predicts prognosis. A grade 2C indicates near-perfect reperfusion while a grade 3 indicates complete perfusion.

INTERPRETATION

The rate of Endovascular Recannalisation (mTICI 2C/3) has improved consistently over the past five years.



Obstetrics & Gynaecology

Vaginal Delivery
Caesarean Section
Hysterectomy

Vaginal Delivery

Number of Patients with Vaginal Delivery

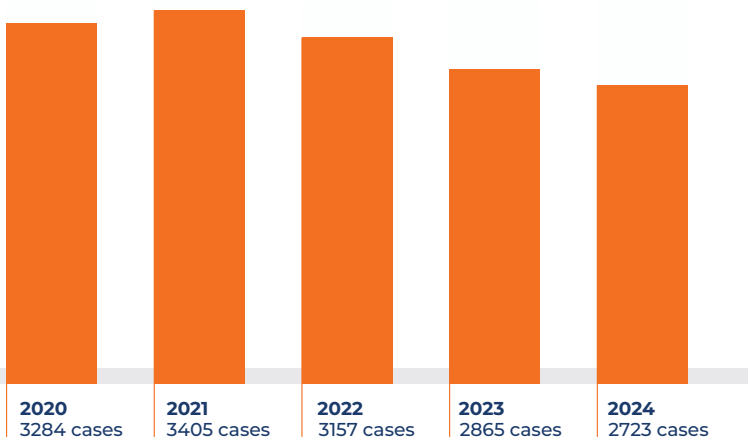
DEFINITIONS

Vaginal Delivery is the process of giving birth to a baby through the vaginal canal. It is generally considered the natural and preferred method of childbirth for full-term pregnancies. The process involves the mother's body naturally progressing through labor and pushing the baby out.

Patients with Vaginal Delivery:
EDDS (Electronic Database of Delivery Suite)

INTERPRETATION

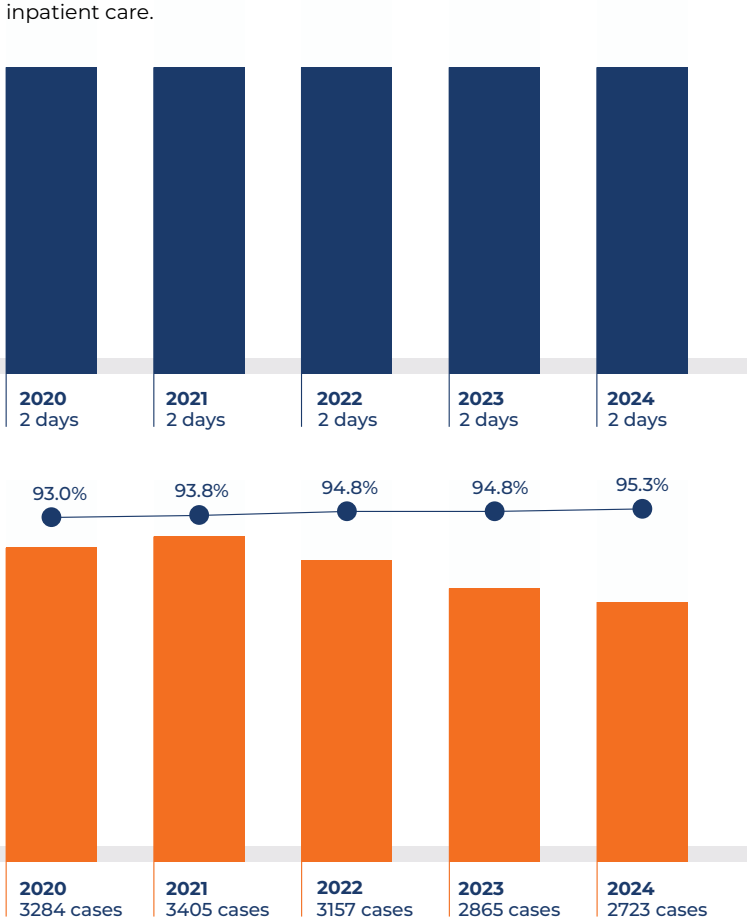
The annual caseload of vaginal delivery cases has declined from 3284 cases in 2020 to 2723 cases in 2024, following a downward trend since peaking at 3405 cases in 2021.



From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.



INTERPRETATION

The median Length of Stay was 2 days. This has remained stable over the past five years.

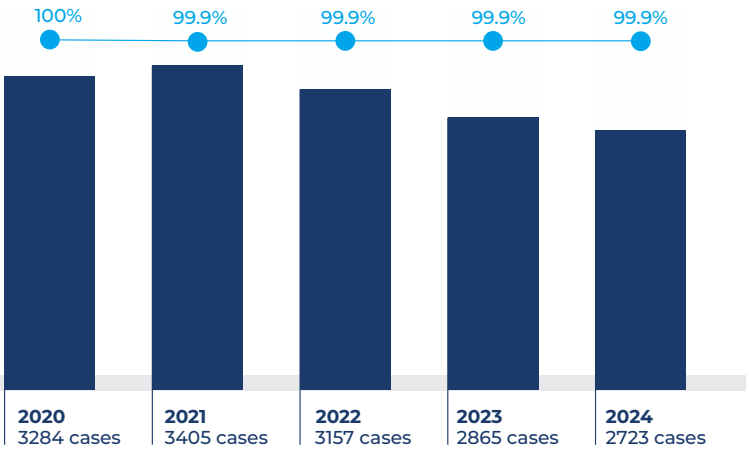
No Intensive Care Unit (ICU) Transfer

DEFINITIONS

Patients should not be transferred to Intensive Care Unit (ICU) during admission.

INTERPRETATION

The percentage of patients who did not require an ICU transfer has remained stable, at 99.9% to 100% over the past five years.



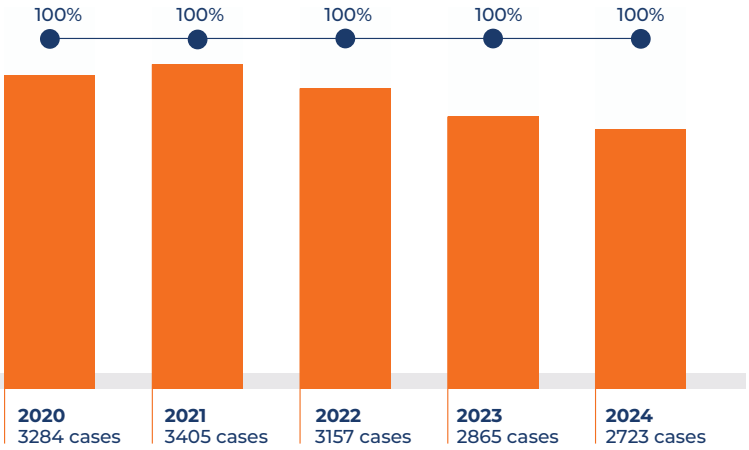
Survival Rate Within 30 Days of Delivery

DEFINITIONS

The proportion of patients who survive within 30 days of delivery, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The survival rate of patients, within 30 days of delivery, has remained at 100% over the past five years.



Measurements of Patient Safety and Quality of Care

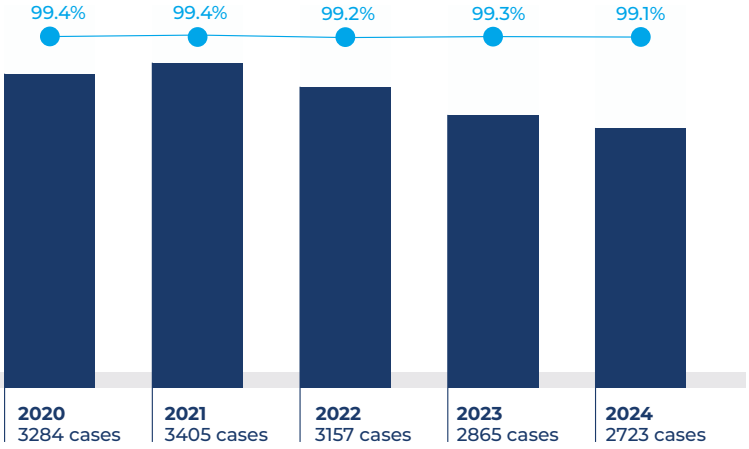
DEFINITIONS

No Obstetric Anal Sphincter Injury (3rd/4th Degree):
Patients should not have Obstetric and sphincter injury (3rd and 4th degree) resulting from unassisted vaginal delivery.

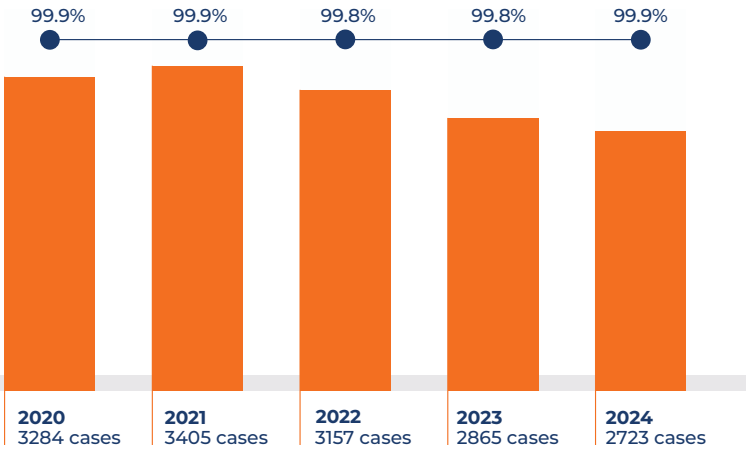
Postpartum Hemorrhage (PPH) is excessive bleeding after childbirth. A loss of 500ml or more after a vaginal birth is generally considered a PPH, while a loss of 1.5L or more is considered a severe or massive PPH. This level of blood loss can be life-threatening and requires immediate medical attention. Patients should not have PPH > 1.5L.

APGAR Scores are a quick way to assess a newborn's physical condition after birth. The test evaluates five characteristics: appearance (skin colour), pulse (heart rate), grimace (reflex irritability), activity (muscle tone), and respiration. Each characteristic is given a score of 0, 1, or 2, and the scores are added together for a total score ranging from 0 to 10. Baby APGAR score at 5 min of births at or after term should not be less than 7.

No Obstetric Anal Sphincter Injury (3rd/4th Degree)



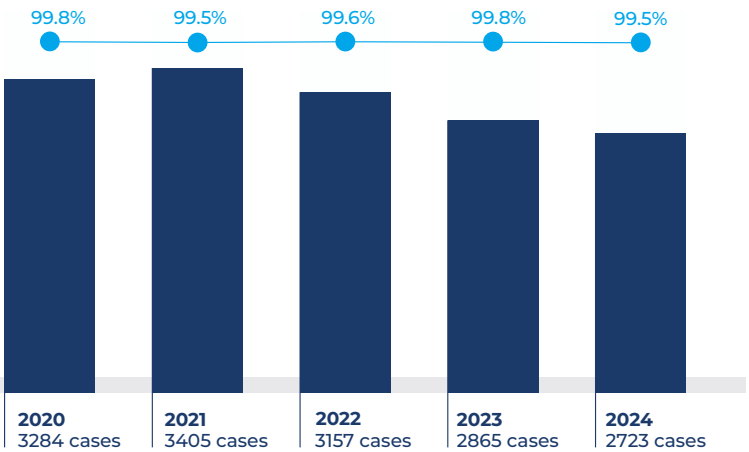
Postpartum Hemorrhage (PPH)
No PPH > 1.5L



APGAR Scores ≥ at 5 mins of birth OR after term

INTERPRETATION

All three quality indicators for vaginal delivery in NUH — no obstetric anal sphincter injury, no PPH >1.5L, and APGAR scores ≥7 at 5 minutes — remained consistently around 99% over the past five years, reflecting strong patient safety and quality of care.



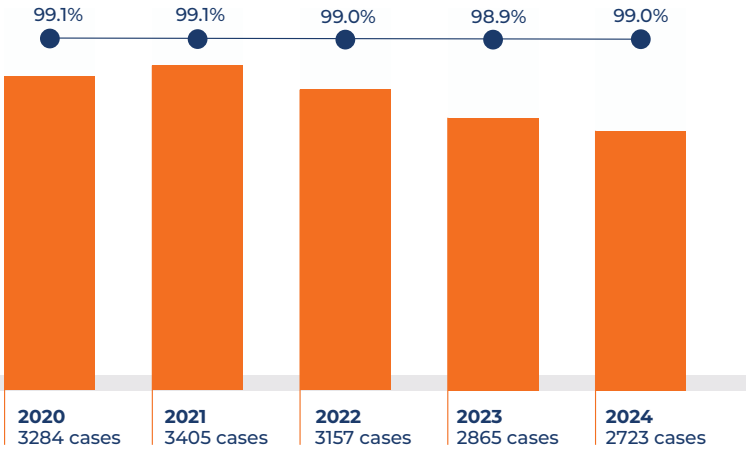
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their delivery. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission rate has remained consistent around 1%, over the past five years.



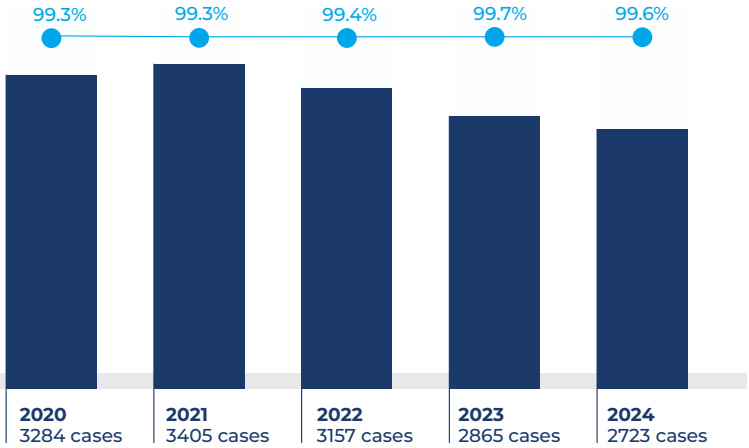
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at around 99% over the past five years.



Caesarean Section

Number of Patients with Caesarean Section

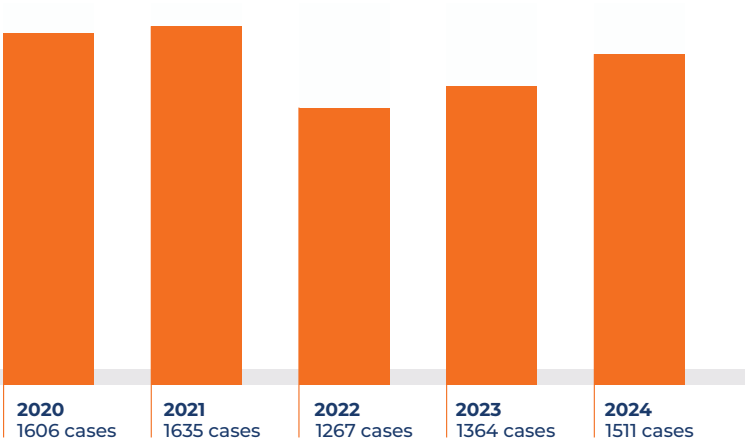
DEFINITIONS

Caesarean Section is a surgical procedure used to deliver a baby through cuts made in the mother's abdomen and uterus, instead of through vaginal birth.

Patients With Caesarean Section:
Collected by MOH TOSP Code (Single or multiple TOSPs):
SI834U, SP832U, SP834U, SP835U

INTERPRETATION

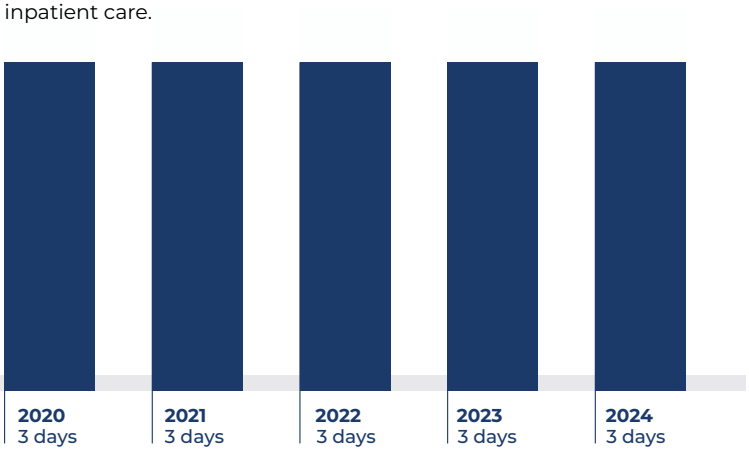
The annual caseload of Caesarean Section cases has fluctuated over the past five years, dropping from 1635 cases in 2021 to a low of 1267 cases in 2022, before gradually increasing to 1511 cases in 2024.

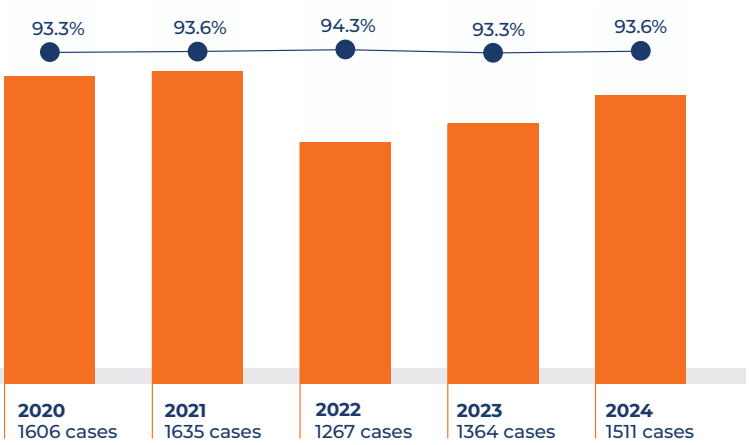


From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.





INTERPRETATION

The median Length of Stay was 3 days. This has remained stable over the past five years.

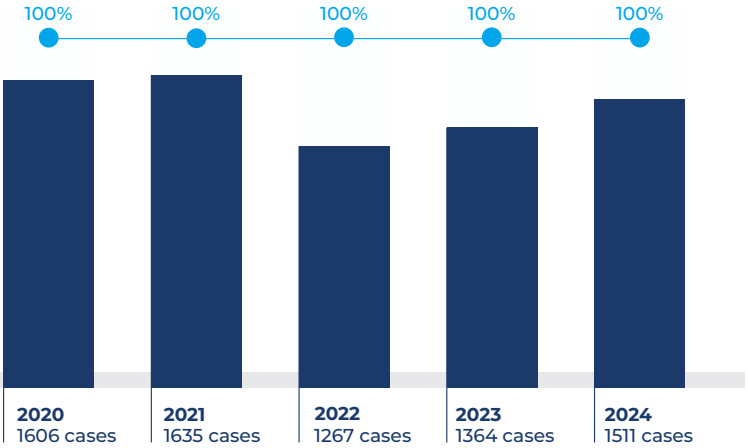
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at 100%, over the past five years.



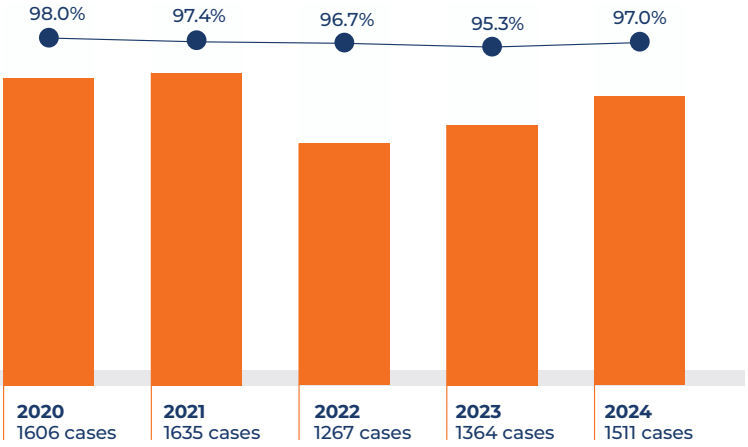
No Blood Transfusion Within 42 days

DEFINITIONS

Patients should not receive blood transfusion within the same episode and/or 42 days from the initial discharge.

INTERPRETATION

The percentage of patients requiring blood transfusion within 42 days has remained low, at 5% or below, over the past five years.



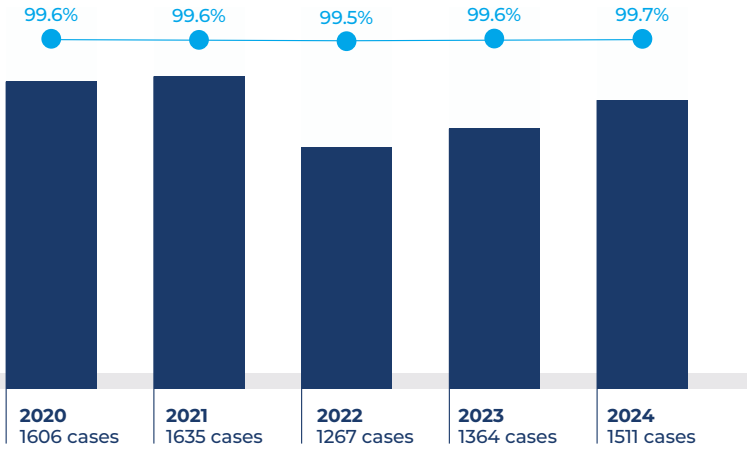
No Intensive Care Unit (ICU) Transfer

DEFINITIONS

Patients should not be transferred to Intensive Care Unit (ICU) during admission.

INTERPRETATION

The percentage of patients who did not require an ICU transfer has remained stable, at 99% to 100% over the past five years.



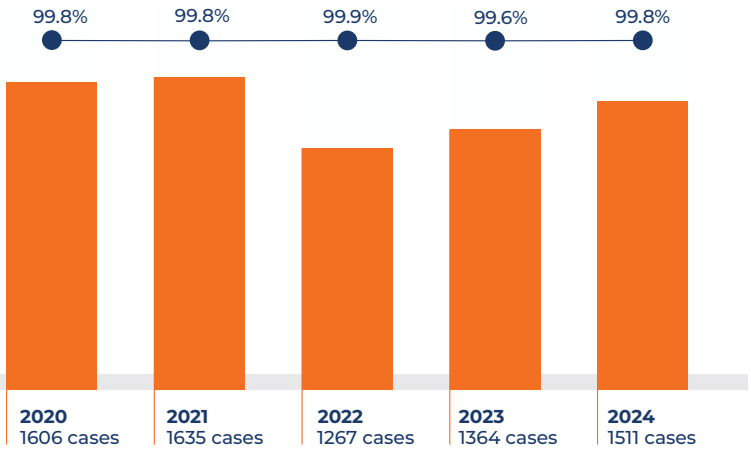
No Return to Operation Theatre (OT) within 42 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 42 days from the initial discharge due to any cause.

INTERPRETATION

The 42-day return to OT rate has consistently remained below 1% over the past five years.



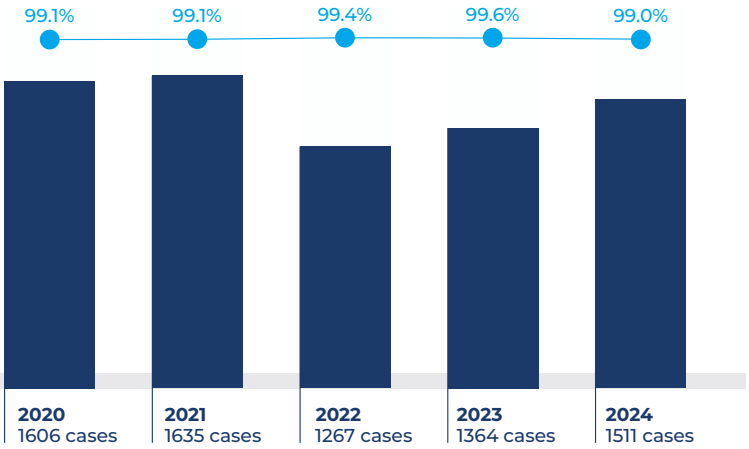
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at around 99% over the past five years.



Hysterectomy

Number of Patients with Hysterectomy

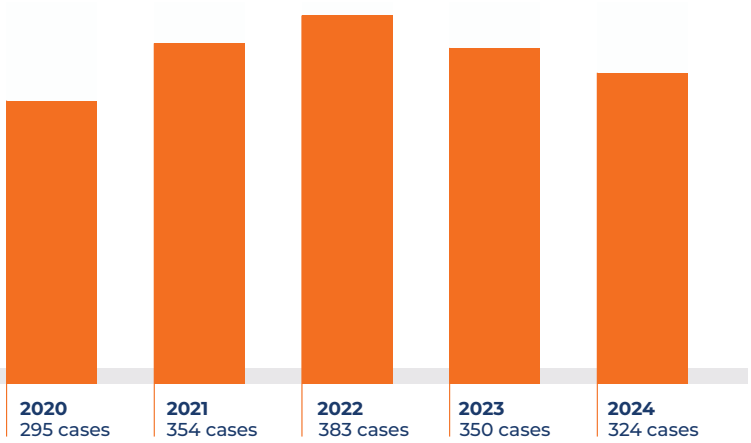
DEFINITIONS

Hysterectomy is a surgical procedure to remove the uterus. It can be performed for the treatment of benign and malignant gynecological conditions. The surgery can be performed through different approaches namely, open surgery, minimally-invasive surgery (laparoscopic, robotic), or vaginal surgery.

Patients with Hysterectomy:
Collected by DRG: N04A, N04B, N12A, N12B

INTERPRETATION

The annual caseload of hysterectomy cases in NUH has ranged between 295 and 383 cases, remaining fairly stable at around 350 cases per year over the past five years.



From Admission Length of Stay

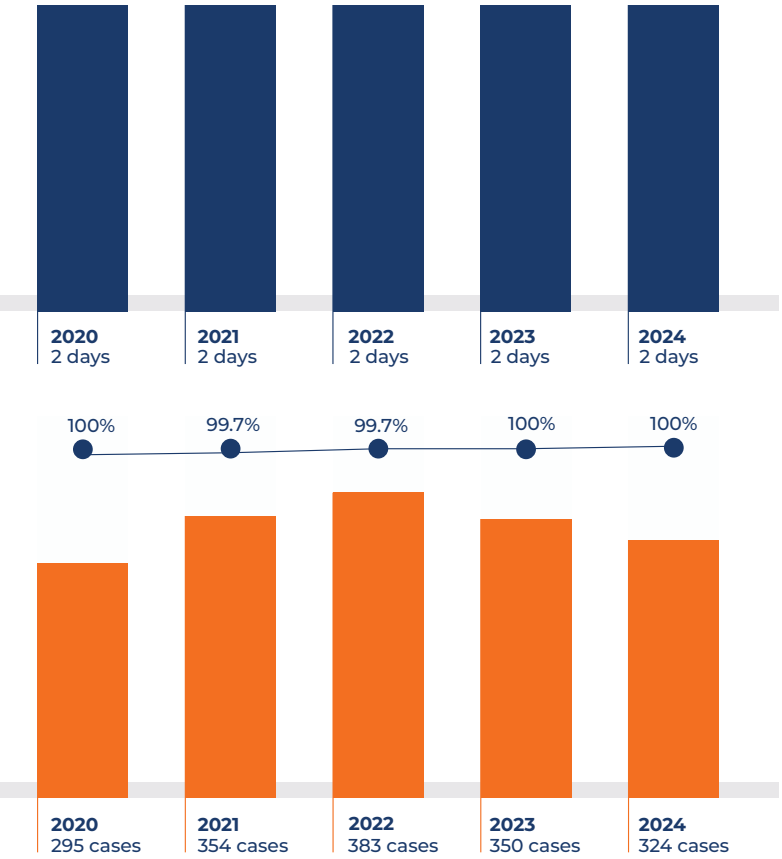
DEFINITIONS

From Admission Length of Stay: The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

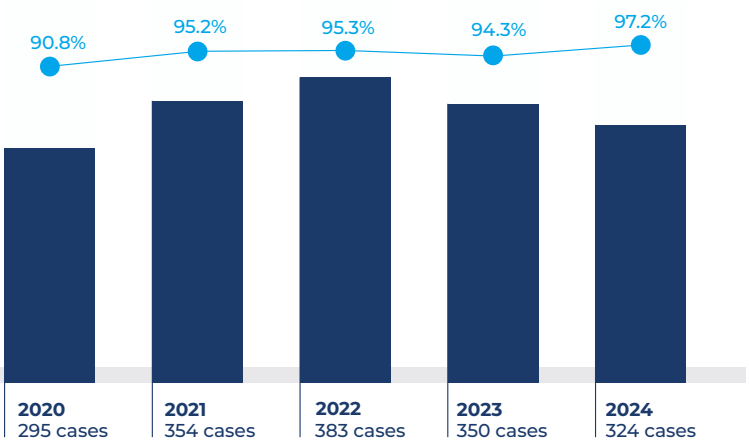
ICU Length of Stay: Patients should stay in ICU for no more than two days.

Post Op Length of Stay: Patients should stay no more than four days from the date of operation to the date of discharge.

ICU LOS ≤ 2 days



Post OP LOS ≤ 4 days



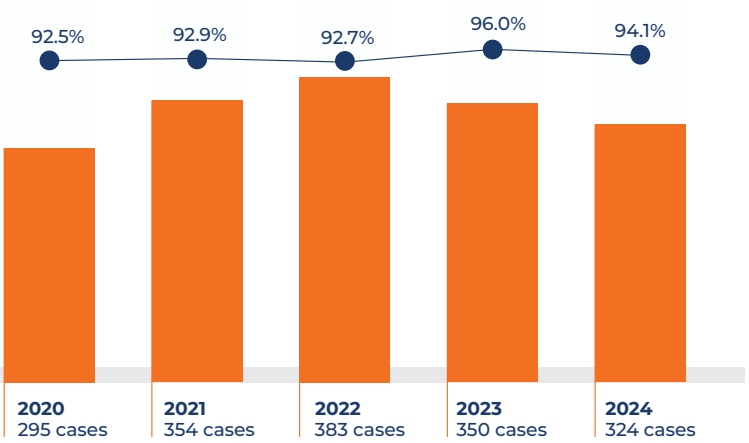
INTERPRETATION

The median Length of Stay was 2 days and more than 90% of patients were able to go home within 4 days after operation.

No Blood Transfusion Within 30 Days

DEFINITIONS

Patients should not receive blood transfusion within the same episode and/or 30 days from the initial discharge.



INTERPRETATION

The percentage of patients requiring blood transfusion within 30 days for hysterectomy has remained low, at 8% or below, over the past five years.

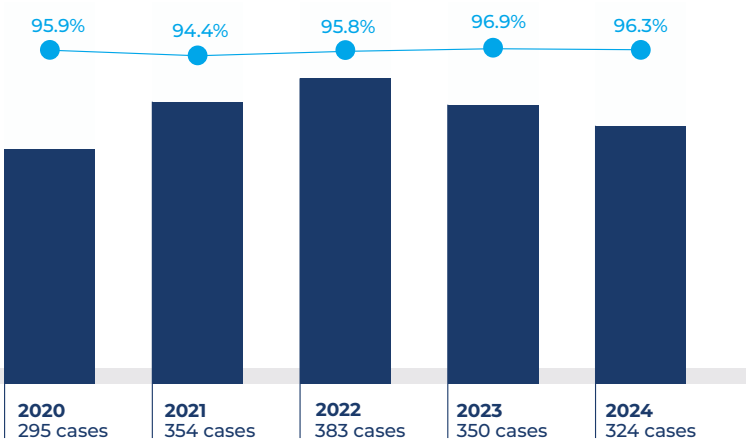
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistent, at above 94%, over the past five years.



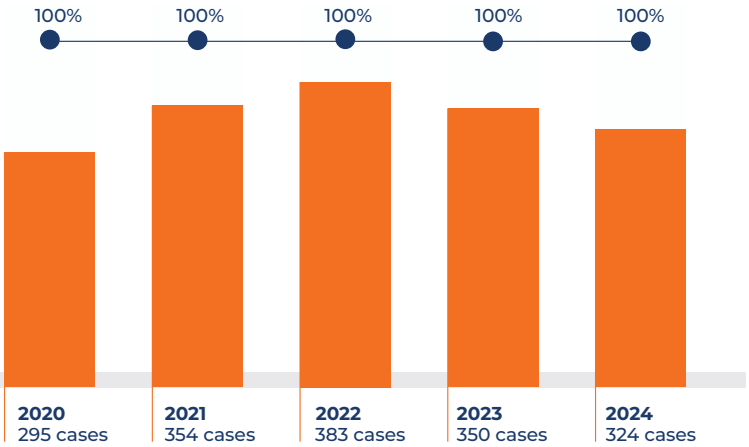
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at 100%, over the past five years.



No Complication during Admission or 30 days from the Initial Discharge

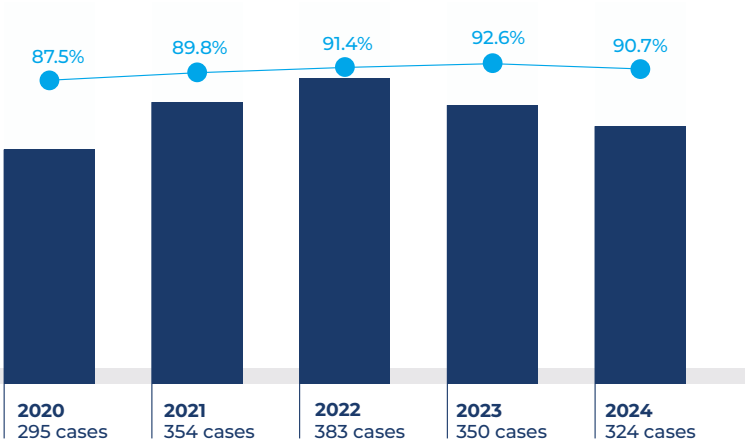
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The percentage of patients, who had no complications during admission or within 30 days of discharge, has increased from 87.5% in 2020 to 90.7% in 2024, gradually increasing over the past five years.



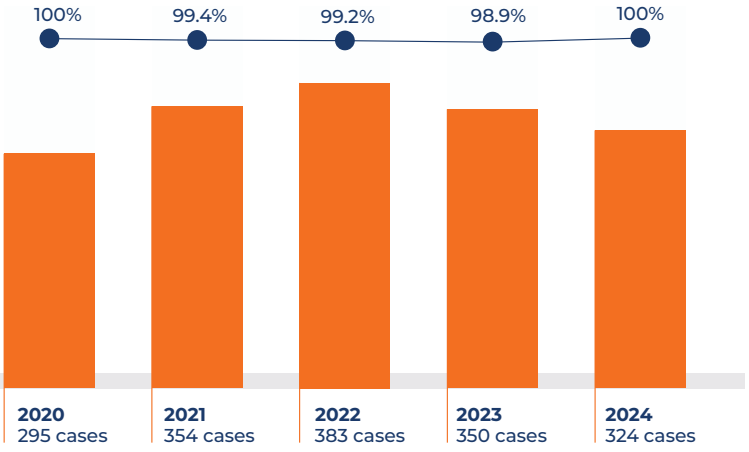
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 2%, over the past five years.



Ophthalmology

Cataract

Trabeculectomy

Cataract

Number of Patients with Cataract

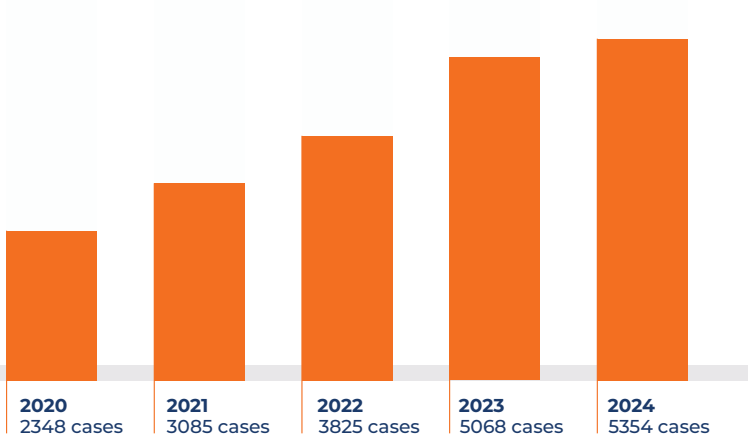
DEFINITIONS

Cataract Surgery is a common procedure to remove the cloudy natural lens of the eye and replace it with an artificial lens (intraocular lens or IOL).

Patients With Cataract:
Collected by MOH TOSP Code (Single or multiple TOSPs): SL808L, SL809L, SL991A, SL991B, SL992A, SL992B

INTERPRETATION

The annual caseload of cataract surgery has increased steadily from 2348 cases in 2020 to 5354 cases in 2024, more than doubling over the past five years.



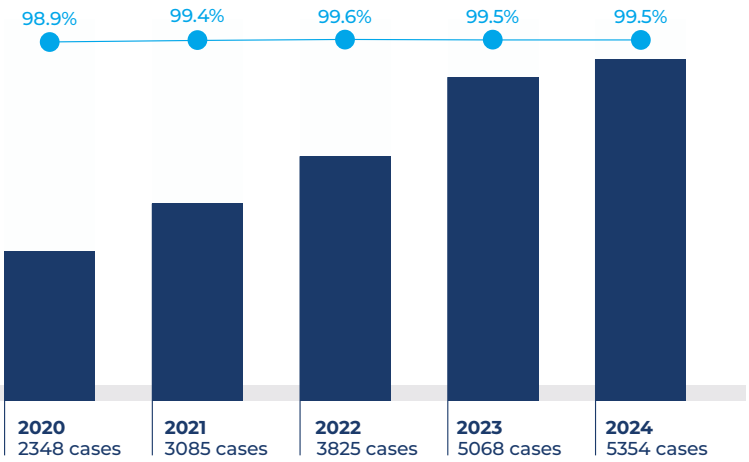
No Day Surgery Turned Inpatient

DEFINITIONS

Patients with day surgeries should not be admitted to the hospital.

INTERPRETATION

The percentage of day surgery patients who did not require an inpatient stay, remained high at above 98%, over the past five years.



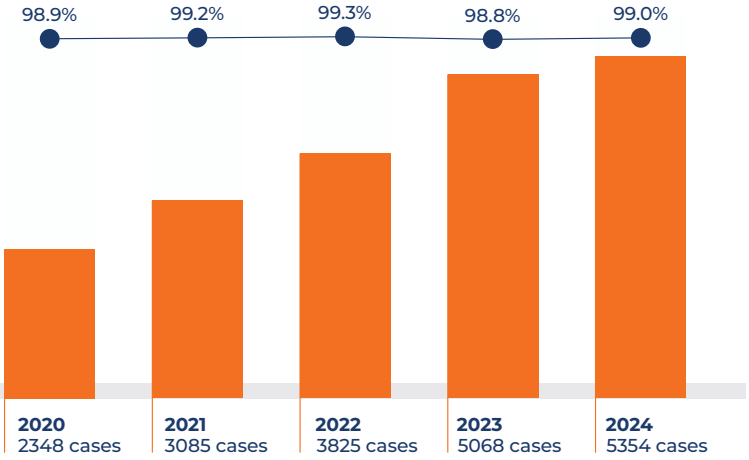
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistently high, holding at above 98% across all five years.



Post-Operative Complications and Quality of Care

DEFINITIONS

No Endophthalmitis: 1) No ICD codes (both primary and secondary) related to Endophthalmitis are tagged for the current episode that does not present at admission; and 2) No ICD codes (both primary and secondary) related to Endophthalmitis are tagged for any new case in ≤30 days from discharge datetime.

No Corneal Decompensation: 1) No ICD codes (both primary and secondary) related to Corneal Decompensation are tagged for the current episode that does not present at admission; and 2) No ICD codes (both primary and secondary) related to Corneal Decompensation are tagged for any new case in ≤30 days from discharge datetime.

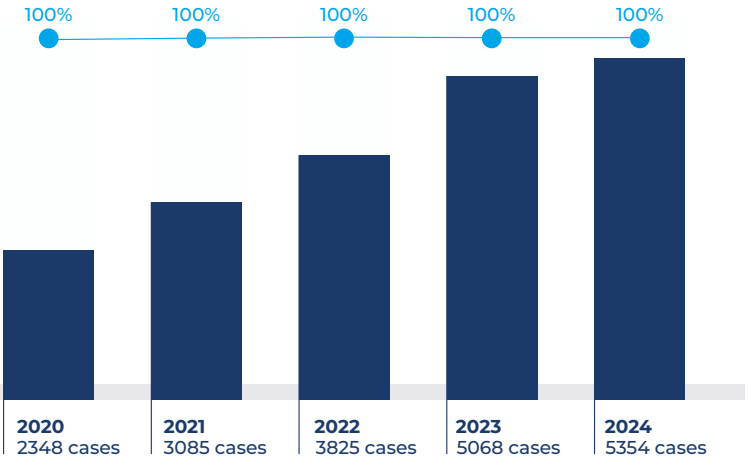
No Other Eye Related Post-Op Complications: 1) No ICD codes (both primary and secondary) specified as "Other eye related post-op complication" are tagged for the current episode; and 2) No ICD codes (both primary and secondary) related to Vitreous loss are tagged for any new case in ≤30 days from discharge datetime.

No Other Post-Op Complication: 1) No ICD codes (both primary and secondary) related to Vitreous loss are tagged for the current episode that does not present at admission; and 2) No ICD codes (both primary and secondary) related to Vitreous loss are tagged for any new case in ≤30 days from discharge datetime.

No Zonulysis: 1) No ICD codes (both primary and secondary) related to Zonulysis are tagged for the current episode that's does not present at admission; and 2) No ICD codes (both primary and secondary) related to Zonulysis are tagged for any new case in ≤30 days from discharge datetime.

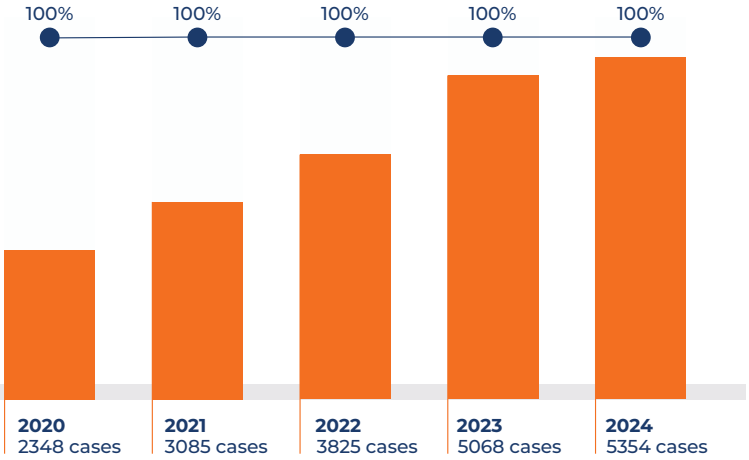
INTERPRETATION

The percentage of patients with no endophthalmitis within 30 days has remained at 100% consistently, over the past five years.



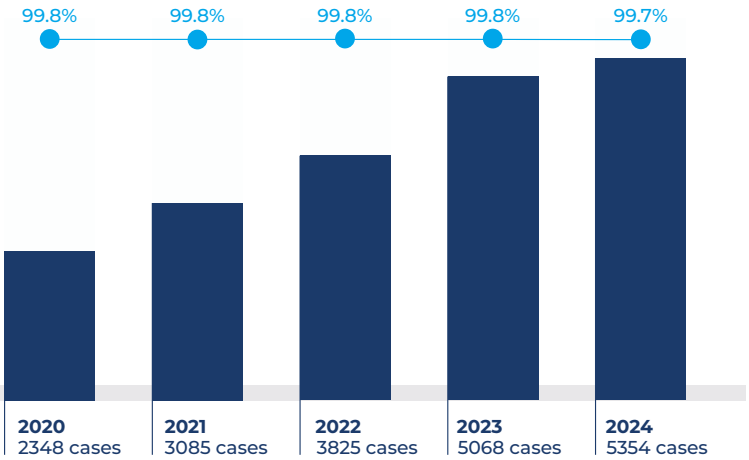
INTERPRETATION

The percentage of patients with no corneal decompensation within 30 days has remained at 100% consistently, over the past five years.



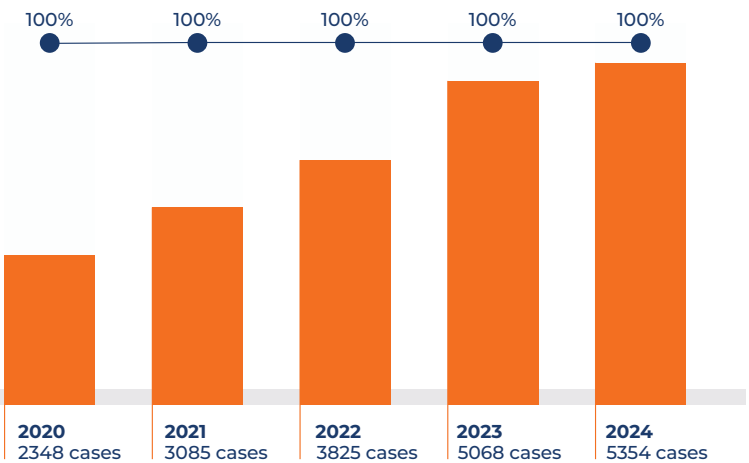
INTERPRETATION

The percentage of patients with no other eye-related complications within 30 days has remained at 100% consistently, over the past five years.



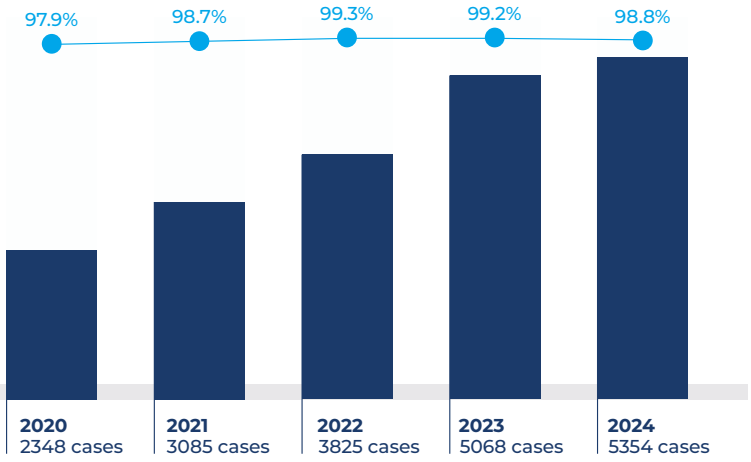
INTERPRETATION

The percentage of patients with no other post-operative complications within 30 days has remained at 100% consistently, over the past five years.



INTERPRETATION

The percentage of patients with no zonulysis within 30 days has remained at above 97% consistently, over the past five years.



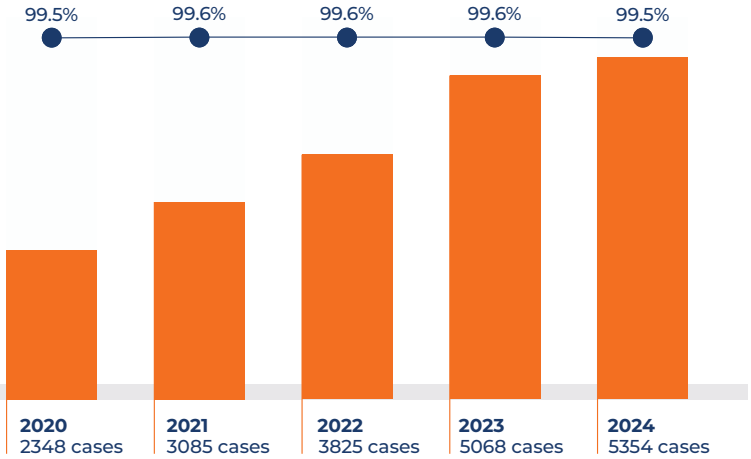
No Return to Operation Theatre (OT) within 90 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 90 days from the initial discharge.

INTERPRETATION

The 90-day return to OT rate has consistently remained below 1%, over the past five years.



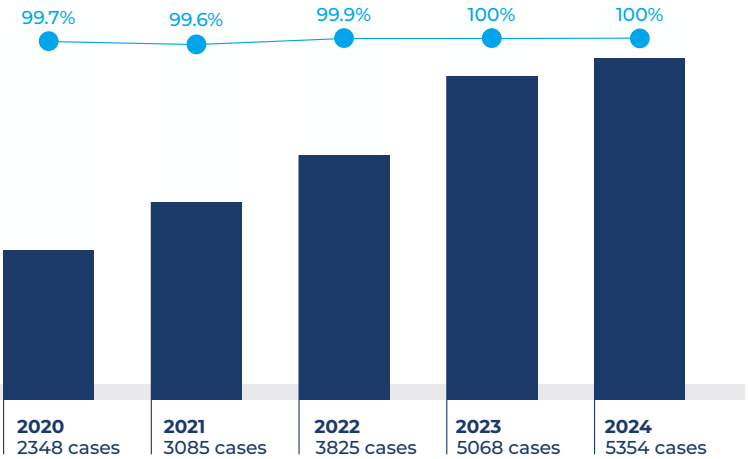
Patient Experience Score (PES)

DEFINITIONS

The Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at above 99%, over the past five years.



Trabeculectomy

Number of Patients with Trabeculectomy

DEFINITIONS

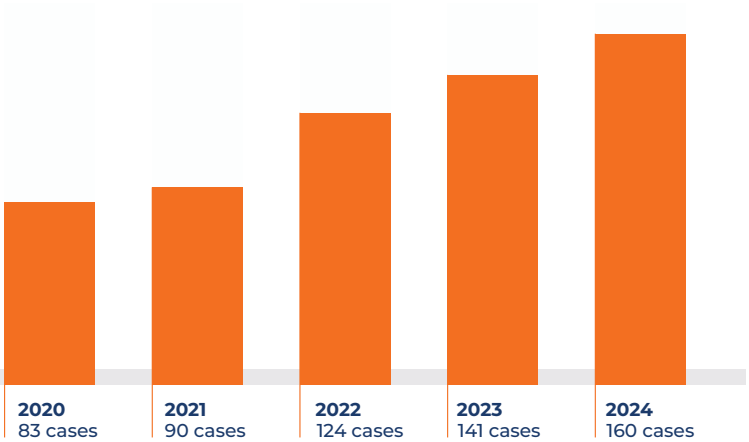
Glaucoma is a group of eye diseases that can lead to damage of the optic nerve. The optic nerve transmits visual information from the eye to the brain. Glaucoma may cause vision loss if left untreated.

Trabeculectomy is a surgical procedure performed to lower intraocular pressure in patients with glaucoma.

Patients With Trabeculectomy: Collected by TOSP Code: SL700E, SL803E, SL810L, SL811L

INTERPRETATION

The annual caseload of patients with trabeculectomy has increased steadily from 83 cases in 2020 to 160 cases in 2024, almost doubling over the past five years.



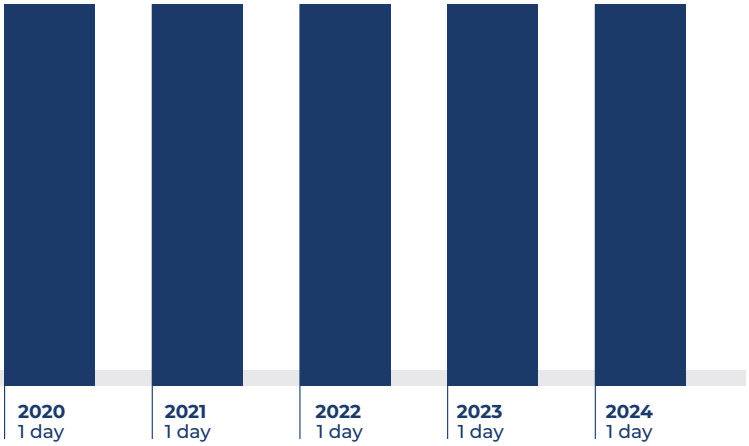
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

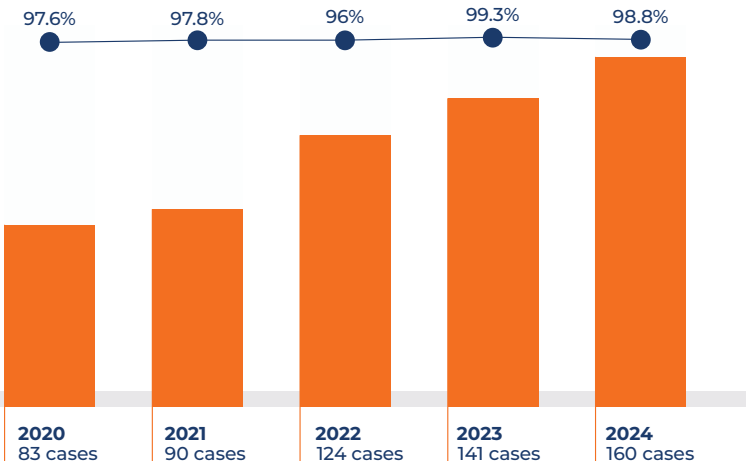
The median Length of Stay was 1 day. This has remained stable over the past five years.



No Day Surgery Turned Inpatient

DEFINITIONS

Patients should not be admitted for inpatient care during a Day Surgery episode.



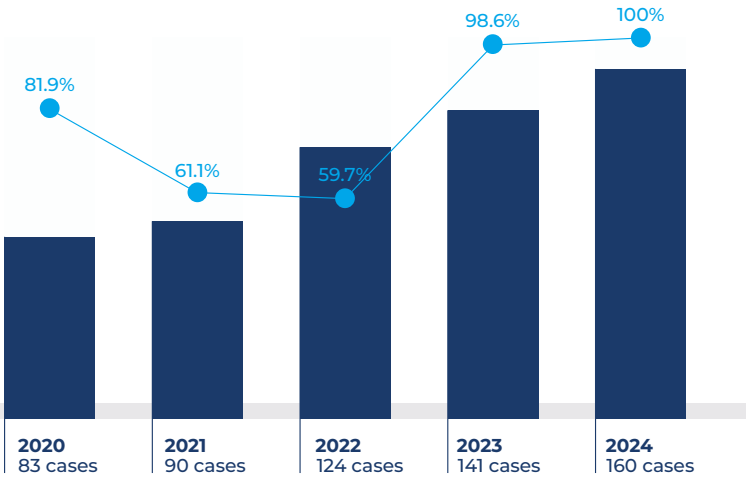
INTERPRETATION

The percentage of day surgery who did not require an inpatient stay, remained high at above 96%, over the past five years.

Complied with General Anaesthesia Requirements

DEFINITIONS

Patients were not given general anaesthesia during the procedure.



INTERPRETATION

The rate of compliance with general anaesthesia requirements dipped to 59.7% in 2022, before improving significantly to reach 100% in 2024.

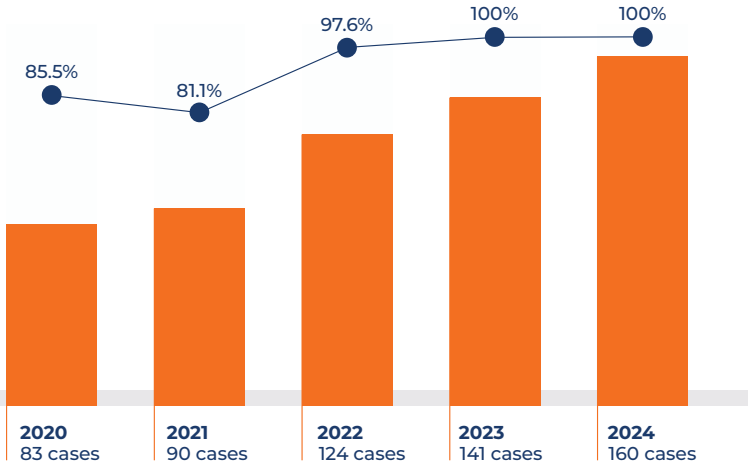
No Second Surgical Intervention

DEFINITIONS

Patients should not be undergoing a second trabeculectomy surgery within one year of surgery.

INTERPRETATION

The percentage of patients who did not require a second surgical intervention has increased from 85.5% in 2020 to 100% in 2023 and 2024, showing an improvement over the past five years.



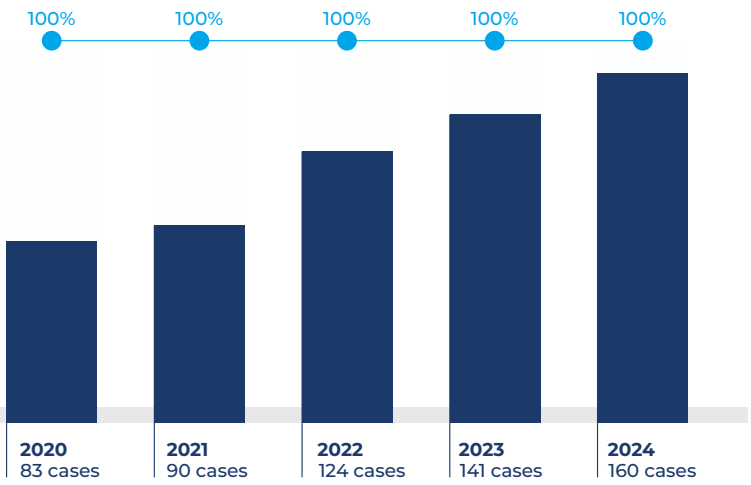
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause

INTERPRETATION

There were no patients who required a return to OT within 30 days over the past five years.



Orthopaedic Surgery

Diabetic Foot Ulcer

Hip Fracture

Total Knee Replacement

Total Hip Replacement

Diabetic Foot Ulcer

Number of Patients with Diabetic Foot Ulcer (DFU)

DEFINITIONS

Diabetics Foot Ulcer:
A diabetic ulcer is an open sore or wound resulting from poor circulation or lack of sensation due to nerve damage caused by elevated blood glucose levels.

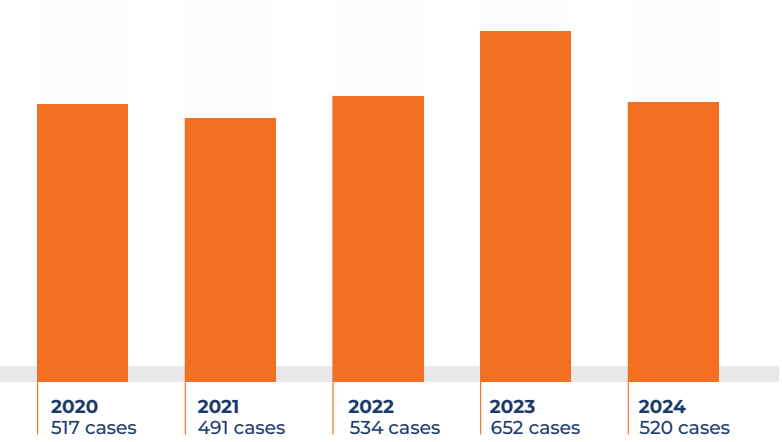
The legs and feet are most at risk for these ulcers. Diabetes makes it hard for the body to heal itself, increasing the risk of wounds becoming chronic and raising the risk of infection.

Significantly, nonhealing diabetic ulcers result in a large number of amputations in Singapore. About two major limb amputations are carried out daily to remove lower limbs affected by diabetes-related ulcers or gangrene. *(Source: Health Hub SG, Diabetic Foot Ulcer: Symptoms and Treatment)*

Patients With Diabetic Foot Ulcer:
Collected by
1) ICD-10 diagnosis codes: E10.52, E10.73, E11.52, E11.73, E13.52, E13.73, E14.52, E14.73
2) Exclusion criteria: upper limb ulcer by TOSP codes LB702U, SB701U, SB702U, SB803U, SB805U, SB807U, SB823B, SB848M

INTERPRETATION

The annual caseload of Diabetic Foot Ulcer cases has remained fairly stable at around 500 cases yearly, with a peak to 652 cases in 2023.



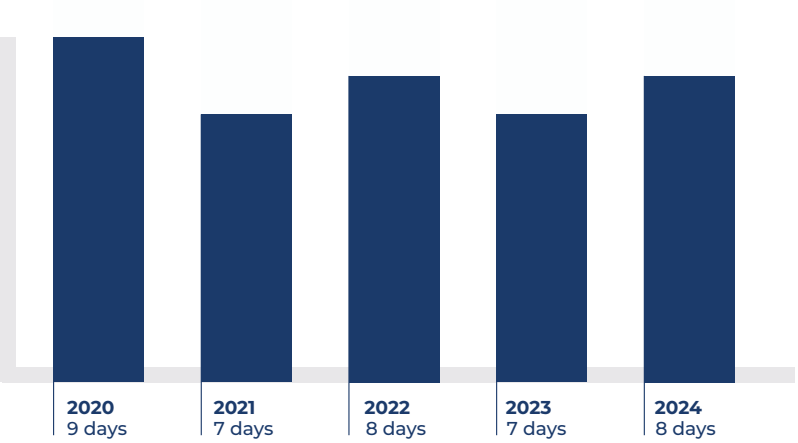
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

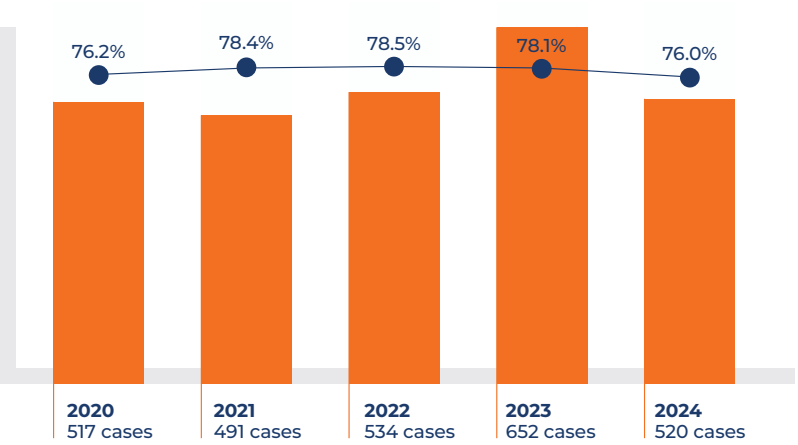
INTERPRETATION

The median Length of Stay has decreased from 9 days to 7-8 days, over the past five years.



INTERPRETATION

The percentage of patients with Length of Stay within target (≤15 days for non-ESRF, ≤26 days for ESRF) has remained relatively stable over the past five years, ranging between 76% and 79%, with a slight decline noted from 78.1% in 2023 to 76.0% in 2024.



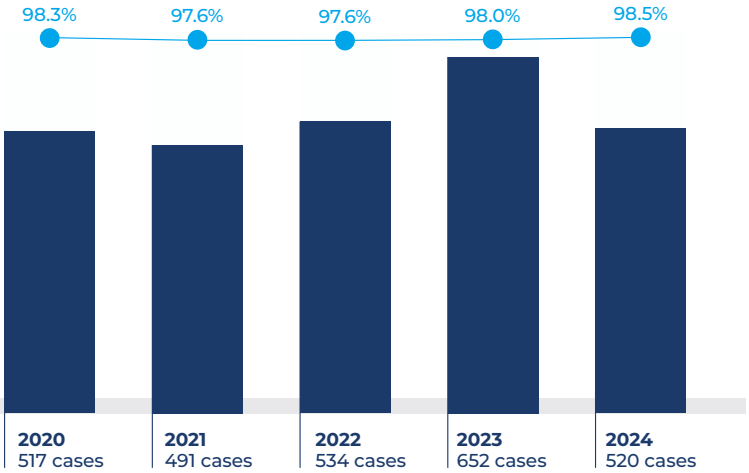
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at above 97% over the past five years.



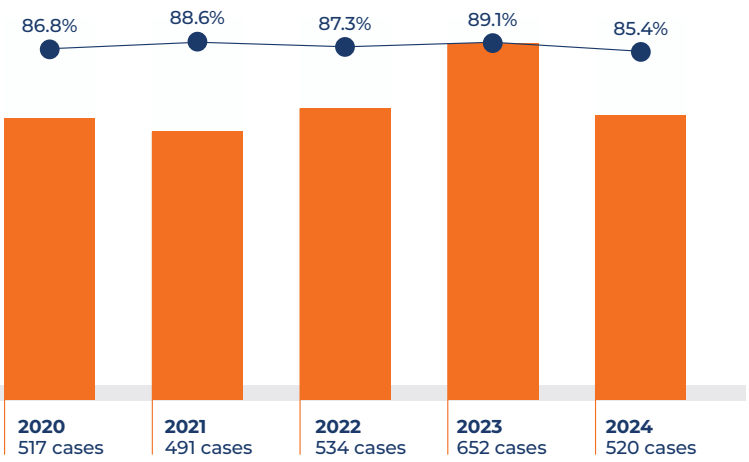
No Major Amputation

DEFINITIONS

Patients should not have major amputation of limbs, identified by TOSP codes.

INTERPRETATION

The percentage of patients who did not require a major amputation has remained stable at above 85% over the past five years.



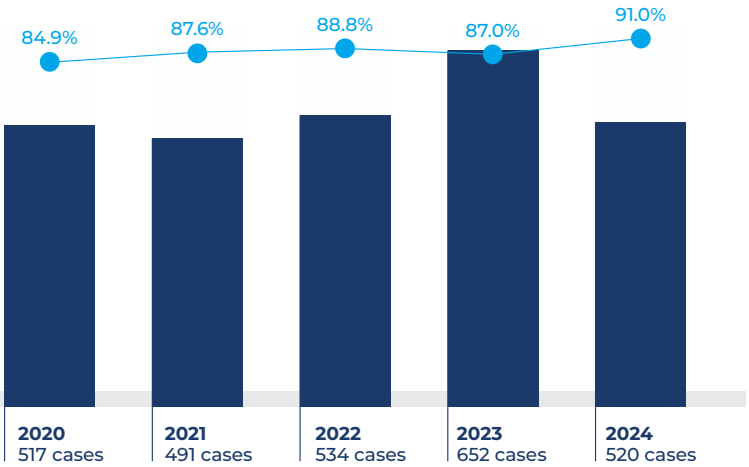
No DFU Related Readmission Within 30 Days (Primary Diagnosis)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department within 30 days following their initial discharge due to DFU by primary diagnosis codes. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day DFU-related readmission-free rate has improved from 84.9% in 2020 to 91.0% in 2024, with a slight dip noted in 2023.



Hip Fracture

Number of Patients with Hip Fracture

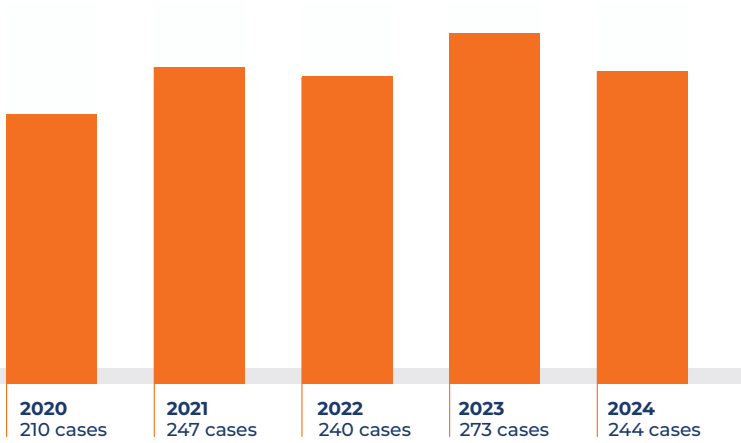
DEFINITIONS

A hip fracture refers to a break in the proximal femur, often affecting the neck or intertrochanteric region. Less commonly, the subtrochanteric region may be involved as well. It is often the result of trauma, such as a fall, and in the elderly, is often associated with osteoporosis.

Patients With Hip Fracture: Collected by DRG codes:
Complex case: I03A, I8A
Simple case: I03B, I08B
Admission Type Description: Emergency
Include cases of patients age > 60 years old
Exclude cases with Primary Diagnosis: C795 Secondary malignant neoplasm of bone and bone marrow

INTERPRETATION

The annual caseload of hip fracture cases has increased from 210 cases in 2020 to 244 cases in 2024, remaining fairly stable within a range of 210 to 273 cases over the past five years.



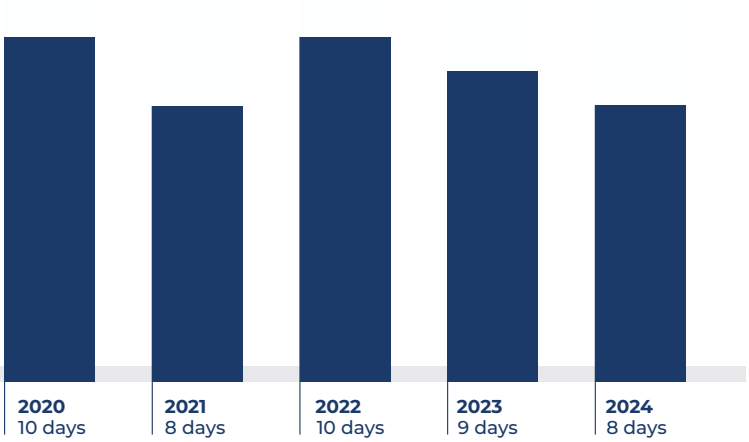
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay has remained relatively stable, ranging between 8 and 10 days over the past five years, with a slight improvement noted from 10 days in 2022 to 8 days in 2024.



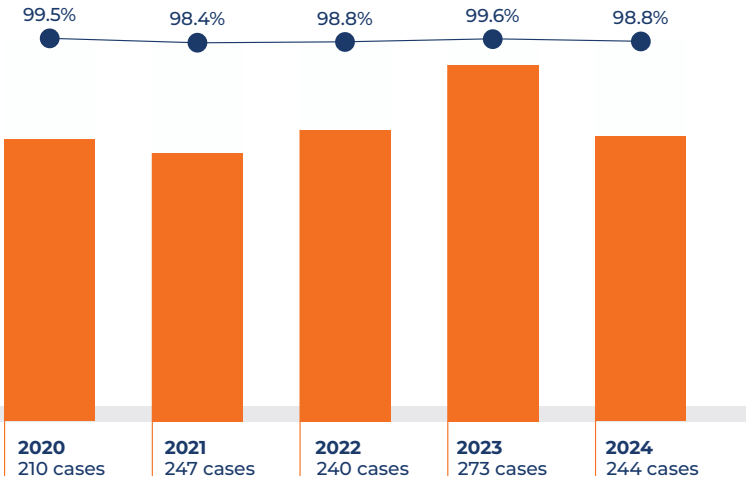
Survival Rate within 30 Days from Admission (A&E)

DEFINITIONS

The proportion of patients who survive within 30 days from admission in the emergency department, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The 30-day survival rate from A&E admission has remained relatively constant, holding at above 98%, over the past five years.



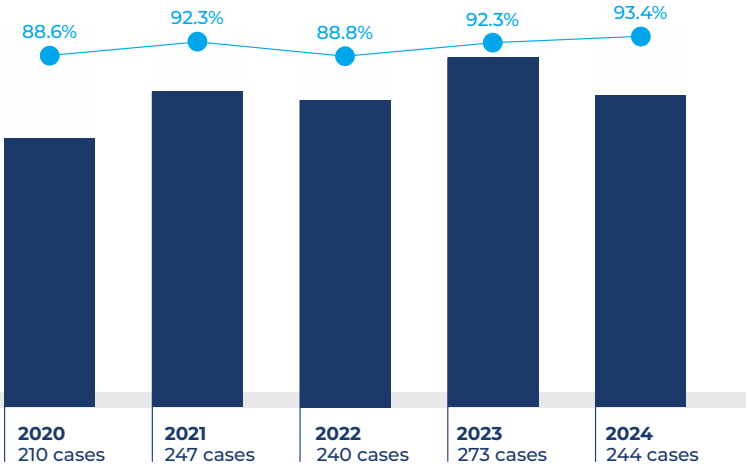
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free has remained consistent at above 88%, with an improvement to 93.4% in 2024, over the past five years.



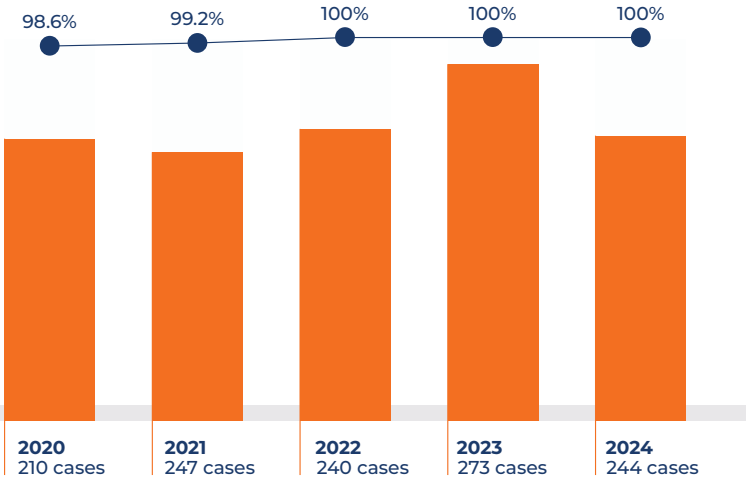
No Return to Operation Theatre (OT) within 90 Days (Hip Related)

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 90 days from the initial discharge due to hip related cause.

INTERPRETATION

The 90-day hip-related return to OT rate has consistently remained below 2%, over the past five years.



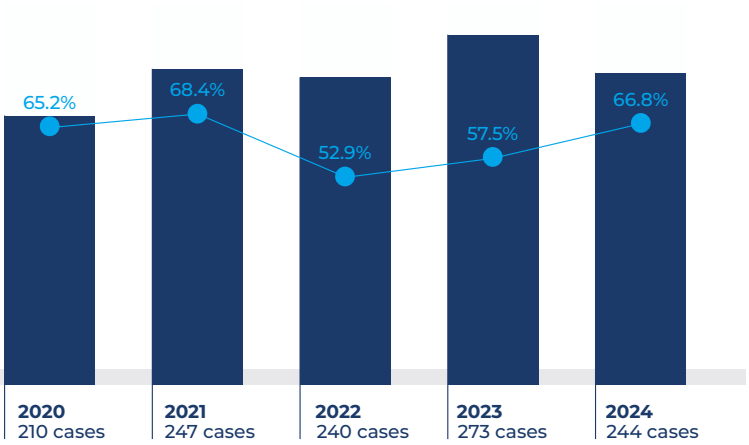
Compliance of Process and Medication

DEFINITIONS

Operation Done Within 48 Hours of Presentation At ED:
The time stamp of starting operation minus the time stamp of registration at A&E should be ≤ 48 hours.

INTERPRETATION

The percentage of patients who had their operation done within 48 hours of presentation at ED declined from 68.4% in 2021 to 52.9% in 2022, before improving to 66.8% in 2024.

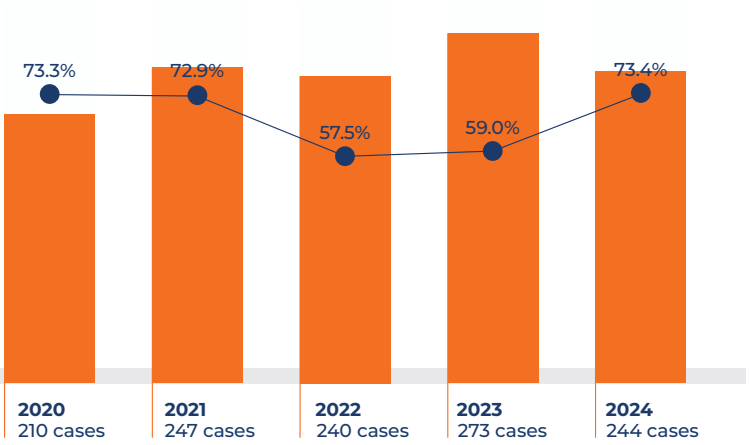


DEFINITIONS

Operation Done Within ≤48 Hours of Admission:
Operation starts time stamp minus (-) the point of admission should be ≤ 48 hours.

INTERPRETATION

The percentage of patients who had their operation done within 48 hours of admission declined from 72.9% in 2021 to 57.5% in 2022, before bouncing back to 73.4% in 2024.



DEFINITIONS

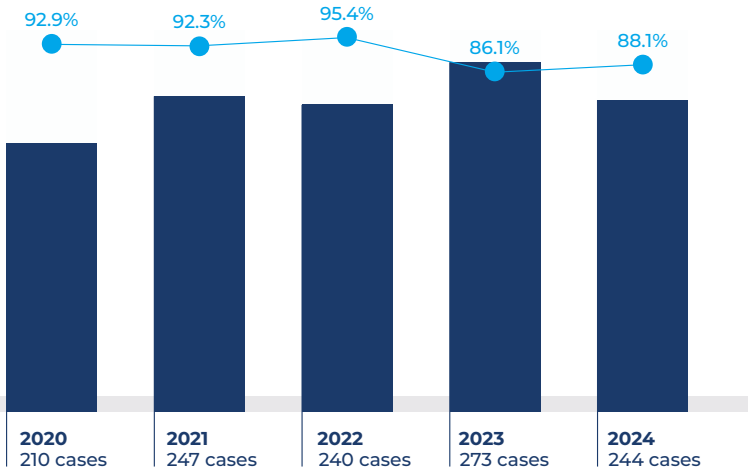
VTE Prophylaxis Ordered:
Patients should have taken VTE prophylaxis during their admission stay in the hospital.

VTE Prophylaxis includes Calf pumps, Plavix (Clopidogrel), Warfarin, Clexane (Enoxaparin), Aspirin, Anti DVT, Stocking, Heparin and Rivaroxaban.

INTERPRETATION

The percentage of patients who received VTE prophylaxis during admission declined from 95.4% in 2022 to 86.1% in 2023, before a slight recovery to 88.1% in 2024.*

**Operations and pharmacy teams have been notified to verify that VTE bill codes are properly charged.*

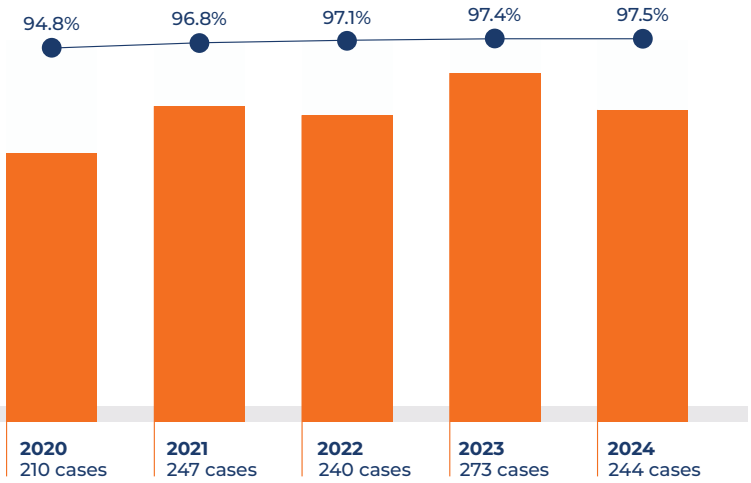


DEFINITIONS

Osteoporosis Assessment:
Patients should receive Osteoporosis Assessment, including assessment on Vitamin D, Calcium, Bone Mineral Density.

INTERPRETATION

The percentage of patients who received Osteoporosis Assessment during admission has improved consistently, from 94.8% in 2020 to 97.5% in 2024.



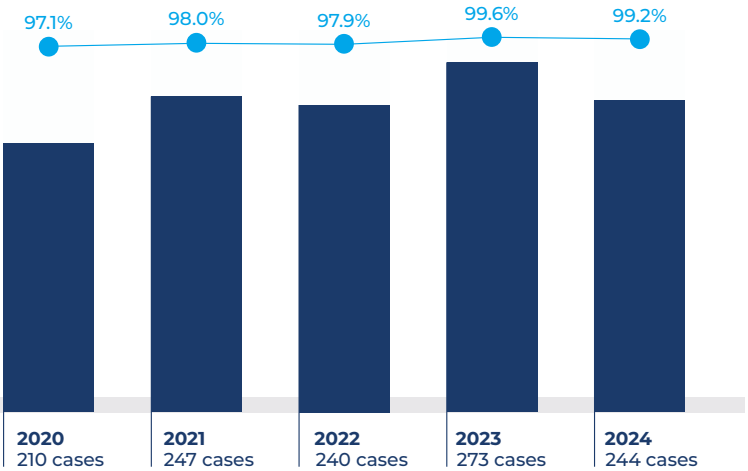
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at above 97% over the past five years.



Total Knee Replacement

Number of Patients with Total Knee Replacement

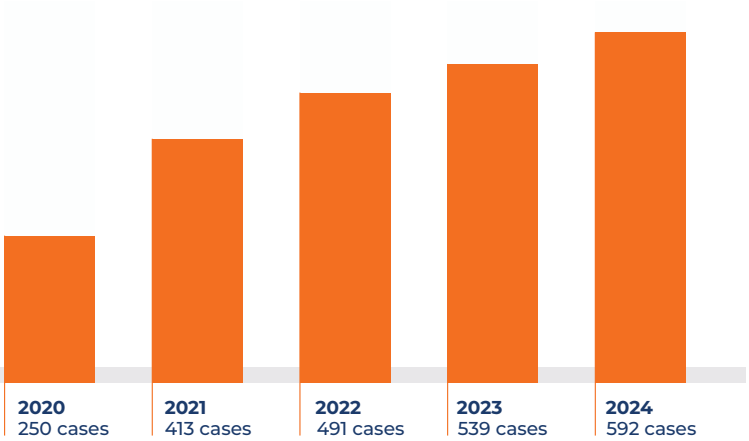
DEFINITIONS

Total Knee Replacement is the surgical intervention to replace damaged joint of knee with artificial component to relieve pain and improve knee functionality.

Patients With Total Knee Replacement:
Collected by MOH TOSP Code (Single or multiple TOSPs):
SB810K, SB716K

INTERPRETATION

The annual caseload of Total Knee Replacement has grown steadily from 250 cases in 2020 to 592 cases in 2024, more than doubling over the past five years.



From Admission Length of Stay

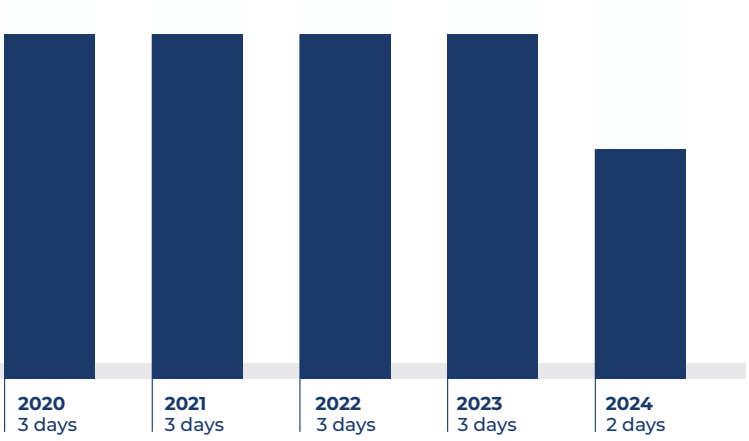
DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for TKR remained stable at 3 days from 2020 to 2023, before decreasing to 2 days in 2024.*

**This reduction reflects a de-centralization effort in collaboration with NUHS@Home and St. Luke's Hospital.*



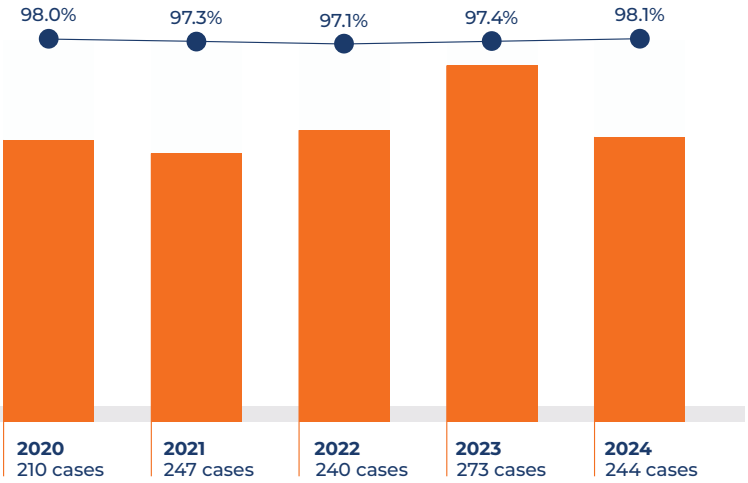
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistent at above 97%, over the past five years.



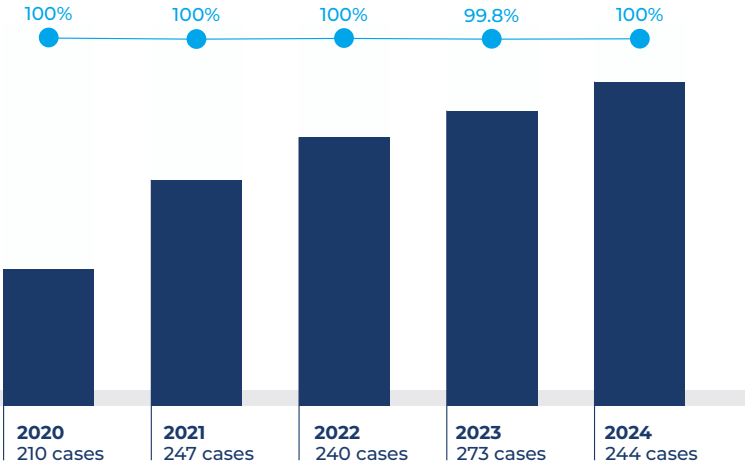
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has held at almost 100% consistently, over the past five years.



No Complication during admission or 30 days from the initial discharge

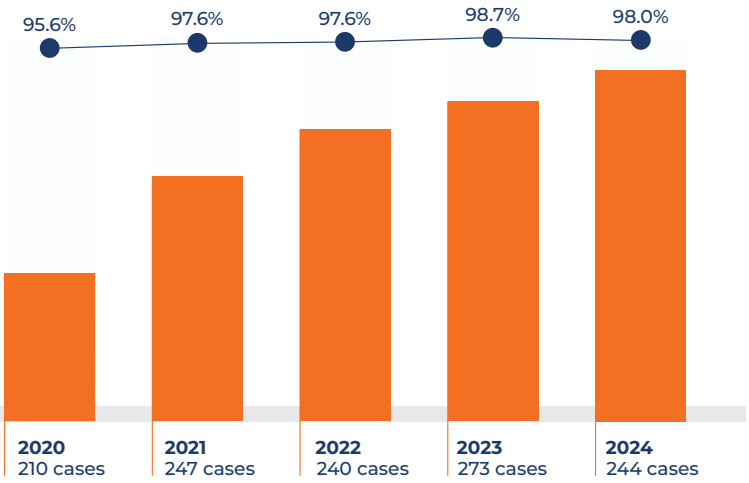
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The percentage of patients who had no post-op complications within 30 days has increased from 95.6% in 2020 to 98.0% in 2024, following a consistently increasing trend over the past five years.



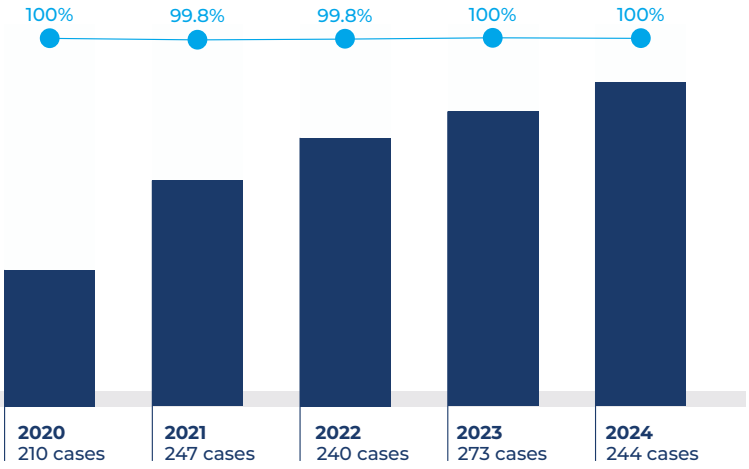
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained below 1%, over the past five years.



Total Hip Replacement

Number of Patients with Total Hip Replacement

DEFINITIONS

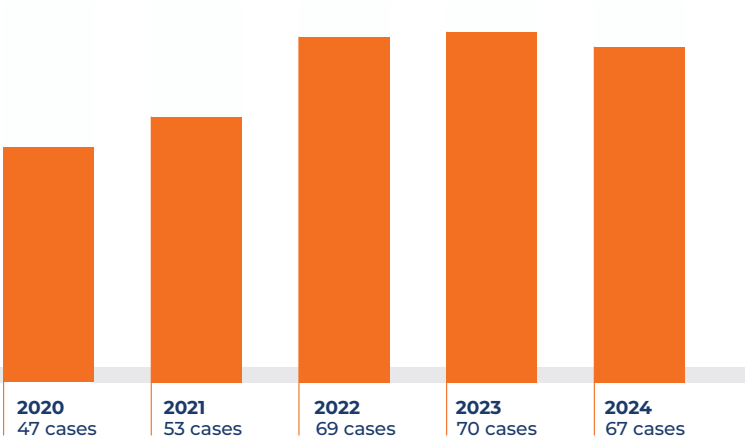
Total Hip Replacement surgery is done to remove damaged bones and cartilage and replaced with prosthetic components. It is done to relieve a painful hip joint, thus making walking easier.

Patients With Total Hip Replacement:

(A) By MOH TOSP Code (Single or multiple TOSPs): SB839H, SB723H
(B) Elective cases only (by "Priority" of TOSP Surgical codes)
(C) Exclusion criteria: Cases with any diagnosis of hip fracture (S720x, S721x, S722x); Aged < 18 years

INTERPRETATION

The annual caseload of Total Hip Replacement cases increased from 47 cases in 2020 to 69 cases in 2022, before stabilizing at around 65-70 cases per year.



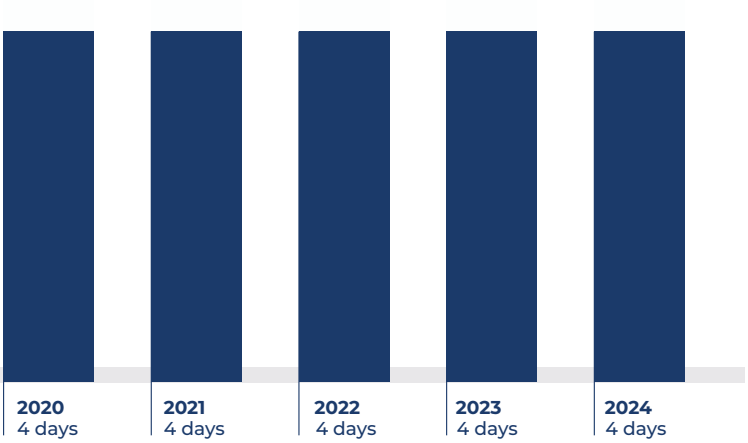
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay has remained consistent at 4 days, over the past five years.



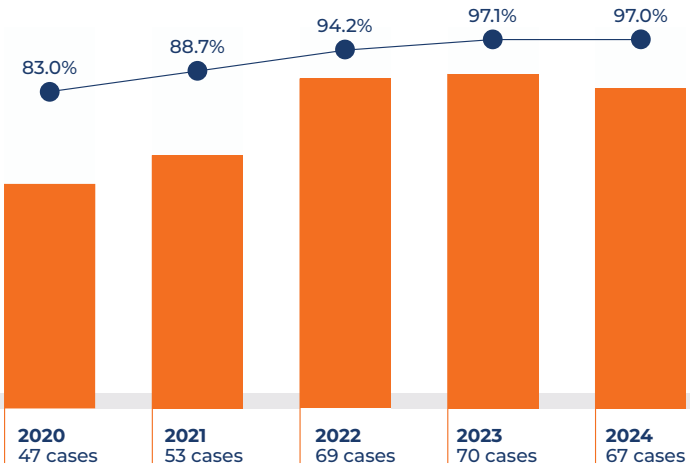
Appropriateness of Care

DEFINITIONS

Dvt Prophylaxis Within Episode:
DVT Prophylaxis is administered for patient during the hospital admission

INTERPRETATION

The percentage of patients who received DVT prophylaxis during their admission has increased consistently year-on-year over the past five years, from 83.0% in 2020 to 97.0% in 2024.



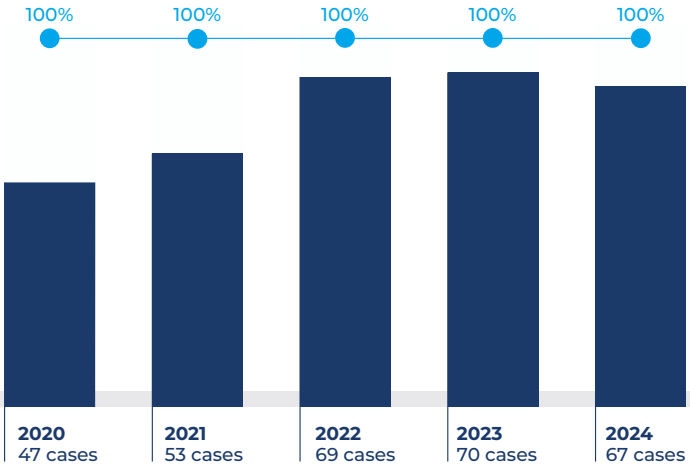
In-Hospital Survival

DEFINITIONS

Survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The survival rate of patients has held at 100% over the past five years.



No Complication during admission or 30 days from the initial discharge

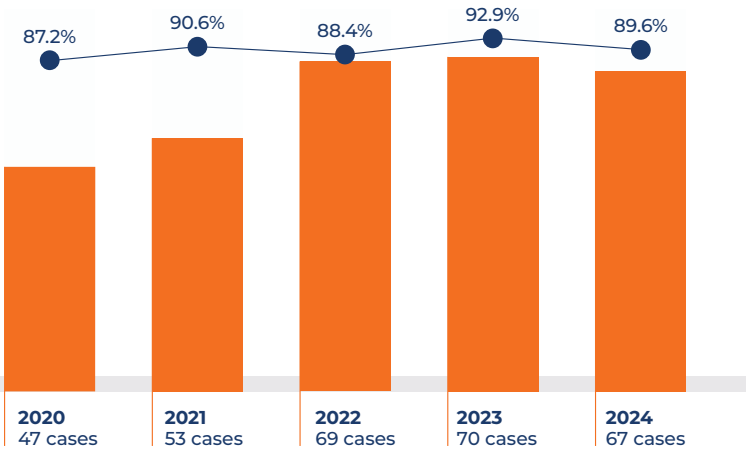
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The percentage of patients who had no post-op complications within 30 days has remained relatively stable, ranging between 87.2% and 92.9%, over the past five years.



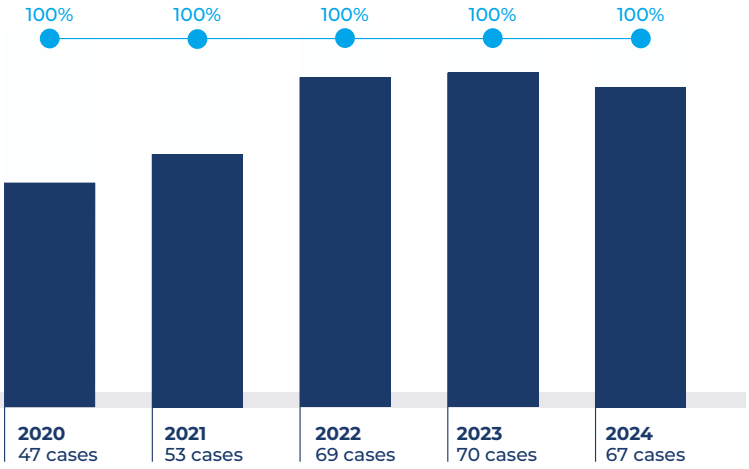
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

There were no patients who required a return to OT within 30 days over the past five years.



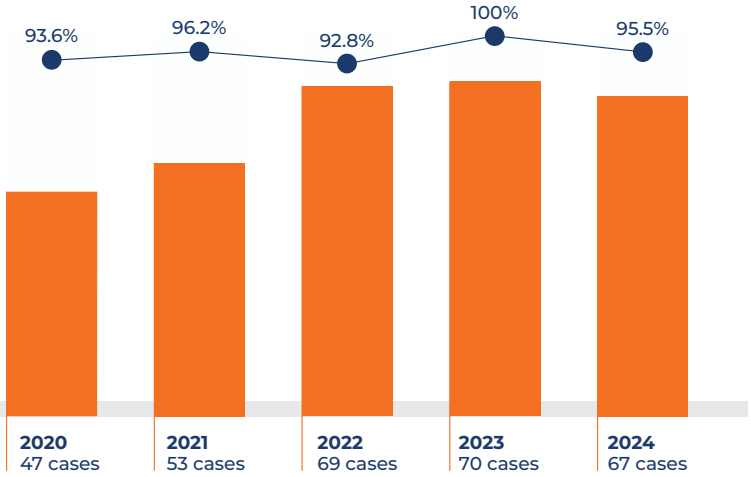
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate has remained consistent at above 92%, over the past five years.



Paediatrics

Bronchiolitis (Child, < 24 months)

Upper Respiratory Tract Infection (Child)

Asthma (Child)

Tonsillectomy (Child)

Circumcision (Child)

Very Low Birth Weight Babies

Bronchiolitis (Child, < 24 months)

Number of Patients with Bronchiolitis (Child, < 24 months)

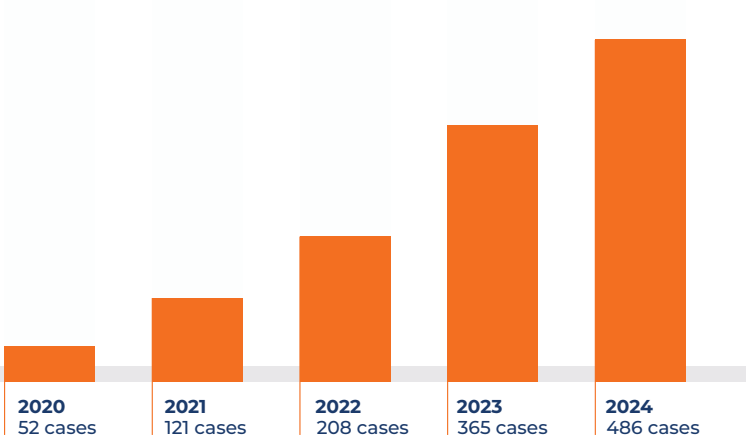
DEFINITIONS

Bronchiolitis is a disorder commonly caused by viral lower respiratory tract infection in infants. It is the most common cause of hospitalization among infants during the first 12 months of life. The disease is usually self-limiting, and treatment in hospital is mainly based around supportive care with oxygen and hydration.

Patients With Bronchiolitis (Child, <24 Months):
Collected by: Diagnosis Code Group J21
Dept NSPMPM Paediatrics
Inpatient cases only
Treatment Category ≠ ICU/HD
Patient Age on Admission < 24 months

INTERPRETATION

The annual caseload of bronchiolitis in paediatrics has grown substantially from 52 cases in 2020 to 486 cases in 2024, nearly a tenfold increase over the past five years.



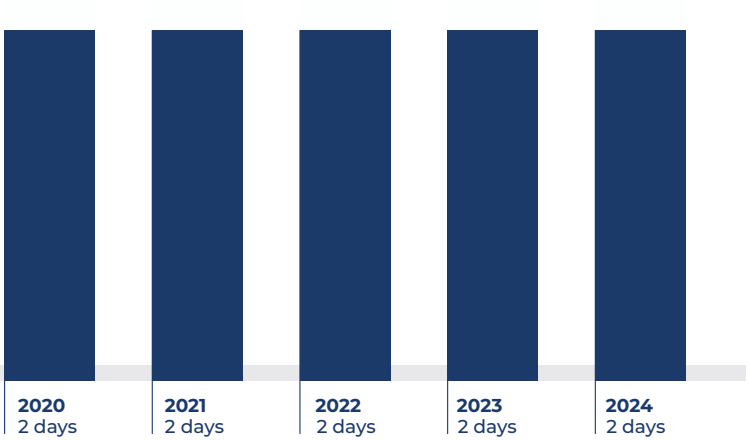
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for bronchiolitis was 2 days. This has remained stable over the past five years.



Appropriateness of Care

DEFINITIONS

NO CHEST XRAY:
No Chest X-Ray is done for patient during the hospital admission

NO BLOOD CULTURES:
No Blood Culture is done for patient during the hospital admission

NO FULL BLOOD COUNT:
No Full Blood Count is done for patient during the hospital admission

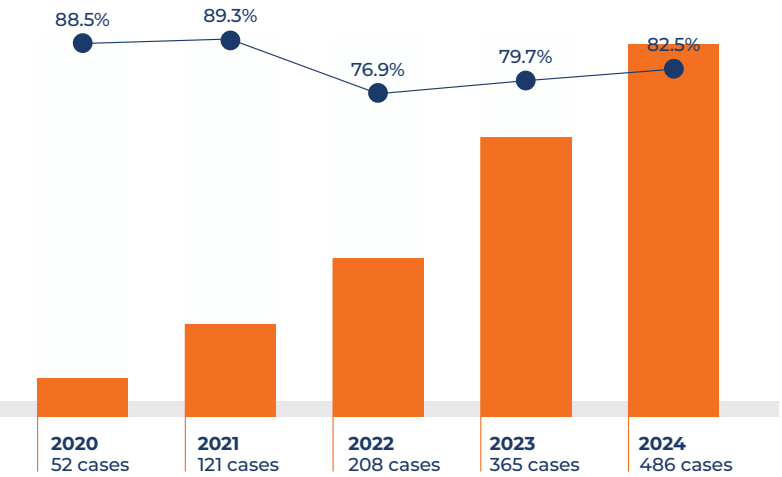
NO METERED DOSE INHALER / SPACE CHAMBER:
No Metered Dose Inhaler / Space Chamber is given for patient during the hospital admission

NO ANTIBIOTICS:
No Antibiotic is given for patient during the hospital admission

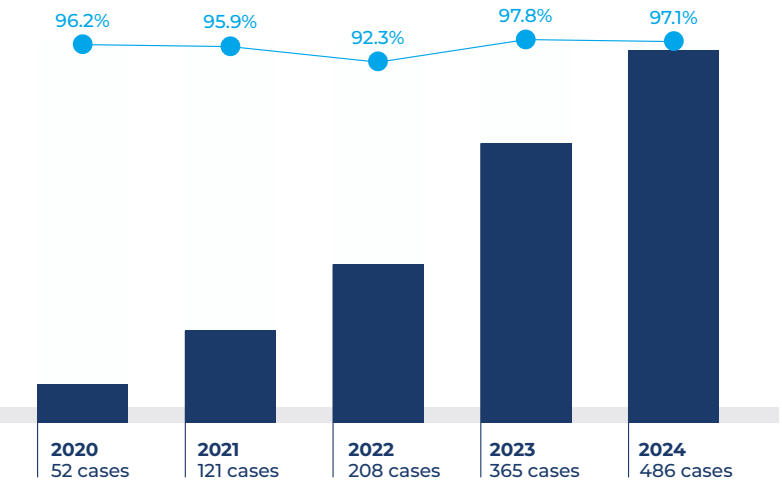
NO MONTELUKAST:
No Montelukast is given for patient during the hospital admission

INTERPRETATION

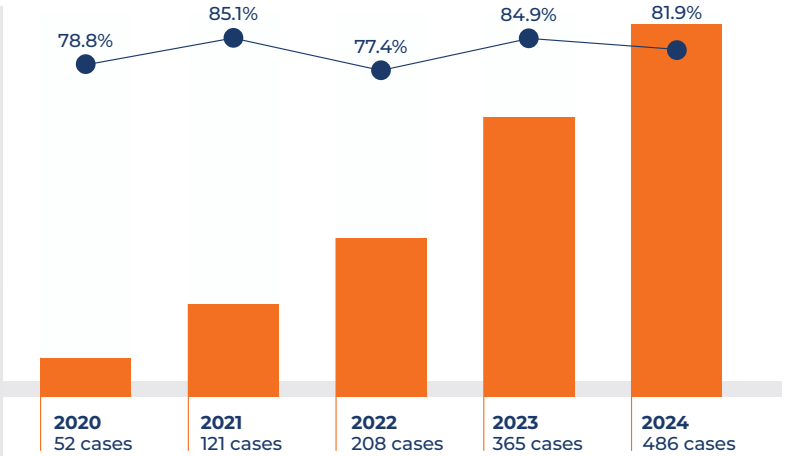
The percentage of patients not subjected to unnecessary Chest X-Ray dipped to 76.9% in 2022, before improving to 82.5% in 2024.



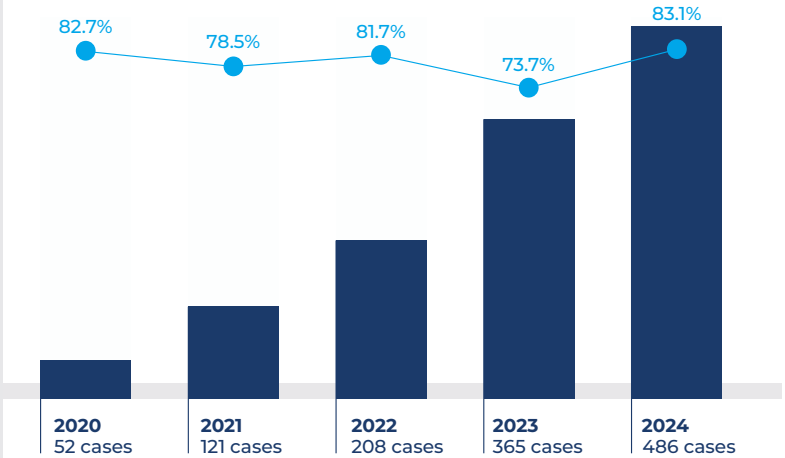
The percentage of patients not subjected to unnecessary Blood Cultures has remained relatively stable, ranging between 92.3% and 97.8% over the past five years.



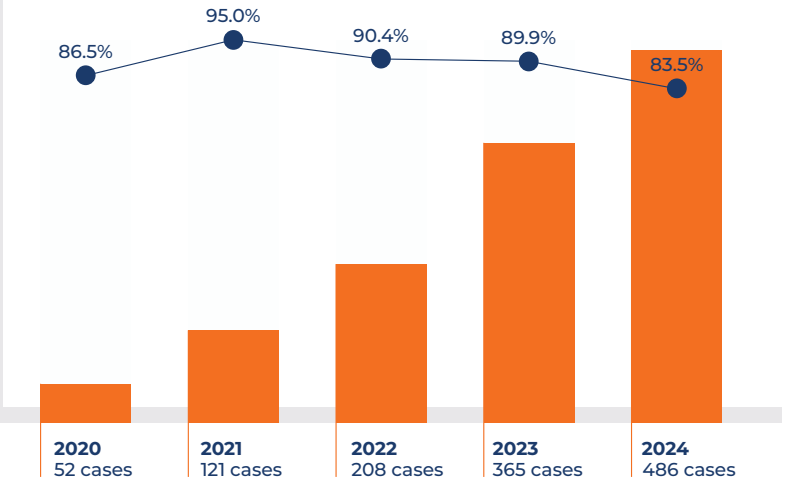
The percentage of patients not subjected to unnecessary Full Blood Count has fluctuated between 77.4% and 85.1%, over the past five years.



The percentage of patients not subjected to unnecessary Metered Dose Inhaler / Space Chamber use declined to 73.7% in 2023, before recovering to 83.1% in 2024.

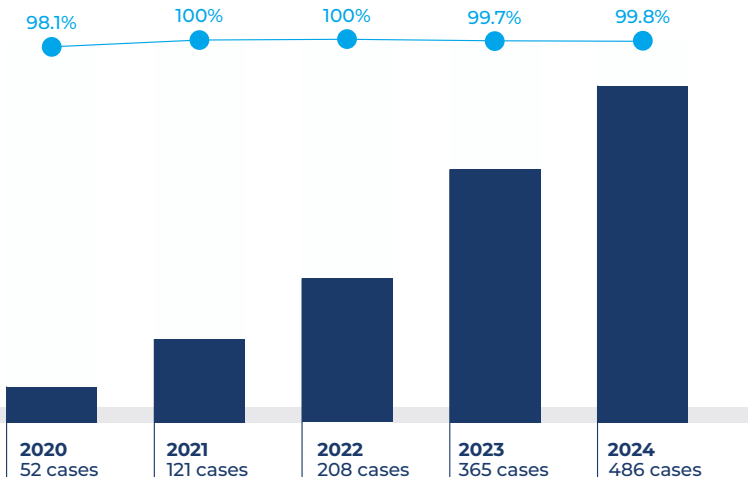


The percentage of patients not subjected to unnecessary Antibiotics declined from a peak of 95.0% in 2021 to 83.5% in 2024.



The percentage of patients not subjected to unnecessary Montelukast use has remained consistently high, at 98.1% or above over the past five years.

This fluctuation across indicators may be attributed to variability within the cohort, such as miscoding of hyperactive airway disease or pneumonia as bronchiolitis.



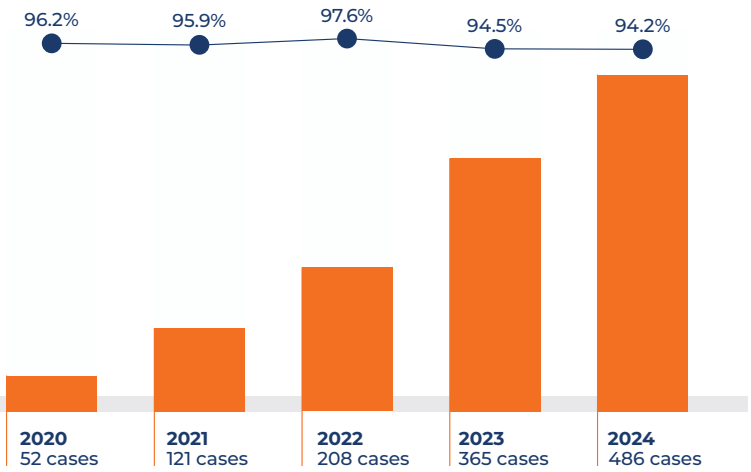
No Emergency Readmission within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted via emergency to the hospital due to any cause within 30 days from the initial discharge.

INTERPRETATION

The 30-day emergency readmission rate has remained stable at around 5%, over the past five years.



Upper Respiratory Tract Infection (Child)

Number of Patients with URTI (Child)

DEFINITIONS

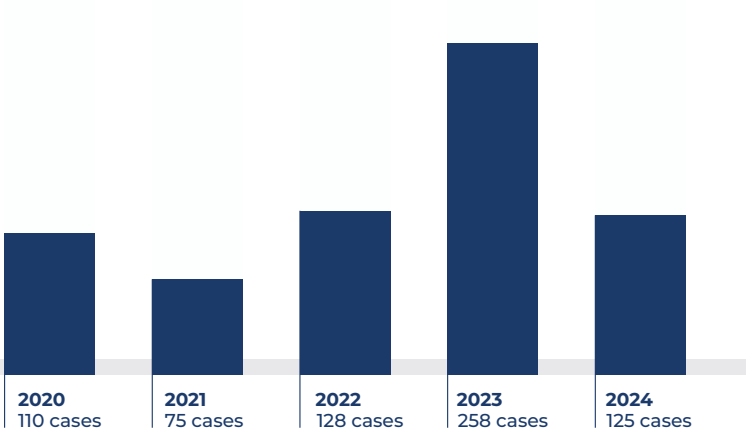
An Upper Respiratory Tract Infection (URTI) In Children is a common infection affecting the nose, throat, and airways, often caused by viruses.

PATIENTS WITH URTI (CHILD):

Collected by: Primary Diagnosis – J060, J068 or J069
Dept. NSPMPM Paediatric only
Accommodation Category ≠ ICU
Patient Age on Admission (Months) ≥ 3 months
Exclude Patients admitted to Ward 45, Ward 46 and Ward 46A
Exclude Patients discharged from Ward 45 and Ward 46
For report purpose: Exclude Patient with B972 Diagnosis

INTERPRETATION

The annual caseload of URTI in children has generally ranged between 75 and 128 cases per year over the past five years, apart from a notable spike to 258 cases in 2023.



From Admission Length of Stay

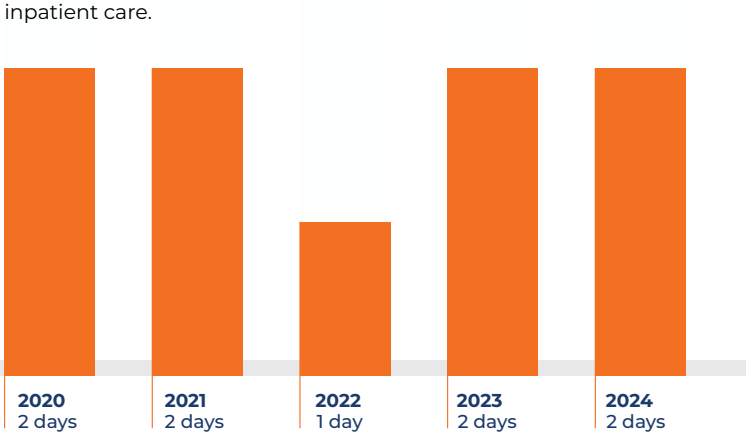
DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for URTI was 2 days. This has remained stable over the past five years.

Most URTI admissions are for observation of fever trends, feeding, and supportive care.



No Emergency Readmission within 15 Days (Same Cause)

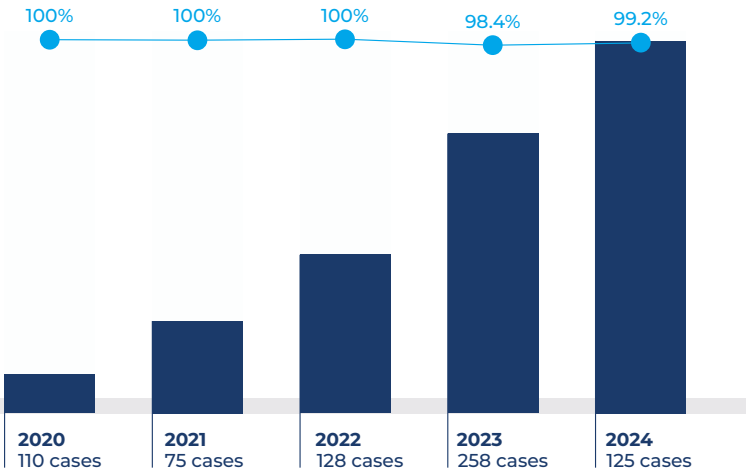
DEFINITIONS

Patients should not be readmitted via emergency to the hospital due to the same cause within 15 days from the initial discharge.

INTERPRETATION

The 15-day related-cause emergency readmission-free rate has remained consistent, above 98%, over the past five years.

Most URTI cases are self-limiting.

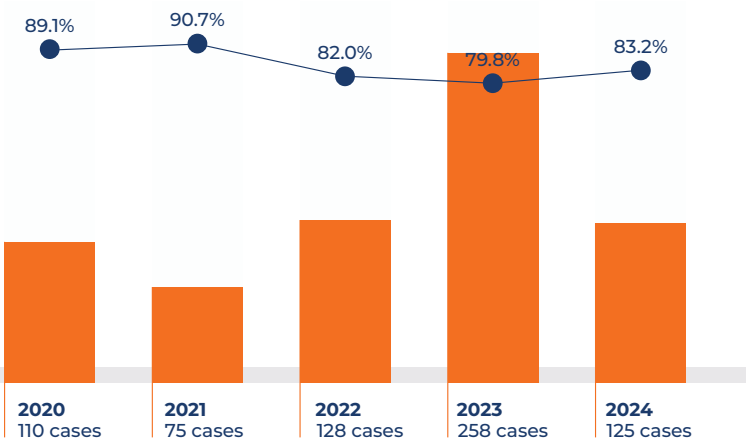


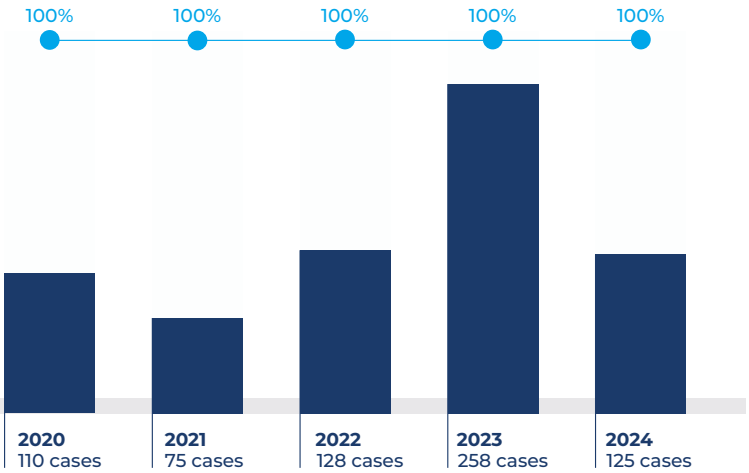
Appropriateness of Care

DEFINITIONS

No Antibiotic Used:
No Antibiotic is given for patient during the hospital admission

No IV Hydration Ordered:
No IV Hydration is given for patient during the hospital admission





INTERPRETATION

The percentage of patients not treated with antibiotics during admission declined from a peak of 90.7% in 2021 to a low of 79.6% in 2023, before recovering to 83.2% in 2024.

The percentage of patients not treated with IV Hydration during admission has remained at 100% consistently over the past five years.

In the case of self-limiting/ viral infections, antibiotics are deemed unnecessary treatment. IV Hydration is not normally given to URTI patients unless they are also diagnosed with dehydration.

Asthma (Child)

Number of Patients with Asthma (Child)

DEFINITIONS

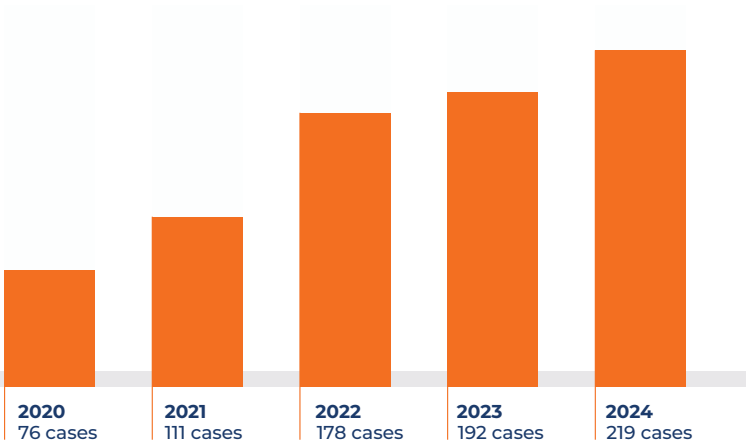
Asthma in Children is a chronic lung condition where the airways become inflamed and narrowed, making it difficult to breathe.

Patients With Asthma (Child):
Collected by
1) J45*, J98* and R062
2) 3 - 18 years old
3) Inpatient only

INTERPRETATION

The annual caseload of paediatric asthma has increased steadily from 76 cases in 2020 to 219 cases in 2024, nearly a threefold increase over the past five years.

Asthma is one of the common chronic conditions among children in Singapore.



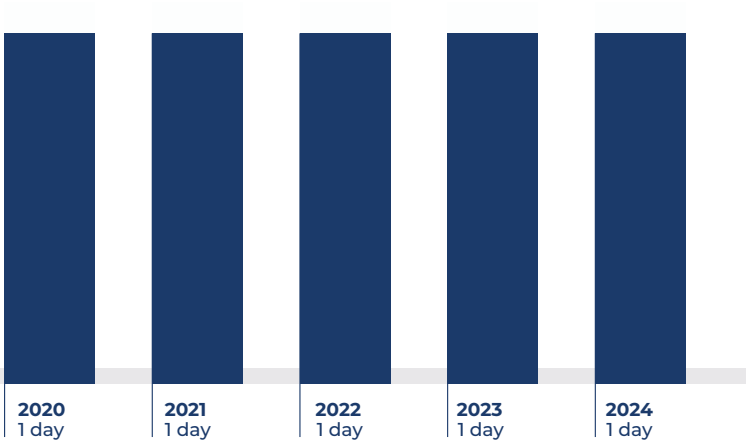
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for asthma was 1 day. This has remained stable over the past five years.



Appropriateness of Care

DEFINITIONS

No X-Ray:
No X-Ray is done for patient during the hospital admission

No Montelukast:
No Montelukast is given for patient during the hospital admission

No Viral Swab:
No Viral Swab is done for patient during the hospital admission

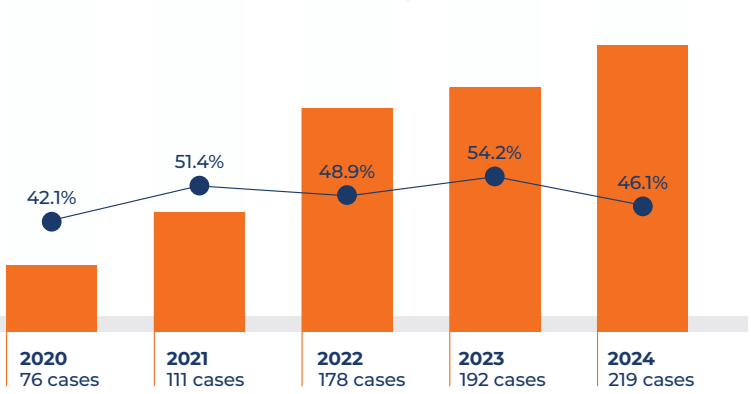
INTERPRETATION

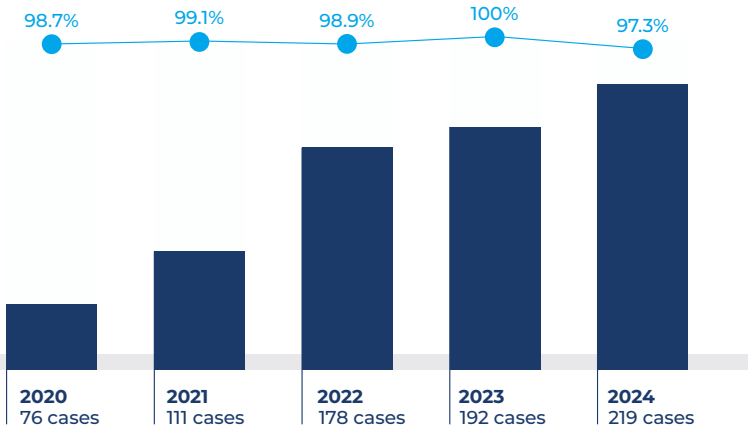
The percentage of patients not subjected to X-Rays during admission has fluctuated between 42.1% and 54.2%, over the past five years.

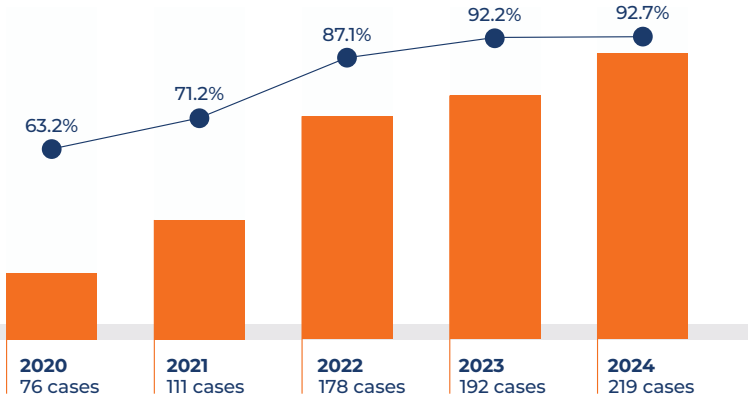
The percentage of patients not treated with Montelukast has remained consistently high, at 97.3% or above over the past five years.

The percentage of patients not subjected to a Viral Swab has improved from 63.2% in 2020 to 92.7% in 2024.

Roughly half of asthma patients undergo chest radiography, reflecting the varied casemix (e.g. patients presenting with wheeze for the first time). Montelukast use has stayed low and stable, prescribed to only around 3% of patients across the five years. Viral testing is not routinely done as part of asthma exacerbation management, though it may be required for patients in shared ward facilities under certain circumstances. The proportion of patients undergoing viral swab testing has fallen from around 37% in 2020 to just 7% in 2024.







Tonsillectomy (Child)

Number of Patients with Tonsillectomy (Child)

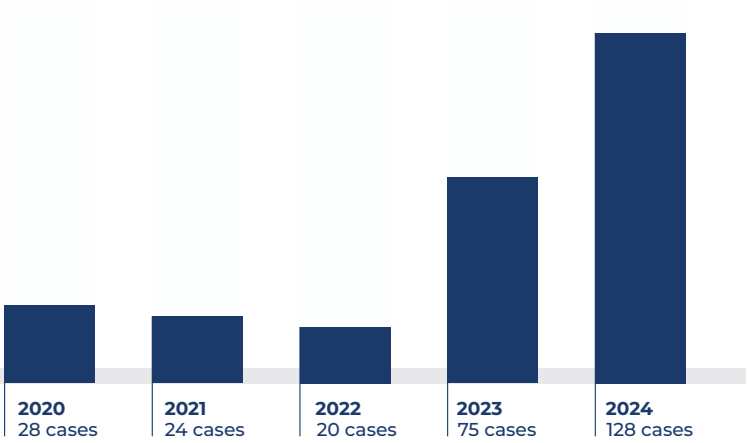
DEFINITIONS

Tonsillectomy is the surgical removal of the palatine tonsils, typically indicated for recurrent tonsillitis or obstructive sleep apnoea.

Patients With Tonsillectomy (Child):
Collected by
(A) MOH TOSP Code (Single only): SM705T & LM705T
(B) Exclusion criteria: Aged ≥ 18 years

INTERPRETATION

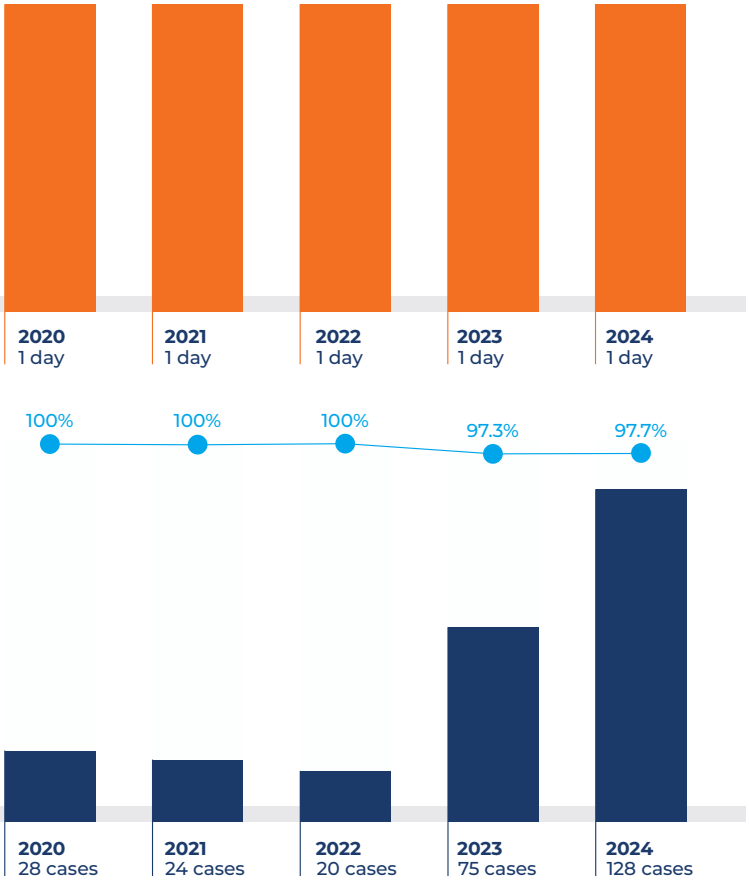
The annual caseload of paediatric tonsillectomy declined from 28 cases in 2020 to 20 cases in 2022, before rising sharply to 75 cases in 2023 and reaching a five-year high of 128 cases in 2024.



From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.



INTERPRETATION

The median Length of Stay for paediatric tonsillectomy was 1 day. This has remained stable over the past five years. The percentage of patients discharged within 1 day stayed at 100% from 2020 to 2022, before a slight decline to 97.3% in 2023 and 97.7% in 2024.

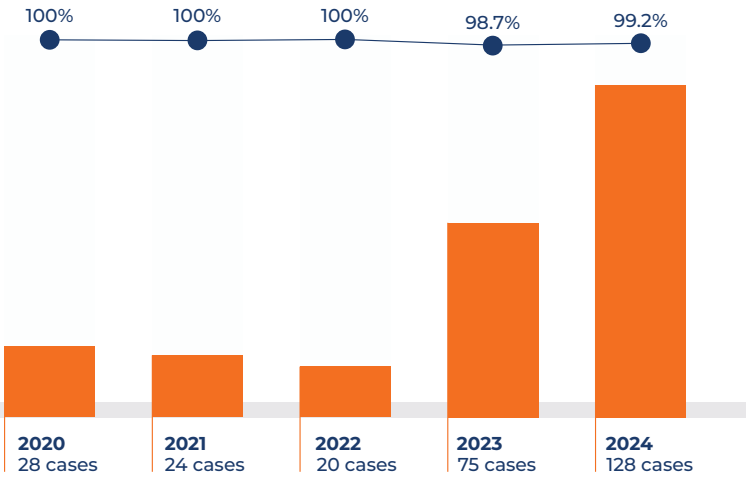
No Blood Transfusion Within 30 Days

DEFINITIONS

Patients should not receive blood transfusion within the same episode and/or 30 days from the initial discharge.

INTERPRETATION

The percentage of patients not requiring blood transfusion within 30 days remained at 100% from 2020 to 2022, before a slight decline to 98.7% in 2023 and 99.2% in 2024.



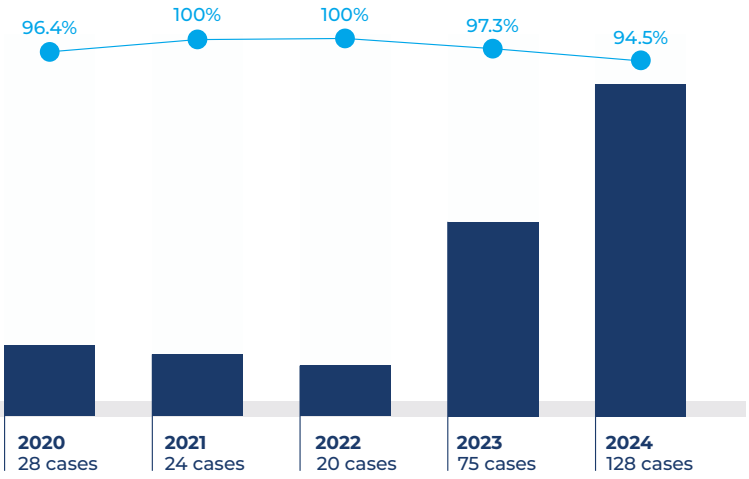
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate (all-cause) reached 100% in 2021 and 2022, before declining gradually to 97.3% in 2023 and 94.5% in 2024.



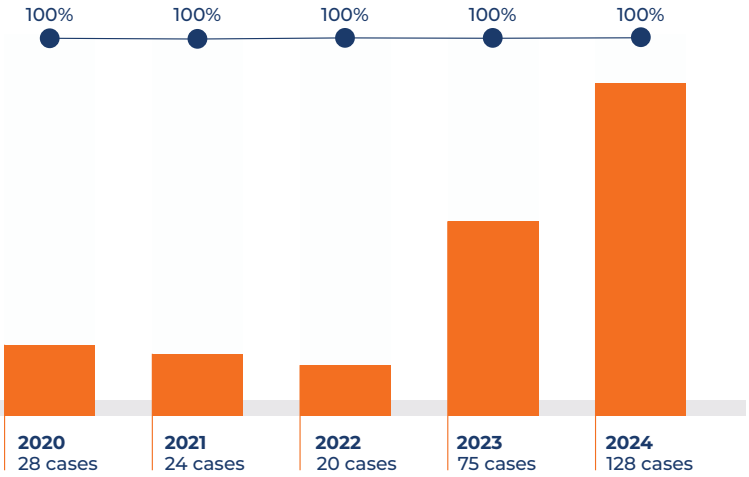
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival for paediatric tonsillectomy has held at 100%, over the past five years.



No Complication during admission or 30 days from the initial discharge

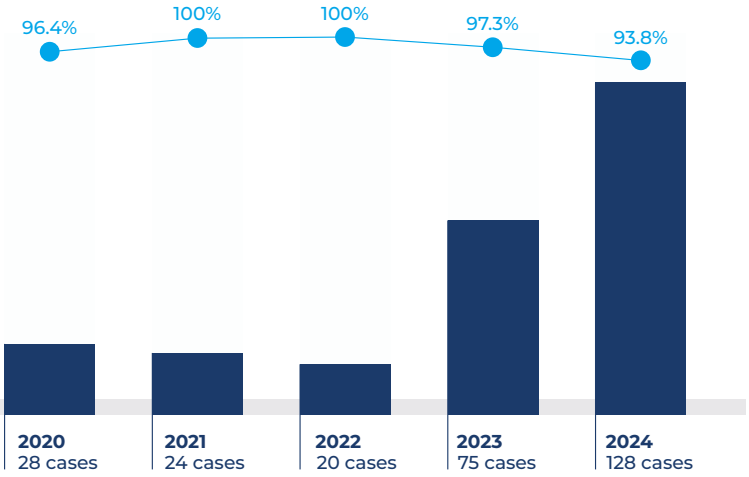
DEFINITIONS

Complication is defined as any record of secondary diagnosis during the current admission that does not present on admission, and primary diagnosis of subsequent readmissions within 30 days from the initial discharge.

Patients should not have complications within the hospital admission or within 30 days of initial discharge.

INTERPRETATION

The percentage of patients, who had no complications during admission or within 30 days of discharge, declined from 100% in 2021 and 2022 to 93.8% in 2024, following a decreasing trend over the past two years.



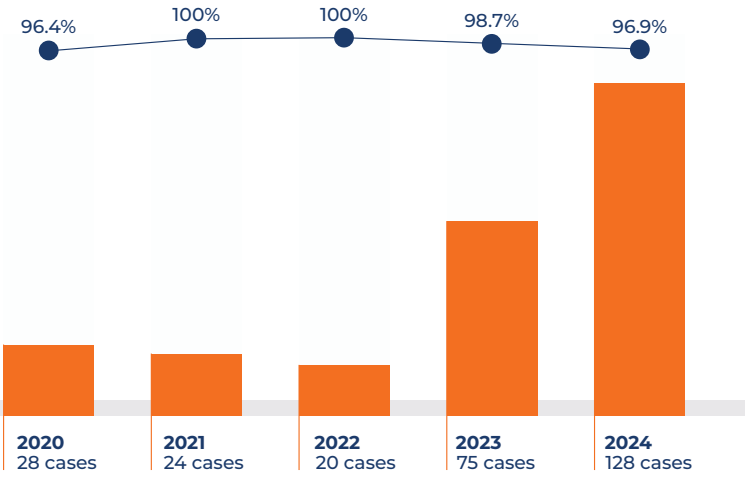
No Return to Operation Theatre (OT) within 30 Days Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 30 days from the initial discharge due to any cause.

INTERPRETATION

The 30-day return to OT rate has consistently remained relatively stable, ranging between 96.4% and 100% over the past five years.



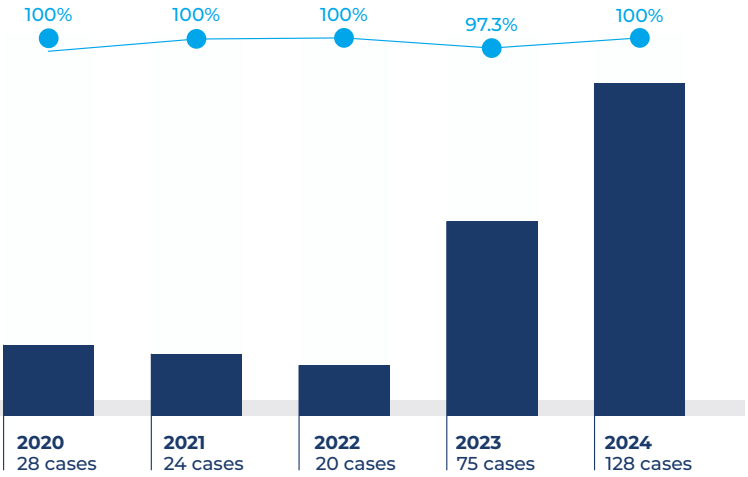
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay ≥8 on the PES has remained consistently high, reaching 100% in most years apart from a slight dip to 97.3% in 2023.



Circumcision (Child)

Number of Patients with Circumcision (Child)

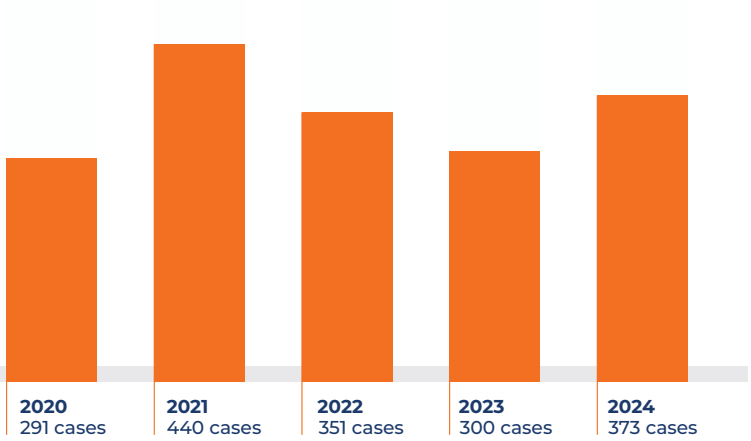
DEFINITIONS

Circumcision (Child):
Circumcision is an operation to remove excess foreskin on the penis. It is performed if there is phimosis (tight foreskin opening), recurrent foreskin infections and for religious reasons. After circumcision, the glans penis (head of the penis) will remain exposed permanently *(Source: HealthHub SG)*.

Patients With Circumcision (Child):
Collected by TOSP SH808P, LH808P

INTERPRETATION

The annual caseload of paediatric circumcision has ranged between 291 and 440 cases, remaining fairly stable over the past five years.



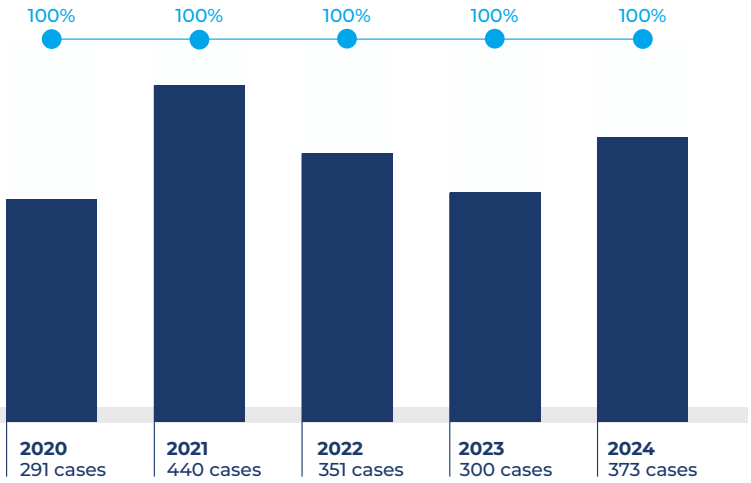
No Return to Operation Theatre (OT) Within 48 Hours Due to Any Cause

DEFINITIONS

Patients should not return to the operation theatre (OT) during the same episode of admission and within 48 hours from the initial discharge due to any cause.

INTERPRETATION

The rate of return to OT rate within 48 hours of discharge, has consistently remained at 0%, over the past five years.



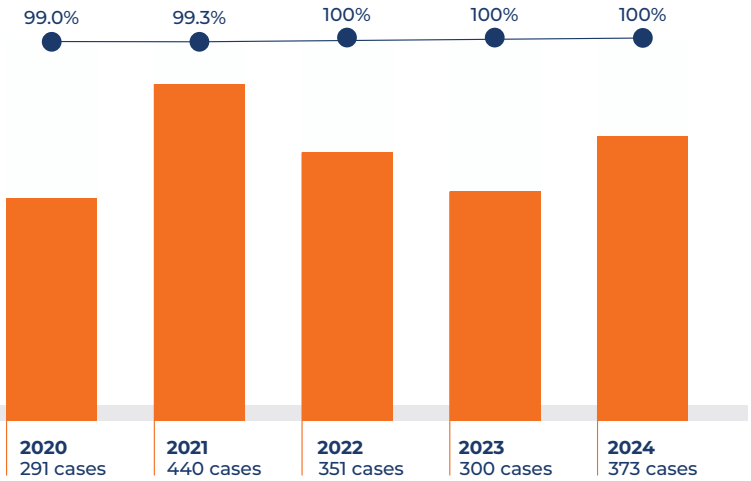
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay above 8 on the PES has held at 100% over the past three years.



Very Low Birth Weight Babies

Number of Patients with Very Low Birth Weight Babies

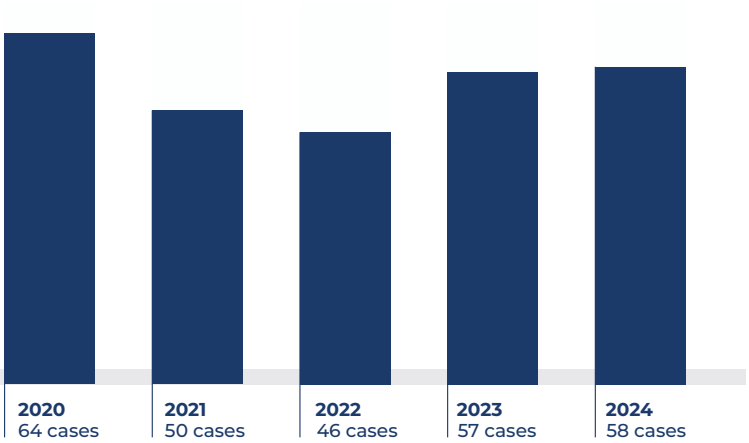
DEFINITIONS

Very Low Birth Weight Babies:
Neonatal patients with <1500 g birth weight

Patients With Very Low Birth Weight (Vlbw):
Collected from Department Registry

INTERPRETATION

The annual caseload of Very Low Birth Weight babies has ranged between 46 and 64 cases, remaining fairly stable over the past five years.



From Admission Length of Stay

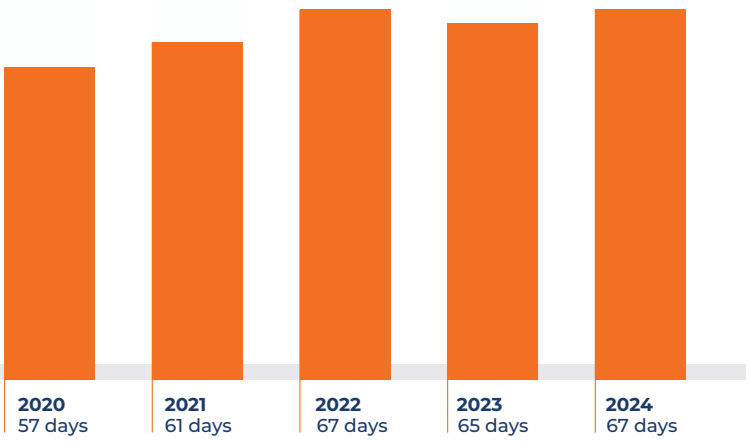
DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay for Very Low Birth Weight babies has increased from 57 days in 2020 to 67 days in 2024.

This is likely related to increased survival of extremely preterm neonates (below 28 weeks of gestational age).



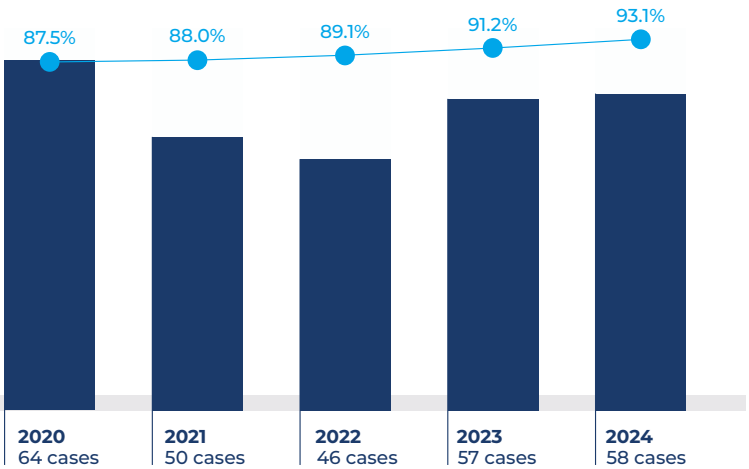
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has improved steadily from 87.5% in 2020 to 93.1% in 2024.



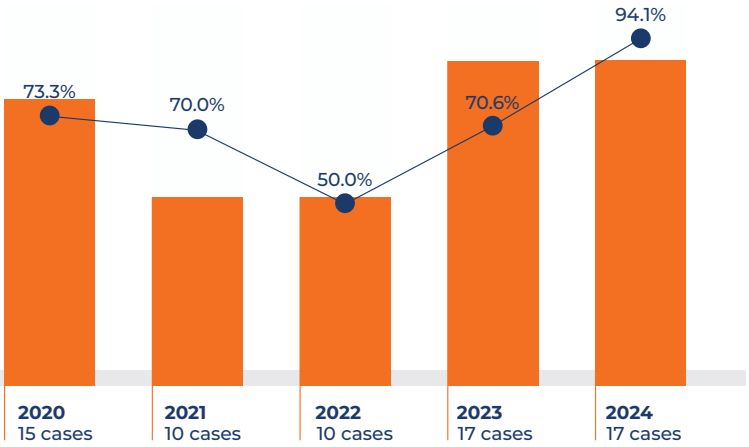
In-Hospital Survival for Newborns with Gestational Age 24 – 26 Weeks

DEFINITIONS

The proportion of patients born 24-26 weeks of gestational age who survive throughout the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival for babies born at 24-26 weeks of gestational age dropped to a low of 50.0% in 2022, before recovering steadily to reach 94.1% in 2024.



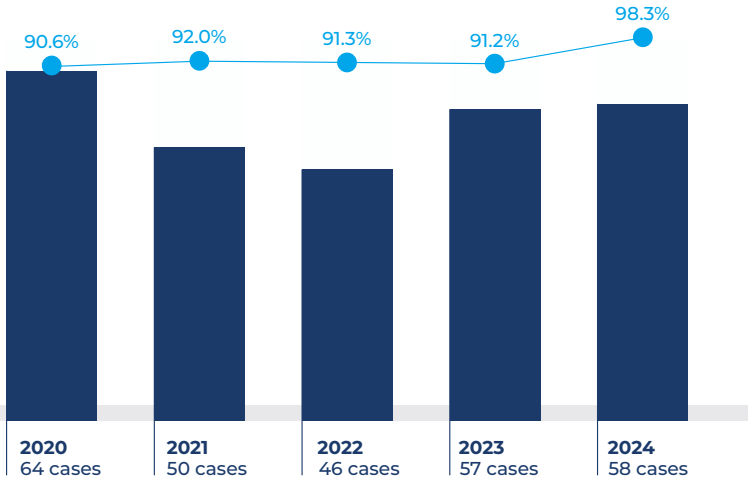
No Emergency Readmission Within 30 Days (All Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for any reason within 30 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 30-day emergency readmission-free rate (all-cause) has remained relatively stable between 90.6% and 92.0% from 2020 to 2023, before improving to 98.3% in 2024.



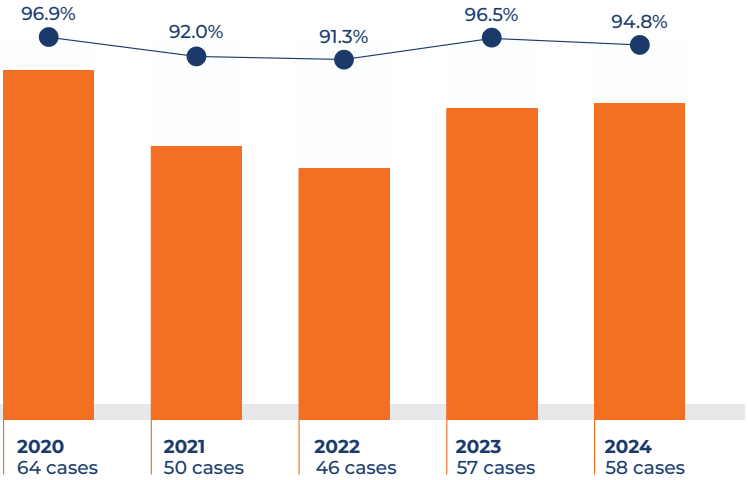
Complications

DEFINITIONS

Survivors without severe Intraventricular haemorrhage (IVH; Grade 3 and 4) or Periventricular Leucomalacia (PVL)
Survivors without Late onset sepsis (LOS)
Survivors without necrotizing enterocolitis or spontaneous intestinal perforation
Survivors without severe retinopathy of prematurity (Stage 3 and above) (ROP)
Survivors without chronic lung disease of prematurity (CLD)

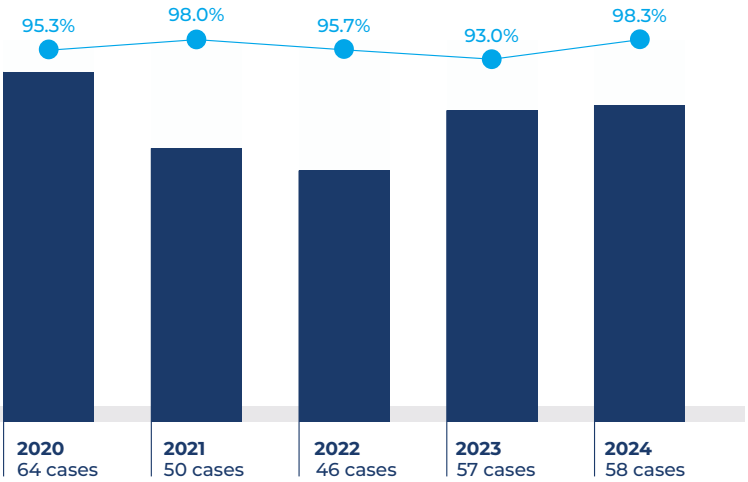
INTERPRETATION

The rate of survivors free of severe IVH or PVL has remained above 90%, ranging between 91.3% and 96.9% over the past five years.



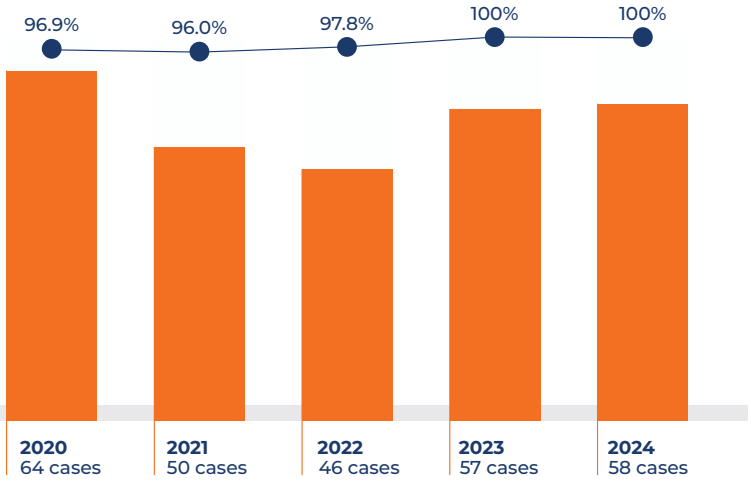
INTERPRETATION

The rate of survivors without late onset sepsis has remained above 90%, ranging between 93.0% and 98.0% over the past five years.



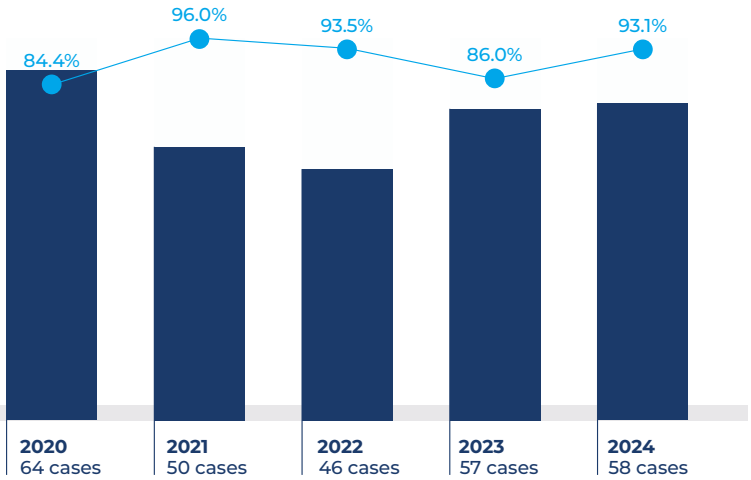
INTERPRETATION

The rate of survivors without necrotizing enterocolitis or spontaneous intestinal perforation has improved from 96.9% in 2020 to reach 100% in 2023 and 2024.



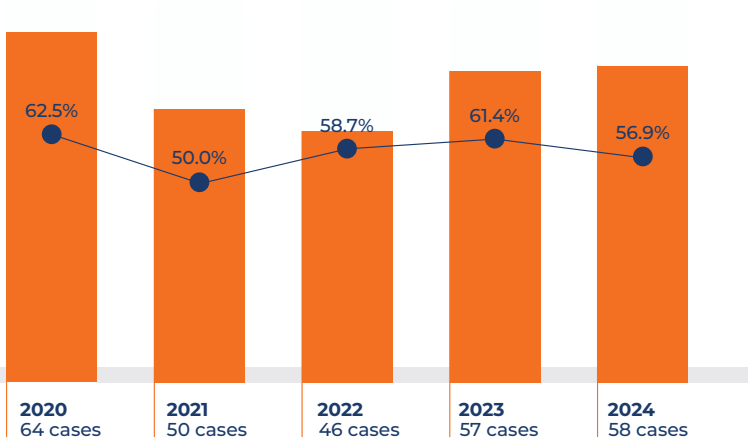
INTERPRETATION

The rate of survivors without severe ROP (Stage 3 and above) has remained above 80%, ranging between 84.4% and 96.0% over the past five years.



INTERPRETATION

The rate of survivors without chronic lung disease of prematurity has remained relatively stable, ranging between 50.0% and 62.5% over the past five years, despite increased survival of extremely premature babies.



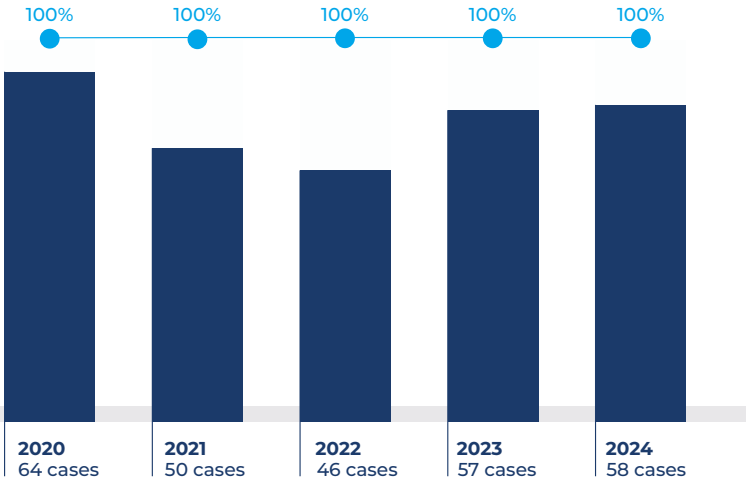
Patient Experience Score (PES)

DEFINITIONS

Patient Experience Score (PES) evaluates patients' overall satisfaction with inpatient ward services, collected via SMS survey. Patients respond to the question: "Based on your recent visit to the ward, how would you rate your experience?" using a scale from 0 (worst possible) to 10 (best possible). A PES of ≥8 indicates satisfactory patient experience.

INTERPRETATION

The percentage of patients who rated their stay ≥8 on the PES has remained consistent at 100%, over the past five years.



Urology

Robot-Assisted Radical Prostatectomy

Robotic Partial Nephrectomy

Robot-Assisted Radical Prostatectomy

Number of Patients with Robot-Assisted Radical Prostatectomy

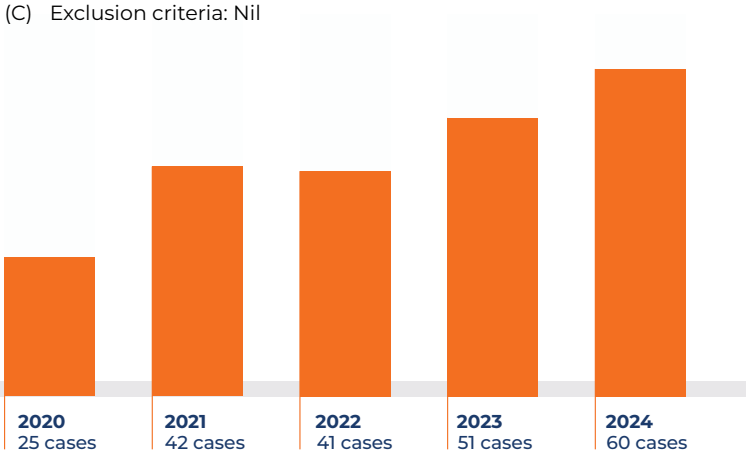
DEFINITIONS

Robot-Assisted Radical Prostatectomy is a minimally invasive surgical procedure to remove the prostate gland due to prostate cancer.

Patients With Robot-Assisted Radical Prostatectomy:
Collected (A) By MOH TOSP Code (Single or multiple TOSPs): LH/SH830P, SH838P
(B) Inclusion criteria: All Cases
(C) Exclusion criteria: Nil

INTERPRETATION

The annual caseload of robot-assisted radical prostatectomy in NUH has increased steadily from 25 cases in 2020 to 60 cases in 2024, more than doubling over the past five years.



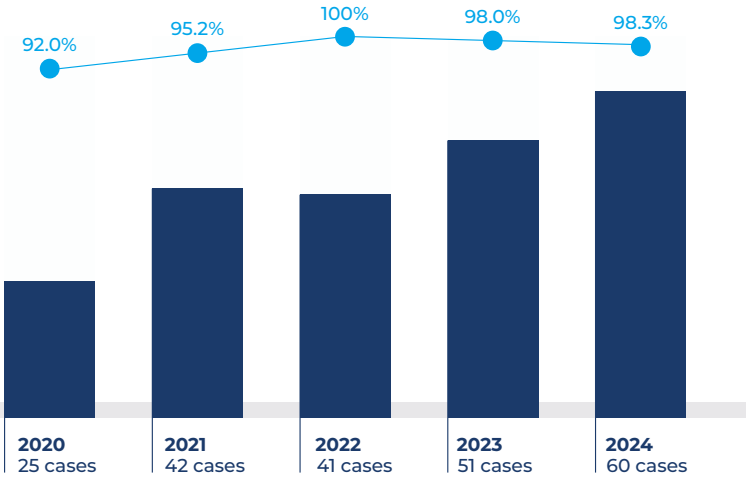
No Emergency Readmission Within 90 Days (Related Cause)

DEFINITIONS

Patients should not be readmitted to the hospital via the emergency department for the related reason within 90 days following their initial discharge. This measure reflects the effectiveness of inpatient care, discharge planning, and post-discharge follow-up.

INTERPRETATION

The 90-day emergency readmission-free rate (related cause) improved from 92.0% in 2020 to reach 100% in 2022, before stabilizing at around 98% in 2023 and 2024.



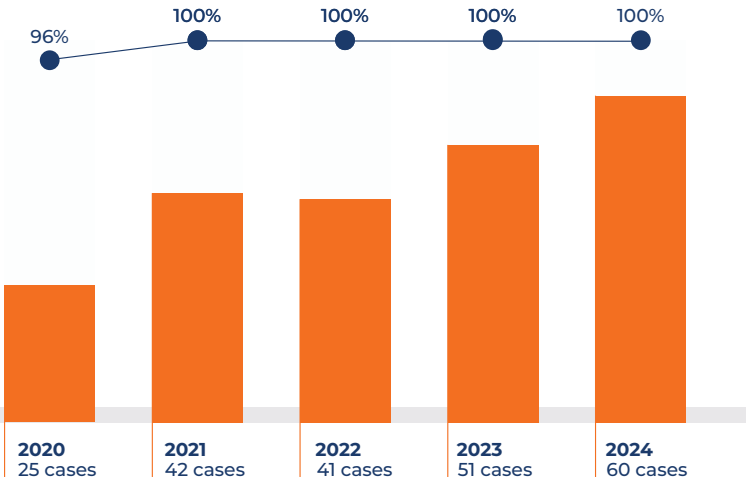
ICU LENGTH OF STAY ≤ 2 DAYS

DEFINITIONS

Patients should stay in ICU for no more than two days.

INTERPRETATION

The percentage of patients with ICU Length of Stay within 2 days improved from 96% in 2020 to reach 100% from 2021 to 2024.



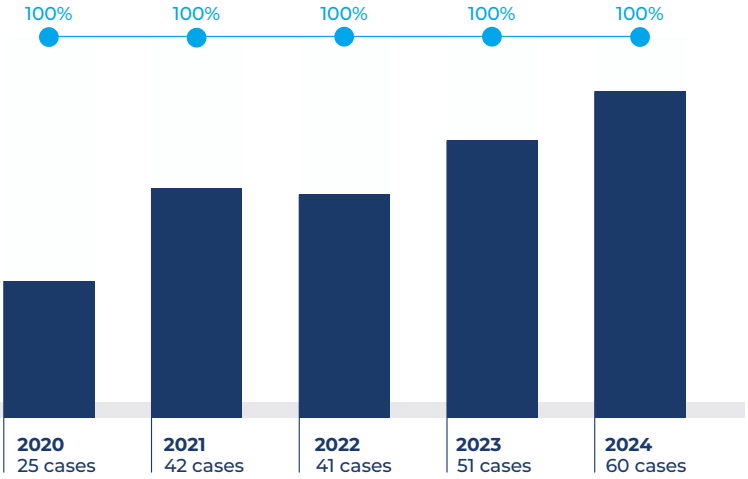
In-Hospital Survival

DEFINITIONS

The proportion of patients who survive during the hospital stay, regardless of cause. This includes survival from the primary condition, associated comorbidities, or other complications and events occurring during admission.

INTERPRETATION

The rate of in-hospital survival has remained at 100% consistently over the past five years.



Robotic Partial Nephrectomy

Number of Patients with Robotic Partial Nephrectomy

DEFINITIONS

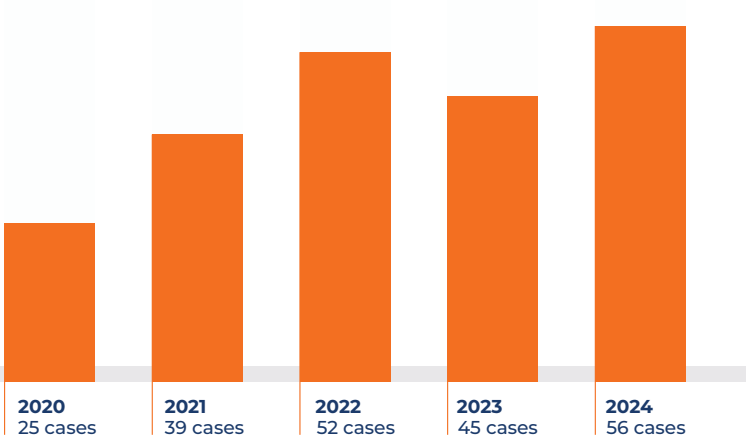
Robotic Partial Nephrectomy is a minimally invasive kidney-sparing surgery for patients with small and complex renal tumours.

Patients With Robotic Partial Nephrectomy:

Collected (A) By MOH TOSP Code (Single or multiple TOSPs): SG720K
(B) Inclusion criteria: All Cases
(C) Exclusion criteria: Nil

INTERPRETATION

The annual caseload of robotic partial nephrectomy in NUH increased steadily from 25 cases in 2020 to 56 cases in 2024, more than doubling over the past five years.



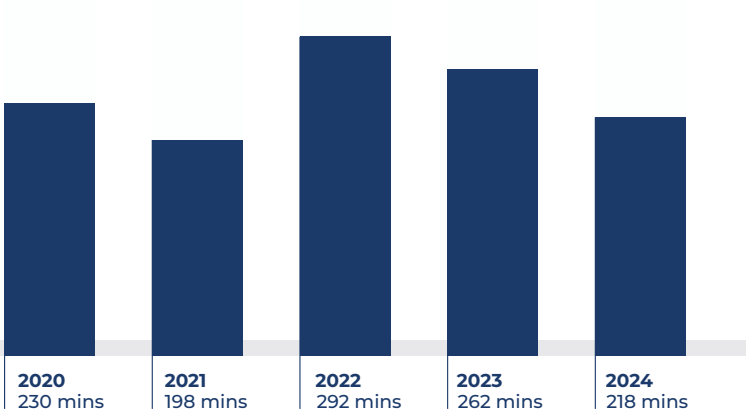
Operative Time

DEFINITIONS

Operative time is defined as the duration from first incision to completion of skin closure, including robotic docking and undocking.

INTERPRETATION

The mean operative time has fluctuated between 198 and 292 minutes, averaging around 240 minutes over the past five years, reflecting increasing case complexity.



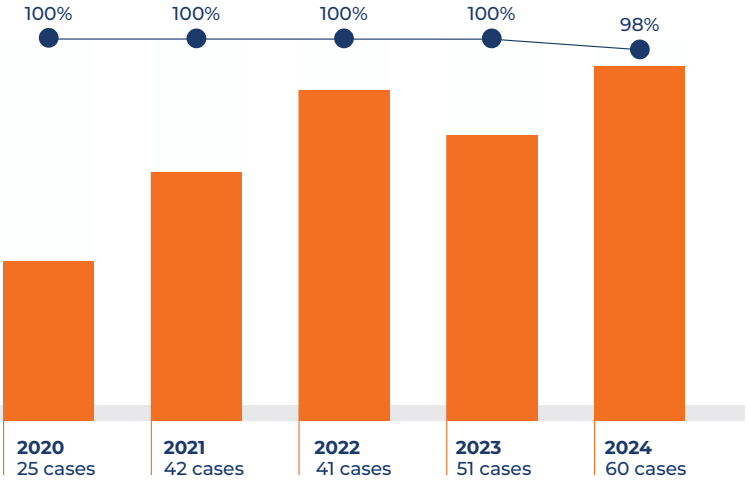
No Blood Transfusion

DEFINITIONS

Patients should not receive blood transfusion during admission.

INTERPRETATION

The percentage of patients not requiring blood transfusion during admission remained at 100% from 2020 to 2023, before a slight decline to 98% in 2024.



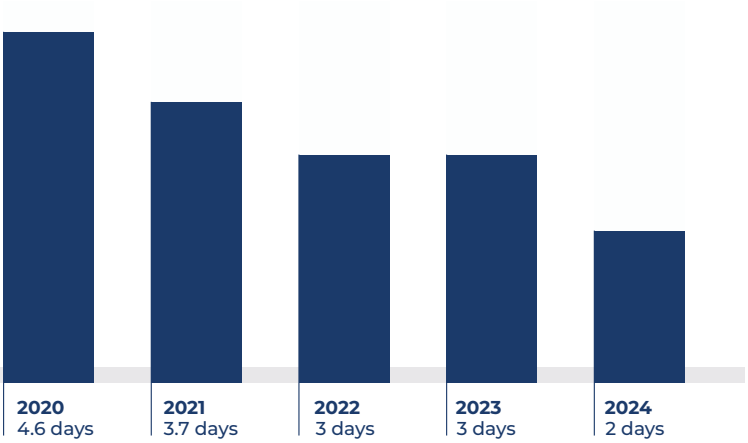
From Admission Length of Stay

DEFINITIONS

The total number of calendar days from the date of hospital admission to the date of discharge. This measure reflects the overall duration of inpatient care.

INTERPRETATION

The median Length of Stay has decreased steadily from 4.6 days in 2020 to 2.0 days in 2024.



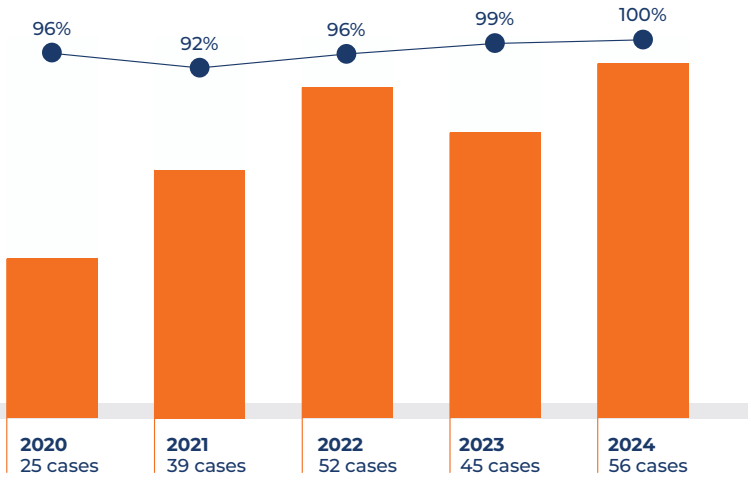
Negative Surgical Margin

DEFINITIONS

Negative surgical margin refers to absence of tumour cells at the resection margin on final histopathological analysis, suggesting that the tumour has been completely excised.

INTERPRETATION

The percentage of cases which achieved a negative surgical margin dipped to 92% in 2021, before improving steadily to reach 100% in 2024, reflecting high rates of complete tumour removal while preserving kidney tissue.



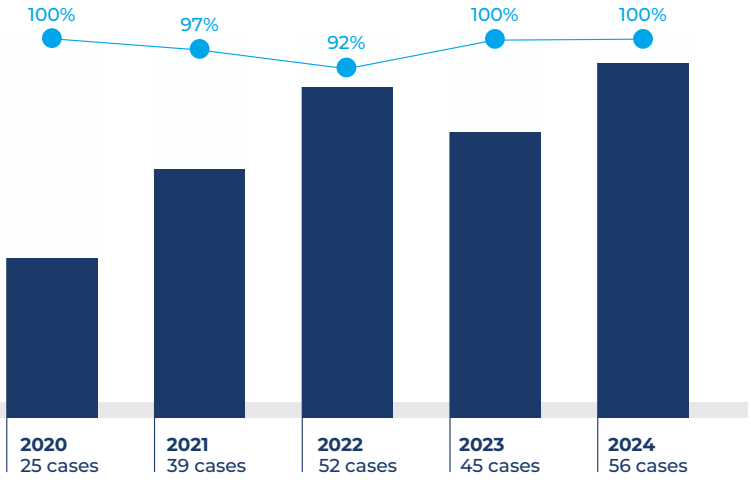
No Conversion from Robotic to Open Surgery

DEFINITIONS

Patients undergoing robotic surgery should not require intraoperative conversion to open surgery. This measure reflects surgical proficiency and appropriate case selection.

INTERPRETATION

The percentage of patients who underwent robotic surgery and did not require intraoperative conversion to open surgery dipped to 92% in 2022, before recovering to remain consistently at 100% in 2023 and 2024.



CLINICAL OUTCOMES BOOK

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