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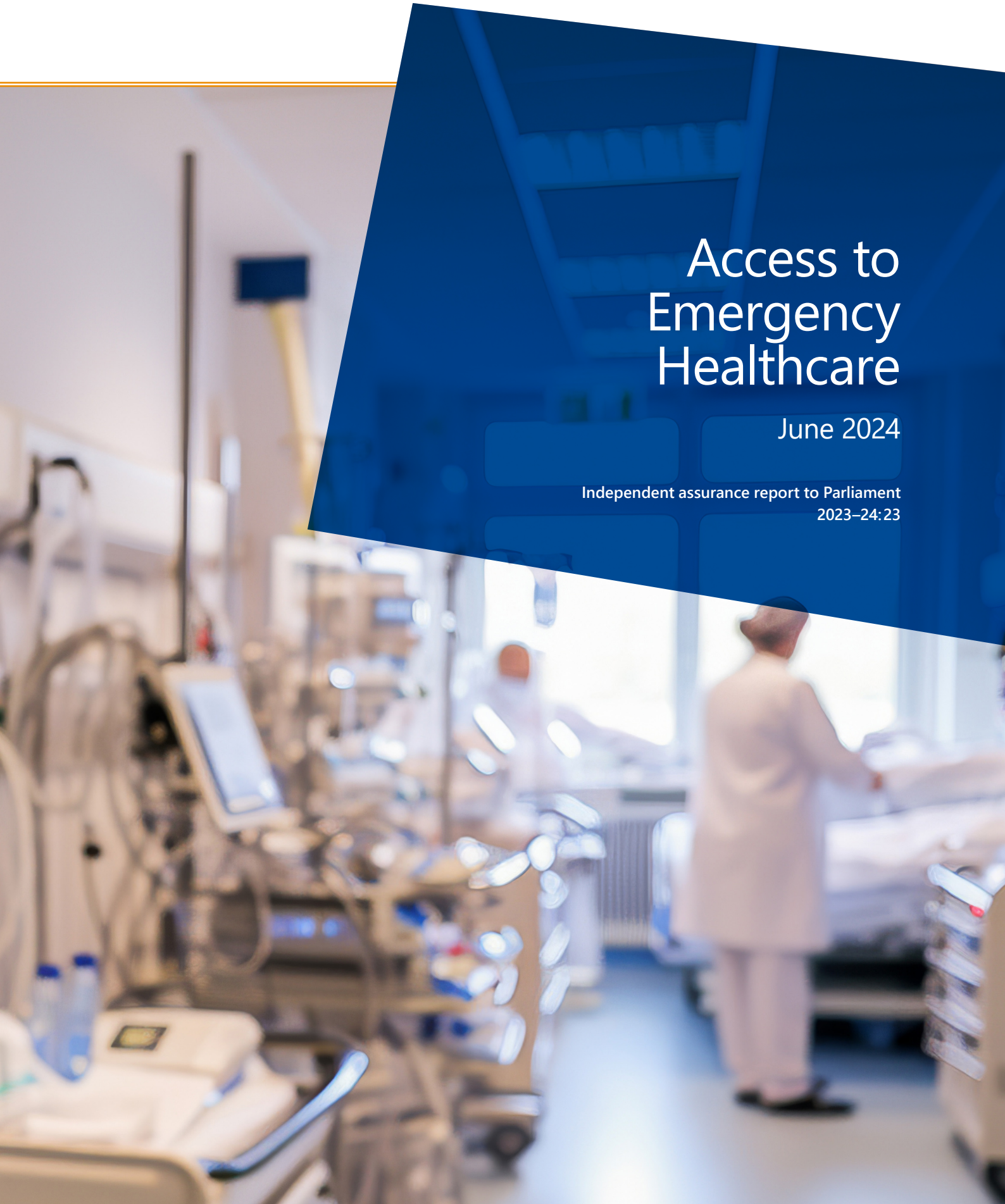

Access to Emergency Healthcare

June 2024

Independent assurance report to Parliament
2023–24:23

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Access to Emergency Healthcare

Independent assurance report to Parliament
Published by order, or under the authority,
of the Parliament of Victoria
June 2024

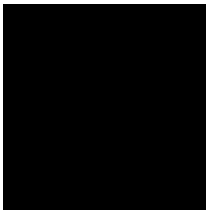
The Hon Shaun Leane MLC
President
Legislative Council
Parliament House
Melbourne

The Hon Maree Edwards MP
Speaker
Legislative Assembly
Parliament House
Melbourne

Dear Presiding Officers

Under the provisions of the *Audit Act 1994*, I transmit my report *Access to Emergency Healthcare*.

Yours faithfully



Andrew Greaves
Auditor-General
25 June 2024

The Victorian Auditor-General's Office (VAGO) acknowledges the Traditional Custodians of the lands and waters throughout Victoria. We pay our respects to Aboriginal and Torres Strait Islander communities, their continuing culture, and to Elders past and present.

Contents

Audit snapshot

What we examined

We assessed whether the Department of Health (DH) and responsible agencies are addressing Victorians' need for timely and equitable access to emergency healthcare.

We examined DH, Ambulance Victoria (AV) and 3 health services (The Royal Melbourne Hospital, Werribee Mercy Hospital and Bendigo Hospital).

Why this is important

Victorians should have access to timely emergency healthcare irrespective of where they live or their social or economic status.

When Victorians are unable to access emergency healthcare in a timely manner, it can negatively impact their health and overall quality of life.

What we concluded

From 2013–14 to 2022–23, Victorian health services met the target to immediately see all triage category 1 patients with life-threatening conditions.

However, for the same period, health services did not meet their targets for:

- patients to be transferred from ambulance to the emergency department (ED) within 40 minutes
- patients to be seen within clinically recommended time
- length of stay in the ED.

DH, AV and audited health services understand the key drivers of demand and barriers to timely access to emergency healthcare, and the initiatives we examined address some of these factors.

DH is improving its performance monitoring and reporting systems, but it does not publish long-term performance data.

What we recommended

We made 3 recommendations to DH about:

- investigating and addressing the root cause of why health service performance targets are not being met
- investigating and addressing potential differences in timely access to emergency healthcare for different population groups
- improving public reporting on timely access to emergency healthcare.

→ Full recommendations

Key performance measures

DH has set these **targets** for Victorian public health services:

90% of patients who arrive by ambulance are transferred into the ED within **40 minutes**

100% of patients with life-threatening conditions* are seen **immediately**

80% of all emergency patients are seen within **clinically recommended time****

Length of stay in the ED

81% of patients spend less than **4 hours** in ED

0 patients spend longer than **24 hours** in ED

Note: *Conditions that require immediate aggressive intervention.
**As recommended by the Australasian Triage Scale.
Source: VAGO.

Our recommendations

We made 3 recommendations to address 3 issues. The Department of Health accepted 2 recommendations in full and one in principle.

Key issues and corresponding recommendations			Agency response
Issue: From 2013–14 to 2022–23, health services did not meet targets for some key performance measures for timely access to emergency healthcare			
Department of Health	**1**	In consultation with Victorian health services: • investigate the root cause of why health services are not meeting timeliness measures • develop an action plan to further explore and address the root cause of why health services are not meeting timeliness measures • share learnings from effective interventions across the health system (see Section 1).	Accepted
Issue: There are potential differences in the timeliness of access to emergency healthcare for different population groups over the period of 2013–14 to 2022–23			
Department of Health	**2**	In consultation with Victorian health services, investigate the root cause and nature of differences in access to timely emergency healthcare for different population groups and put in place any necessary measures to ensure equitable access (see Section 1).	Accepted
Issue: The public reporting of performance against key measures does not provide insights into long-term trends			
Department of Health	**3**	Improve its public reporting on timely access to emergency healthcare by: • publishing long-term performance data for Victoria's public health services and updating it regularly • reviewing and updating its relevant Budget Paper No. 3: Service Delivery measures to ensure they are consistent with health service targets and show trends over time (see Section 3).	Accepted in principle

What we found

This section summarises our key findings. The numbered sections that follow detail our complete findings, including supporting evidence.

When reaching our conclusions, we consulted with the Department of Health (DH), Ambulance Victoria and 3 health services (The Royal Melbourne Hospital, Werribee Mercy Hospital and Bendigo Hospital) and considered their views. The agencies' full responses are in Appendix A.

Why we did this audit

It is an objective of the *Health Services Act 1988* that an adequate range of essential health services is available to all Victorians irrespective of where they live or their social or economic status. This includes access to timely emergency healthcare.

When Victorians are unable to access emergency healthcare in a timely manner, it can negatively impact their health and overall quality of life.

Time in scope

We assessed the key performance measures for timely access to emergency healthcare over the most recent 10 financial years (2013–14 to 2022–23) to determine if health services met their targets to provide emergency healthcare to Victorians in a timely manner.

Key performance measures

DH sets out several performance measures in its annual statements of priorities with health services and Ambulance Victoria. We assessed the following key performance measures for timely access to emergency healthcare:

- patients transferred from ambulance to the emergency department (ED) within 40 minutes
- patients treated within clinically recommended time
- length of stay in the ED.

Experiences of different patient groups

We assessed how different population groups access emergency healthcare based on the key performance measures outlined above. We examined 5 different population groups:

- patients who prefer a language other than English
- First Nations peoples
- patients with a mental health indicator
- presentations in non-metro hospitals
- patients from lower socioeconomic postcodes.

Our key findings

We made 3 key findings:

1	From 2013–14 to 2022–23, Victorian health services met the target to immediately see all triage category 1 patients with life-threatening conditions. For the same period, health services did not meet their targets for: • patients to be transferred from ambulance to the ED within 40 minutes • patients to be seen within clinically recommended time • length of stay in the ED.
2	DH, AV and audited health services understand the key drivers of demand and barriers to timely access to emergency healthcare, and the initiatives we examined address some of these factors.
3	DH is improving data collection and monitoring of health services. However, public reporting of health services' performance against key measures does not provide insights into long-term trends.

Key finding 1: Victorian health services immediately see all triage category 1 patients with life-threatening conditions but do not meet other key performance targets

Targets for key performance measures

From 2013–14 to 2022–23, Victorian health services immediately attended to all triage category 1 patients presenting in the ED with life-threatening conditions. However, they did not meet the performance targets for other key timeliness measures (see Figure 1).

Figure 1: Key performance measures for timely access to emergency healthcare

Key performance measure		Target	Performance
Ambulance to the ED transfer	% of patients transferred from ambulance to the ED within 40 minutes	90%	**Below target**
Time to treatment	% of (all) triage category 1 to 5 emergency patients (collectively) seen within clinically recommended time*	80%	**Below target**
	% of triage category 1 emergency patients (with immediately life-threatening conditions) seen immediately	100%	**Target achieved**
Length of stay in the ED	% of emergency patients with a length of stay in the ED of less than 4 hours	81%	**Below target**
	Number of patients with a length of stay in the ED greater than 24 hours	0	**Below target**

Note: *As recommended by the Australasian Triage Scale.
Source: VAGO, based on the *Victorian Health Services Performance Monitoring Framework 2022-23*.

Performance is declining over time

Victorian health services have immediately seen all triage category 1 emergency patients with life-threatening conditions and met the target for this performance measure. However, their performance against other key measures for timely access to emergency healthcare has declined from 2013–14 to 2022–23.

Figure 2 shows that the percentage of patients transferred from an ambulance into the ED within 40 minutes remained below target but stable at around 86 per cent from 2014–15 to 2016–17. However, it began to gradually decline until 2020, when the coronavirus diseases (COVID-19)

began to spread in Victoria. There is a sharper decline in performance against this measure from 2020–21 onwards.

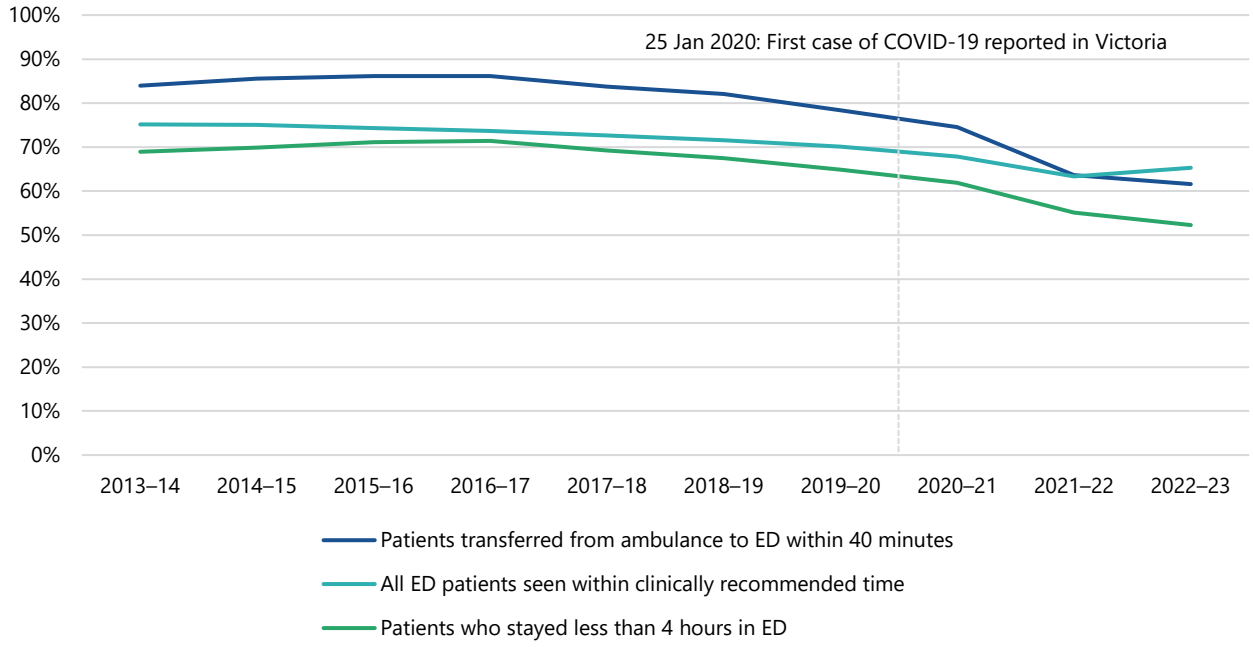
There was a similar trend for the number of patients seen within clinically recommended timeframes. Performance against this measure gradually declined since 2014–15 and was at its worst in 2020–21, following the onset of the COVID-19 pandemic. There is an improvement in performance in 2022–23, but it is too early to tell if this reflects a sustained performance improvement.

The percentage of patients staying in the ED for less than 4 hours was relatively stable at around 70 per cent from 2013–14 to 2017–18, but since then there has been a gradual decline.

The performance data we used to undertake our assessment is based on yearly time series for 2013–14 to 2022–23.

The performance data for the first 3 quarters of 2023–24 is also available (see Appendix D). While the data potentially shows some signs of improvement it is incomplete and does not account for seasonal variation. Therefore, it is not included in our assessment to compare to previous years and cannot be reflected in our findings.

Figure 2: Health services' performance against key measures for timely access to emergency healthcare over 2013–14 to 2022–23



Source: VAGO, based on Victorian Emergency Minimum Dataset (VEMD) data.

Key finding 2: DH, AV and audited health services understand the key drivers of demand and barriers to timely access to emergency healthcare, and the initiatives we examined address some of these factors

Factors impacting timely access to emergency healthcare

DH, Ambulance Victoria and the audited health services understand and largely agree on the drivers of demand and barriers to patient flow impacting timely access to emergency healthcare.

The primary drivers of demand include the growing and ageing population, and an increase in the number of patients experiencing more severe health conditions. The limited capacity of health services to transfer and discharge patients through the health system in a timely manner is a key barrier to patient flow.

Patient flow in the ED

Patient flow through the emergency healthcare system refers to the movement of patients through emergency healthcare settings and encompasses the entire patient journey from arrival until the patient leaves the ED.

Effective patient flow is essential for timely, high-quality emergency healthcare, and inefficiencies can cause disruptions within the emergency healthcare system.

DH's initiatives

DH has implemented several initiatives to address the system-wide barriers that impact patient flow and timely access to emergency healthcare. In consultation with DH, we selected a sample of 8 initiatives to determine if they:

- address the key factors impacting timely access to emergency healthcare
- contribute towards improving health services' overall performance against key measures for timely access to emergency healthcare.

DH monitors the performance of these initiatives against their intended program objectives. Seven of these initiatives aim to connect patients to out-of-hospital care, where appropriate. The Timely Emergency Care Collaborative is the only initiative we examined with the primary objective to provide more timely emergency healthcare to Victorians by improving system-wide patient flow. Audited health services have also implemented several initiatives to address factors impacting ED patient flow within hospitals. But it is not clear whether and to what extent they are improving timely access to emergency healthcare.

Addressing factors impacting timely access to emergency healthcare

DH's monitoring data reveals that because of these initiatives, some potential ED presentations were directed to appropriate out-of-hospital care settings. This potentially increases the availability of ED resources to attend to high-acuity presentations. It also enables patients with low-acuity conditions to access timely medical care outside of the ED, which can prevent their condition from further deteriorating.

The 8 initiatives we examined address the drivers of demand related to:

- patients with low-acuity conditions
- patients with lasting impact of COVID-19
- patients with socioeconomic disadvantage
- limited access to GPs
- seasonal demand
- some workforce barriers.

Impact on performance against key measures

The 8 initiatives we examined are part of a broader range of programs in place with varying objectives. The performance data related to timely access to emergency healthcare from 2013–14 to 2022–23 does not show significant improvement.

Performance evaluation data is not available for 2 of the 8 initiatives we examined. The initiatives that DH has evaluated appear to be achieving their specific program objectives. However, we note most initiatives we examined are relatively recent and many factors may contribute to the health services' ability to meet performance targets.

Key finding 3: DH is improving data collection and monitoring of health services. However, public reporting of health services' performance against key measures does not provide insights into long-term trends

Improvements to data collection and performance monitoring

DH is improving its ability to capture real-time adverse event data from all public health services. This data is now used as part of its early warning system to proactively identify and monitor patient safety risks.

DH has also been working with a selection of health services to improve the data it has and to better use data insights to make improvements. For example, DH's Timely Emergency Care Collaborative has included development of a dashboard to monitor post-ED patient metrics. DH advised us this will be expanded to all hospitals with an ED.

Publicly reporting on access to emergency healthcare

Access to long-term performance data is important for the public because it provides transparency and accountability in the delivery of public health services.

DH publishes performance data for Victorian health services and hospitals through the Victorian Agency for Health Information. This data only displays performance over the most recent 15 months for individual hospitals. The short-term results do not show trends over time or insights on how events such as the COVID-19 pandemic have impacted health services' delivery of emergency healthcare.

DH advised us that it plans to publish time series data for all Victorian health services' performance indicators on the Victorian Agency for Health Information website. This will be published by the end of the 2024, including 25 quarters of data from 2018–19 to the first quarter of 2024–25. Each new time series will be anchored at 2018–19, providing an increasing time series as new data is released.

Interstate comparison

Public health authorities in New South Wales and Queensland publicly report comparable performance data on timely access to emergency healthcare for a significantly longer period than Victoria. The published data on ED presentations in New South Wales dates to January 2010 while Queensland publishes 10 quarters of historical ED data.

Performance data presented in the Budget papers

DH provides an overview of the health services' performance to Parliament through the *Budget Paper No. 3 Service Delivery* (BP3). The reported information includes results for the previous financial year and expected results for the current one.

The BP3 includes results of 4 of the 5 key performance measures for timely access to emergency healthcare. The performance measure for the number of patients with a length of stay in the ED greater than 24 hours is not a BP3 measure and is therefore not reported.

The BP3 target for the percentage of emergency patients with a length of stay in the ED of less than 4 hours is 75 per cent, instead of 81 per cent as per health services' statements of priorities. Results for this performance measure for the last decade are consistently below 75 per cent.

1. Access to emergency healthcare

DH has several key performance measures for timely access to emergency healthcare. One of these is that health services immediately see all triage category 1 patients (with immediately life-threatening conditions). From 2013–14 to 2022–23, Victorian health services met this target. However, they did not meet the targets for the following performance measures:

- patients transferred from ambulance to the ED within 40 minutes
- patients treated within clinically recommended time
- length of stay in the ED.

In addition, there are some differences in access to timely emergency healthcare for different patient groups.

Emergency healthcare in Victoria

Health Services Act 1988

One of the objectives of the *Health Services Act 1988* is that all Victorians have access to an adequate range of essential health services regardless of where they live or their social or economic status. This includes access to timely emergency healthcare.

Victorian Health Services Performance Monitoring Framework

The *Victorian Health Services Performance Monitoring Framework 2022-23* (the Framework) articulates the government's performance monitoring of public health services and hospitals. It describes the contextual, strategic and operational aspects of monitoring and improving health services' performance.

The Framework also describes the various roles DH, Safer Care Victoria and the Victorian Agency for Health Information have in building, designing and monitoring best-practice indicators to assist with the implementation of health services' performance strategies.

Roles and responsibilities

DH, Ambulance Victoria and health services share individual and collective responsibilities in delivering timely and equitable emergency healthcare services. Figure 3 outlines these responsibilities.

Figure 3: Roles and responsibilities of key agencies in delivering emergency healthcare services

	DH	Ambulance Victoria	Individual health services
Entity type	Government department	Independent legal entities	
Role	• Contribute to management of the public health system through leadership, governance, policy development and advancement of quality and safety • Includes responsibility for funding, performance monitoring and accountability, strategic asset management and system planning	• Provide urgent treatment and transport patients to health services for emergency healthcare • Provide secondary triage services to patients who access emergency healthcare via 000	• Operate EDs that provide urgent treatment and care to patients who are unwell or injured • Primary role of an ED is to provide short-term treatment and stabilise patients before discharging them (home) or referring them for further care
Responsibilities under the Framework	System manager	Service providers	
	• Identify performance concerns and factors that may impact health service performance • Analyse performance issues and opportunities for improvement • Determine appropriate interventions • Ensure action is taken to address performance concerns and support ongoing improvement	• Partner with DH and other agencies to improve health service performance and system-wide performance • Promptly report any emerging risks or potential performance issues to DH, including immediate action taken • Establish and maintain a culture of safety and performance improvement • Ensure accurate and timely submission of data and other information, including implementing agreed action plans and status update reports • Collaborate with other health services and system partners to maintain and improve their performance and meet the needs of their communities	

Source: VAGO, based on the Framework.

Targets for key performance measures

Each year, DH sets performance measures for timely access to emergency healthcare in its statements of priorities with health services and Ambulance Victoria. We assessed the health services' performance for the key measures in Figure 4.

Figure 4: DH performance measures (with targets) that we assessed

	Key performance measure		DH target
1	Time for transfer on arrival: ambulance to the ED	% of patients transferred from ambulance to the ED within 40 minutes	90%
2	Time to treatment	% of (all) triage category 1 to 5 emergency patients (collectively) seen within clinically recommended time*	80%
		% of triage category 1 emergency patients (with life-threatening conditions) seen immediately	100%
3	Length of stay in the ED	% of emergency patients with a length of stay in the ED of less than 4 hours	81%
		Number of patients with a length of stay in the ED greater than 24 hours	0

Note: *As recommended by the Australasian Triage Scale.
Source: VAGO, based on the Framework.

Measure 1: Transferring patients from ambulance on arrival to the ED within 40 minutes

Risks associated with delayed transfers

It is important patients are transferred from ambulance on arrival to the ED in a timely manner to not delay medical assessment and ensure ambulances are available to respond to other emergencies.

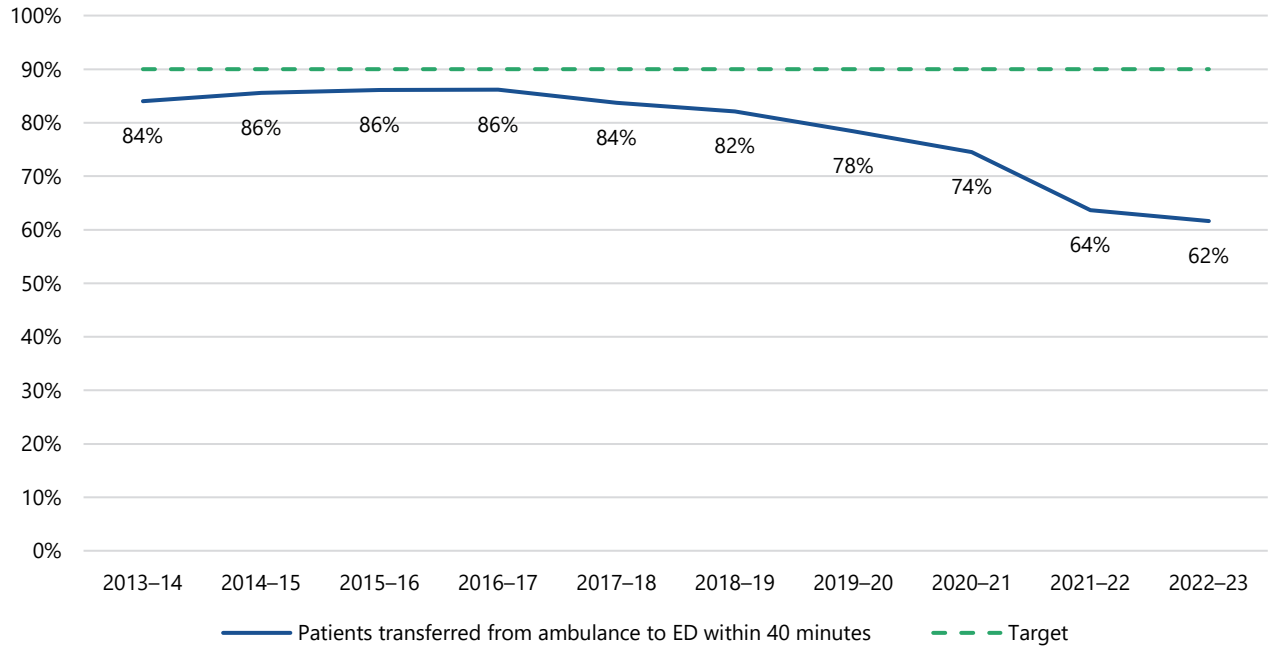
The 90 per cent target and actual performance

In 2011, DH introduced a new performance target for health services to transfer at least 90 per cent of patients from ambulances into the ED within 40 minutes.

However, in the decade 2013–14 to 2022–23, health services did not meet this target.

Figure 5 illustrates this, showing that performance remained below target but stable at around 86 per cent from 2014–15 to 2016–17, but gradually declined until 2020, when COVID-19 started spreading in Victoria. There is a sharper decline in performance against this measure from 2021–22 onwards.

Figure 5: Percentage of patients transferred from ambulance to the ED within 40 minutes for 2013–14 to 2022–23



Note: VAGO reviewed VEMD data from 1 July 2014 to 30 June 2023. For 2013–14, we used data from DH's 2013–14 annual report because VEMD did not collect this data until 2014–15 onwards.
Source: VAGO, based on VEMD and DH's 2013–14 annual report.

Measure 2: Seeing emergency patients within clinically recommended times

The ED triage system

Hospitals use a triage system to guide decisions about which patients they should see first. This is according to how sick they are rather than when they present. A triage assessment should take no more than 2 to 5 minutes and be carried out by an appropriately trained staff member.

On arrival at the ED, a specialist emergency nurse, called a triage nurse, assesses all patients. Using an established urgency scale, the triage nurse categorises the patient. This dictates how quickly the patient needs treatment.

Australasian Triage Scale

All Victorian EDs use the Australasian Triage Scale to ensure patients are treated in order of clinical urgency and allocated to the most appropriate assessment and treatment area.

The Australasian Triage Scale has 5 categories with corresponding maximum wait times for medical assessment and treatment, as shown in Figure 6.

Figure 6: The 5 Australasian Triage Scale categories

Triage category	Patient description	Response
Category 1	Immediately life threatening and requiring immediate aggressive intervention	0 minutes (immediate assessment and treatment)
Category 2	Imminently life threatening, important or time-critical, or very severe pain (for example, airway risk or severe respiratory distress, acute stroke, very severe pain)	Within 10 minutes – assessment and treatment (often simultaneous)
Category 3	Potentially life-threatening conditions, or situational urgency requires time-critical treatment or humane practice mandates relief of severe discomfort or distress (for example, persistent vomiting or moderately severe blood loss)	Within 30 minutes – assessment and treatment to start
Category 4	Potentially serious conditions, or situational urgency requires time-critical treatment or involves significant complexity or severity (for example, mild haemorrhage, difficulty swallowing, sprained ankle, and semi-urgent mental health problems)	Within 60 minutes – assessment and treatment to start
Category 5	Less urgent or clinic-administrative problems, such as results review, medical certificates or prescriptions only	Within 120 minutes – assessment and treatment to start

Source: DH and the Australasian College for Emergency Medicine.

DH's targets

In 2011, DH set health services the following performance targets based on the triage categories:

- percentage of triage category 1 emergency patient seen immediately: 100 per cent
- percentage of triage category 1 to 5 emergency patients seen within clinically recommended time: 80 per cent (note this is a combined measure for all category 1 to 5 patients).

Actual performance: category 1 patients

From 2013–14 to 2022–23, health services consistently provided immediate treatment to all the patients in triage category 1 with conditions that are an immediate threat to life (or at imminent risk of deterioration).

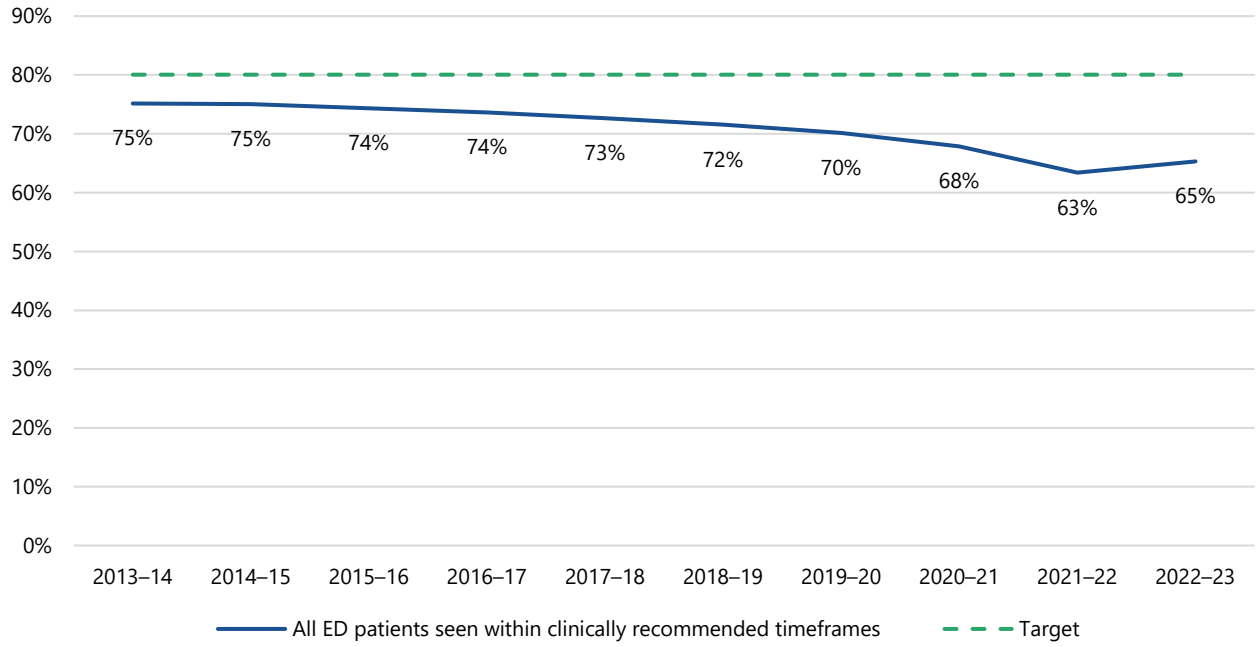
This performance meets DH's 100 per cent target.

Actual performance: all category 1 to 5 patients

During the same 10-year period, aggregate data across all health services shows they did not meet the performance target of seeing at least 80 per cent of triage category 1 to 5 patients within the clinically recommended times.

Figure 7 shows that the performance against this target has been gradually declining since 2014–15 and was at its worst in 2021–22, following the onset of the COVID-19 pandemic. There is an improvement in performance since 2022–23, but it is too early to tell if this reflects a sustained performance improvement.

Figure 7: Percentage of all emergency patients (triage Category 1 to 5) treated within clinically recommended timeframes



Source: VAGO, based on VEMD.

Actual performance: time for assessment and treatment by category

While triage category 1 patients are those with the most urgent medical needs, triage category 2 and 3 patients also have imminent or potentially serious conditions.

DH has advised us that it tracks performance against each triage category. However, it does not have individual targets for health services with respect to triage categories 2, 3, 4 and 5. The Australasian College for Emergency Medicine's *Policy on the Australasian Triage Scale* outlines different performance indicator thresholds (the percentage of patients who commence assessment and treatment within the relevant waiting time from their time of arrival) for each triage category 1 to 5 of 100 per cent, 80 per cent, 75 per cent, 70 per cent and 70 per cent, respectively.

Performance against the Australasian College for Emergency Medicine's threshold scale indicates that triage category 2 and 3 patients have had the most significant drop in performance overall, while all performance threshold targets except category 3 were met in 2013–14.

We have not assessed patient outcomes, clinical decision-making or anything else with respect to this performance. As shown in Figure 13 in Section 2, from 2013–14 to 2022–23 the proportion of patients in triage category 2 and 3 has grown, while the proportion of patients in triage categories 4 and 5 has decreased. This increased demand in category 2 and 3 patients may be contributing to the declining performance for these patients.

Figure 8 shows the percentage of patients seen within clinically recommended timeframes by triage category over the 10 years between 2013–14 to 2022–23.

Figure 8: Percentage of patients seen within recommended timeframes by triage category (2013–14 to 2022–23)

Category and recommended response time to assess/commence treatment	Category 1 (Immediate)	Category 2 (10 mins)	Category 3 (30 min)	Category 4 (60 min)	Category 5 (120 min)
2013–14	100%	84%	73%	71%	89%
2014–15	100%	80%	73%	73%	89%
2015–16	100%	78%	71%	73%	89%
2016–17	100%	77%	70%	73%	89%
2017–18	100%	76%	68%	72%	89%
2018–19	100%	75%	66%	72%	89%
2019–20	100%	67%	65%	72%	90%
2020–21	100%	62%	63%	71%	90%
2021–22	100%	55%	58%	69%	89%
2022–23	100%	57%	62%	69%	88%

Source: VAGO, based on VEMD.

Measure 3: Length of stay in the ED

Length of stay in ED

Length of stay is an important performance measure for EDs, particularly as longer stays can tie up resources, including beds, medical equipment and staff that could be used to treat incoming patients. Length of stay is also very important to the quality of care and longer stays can delay transfer to other healthcare settings.

DH's target

In 2011, DH introduced the following new performance measures for health services regarding length of stay in the ED:

- at least 81 per cent of all emergency patients stay in the ED for less than 4 hours
- no patients stay in the ED for longer than 24 hours.

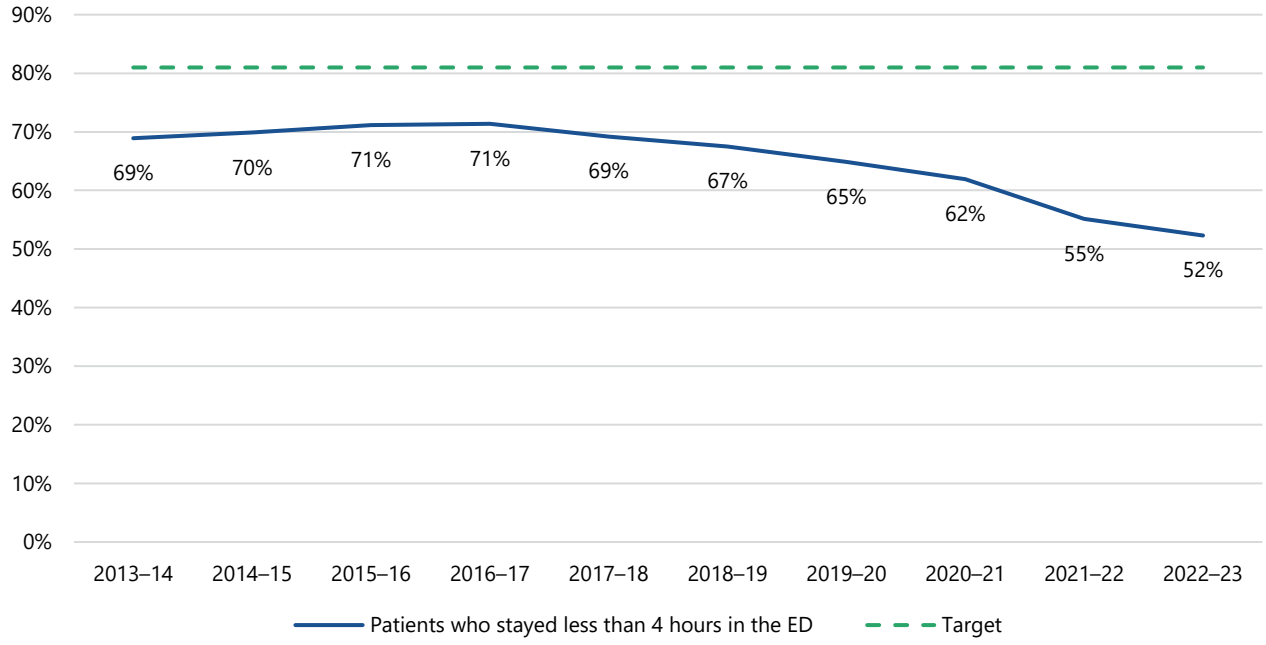
Actual performance: less than 4-hour length of stay

From 2013–14 to 2022–23, health services did not meet the 81 per cent target for this measure.

Figure 9 shows the percentage of patients staying in the ED for less than 4 hours was relatively stable at around 70 per cent from 2013–14 to 2017–18, but since then there has been a gradual decline. The performance data reported for the first 3 quarters of 2023–24 shows slight improvement but remains under target (see Appendix D).

In 2022–23, almost half of all emergency patients (48 per cent) remained in ED for more than 4 hours. This was between 29 and 31 per cent from 2013–14 to 2017–18.

Figure 9: Percentage of emergency patients staying in ED for less than 4 hours (2013–14 to 2022–23)



Source: VAGO, based on VEMD.

Actual performance: less than 24-hour length of stay

Collectively, health services have also consistently missed the target of having no patient stay in the ED for longer than 24 hours. As Figure 10 shows, from 2013–14 to 2022–23, there has been a significant increase in the number of patients exceeding a 24-hour stay, with a substantial increase between 2020–21 and 2021–22 of 177 per cent and another substantial increase between 2021–22 to 2022–23 of 304 per cent.

Health services identified the following 2 key factors for this. However, we could not verify them as part of this audit:

- the number of available hospital beds (bed capacity)
- whole-of-hospital difficulties with patient flow, such as access block where patients who need admission to hospital are delayed from leaving the ED due to a lack of ward beds.

Figure 10: Number of patients staying in ED for longer than 24 hours (2013–14 to 2022–23)

Year	No. of patients who stayed in ED longer than 24 hours per 100,000 population	Increase on prior year	Increase on year 1 (2013–14)
2013–14	518	N/A	N/A
2014–15	534	3%	3%
2015–16	252	−53%	−51%
2016–17	368	46%	−29%
2017–18	292	−21%	−44%
2018–19	721	147%	39%
2019–20	972	35%	88%
2020–21	1,017	5%	96%
2021–22	2,815	177%	443%
2022–23	11,363	304%	2,094%

Source: VAGO, based on VEMD.

Targeted actions to address high number of patients staying in EDs longer than 24 hours

DH is aware of the high number of patients staying in EDs longer than 24 hours. It has taken action to understand the causes of extended length of stays and barriers to improvement.

It has consulted health services with both high and low numbers of ED breaches and identified targeted actions for improvement, including:

- strengthening leadership and culture of zero tolerance to 24-hour ED breaches, with a focus on quality and safety implications for patients
- reviewing or developing new escalation processes, protocols and guidelines, with an emphasis on outlining precise actions across all teams in a hospital
- developing relationships with community-based services to enhance the ability to discharge patients earlier and reduce bed access block
- where possible, redirecting appropriate patients to alternative services and at-home care
- increasing the availability of senior decision-makers across the patient pathway to reduce delayed transfer of care.

DH is managing health services that show sustained rates of 24-hour breaches. This includes a targeted follow-up with health services who have reported the highest numbers of 24-hour breaches relative to total presentations each fortnight. DH is seeking to understand:

- patient impacts
- reasons for the breach
- steps being taken to minimise further breaches occurring due to similar reasons.

DH undertakes monthly engagement with these health services to understand progress on implementing the targeted actions, delivering quarterly best-practice workshops to promote collaboration and cross-service learning between low and high-breach sites. DH advises that it has an increased focus on this issue at performance meetings. It is too early to tell if these actions are having any impact on reducing the number of 24-hour breaches.

Access to emergency healthcare for specific population groups

Comparing equitable access to emergency healthcare

Comparing the experience of patients across various population groups provides insights into whether they have the same timely access to emergency healthcare. Healthcare providers need this data to identify any disparities and areas for improvement so they can implement targeted interventions.

We assessed whether there was any statistically significant difference in outcomes for 5 population groups:

- patients who prefer a language other than English
- Aboriginal and Torres Strait Islander patients (excludes patients for whom First Nations status was not stated)
- patients with a mental health indicator
- patients presenting in non-metro hospitals
- patients from lower socioeconomic postcodes (determined using Australian Bureau of Statistics classifications).

What we examined

We analysed each of the 5 population groups against the same key performance measures:

- percentage of patients transferred from ambulance into the ED within 40 minutes
- percentage of triage category 1–5 patients (collectively) seen within clinically recommended times
- percentage of patients with a stay in the ED of less than 4 hours
- number of patients with a stay in the ED over 24 hours.

We analysed aggregated data for each population group for these measures over the 10-year period from 2013–14 to 2022–23.

As health services immediately attended to 100 per cent of triage category 1 patients, we did not assess this measure for the different cohorts.

Comparing metro and non-metro performance

To improve health outcomes across all parts of the state during the COVID-19 pandemic, DH established Health Service Partnerships to promote collaboration between metro and regional services.

To compare access to emergency healthcare in metro and regional health services, we analysed performance data provided by the 3 metropolitan and 5 regional Health Service Partnerships.

Differences among some population groups

Our assessment of available data shows statistically significant differences in experiences for all population groups in accessing emergency healthcare services when compared to their counterparts over the period of 2013–14 to 2022–23.

We investigated whether the differences are driven by demographic differences between regions but could not find any evidence of this. While aggregate data is useful in conducting comparative analysis and identifying overall differences, it does not consider individual characteristics, such as patient and demographic factors.

Our analysis does not rule out the potential influence of other factors that may be driving the differences in the experience of these population groups. Since the population groups we assessed are not mutually exclusive, there may also be factors (for example, urgency of treatment, nature of the diagnosis or age) impacting patients across multiple population groups simultaneously.

Further investigation is required to identify and understand the factors that may be driving the differences in the experience of these population groups.

The result of our analysis is shown in Appendix E.

Statistically significant

An observation is statistically significant when the size of the effect is so large that it is unlikely to be explained by chance or random effects alone. A statistically significant effect that is also material may warrant further investigation to understand and address underlying causes.

2. Understanding and improving timely access to emergency healthcare

DH, AV and audited health services understand the demand drivers and barriers to timely access to emergency healthcare, and they have implemented various initiatives to address them. We examined 8 initiatives, and 6 of them have mostly achieved their specific goals, which are broader than improving timely access to emergency healthcare. Performance evaluation data for 2 of the 8 initiatives is not available.

However, health services' overall performance against key timeliness measures has not improved over the period we examined between 2013–14 to 2022–23.

Factors that affect timely access to emergency healthcare

Understanding the drivers of demand

Ambulance Victoria and the audited health services have a good understanding of the factors driving demand and barriers to patient flow in EDs. They identify population growth and the increased severity and complexity of patient conditions as primary drivers of demand for emergency healthcare services. Figure 11 shows the demand drivers and system constraints identified by Ambulance Victoria and the audited health services.

Figure 11: ED drivers of demand and barriers identified by Ambulance Victoria and health services

Drivers of demand	Barriers
Ambulance Victoria	
• Population growth, ageing population • Increase in patients presenting with higher-acuity conditions, including heart and respiratory issues, mental health issues and alcohol and other drug concerns	Delays in patient handover from ambulance to hospitals (ramping most prevalent in growth corridors)
Bendigo Health	
• Population growth, ageing population • Poor access to GPs • Transfers from other hospitals (helipad) • Increased patient complexity and frailty	• Bed block due to lack of timely discharge from hospital beds to aged or disability care (National Disability Insurance Scheme) • Bed capacity • Workforce availability
Werribee Mercy Hospital	
• Population growth in catchment area, and the poor health condition of that population • Increased rates of chronic diseases and more behavioural, alcohol and other drug incidents • More patients experiencing financial difficulties, and older patients requiring care	Current limited capacity of Werribee Mercy Hospital
The Royal Melbourne Hospital	
• Population growth in catchment area • Increased chronic disease • Receives more ED patients due to its location (close to freeway exit) and being an adult trauma hospital	• Limited ED capability • Pressure points in the ED and other areas of the hospital

Source: VAGO, based on information provided by DH and audited health services.

Impact of growing demand

The case study illustrates the impact of growing demand on hospitals' capacity to provide services and highlights the need for effective forward planning.

Case study: Growing demand in the Werribee Mercy Hospital catchment area

Context

DH and health services are responsible for developing service plans for new or expanded services for hospitals across the state. DH prioritises the development of service plans according to a needs assessment framework. This considers the needs of the hospital's location, including socioeconomic disadvantage, average travel time, GPs per capita, growth in required hospital beds and forecast bed deficit.

Increasing demand in the Werribee Mercy Hospital catchment area

Werribee Mercy Hospital is a general hospital that provides a broad range of comprehensive care in the south-western region of Melbourne. The hospital opened in January 1994 and has since experienced increasing demand from the expanding population in Melbourne's fast-growing western suburbs.

In 2015, the government allocated $560 million to boost hospital capacity to support growing communities, particularly in metropolitan Melbourne. As a part of this capital investment, the government allocated $85 million for a new critical care unit at Werribee Mercy Hospital. According to the Werribee Mercy Hospital Service Plan Refresh 2021, the hospital's emergency services will have an increased self-sufficiency of 54 per cent by 2036–37. The service plan states that Werribee Mercy Hospital is scheduled to get a new ED in late 2025.

Demand outstrips current ED capacity at Werribee Mercy Hospital

A May 2023 internal Werribee Mercy Hospital briefing noted that demand was outstripping ED capacity, resulting in 'a poor perception of the ED in the community due to the negative experience of patients'.

A Werribee Mercy Hospital analysis found that from 2017–18 to 2021–22, around 8,500 patients from postcodes in the hospital's catchment bypassed their local hospital to receive treatment at the Royal Children's Hospital each year. This may have been necessary or by preference for some patients, although it indicates challenges meeting demand.

In 2016, Werribee Mercy Hospital's service plan recommended a continuous focus on strategies to meet ongoing increases in demand arising from the population growth in its catchment area. However, a new ED for the hospital was not announced until 2022, with planned completion in late 2025.

Source: VAGO, based on Werribee Mercy Hospital.

Shared understanding of drivers and barriers

DH's understanding of drivers and barriers is largely consistent with that of Ambulance Victoria and the audited health services. This understanding is based on its consultation with health services and review of available emergency data and information.

DH uses this information when advising the government on issues and challenges facing Victoria's health services.

Figure 12 summarises the factors identified by DH.

Figure 12: Drivers of demand and barriers to patient flow identified by DH as impacting timely access to emergency healthcare

Factor	Drivers of demand	Barriers to patient flow in EDs
Patient factors	• Growing and ageing population and an increase of patients across all ages • Impact of improved health literacy and community expectations – people being more likely to attend an ED • Impact of low health literacy – patients not seeking timely treatment in the community then needing emergency healthcare • Patient preference for public healthcare rather than private	• Skilled workforce shortages, particularly registered nurses • Workforce models and growth in wage costs challenging hospitals' ability to best utilise and grow their workforce to meet health system demands • Lack of planning for and coordination of each hospital's role in the broader system to provide the right care in the right place – particularly joining up with out-of-hospital care and step-up/step-down models • Infrastructure constraints impacting ED and hospital capacities and hindering patient flow, including geographical maldistribution of services • Public hospital funding and accountability measurement being focused on quantity of services rather than quality or patient outcomes. This stifles the incentive for innovation, change and collaboration • ED and hospital capacities, including the ability to respond to unexpected events

Clinical factors	• Increase in number of patients of all ages presenting with:
	  • mental health conditions
	  • alcohol and other drug conditions
	  • complex and chronic conditions
	• Lasting impacts of COVID-19
	• GP skills/confidence in dealing with particular patient cohorts (for example, children)	

Environmental factors	• Limited access to GPs (especially bulk-billing GPs) • Increases in demand in areas of lower socioeconomic/educational advantage with higher instances of obesity and chronic illnesses (including mental-health-related conditions) • Increases in demand due to seasonal and environmental events, including heatwaves, bushfires and winter	

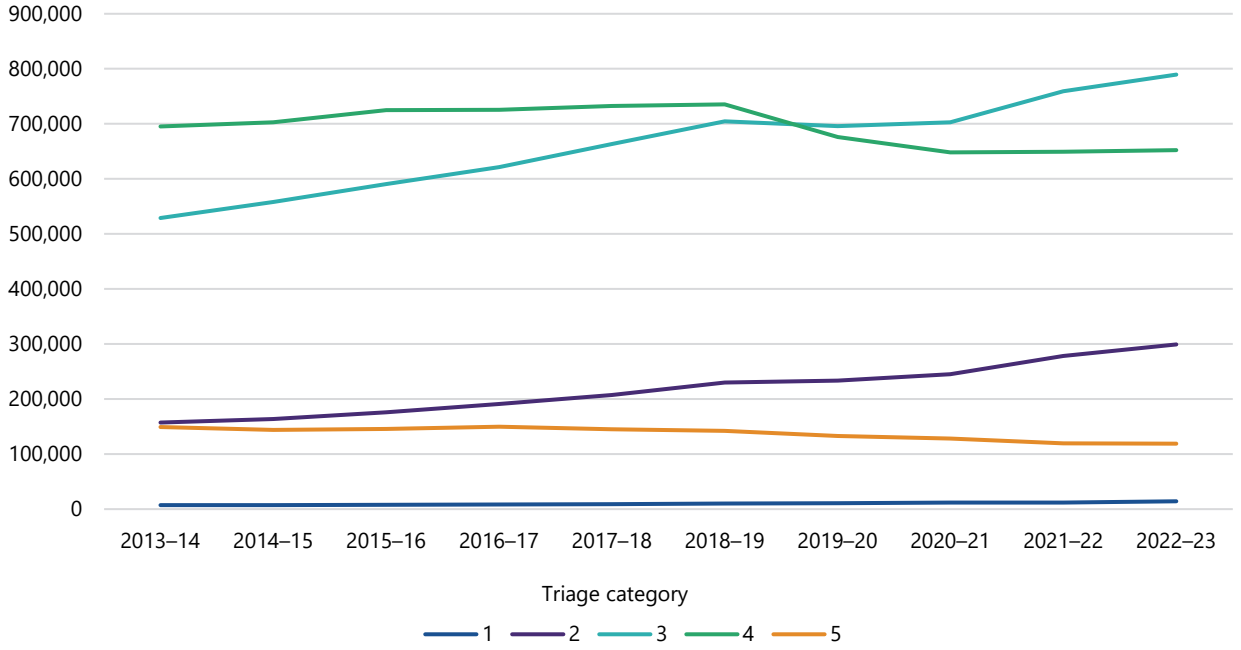
Source: VAGO, from DH's April 2023 Timely Emergency Care Project report and DH's budget submissions between 2019–20 and 2023–24.

Decreasing demand from patients with lower-acuity conditions

Our analysis of available data shows a decline in the number of patients with lower-acuity conditions (typically triage categories 4 and 5).

Figure 13 shows that from 2013–14 to 2022–23, the overall number of patients in triage categories 4 and 5 decreased while the number of patients in triage categories 2 and 3 patients increased.

Figure 13: Number of patients by triage category from 2013–14 to 2022–23



Source: VAGO, from DH data.

Funding timely access to emergency healthcare

Forecasting activity and demand

DH seeks operational funding for emergency health services in line with the government's annual Budget cycle. DH bases its Budget submissions for ED growth funding on a forecasting model that incorporates:

- changes in the number of patient presentations over several previous years
- trends in patient presentation
- changes in population, including ageing and patient utilisation
- feedback from health services on demand pressures, which is collected through its regular meetings with the health services throughout the year.

Calculating activity funding for existing services

The government funds health services based on the National Weighted Activity Unit model. Changes in patient complexity are built into the budget estimates when converting patient growth to funding growth.

Health services are funded on a total National Weighted Activity Unit target for admitted and non-admitted (including emergency) services. This allows services greater flexibility in the way they allocate internal resources for managing and treating patients.

In addition, DH has a recall and throughput policy. This means health services are paid for activity levels above the set target. That is, when a health service delivers additional activity, it receives additional funding.

The National Weighted Activity Unit model

A National Weighted Activity Unit represents a measure of health service activity expressed as a common unit of resources. This provides a way of comparing and valuing each public hospital service (whether it is an ED presentation, admission or outpatient episode) by weighting it for clinical complexity.

Funding for service expansion

In recent years, growth funding for emergency healthcare has focused on planned service expansion.

The government considers funding requests for expanding and/or adding new services as part of its capital build program. In determining where to expand services, it considers a broad suite of variables as part of forecasting future demand for services and rates of growth. In 2021, DH identified 5 hospitals – Austin Hospital, Casey Hospital, Maroondah Hospital, Northern Hospital and Werribee Mercy Hospital – for priority expansion of their EDs.

Initiatives to improve timely access to emergency healthcare

DH investments

In the past few years, DH has made a series of investments that it advised are related to, or may contribute to, improved timely access to emergency healthcare. Figure 14 outlines some of these initiatives, noting it is not an exhaustive list of investments.

Figure 14: Budget initiatives aimed at improving timely access to emergency healthcare

State Budget	Budgeted amount	Purpose
2022–23	$698 m	Better at Home package to deliver more hospital services within patients' homes through home based and virtual care
2023–24	$41.9 m	Prevention and early intervention of chronic and preventable health conditions
	$16.0 m	Supporting GPs
	$6.0 m	Supporting community sector jobs
	$73.9 m	Public Health Victoria
	$44.0 m	Victoria's pandemic program
	$15.5 m	Maternal and child health and early parenting services
	$117.4 m	System-wide improvements to support timely emergency care
	$9.1 m	For Pathways to home, supporting people well enough for discharge from hospital, including those with disability, into home-like settings equipped to meet their needs, making more hospital beds available
	$34.3 m	Better services for older people in aged care
	$162 m (over 4 years)	Better aged-care services for regional Victorians (asset initiative)

Source: VAGO, based on DH information.

DH's initiatives to improve timely access to emergency healthcare

DH has implemented several initiatives to address the system-wide barriers that impact patient flow and timely access to emergency healthcare. In consultation with DH, we selected a sample of 8 initiatives to determine if they:

- address the key factors impacting timely access to emergency healthcare, as identified by DH
- contribute towards improving health services' overall performance against key measures for timely access to emergency healthcare.

DH monitors the performance of these initiatives against their intended program objectives, which can be broader than improving timely access to emergency healthcare. Seven of these initiatives are designed to connect patients to out-of-hospital care, where appropriate. Of the initiatives we examined, the Timely Emergency Care Collaborative is the only initiative with the primary objective

to provide more timely emergency healthcare to Victorians by improving system-wide patient flow.

These initiatives mostly target lower-acuity patients and not the identified demand driver of an increasing number of high-acuity presentations in ED over the period of 2013–14 to 2022–23. However, any efforts to reduce demand (including from lower-acuity patients) is positive and may free up resources to focus on higher-acuity patients for whom ED is the most appropriate care setting.

Figure 15 shows DH's reported outcomes for these initiatives.

Figure 15: Summary of DH's 8 initiatives in scope – purpose and outcomes

Initiative and start year objective	Reported outcome relative to objective*	Evaluation done/planned?
Nurse on Call (2006)		
A 24/7 statewide phoneline connecting callers with a registered nurse who can provide health advice		
Objective:	**Outcome:**	Yes (2021)
To reduce demand on hospitals by diverting cases where acute care is not needed	In 2022, 50.9% of callers intending to go to ED were diverted to an out-of-hospital care setting.	
Supercare Pharmacies (2016)		
Includes 20 pharmacies providing access to after-hours nursing services that can treat minor injuries		
Objective:	**Outcome:**	Yes (2020)
To reduce preventable ED attendances for minor injuries and illnesses after hours	In a survey of over 78,000 Supercare Pharmacy consumers, over 30% of respondents reported that they would have gone to a local hospital if the Supercare Pharmacy was not available.	
Victorian Virtual Emergency Department (2020) (Pilot)		
A 24/7 statewide video call service connecting callers with an emergency doctor who can provide health advice and prescriptions		
Objective:	**Outcome:**	Yes (2023)
To reduce unnecessary ambulance transports and ED attendances	84.4% of Victorian Virtual Emergency Department presentations were not referred to the ED from October 2020 to April 2024.	
Priority Primary Care Centres (2022)		
A GP-led model able to treat minor injuries and fractures		
Objective:	**Outcome:**	Yes, (planned late 2023)
To provide an alternative to EDs where treatment can be provided in a primary care setting	Based on survey of users (6.5% survey response), 44,730 patients were diverted from going to the ED.	
GP respiratory clinics (2021)		
A GP-led model that offered comprehensive respiratory assessments and advice on ongoing treatment		
Objective:	**Outcome:**	No
To provide an alternative to the ED for adults and children with mild respiratory symptoms	No evaluation to date	
Ambulance Victoria secondary triage (2003)		
A secondary triage service operated by paramedics and nurses connecting patients with appropriate care in the community when an emergency response is not needed		
Objective:	**Outcome:**	Yes (2023)
To avoid unnecessary ambulance call-outs and ED transports	At least 17.5% of 000 calls avoided emergency dispatch since 2019–20.	

Initiative and start year objective	Reported outcome relative to objective*	Evaluation done/planned?
Ambulance Victoria Medium Acuity Patient Transport Services (2021) • An Ambulance Victoria program that pairs new graduates with pre-retirement paramedics • Teams respond only to codes 2 and 3 cases, freeing up ambulances to respond to code 1 emergencies		
Objective: To improve code 1 response times for Ambulance General Platform resources by attending codes 2 and 3 cases	**Outcome:** The end of the trial was associated with a reduction of 9.2% in codes 2 and 3 cases attended by an Ambulance General Platform resource.	Yes (2022)
Timely Emergency Care Collaborative (2022) • A collaboration between 14 health services to generate and test new ways of improving hospital patient flow • Learnings will be shared with the wider health sector		
Objective: To provide more timely emergency care to Victorians by improving system-wide patient flow	**Outcome:** Current progress data shows positive impact across multiple sites and metrics.	Due for completion in May 2024

Note: *The reported outcomes for these initiatives are based on DH's evaluations and reporting.
Source: VAGO, based on information provided by DH.

Initiatives implemented by health services

Health services have also implemented specific initiatives to address ED patient flow issues in hospitals. These initiatives aim to match hospital capacity with demand and are ordinarily aimed at improving patient flow within a service or hospital.

Figure 16 outlines some of these initiatives implemented in 3 of the audited health services.

Figure 16: Whole-of-hospital patient-flow initiatives implemented by some health services

Initiative	Bendigo Hospital	The Royal Melbourne Hospital	Werribee Mercy Hospital
Real-time data dashboards	Yes	Yes	Yes (except for data outside of ED)
Discharge lounges	Yes	Yes	No
Huddles*	Yes	Yes	Yes
Patient flow coordinator	Yes	Yes	Yes
Early assessment/doctor at triage	Yes (when capacity allows)	Yes	Yes
Waiting room nursing staff	Yes	Yes	Yes

Note: *Huddles are brief, focused and structured stand-up meetings among senior and clinical staff to exchange information about potential or existing safety risks that may affect patients and/or staff.
Source: VAGO, from health services' documentation.

Gaps in addressing drivers and barriers

DH has implemented a range of initiatives with varying objectives and committed to investing in improving timely access to emergency healthcare. There are gaps to address around critical drivers of demand and barriers to patient flow.

The initiatives we assessed primarily aim to reduce demand from patients with low-acuity conditions, freeing up ED resources to respond to patients with more serious conditions and/or needing urgent care. However, given the increasing proportion of higher-acuity presentations (triage category 2 and 3, shown in Figure 13), demand will likely continue to put significant pressure on our state's EDs, and therefore on the broader hospital system. From 2013–14 to 2022–23, the increase in demand for emergency healthcare has mostly been driven by patients

who require urgent or immediate healthcare and cannot be diverted to other care systems. But reducing demand from lower-acuity patients frees up resources to deal with the higher-acuity patients.

Figure 17 outlines whether the initiatives we examined directly address drivers of demand and barriers to patient flow. We note that these initiatives have their own specific program objectives that may not be intended to directly address factors impacting timely emergency healthcare.

Figure 17: Assessment of 8 in-scope initiatives against drivers and barriers to timely emergency healthcare

Drivers/barriers identified by DH	Addressed by the initiatives
Patient drivers	
Growing and ageing population	Not addressed directly
Improved health literacy/expectations	Not addressed directly
Low health literacy	Not addressed directly
Patient choice for public healthcare	Not addressed directly
Clinical drivers	
Mental health, alcohol and drugs	Not addressed directly
Low-acuity conditions	Directly addressed by Nurse on Call, Supercare Pharmacies, Priority Primary Care Centres and GP respiratory clinics
Chronic and complex conditions	Not addressed directly
Lasting COVID-19 impact	Directly addressed by GP respiratory clinics
GP skills/confidence	Not addressed directly
Environmental drivers	
Limited access to GPs	Directly addressed by Nurse on Call, Supercare Pharmacies, Priority Primary Care Centres and GP respiratory clinics
Socioeconomic disadvantage	Directly addressed by Nurse on Call, Supercare Pharmacies, Priority Primary Care Centres and GP respiratory clinics
Seasonal demand (for example, heatwaves, winter)	Directly addressed by GP respiratory clinics
Barriers	
Workforce	Directly addressed by Ambulance Victoria Medium Acuity Patient Transport Services
Inadequate planning and system linkages	Not addressed directly
Infrastructure constraints	Not addressed directly
Focus on service quantity over quality	Not addressed directly
ED and hospital capacity, including to respond to unexpected events	Not addressed directly

Source: VAGO, from DH's documentation.

Impact on performance against key measures

The 8 initiatives we assessed are part of a broader range of programs in place to address system-wide issues, including timely access to emergency healthcare.

Despite the broader program of work in place, the performance data related to timely access to emergency healthcare does not show significant improvement in the period we examined

between 2013–14 and 2022–23. We note that most of these initiatives are recent and many factors may contribute to the health services' ability to meet performance targets.

Workforce planning

Victorian Health Workforce Strategy

DH's 2023–24 Budget submission notes that Victoria lacks timely, detailed and quality data on the public health sector workforce, including in emergency healthcare. This limits DH's ability to guide health services on current and emerging workforce issues and ensure workforce availability across the system.

In February 2024, DH launched its new workforce strategy, setting out a plan to bolster Victoria's workforce capacity and capability for the next 10 years. We have not assessed DH's new workforce strategy as part of this audit.

Health service workforce plans

The Royal Melbourne Hospital and Werribee Mercy Hospital advised that they are currently developing workforce plans. Werribee Mercy Hospital advised us a focus of this work will be addressing sub-speciality workforce gaps.

Bendigo Hospital advised that its workforce plan is out of date and it is currently developing a new workforce plan in consultation with external advisors.

Ambulance Victoria has a draft workforce plan, but it is yet to be approved. The draft plan focuses on attracting and retaining staff, particularly in rural and remote locations.

3. Performance monitoring and reporting

DH's regular performance monitoring enables the collection of important data from health services and Ambulance Victoria on their short-term performance. Longer-term performance data is also important for the public because it provides greater insights into trends over time and improves the accountability and transparency of public health services.

DH is improving its ability to monitor patient safety trends and is working with health services to capture real-time hospital data, and to better use data insights to make improvements at health services.

Monitoring patient safety trends

Safer Care Victoria and adverse events

Safer Care Victoria is an administrative office of DH, and is a quality and safety body. As a part of its function, Safer Care Victoria responds to safety risks and issues and identifies areas for improvement.

Safer Care Victoria is the accountable agency for the *Adverse Patient Safety Event policy*, including oversight of the Sentinel Event Program. It collects and collates information thematically as part of the Sentinel Event Program. This process is partly automated, but is predominantly a manual process.

Where relevant, Safer Care Victoria shares individual events with DH, particularly where this event is considered high risk.

Adverse patient safety event

An adverse patient safety event is an incident that results, or could have resulted, in harm to a patient or consumer. A near miss is a type of adverse event.

Sentinel event

A sentinel event is an unexpected and adverse incident that occurs infrequently in a health service entity and results in the death of, or serious physical or psychological harm to, a patient as a result of system and process deficiencies.

VHIMS data quality

In our 2021 audit *Clinical Governance: Health Services*, we found deficiencies in the quality and consistency of data in the Victorian Health Incident Management System (VHIMS). DH has not yet fully addressed these deficiencies.

DH advises that work is underway to improve the quality of data reported to VHIMS, which will enable it to identify potential or emerging patterns of risk to patient safety.

VHIMS

VHIMS is a standardised dataset for the collection and classification of clinical, occupational health and safety incidents, near misses and hazards. Incident information collected in VHIMS helps to drive local and statewide improvements in quality, safety and patient experience.

Improvements in performance data monitoring processes

Recent improvements to VHIMS: near-real-time adverse event data

DH advises that since September 2023, it receives near-real-time adverse event data from all public health services via VHIMS. This data is now used in an early warning system report that enables Safer Care Victoria to proactively identify and monitor safety risks, which is an ongoing project.

This work is the result of:

- optimising the utility of VHIMS data, which also involves ongoing work to review and refine the VHIMS minimum dataset
- the VHIMS automation project, overseen by the VHIMS project board, which focused on enabling automated submission of incident records at creation from local health service incident management systems via the VHIMS interface.

DH advised us that all Victorian public health services are utilising the VHIMS interface to submit incident data in near real time since September 2023.

The VHIMS compliance reports, presented to the VHIMS project board, show an increase in the number of services submitting data and the total volume of records received and the reduction in average and median days from record creation to submission.

Under automation, the DH receives all records that public health services create in near real time.

Case study: The Timely Emergency Care Collaborative

DH is working to improve the way it uses data to identify and progress improvement opportunities in partnership with health services. One such initiative is the Timely Emergency Care Collaborative that involves 14 health services and Ambulance Victoria. Officially launched in December 2022, the primary focus of the Timely Emergency Care Collaborative is to identify and address systemic opportunities to improve access to emergency healthcare.

DH reports that health services participating in the Timely Emergency Care Collaborative have observed a reduction in ED length of stay for both admitted and non-admitted patients compared to non-participating health services. This assessment is based on a comparison of data from February 2023 to November 2023 with baseline performance from January 2022 to December 2022. DH's evaluation of the Timely Emergency Care Collaborative is due to complete in May 2024.

Through the Timely Emergency Care Collaborative dashboard, DH can actively monitor post-ED patient flow metrics, including inpatient length of stay, percentage of discharges before 12 pm, and bed occupancy, across all participating health services and Ambulance Victoria. In 2024, these metrics will expand to all sites with an ED, supporting a data driven whole-of-hospital improvement focus on ED performance.

DH and health services uses these same measures to measure the impact of post-ED improvement initiatives.

Source: VAGO.

Initiatives by health services

All audited health services review individual adverse events at all levels of harm, including those related to delays accessing emergency healthcare.

For example, The Royal Melbourne Hospital conducted a review after detecting an increase in falls and pressure injuries in the ED. The review found that access block was a contributing factor to the falls and injuries.

While working on broader strategies to address access block, The Royal Melbourne Hospital put strategies in place to mitigate the risk of pressure injuries and falls in the ED, including:

- flagging and monitoring long-stay patients
- enacting preventative plans for long-stay patients.

Publishing ED performance data

Publishing long-term performance data

Long-term performance data on timely access to emergency healthcare can provide important insights into performance over time and help to identify trends and patterns. This allows for investigation and action to be undertaken into any performance gaps, and also provides transparency and accountability of public health service performance.

DH publishes short-term data (via the Victorian Agency for Health Information website), showing performance results for timeliness of emergency healthcare for individual hospitals for the most recent 15 months.

While the performance data available to the public via the Victorian Agency for Health Information is accurate, it has its limitations. Since the data only shows performance over a short period of time, it does not provide a view of performance over time or insights to the public, such as long-term performance trends and the impact of events like the COVID-19 pandemic on health services' delivery of emergency healthcare.

Interstate comparison

In comparison to Victoria, New South Wales and Queensland publish long-term performance data for timely access to emergency healthcare. New South Wales provides data on ED presentations that dates to January 2010 while Queensland provides 10 quarters of historical ED data. The performance data published by New South Wales and Queensland is more informative than that from Victoria because it enables the public to see trends over a long period of time.

DH's future plans

DH advised us that it plans to publish time series data for all Victorian health services' performance indicators on the Victorian Agency for Health Information website. This will be published by the end of the 2024, including 25 quarters of data from 2018–19 to the first quarter of 2024–25. Each new time series will be anchored at 2018–19, providing an increasing time series as new data is released.

Reporting performance targets in the BP3

BP3 measures

DH reports on the performance of health services against 4 of the emergency healthcare timeliness measures we have assessed in the BP3. The performance measure for patients staying longer than 24 hours in the ED is not a BP3 measure. The information reported in the BP3 includes actual performance results for the previous financial year and expected results for the current financial year.

Reporting does not match timeliness target

Figure 18 shows that the BP3 target for patients staying less than 4 hours in ED is 75 per cent and not 81 per cent as per health services' statements of priorities. Regardless, the results for this performance measure from 2013–14 to 2022–23 remained below 75 per cent, ranging from 52 per cent to 71 per cent.

Figure 18: Comparison of measures in health services' statements of priorities and the BP3

Measure in health services' statements of priorities (examined in this audit)	Health services' statement of priorities target	Target published in the BP3
% of patients transferred from ambulance to the ED within 40 minutes	90%	90%
% of (all) ED patients (collectively) seen within clinically recommended time*	80%	80%
% of triage category 1 patients (with immediately life-threatening conditions) seen immediately	100%	100%
% of emergency patients with a length of stay in the ED of less than 4 hours	81%	75%
Number of patients with a length of stay in the ED greater than 24 hours	0	N/A

Source: VAGO, from health services' statements of priorities and the BP3.

Appendices

Appendix A:
Submissions and comments

We have consulted with DH, Ambulance Victoria, The Royal Melbourne Hospital, Werribee Mercy Hospital and Bendigo Hospital, and we considered their views when reaching our audit conclusions. As required by the *Audit Act 1994*, we gave a draft copy of this report, or relevant extracts, to those agencies and asked for their submissions and comments.

Responsibility for the accuracy, fairness and balance of those comments rests solely with the agency head.

Responses received

Response provided by the Secretary, DH

Secretary

Department of Health

50 Lonsdale Street
Melbourne Victoria 3000
Telephone: 1300 650 172
GPO Box 4057
Melbourne Victoria 3001
www.health.vic.gov.au
DX 210081

BAC-BR-25772

Andrew Greaves
Auditor-General
Victorian Auditor-General's Office (VAGO)
Via email: [redacted]

Dear Mr Greaves

Thank you for your letter of 20 May 2024 regarding the 'Performance Audit Report Access to Emergency Healthcare' (VAGO's report) and the opportunity to submit comments and respond to the proposed recommendations.

I support the first two recommendations and support the third recommendation in-principle. In line with this, please find attached the Department of Health's action plan in response to the three recommendations.

Timely access to emergency healthcare remains a priority for the Department of Health and we welcome VAGO's report and recommendations. The department will continue to progress initiatives to improve emergency healthcare performance in its forward work program, including initiatives such as the Timely Emergency Care Collaborative and the expansion of the Victorian Virtual Emergency Department.

I note that, given time constraints, the analysis in VAGO's report does not include the most recent performance data for emergency services and the data will be over one year old as of June 2024. The latest quarterly data (quarter three, 2023-24) shows gradual improvements in the performance of emergency services. For example, the percentage of patients seen within clinically recommended times has increased to 73.3%; and the percentage of ambulance arrivals transferred within 40 minutes has increased to 69.0%.[1]

Should your office have any questions, please contact Maria Perera, Executive Director, Ambulance, Emergency Care and Access Branch at [redacted].

[1] Victorian Health Service Performance Data, VAHI, as of 21 May 2024 (Emergency care | Victorian Agency for Health Information (vahi.vic.gov.au)).

VICTORIA State Government

Response provided by the Secretary, DH – *continued*

Thank you to you and your team for the work on this important audit.

Yours sincerely

[redacted]

Professor Euan M Wallace AM
Secretary
27/05/2024

Copy: [redacted]

Department of Health action plan to address recommendations from *Access to Emergency Healthcare*

No.	VAGO recommendation	Acceptance	Agreed management actions	Target completion date
1	Department of Health, in consultation with Victorian health services: • investigate the root cause of why health services are not meeting timeliness measures • develop an action plan to further explore and address the root cause of why health services are not meeting timeliness measures • share learnings from effective interventions across the health system.	☒ Yes ☐ No ☐ In part ☐ In principle	The Department of Health (the department) supports this recommendation. The department proposes that the recommendation has been acquitted, and will continue to be acquitted, through the following: 1. In 2022, the department undertook extensive engagement and fieldwork with frontline staff and operational leaders within health services to identify the challenges impacting access to emergency healthcare and performance, including timeliness measures, and interventions to address them. A range of interventions were implemented, including the expansion of the Victorian Virtual Emergency Department and the establishment of the Timely Emergency Care Collaborative (the Collaborative). 2. The Collaborative is a partnership between the department, the Institute for Healthcare Improvement, 14 health services, and Ambulance Victoria. The Collaborative focusses on identifying and progressing clinician-led patient-flow improvements across emergency departments, general wards, and operational aspects, to reduce pressures and improve timely emergency healthcare. The Collaborative developed a comprehensive driver diagram that identified the priority drivers of emergency performance and barriers to timely healthcare and the initiatives to address them. This has shaped the work of the Collaborative and the range of initiatives that have been implemented at participating health services. By March 2024 initiatives under the Collaborative had led to reductions in patient length of stay in emergency departments and reductions in ambulance handover times. In 2024-25, the Collaborative will continue to focus on identifying challenges and progressing initiatives to address timely access to emergency healthcare. For example, it will have a focus on: the optimisation of patient flow of both inpatients and patients in emergency departments; excellence in flow to address factors that contribute to avoidable hospital stays; and innovation in flow with a focus on targeted initiatives to improve access to timely emergency care and emergency department performance.	1. Completed 2. June 2025 3. Ongoing

			Through the Collaborative, health services routinely come together to share successes and lessons learned, with a view to spreading and scaling successful interventions across the system. The evaluation of the Collaborative's first year of work will be completed by June 2024. Learnings will be shared across the health system. 3. In its forward work program, the department will continue to work with health services to review and update the Collaborative's driver diagram to identify the current, emerging and expected challenges that affect timely access to emergency healthcare and the solutions to address them.	
2	Department of Health, in consultation with Victorian health services, investigate the root cause and nature of differences in access to timely emergency care for different population groups and put in place any necessary measures to ensure equitable access.	☒ Yes ☐ No ☐ In part ☐ In principle	The Department of Health (the department) supports this recommendation and proposes it will be acquitted through: 1. The Timely Emergency Care Collaborative and the department's ongoing forward workplan, as described in row one of this table. This work will include the identification of different experiences and outcomes across various population groups, and identify initiatives to improve equitable access to emergency healthcare. A particular focus will be improving access for First Nations people to emergency care with this work progressed by bringing together health services and Aboriginal-led organisations.	1. June 2025
3	Department of Health improve its public reporting on timely access to emergency healthcare by: • publishing long-term performance data for Victoria's public health services and updating it regularly • reviewing and updating its relevant Budget Paper No. 3: Service Delivery measures to ensure they are consistent	☐ Yes ☐ No ☐ In part ☒ In principle	The Department of Health (the department) supports point one of this recommendation and proposes it will be acquitted through the following: 1. By the end of 2025, the department will publish extended time series data (five years of data reported monthly, where available) for indicators within the Victorian Health Services Performance digital report (publicly available on the Victorian Agency for Health Information portal). The department supports point two of this recommendation in-principle, noting that any changes to the Budget Paper measures need to be approved by Cabinet and are not exclusively within the control of the department. The department proposes the recommendation will be acquitted, in-principle, through the following:	1. December 2025 2. July 2024 3. June 2025

	with health service targets and show trends over time.		2. In 2024, the department intends to conclude its review of the Victorian Health Services' Performance Monitoring Framework (the Framework). The Framework outlines the Victorian Government's approach to monitoring the performance of all Victorian public health services and hospitals. The Framework describes the contextual, strategic and operational aspects of monitoring and improving health services' performance. The review of the Framework aims to ensure that it is fit-for-purpose to achieve the best outcomes for patients and support performance improvement. As part of this reset, measures related to emergency care access are being updated to reflect the drivers of emergency department performance. 3. After the review is concluded, the department will use the review's findings to inform analysis and decision-making regarding whether the Budget Paper No. 3 Service Delivery measures need to be reviewed and revised. The department notes that any changes to these measures must be undertaken in partnership with the Department of Premier and Cabinet and the Department of Treasury and Finance, and be approved by Cabinet.	

Response provided by the Chief Executive, Ambulance Victoria

375 Manningham Road
Doncaster VIC 3108
PO Box 2000
Doncaster VIC 3108
03 9840 3500
ambulance.vic.gov.au

OFFICIAL

AmbulanceVictoria

ABN 50 373 327 705

7 June 2024

Mr Andrew Greaves
Auditor General
Victorian Auditor General's Office
Level 31
35 Collins Street
MELBOURNE VIC 3000

By email: [redacted]

Dear Andrew

Proposed Performance Audit Report - Access to Emergency Healthcare

Thank you for the opportunity to consider the proposed report on Access to Emergency Healthcare.

Whilst we note that the recommendations within the report will be owned by the Department of Health, Ambulance Victoria remains committed to working closely with all our partners across the health sector in the implementation of the recommendations and in the delivery of our own performance uplift initiatives to improve access to emergency healthcare for our communities.

Yours sincerely

[redacted]

Jane Miller
Chief Executive

cc: Garry Button, Executive Director Corporate Services, Ambulance Victoria
([redacted])

Danielle North, Executive Director Clinical Operations, Ambulance Victoria
([redacted])

Anthony Carlyon, Executive Director Operational Communications, Ambulance Victoria
([redacted])

Response provided by the Chief Executive, The Royal Melbourne Hospital

The Royal Melbourne Hospital

Shelley Dolan
Chief Executive
Telephone: +61 3 9342 7762
Email: [redacted]

31 May 2024

Mr Andrew Greaves
Auditor-General
Victorian Audit-General's Office
Level 31 / 35 Collins Street
Melbourne Vic 3000

Dear Mr. Greaves

Proposed Performance Audit Report Access to Emergency Healthcare

Thank you for the invitation to include a submission or comment on the report.

The Royal Melbourne Hospital (RMH) team that have participated in this audit appreciated the opportunity to work with you to assess and understand this important topic of timely and equitable access to emergency healthcare for Victorians.

This report highlights some important issues facing Victorian Health Services and the Victorian community in general. We recognise our key role in ensuring equitable and timely access to emergency healthcare for Victorians and support the three recommendations made in the report.

We look forward to working collaboratively with the Department of Health, Ambulance Victoria and other Victorian Health Services to implement any actions resulting from any of the recommendations.

Yours sincerely

[redacted]

Professor Shelley Dolan RN MSc PhD
Chief Executive, The Royal Melbourne Hospital
Professor (Enterprise) Melbourne School of Health Science, University of Melbourne

300 Grattan Street,
Parkville VIC 3050 Australia
thermh.org.au
ABN 73 802 706 972

Appendix B: Abbreviations, acronyms and glossary

Abbreviations

We use the following abbreviations in this report:

Abbreviation	
the Framework	*Victorian Health Services Performance Monitoring Framework 2022-23*.

Acronyms

We use the following acronyms in this report:

Acronym	
BP3	Budget Paper No. 3 Service Delivery
DH	Department of Health
ED	emergency department
VAGO	Victorian Auditor-General's Office
VEMD	Victorian Emergency Minimum Dataset
VHIMS	Victorian Health Incident Management System

Glossary

This glossary includes an explanation of the types of engagements we perform:

Term	
Reasonable assurance	We achieve reasonable assurance by obtaining and verifying direct evidence from a variety of internal and external sources about an agency's performance. This enables us to express an opinion or draw a conclusion against an audit objective with a high level of assurance. We call these audit engagements. See our assurance services fact sheet for more information.
Limited assurance	We obtain less assurance when we rely primarily on an agency's representations and other evidence generated by that agency. However, we aim to have enough confidence in our conclusion for it to be meaningful. We call these types of engagements assurance reviews and typically express our opinions in negative terms. For example, that nothing has come to our attention to indicate there is a problem. See our assurance services fact sheet for more information.

Appendix C:
Audit scope and method

Scope of this audit

Who we examined

We examined the following agencies:

Agency	Their key responsibilities
DH	Contribute to the management of the public health system through leadership, governance, policy development and advancement of quality and safety. This includes the responsibility for funding, performance monitoring and accountability, strategic asset management and system planning As a health system manager, DH is responsible for: • identifying performance concerns and factors that may impact health service performance • analysing performance issues and opportunities for improvement • determining appropriate interventions • ensuring action is taken to address performance concerns and support ongoing improvement.
• The Royal Melbourne Hospital • Werribee Mercy Hospital • Bendigo Hospital	Operate EDs that provide urgent treatment and healthcare to patients who are unwell or injured As a service provider, The Royal Melbourne Hospital, Werribee Mercy Hospital and Bendigo Hospital are responsible for: • partnering with DH and other agencies to improve health service and system-wide performance • promptly reporting any emerging risks or potential performance issues to DH, including immediate action taken • establishing and maintaining a culture of safety and performance improvement • ensuring accurate and timely submission of data and other information, including implementing agreed action plans and status update reports • collaborating with other health services and system partners to maintain and improve their performance and meet the needs of their communities.

Our audit objective

To determine whether DH and responsible agencies are addressing Victorians' need for timely and equitable access to emergency healthcare.

What we examined

We examined whether health services are providing Victorians with timely and equitable access to emergency healthcare. We considered how DH and health services are ensuring sustainable emergency healthcare in the current environment of increasing demand, including how well they are managing patient handovers from ambulances and the consequences of delays. We considered emergency healthcare performance over the last decade (from 2013–14 to 2022–23).

Conducting this audit

Assessing performance

To form our conclusion against our objective we used the following lines of inquiry and associated evaluation criteria:

Line of inquiry		Criteria	
1.	Health services provide Victorians with timely and equitable access to emergency healthcare.	1.1	Health services provide emergency healthcare within set timeframes and measures, including: • transferring patients from ambulances within 40 minutes of arrival • commencing treatment within clinically determined times pursuant to the Australasian Triage Scale • ensuring that at least 81 per cent of patients have an ED length of stay less than 4 hours from arrival.
		1.2	Victorians from different population groups can access timely emergency healthcare.
2.	DH, Ambulance Victoria and audited health services ensure the availability and sustainability of timely emergency health services.	2.1	DH, Ambulance Victoria and audited health services understand the drivers of demand and key barriers to timely access to emergency healthcare.
		2.2	DH, Ambulance Victoria and audited health services demonstrate their understanding of the drivers of demand and key barriers to timely access to the ED, including: • operational (recurrent) funding model, which is based on an accurate understanding of demand, including forecasting • strategies that optimise the use of resources, including workforce, to ensure the availability and sustainability of services • effective performance monitoring, comprising of measures to assess accessibility, timeliness and adverse effects to a patient if access to treatment is delayed • clear and transparent reporting of timeliness of access to emergency healthcare.
		2.3	DH and health service initiatives are addressing barriers to timely access to emergency healthcare, including treating patients outside EDs when safe to do so.

Our methods

As part of the audit we:

- analysed information related to access to emergency healthcare held by audited agencies, including:
  - briefings and reports related to emergency healthcare
  - Budget submissions to Cabinet
  - project documentation including evaluation reports
- interviewed DH and audited health service staff and undertook site visits to audited hospitals' EDs
- extracted and analysed health service performance data from the Victorian Agency for Health Information.

Compliance

We conducted our audit in accordance with the *Audit Act 1994* and ASAE 3500 *Performance Engagements* to obtain reasonable assurance to provide a basis for our conclusion.

We complied with the independence and other relevant ethical requirements related to assurance engagements.

We also provided a copy of the report to the Department of Premier and Cabinet and the Department of Treasury and Finance.

Cost and time

The full cost of the audit and preparation of this report was $1,170,000.

The duration of the audit was 15 months from initiation to tabling.

Appendix D:
Performance data for 2023–24 (quarters 1 to 3)

Figure D1: Health services' performance for timely access to emergency healthcare measures in 2023–24 (quarters 1 to 3)

Performance measures	Target	2023–24 (Quarter 1)	2023–24 (Quarter 2)	2023–24 (Quarter 3)	2023–24 (Quarter 4)
% of patients transferred from ambulance to the ED within 40 minutes	**90%**	64%	68%	69%	Not available
% of (all) triage category 1 to 5 emergency patients (collectively) seen within clinically recommended time*	**80%**	70%	72%	73%	Not available
% of emergency patients with a length of stay in the ED of less than 4 hours	**81%**	53%	55%	55%	Not available
Number of patients with a length of stay in the ED greater than 24 hours	**0**	2303	1528	1281	Not available

Note: *As recommended by the Australasian Triage Scale.
Source: VAGO, based on DH.

Appendix E: Experience of different population groups

Our assessment of available data shows statistically significant differences in experiences for all population groups in accessing emergency healthcare services when compared to their counterparts over the period of 2013–14 to 2022–23.

We investigated whether the differences are driven by demographic differences between regions but could not find any evidence of this. While aggregate data is useful in conducting comparative analysis and identifying overall differences, it does not consider individual characteristics, such as patient and demographic factors.

Our analysis does not rule out the potential influence of other factors that may be driving the differences in the experience of these population groups. Since the population groups we assessed are not mutually exclusive, there may be other factors (for example, urgency of treatment, nature of the diagnosis or age) impacting patients across multiple population groups simultaneously.

Experience of population groups against the timely emergency healthcare performance measures

Key performance measure 1: Transferring patients from ambulance on arrival to the ED within 40 minutes

DH's target: 90 per cent of all ED patients to be transferred from ambulance into the ED within 40 minutes

Figure E1: Percentage of patients from different population groups transferred from ambulance into the ED within 40 minutes over the period of 2013–14 to 2022–23

Population group	Percentage of patients transferred from ambulance into the ED within 40 minutes
Patients who prefer a language other than English	
Non-English preferred	72.2%
English preferred	77.6%
Difference	**−5.4%**
First Nations peoples*	
First Nations	79.3%
Non-First Nations	77.1%
Difference	**2.2%**
Patients with a mental health indicator	
Presentation has a mental health indicator	76.4%
Presentation does not have a mental health indicator	77.3%
Difference	**−0.9%**
Patients presenting in non-metro hospitals	
Non-metro	81.7%
Metro	75.5%
Difference	**6.2%**
Patients from lower socioeconomic postcodes*	
Lower 5 deciles	78.0%
Upper 5 deciles	76.0%
Difference	**2.0%**

Note: *First Nations peoples excludes patients for whom First Nations status was not stated. Lower socioeconomic postcodes are determined using Australian Bureau of Statistics classifications.
Source: VAGO, based on DH data.

Key performance measure 2: Seeing emergency patients within clinically recommended times

DH's target: 80 per cent of triage category 1 to 5 emergency patients seen within clinically recommended time.

Figure E2: Percentage of patients from different population groups seen within clinically recommended times over the period of 2013–14 to 2022–23

Population group	Percentage of triage category 1 to 5 patients (collectively) seen within clinically recommended time
Patients who prefer a language other than English	
Non-English preferred	66.9%
English preferred	71.0%
Difference	**–4.1%**
First Nations peoples*	
First Nations	69.0%
Non-First Nations	70.7%
Difference	**–1.7%**
Patients with a mental health indicator	
Presentation has a mental health indicator	67.5%
Presentation does not have a mental health indicator	70.9%
Difference	**–3.4%**
Patients presenting in non-metro hospitals	
Non-metro	69.5%
Metro	71.2%
Difference	**–1.7%**
Patients from lower socioeconomic postcodes*	
Lower 5 deciles	69.8%
Upper 5 deciles	72.1%
Difference	**–2.3%**

Note: *First Nations peoples excludes patients for whom First Nations status was not stated. Lower socioeconomic postcodes are determined using Australian Bureau of Statistics classifications.
Source: VAGO, based on DH data.

Key performance measure 3: Length of stay in the ED

DH's Targets:

- at least 81 per cent of all emergency patients stay in the ED for less than 4 hours
- no patients stay in the ED for longer than 24 hours.

Figure E3: Percentage of patients from different population groups who stayed in the ED for less than 4 hours over the period of 2013–14 to 2022–23

Population group	Percentage of patients who stayed in the ED for less than 4 hours
Patients who prefer a language other than English	
Non-English preferred	54.2%
English preferred	65.7%
Difference	**−11.5%**
First Nations peoples*	
First Nations	66.4%
Non-First Nations	65.0%
Difference	**1.4%**
Patients with a mental health indicator	
Presentation has a mental health indicator	51.4%
Presentation does not have a mental health indicator	65.7%
Difference	**−14.3%**
Patients presenting in non-metro hospitals	
Non-metro	65.6%
Metro	64.7%
Difference	**0.9%**
Patients from lower socioeconomic postcodes*	
Lower 5 deciles	63.6%
Upper 5 deciles	66.7%
Difference	**−3.1%**

Note: *First Nations peoples excludes patients for whom First Nations status was not stated. Lower socioeconomic postcodes are determined using Australian Bureau of Statistics classifications.
Source: VAGO, based on DH data.

Figure E4: Number of patients with a stay in the ED over 24 hours over the period of 2013–14 to 2022–23

Population group	Number of patients with a stay in the ED over 24 hours per 100,000 population
Patients who prefer a language other than English	
Non-English preferred	107
English preferred	110
Difference	**–3**
First Nations peoples*	
First Nations	145
Non-First Nations	109
Difference	**36**
Patients with a mental health indicator	
Presentation has a mental health indicator	695
Presentation does not have a mental health indicator	77
Difference	**618**
Patients presenting in non-metro hospitals	
Non-metro	169
Metro	85
Difference	**84**
Patients from lower socioeconomic postcodes*	
Lower 5 deciles	128
Upper 5 deciles	83
Difference	**45**

Note: *First Nations peoples excludes patients for whom First Nations status was not stated. Lower socioeconomic postcodes are determined using Australian Bureau of Statistics classifications.
Source: VAGO, based on DH data.

Auditor-General's reports tabled during 2023–24

Report title	Tabled
Cybersecurity: Cloud Computing Products (2023–24: 1)	August 2023
Responses to Performance Engagement Recommendations: Annual Status Update 2023 (2023–24: 2)	August 2023
Eloque: the Joint Venture Between DoT and Xerox (2023–24: 3)	October 2023
Domestic Building Oversight Part 1: Regulation (2023–24: 4)	November 2023
Employee Health and Wellbeing in Victorian Public Hospitals (2023–24: 5)	November 2023
Reducing the Illegal Disposal of Asbestos (2023–24: 6)	November 2023
Auditor-General's Report on the Annual Financial Report of the State of Victoria: 2022–23 (2023–24: 7)	November 2023
Contractors and Consultants in the Victorian Public Service: Spending (2023–24: 8)	November 2023
Major Projects Performance Reporting 2023 (2023–24: 9)	November 2023
Fair Presentation of Service Delivery Performance 2023 (2023–24: 10)	November 2023
Reducing the Harm Caused by Drugs on Victorian Roads (2023–24: 11)	December 2023
Results of 2022–23 Audits: Local Government (2023–24: 12)	March 2024
Withdrawal from 2026 Commonwealth Games (2023–24: 13)	March 2024
Follow-up of Management of the Student Resource Package (2023–24: 14)	May 2024
Literacy and Numeracy Achievement Outcomes for Victorian Students (2023–24: 15)	May 2024
Guardianship and Decision-making for Vulnerable Adults (2023–24: 16)	May 2024
Domestic Building Oversight Part 2: Dispute Resolution (2023–24: 17)	June 2024
Planning Social Housing (2023–24: 18)	June 2024
Effectiveness of the Tutor Learning Initiative (2023–24: 19)	June 2024
Assuring the Integrity of the Victorian Government's Procurement Activities (2023–24: 20)	June 2024
Effectiveness of Arterial Road Congestion Initiatives (2023–24: 21)	June 2024
Metro Tunnel Project: Phase 3 – Systems Integration, Testing and Commissioning (2023–24: 22)	June 2024
Access to Emergency Healthcare (2023–24: 23)	June 2024

All reports are available for download in PDF and HTML format on our website at https://www.audit.vic.gov.au

Our role and contact details

The Auditor-General's role

For information about the Auditor-General's role and VAGO's work, please see our online fact sheet About VAGO.

Our assurance services

Our online fact sheet Our assurance services details the nature and levels of assurance that we provide to Parliament and public sector agencies through our work program.

Contact details

Victorian Auditor-General's Office
Level 31, 35 Collins Street
Melbourne Vic 3000
AUSTRALIA

Phone +61 3 8601 7000
Email enquiries@audit.vic.gov.au