



# **Point prevalence survey of healthcare-associated infections and antimicrobial use in Swiss acute care hospitals (2024)**

Contributing authors:

Dr. Ashlesha Sonpar  
Prof. Dr. Walter Zingg

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## Abbreviations

ANRESIS	Swiss Centre for Antibiotic Resistance
AU	Antimicrobial use
BSI	Bloodstream infection
CABSI	Catheter-associated bloodstream infection
CAUTI	Catheter-associated urinary tract infection
CDI	<i>Clostridioides difficile</i> infection
COVID-19	Coronavirus disease
CH	Switzerland
CI*	Confidence interval
CLABSI	Central line-associated bloodstream infection
CVC	Central venous catheter
FOPH	Federal Office of Public Health
HAI	Healthcare-associated infection
ICU	Intensive care unit
IPC	Infection Prevention and Control
LRTI	Lower respiratory tract infection
NEO	Neonatal infection
PPS	Point Prevalence Survey
PRIM	Primary care
PRIVFP	Private ownership, for-profit
PRIVNFP	Private ownership, not-for-profit
PUB	Public hospitals
PVC	Peripheral venous catheter
SEC	Secondary care
SPEC	Specialised care
SSI	Surgical site infection
SYS	Systemic infection
TERT	Tertiary care
UTI	Urinary tract infection
VAP	Ventilator-associated pneumonia

\*Unless otherwise specified all confidence intervals are 95% confidence intervals

## 1 Executive Summary

Switzerland has conducted yearly point prevalence surveys (PPS) since 2017, apart from 2020 due to the COVID-19 pandemic. Participation in the 2024 PPS was voluntary and free of charge for the hospitals due to the generous financial support from the Federal Office of Public Health. Participation was significantly higher this year (in comparison to previous years with no national survey) with 103 hospitals and 12 414 patients included in the overall analysis. Comparisons to previous years are made for all participating hospitals and the subset of hospitals participating in both national surveys (2017 and 2022) and 2024 (56 hospitals). Comparison with hospitals participating in all previous surveys was not done due to the low number of hospitals (only nine hospitals have taken part each year since 2017).

2024 was the first year the Minimum Standards survey was done as part of the PPS. This survey defines seven key components for Infection Prevention: Guidelines, Material and Equipment, IPC Organization, Education and Training, Audit and Monitoring, Surveillance and Outbreaks, and HAI prevention. 96 hospitals out of the 103 participating hospitals completed this survey.

### HAI

707 out of 12 414 patients were diagnosed with at least one HAI leading to an overall prevalence of 5.7% (5.3-6.1%). When data from hospitals participating in both national surveys and 2024 were analyzed, the overall HAI prevalence was 6.2% (5.7-6.7%). The HAI prevalence in all participating hospitals and the subset of hospitals participating in 2017, 2022, 2024 has not significantly changed. The prevalence of patients with one or more HAI is stable since 2017, and this given the pandemic and the increasing complexity of inpatients.

### Antimicrobial use (AU)

Approximately 36% of all patients were treated with one or more antimicrobials (35.7% (34.9-36.6%)), consistent with estimates from previous years but trending upwards. When including only hospitals participating in both national surveys and 2024 are included, the prevalence is higher in 2024 compared to the prior years (35.8% compared to 32.3% and 33%). However, this could be due to the added collection of anti-viral agents this year.

### Minimum Standards

The average weighted score was 54.6 (CI: 54.2-58.2) points out of a maximum of 70 achievable points. These minimum standards scores can help hospitals understand how to improve their IPC programmes with the objective to decrease the burden of HAI.

## 2 Introduction

### 2.1 NOSO strategy

The NOSO strategy is the Swiss national strategy for the surveillance, prevention and control of healthcare-associated infections. The objective is to develop and implement a national system for monitoring HAIs and evidence-based methods to prevent them. The strategy has five action areas of which the PPS is part of the Evaluation area (gather reference data to analyse and brainstorm appropriate measures) (1).

Operational targets set by the Federal Office of Public Health include the reduction of the HAI prevalence in Switzerland to 5% by 2030 and 4% by 2035 (2). These targets are to be achieved with a gradual reduction in HAIs per year by focusing on the action areas defined by Strategy NOSO and implementing the structural minimal standards as a starting point. (See Figure 1).

### 2.2 Minimum requirements Survey

This year the minimum standards self-assessment tool was part of the PPS. This survey allows IPC professionals of Swiss hospitals to evaluate if their programmes are in line with the NOSO Strategy area Governance (G-1 Standards and Guidelines) (1). The structural minimum standards outlined within G-1 were developed by a working group with professional societies under the lead of Swissnoso; and they have been communicated to hospitals in 2021.

NOSO Strategy				
Governance	Monitoring	Prevention and Control	Education and Research	Evaluation
<b>G-1</b> Standards and Guidelines	<b>M-1</b> National monitoring system	<b>PC-1</b> Improving prevention and control	<b>ER-1</b> Infection control in education and training	<b>E-1</b> Baseline
<b>G-2</b> Responsibilities and Structures	<b>M-2</b> Targeted use of data	<b>PC-2</b> Awareness and involvement	<b>ER-2</b> Promoting infection control in research	<b>E-2</b> Evaluation NOSO Strategy
<b>G-3</b> Implementation support	<b>M-3</b> Early recognition	<b>PC-3</b> Learning and dialogue culture	<b>ER-3</b> New technologies, quality assurance	
<b>G-4</b> Knowledge management		<b>PC-4</b> Support vaccination prevention		

**Figure 1: 5 action fields of the NOSO strategy**



## **3 PPS methodology and organisation**

### **3.1 Objectives and methods**

The objectives and methods were the same as in the previous year, and no significant changes have been made to the protocol (3). This year the number of antimicrobial agents was expanded to include antivirals and the doses of all medications was also uploaded in order to calculate daily defined doses (DDDs).

### **3.2 Material and train-the-trainer courses**

As in previous years, the training courses were organized online in both German and French. All materials were available on the Swissnoso website and protocol changes were highlighted during the training sessions.

### **3.3 Data management**

The PPS-period started from 1 April and ended on 30 June; data could be collected until July 2024. Hospitals could choose to enter data into the database either manually or automatically using specifications provided by the coordinating centre. As in the previous year, automatic import was facilitated by a direct upload option in the database. Hospitals could download their data (without benchmarking) in different formats (HTML, CSV, pdf). The data were analysed using R version 4.4.1. (4)

Data downloaded from the Charité database is anonymous and stored on the firewall-protected University Hospital of Zürich servers. Data can only be accessed from within the hospital network.

## 4 Implementation

### 4.1 List of participating hospitals

103 hospitals participated in the survey. Table 1 summarises the hospitals by Canton and Institution name

**Table 1: Participating hospitals by Canton**

Canton	Institution	Canton	Institution
AG	Kantonsspital Baden AG	FR	Hôpital Daler
	Hirslanden Klinik Aarau		Clinique Générale Ste-Anne SA
AR	Spitalverbund Appenzell Ausserrhoden Herisau	GE	Hôpitaux universitaires de Genève
	Hirslanden Heiden		La Tour Réseau de Soins SA Hôpital de La Tour
BE	Regionalspital Emmental AG Burgdorf	GR	Clinique Générale-Beaulieu
	SRO AG Langenthal		Clinique des Grangettes
	Spitäler FMI AG Unterseen/Interlaken		Clinique La Colline
	Spitäler FMI AG Frutigen		Clinique de la Plaine
	Hôpital de Saint-Imier		Kantonsspital Graubünden
	Hôpital de Moutier		Spital Oberengadin
	Hirslanden Bern AG Klinik Beau-Site		Spital Thusis
	Hirslanden Bern AG Salem-Spital		Flury Stiftung Spital Schiers
	Hirslanden Bern AG Klinik Permanence		Center da sandà Engiadina Bassa Scuol
BL	Klinik Arlesheim AG		Center da sandà Val Müstair
BS	Universitätsspital Basel		Klinik Gut Fläsch
	St. Claraspital	JU	Hôpital du Jura Delémont
	Universitäts-Kinderspital beider Basel UKBB	LU	Luzerner Kantonsspital Luzern
	Bethesda Spital AG		Luzerner Kantonsspital Sursee
	Felix Platter-Spital		Luzerner Kantonsspital Wolhusen
	Merian Iselin Klinik für Orthopädie und Chirurgie	NE	Hôpital neuchâtelois Neuchâtel
	REHAB Basel		Hôpital neuchâtelois La Chaux-de-Fonds
	Adullam Spital/Pflegezentrum Basel		Clinique Montbrillant
	Adullam Spital/Pflegezentren Riehen	OW	Kantonsspital Obwalden

Canton	Institution	Canton	Institution
SG	Kantonsspital St. Gallen		Hôpital intercantonal de La Broye HIB
	Spitalregion Fürstenland Toggenburg		Hôpital du Pays-d'Enhaut
	Spitalregion Rheintal Werdenberg Sarganserland Grabs		Réseau Santé Balcon du Jura.vd
	Spitalregion Rheintal Werdenberg Sarganserland Altstätten		Clinique Bois-Cerf
	Spital Linth		Clinique de La Source
	Hirslanden Klinik Stephanshorn		Clinique Cecil SA
	Die Geriatriische Klinik St.Gallen		Clinique de Genolier
SH	Swiss Medical Network Klinik Belair		Clinique CIC Montreux
SO	Solothurner Spitäler AG Bürgerspital Solothurn		Pôle Santé Vallée de Joux
	Solothurner Spitäler AG Olten	VS	Hôpital du Valais
	Solothurner Spitäler AG Dornach		Spital Wallis Brig
SZ	Spital Lachen AG		Clinique de Valère
TG	Spital Thurgau AG Münsterlingen		Clinique CIC Saxon
	Spital Thurgau AG Frauenfeld	ZG	Zuger Kantonsspital AG
	Klinik Seeschau	ZH	UniversitätsSpital Zürich
TI	Ospedale Regionale di Lugano Civico		Universitätsklinik Balgrist
	Ospedale Regionale Bellinzona e Valli Bellinzona		Kantonsspital Winterthur
	Ospedale Regionale di Locarno		Stadtspital Zürich
	Ospedale Regionale di Mendrisio		Spital Uster
	Ospedale Regionale di Lugano		Spitalverband Limmattal
	Fondazione Cardiocentro Ticino		Spital Wetzikon
	Clinica Moncucco		Schulthess Klinik
	Clinica Santa Chiara SA		Spital Bülach AG
UR	Kantonsspital Uri		Kinderspital Zürich - Eleonorenstiftung
VD	Centre Hospitalier Universitaire Vaudois		Spital Männedorf AG
	Etablissements Hospitaliers du Nord Vaudois Yverdon-les-Bains		Klinik Hirslanden
	Etablissements Hospitaliers du Nord Vaudois St-Loup		Privatklinik Bethanien
	Ensemble Hospitalier de la Côte		Privatklinik Lindberg
	Hôpital Riviera-Chablais		

## 5 Results

### 5.1 Hospital characteristics and most relevant indicators

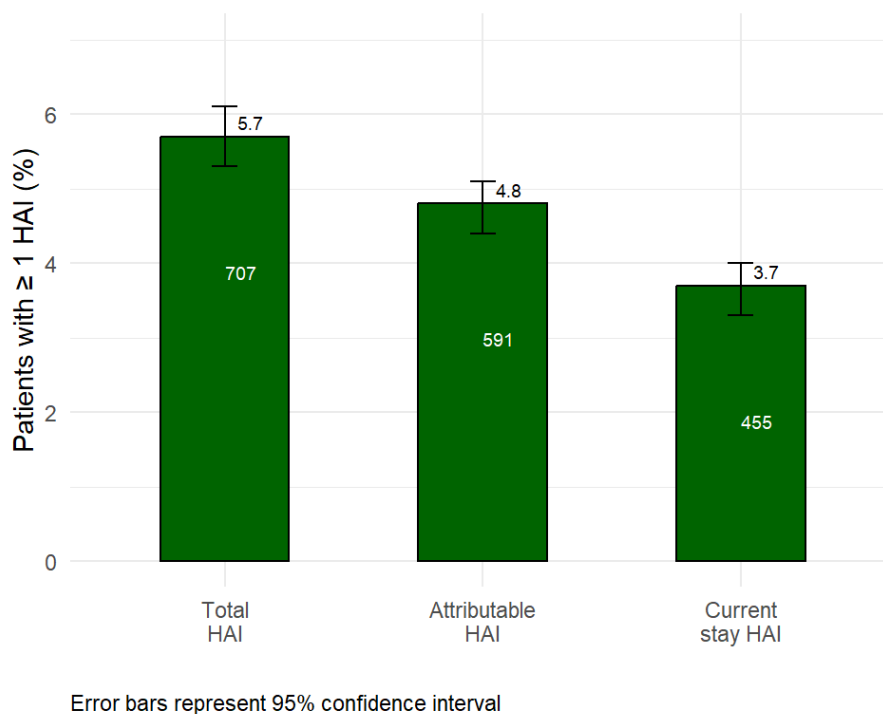
A total of 103 hospitals participated in the PPS with 12 414 patients. This included 78 small-size, 19 medium-sized and six large-size hospitals. Only 4 University hospitals participated this year. There were 43 primary, 37 secondary, 10 tertiary, 11 specialized, and 2 paediatric hospitals. Table 2 summarises details from the participating hospitals.

**Table 2: Characteristics of hospitals participating in PPS 2024**

	Hospitals, N	Patients, N
Total	103	12,414
Large hospitals (>650 beds)	6	3,974
Medium hospitals (200-650 beds)	19	3,719
Small hospitals (<200 beds)	78	4,721
University hospitals	4	3,207
Primary hospitals	43	3,088
Secondary hospitals	37	4,130
Tertiary hospitals	10	4,432
Specialized hospitals	11	587
Pediatric hospitals	2	177
Public hospitals	55	9,520
Private non-for-profit hospitals	24	1,560
Private for-profit hospitals	22	1,215

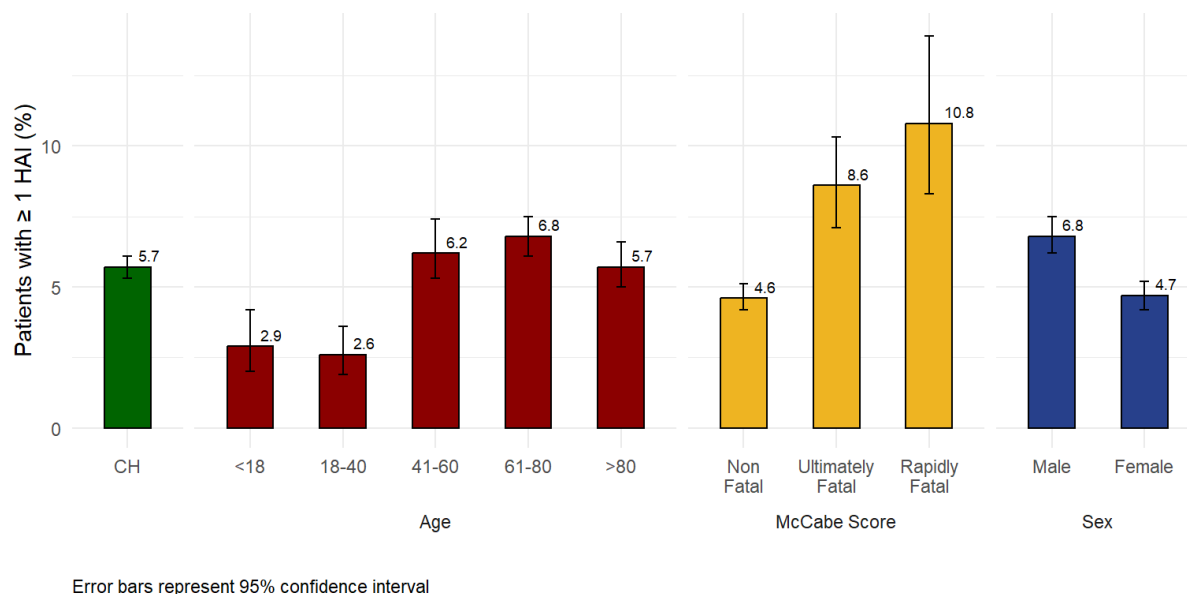
## 5.2 Healthcare-associated infections

The total HAI prevalence was 5.7% (5.3-6.1%). Of these 4.8% (4.4- 5.1%) were attributable to the hospital and 3.7% (3.3-4.0%) occurred during the current hospital stay.



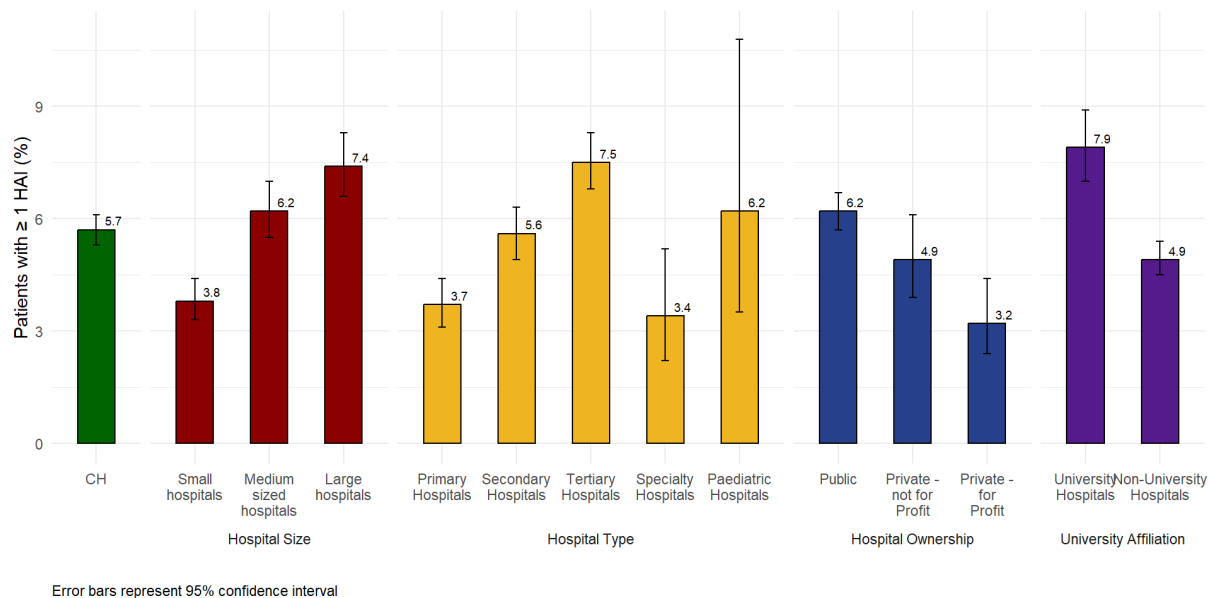
**Figure 2: 2024 HAI prevalence in all participating hospitals (Total HAI, Attributable HAI and Current Stay HAI)**

The HAI prevalence by intrinsic patient-related risk factors identified similar trends to previous years (increased risk for male sex, with increasing age, and for poorer prognosis (ultimately and rapidly fatal outcomes by the McCabe score). (see Figure 3)



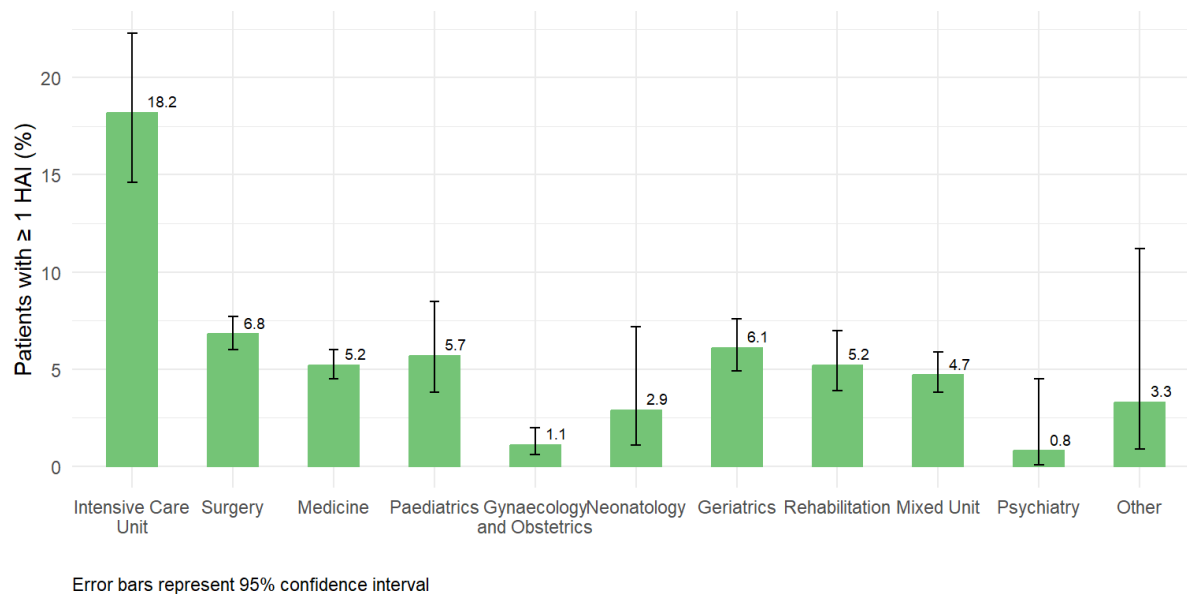
**Figure 3: HAI prevalence by intrinsic risk factors**

The HAI prevalence was also analyzed by hospital size, type, ownership, and university affiliation (Figure 4). Differences are largely due to patient differences and type of care provided. University and tertiary hospitals tend to have more complex cases and higher intensive care capacity.



**Figure 4: HAI prevalence by hospital size, type, ownership, and university affiliation**

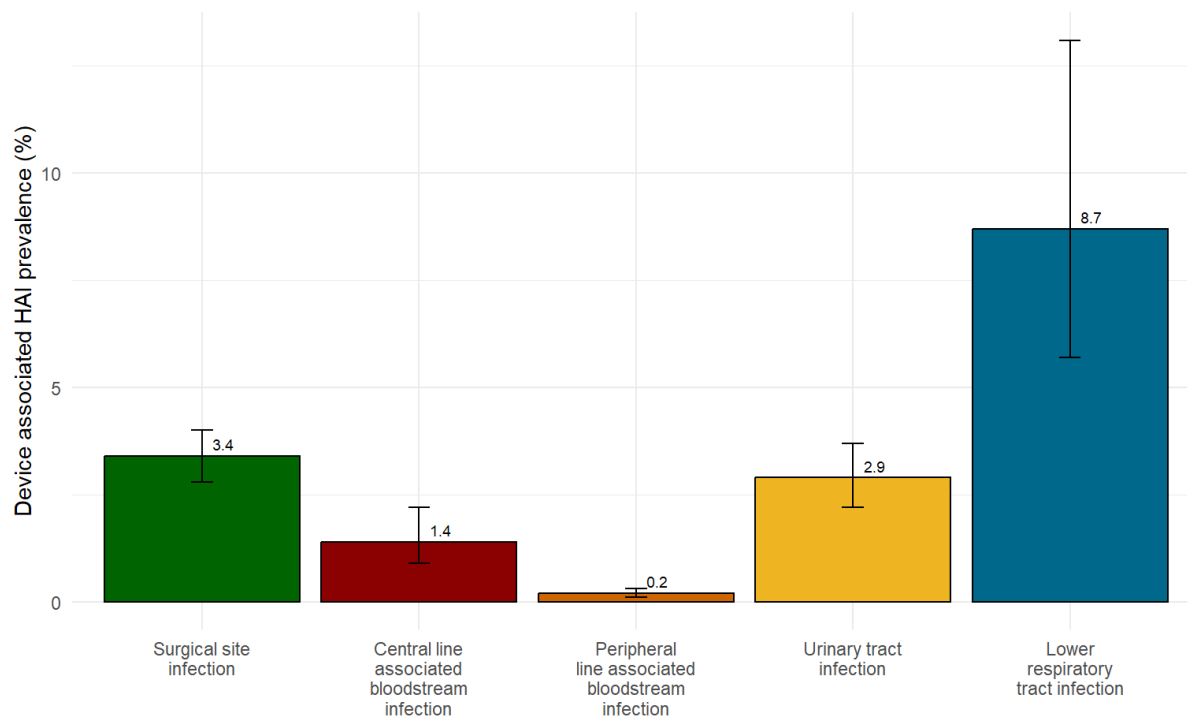
Similar to last year, intensive care has the highest and obstetrics and gynecology the lowest HAI prevalence (Figure 5). Patients in intensive care are complex with higher risk of fatal outcome whereas in obstetrics and gynecology they are younger and have fewer comorbidities.



**Figure 5: HAI prevalence by ward specialty**



Figure 6 provides an overview of HAIs associated with surgery or invasive devices such as intravascular catheters, urinary catheters, and mechanical ventilation.

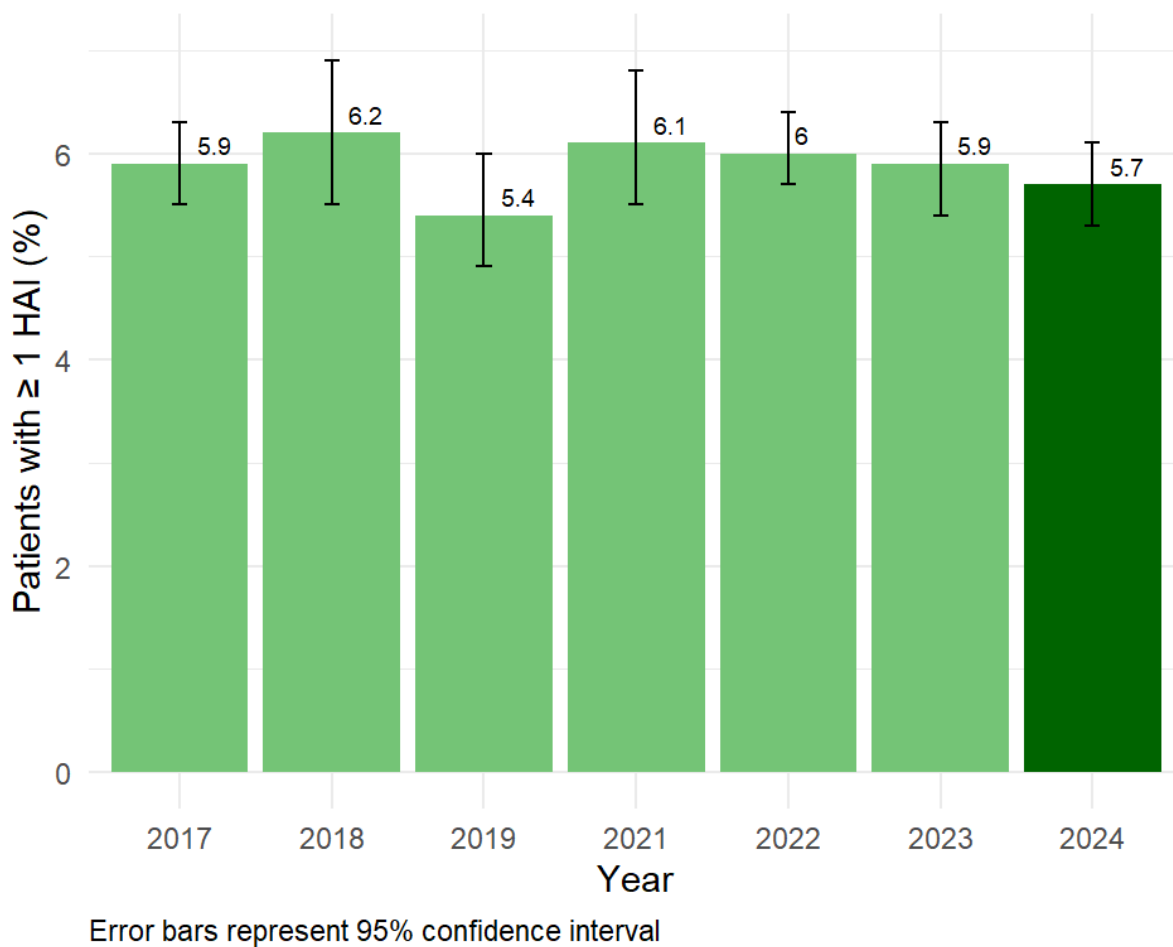


SSI: Number of surgical site infections occurring during present hospital stay as a proportion of NHSN (National Healthcare Safety Network) surgeries during current hospital stay.

CLABSI/CAUTI/LRTI: number of infections as a proportion of patients with relevant devices in place.

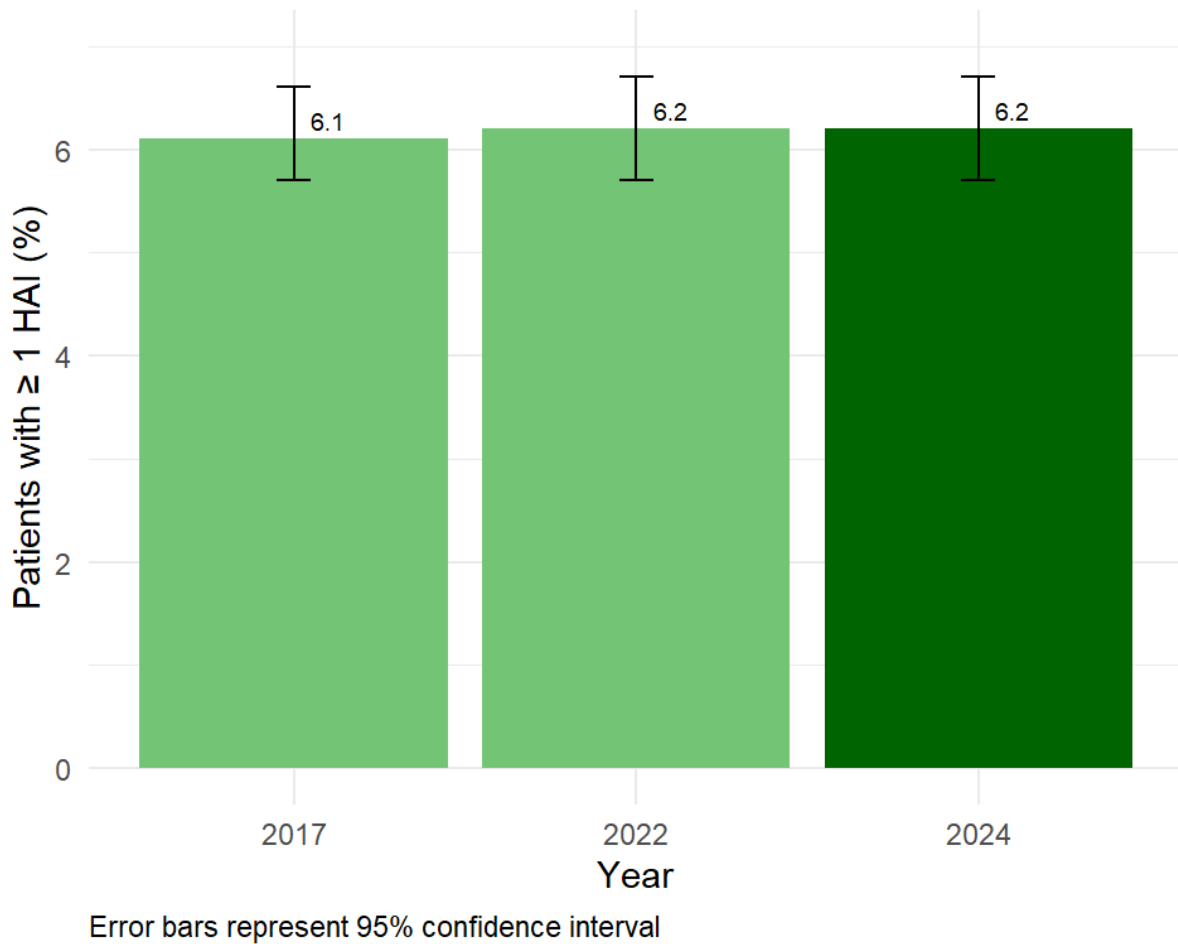
**Figure 6: SSI and device-associated HAI prevalence in patients underwent surgery during or with devices during the current stay**

Figure 7 summarizes the trend of HAI prevalence since 2017 in all participating hospitals. No significant changes in HAI rate can be observed.



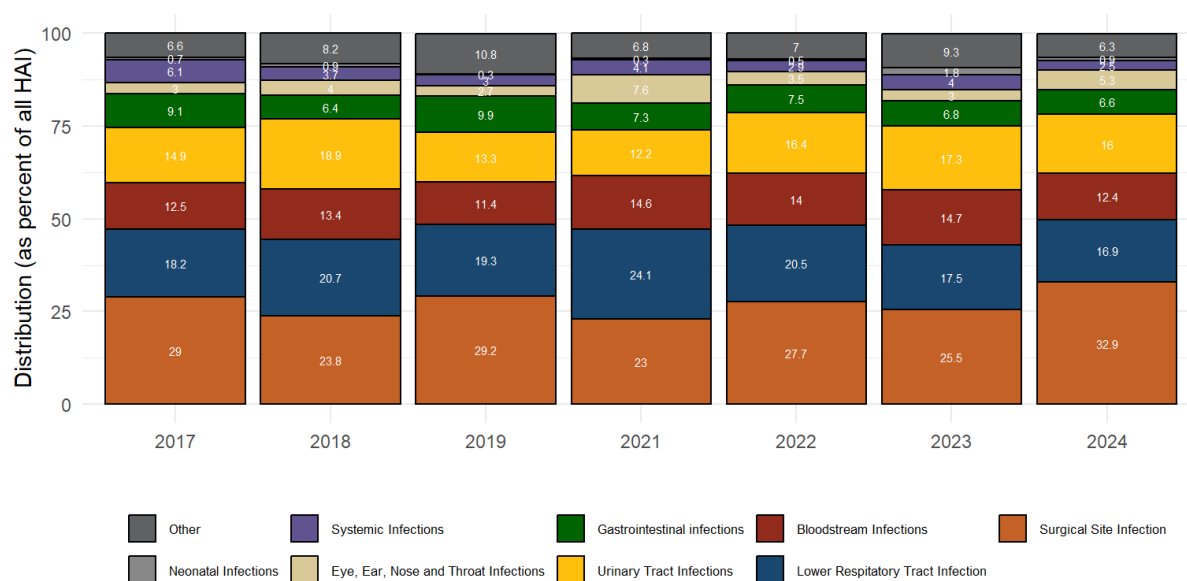
**Figure 7: HAI prevalence in all participating hospitals over time**

Due to the small number of hospitals participating consistently since 2017 (nine hospitals in total), comparisons were made for the hospitals participating in both national surveys in 2017 and 2022, and in 2024 (N = 56 hospitals). Figure 8 shows no significant trend for the last eight years.

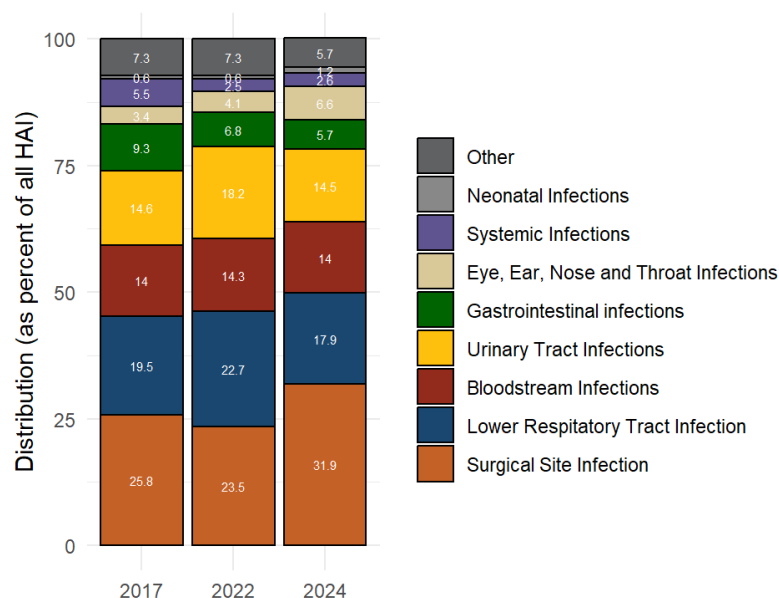


**Figure 8: HAI prevalence over time including hospitals participating in both national surveys and 2024**

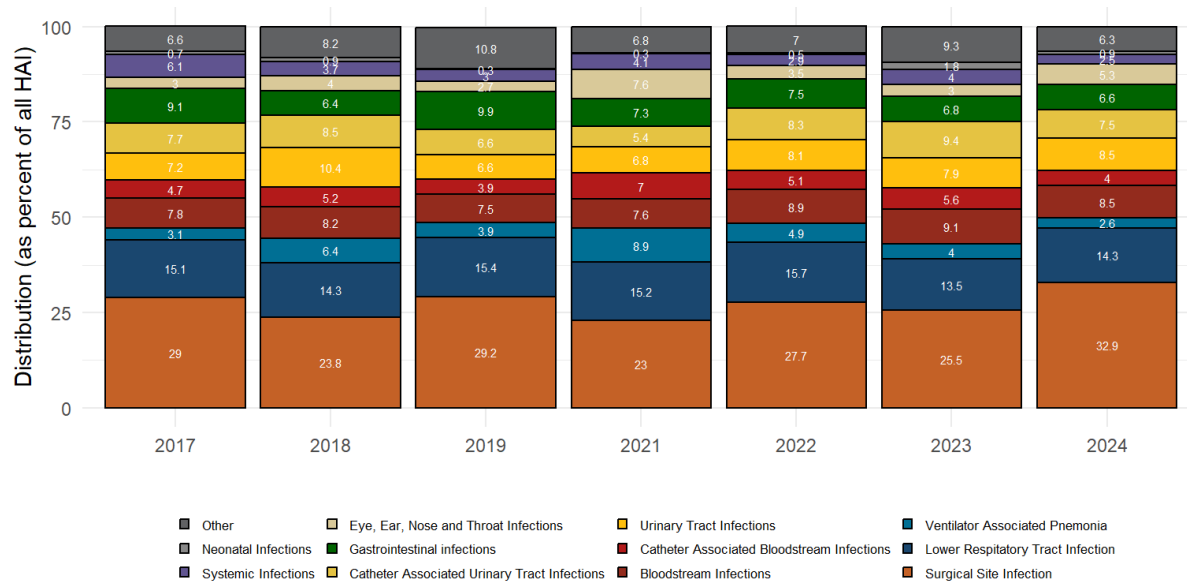
The most common infection types are surgical site infections, lower respiratory tract infections, urinary tract infections, and bloodstream infections. The distribution of infections remained consistent over the last eight years (Figure 9 and Figure 10). Figure 11 and Figure 12 summarise the distribution of infections with device related infections. Figure 10 and Figure 12 include hospitals participating in both national surveys and 2024.



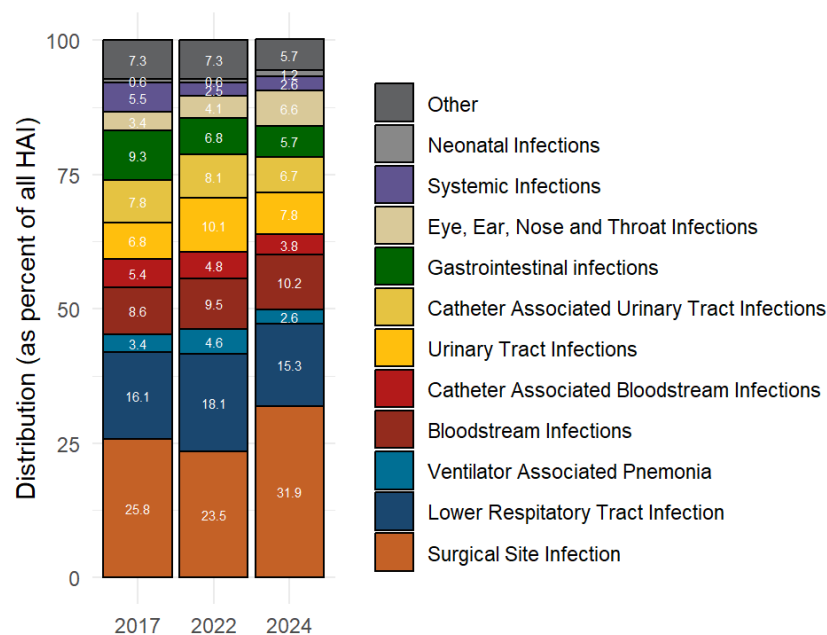
**Figure 9: Distribution of HAI types (as percent of all HAI) in all participating hospitals 2017-2024**



**Figure 10: Distribution of HAI types (as percent of all HAI) in hospitals participating in both national surveys and 2024**

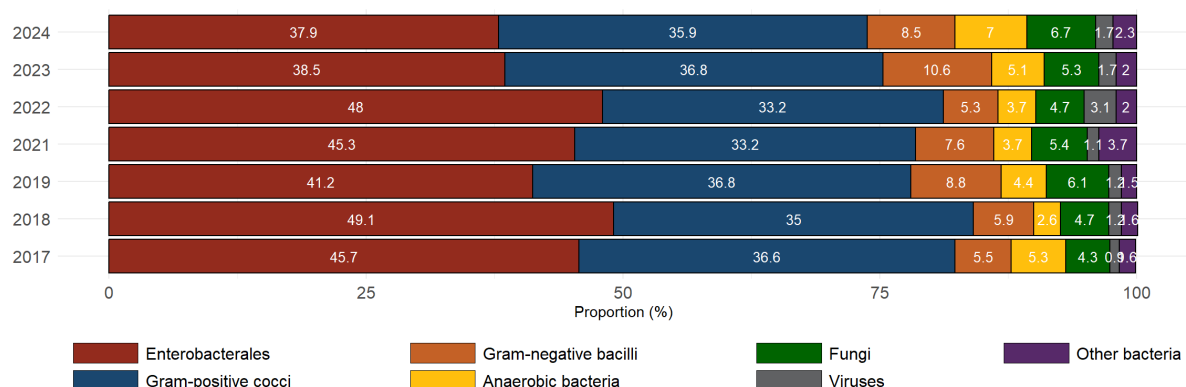


**Figure 11: Distribution of HAI types with device related infections (as percent of all HAI) in all participating hospitals**

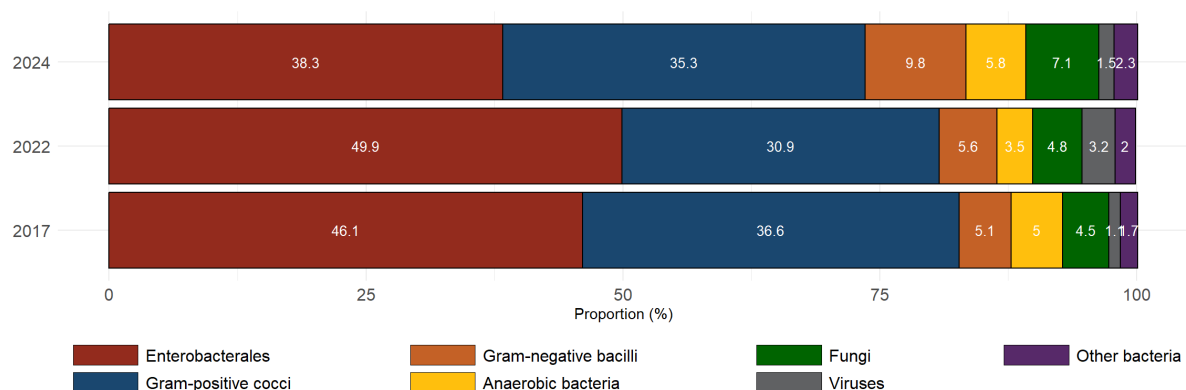


**Figure 12: Distribution of HAI types with device related infections (as percent of all HAI) in hospitals participating in both national surveys and 2024**

Figure 13 and Figure 14 summarise the distribution of HAI pathogens over the years in all participating hospitals and in hospitals participating in both national surveys and 2024.



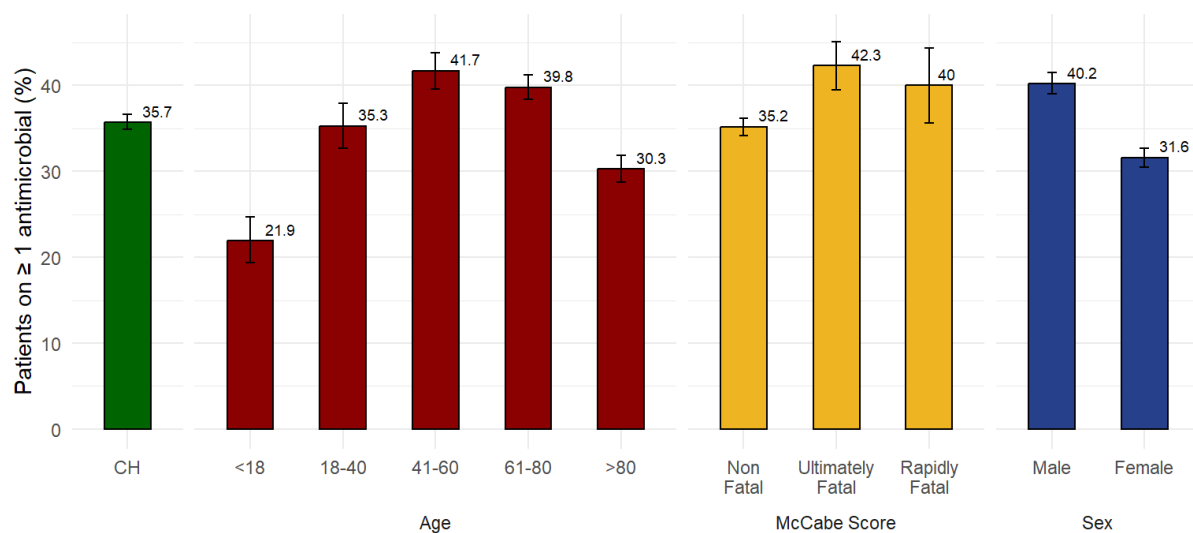
**Figure 13: Distribution of pathogens in all participating hospitals over the years**



**Figure 14: Distribution of pathogens in hospitals participating in all surveys over the years**

### 5.3 Antimicrobial use

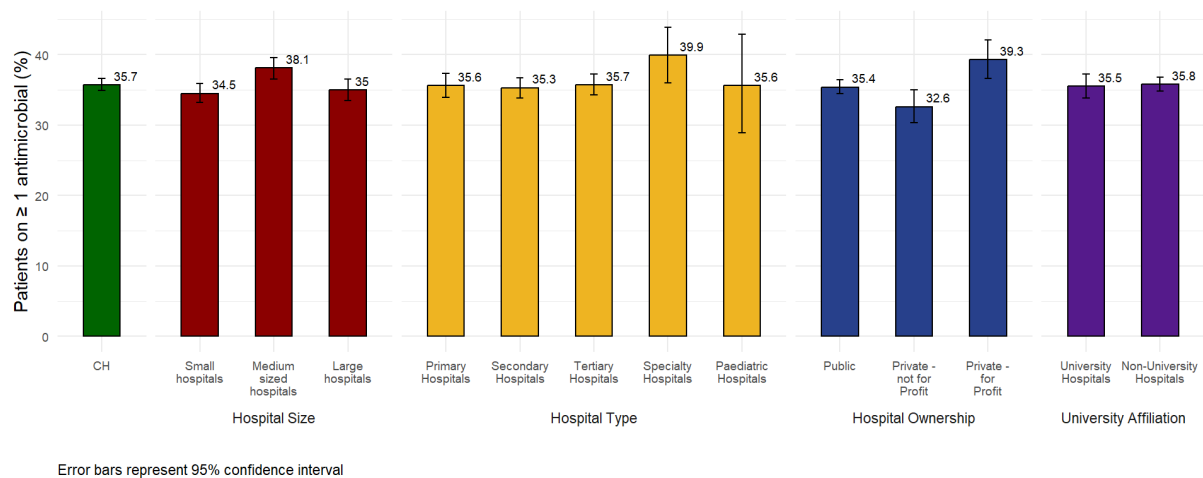
The use of antimicrobials varies with intrinsic patient related risk factors (Figure 15). Similar to last year, male sex, ultimately or rapidly fatal McCabe scores and increasing age were associated with increased antimicrobial use (AU).



Error bars represent 95% confidence interval

**Figure 15: AU prevalence by intrinsic risk factors**

Hospital characteristics (size, type, ownership, university affiliation) were not associated with AU.



**Figure 16: AU prevalence by hospital size, type, ownership, and university affiliation**



Use of antimicrobials was highest in intensive care, followed by surgery, medicine, paediatrics, and mixed units (Figure 17).

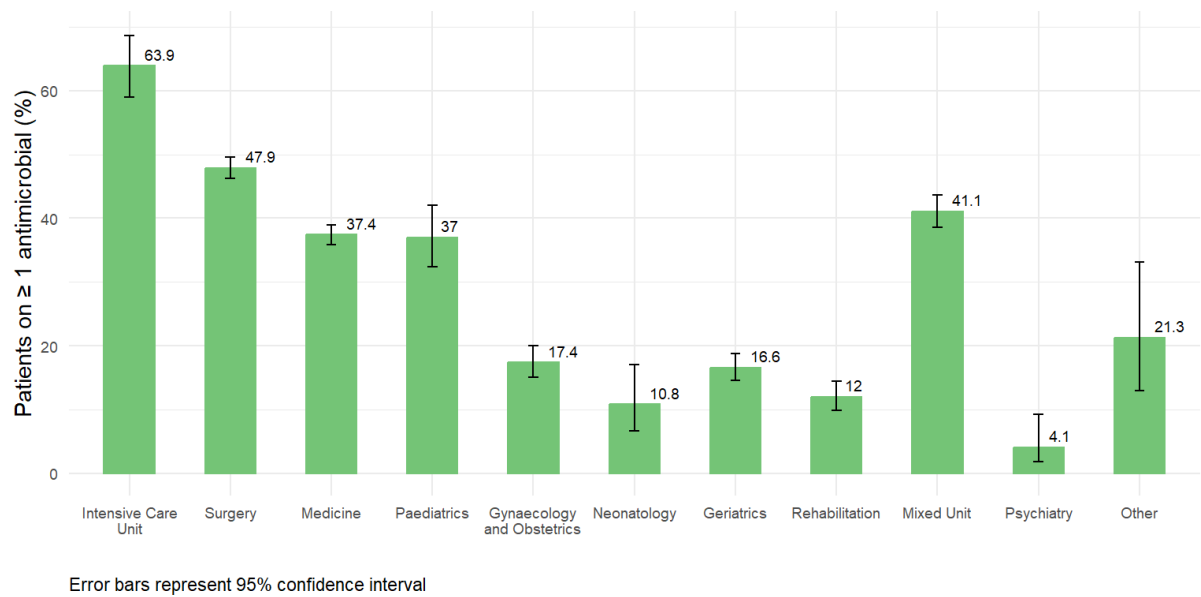
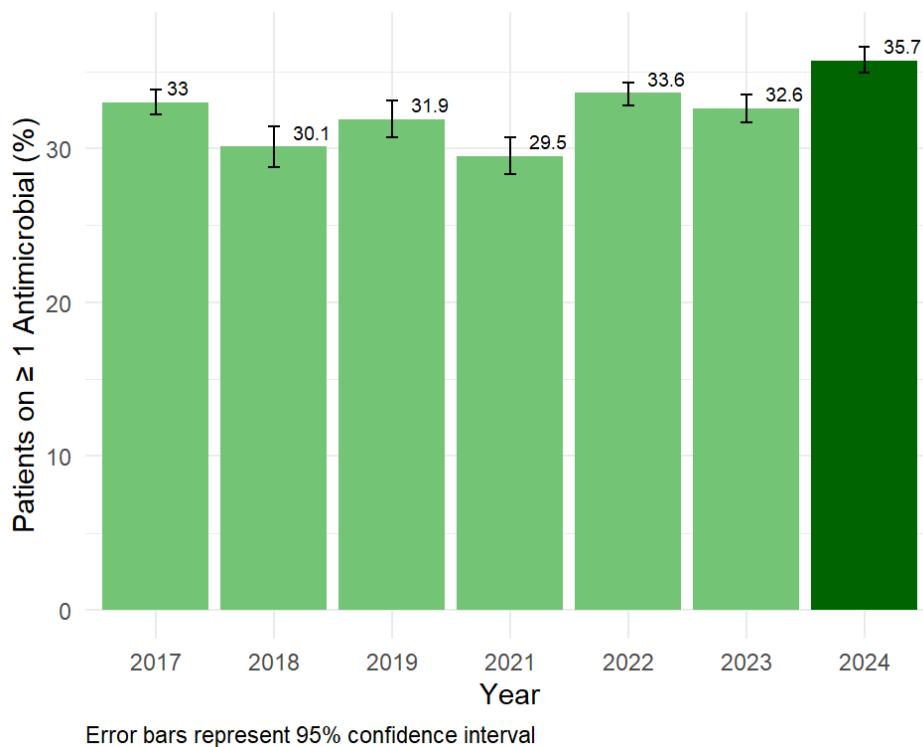
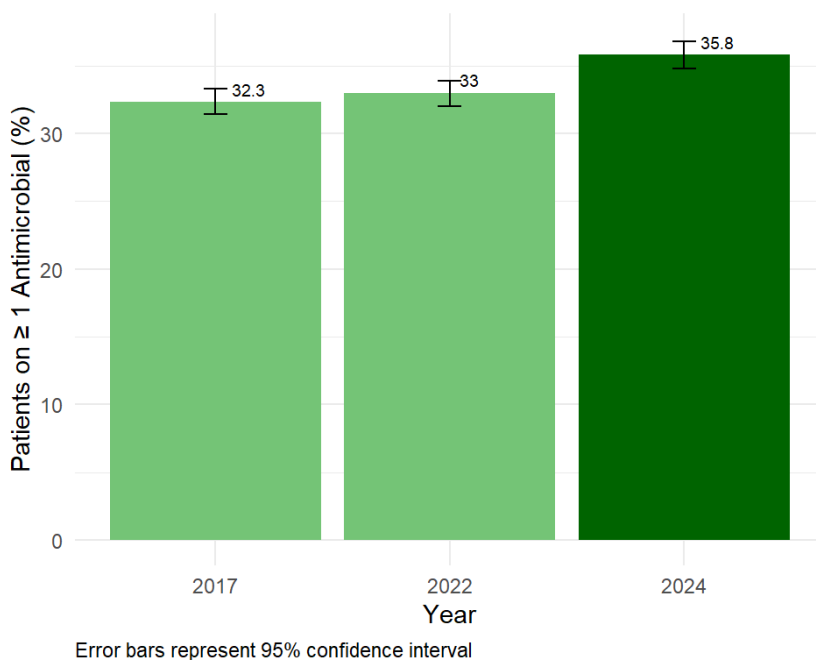


Figure 17: AU prevalence by ward specialty

Figure 18 and Figure 19 summarize the prevalence of AU over time in all participating hospitals and in hospitals participating in both national surveys and 2024. Compared to 2017 and 2022, there was an increased proportion of patients prescribed antimicrobials in 2024 (difference: 2.8% CI: 1.4-4.2%).

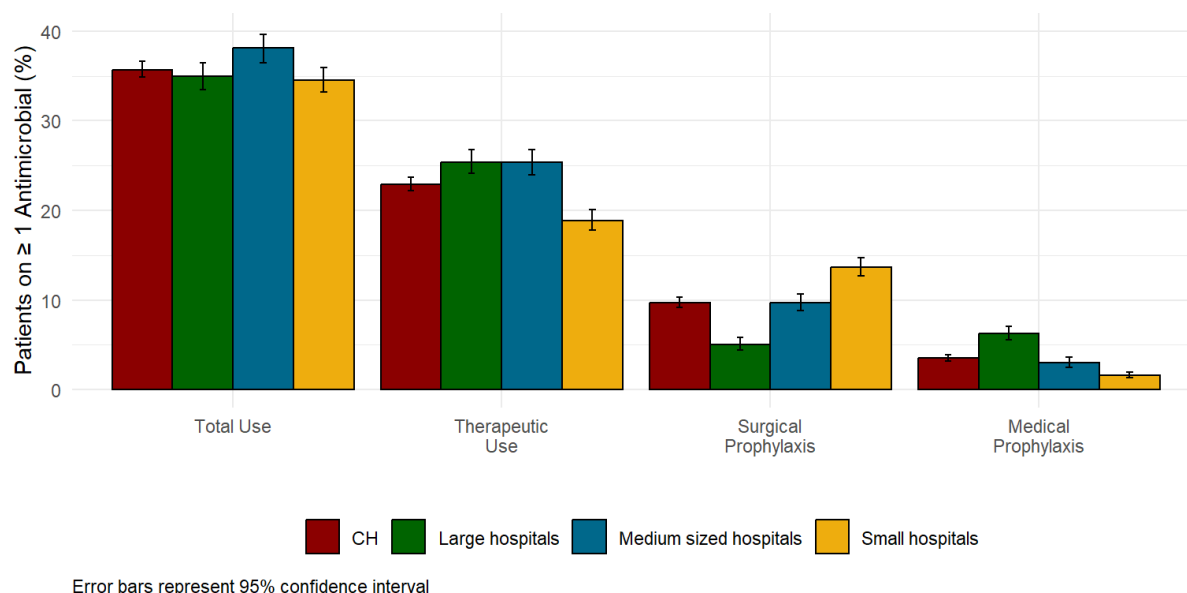


**Figure 18: AU prevalence in all participating hospitals over time**



**Figure 19: AU prevalence over time in hospitals participating both national surveys and 2024**

Figure 20 indication for AU by hospital size. Large hospitals use more antimicrobials for medical prophylaxis compared to medium and small sized hospitals while smaller hospitals use more antimicrobials for surgical prophylaxis. This is likely due to small hospitals having more patients undergoing NHSN surgeries (1308 patients in small hospitals compared to 901 and 951 in medium and large hospitals respectively)



**Figure 20: Indications for AU by hospital size**

The reason for antimicrobial change is shown in Figure 21. In 71% of treatments there was no change of antimicrobials noted in the chart. Compared to 2022, more patients had “no change” compared to “unknown” (See Figure 22).

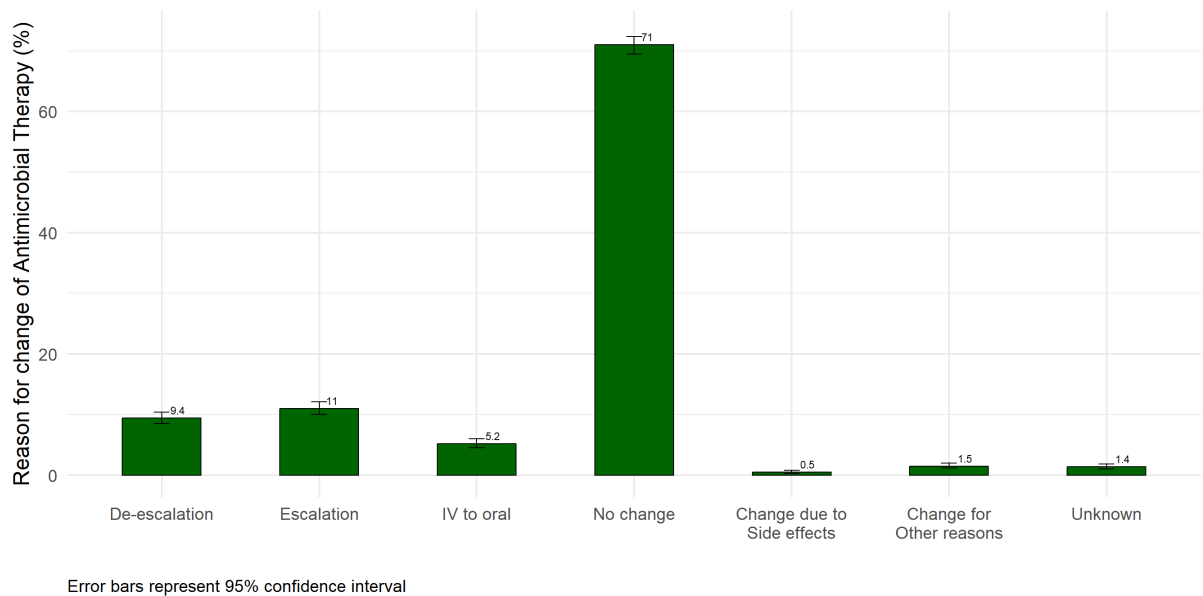


Figure 21 : Reason for change in antimicrobial therapy 2024 (all participating hospitals)

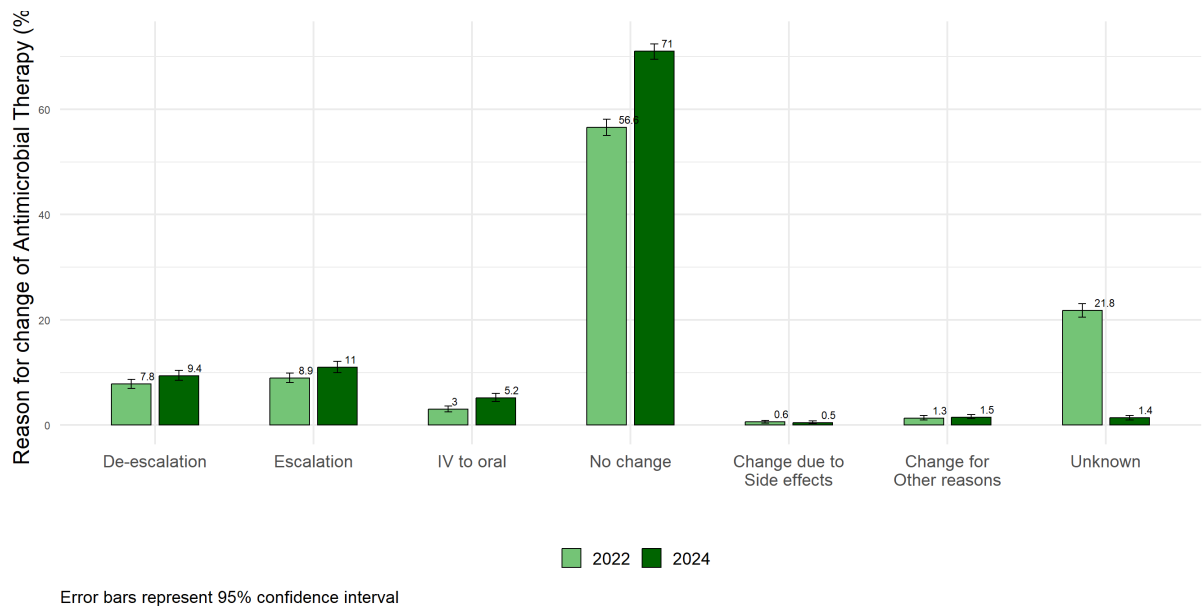


Figure 22 : Reason for change in antimicrobial therapy 2022 and 2024 (all participating hospitals)

Figure 23 and Figure 24 show the proportion of patients on antimicrobials by indication in 2024 compared to 2022 for all participating hospitals (Figure 23) and hospitals participating in both surveys (Figure 24).

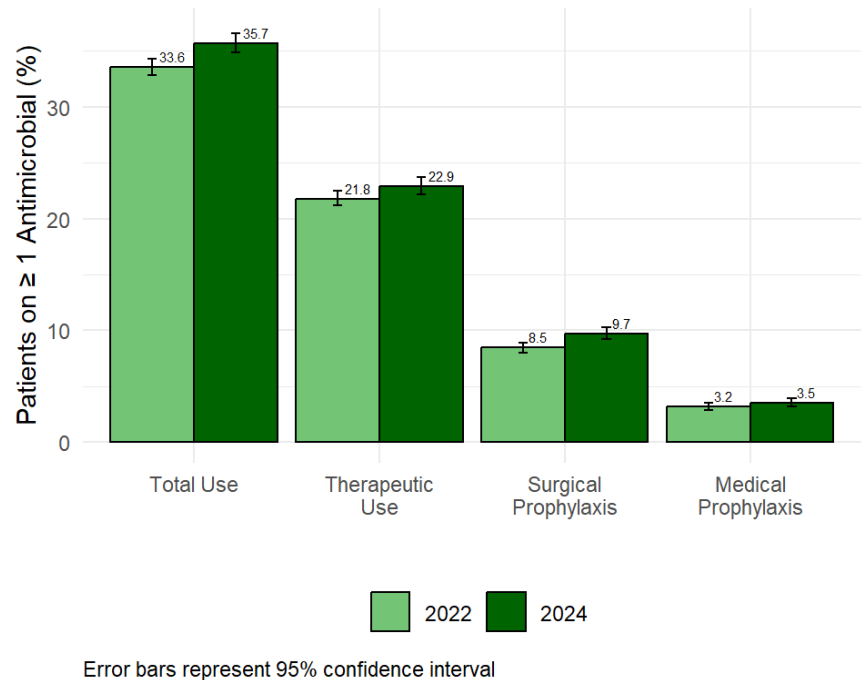
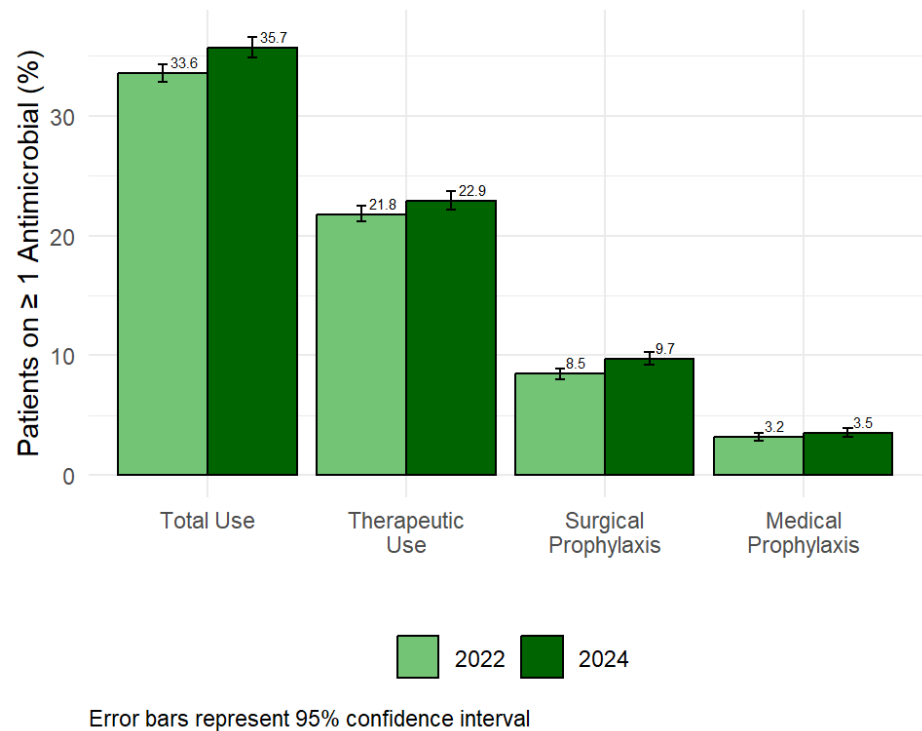


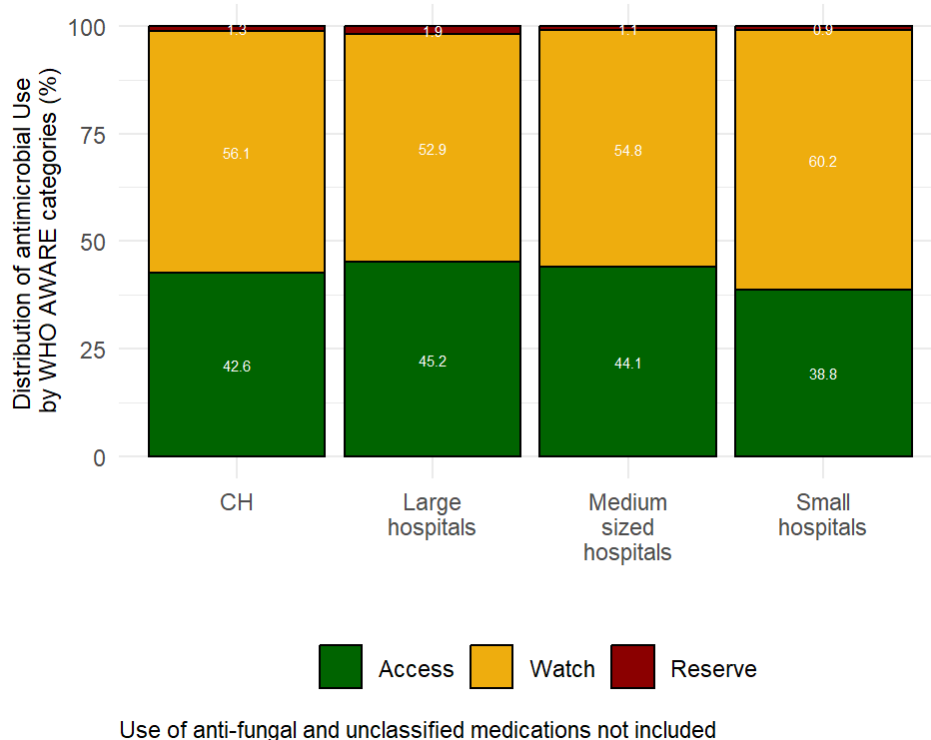
Figure 23: Indications for AU in all participating hospitals in PPS 2022 and 2023



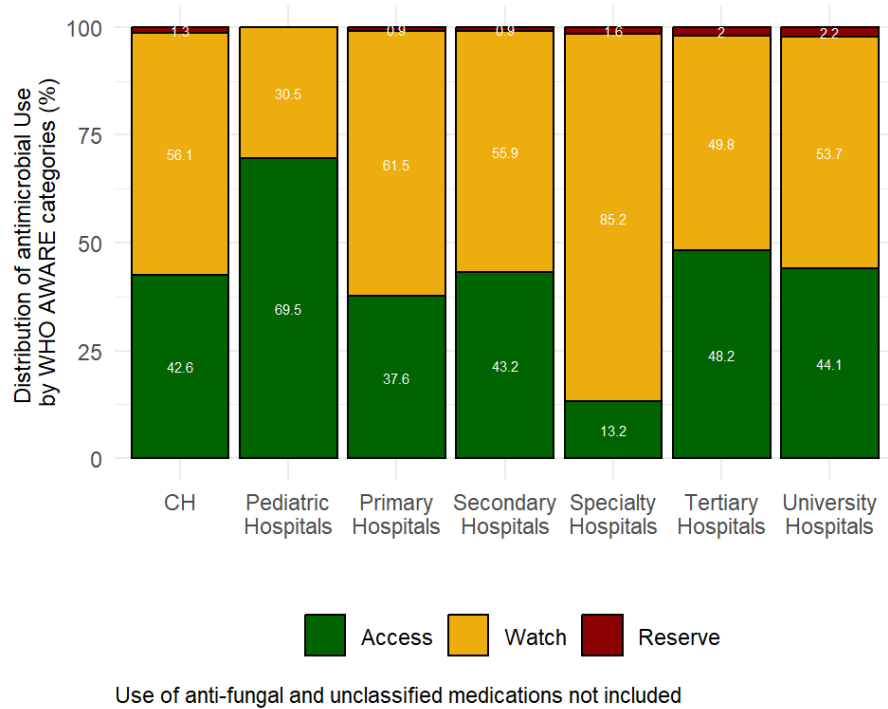
**Figure 24: Indications for AU in hospitals participating in both surveys in PPS 2022 and 2023**

Use of antimicrobials was grouped by the WHO AWaRe classification. Introduced in 2017 to support Antimicrobial Stewardship activities, it classifies antimicrobials into three categories – Access, Watch, and Reserve based on their impact on antimicrobial resistance (5).

Use of antimicrobials by WHO AWaRe classification is shown in Figure 25 (by hospital size) and Figure 26 (by hospital type)

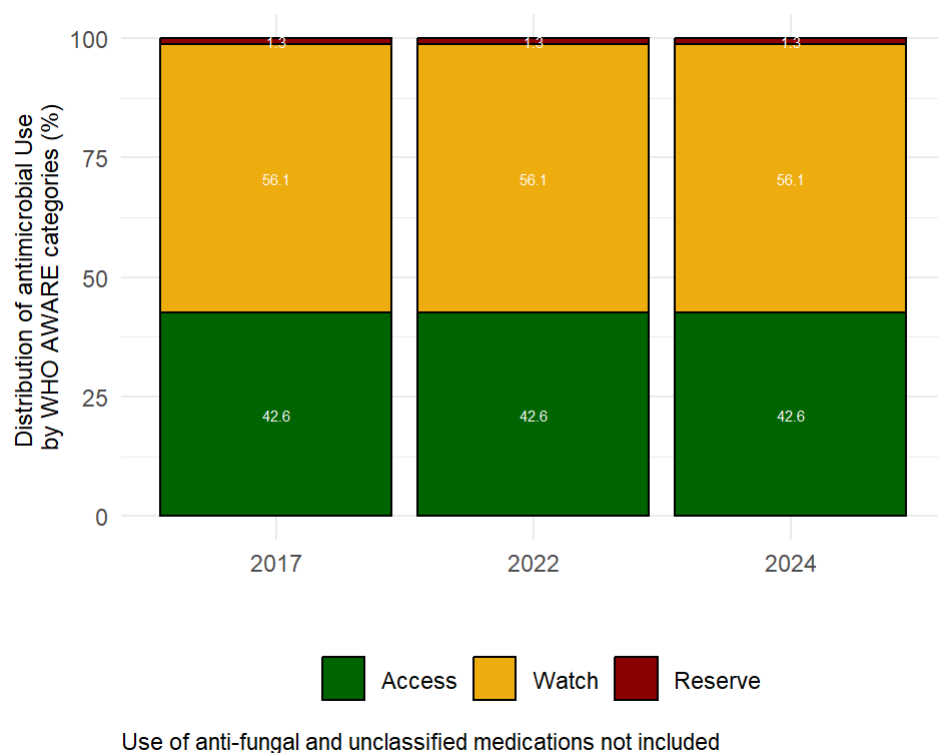


**Figure 25: Antimicrobial use by WHO AWaRe categories by hospital size**



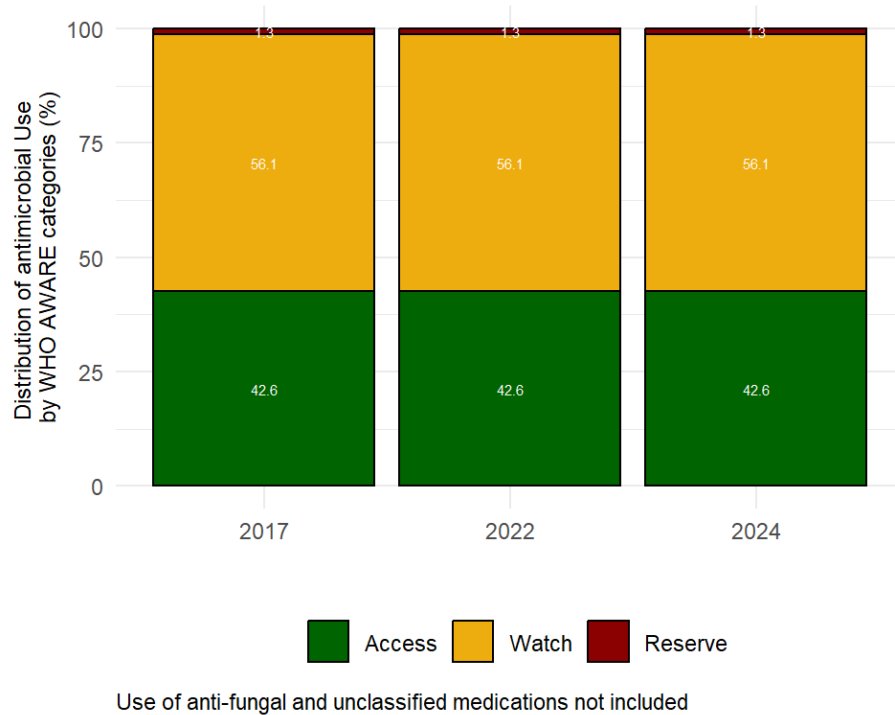
**Figure 26: Antimicrobial use by WHO AWaRe categories by hospital type**

Figure 27 and Figure 28 summarise the use of antimicrobials by WHO AWaRe categories over the last two national surveys (Figure 27 all hospitals and Figure 28 hospitals participating in all three surveys).



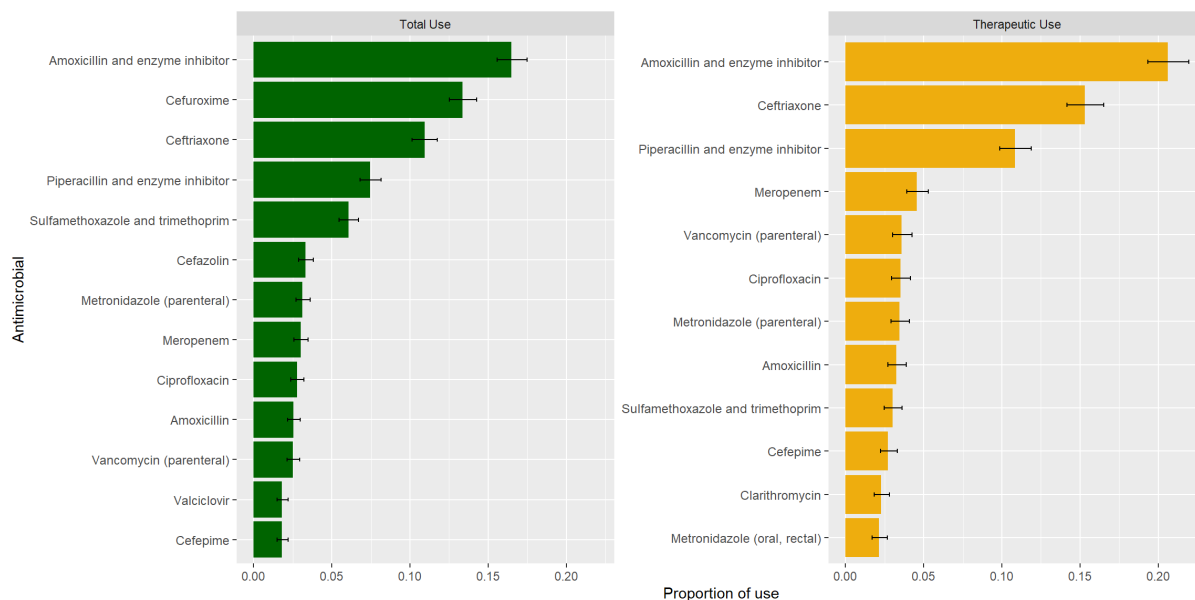
**Figure 27: Antimicrobial use by WHO AWaRe categories in all participating hospitals**





**Figure 28: Antimicrobial use by WHO AWaRe categories in hospitals participating in all surveys**

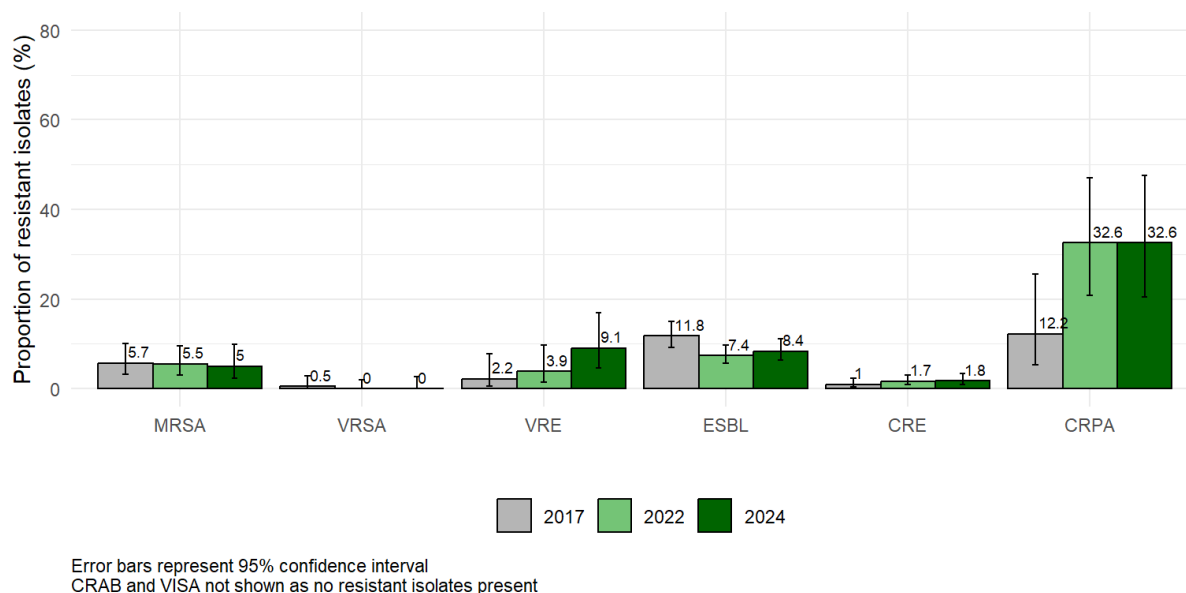
Figure 29 summarises the antimicrobial agents accounting for 75% of antimicrobial prescriptions by total use (left) and therapeutic use (right). Similar to 2023, Co-amoxicillin was the most commonly prescribed antimicrobial, followed by cefuroxime and ceftriaxone for total use and ceftriaxone and piperacillin-tazobactam for therapeutic use.



**Figure 29: Antimicrobial agents that accounted for 75% of total antimicrobial use during PPS 2023**

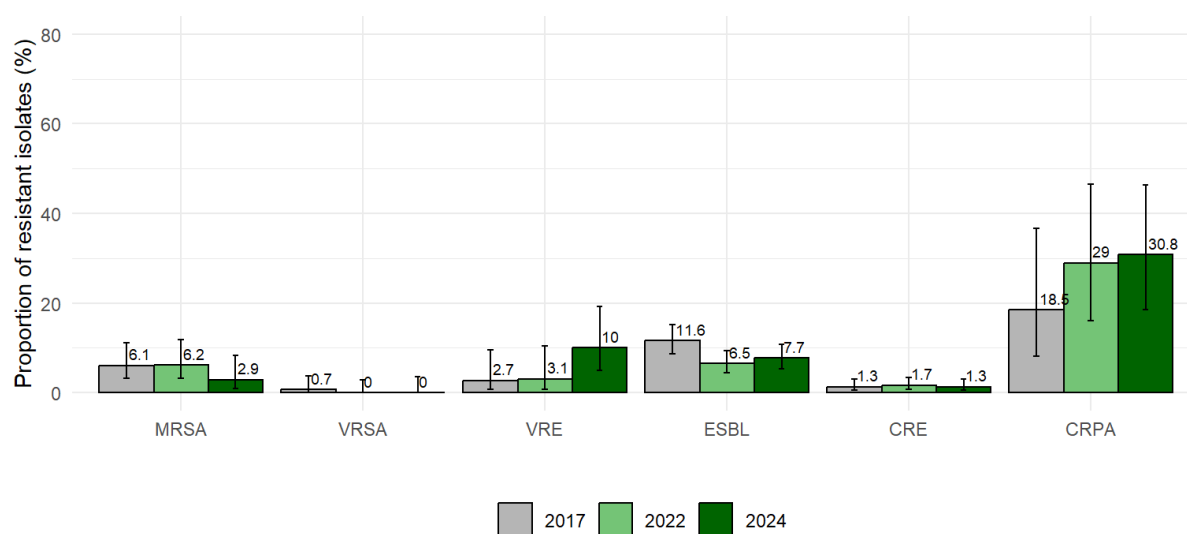
## 5.4 Antimicrobial Resistance

Figure 30 and Figure 31 show resistance over time in all hospitals and hospitals participating in all three surveys, respectively. The proportion of VRE and CRPA has increased compared to 2017 (difference between 2017 to 2024 for CRPA 20% (CI: 0.8-40.0%); for VRE 6.8% (CI: -1.0-14.7%)) but other resistance ratios have remained stable in the PPS data.



ESBL: Extended spectrum beta-lactamase producing organisms; CRAB: Carbapenem resistant *Acinetobacter baumannii*; CRE: Carbapenem resistant enterobacterales; CRPA: Carbapenem resistant *Pseudomonas aeruginosa*; MRSA: Methicillin resistant *Staphylococcus aureus*; VISA: Vancomycin intermediate *Staphylococcus aureus*; VRE: Vancomycin resistant Enterococci; VRSA: Vancomycin resistant *Staphylococcus aureus*

**Figure 30 : Proportion of microbiology isolates classified as resistant in all participating hospitals**



Error bars represent 95% confidence interval  
CRAB and VISA not shown as no resistant isolates present

ESBL: Extended spectrum beta-lactamase producing organisms; CRAB: Carbapenem resistant *Acinetobacter baumannii*; CRE: Carbapenem resistant enterobacterales; CRPA: Carbapenem resistant *Pseudomonas aeruginosa*; MRSA: Methicillin resistant *Staphylococcus aureus*; VISA: Vancomycin intermediate *Staphylococcus aureus*; VRE: Vancomycin resistant Enterococci; VRSA: Vancomycin resistant *Staphylococcus aureus*

**Figure 31 : Proportion of microbiology isolates classified as resistant in hospitals participating in all three surveys**

5.5 Minimum Standards

Figure 32 shows the total weighted minimum standards by hospital size and type. Large hospitals had a higher weighted score compared to small and medium sized hospitals (difference 8.4% (CI: 5.7-11.1%) and 9.8% (CI: 4.1-15.4%) respectively). Weighted scores are calculated per minimum standard by standardizing the maximum possible score to 10 for every minimum standard (for a maximum total score of 70).

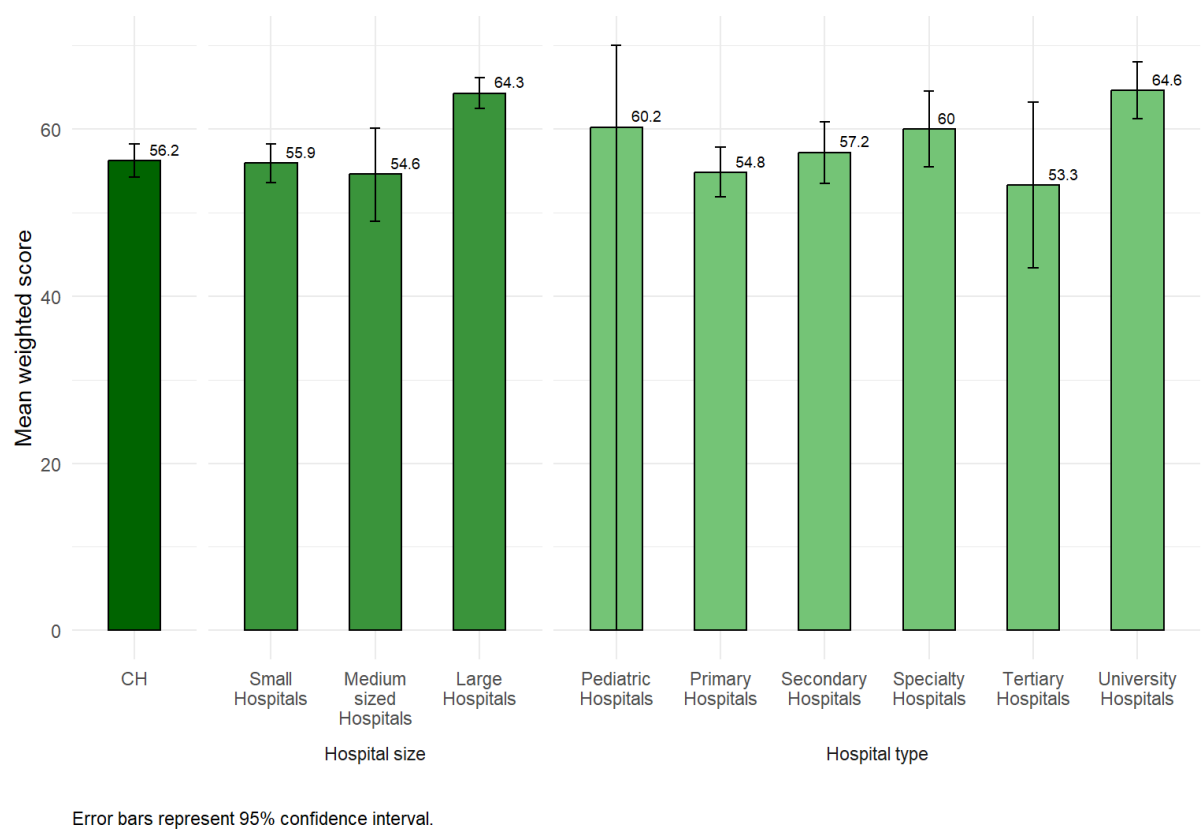
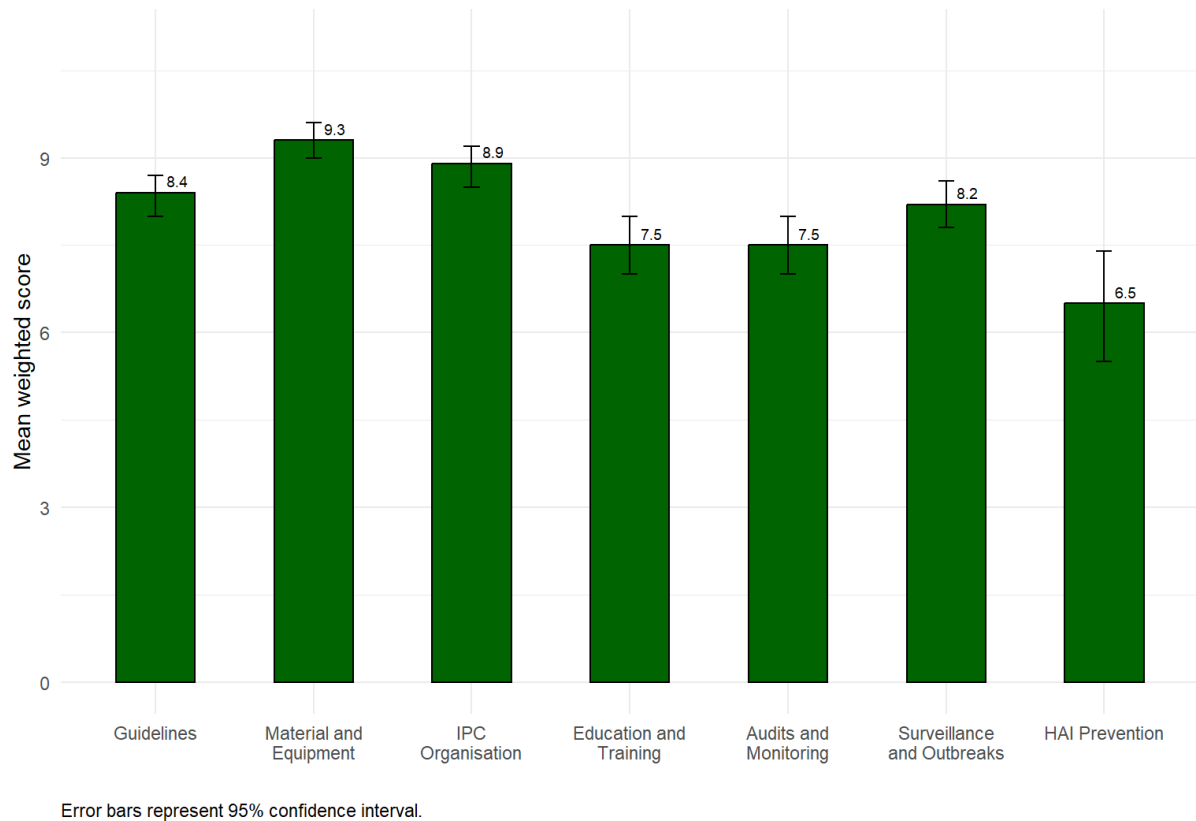


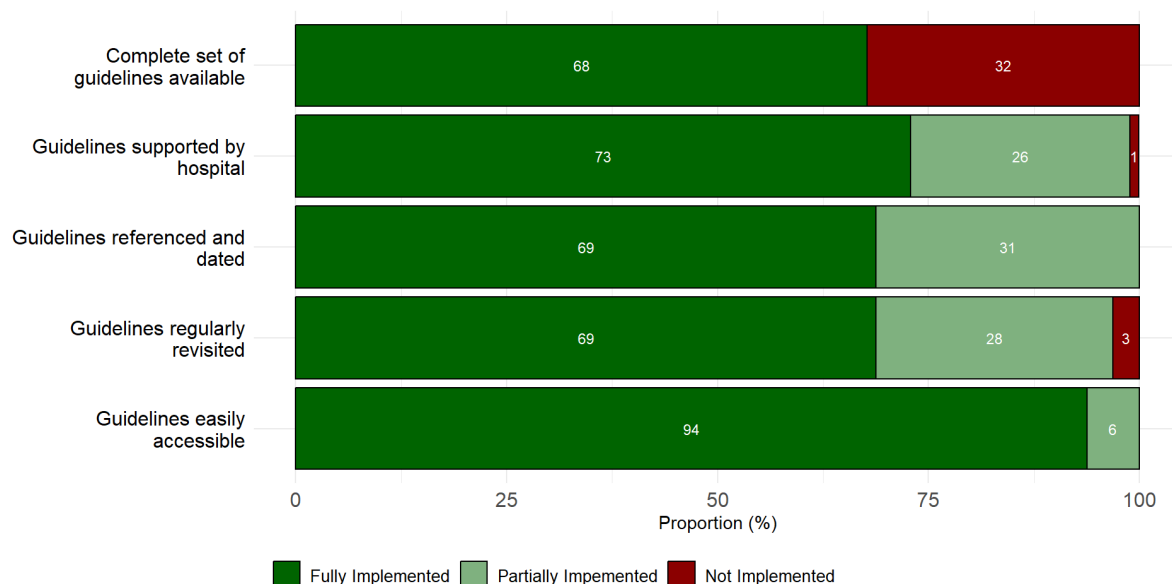
Figure 32 : Total weighted minimum standards score for Switzerland and by Hospital size and type

Figure 33 shows the mean weighted score by each minimum standard for all participating hospitals. The lowest score was for HAI prevention and the highest for material and equipment. Figure 34 – Figure 42 depict the proportion of participating hospitals that have implemented each minimum standard component. These components allow hospitals to easily identify areas for improvement within their IPC programmes.



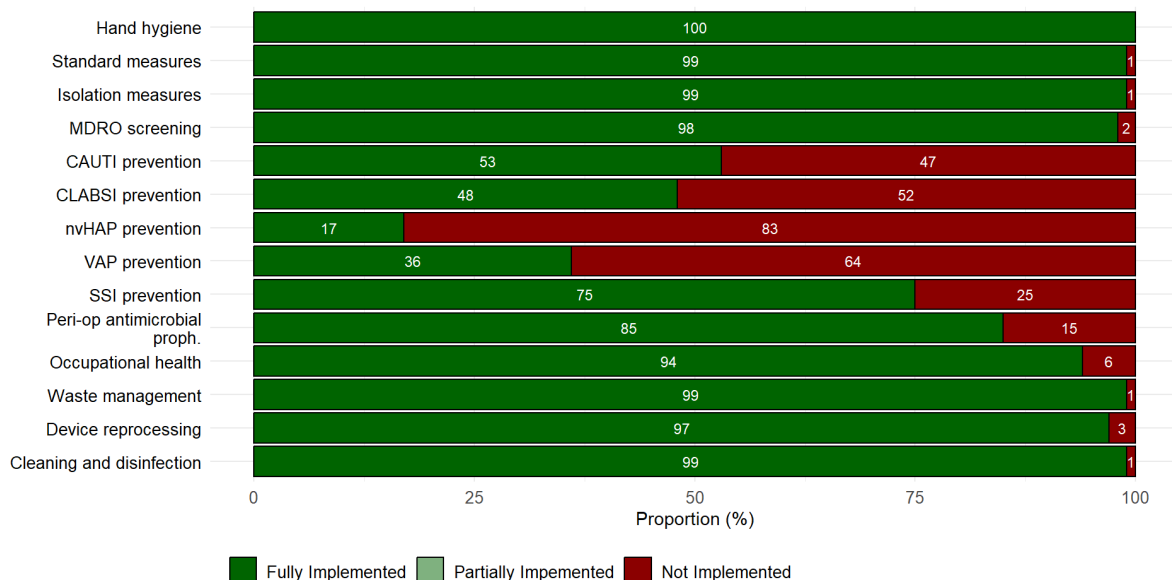
**Figure 33: Mean weighted score per minimum standard for all participating hospitals**

Figure 34 shows the proportion of hospitals that have implemented the components of minimum standard 1 (Guidelines). The vast majority of hospitals have easily accessible guidelines, however, only approximately two-thirds have a complete set of guidelines available.



**Figure 34 : Proportion of hospitals that have implemented components of Minimum Standard 1 – Guidelines**

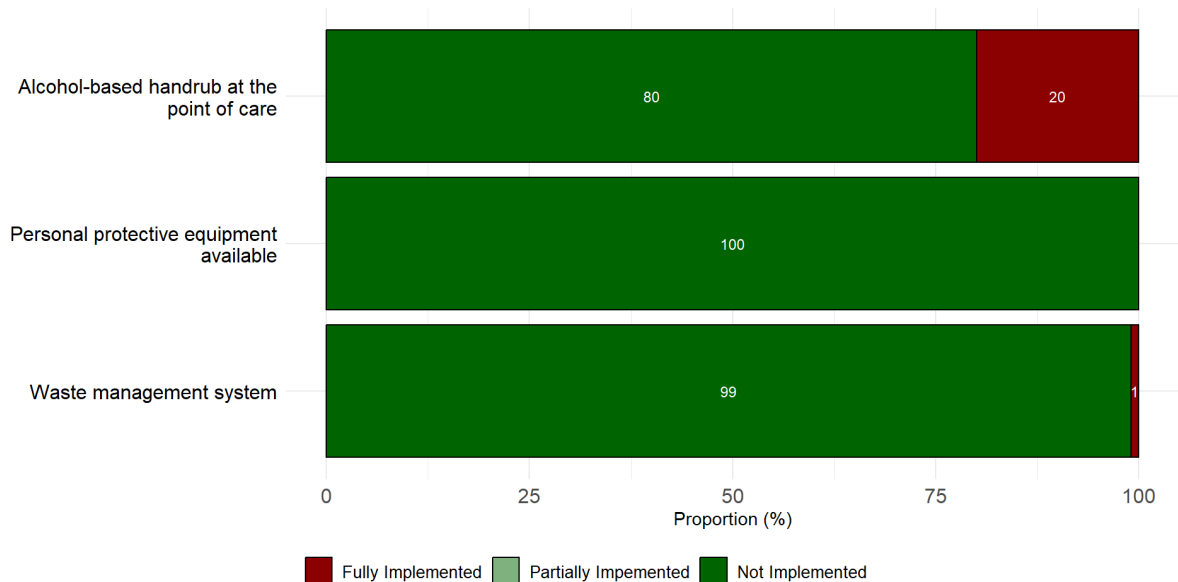
Figure 35 shows the proportion of hospitals that have implemented each guideline encompassed by 'complete set of guidelines'. The guidelines for infection prevention (CAUTI, CLABSI, nvHAP, VAP, SSI prevention) were counted as one guideline for the summary in Figure 34.



**Figure 35: Proportion of hospitals that have implemented guidelines recommended within Minimum Standard 1**

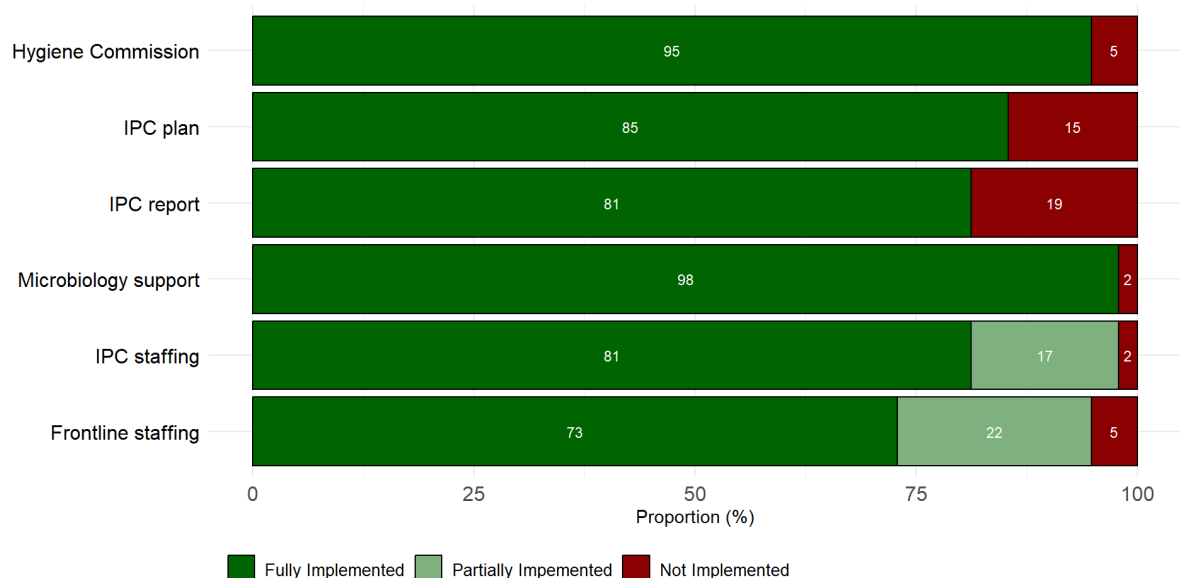


Figure 36 depicts the proportion of hospitals that have implemented the components of Minimum Standard 2 – Material and Equipment. Nearly all the hospitals have personal protective equipment available and a waste management system but availability of ABHR at point of care could still be improved.



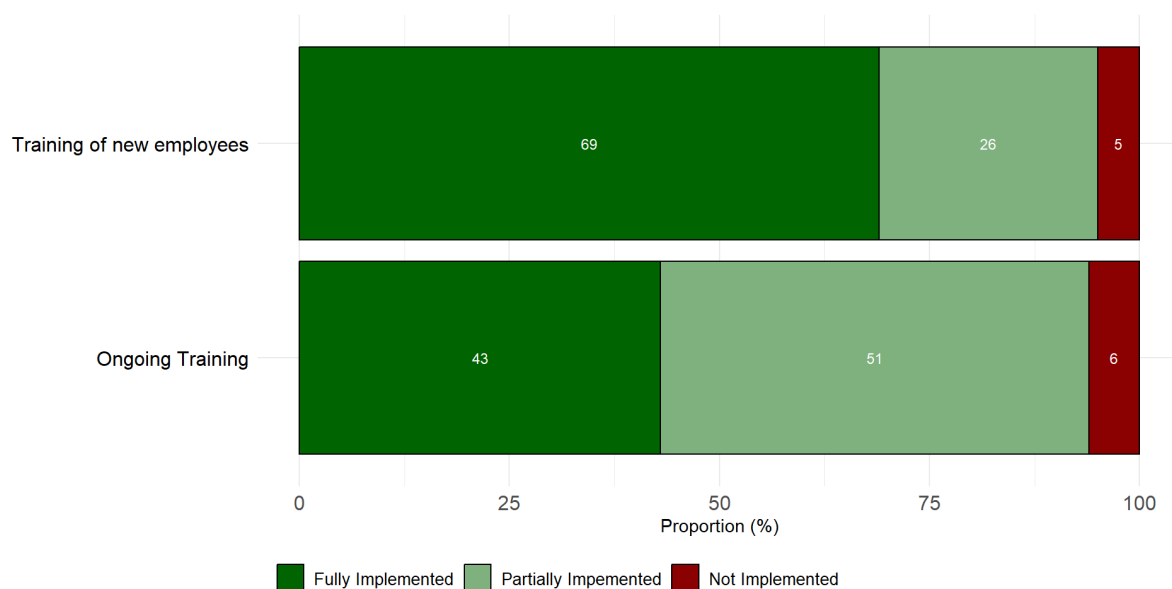
**Figure 36: Proportion of hospitals that have implemented the components of Minimum Standard 2 – Material and Equipment**

Figure 37 illustrates the proportion of hospitals that have implemented components of Minimum Standard 3 – IPC Organisation. Most hospitals have an interdisciplinary IPC Committee and microbiology support. However, only approximately 80% of hospitals have a yearly IPC plan and report and have fully met the IPC staffing criteria (1 full time equivalent Infection Control Practitioner (ICP) per 150 patient beds). Fewer hospitals (approximately three-fourths) fully met the frontline staffing criteria.



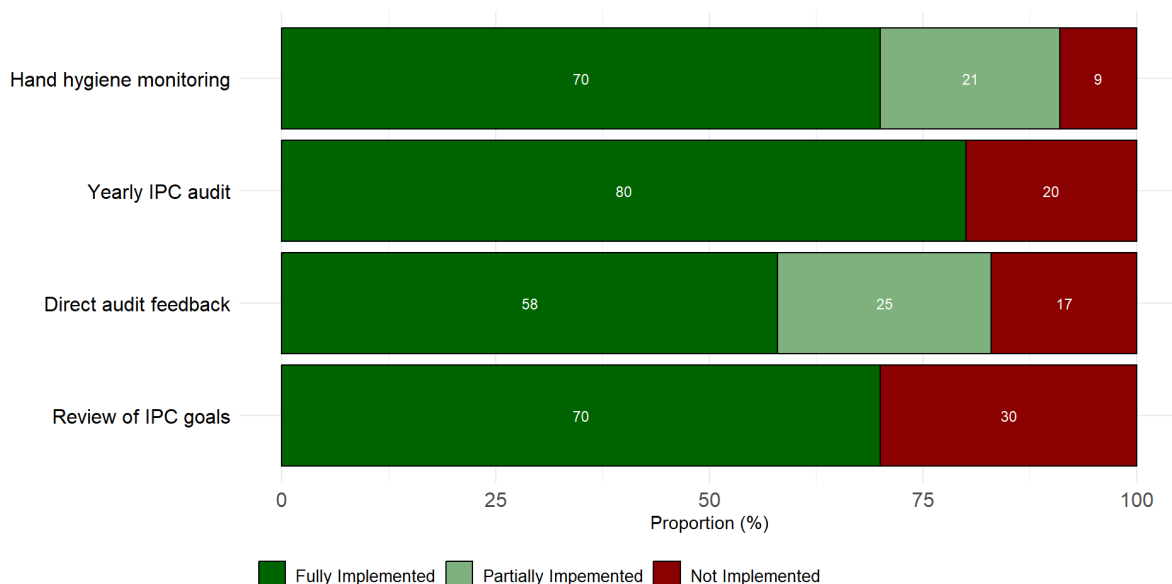
**Figure 37: Proportion of hospitals that have implemented the components of Minimum Standard 3 – IPC Organisation**

Figure 38 depicts the proportion of hospitals that have implemented components of Minimum Standard 4 – Education and Training. Only 70% have a fully implemented programme to train new employees and less than 50% have one for ongoing training. This represents an area for improvement in the majority of Swiss hospitals.



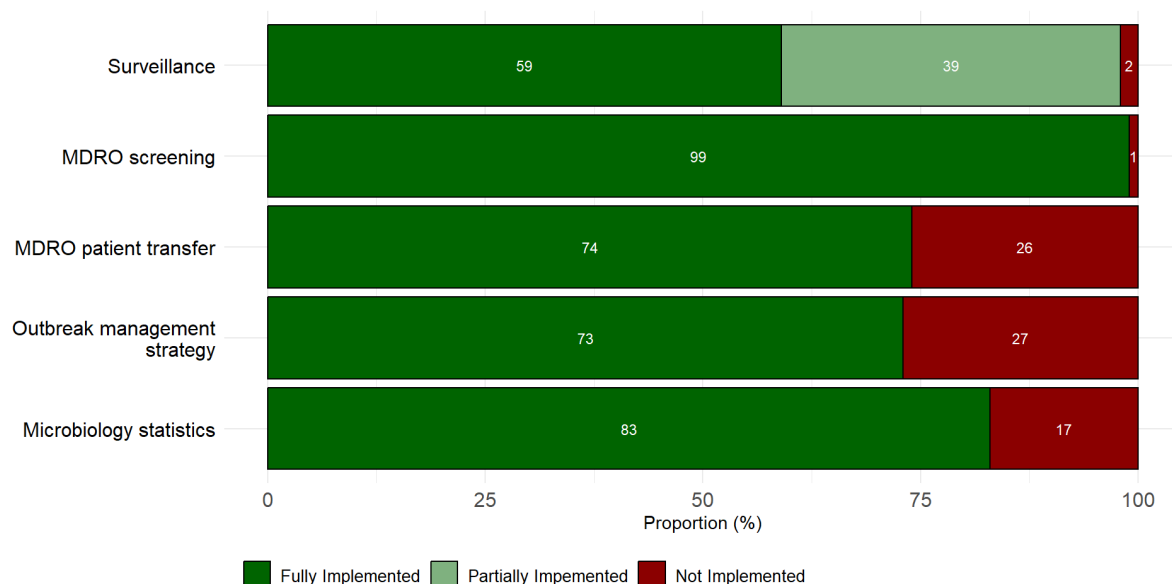
**Figure 38: Proportion of hospitals that have implemented the components of Minimum Standard 4 – Education and Training**

Figure 39 illustrates the proportion of hospitals that have implemented the components of Minimum Standard 5 – Audit and Monitoring. Most hospitals have fully or partially implemented hand hygiene monitoring but only 70% review their IPC goals yearly.



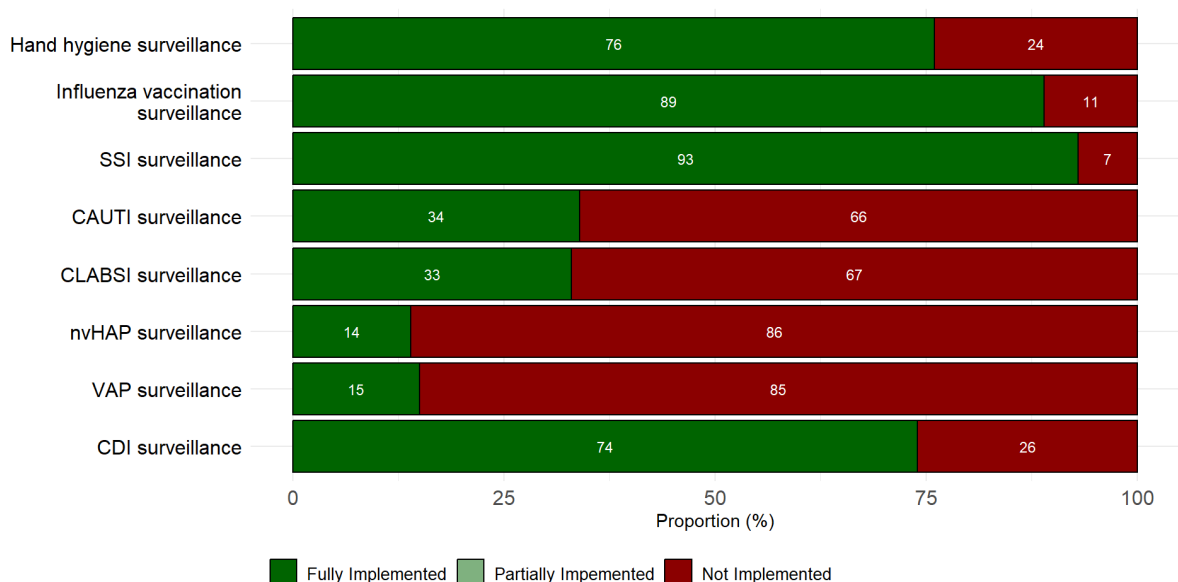
**Figure 39: Proportion of hospitals that have implemented the components of Minimum Standard 5 – Audit and Monitoring**

Figure 40 shows the proportion of hospitals that have implemented components of Minimum Standard 6 – Surveillance and Outbreaks. Almost all hospitals perform MDRO screening but only three-fourths have a outbreak management strategy or a method to transmit MDRO information on patient transfer.



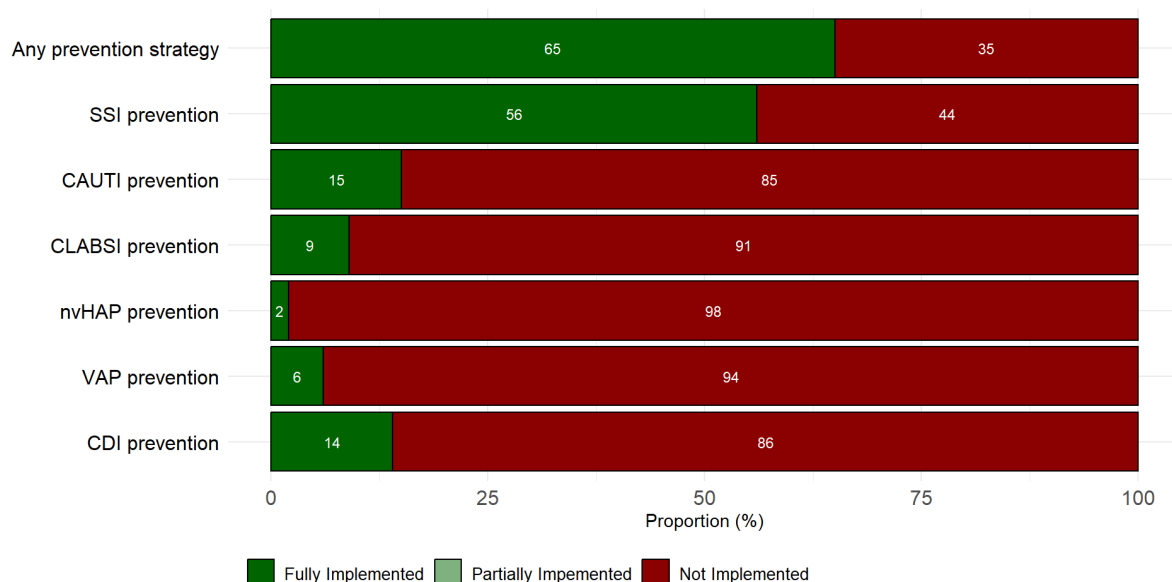
**Figure 40: Proportion of hospitals that have implemented the components of Minimum Standard 6 – Surveillance and Outbreaks**

Figure 41 depicts the proportion of hospitals that have implemented the surveillance modules that are part of Minimum Standard 6. Almost all hospitals have implemented the SSI surveillance module with Influenza vaccination and Hand hygiene surveillance modules being the next most frequent. Very few hospitals have implemented nvHAP or VAP surveillance and only a third have implemented CAUTI and CLABSI surveillance.



**Figure 41: Proportion of hospitals that have implemented the Surveillance modules (part of Minimum Standard 6)**

Figure 42 shows the proportion of hospitals that have implemented components of Minimum Standard 7 – HAI prevention. Two-thirds of hospitals have implemented at least one prevention strategy with SSI prevention being the most common. Few hospitals have implemented any other strategies.



**Figure 42: Proportion of hospitals that have implemented the components of Minimum Standard 7 – HAI prevention**

## 6 References

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