



Ambulance services in regional New South Wales

PERFORMANCE AUDIT | 28 JUNE 2024

NEW SOUTH WALES AUDITOR-GENERAL'S REPORT

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In accordance with section 38EC of the *Government Sector Audit Act 1983*, I present a report titled '**Ambulance services in regional New South Wales**'.

Bola Oyetunji
Auditor-General for New South Wales
28 June 2024



RECONCILIATION COMMITMENT STATEMENT

We pay our respects and recognise
Aboriginal people as the traditional custodians of the land in
New South Wales.

We recognise that Aboriginal people, as custodians, have a
spiritual, social and cultural connection with their lands and
waters, and have made and continue to make a rich, unique
and lasting contribution to the State. We are committed to
continue learning about Aboriginal and Torres Strait Islander
peoples' history and culture.

We honour and thank the traditional owners of the land on
which our office is located, the Gadigal people of the Eora
nation, and the traditional owners of the lands on which our
staff live and work. We pay our respects to their Elders past
and present, and to the next generation of leaders.

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Section one

Ambulance services in
regional New South Wales

Executive summary

NSW Ambulance is a front line health service provider, delivering emergency and non-emergency medical services and transport to patients in New South Wales. It provides medical help to patients experiencing life-threatening injuries (referred to as high acuity patients), illness, and trauma, and connects patients who do not need an emergency medical response (referred to as low acuity patients) with the most appropriate health provider.

NSW Ambulance operates as part of a network of public health services. For NSW Ambulance to efficiently transfer patients to hospitals, hospitals need to have sufficient capacity to accept new patients. In regional contexts, distance is an important factor in the effective delivery of ambulance services.

The objective of this audit is to assess the efficiency and effectiveness of ambulance services in regional New South Wales, by answering the following questions:

1. Does NSW Health work effectively and efficiently to deliver ambulance services in regional and rural New South Wales?
2. Is NSW Health effectively and efficiently planning and allocating ambulance services in regional New South Wales?
3. Is the effectiveness of ambulance services in regional and rural New South Wales increasing over time?

The NSW Health agencies included in this audit are NSW Ambulance, the Ministry of Health, Murrumbidgee and Southern NSW Local Health Districts, eHealth NSW and HealthShare NSW.

Conclusion

NSW Health is maintaining the effectiveness of ambulance services in regional New South Wales, despite increasing demand. While NSW Ambulance and the Ministry of Health have effective governance arrangements in place to monitor regional ambulance performance, the Ministry of Health should strengthen its oversight of NSW Ambulance's regional performance.

Demand for ambulance services has increased significantly across New South Wales, with the number of ambulance responses in the state increasing by 18% since October 2018. Since October 2022, response times for ambulances improved at a statewide level, and the two ambulance zones examined as part of this audit demonstrated a similar improvement.

NSW Ambulance and the Ministry of Health collect activity data to monitor the effectiveness of ambulance services in regional New South Wales. However, NSW Ambulance has limited data on the outcomes of its patients because its electronic medical record system does not integrate or communicate with other NSW Health systems.

Service Agreements between the Secretary of Health and NSW Ambulance set the expected performance of ambulance services with measures for response times, ambulance turnaround time and a selection of evidence-based clinical quality indicators. However, these indicators are reported at the statewide level and only one of 15 indicators directly relates to clinical service delivery in regional New South Wales.

The key performance indicator used to assess ambulance response time only reflects the performance of the fastest 50% of incidents and the use of a statewide metric obscures differences in regional and metropolitan performance. Further, as NSW Health has identified health outcomes in regional New South Wales as a strategic priority, the Ministry of Health could improve its oversight of system performance through routine consideration of regional performance across many of the key performance indicators included in the Service Agreement. This would better align with the Ministry's monitoring of transfer of care (the time taken to transfer a patient from an ambulance to an emergency department) which occurs at the individual Local Health District level.

There is effective communication between NSW Ambulance and Local Health Districts to efficiently manage day-to-day operational challenges, such as prioritising the most clinically important cases. However, there are opportunities to enhance information sharing between NSW Ambulance and Local Health Districts to improve patient outcomes and plan for the future.

NSW Ambulance and Local Health District staff regularly communicate both formally and informally to share information. At an operational level, the Ministry of Health's Patient Flow Portal allows Local Health District staff to track patient journeys through the health system, starting from anticipated ambulance arrivals through to patient discharge. More locally, NSW Ambulance Health Relationship Managers maintain close relationships with hospital and Local Health District stakeholders.

The Ministry of Health has developed high-level guidance for Local Health Districts which notes the importance of engaging stakeholders, including statewide services such as NSW Ambulance, throughout the service design process. However, NSW Ambulance is not consistently included in Local Health District service planning discussions, particularly in the early stages of options consideration. Similarly, while NSW Ambulance undertakes holistic service planning, it does not consistently engage with Local Health Districts in service planning activities.

NSW Health is working to identify opportunities to reduce demand on the NSW Ambulance fleet and hospital emergency departments in regional New South Wales.

NSW Ambulance, Local Health Districts and the Ministry of Health have identified key challenges that impact on ambulance services such as increases in emergency department presentations and ambulance call outs. To address these challenges, they have developed a range of demand management and emergency avoidance plans and strategies.

HealthShare NSW operates Patient Transport Services in metropolitan Local Health Districts and Hunter New England Local Health District. Outside of these areas, regional Local Health Districts such as Murrumbidgee and Southern NSW operate their own non-emergency patient transport services. A strategic priority for NSW Health is to reduce reliance on ambulance services to provide patient transport services for lower acuity patients in regional settings. However, the Ministry does not undertake whole-of-system planning for non-emergency patient transport services in rural and regional New South Wales. HealthShare NSW is responsible for expanding Patient Transport Service operations into regional and remote New South Wales, supplemented with the use of private providers. HealthShare NSW has recently started exploring the possibility of expanding its Patient Transport Services to all Local Health Districts.

NSW Ambulance undertakes holistic service planning and effectively considers demand, workload, coverage and capability requirements when planning its workforce.

In 2023, NSW Ambulance developed its Clinical Services Plan 2024–2029 which includes a focus on supporting innovative approaches to clinical redesign and the delivery of new clinical programs. This includes strengthening collaboration between NSW Ambulance and Local Health Districts, particularly to improve care for smaller rural communities and involve paramedics in care and management of patients with chronic diseases. While NSW Ambulance is currently developing a five-year roadmap for the implementation of its Clinical Services Plan, it is unclear how NSW Ambulance intends to implement and resource these objectives in a timeframe that complements similar work across NSW Health.

NSW Ambulance's workforce planning effectively considers demand, workload, coverage and capability requirements to support efficient service delivery. In addition to the demand and activity-based evidence sources used to inform its service planning, NSW Ambulance included evidence-based analysis in its business cases to support NSW Government funding requests, which also contained thorough descriptions of how the proposed funding would be allocated.

NSW Ambulance captures and monitors workforce metrics, such as overtime, shift extensions and call-out utilisations, which it uses to assess the safety and experience of regional paramedics. Recent investments in the regional paramedic workforce, such as the conversion of selected ambulance stations to a 24-hour roster (as opposed to an on-call roster) have reduced the number of on-call shifts worked by paramedics. The reduction in on-call shifts has improved the working conditions of regional paramedics.

1. Key findings

Since October 2022, NSW Ambulance response time performance has improved, despite increasing demand.

While COVID-19 had a measurable impact on the demand for ambulance services across New South Wales, data published by the Bureau of Health Information indicates that the increase in demand began in January 2019 and continues to the present. New South Wales experiences the highest volume of emergency and urgent incidents nationally, with the number of ambulance responses in New South Wales increasing by 18% between October–December 2018 to October–December 2023.

Since October 2022, NSW Ambulance response times at the statewide level have improved for Priority 1 and 2 incidents (Priority 1 is defined as a 'lights and sirens' emergency response, and Priority 2 is defined as an 'urgent' response). A comparison of 2021–22 and 2022–23 response times in the two ambulance zones we examined as part of this audit (Southern NSW and Murrumbidgee) demonstrated a similar improvement.

NSW Ambulance has effective governance arrangements to monitor regional ambulance performance. However, its key performance indicators are focused at the statewide level, and the Ministry of Health does not regularly monitor NSW Ambulance's regional performance

NSW Ambulance key performance indicators are set out in its Service Agreement with the Secretary of NSW Health. However, these indicators are focused at the statewide level, with only one of 15 indicators directly specific to regional New South Wales. Within NSW Ambulance, performance data is available at the sector, zone, and station level. NSW Ambulance zone and sector managers are accountable for performance within their respective geographical areas and use this data to improve performance where required. The NSW Ambulance Clinical Governance Framework provides for an escalation pathway from management reporting through to the NSW Ambulance Advisory Board, which reports on key matters to the Secretary of NSW Health.

In addition to the oversight provided by the NSW Ambulance Advisory Board, the Ministry of Health monitors NSW Ambulance statewide performance against the Service Agreement key performance indicators. The Ministry also monitors progress against strategic outcomes, priority areas impacting health service delivery, and is alert to opportunities for the Ministry and NSW Ambulance to collaborate to improve performance.

The Ministry of Health does not routinely consider NSW Ambulance's performance in regional New South Wales, or performance at the NSW Ambulance zone level, during these meetings. The Ministry of Health advised the audit that it is able to focus on regional or zone performance, should an issue be identified and escalated by NSW Ambulance management or via the NSW Ambulance Advisory Board.

As NSW Health has identified health outcomes in regional New South Wales as a strategic priority, the Ministry of Health could improve its oversight of system performance through routine consideration of regional performance rather than waiting for issues to be escalated.

The key performance indicator used by the Ministry of Health to assess ambulance response times for the most clinically serious calls should be strengthened

The Service Agreement between the Secretary of Health and NSW Ambulance contains one key performance indicator on response time – the median response time for Priority 1A incidents. Priority 1A is reserved for the highest priority incidents, for example where a patient is not breathing, and the Service Agreement target for this indicator is less than ten minutes. The Ministry of Health monitors system performance against this target at the statewide level during its quarterly performance meetings with NSW Ambulance.

The use of a median figure as a performance indicator does not accurately represent system performance, as only the performance of the fastest 50% of responses is reflected in the metric.

For the period October to December 2023, the New South Wales median response time for Priority 1A incidents was eight minutes. For the same period, the 90th per centile response time for Priority 1A incidents was 18 minutes. This means that one in ten Priority 1A responses took almost twice as long to respond to the most clinically critical calls.

Furthermore, the use of a statewide indicator to measure response time performance obscures differences in regional and metropolitan performance. In 2022–23, the median response time for Priority 1A incidents is similar between metropolitan and regional zones (8.27 and 8.64 minutes respectively). When performance is considered at the 85th per centile, metropolitan performance is significantly superior to regional performance (13.58 and 17.88 minutes respectively).

Internally, NSW Ambulance monitors Priority 1A response time at the 50th and 90th per centile by division and sector. Similarly, the Productivity Commission's Report on Government Service, which provides information on the equity, effectiveness and efficiency of government services in Australia, reports Priority 1A response performance at both the median and 90th per centile at a statewide and capital city level for all Australian states and territories.

The Ministry of Health could improve its system oversight through the use of a more holistic set of key performance indicators.

The Ministry of Health monitors Local Health District transfer of care performance

The Service Agreements between the Secretary of Health and Local Health Districts include a key performance indicator on transfer of care – which is the time taken to transfer a patient from an ambulance to an emergency department. In 2022–23, the target was 90% of patients transferred within 30 minutes. The Ministry of Health monitors Local Health District performance against this indicator and has a performance monitoring framework to identify and manage underperformance. The Ministry of Health has also developed operational processes to escalate transfer of care issues when they arise.

For the period October to December 2023, statewide performance against this target was 79.9%. Performance in regional Local Health Districts is generally higher than the statewide average. During the same period Southern NSW Local Health District reported 95.8% and Murrumbidgee Local Health District reported 87.4%.

At an operational level, NSW Ambulance works effectively with Local Health Districts, communicating regularly with Local Health District staff to facilitate service delivery

The Ministry of Health has developed a Patient Flow Portal, which allows NSW Health staff, including Local Health District staff to track patient journeys through the health system. Tracking of patient journeys starts from anticipated ambulance arrivals through to patient discharge. Because of its ability to display capacity and waiting time information in one place, the Patient Flow Portal allows Local Health District and Ministry of Health staff to monitor and manage performance against key performance indicators, including transfer of care times. Clinical staff working in Local Health Districts reported to this audit that the Patient Flow Portal is a key tool for the management of low-acuity patient transports.

NSW Ambulance and Local Health District staff regularly communicate both formally and informally to share information. Informal information sharing between NSW Ambulance and Local Health District staff includes training and professional learning opportunities, updating one another about staffing and facility availability, and discussing the scheduling of non-emergency patient transport. In addition, both Murrumbidgee and Southern NSW Local Health Districts hold regular formalised forums which include NSW Ambulance to facilitate effective service delivery.

Ministry of Health policy guidance requires Local Health Districts and NSW Ambulance to engage and collaborate when undertaking service planning activities, but this does not always occur

The Ministry of Health has developed its Guide to Service Plans, which instructs NSW Health entities undertaking service planning activities. The Guide highlights the importance of active and inclusive stakeholder engagement and requires NSW Health entities to engage with state-wide health services which are impacted by the services being planned.

The Ministry of Health does not collect data regarding whether NSW Health entities have engaged with other services when undertaking service planning activities. This means it is unable to monitor whether NSW Health entities are consistently engaging with one another during service planning.

The audit identified several instances of service planning at Southern NSW Local Health District not identifying NSW Ambulance as a relevant stakeholder and subsequently not including it in its service planning activities. Additionally, NSW Ambulance did not engage with Local Health Districts when developing its Clinical Services Plan 2024–2029.

NSW Ambulance's electronic medical record system does not integrate with other NSW Health information systems, is approaching end-of-life, and there are no plans to update or replace it

The current NSW Ambulance electronic medical record system (eMR) is approaching end-of-life and limits clinicians ability to operate effectively. The eMR does not integrate or communicate with other NSW Health systems. This prevents NSW Ambulance clinicians from accessing clinical information such as patients' medical histories or information regarding previous interactions with the healthcare system. The lack of integration means that tracking patient outcomes for monitoring and evaluation purposes is resource intensive and inefficient.

This also means that paramedics and Local Health District staff are unable to easily share clinically relevant information with one another, including the information allowing paramedics to transfer patients into hospital care after transporting a patient to a hospital emergency department. Under the current system, paramedics are required to print hard copies of patient medical records to complete transfer of care to hospital emergency department staff.

In 2022, eHealth NSW assisted NSW Ambulance in the creation of a business case for a project to update or replace the NSW Ambulance eMR. The business case noted that NSW Ambulance has a 'limited window to procure, implement and establish a replacement eMR solution to ensure that the same level of care can continue to be provided to the New South Wales community.' It is unclear whether this business case has been considered for funding, as neither NSW Ambulance, nor eHealth NSW could provide evidence to this effect.

In 2023, NSW Health announced the commencement of a new 'whole-of-system' eMR, the Single Digital Patient Record (SDPR). The purpose of the SDPR program is to establish one 'digital clinical system' across New South Wales, allowing clinicians to access patient information, record the care they provide, order diagnostic tests and manage medication from any public hospital or community health care facility across the state.

eHealth NSW advised the audit that, while NSW Ambulance is not currently included in the roll-out plan for the SDPR, it intends to include NSW Ambulance in the project. However, this intention is not scoped, planned or funded. Currently, the SDPR does not have the capability to support NSW Ambulance's specific needs, and the vendor has not committed to expanding its scope or changing its product to meet these needs.

The Ministry of Health is centralising the development of referral pathways for NSW Ambulance across the NSW Health system, but has not developed an evaluation framework for this project

Integrated care activities, which include alternate referral pathways and emergency department diversion services, are system-wide functions which serve to reduce demand on emergency resources while providing patients with the most appropriate form and level of care. Alternate referral pathways are clinical guidelines that paramedics and NSW Ambulance clinicians (such as NSW Ambulance's Virtual Clinical Care Centre) can use to refer patients who are assessed as not requiring emergency health care at a hospital emergency department.

These pathways often, but not always, involve the establishment of 'entry points' into the health system for patients (such as direct referral to urgent care clinics, or virtual assessment and management by mental health clinicians). Up until recently, in regional New South Wales, the process to establish these pathways has taken place locally, with NSW Ambulance working with Local Health District staff to identify and develop pathways into local services.

The Ministry of Health developed the Pathways for NSW Ambulance Referrals Project to centralise and standardise the process to develop alternate referral pathways. The project also includes a plan to create a governance monitoring plan for all alternate referral pathways in use across the state. However, there is currently no agreed performance monitoring framework in place for the oversight of alternate referral pathways used by NSW Ambulance across the NSW Health system.

As a frontline service, NSW Ambulance has limited resources to participate in non-operational (or strategic) activities. While NSW Ambulance is currently developing a five-year roadmap to implement its Clinical Services Plan, it is unclear how NSW Ambulance intends to implement and resource these objectives in a timeframe that complements similar work across NSW Health.

As NSW Health agencies increase their focus on coordinated clinical redesign and the delivery of new service models to address challenges such as increases in emergency department presentations and ambulance call outs, there is a risk that NSW Ambulance will not be included in all these activities. This exposes the risk that efficiencies in joint service planning are not realised, leading to duplication of effort or inefficient and ineffective resource allocation.

NSW Health prioritised reducing the reliance on the NSW Ambulance fleet for non-emergency patient transport in regional New South Wales, however the roles and responsibilities for doing so are not clear in all Local Health Districts

In 2022–23, NSW Ambulance provided 13,627 patient transports, almost 80% of which took place in regional New South Wales. NSW Health’s overarching strategy, Future Health 2022–2032, and the NSW Health Regional Health Strategic Plan 2022–2032 have prioritised reduction in the use of NSW Ambulance resources for the provision of non-emergency patient transport.

To support its Regional Health Strategic Plan, the Ministry of Health developed a Priority Framework, which includes an initiative where HealthShare NSW’s Patient Transport Service will provide transport for people who require transport to, or from, a health facility such as a hospital, but do not need a time-critical emergency response. Currently, HealthShare NSW’s Patient Transport Service does not operate across all of New South Wales, and the framework does not include provisions or plans to expand its scope.

While HealthShare NSW is exploring the possibility of expanding Patient Transport Services to all Local Health Districts, it advises that it has not yet received official endorsement from key stakeholders to formally commence such an expansion.

HealthShare NSW’s 2023–24 Statement of Service sets out HealthShare NSW’s service and performance expectations for the provision of patient transport. Included in the performance measures is a performance target for the number of patient transport jobs given to NSW Ambulance each month. The Statement of Service sets a target of less than 150 jobs per month as ‘performing’ and defines ‘non-performing’ as greater than 250 jobs per month. HealthShare NSW does not publicly report regular performance data against its targets and the data for 2023–24 is not yet available, so the audit is unable to determine whether the target is being achieved.

NSW Health does not have a strategy to guide the provision and access of transport for patients accessing health services in New South Wales

NSW Health developed a ‘Transport for Health’ strategy in 2006 to meet the transport needs of patients with a system-wide framework to support, simplify, and improve patient access to health services. The Transport for Health strategy expired in 2011 and NSW Health did not start the development of a new strategy until 2023.

This means that for over a decade NSW Health has not had a cohesive state-wide policy to address well known transport needs affecting health outcomes and service delivery in regional and rural New South Wales.

NSW Ambulance’s workforce planning activities are evidence-based

NSW Ambulance’s service planning methodology contains detailed analysis of station and location demand projections, the staffing levels required to meet demand, models of care, specialty resources and infrastructure requirements. Ambulance station resources (including the number of paramedics and ambulances, as well as the types of rosters in use at a station) are allocated under this methodology. NSW Ambulance uses a continuous review strategy to ensure its service planning methodology is accurate and current.

In addition to the demand and activity-based evidence sources NSW Ambulance uses to inform its service planning, NSW Ambulance includes evidence-based analysis in its business cases to support NSW Government funding requests, which contain thorough descriptions of how the funding will be allocated.

Recent investments in the regional paramedic workforce have allowed NSW Ambulance to reduce its use of on-call rostering to improve the working conditions of regional paramedics

NSW Ambulance rostering practices allow for some stations to utilise on-call resources, which can cause fatigue among paramedics rostered on shift following an on-call period. In the 2018–19 New South Wales Budget, the NSW Government announced funding for the recruitment of an additional 750 full-time equivalent (FTE) paramedic and call-centre staff across New South Wales over four years commencing in 2018–19. The Statewide Workforce Enhancement Program (SWEP) was designed by NSW Ambulance to enable improvements in efficiency, coverage, quality, safety and performance across New South Wales and achieve response performance targets.

SWEP resulted in an additional 376 FTE positions across ambulance stations in regional New South Wales, and allowed NSW Ambulance to reduce on-call rostering through the following actions:

- 22 regional/rural locations were converted to a 24/7 operating model removing overnight on-call
- removal of on-call at four locations that were previously operating on a 24/7 roster with overnight on-call
- reduction in on-call at eight locations.

In August 2022, as part of an internal review of the SWEP program, NSW Ambulance found that the program reduced the number of on-call shifts worked by paramedics which improved the working conditions of regional paramedics.

NSW Ambulance station management staff report that incident reports are not always submitted in a timely manner, which limits their ability to actively manage and respond to risks relating to staff welfare

NSW Ambulance zone and sector managers are responsible for multiple stations, often spread across large geographical areas and they cannot be physically present at each station they are responsible for overseeing. In this context, access to information which can assist management to identify risks to staff wellbeing, health and safety, becomes particularly important.

The NSW Ambulance Incident Management System (IMS+) is a tool station managers use to monitor and manage staff wellbeing. NSW Ambulance staff use this system to report work health and safety related incidents. This includes workplace injury and attending traumatic incidents. Our 2020 performance audit report, 'Managing the health, safety and wellbeing of nurses and junior doctors in high demand hospital environments', found that NSW Health's incident management system was not designed for rapid reporting.

NSW Ambulance station management staff reported to this audit that paramedics are not always submitting incident reports to the IMS+ or are not submitting incident reports in a timely manner. Incomplete information limits management's ability to respond, escalate, and/or monitor risks relating to staff wellbeing and welfare.

2. Recommendations

By June 2025, the Ministry of Health, eHealth NSW and NSW Ambulance should:

1. implement a new NSW Ambulance electronic medical record system that facilitates information sharing between NSW Ambulance and Local Health Districts to improve clinical decision making and improve the assessment of patient outcomes.

By June 2025, the Ministry of Health and NSW Ambulance should:

2. improve system oversight of ambulance response times through the development and implementation of new performance indicators aimed at the regional level.

By June 2025, the Ministry of Health should:

3. work with relevant agencies to finalise its Transport for Health strategy, including undertaking a review of all non-emergency patient transport operators in place across New South Wales, and determining an approach to provide patient transport services across the state
4. collect and monitor performance data on patient transport services in all Local Health Districts, including the number of non-emergency patient transports provided by NSW Ambulance in each Local Health District
5. ensure that performance on statewide indicators is regularly considered, and publicly reported, at the regional and metropolitan level.

By June 2025, NSW Ambulance should:

6. improve strategic engagement with NSW Health entities (including Local Health Districts and HealthShare NSW) by:
 - a) ensuring Local Health Districts and HealthShare NSW are included in local, as well as organisation-wide ambulance service planning activities
 - b) finalising its five-year roadmap for the implementation of the NSW Ambulance Clinical Services Plan 2024–29.

By June 2025, Local Health Districts should:

7. improve strategic engagement with NSW Ambulance by ensuring NSW Ambulance is included in service planning activities and the development of key initiatives.

1. Introduction

1.1 Delivery of ambulance services in New South Wales

Multiple NSW Health entities have a role in the delivery of effective and efficient ambulance services

NSW Ambulance is a front line health service provider, delivering emergency and non-emergency medical services and transport to patients in New South Wales. It provides of medical help to patients experiencing life-threatening injuries, illness, and trauma, and connects patients who do not need an emergency medical response with the most appropriate health provider.

NSW Ambulance operates as part of a broader network of public health services, where the performance of one part of the system can have impacts on other parts of the system. For example, for NSW Ambulance to efficiently transfer patients to hospitals, hospitals need to have sufficient capacity to accept new patients. In regional contexts, the distance to the closest hospital with the required clinical capability is another important factor in the effective delivery of ambulance services.

Similarly, access to primary health services (such as general practice and community health services) helps reduce demand on ambulance services. In areas where these services do not exist at levels sufficient to meet demand, NSW Ambulance can experience higher demand for ambulance services, which can impact its ability to deliver services effectively and efficiently.

The emergency and non-emergency medical services and transport that NSW Ambulance provides to patients in New South Wales are defined in its Service Agreement with the Secretary of Health, which is updated annually. These services include:

- **Emergency services:** including emergency out of hospital care; delivery of high-quality clinical care, and coordination of referral, transport and retrieval services for emergency and time-sensitive patients; emergency management services and multi-agency operations; and receipt and triaging of triple zero calls for residents of New South Wales and dispatch of ambulance and specialist resources to emergency incidents.
- **Trauma services:** including Aeromedical and Medical Retrieval consisting of the aeromedical control centre, medical retrieval services, fixed and rotary wing and road transport services. The Aeromedical and Medical Retrieval service manages all requests for aeromedical transport and adult medical retrieval.
- **Demand management:** including delivery of integrated care programs that are focused on improving the integration and patient connectedness through support of new and already established low acuity pathways in and across Local Health District boundaries; and development of community health promotion programs.
- **Emergency management:** including emergency management services and multi-agency operations.
- **Support services:** including health related transport services (including secondary aeromedical); health related transport: booking, scheduling and dispatch; and Clinical Emergency Response Assistance (CERS Assist).

Because ambulance services in New South Wales are delivered as part of the broader NSW Health system, other NSW Health entities hold responsibility for functions that affect the delivery of ambulance services in regional New South Wales. These entities and their responsibilities are:

- **Ministry of Health:** The Ministry of Health sets the policy and strategic direction for the New South Wales public health system and is responsible for the overall performance of NSW Health entities across the state, as well as supporting and overseeing the planning activities of NSW Health entities.
- **HealthShare NSW:** HealthShare NSW administers the Patient Transport Service, which provides non-emergency patient transport services and operates across Metropolitan Sydney and the Hunter New England Local Health District.
- **Local Health Districts:** Local Health Districts are responsible for managing public hospitals and health institutions. Hospital emergency department staff receive patients whose care is transferred to them by paramedics and non-emergency patient transport providers. Local Health Districts also operate non-emergency patient transport services. Local Health District health services can also accept patients for care through alternative referral pathways used by NSW Ambulance clinicians.
- **eHealth NSW:** eHealth NSW provides ICT services to NSW Health entities. To that end, eHealth supports the Computer Aided Dispatch (CAD) and Electronic Medical Record (eMR) systems in use by NSW Ambulance and Local Health Districts. eHealth NSW is administering the NSW Health Single Digital Patient Record (SDPR) program currently underway, which has been designed to integrate eMR systems in use by NSW Health entities (except NSW Ambulance), and is due to be completed in 2030.

NSW Ambulance operates within Ambulance Zones – defined geographical areas of New South Wales, split into ten regional and ten metropolitan Zones. See Appendix three for further information regarding NSW Ambulance regional ambulance zones.

NSW Health operates within Local Health Districts, which manage public hospitals and health facilities, providing health care services within defined geographical areas of New South Wales. There are 15 Local Health Districts in New South Wales, six across the Sydney Metropolitan region, and nine across rural and regional New South Wales.

According to the NSW Health Regional Health Strategic Plan 2022–2032, regional New South Wales encompasses all regional, rural and remote areas of New South Wales, including some areas within metropolitan Local Health Districts.

NSW Ambulance has applied a 'peri-urban' classification to locations across 11 NSW Ambulance Zones within Greater Sydney, Northern Illawarra, Central Coast, and Inner Hunter regions. NSW Ambulance reports its performance for some key performance indicators at the peri-urban and rural level, to highlight its performance in those parts of the state. Where this data is available, the audit has considered performance as defined by both sets of classifications – metropolitan/regional and peri-urban/rural.

This audit focuses on the effectiveness and efficiency of ambulance services in two regional New South Wales Ambulance Zones/Local Health Districts: Murrumbidgee Zone/Murrumbidgee Local Health District and Southern NSW Zone/Southern NSW Local Health District.

Approximately 45% of NSW Ambulance's activity takes place in regional New South Wales. Appendix two contains information on NSW Ambulance activity (in terms of responses, incidents and numbers of transports) for year 2022–23.

1.2 Challenges to the delivery of health and ambulance services in regional and rural New South Wales

A 2022 NSW Parliamentary inquiry found that residents of regional New South Wales had poorer health outcomes and poorer access to health services

The 2022 NSW Parliamentary inquiry report titled 'Health outcomes and access to health and hospital services in rural, regional and remote New South Wales' describes the context and circumstances surrounding access and demand for health services in regional, rural, and remote New South Wales. The inquiry found that, 'overall, residents of rural, regional, and remote New South Wales have poorer health outcomes and inferior access to health and hospital services, and face significant financial challenges in accessing these services, compared to their metropolitan counterparts.'

The inquiry noted increasing demand for ambulance services across New South Wales, stating calls for ambulances are 2.5 times higher in remote communities when compared with metropolitan or inner regional areas.

With respect to demand for ambulance services, recent data from NSW Health's Bureau of Health Information shows that almost all regional areas have higher incident rates (calculated as number of incidents per 10,000 people) than the New South Wales average.

The inquiry noted general practitioner shortages are occurring across rural, regional, and remote New South Wales, and that more towns had been identified as being at risk of not having a general practitioner within the next ten years. When regional, rural and remote communities do not have access to a local general practitioner, patients must travel to access this care. The inquiry noted these circumstances often lead to services in nearby towns becoming overwhelmed, resulting in these services closing their books to new patients.

Another issue explored by the Parliamentary inquiry relates to challenges accessing transport in rural and regional areas. In many regional towns, there are limited public transport options available, and where these options exist, they are often irregular, and/or can result in long journeys. The inquiry report noted that when patients do not have access to a private vehicle, patients are often 'wholly reliant on the generosity of friends, family and neighbours', and that the distances to be travelled, and related costs (such as fuel) can be a disincentive to individuals following through with, or seeking, treatment.

In regional New South Wales, ambulances often have to travel greater distances, and provide more non-emergency patient transport services

In regional New South Wales, health services are often provided in a 'hub and spoke' model, where smaller regional facilities provide integrated health and aged care services to regional, rural, and remote communities. These smaller regional facilities, such as NSW Health Multi-Purpose Services, receive support from larger facilities in regional centres or metropolitan Sydney. Hub and spoke models rely on the ability to transport complex and seriously unwell patients to larger facilities as needs arise.

These arrangements are reflected in NSW Ambulance's 2022–23 activity data, which demonstrate that 73% of inter-hospital transports undertaken by NSW Ambulance take place in regional New South Wales (63% take place in rural areas).

NSW Ambulance also provides non-emergency patient transport services in regional New South Wales. In 2022–23, NSW Ambulance provided 13,627 patient transports, almost 80% of which took place in regional New South Wales.

The issue of paramedics responding to patients not requiring emergency care and providing non-emergency patient transport services in rural, regional and remote New South Wales was explored in the 2022 Parliamentary inquiry. The inquiry found that paramedics in rural and regional areas are called out to undertake long distance transfers at night, which diverts 'limited emergency resources to low-acuity cases for which they are not required.' This leads to the flow-on effect that off-duty paramedics are called out in place of the rostered crews undertaking patient transport. The report states these circumstances are compounded by staffing levels, with staff increasingly experiencing excessive workloads.

The inquiry made a finding specific to the provision of ambulance services in regional and rural New South Wales:

...a lack of regional Patient Transport Services is being supplemented by Ambulance NSW, resulting in paramedics frequently attending patients who do not require emergency care and reducing Ambulance NSW's capacity to respond to emergencies, and that this comes at great cost to patient and paramedic safety.

The Parliamentary inquiry recommended that NSW Ambulance and NSW Health:

review the use of ambulance vehicles for patient transfers, and in partnership with rural and regional Local Health Districts explore extending the hours of operation of patient transfer vehicles to provide 24-hour coverage, undertake community profiling, workforce planning, and develop models of care to better support communities lacking primary health care.

Addressing increasing demand on health services in New South Wales is a strategic priority for NSW Health

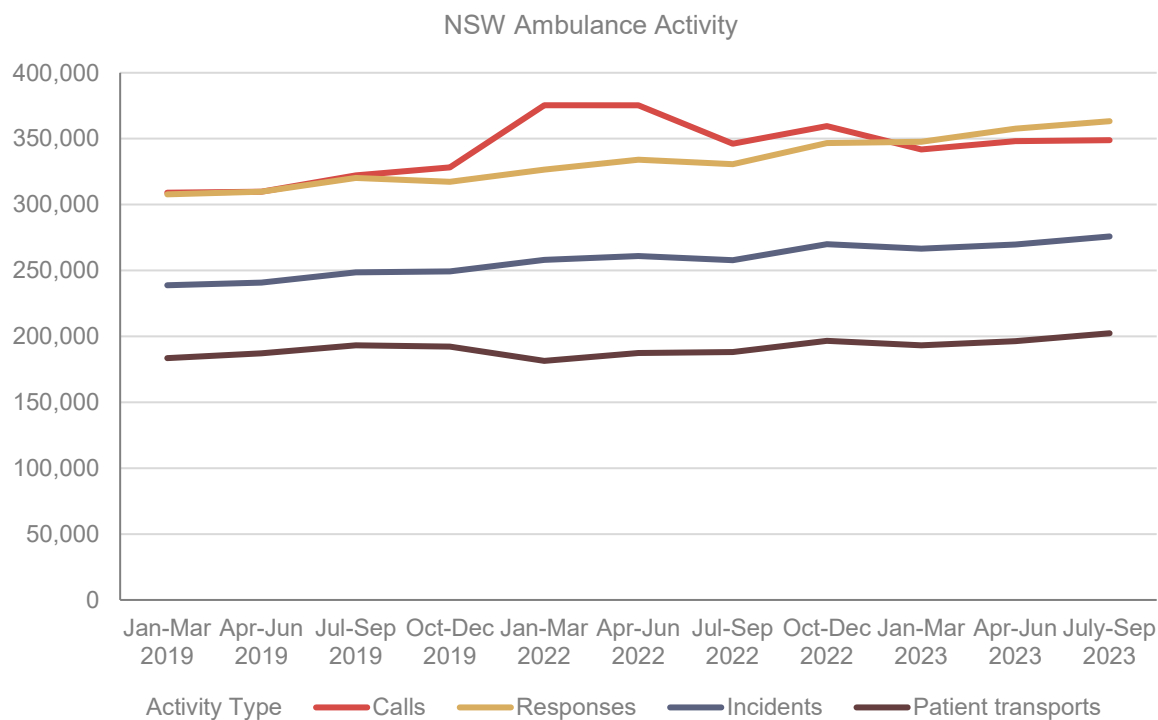
The Ministry of Health has developed broad strategies which guide and inform the activities of the health system. The strategies describe the current landscape, including current challenges, as well as the intended priorities, actions, and investment required to achieve the Ministry's proposed future state. NSW Health's Future Health 2022–2032 is NSW Health's overarching strategy, which outlines how the Ministry of Health intends to meet the needs of its patients, the community, and its workforce over the next decade.

With respect to the current context and challenges across the report period related to the provision of health care services in regional and rural New South Wales, the Future Health report notes that demand for health services in New South Wales is rising at rates which are beyond what can be attributed to population growth, with changing demographics (such as the growing ageing population) and growing complexity accounting for increased activity and demand. The Future Health report states that:

If the health system continues to rely on the current models of care to address this increase and more complex demand, indicative estimates suggest future demand would drive 1.7 times more activity in the health system by 2032.

Since 2019, demand for ambulance services has increased significantly. While COVID-19 had a measurable impact on the demand for ambulance services, recent Bureau of Health Information data indicates that the increase in demand continues. Exhibit 1 demonstrates an 18% increase in the number of ambulance responses in New South Wales between October-December 2018 to October-December 2023.

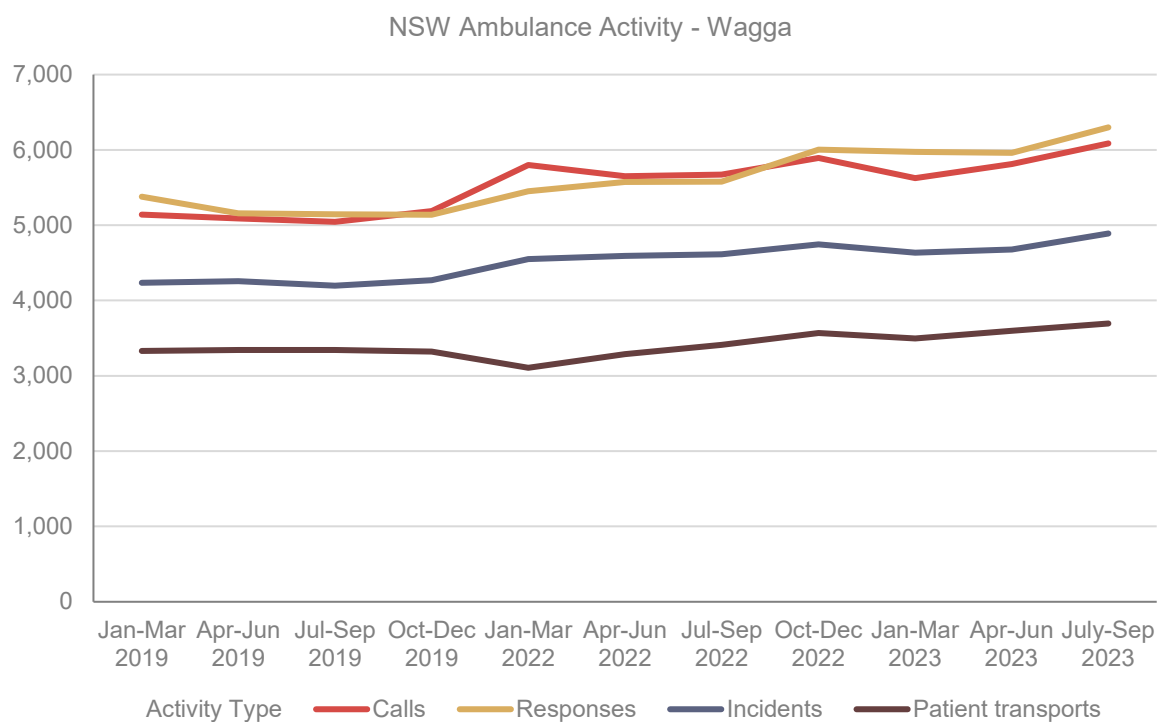
Exhibit 1: Ambulance response activity – January-March 2019 to October-December 2023



Source: Bureau of Health information (unaudited).

This growth in demand is seen across New South Wales, including in regional New South Wales. Exhibit 2 below demonstrates the growth in regional demand, as experienced at Wagga Wagga Base Hospital in Murrumbidgee Local Health District.

Exhibit 2: NSW Ambulance activity in Wagga Wagga Base Hospital – Jan 2019-September 2023



Source: Bureau of Health Information (unaudited).

The Future Health report notes that one third of the New South Wales population lives in regional areas, and that while population growth in those areas will be slower than in metropolitan areas, ageing will occur faster in the regions.

The NSW Health Regional Health Strategic Plan 2022–2032 supports Future Health and is focused on actions in regional New South Wales which support a sustainable, equitable, and integrated health system. The Regional Health Strategic Plan notes the residents of regional and rural New South Wales have poorer health outcomes, and face significant challenges in accessing health and hospital services compared to people living in metropolitan areas. The Regional Health Strategic Plan states that:

A movement of population from small towns to regional centres has occurred in Australia... This has contributed to a reduction in the skills and capabilities available in more remote areas and the ability to support a broad range of services.

The Regional Health Strategic Plan 2022–2032 includes six strategic priorities, which are supported by a priority framework document, which sets out strategic objectives, targets, and investment and initiatives to be achieved by 2026. One of the six strategic priorities directly relates to the provision of low acuity patient transport:

Strategic Priority Two: Enable better access to safe, high quality and timely health services.

In its 2023 Transport for Health Policy draft project plan, NSW Health notes that ‘travelling to and from health facilities is often difficult for people who cannot use or have difficulty in accessing public and/or private transport. People... who live in rural and/or isolated communities are also the most likely to face transport disadvantage.’

NSW Health and NSW Ambulance have developed secondary triage services and referral pathways

People calling triple zero for an emergency ambulance do not always require an emergency response. To counter this, NSW Health entities have developed and use programs which contribute to its demand management and emergency department diversion activities.

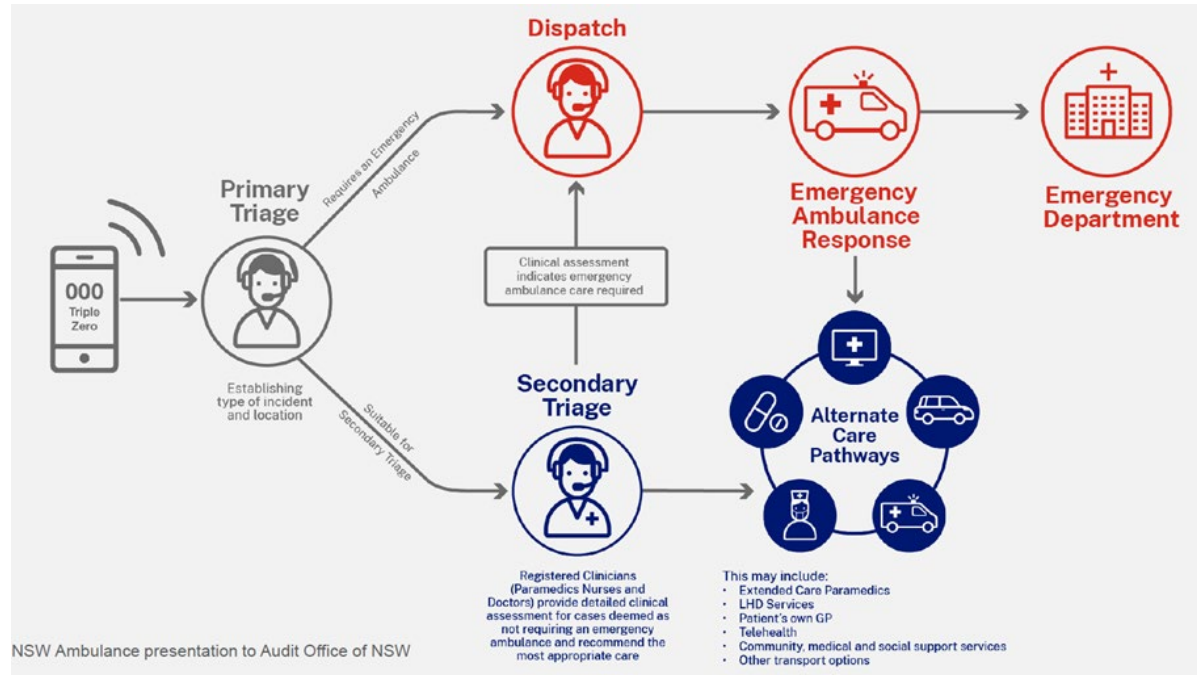
NSW Ambulance established its Virtual Clinical Care Centre (VCCC) in September 2021 to provide an integrated secondary triage and referral service to assist COVID-positive patients in finding the most appropriate care. Following a permanent expansion of the VCCC in 2023, it now provides secondary triage and referral (where clinically appropriate) to patients across New South Wales. Secondary triage is a process which seeks to identify patients who may be suitable for a non-emergency response (such as virtual clinical monitoring or referral to a general practitioner). If the patient does require an emergency response, the call will be returned to a NSW Ambulance control centre and an ambulance will be dispatched.

Alternate referral pathways provide NSW Ambulance clinicians (paramedics and clinicians at the VCCC) with alternatives to emergency departments for patients where clinically appropriate. Often, alternate referral pathways involve a direct entry point into a Local Health District administered health service or facility. The aim of these pathways is to reduce avoidable transfers by ambulance to emergency departments, improve patient experience of care, and improve wait and transfer times for high-acuity triple zero calls.

In addition to secondary triage services provided by NSW Ambulance staff at the VCCC, the NSW Government, in collaboration with other jurisdictions, funds HealthDirect to provide patients with clinical advice with the aim of identifying patients whose condition can be managed outside of the emergency department. In some circumstances, HealthDirect can connect patients with free virtual General Practitioner services. A patient who calls the HealthDirect helpline for medical advice may be referred to NSW Ambulance for an emergency ambulance once HealthDirect clinicians have completed primary triage activities. Similarly, NSW Ambulance transfers some calls it determines as not requiring an emergency response to HealthDirect, which can provide patients with ‘enhanced assessment’, including advice for patients regarding appropriate care options.

Exhibit 3 below shows NSW Ambulance's primary and secondary triage process.

Exhibit 3: NSW Ambulance primary and secondary triage process



Source: NSW Ambulance.

1.3 Investment in ambulance services in New South Wales

The NSW Government increased funding to NSW Ambulance in recent budgets

In its 2018–19 Budget, the NSW Government allocated \$700m in workforce enhancement for NSW Ambulance, which included funding for 700 additional paramedics and 50 control centre employees across four years. To support the funding, NSW Ambulance designed the Statewide Workforce Enhancement Program (SWEP) to enable improvements in efficiency, coverage, quality, safety and performance across New South Wales and achieve response performance targets.

In June 2022, the NSW Government announced the Strategic Workforce Infrastructure Team (SWIFT) program, a \$1.76b investment in NSW Ambulance over a four-year period to fund 210 ambulance support staff, 1,878 new paramedics, 52 nurses, eight doctors, and build 30 ambulance stations.

In the 2023–24 New South Wales Budget, the NSW Government announced a further investment toward ambulance services of \$438.6 million to fund an additional 500 paramedics in rural and regional New South Wales.

1.4 2017 Performance Audit – ‘Managing Demand for Ambulance Services’

In 2017, the Auditor-General published a performance audit on NSW Ambulance's demand management and assessed the extent to which NSW Ambulance's demand management initiatives improved the efficiency of its services. The audit found that while NSW Ambulance had introduced several initiatives that aimed to more efficiently manage demand from less urgent cases, it didn't have an overall strategy for these initiatives and NSW Ambulance's data systems did not measure outputs or outcomes. As a result, the audit was unable to assess the impact of NSW Ambulance's demand management initiatives on the efficiency of ambulance services.

The Auditor-General made the following recommendations to NSW Ambulance:

1. Develop a demand management strategy that outlines its approach to managing demand. This strategy should include:
 - Clear objectives and key performance indicators for demand management initiatives.
 - Input from stakeholders in the health system and a continuing plan for collaboration with stakeholders.
 - Planned approaches to communication with the public about demand management initiatives.
2. Determine the data system improvements required to provide accurate oversight of demand management initiatives. This should enable routine monitoring and reporting of the activity and performance of these initiatives
3. Develop a strategy to guide the continued use of Extended Care Paramedics. This should include planning for how they are used and how their performance is measured
4. Evaluate its approach to using telephone referrals for managing less urgent demand for services
5. Ensure paramedics are as well prepared as possible for their contemporary role by:
 - a) Strengthening staff performance and development practices to help paramedics develop their decision-making and communication skills. This could include introducing formal mentoring programs for paramedics.
 - b) Determining the mobile technology needs of paramedics to support their expanded decision making and assessment roles.

NSW Ambulance accepted all five recommendations of this performance audit.

1.5 2020 Performance Audit – ‘Managing the health, safety and wellbeing of nurses and junior doctors in high demand hospital environments’

In 2020, the Auditor-General published a performance audit report on NSW Health’s management of health and safety risks to nurses and junior doctors in high demand hospital wards from 2016 to August 2020. The audit focussed on emergency departments, mental health wards and aged care wards prior to COVID-19 and expanded to include the new health and safety risks to hospital staff presented by COVID-19. The audit assessed the effectiveness of NSW Health’s:

- systems, forums and workplace cultures to support reporting and generate data about risk
- initiatives to support safe workplaces and effectively respond to health and safety incidents
- actions to continuously improve staff health, safety and wellbeing in hospital environments.

The audit found that NSW Health’s incident management system was effective for recording health and safety incidents in hospital wards where incidents occur infrequently, and staff have time to log incident details during shift hours. However, in high demand wards where incidents and risks are common, staff reported that they were unable to log all incidents due to the frequency of events, and the time required to record incidents in the system.

The audit also found that NSW Health was taking reasonable steps to manage and respond to physical health and safety incidents in New South Wales hospitals, but psychological and wellbeing risks and incidents were not routinely recorded or escalated to managers. Stress debriefing was not consistently available to staff after difficult or traumatic workplace incidents.

To address these findings, the Auditor-General made the following recommendations to NSW Health:

- evaluate the effectiveness of the new incident management system to enable full reporting of health and safety incidents and risks in all hospital wards, including those where incidents and risks are common, and monitor for consistency of reporting over time
- ensure that nurses and junior doctors have regular opportunities to report on risks to their psychological health and wellbeing, and that system managers have access to aggregate data to guide responses to mitigate these risks
- develop and implement an evidence-based guiding framework and strategy to support hospital staff in the aftermath of traumatic or unexpected workplace incidents, and monitor implementation.

NSW Health accepted all of the audit recommendations.

1.6 About the audit

The objective of this audit was to assess the efficiency and effectiveness of ambulance services in regional New South Wales, through the examination of three lines of inquiry:

- Does NSW Health work effectively and efficiently to deliver ambulance services in regional and rural New South Wales?
- Is NSW Health effectively and efficiently planning and allocating ambulance services in regional New South Wales?
- Is the effectiveness of ambulance services in regional and rural New South Wales increasing over time?

The audit focused on ambulance services as defined in the Service Agreement between the Secretary, Health and NSW Ambulance, specifically emergency services, demand management and support services. The audit considered whole-of-system planning and information sharing with a specific focus on two NSW Ambulance zones (Murrumbidgee and Southern NSW).

2. Monitoring the performance of ambulance services in regional and rural New South Wales

2.1 Monitoring NSW Ambulance service provision performance

The Ministry of Health monitors the performance of NSW Ambulance and Local Health Districts against key performance indicators described in Service Agreements

The Ministry of Health monitors NSW Ambulance performance through its NSW Health Performance Framework. The Framework describes the performance expectations and process to monitor the performance of public sector health and support services and is intended to sit alongside Service Agreements between the Secretary of Health and NSW Health entities. As part of this process, the Ministry produces monthly Health System Performance Reports for NSW Ambulance, which include performance data against the key performance indicators, any variation from the targets, and the previous years' performance.

Under the process set out in the NSW Health Performance Framework, NSW Ambulance is required to submit an annual Safety and Quality Account to the Ministry of Health. Additionally, the Ministry holds quarterly performance meetings with NSW Ambulance, per the Performance Framework, which are chaired by the Deputy Secretary, System Sustainability and Performance Division. The purpose of quarterly performance meetings is to discuss:

- performance against Service Agreement key performance indicators
- progress against Future Health strategic outcomes
- priority areas impacting health service delivery
- performance level
- opportunities for the Ministry and health service to collaborate to improve performance.

The Ministry of Health also informally monitors NSW Ambulance performance through the Ministry of Health/NSW Ambulance Operational Meeting, which was established in 2019 to:

- discuss current and emerging issues related to ambulance and retrieval operations, including the development of solutions
- discuss retrieval and/or surge plans, including cross border issues, planning and transfers in and out of Sydney
- enable information sharing and multidisciplinary strategy development
- provide oversight and action recommendations arising from the Patient Safety Distribution Unit Review
- monitor the operational effectiveness of the System Flow functions.

Similarly, the Ministry of Health monitors the performance of Local Health Districts against their Service Agreements. With respect to ambulance services, all Local Health Districts have a key performance indicator for 'transfer of care' (which is the time taken to transfer a patient from an ambulance to an emergency department), where the expectation is that 90% of patients will be transferred from the ambulance to the emergency department within 30 minutes.

NSW Ambulance's data to measure clinical performance is limited

NSW Ambulance uses data captured by its operational systems to assess performance against key performance indicators to measure and monitor clinical performance. NSW Ambulance collects dispatch data from its Computer Aided Dispatch (CAD) system, and clinical data out of its Electronic Medical Record (eMR).

The CAD system contains information such as:

- information about the allocation of resources to triple zero calls
- time-stamped information relating to when activities are begun and completed (e.g., the time when an ambulance arrives at and departs the scene)
- information about the incident (e.g., the type of incident and the transport protocol applied).

The NSW Ambulance eMR system contains information such as:

- information about the incident (e.g., reason for the call and scene location)
- patient information (e.g., demographics, injury/illness characterisation, vital signs, and assessment results)
- treatment details (e.g., pharmacology and interventions)
- outcomes (e.g., patient transported or not transported, died).

NSW Ambulance reports that both the Computer Aided Dispatch and Electronic Medical Record systems were not designed with performance measurement in mind, and because of this, the NSW Ambulance Key Performance Indicators which are monitored through data collected via these systems take the form of output metrics, rather than outcome metrics. Furthermore, NSW Ambulance notes that because the Electronic Medical Record system is designed for use by clinicians at the bedside of a patient, reliable and reproducible data comes secondary to the provision of care.

The NSW Ambulance Computer Aided Dispatch system is primarily concerned with time measurement metrics (i.e., did the patient get to hospital within a certain timeframe), it focuses less on whether the patient received high-quality clinical care before getting to hospital.

The key performance indicators (and the methods used to determine key performance indicators) used to monitor NSW Ambulance performance are agreed between the Ministry of Health and NSW Ambulance each year through the Service Agreement process. This process includes developing data definitions for how these measures are counted.

In addition, the NSW Ambulance Clinical Governance Committee reviews NSW Ambulance's performance measures each year from the perspective of appropriateness, accuracy, and fitness for purpose. NSW Ambulance reports that when the Clinical Governance Committee considers the accuracy and fitness for purpose of performance measures, one of its primary considerations is its confidence in the percentages, and not necessarily absolute numbers. This means that for output measures with a relatively low count, the Clinical Governance Committee applies more scrutiny around whether the measure is complete. For output measures with a higher count, the risk of incomplete data reduces, which means less scrutiny is applied.

NSW Ambulance systems are approaching end-of-life, and do not integrate with similar clinical systems in place across the NSW Health system. Our 2017 performance audit report, 'Managing demand for ambulance services' noted that better linkage between health data would benefit NSW Ambulance by allowing tracking of the health outcomes of patients treated by paramedics.

NSW Ambulance has been working toward a new eMR solution in partnership with eHealth NSW, but it does not have an agreed new state for its clinical systems, or a timeframe in which a solution will be delivered.

The NSW Ambulance service agreement contains only one key performance indicator specific to regional New South Wales

The NSW Ambulance Service Agreement contains key performance indicators used to assess NSW Ambulance's performance. See Appendix four for the key performance indicators in the NSW Ambulance 2023–24 Service Agreement. Of 15 clinical key performance indicators, only one applies specifically to regional New South Wales:

Stroke FAST positive patients with onset of symptoms in last 24 hours transported to a 24/7 Acute Thrombolytic Centre or Acute Stroke Unit within the 4.5-hour clinical window from time of call for Regional New South Wales (the target is 80%).

For metropolitan areas, the comparable performance indicator has a higher target (90%), with a more narrowly defined response (patients can only be transported to a 24/7 Acute Thrombolytic Centre).

Furthermore, the performance indicator for major trauma relates to a protocol which describes different processes depending on whether the response occurs in metropolitan or regional areas. If a patient meets the criteria for major trauma, the protocol allows 60 minutes transport time for metropolitan incidents and 90 minutes for regional incidents.

As only one key performance indicator gives specific regard to patients in regional New South Wales, there is a risk that emerging issues or risks in regional ambulance service delivery are not adequately considered unless performance metrics are disaggregated to the regional level.

The key performance indicator used by the Ministry of Health to assess ambulance response times for the most clinically serious calls should be strengthened

The Service Agreement between the Secretary of Health and NSW Ambulance contains one key performance indicator on response time – the median response time for Priority 1A incidents. Priority 1A is reserved for the highest priority incidents, for example where a patient is not breathing. The Service Agreement target for this indicator is less than ten minutes. The Ministry of Health monitors system performance against this target at the statewide level during its quarterly performance meetings with NSW Ambulance.

The use of a median figure as a performance indicator does not accurately represent system performance, as only the performance of the fastest 50% of responses is reflected in the metric.

For the period January to March 2024, the New South Wales median response time for Priority 1A incidents was eight minutes. For the same period, the 90th per centile response time for Priority 1A incidents was 18 minutes. This means that one in ten Priority 1A responses took almost twice as long to respond to the most clinically critical calls.

Furthermore, the use of a statewide indicator to measure response time performance obscures differences in regional and metropolitan performance. In 2022–23, the median response time for Priority 1A incidents is similar between metropolitan and regional zones (8.27 and 8.64 minutes respectively). When performance is considered at the 85th per centile, metropolitan performance is significantly superior to regional performance (13.58 and 17.88 minutes respectively).

Internally, NSW Ambulance monitors Priority 1A response time at the 50th and 90th per centile by division and sector. Similarly, the Productivity Commission's Report on Government Service, which provides information on the equity, effectiveness and efficiency of government services in Australia, reports Priority 1A response performance at both the median and 90th per centile at a statewide and capital city level for all Australian states and territories.

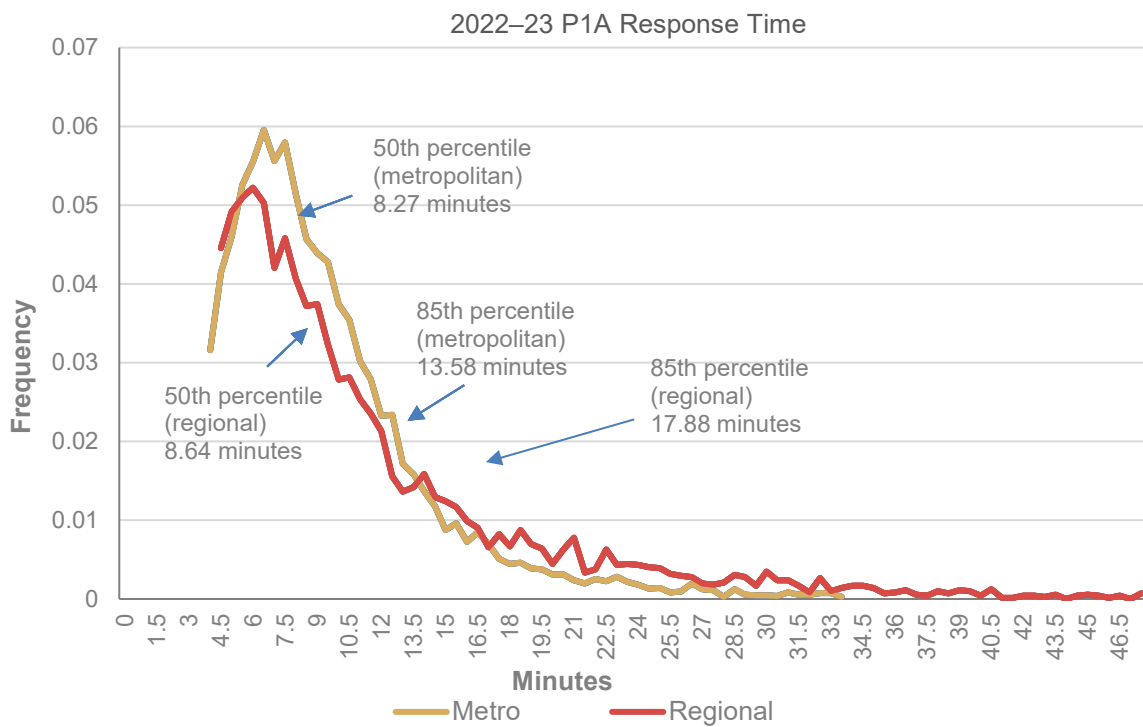
Performance data on metrics such as ambulance response time or transport time can be more readily understood when considered as a distribution. Exhibit 4 demonstrates the 'long tail' present in NSW Ambulance 2022–23 response time data, where there are a significant number of 'high response time' incidents that are not reflected in the median value. Without other information, NSW Ambulance or Ministry of Health decision makers are unable to consider these incidents when monitoring performance. The Ministry of Health could improve its oversight of system performance through the use of a more holistic set of key performance indicators.

Exhibit 4: Metro vs Regional response time performance for P1A incidents (2022–23)

Location type	Median of Response Min	85 th per centile response
Metro	8.27	13.58
Regional	8.64	17.88
Total	8.42	14.97

Source: NSW Ambulance data (unaudited), Audit Office analysis.

Exhibit 5: Response time performance for P1A incidents (2022–23)



Source: NSW Ambulance data (unaudited), AO analysis

Location type	Priority Code	Median of Response Min	85 th per centile response
Metro	P1	14.47	27.20
Regional	P1	13.88	28.77
Statewide		14.25	27.82

Source: NSW Ambulance data (unaudited), Audit Office analysis.

Location type	Priority Code	Median of Response Min	85 th per centile response
Metro	P2	29.83	81.92
Regional	P2	22.07	56.20
Statewide		26.10	69.18

Source: NSW Ambulance data (unaudited), Audit Office analysis.

Statewide performance metrics do not sufficiently reflect performance in regional New South Wales

Ambulances in regional New South Wales often travel greater distances to and from incidents. As a result of these challenges, NSW Ambulance response time performance in regional New South Wales differs significantly from the statewide performance metric.

Exhibits 6 and 7 show performance data for ambulance travel and transport times (where travel is the time taken to get to an incident, and transport is the time taken to transport a patient to a destination) for Priority 1 and Priority 2 responses (Priority 1 is a 'lights and siren' emergency response and Priority 2 is defined as an urgent response).

Exhibit 6: NSW Ambulance travel and transport time performance (2022–23)

Location type	Priority Code	Median of Travel Min	85 th per centile travel	Median of Transport Min
Metro	P2	15.20	26.68	16.65
Regional	P2	11.03	25.95	12.30
Metro	P1	10.17	18.10	16.68
Regional	P1	9.45	22.32	13.55
Statewide		11.20	22.78	15.37

Source: NSW Ambulance data (unaudited), Audit Office analysis.

In 2022–23, compared with metropolitan cases, a higher percentage of regional ambulances achieved a response time of less than fifteen minutes for Priority 1 calls (68% versus 65%). Similarly, regional ambulance services demonstrate better performance than their metropolitan peers in meeting a response time target of 30 minutes for Priority 2 calls (74% versus 67%).

More significant variation exists when performance against these metrics is considered at an ambulance zone level. Furthermore, higher population density centres like Newcastle and Wollongong constituted 30% of regional responses in 2022–23. The inclusion of these areas in regional performance data can further distort the difference in rural performance.

Exhibit 7: Response time for P1 and P2 incidents in Murrumbidgee and Southern NSW Ambulance Zones

NSW Ambulance Zone	Calendar year	50 th per centile Response Minutes	85 th per centile Response Minutes	90 th per centile Response Minutes
Murrumbidgee	2019	10.62	22.08	26.78
Murrumbidgee	2022	12.58	28.57	34.13
Murrumbidgee	2023	11.58	26.52	31.92
Southern NSW	2019	13.23	29.10	33.60
Southern NSW	2022	14.58	32.96	38.33
Southern NSW	2023	13.93	31.93	37.07

Source: NSW Ambulance data (unaudited).

Although NSW Ambulance can generate performance data for regional New South Wales, it does not regularly provide this information to the Ministry of Health

NSW Ambulance has an internal governance structure which includes an Advisory Board, Clinical Governance Committee Audit and Risk Committee, and Patient Safety Quality Committee. These groups receive NSW Ambulance performance monitoring information, including reports on performance data, to enable them to provide oversight, guidance, and advice on NSW Ambulance organisational performance. The NSW Ambulance governance structure, including details regarding the reports received by these bodies is described in Appendix seven.

The NSW Ambulance Clinical Governance Framework sets out the process of escalation from management reporting within its internal governance committees through to the NSW Ambulance Advisory Board, which reports key matters to the Secretary of Health. Both NSW Ambulance and the Ministry of Health reported to this audit that the Ministry can focus on NSW Ambulance performance in regional New South Wales 'as the need arises'. The NSW Ambulance Advisory Board reports to the Secretary of Health 'as required on key matters'.

At the statewide level, NSW Ambulance meets performance targets for all but two of eleven clinical key performance indicators and service measures. As shown in the exhibit below, when performance is considered at the NSW Ambulance zone level, some zones are not meeting targets for an additional six measures.

Exhibit 8: NSW Ambulance performance against clinical key performance indicators and clinical service measures, 2022–23

	Metropolitan Zones								Regional Zones										NSW Total		
	Central Coast	Northern Sydney	South Eastern Sydney	Sydney	South West Zone 1	South West Zone 2	Neparran Blue Mountains	Western Sydney	Metro Total	Hunter Zone 1	Hunter Zone 2	New England Zone	Mid North Coast Zone	Northern Rivers Zone	Illawarra Shoalhaven Zone	Murrumbidgee Zone	Southern NSW Zone	Central and Far West Zone 2		Central West Zone 1	Regional Total
STEMI (target 95%)	92.3	97.5	100.0	97.8	100.0	98.4	100.0	98.8	98.2	97.0	88.2	100.0	100.0	44.4	100.0	83.3	100.0	100.0	90.8	97.7	
Major Trauma T1 (target 95%)	99.7	99.6	99.8	99.8	100.0	99.4	100.0	99.8	99.6	99.5	99.7	99.3	99.8	100.0	99.1	98.8	99.5	97.7	99.1	99.4	99.6
Stroke FAST regional (target 80%)										96.7	96.4	95.7	100.0	97.0	98.3	100.0	88.8	90.4	90.9	96.1	96.1
Mental health assessment (target 70%)	71.4	79.4	72.8	73.4	73.5	70.8	77.5	74.9	74.4	67.7	69.0	74.5	77.1	72.4	66.1	76.2	69.6	80.5	71.0	72.4	73.6
End-tidal wave form (target 95%)	82.6	96.6	96.6	92.7	98.4	95.3	85.9	96.9	94.0	93.8	93.3	81.0	93.5	93.5	86.8	94.9	66.7	84.6	88.9	90.2	92.9
12 lead ECG (target 95%)	95.7	96.3	96.0	96.2	96.3	97.0	97.0	98.1	96.6	95.5	95.8	96.1	94.2	96.4	94.2	96.9	94.5	97.2	96.8	95.6	96.2
All patient observations (target 80%)	84.7	84.6	82.1	81.7	83.0	82.9	82.9	85.7	83.5	80.3	79.5	80.0	83.7	83.9	79.9	82.5	82.1	86.3	84.4	82.1	82.9
Patient score reduction (target 80%)	83.0	85.6	83.0	82.1	82.5	83.0	85.3	85.7	83.2	78.8	80.4	81.9	84.5	85.1	81.7	83.7	82.1	85.4	85.0	83.3	83.2
Acute severe behavioural disturbance (target 80%)	86.1	85.8	87.0	82.2	89.7	84.9	87.5	88.0	86.0	86.8	89.6	90.2	87.9	91.8	86.8	84.3	89.1	85.8	86.4	87.8	86.7
Visual observation (target 80%)	80.8	87.2	82.4	81.0	85.8	87.5	84.2	88.1	84.5	79.6	79.6	75.4	80.5	81.2	80.8	79.7	79.6	83.1	80.2	80.1	82.7
Elder at risk (target 80%)	62.5	69.5	55.6	57.2	69.6	70.2	62.4	58.7	62.8	45.2	49.2	58.3	69.1	70.5	45.9	51.5	65.0	60.9	56.2	57.1	60.1

Source: NSW Ambulance data (unaudited).

The Ministry of Health monitors Local Health District transfer of care performance

The service agreements between the Secretary of Health and Local Health Districts include a key performance indicator on transfer of care – which is the time taken to transfer a patient from an ambulance to an emergency department. In 2023–23, the target was 90% of patients transferred within 30 minutes. The Ministry of Health monitors Local Health District performance against this indicator and has a performance monitoring framework to identify and manage underperformance. The Ministry of Health has also developed operational processes to escalate transfer of care issues when they arise.

For the period October to December 2023, statewide performance against this target was 79.9%. Performance in regional local health districts is generally higher than the statewide average. During the same period Southern NSW Local Health District reported 95.8% and Murrumbidgee Local Health District reported 87.4%.

2.2 Managing and monitoring NSW Ambulance staff wellbeing

NSW Ambulance monitors staff wellbeing through Service Agreement key performance indicators, internally collected and reported data and Sector Health and Safety Committees

The 2022 Parliamentary inquiry into 'Health outcomes and access to health and hospital services in rural, regional and remote New South Wales' found that NSW Ambulance staff were at increased risk of burnout and dissatisfaction due to several factors, including:

- an increased reliance on paramedics to provide primary care in some rural communities due to the lack of healthcare practitioners
- excessive overtime due to insufficient staffing
- overreliance on off-duty colleagues filling staffing gaps.

NSW Ambulance monitors the wellbeing of its workforce through several channels, including Key Performance Indicators included in its Service Agreement with the Secretary of Health. Key Performance Indicators included in the 2023–24 Service Agreement under the heading 'Our staff are engaged and well-supported' are described in Appendix four.

NSW Ambulance also collects and reports other wellbeing performance data such as workload figures, excess annual leave, and premium labour expenses such as those relating to the use of staff overtime. This information is presented in a fortnightly report received by NSW Ambulance executive staff members.

At the local level, each NSW Ambulance sector has a Health and Safety Committee. In Southern Sector, which includes the focus NSW Ambulance Zones for this audit – Southern Zone and Murrumbidgee Zone – Health and Safety meeting members include Zone Managers, a Safety Partner and other local NSW Ambulance staff.

NSW Ambulance staff in the Southern Sector have used the Health and Safety Committee to raise issues relating to fatigue such as:

- concerns around staff not following fatigue mitigation protocols
- request for consistent messaging regarding how to use fatigue mitigation protocols
- feedback from staff regarding the NSW Ambulance control centre dispatching jobs to staff while they are utilising fatigue mitigation strategies
- job types leading to increased fatigue amongst paramedics (e.g., patient transfers across large distances)
- stations experiencing increased fatigue levels.

NSW Ambulance station management staff report that incident reports are not always submitted in a timely manner, which limits their ability to actively manage and respond to risks relating to staff welfare

In our 2020 performance audit report, 'Managing the health, safety and wellbeing of nurses and junior doctors in high demand hospital environments', we noted the importance of system managers having access to all the information needed to identify risks to staff health and safety, reporting that:

NSW Health Agencies have obligations to take all reasonable steps to protect their workers from health and safety risks and support them in the aftermath of workplace incidents. NSW Health's Work Health and Safety: Better Practice Procedures requires managers to 'identify any foreseeable hazards' and 'eliminate' or 'minimise the risk'.

NSW Ambulance zone and sector managers are responsible for multiple stations, often spread across large geographical areas and they cannot be physically present at each station they are responsible for overseeing. In this context, access to information which can assist management to identify risks to staff wellbeing, health and safety becomes particularly important.

The NSW Ambulance Incident Management System (IMS+) is a tool station managers can use to monitor and manage staff wellbeing. Staff use this system to make reports of work health and safety related incidents, such as attending traumatic events and experiencing workplace injury. Our 2020 performance audit report, 'Managing the health, safety and wellbeing of nurses and junior doctors in high demand hospital environments', found that NSW Health's incident management system was not designed for rapid reporting.

NSW Ambulance station management staff reported to this audit that paramedics do not always submit incident reports to the IMS+ or are not submitting incident reports in a timely manner, which limits manager's ability to respond, escalate, and/or monitor risks relating to staff wellbeing and welfare. Station management staff advised that in many instances, delays in reporting are occurring because the paramedic does not feel they have capacity to take the time to make the report.

NSW Ambulance is updating its suite of fatigue management policy documentation to reduce reliance on paramedic self-assessment of fatigue

NSW Ambulance rostering practices allow for some stations to utilise on-call resources. This practice can cause fatigue among paramedics rostered on shift following an on-call period.

NSW Ambulance developed a Work Related Fatigue Mitigation and Management Operating Procedure (the Procedure) in 2023 to provide guidance to staff about their individual responsibilities in this space. The Operating Procedure includes guidelines for employees to monitor and assess their own fatigue levels, as well as a description of the types of mitigation strategy actions employees can utilise to manage fatigue, and the process to notify managers and the control centre when they are in use.

The Procedure includes an 'assessment of individual fatigue level' protocol, which is a tool for paramedics rostered with an on-call component to assess their fatigue level. The tool requires paramedics to input hours of sleep over the past 24 and 48 hours and total waking hours since their last sleep (calculated from the end of the previous shift). The tool provides a score for each of the figures input by staff, with each score added together for a final total. The total score links paramedics to the steps they should take to manage their own fatigue.

NSW Ambulance has developed a new draft Fatigue Risk Management Operating Procedure and Business Requirements document in 2023 aimed at reducing its reliance on individual paramedics calculating and self-assessing fatigue levels. The draft operating procedure includes five levels of controls, which focus on managing:

- work hours (including ensuring workers have adequate opportunity to sleep between shifts and/or periods of work)
- individual fitness for duty
- identifying behavioural symptoms of fatigue
- task-based fatigue management
- fatigue-related incidents.

While the draft procedure still employs the use of a fatigue calculator to assist NSW Ambulance staff to assess their fatigue levels, the process of calculating fatigue levels is now automated. This allows Control Centre Officers and Managers to view individual fatigue data in real time to allow them to proactively manage and support staff experiencing fatigue. At the time of writing this report, NSW Ambulance advises that it is currently consulting with key stakeholders on the proposed new Fatigue Risk Management Operating Procedure.

2.3 Information sharing to enhance services, mitigate risks, and identify opportunities for improvement

NSW Ambulance's electronic medical record system does not integrate with other NSW Health information systems, is approaching end-of-life, and there are no plans to update or replace it

The NSW Ambulance eMR (electronic medical record) system is one of NSW Ambulance's primary datasets and is used to capture:

- information about the incident (e.g., reason for the call and scene location)
- patient information (e.g., demographics, injury/illness characterisation, vital signs, and assessment results)
- treatment details (e.g., pharmacology and interventions)
- outcomes (e.g., patient transported or not transported, died).

While the NSW Ambulance eMR system captures this specific incident information, it does not integrate with other NSW Health information systems. As a result:

- when transferring patients from ambulance to emergency departments, paramedics need to hard copy print NSW Ambulance referral notes at public hospitals which are then subsequently scanned by hospital administrative staff
- NSW Ambulance staff do not have access to potentially relevant clinical information
- Local Health District clinicians do not have access to potentially relevant clinical information
- tracking patient outcomes for the purposes of monitoring and evaluating integrated care programs that involve NSW Ambulance (such as alternate referral pathways) is resource intensive and inefficient.

In November 2022, NSW Ambulance and eHealth NSW developed a business case for the replacement and enhancement of NSW Ambulance's eMR. The business case noted that the current version of the NSW Ambulance eMR is approaching end-of-life and has limitations which negatively impact clinicians' ability to operate effectively.

In 2023, NSW Health announced its Single Digital Patient Record (SDPR) program, to be led by eHealth NSW. The SDPR is designed to replace multiple systems across the NSW Health system in use by Local Health Districts, Specialty Health Networks, and other NSW Health organisations, but does not include NSW Ambulance. eHealth anticipates that SDPR will be implemented over the six years from 2023 to 2029/30.

The purpose of the SDPR program is to establish one 'digital clinical system' across New South Wales, allowing clinicians to access patient information, record the care they provide, order diagnostic tests and manage medication from any public hospital or community health care facility across the state.

eHealth NSW advised the audit that it has taken effort to help NSW Ambulance address interoperability challenges relating to its eMR system, including:

- upgrading NSW Ambulance's eMR to a newer version with better integration capabilities
- developing an interface between the NSW Ambulance and hospital eMRs
- developing a business case, in partnership with NSW Ambulance to replace its current eMR with a solution which would have improved integration capabilities.

It is unclear whether this business case has been considered for funding, as at the time of writing this report, neither NSW Ambulance, nor eHealth NSW could provide evidence to this effect.

eHealth NSW has reported to this audit that it intends to include NSW Ambulance in the SDPR, but this intention is not scoped, planned or funded. Additionally, the planned SDPR final product does not have the capability to support the needs of NSW Ambulance, and the vendor in use for the SPDR program has not committed to an expansion of its scope or changes to its product to meet the needs of NSW Ambulance.

NSW Ambulance, Murrumbidgee Local Health District and Southern NSW Local Health District effectively share information to raise risks and opportunities for improvement to service delivery

Local Health District and NSW Ambulance staff use many informal avenues for communication to facilitate information sharing and operational activities at a day-to-day level. Staff in Southern NSW Local Health District report that they regularly met with NSW Ambulance staff during COVID-19 to undertake planning activities, discuss 'hot and cold zones', and keep each other updated on changes as they occurred. Southern NSW Local Health District and Murrumbidgee Local Health District regularly inform NSW Ambulance regarding the availability of medical officers in their facilities because of the impact this may have on where paramedics can transfer patients.

The NSW Ambulance Health Relationship Manager position is key to local information sharing and raising or escalation of issues between NSW Ambulance and Local Health District staff. The position description for this role states its primary purpose is to 'establish and maintain close working relationships with hospital and Local Health District stakeholders to improve the working relationships between NSW Ambulance and the primary health providers', noting that the promotion of shared NSW Ambulance and NSW Health demand management initiatives, programs and policies is central to the role.

Each NSW Ambulance Zone is allotted one Health Relationship Manager. Staff at Murrumbidgee Local Health District and Southern NSW Local Health District highlighted the importance of the Health Relationship Manager role in facilitating a regular flow of open communication and issues resolution and reported local Health Relationship Managers are the key contact person for hospital staff in all matters involving NSW Ambulance.

Additionally, the Health Relationship Manager and, in some instances the NSW Ambulance Zone Manager, attend regular forums with Southern NSW Local Health District and Murrumbidgee Local Health District.

In the Southern Zone/Southern NSW Local Health District, this includes:

- the Stroke Care Clinical Governance Committee
- the Quarterly Southern NSW LHD & Ambulance Liaison Committee to discuss strategic trends, insights and improvements
- fortnightly Memorandum of Understanding meetings for mental health patients
- the Snowy Mountains Trauma Committee
- seasonal planning forums.

In Murrumbidgee Zone/Murrumbidgee Local Health District, this includes:

- daily (Monday to Friday) Patient Flow Unit meetings
- ambulance liaison meetings
- Memorandum of Understanding meetings for mental health patients.

The Ministry of Health and NSW Ambulance effectively share information to raise risks and facilitate opportunities for improvement to service delivery

Across the NSW Health system, NSW Health entities regularly collect, share and report performance data that extends beyond Key Performance Indicators included in Service Agreements. Key data sources include:

- **Ministry of Health Patient Flow data:** The Ministry of Health developed a Patient Flow Portal, which allows NSW Health staff, including Local Health District staff to track patient journeys through the health system. The portal has five main functions, which include:
 - Electronic Patient Journey Board: provides information about every patient on a ward that directly relates to coordinating care and managing patient flow.
 - Dashboard: a one-page overview of all current Patient Flow Portal activity. It identifies how many beds are required for that day, displays patients waiting in emergency departments, and identifies pending interhospital transfers.
 - Bed Board: provides an up-to-date view of occupancy by ward, hospital beds and Local Health District. Data includes the Estimated Date of Discharge and average length of stay for each patient. Bed Board records inter ward and inter hospital transfers and shows the status of the transfer (requested, confirmed, allocated, in progress and completed) and allows patient information to be sent to the receiving hospital or ward.
 - Predictive Tool: provides the prediction of hospital demand and capacity up to 14 days and assists in future planning
 - Report Module: provides access to pre-defined patient flow reports.
- **NSW Ambulance data:** NSW Ambulance collects data on its performance against key performance indicators and other performance metrics. This data is reported in dashboards which allow executive and local station staff to monitor performance. These dashboards can break performance data down to station, zone, sector, regional/metro and state wide levels. Data reported includes:
 - Emergency triple zero calls, and the number of priority incidents
 - Emergency response performance (including response times, scene time turnaround times, transfer of care and other related indicators)
 - Secondary triage performance, including HealthDirect call activity
 - Staff overtime, breaks missed.
- NSW Ambulance also routinely collects and reports data on patient experience, premium labour (overtime), staff experience, clinical incidents and work health and safety data.

Because of its ability to display capacity and waiting time information in one place, the Patient Flow Portal allows Local Health District and Ministry of Health Staff to monitor and manage performance against key performance indicators. Additionally, Local Health District staff report to this audit that the Patient Flow Portal is a key tool for the management of low-acuity patient transports.

Exhibit 9: Transfer of care at Albury Base Hospital

NSW Ambulance experiences delays in transfer of care at Albury Base Hospital

NSW Ambulance staff have reported to this audit that they experience significant delays when attempting to complete transfer of care of patients at Albury Base Hospital, sometimes up to hours at a time. Staff further reported that patients transported by Ambulance Victoria are often transferred to Albury Base Hospital Emergency Department before those transported by NSW Ambulance, even if they arrive later and/or the patient transported by NSW Ambulance is a higher acuity patient.

Over the period 23 to 29 September 2023, transfer of care at Albury Base Hospital for Priority 1 and Priority 2 cases is at a median turnaround time of 52.71 minutes and a 90th per centile turnaround time of 136.39 minutes. During the same period, the median turnaround time for Priority 1 and Priority 2 cases within Murrumbidgee Local Health District was 39.79 minutes and the 90th per centile turnaround time was 71.79 minutes.

While Albury Base Hospital is in New South Wales, the hospital is managed by Albury Wodonga Health, which is a Victorian Department of Health organisation. Local NSW Ambulance staff report that this means it is more difficult for them to address this issue with hospital staff.

In October 2023, the Ministry of Health developed escalation procedures with Albury Wodonga Health in consultation with Albury Wodonga Health and NSW Ambulance which have been signed off by both organisations. The escalation procedures require:

- The Albury hospital Chief Operating Officer to ensure the hospital puts an escalation framework in place to effectively manage transfer of care
- NSW Ambulance to escalate delays at defined escalation points and maintain oversight of the escalation process
- Ministry of Health involvement where there is 'a critical level of resources available' and if previous escalations have failed.

The NSW Health Transfer of Care Delay Escalation Guideline with Albury document sets out four escalation levels, which are defined by the amount of time elapsed without completion of transfer of care and include actions for NSW Ambulance and Albury Hospital to complete. The audit team has not received information regarding the efficacy of the new escalation guideline.

Source: NSW Ambulance information and data, Audit Office analysis.

3. Delivering ambulance services in regional and rural New South Wales

3.1 NSW Health entity roles and responsibilities

NSW Health entities (including NSW Ambulance and Local Health Districts) operate under roles and responsibilities set out in Service Agreements with the Secretary of Health

NSW Health entities, including NSW Ambulance and Local Health Districts are required to enter into annually updated Service Agreements with the New South Wales Secretary of Health. These Service Agreements include a description of current NSW Health legislation relevant to service delivery, NSW Health strategic priorities, a description or list of the purchased services under the Agreement, and performance measures for the period of the Agreement.

The 2023–24 Service Agreement between NSW Ambulance and the Secretary of Health contains a description of purchased services NSW Ambulance is responsible for delivering, a description of the activities covered under purchased services, as well as key performance indicators and performance deliverables. The current Service Agreement between Local Health Districts and the Secretary of Health contains a description of NSW Health services and networks, purchased volumes and services (including information relating to Activity, State wide dental services, and priority programs), and key performance indicators and performance deliverables.

Under the Service Agreement between NSW Ambulance and the Secretary of Health, NSW Ambulance is responsible for providing of emergency patient transport to local hospital emergency departments, demand management (which includes delivery of integrated care programs), and for working with HealthShare and Local Health Districts to reduce reliance on the emergency fleet for non-emergency patient transport in rural New South Wales.

Service Agreements between the Secretary of Health and Local Health Districts do not explicitly include any patient transport activities. However, Southern NSW Local Health District and Murrumbidgee Local Health District both provide non-emergency patient transport services (including some interhospital transfers) within their Districts.

3.2 Reducing demand on the emergency ambulance fleet

The Ministry of Health has prioritised a reduction in the use of emergency ambulances for the provision of non-emergency patient transport, and HealthShare NSW tracks performance against this objective

The Ministry of Health has developed broad strategies to guide and inform the activities of the NSW Health system. Two of the key strategies in place for the health system in New South Wales are the Future Health Strategy 2022–2032 and the Regional Health Strategic Plan 2022–2032. Each of these strategies underpin the Service Agreements between NSW Ambulance and the Secretary of Health, and Local Health Districts and the Secretary of Health which states that the delivery of NSW Health strategies and priorities is ‘the responsibility of The Ministry of Health, health services and support organisations.’

The Future Health Strategy 2022–32 contains one strategic outcome and key objectives which relates to the provision of low-acuity patient transport:

- Strategic Outcome Two: Safe care is delivered across all settings. This outcome includes key objectives to strengthen equitable outcomes and access for rural, regional and priority populations and to align infrastructure and service planning around the future care needs.

The NSW Regional Health Strategic Plan 2022–32 contains one priority and four associated strategic objectives which relate to the provision of low-acuity patient transport:

- Priority Two: Enable better access to safe, high quality and timely health services. This priority is to be achieved through the following strategic objectives:
 - improvement of local transport and access schemes
 - delivering appropriate services in the community
 - driving and supporting... timely access
 - aligning infrastructure and sustainable service planning.

To support its Regional Health Strategic Plan, the Ministry of Health has also developed a Priority Framework, which sets out investment and initiatives, targets to reach by 2026, and strategic objectives for each of the priorities included under the plan. An initiative included in the Framework under Priority 2 is to reduce ambulance use in non-emergency patient transports through HealthShare NSW's Patient Transport Service. However, Patient Transport Service does not operate throughout all of New South Wales, and the framework does not include provisions or plans to expand its scope. Of the three targets included under Priority 2, none relate to this initiative.

Under the Service Agreement between NSW Ambulance and the Secretary of Health, NSW Ambulance has responsibility to work with HealthShare and Local Health Districts to reduce reliance on the emergency fleet for non-emergency patient transport in rural New South Wales. The Service Agreement does not include any accompanying performance indicators or measures for this activity.

HealthShare NSW's 2023–24 Statement of Service sets out HealthShare NSW's service and performance expectations for the provision of patient transport. Included in the performance measures is a performance target for the number of patient transport jobs given to NSW Ambulance each month. The Statement of Service sets out a target of less than 150 jobs as 'performing' and defines 'non-performing' as greater than 250 jobs per month.

In 2022–23, NSW Ambulance provided 13,627 patient transports. This figure excludes interhospital transports, also known as P4 transports. Almost 80% of which took place in regional New South Wales. HealthShare NSW does not publicly report regular performance data against its targets and the data for 2023–24 is not yet available, so the audit is unable to determine whether the target is being achieved.

Rural and regional transport of patients under the *Mental Health Act 2007* presents a significant resourcing challenge for regional ambulance services

The *Mental Health Act 2007* mandates a 72-hour period under which people can be held for the purposes of conducting an assessment. After that time, all people held involuntarily under the Act must be treated within a declared mental health assessment and inpatient unit. In regional and rural New South Wales, this requires transporting patients to a smaller number of sites than is available in metropolitan areas, which are often long distances away from the health facility where they were initially assessed.

In the financial year 2022–23, Murrumbidgee Ambulance Zone reported 113 ambulance scheduled psychiatric transfers, with a median transport time of 84 minutes. In the same financial year, Southern NSW Ambulance Zone reported 155 scheduled psychiatric transfers, with a median transport time of 68 minutes. Refer to Appendix six for more data on this topic. On average, this represents more than two transfers per week in each Ambulance Zone. Furthermore, transport time only reflects the time taken to transport from the first location to an inpatient unit, and does not include transport to the first location, transfer of care, or the return travel time back to base.

NSW Ambulance and Local Health District staff advised the audit that these transfers can be resource intensive for significant periods of time and limit NSW Ambulance's ability to respond to other emergencies. The audit also heard that when patients are transported long distances (for example from Jerilderie to Wagga Wagga), there is a reluctance from Local Health District staff to accompany patients due to concerns regarding understaffing and challenges in arranging transport back to the home facility. Local Health District staff report to this audit that it is challenging for Local Health Districts to provide staff to accompany patients, due to the risk of leaving facilities without the necessary level of staffing.

Exhibit 10: Transport of involuntary patients under the *Mental Health Act 2007*

NSW Health and the NSW Police Force have a 'Memorandum of Understanding 2018' (the Memorandum), which sets out principles guiding how agencies will work together when delivering services to people with mental health conditions. The Memorandum recognises that resources across all services vary and fluctuate, particularly in rural and remote areas. NSW Health staff, paramedics, and police officers are authorised to provide transport for patients who are being managed in a smaller rural hospital and require transfer to a larger hospital for definitive treatment. Where transport is provided by NSW Ambulance, it is managed as an interhospital transfer.

While aeromedical transport is available for patients requiring transport over 250km or more than three hours, safety considerations require a high level of sedation for involuntary patients during aeromedical transport. For some people, this level of sedation may not be compatible with the patients' other health needs. For example, some medications interact with the level of sedation required, which means the patient cannot safely be sedated during the 72-hour window. In these cases, NSW Ambulance, with support from other NSW Health staff, such as nursing staff and/or Local Health District security staff provide road transport over long distances, which is resource intensive and challenging for both Local Health Districts and NSW Ambulance.

Source: Murrumbidgee Local Health District and NSW Ambulance, AO analysis.

There is no single source of truth for non-emergency patient transport activity across New South Wales

NSW Ambulance and HealthShare NSW have developed non-emergency patient transport business rules, which outlines the process for transferring non-emergency patient transport requests between NSW Ambulance and HealthShare NSW Patient Transport Services. However, the process laid out in this document does not include provisions for, or consideration of, non-emergency patient transport carried out by Local Health Districts, except to note that existing agreements with Local Health Districts continue. The business rules also do not include any accompanying performance indicators or measures.

In addition to the business rules, NSW Health also developed its service specifications for non-emergency transport providers policy directive, which sets out expectations for non-emergency transport providers, including:

- transport and vehicle specifications
- transport staff service specifications
- classes of transport (describing the types of care required for each class and whether it is in or out of scope for non-emergency transport providers)
- clinical governance specifications
- record keeping specifications for individual transfers.

Although the service specifications policy directive includes record keeping directions for non-emergency transport providers, it does not include any accompanying performance indicators or measures against which non-emergency transport providers are required to report performance.

Local Health District staff report to this audit that outside of communications to NSW Ambulance requesting the provision of non-emergency patient transport, they do not share information with NSW Ambulance regarding the number of non-emergency transports undertaken by the Local Health Districts. While HealthShare NSW captures information recorded in the Patient Transport Service booking system for all Local Health Districts, except Far West Local Health District, it is not clear how state wide activity and performance data for non-emergency patient transport undertaken by Local Health Districts is reported to the Ministry of Health.

HealthShare NSW is exploring the possibility of expanding Patient Transport Services in regional Local Health Districts, but there are no current plans in place to expand its services

In May 2022, the NSW Parliament tabled the report for its inquiry into health outcomes and access to health and hospital services in rural, regional and remote New South Wales. The inquiry recommended that NSW Health review the use of ambulance vehicles for patient transfers and, in partnership with rural and regional Local Health Districts, explore extending the hours of operation of patient transfer vehicles to minimise the number of low-acuity jobs that paramedics attend to. The NSW Government supported this recommendation. NSW Health made HealthShare NSW responsible for the expansion of Patient Transport Services into regional and remote New South Wales and the use of private market providers to provide support in this area.

As at June 2023, NSW Health had not determined a delivery due date for these responsibilities and while HealthShare NSW has trialled an expansion of its Patient Transport Services into Hunter New England Local Health District since 2015, HealthShare NSW does not provide patient transport in six (of nine) rural and regional Local Health Districts. However rural and regional Local Health Districts, including the focus Local Health Districts for this audit – Murrumbidgee Local Health District and Southern NSW Local Health District – deliver non-emergency patient transport services within their districts. HealthShare NSW reports to this audit it has developed a proposed expansion of Patient Transport Service in regional and rural Local Health Districts, which has not yet received the official endorsement from key stakeholders required for the proposal to commence.

At an operational level relevant entities coordinate with each other to manage the use of non-emergency patient transport services

Under the Service Agreement between NSW Ambulance and the Secretary of Health, NSW Ambulance is responsible for providing emergency patient transport to local hospital Emergency Departments, as well as working with HealthShare and Local Health Districts to reduce reliance on the emergency fleet for non-emergency patient transport in rural New South Wales.

In addition to non-emergency patient transport, NSW Ambulance has Service Level Agreements with each Local Health District for to provide interhospital patient transport, which is defined as the provision of ambulance services to patients from a public hospital to another public hospital. Under these Service Level Agreements, NSW Ambulance is responsible for the provision of interhospital transports. Staff in Southern NSW Local Health District and Murrumbidgee Local Health District reported to this audit that their patient transport units also undertake interhospital patient transports.

In Metropolitan Sydney, Hunter New England, Nepean Blue Mountains, Central Coast and Illawarra Local Health Districts, HealthShare operates Patient Transport Service, which provides low-acuity patient transports for patients not requiring emergency ambulance transport. In Southern NSW Local Health District and Murrumbidgee Local Health District, the regional and rural New South Wales Local Health Districts this audit focused on, non-emergency patient transports are coordinated and provided in the first instance through Local Health Districts. Local Health Districts in these regions use a mixed approach of Local Health District-owned fleets and private and community operators, with NSW Ambulance providing coverage for transports Local Health Districts cannot complete.

Murrumbidgee and Southern NSW Local Health Districts operate non-emergency patient transports through a Patient Flow Unit and Patient Transport Unit respectively. These units:

- process requests for patient transports (including processing clinically relevant patient information, such as urgency or timeframe for transports to occur)
- manage patient transport vehicle fleets and drivers
- schedule transports
- send patient transport requests their staff are unable to complete to NSW Ambulance
- regularly liaise and coordinate with NSW Ambulance to coordinate and schedule non-emergency patient transport.

Murrumbidgee and Southern NSW Local Health District staff report they do not have enough resources available to complete all low-acuity patient transports within their districts, which requires them to rely on NSW Ambulance to fulfil those transports. NSW Ambulance uses different methods for triage and does not operate under the same access key performance indicators as Local Health District and hospital staff, which specify timeframes patients must be moved within. This means that when NSW Ambulance is required to complete low-acuity patient transports, it does so in a timeframe which does not always align with Local Health District requirements due to NSW Ambulance's competing priorities to attend to emergency cases prior to providing non-emergency transport.

Community organisations across New South Wales also provide patient transport services but these are difficult to factor into planning

Patients in rural and regional New South Wales have fewer transportation options available to them when they require health care services. Across New South Wales, community transport providers sometimes provide non-emergency patient transport services, for example assisting patients to attend medical appointments.

Non-emergency patient transport services provided by community organisations can help to reduce demand on emergency ambulances, while also supporting the needs of patients without access to private vehicles and/or the financial means to pay for other private transport options.

The Local Health Districts included in this audit reported they frequently communicate with the community transport providers operating in their districts. However, as community services are often funded by multiple government agencies across jurisdictions, it is not clear to what extent NSW Health entities interact with, or oversee, non-emergency patient transport services provided by these organisations.

It is not clear whether NSW Health is progressing a plan to update its policy to guide health related transport provision, despite a Parliamentary inquiry and its own key strategy highlighting significant need in this space

Patients across New South Wales, but especially in regional and rural New South Wales, experience many transport related barriers which can hinder or block their ability to access health services for diagnosis, treatment, and care. These barriers include, but are not limited to:

- lack of access to private vehicles
- no or limited public transport availability
- no or limited private transport availability (e.g., taxis, community transport)
- lack of locally situated health care providers
- long distances travelled to reach health care services.

In 2006, NSW Health released its Transport for Health policy to assist NSW Health in simplifying and improving patient access to health services. Transport for Health was intended to integrate all non-emergency health-related transport provision into one program. The Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS), which provides financial assistance for travel to patients traveling more than 100km for medical treatment, was included under the umbrella of Transport for Health and is still in operation today.

The Transport for Health policy expired in 2011, and has not been replaced by NSW Health, with NSW Health acknowledging in internal documents from 2023 that previous attempts to update it were impacted by ‘the availability of resources, parallel reform processes and competing priorities.’

In November 2023, NSW Health developed a draft Transport for Health project plan as part of its plan to refresh the Transport for Health policy. This move came out of an agreement between the NSW Health Regional Health Division, Social Policy Branch, and HealthShare NSW to revise NSW Health’s approach to non-emergency transport which utilises a system-wide approach, but has a specific focus on regional, remote, and rural communities. The project plan notes:

Traveling to and from health facilities is often difficult for people who cannot use or have difficulty in accessing public and/or private transport. People experiencing the greatest socioeconomic and health disadvantage, or who live in rural and/or isolated communities are also the most likely to face transport disadvantage. Improving access to transport enables NSW Health to ensure these groups can access the healthcare they require.

The intended long term outcome of the project to update the Transport for Health strategy is to develop a refreshed approach to transport for Health which is reflective of current priorities and effectively facilitates access to care for all New South Wales residents. The project has been split into three phases and is expected to result in a report which includes:

- a detailed description of the current state of non-emergency patient transport
- identified gaps and barriers in the current state
- studies of exemplary New South Wales non-emergency patient transport programs
- high-level principles to support implementation of a seamless and connected approach to non-emergency patient transport
- informed recommendations for a refreshed approach based on key stakeholder insights
- identifies opportunities and strategies to improve access to care through transport for disadvantaged groups, including (but not limited to):
 - regional communities
 - Aboriginal communities
 - socioeconomic disadvantaged groups
 - renal dialysis patients.

The first phase of the project is a review of the current state of non-emergency patient transport across New South Wales, which includes non-emergency ambulance, non-emergency patient transport (including that provided by Patient Transport Service and Local Health Districts), the Isolated Patient Access and Accommodation Scheme, ride share, community transport, and active and public transport. This phase has been approved by the NSW Health Secretary, but it is not clear whether work has commenced.

Per the draft project plan, the project was planned to commence in December 2023, with each phase due as follows:

- Phase 1 – Review – March 2024
- Phase 2 – Analyse – April-May 2024
- Phase 3 – Report – June 2024.

It is not clear whether the project has commenced as planned, which means that currently, all health-related non-emergency transport in New South Wales is not guided by a central NSW Health policy position.

3.3 Integrated care services and responsibilities

NSW Ambulance and Local Health Districts work to reduce demand on ambulance services and have implemented alternate referral pathways to reduce demand on emergency services

Under the Service Agreement between NSW Ambulance and the Secretary for Health, NSW Ambulance is responsible for demand management. This includes the delivery of integrated care initiatives and programs intended to improve integration across the health system and improve the patient experience through pathways for lower acuity patients. Integrated care initiatives can also include health promotion programs.

Our 2017 performance audit report, 'Managing demand for ambulance services' noted that links between NSW Ambulance and the broader health system were underdeveloped. In particular, the report noted relatively little evidence of collaboration on demand management initiatives. To support this finding, the audit recommended NSW Ambulance:

Develop a demand management strategy that outlines its approach to managing demand. This strategy should include clear objectives and key performance indicators for demand management initiatives; input from stakeholders in the health system and a continuing plan for collaboration with stakeholders; and planned approaches to communication with the public about demand management initiatives.

NSW Ambulance accepted the recommendation and finalised a Demand Management Strategy in 2018.

Alternate referral pathways are clinical guidelines that paramedics and NSW Ambulance clinicians (such as NSW Ambulance's Virtual Clinical Care Centre) can use to refer patients assessed as not requiring emergency health care at a hospital Emergency Department. The aim of these pathways is to reduce avoidable transfers by ambulance to Emergency Departments, improve patient experience of care, and improve wait and transfer times for high-acuity triple zero calls. A patient may be eligible for an alternate referral pathway if, upon calling triple zero for an ambulance, or once assessed by a paramedic, triaging activities determine the patient requires lower-acuity care which can be provided through other health services outside of an Emergency Department.

NSW Ambulance partners with the Ministry of Health Local Health Districts and other health services to identify, develop, and implement alternate referral pathways to reduce unnecessary emergency department presentations.

These pathways often, but not always, involve the establishment of 'entry points' into the health system for patients (such as direct referral to urgent care clinics, or virtual assessment and management by mental health clinicians). Until recently, in regional New South Wales, the process to establish these pathways has taken place locally, with NSW Ambulance working with Local Health District staff to identify and develop pathways into local services.

Some of the types of services for which NSW Ambulance has alternate referral pathways in place in the areas visited for this audit include:

- Southern NSW Local Health District/Southern Zone:
 - hospital clinic: the Rapid Assessment Unit at the Canberra Hospital
 - virtual care: virtual enhanced community care
 - mental health: PACER.
- Murrumbidgee Local Health District/Murrumbidgee Zone:
 - hospital clinic: the Rapid Access Clinic at Wagga Wagga
 - urgent care: Wodonga Priority Patient Care
 - mental health: PACER.

The ability of NSW Ambulance to establish and implement alternate referral pathways is limited by the availability of healthcare services and medical officers in regional New South Wales. This means, in the absence of a viable alternative, patients may be transported to hospital emergency departments.

NSW Ambulance and the Ministry of Health are in the process of centralising the procedure to develop alternate referral pathways, through the establishment of a principle-based approach

Currently, many of the alternate referral pathways used by NSW Ambulance staff are Local Health District specific. Between Local Health Districts, pathways with similar purposes and approaches (such as PACER) have different operating hours, exclusion/inclusion criteria and governance. NSW Ambulance staff interviewed as part of this audit have expressed a desire to move towards a 'standardised' set of alternate referral pathways.

The Ministry of Health and NSW Ambulance are centralising the process to develop alternate referral pathways, through the establishment of a principle-based approach. NSW Ambulance has developed internal documentation to support the project, which would see NSW Ambulance implement a formalised co-governance structure to establish alternate referral pathways, in partnership with health service providers, with each pathway overseen by an advisory committee.

There is a risk that this approach may result in the loss of localised knowledge, including opportunities to leverage local relationships to develop locally specific alternate pathways. For example, NSW Ambulance paramedics have reported to this audit they can sometimes refer patients directly to local GPs because of their relationships with local providers. It is important that as the Ministry of Health and NSW Ambulance proceed with the plan to centralise processes to establish alternate referral pathways, local staff can still leverage local knowledge and local relationships to continue reducing demand on emergency services.

There is no central monitoring or evaluation framework for ambulance referral pathways

The Ministry of Health developed the Pathways for NSW Ambulance Referrals Project to centralise and standardise the process to develop alternate referral pathways. The project also includes a plan to create a governance monitoring plan for all alternate referral pathways in use across the state. However, there is currently no agreed performance monitoring framework in place for the oversight of alternate referral pathways in use across the NSW Health system.

Our 2017 performance audit report, 'Managing demand for ambulance services' noted:

NSW Ambulance has introduced initiatives to change the way it manages demand from patients who have less urgent medical issues. These have the potential to achieve positive results, but we were unable to fully assess their impact because of weaknesses in data systems and monitoring. More needs to be done to demonstrate progress toward the efficiency improvements required.

Specifically, the Auditor-General recommended that NSW Ambulance determine the data system improvements required to provide accurate oversight of demand management initiatives.

In 2019, as part of its inquiry 'Examination of the Auditor-General's Performance Audit Reports May 2017 – December 2017', the Public Accounts Committee requested that NSW Ambulance update the committee on its progress in implementing this recommendation. In response, NSW Ambulance noted that 'new technology was now fully operational, with greater individualised reporting capability. A series of updates to the electronic medical record (eMR) had been released or were in train.' NSW Ambulance further noted that the updates to the eMR had improved the quality of its reporting.

NSW Ambulance reported it completes evaluations of the alternate referral pathways it has established but only provided an evaluation for the Frequent User Management Program, which is a demand management model of care. NSW Ambulance provided evidence of performance monitoring activities it undertakes for some alternate referral pathways, which include:

- a steering committee for Elderly and Frail Connected Pathways
- a presentation of activity and performance for the NSW Ambulance Arrivals Board and Intouch referral service (including numbers of referrals and ED avoidances and analysis of outcomes data)
- documentation for the Mental Health First Responder pathway rollout, including steering committee minutes and agenda, a rollout plan, rollout progress report and other Mental Health First Responder rollout related documentation.

It is not clear whether NSW Ambulance currently uses a uniform approach to referral pathway performance monitoring. NSW Ambulance reports to this audit that, as it does not hold control over the service delivery of referral pathways, referral pathway performance monitoring should be assessed by service delivery partners.

4. Planning and allocating ambulance services in regional and rural New South Wales

The Ministry of Health expects Local Health Districts and state wide health services (such as NSW Ambulance) to engage and collaborate with stakeholders throughout service planning, but it is unclear whether the Ministry ensures that this occurs

The Ministry of Health is responsible for setting policy and strategy direction for the overall NSW Health system and provides guidance to all NSW Health entities (including Local Health Districts and NSW Ambulance) to inform service planning. Local Health Districts are responsible for ensuring that relevant policy objectives are achieved through the planning and funding of the range of health services that best meet the needs of their communities.

Service plans describe how services will achieve measurable health improvements and outcomes. NSW Health entities create service plans within a broader framework of system-wide goals, objectives and priorities. The Guide to Service Plans notes the importance of active and inclusive stakeholder engagement and requires that stakeholders should be engaged throughout the planning process. It also notes that state-wide health and shared services impacted by planning should be engaged to assist with the assessment of service requirements and resource implications.

The audit identified several examples of service plans and key initiatives developed within Southern NSW Local Health District which directly related to ambulance services, but where NSW Ambulance was not identified as a stakeholder. These include:

- A business case for a new MRI service at Goulburn hospital: prior to the establishment of MRI services in Goulburn, there were no MRI services available within Southern NSW Local Health District, with the closest available provider located in Bowral (a private provider) or at the Canberra Hospital. This business case included decreased reliance on patient transport for imaging as a benefit.
- The clinical service plan for Batemans Bay Community Health Centre (which will provide urgent care services in Southern NSW Local Health District).

Southern NSW Local Health District included NSW Ambulance as a stakeholder in cross-border service planning, including NSW Ambulance as a signatory in a cross-border memorandum of understanding for stroke patient transfers between Southern NSW Local Health District, Murrumbidgee Local Health District, Canberra Health Services and NSW Ambulance.

In Murrumbidgee Local Health District, the audit identified one example of the Local Health District including NSW Ambulance as a stakeholder in planning activities. In an updated terms of reference document for the Cootamundra Partnership Reference Committee, which was established to develop a new Health Service Plan for the Cootamundra Health Service, NSW Ambulance has been included as an invitee to this forum.

No health entities undertake whole-of-system service planning for non-emergency patient transport services in rural and regional New South Wales

Non-emergency patient transport services in regional and rural Local Health Districts are provided by HealthShare NSW (in Hunter New England Local Health District and Illawarra Shoalhaven Local Health District), Local Health Districts and NSW Ambulance. Both Southern NSW Local Health District and Murrumbidgee Local Health District engage private providers and community transport providers to supplement their patient transport capacity. When non-emergency patient transport services are at capacity, Local Health Districts rely on NSW Ambulance to assist with facilitating patient transfers.

Despite these challenges, there is no whole-of-system approach to service planning for patient transport. Whole-of-system planning would enable NSW Health to better manage risk and reduce reliance on the use of the NSW Ambulance fleet for patient transport in rural and regional New South Wales.

NSW Ambulance undertakes holistic service planning, but it did not engage Local Health Districts as stakeholders in the development of its recent Clinical Services Plan

As a state-wide health service, NSW Ambulance's service planning broadly reflects the key deliverables articulated in its Service Agreement with the Secretary of Health. The Ministry of Health, in its responsibility for planning key services and as the 'purchaser' of ambulance services, ensures that NSW Ambulance service planning gives regard to the broader strategic policy environment.

In 2023, NSW Ambulance developed a new Clinical Services Plan 2024-2029 which includes a focus on supporting innovative approaches to clinical redesign and the delivery of new clinical programs. This includes strengthening collaboration between NSW Ambulance and Local Health Districts (particularly in care models for smaller rural communities and the involvement of paramedics in care and management of patients with chronic diseases).

NSW Ambulance consulted with the Ministry in the development of the Clinical Services Plan. It advised the audit that as the Clinical Services Plan largely reflects the objectives contained in its Strategic Plan, specific consultation with Local Health Districts was not required.

While NSW Ambulance is currently developing a five-year roadmap for the implementation of its Clinical Services Plan, it is unclear how NSW Ambulance intends to implement and resource these objectives in a timeframe that complements similar work across NSW Health.

The Southern NSW Local Health District Clinical Services Plan does not include specific consideration of the provision of patient transport and it is not clear whether it consulted NSW Ambulance during development

Southern NSW Local Health District's 2023-28 Clinical Services Plan notes development of the plan was informed by local, state and national strategic directions for the health system, as well as outcomes and recommendations of relevant NSW Health and local reviews and inquiries.

Southern NSW Local Health District identified five focus areas in its 2023-28 Clinical Services Plan:

- Supporting health and wellbeing through primary, secondary, and tertiary prevention
- Providing care closer to home
- Ensuring the sustainability of our existing services
- Planning for growth and ageing in our population
- Ensuring equity of access to care.

The Southern NSW Local Health District conducted community stakeholder consultation during development of its Clinical Services Plan, which resulted in feedback relating to challenges accessing health services. Community consultation feedback provided to Southern NSW Local Health District included the below key points relating to transportation to access health services:

- a lack of public and/or private transport to and from health facilities
- the additional burden on rural residents to access health care, noting that rural communities are often long distances from tertiary facilities
- difficulties with transportation, noting community transport options are limited and it can be difficult to coordinate timing.

Southern NSW Local Health District's Clinical Services Plan acknowledges the District consulted with internal stakeholders and other service providers to develop the plan, however, it is not clear whether Southern NSW Local Health District included NSW Ambulance in consultation for feedback. Additionally, while actions to address the areas of focus for the Clinical Services Plan relate to more localised access to care and delivery of care, as well as increased capacity and access, the plan does not include any actions specific to the provision of health related transportation.

Southern NSW Local Health District has committed to improve access to clinical services in rural and remote settings through the delivery of virtual care models

In its 2023-28 Clinical Services Plan, Southern NSW Local Health District commits to establishing a single point of entry so that patients can access appropriate care in 'the right place, at the right time' through (among other actions), an enhancement and expansion of its Virtually enhanced Community Care program and establishment of the Virtual Rural Generalist Service.

This audit identified some examples of Local Health Districts partnering to improve access to clinical service in rural and remote settings. In Southern NSW Local Health District, the Local Health District has partnered with Western NSW Local Health District to implement the Rural Virtual Generalist Service in smaller facilities across the District.

NSW Ambulance's workforce planning effectively considers demand, workload, coverage, and capability requirements and it uses this evidence to allocate personnel and other resources to efficiently deliver ambulance services in regional New South Wales

NSW Ambulance has a well evolved and evidenced service planning methodology. NSW Ambulance established a service planning capability in 2010, and the current methodology (developed in 2022–23) includes analysis at the station and local network level of demand projections, staffing levels required, the drivers of effective and efficient supply provision, models of care, specialty resources and capital and infrastructure requirements. It includes a substantial focus on station location and the type of resource required.

Service planning informs (and is informed by) benefits realisation for new programs and initiatives (such as SWEP, SWIFT). NSW Ambulance has also developed a model to assess 'unmet demand' which it uses when determining sites for potential resource allocation and supplementation. NSW Ambulance continuously monitors its need and priority for additional or enhanced ambulance services and considers the following criteria:

- volume of demand in town and surrounding area
- distance from any ambulance service
- current response times to emergency incidents
- modelled improvement in response times if an ambulance station was commissioned
- assessment of capacity and condition of closest ambulance station
- capacity of NSW Ambulance volunteer service to provide a response.

NSW Ambulance continuously reviews key inputs into the service planning methodology, in particular its demand project methodology.

The main output of NSW Ambulance's service planning methodology is the creation of a whole-of-state service model which describes the clinical service levels for each ambulance station. A station's clinical service level determines both the number of clinical staff required and its specific roster pattern, as well as the staff type (graduate paramedic, specialist paramedic, etc.). NSW Ambulance then creates station rosters in alignment with this model.

In addition to the demand- and activity-based evidence sources NSW Ambulance uses to inform its service planning, NSW Ambulance includes evidence-based analysis in its business cases to support NSW Government funding requests, which also contain thorough descriptions of how the proposed funding would be allocated.

Recent investments in the regional paramedic workforce have allowed NSW Ambulance to reduce the use of on-call rostering and improve the working conditions of regional paramedics

NSW Ambulance rostering practices allow for some stations to utilise on-call resources, which can cause fatigue among paramedics rostered on shift following an on-call period.

Announced in the 2018–19 NSW Budget, the NSW Government announced funding for the recruitment of an additional 750 FTE paramedic and call-centre staff over four years commencing in 2018–19. The Statewide Workforce Enhancement Program (SWEP) was designed by NSW Ambulance to enable improvements in efficiency, coverage, quality, safety and performance across New South Wales and achieve response performance targets.

The SWEP business case detailed the extent to which NSW Ambulance relied upon various forms of premium labour in order to maintain service delivery and to meet community expectations in terms of response performance. The SWEP business case identified that \$20 million in premium labour savings after the four-year implementation program would be achieved by reducing over-reliance on overtime.

SWEP resulted in an additional 376 FTE positions across ambulance stations in regional NSW, and allowed NSW Ambulance to reduce on-call rostering:

- 22 regional/rural locations were converted to a 24/7 operating model removing overnight on-call
- Removal of on-call at four locations that were previously operating on a 24/7 roster with overnight on-call
- Reduction in on-call at eight locations.

NSW Ambulance measured premium labour savings achieved by monitoring callouts, crib-penalty payments, and dropped-shift overtime. In August 2022, as part of an internal review of the SWEP program, NSW Ambulance noted that the SWEP program achieved the reduction in premium labour expenditure and improved the working conditions of regional paramedics.

NSW Ambulance anticipates that recent changes to funding arrangements will result in a key program not achieving its intended benefits

In June 2022, the NSW Government announced a \$1.76b investment in NSW Ambulance over a four-year period to fund 210 ambulance support staff (including the ongoing establishment of NSW Ambulance's Virtual Clinical Care Centre (VCCC)), 1,878 new paramedics, 52 nurses, eight doctors, and build 30 stations.

Known as the Strategic Workforce InFrastructure Team program (SWIFT), NSW Ambulance designed the program to meet two objectives:

- firstly, to improve patient outcomes, and the probability of survival from immediately life threatening conditions.
- to achieve compliance with WHS obligations through the reduction of overrun shifts, overtime, and increase staff meal breaks.

When it was announced as part of the 2022–23 NSW Government budget, SWIFT was designed as a four-year program. However, recent changes to funding arrangements have changed the SWIFT timeframe and the program will now be delivered over seven years (at the same cost).

One of the key objectives of the SWIFT business case was to improve patient outcomes and the probability of patient survival by achieving response times within 15 minutes for 85% of P1 incidents by 30 June 2026. NSW Ambulance regularly reports and tracks performance on SWIFT indicators, and advises that as at 21 December 2023, the program was on track to meet the target.

NSW Ambulance modelled that the impact of extending the funding window from four years to seven years would add three years of additional demand growth and result in the program failing to achieve the 85% target by June 2026.

Section two

Appendices

Appendix one – Response from entity

Response from NSW Health

NSW Health



Ref: H24/74727

Mr Bola Oyetunji
Auditor-General of NSW

Via email to

NSW Health response to the Auditor-General's performance audit on Ambulance Services in Regional NSW

Dear Mr Oyetunji

Thank you for the opportunity to respond to your performance audit report on Ambulance Services in Regional NSW.

I welcome the focus that this audit has given to the delivery of these critical services in our regional areas. I am pleased to note that the audit report has concluded that NSW Health is maintaining effective ambulance services in regional NSW and that effective arrangements are in place for performance monitoring. The areas highlighted for further enhancement will be considered as part of our ongoing management of the core system performance and governance frameworks.

All recommendations have been accepted, noting that further consideration needs to be given regarding planning for the integration of patient management systems in context of our broader Single Digital Patient Record (SDPR) project. This project will deliver greatly enhanced access to patient information and support for our clinical staff and will have a positive impact on the provision of key services to regional NSW. Further detail regarding NSW Health's response to each of the report recommendations is attached to this letter.

I appreciate the support offered by the Audit Office over the duration of this audit program and for the collaborative approach to working with representatives of NSW Health which has been shown.

Yours sincerely

A handwritten signature in black ink, appearing to read "Susan Pearce".

Susan Pearce AM
Secretary, NSW Health

Recommendation	Responsibility	Agency Position	Agency Response
By June 2025, the Ministry of Health, eHealth NSW and NSW Ambulance should:			
1. Implement a new NSW Ambulance EMR that facilitates information sharing between NSW Ambulance and Local Health Districts to improve clinical decision making and improve the assessment of patient outcomes.	Ministry of Health, eHealth NSW and NSW Ambulance	Accept in principle	The NSW Ministry of Health will work with NSW Ambulance, the newly established Single Digital Patient Record (SDPR) Implementation Authority and eHealth NSW to explore options for the deployment of a fully functional eMR for NSW Ambulance with integration capability into the statewide SDPR platform. It should be noted that this will be a significant technical and clinical undertaking and a longer implementation timeframe will be required.
By June 2025, the Ministry of Health and NSW Ambulance should:			
2. Improve system oversight of ambulance response times through the development and implementation of new performance indicators aimed at the regional level.	Ministry of Health and NSW Ambulance	Accept	The NSW Ministry of Health annually considers KPIs for inclusion in Service Agreements with all health organisations including NSW Ambulance. The Ministry will work with NSW Ambulance to develop appropriate measures and benchmarks for inclusion in the 2025-26 Service Agreement, with monitoring through the NSW Health Performance Framework.

Recommendation	Responsibility	Agency Position	Agency Response
By June 2025, the Ministry of Health should:			
3. Work with relevant agencies to finalise its Transport for Health strategy, including undertaking a review of all non-emergency patient transport operators in place across New South Wales, and determining an approach to provide patient transport services across the state.	Ministry of Health	Accept	<p>The Ministry of Health is working collaboratively with NSW Ambulance, HealthShare, Transport for NSW and local health districts to enable better access to safe, high quality and timely health services, including improving local transport solutions and travel assistance schemes, and addressing their affordability, to strengthen equitable access to care, aligned to Regional Health Strategic Plan, Priority 2.</p> <p>The Regional Health Division is working with these partners to review the current approach to providing non-emergency patient transport in NSW, including identifying transport operators and initiatives in place. This review will inform recommendations for a refreshed Transport for Health Policy which:</p> <ul style="list-style-type: none"> - reflects strategic priorities - improves community awareness of available services - increases availability to addresses identified service gaps - and where possible improves coordination between stakeholders to maximise use of existing resources.
4. Collect and monitor performance data on patient transport services in all Local Health Districts, including the number of non-emergency patient transports provided by NSW Ambulance in each Local Health District.	Ministry of Health	Accept	<p>The HealthShare NSW Patient Transport Service (PTS) has regular performance meetings with the NSW Ministry of Health, Local Health Districts and NSW Ambulance and regularly reports performance data to the HealthShare NSW Board. There are already strong foundations for data reporting on non-emergency patient transport in areas where PTS is operational, and this capacity can be extended to rural and regional LHDs as part of a broader planned roll out of PTS services.</p> <p>The NSW Ministry of Health annually considers KPIs for inclusion in Service Agreements with all health organisations including HealthShare NSW. The Ministry will work with HealthShare NSW, the Regional Health Division and Local Health Districts to develop appropriate measures and benchmarks for inclusion in the 2025-26 Service Agreement, with monitoring to occur through the NSW Health Performance Framework.</p>

Recommendation	Responsibility	Agency Position	Agency Response
5. Ensure that performance on statewide indicators is regularly considered, and publicly reported, at the regional and metropolitan level.	Ministry of Health	Accept	The Ministry of Health will review performance against agreed measures through the existing NSW Health Performance Framework and determine appropriate avenues for public reporting.
By June 2025, NSW Ambulance should:			
6. Improve strategic engagement with NSW Health entities (including Local Health Districts and HealthShare NSW) by: a) ensuring Local Health Districts and HealthShare NSW are included in local, as well as organisation-wide ambulance service planning activities b) finalising its five-year roadmap for the implementation of the NSW Ambulance Clinical Services Plan	NSW Ambulance	Accept	<p><i>Response to Recommendation 6a</i></p> <p>NSW Ambulance continues to identify opportunities to improve strategic engagement with NSW Health entities at a local and organisational level. NSW Ambulance actively participates in the NSW Health Planning Directors and Managers Network Meetings which has resulted in engagement and collaboration with NSW Health agencies on service planning activities.</p> <p>NSW Ambulance undertakes service planning centrally coordinated by Ministry of Health including growth precinct needs analyses, hospital clinical capability reviews, station infrastructure and hospital co-location projects and hospital relocation impacts.</p> <p>NSW Service Planning is committed to improved strategic engagement with LHDs and HealthShare with regular meetings and increased collaboration on health and clinical service plans.</p> <p><i>Response to Recommendation 6b</i></p> <p>NSW Ambulance is committed to the delivery of the Clinical Services Plan with implementation plan development currently in progress and identification of opportunities for NSW Ambulance, LHD and HealthShare collaboration.</p>

Recommendation	Responsibility	Agency Position	Agency Response
By June 2025, Local Health Districts should:			
7. Improve strategic engagement with NSW Ambulance by ensuring NSW Ambulance is included in service planning activities and the development of key initiatives.	Local Health Districts	Accept	<p>While the Ministry of Health will continue to guide the Local Health Districts in their engagement with NSW Ambulance in service planning activities, the Districts themselves have the responsibility to ensure there is strong collaboration with statewide health services which impact their local service planning.</p> <p>As an auditee of this audit program, Murrumbidgee Local Health District has noted that NSW Ambulance and Murrumbidgee Patient Flow stakeholders are included on all Health Services Planning steering committees.</p>

Appendix two – NSW Ambulance performance data

NSW Ambulance activity (by location type) 2022–23

	Responses	% of Responses	Incidents	% of Incidents	Transports	% of Transports
Metro	754,682	54.5	579,302	54.4	420,435	54.3
Regional	627,213	45.3	484,017	45.5	353,369	45.6
Peri-Urban	943,518	68.2	723,585	68	522,029	67.4
Rural	438,408	31.7	339,746	31.9	251,779	32.5

Source: NSW Ambulance CAD data 2022–23 (unaudited).

NB: due to NSW Ambulance data classification rules, this table excludes a small percentage of NSW Ambulance activity.

NSW Ambulance response time performance for Priority 1 calls

	Median	85 th per centile
Metro	14.5	27.2
Regional	13.9	28.8
Peri-Urban	14.5	27.2
Rural	13.6	29.7
Regional and Peri-Urban (for example urban areas of Newcastle and Wollongong)	14.4	27.0

Source: NSW Ambulance data, unaudited.

Priority 1 response time less than 15 minutes

NSW Ambulance Zone	% Response less than 15 mins
Central and Far West Zone 2	68.00
Central Coast	58.09
Central West Zone 1	59.80
Hunter Zone 1	58.15
Hunter Zone 2	45.91
Illawarra Shoalhaven	50.05
Mid North Coast Zone	50.52
Murrumbidgee Zone	60.89
Nepean Blue Mountains	52.06
New England Zone	61.27
Northern Sydney	52.46
Northern Zone	52.62
South Eastern Sydney	57.22
South West Zone 1	43.26
South West Zone 2	51.90
Southern NSW Zone	52.79
Sydney	61.99
Western Sydney	46.68
Statewide	53.50

Source: NSW Ambulance data, unaudited.

Appendix three – NSW Ambulance regional station map



Regional Station Map – January 2021 06222114

Appendix four – NSW Ambulance key performance indicators

The NSW Ambulance Service Agreement with the Secretary of Health contains state wide key performance indicators under which its performance is monitored and reported. Key performance indicators included in Service Agreements between NSW Ambulance and the Secretary of Health fall under four categories: clinical ('Safe care is delivered across all settings'), workforce ('Our staff are engaged and well supported'), research ('Research and innovation, and digital advances inform service delivery') and finance ('The health system is managed sustainably').

For the purposes of this audit, the audit team focused its analysis on key performance indicators falling under the clinical and workforce categories. The key performance indicators included under these categories in the NSW Ambulance 2023–24 Service Agreement are:

Safe Care is delivered across all settings:

- All cases where STEMI is confirmed and patient meets Pre-hospital Assessment for Primary Angioplasty (PAPA) criteria and who arrive at the designated cardiac catheterisation laboratory facility within 60 minutes (95% target).
- Major trauma patients managed as per protocol T1 by either direct transport to a Trauma Service OR with Aeromedical Control Centre (ACC) notification (95% target).
- Stroke FAST positive patients with onset of symptoms in last 24 hours transported to a 24/7 Acute Thrombolytic Centre within the 4.5 hour clinical window from time of call for Metropolitan Sydney (90% target).
- Stroke FAST positive patients with onset of symptoms in last 24 hours transported to a 24/7 Acute Thrombolytic Centre or Acute Stroke Unit within the 4.5 hour clinical window from time of call for Regional NSW (80% target).
- Mental Health patients who have a mental health assessment completed and documented (70% target).
- Triple Zero call answer time – calls answered in < ten seconds (90% target).
- Transfer of care – Patients transferred from ambulance to ED < 30 minutes (90% target).
- Make Ready Time Priority 1 & Priority 2 cases < 30 minutes (90% target).
- Make Ready Time Priority 3 cases < 20 minutes (90% target).
- Response Time – Ambulance response times to Priority 1A Incidents (50th per centile – minutes) (target 10).
- Frequent User Management Program Monitoring – reduction in the number of 000 calls from the Top 20 callers currently enrolled (50% change from 2015–16 baseline target).
- Complaints Management: Complaints resolved within 35 days (80% target).
- Death Review: Witnessed deaths reviewed within 45 days (100% target).
- Serious Adverse Events Reviews completed within 60 days (100% target).
- Clinical Incidents Management- Clinical incidents with Harm Score 2, 3, 4 (Not SAER) completed within 45 days (85% target).

Our staff are engaged and well supported:

- Workplace Culture – People Matter Survey Culture Index – Variation from previous survey ($\geq -1\%$ target).
- Take action – People Matter Survey take action as a result of the survey – Variation from previous survey ($\geq -1\%$ target).
- Staff Engagement – People Matter Survey Engagement Index – Variation from previous survey ($\geq -1\%$ target).
- Staff Engagement and Experience – People Matter Survey – Racism experienced by staff – Variation from previous survey ($>5\%$ points decrease on previous survey target).
- Staff Performance Reviews – Within the last 12 months (100% target).
- Recruitment: Average time taken from request to recruit to decision to approve/decline/defer recruitment (business days) (<10 target).
- Aboriginal Workforce Participation – Aboriginal Workforce as a proportion of total workforce at all salary levels (bands) and occupations (3.43% target).
- Employment of Aboriginal Health Practitioners (Number) (Individual – See Data Supplement).
- Compensable Workplace Injury Claims (% of change over rolling 12 month period) (0% target).

Appendix five – Types of patient transport operational across New South Wales

Across New South Wales, various kinds of emergency and non-emergency patient transport are provided by NSW Ambulance and other NSW Health entities, which are described below.

Emergency transport: Under the Service Agreement between the Ministry of Health and NSW Ambulance, NSW Ambulance is responsible for the provision of emergency services, described as ‘...transport and retrieval services for emergency and time sensitive patients,’ which sees patients transported to hospital emergency departments.

Non-emergency patient transport: the Service Agreement between the Ministry of Health and NSW Ambulance includes ‘Health Transport Services’ as a purchased service, which requires NSW Ambulance to work with HealthShare NSW and Local Health Districts in reducing reliance on the emergency fleet for non-emergency patient transport in regional and rural New South Wales. HealthShare describes Patient Transport Service on its website as providing low-acuity transports for patients requiring transport to, or from a health facility such as a hospital or rehabilitation unit not requiring a time-critical emergency ambulance. In New South Wales, non-emergency patient transport is delivered by NSW Ambulance, Local Health Districts and HealthShare.

Interhospital transfers: NSW Ambulance has a Service Level Agreement with each Local Health District in New South Wales to provide interhospital patient transport. The Service Level Agreement defines interhospital service as the ‘provision of ambulance services to patients from a public hospital to another public hospital.’ Local Health Districts with patient transport fleets in place can also complete interhospital patient transfers.

Transport of involuntary patients under the *Mental Health Act 2007*: If an ambulance officer believes on reasonable grounds that a person is mentally ill or mentally disordered as defined under the *Mental Health Act 2007 (NSW)*, and that it would be beneficial for their welfare to be dealt with under that Act, they can take that person to a public mental health facility for the purpose of a mental health assessment. A person detained under the *Mental Health Act* may only be taken to, detained, assessed and involuntarily treated in a declared mental health facility, unless they require treatment for a non-mental health condition.

Because resources across all mental health services vary and fluctuate, particularly in rural and remote areas. NSW Health staff, paramedics, and police officers are authorised to provide transport for patients who are being managed in a smaller rural hospital and require transfer to a larger hospital for definitive treatment. Where transport is provided by NSW Ambulance, it is managed as an interhospital patient transfer.

Appendix six – Scheduled psychiatric interhospital patient transfers

Performance and activity data for scheduled psychiatric transfers in Southern NSW and Murrumbidgee ambulance zones.

FY	Murrumbidgee Zone			Southern NSW Zone		
	Median of Transport Mins	85 th per centile transport	Number of transports	Median of Transport Mins	85 th per centile transport	Number of transports
2019	73.42	126.30	120	61.88	104.11	181
2022	81.92	125.49	112	72.50	126.37	201
2023	83.87	137.38	113	68.13	127.81	155
Total	79.16	128.08	345	65.77	124.04	537

Appendix seven – NSW Ambulance governance bodies

NSW Ambulance Advisory Board

The NSW Ambulance Advisory Board is made up of ten members appointed by the Secretary of Health, which advises the Secretary in relation to the provision of ambulance services in New South Wales and meets monthly, excluding January and July. Among the functions of the Advisory Board included in its establishing legislation is performance and financial oversight. This function empowers the Board to:

- ensure systems are in place to support the efficient and economic operation of the ambulance service against the financial, operational, and strategic targets included in the NSW Ambulance Service Agreement
- monitor NSW Ambulance performance against targets included in the NSW Ambulance Service Agreement.

The Advisory Board receives operational activity and performance reports which include a breakdown of underperforming or not performing Key Performance Indicators (including information around possible contributors to under performance or actions being taken to improve performance) from NSW Ambulance at each meeting.

Generally, NSW Ambulance reports its key performance indicators to the Advisory Board at a statewide level, with regional performance reported for the following:

- Priority 1 and Priority 2 emergency demand performance by metropolitan and regional levels
- Priority 1 and Priority 2 emergency incident activity and response performance data by sector level
- Priority 1, Priority 2, and Priority 3 make ready time performance data by division level (state, metro, and regional).

NSW Ambulance Clinical Governance Committee

The NSW Ambulance Clinical Governance Committee is chaired by an independent chair, attended by the Chief Executive and reports to the NSW Ambulance Advisory Board. NSW Ambulance staff report that the Clinical Governance Committee is primarily an oversight committee which considers trends and themes related to incident management and provides assurance over incident management activities.

The Committee meets quarterly, and receives reports outlining NSW Ambulance performance against clinical Key Performance Indicators at each meeting, including a monthly clinical Key Performance Indicator and financial year to date report, a monthly underperforming Key Performance Indicator report (which includes a breakdown of underperformance against Clinical Key Performance Indicators), a financial year clinical Key Performance Indicator performance report, and a quarterly clinical risk register brief.

NSW Ambulance Patient Safety Clinical Quality Committee

The NSW Ambulance Patient Safety Clinical Quality Committee reports to the Clinical Governance Committee and monitors, identifies, and escalates emerging patient safety risks. NSW Ambulance staff report that when a trend in adverse patient outcomes is identified, the Committee will request to see more detailed analysis on the topic. The Committee meets monthly and operates with a standing agenda, which includes:

- key performance indicators
- measures for improvement
- clinical performance reporting
- patient safety reports
- consumer feedback reports
- clinical programs.

As part of its Key Performance Indicators standing agenda item, the terms of reference for the Patient Safety Clinical Quality Committee states the Committee is to receive monthly clinical Key Performance Indicator reports.

Appendix eight – About the audit

Audit objective

This audit assessed the efficiency and effectiveness of ambulance services in regional New South Wales.

Audit criteria

We addressed the audit objective through the following lines of inquiry:

1. Does NSW Health work effectively and efficiently to deliver ambulance services in regional and rural New South Wales?
2. Is NSW Health effectively and efficiently resourcing ambulance services in regional New South Wales?
3. Is the effectiveness of ambulance services in regional and rural New South Wales increasing over time?

Audit scope and focus

To assess the lines of inquiry, the audit considered the following:

1. Does NSW Health work effectively and efficiently to deliver ambulance services in regional and rural New South Wales?
 - a) NSW Health entities have clearly defined roles for the provision of ambulance services in regional and rural areas.
 - b) As part of delivering ambulance services, NSW Health entities use service models which consider the context of patient needs in rural and regional New South Wales.
 - c) NSW Ambulance develops and uses alternate referral pathways to effectively manage demand for ambulance services in rural and regional areas.
 - d) NSW Health entities manage the use of patient transport services as part of a coordinated effort to reduce impact on high priority ambulance services.
2. Is NSW Health effectively and efficiently resourcing ambulance services in regional New South Wales?
 - a) NSW Health undertakes whole-of-system planning, which informs NSW Ambulance's planning activities.
 - b) NSW Ambulance undertakes holistic service planning, which sits within NSW Health's framework of integrated planning for health services in New South Wales.
 - c) NSW Ambulance's workforce planning adequately considers demand, workload, coverage, and capability requirements.
 - d) NSW Ambulance uses an evidence-based approach to allocate personnel and other resources (i.e., ambulances and ambulance stations).
3. Is the effectiveness of ambulance services in regional and rural New South Wales increasing over time?
 - a) NSW Health entities have effective measures to understand performance.
 - b) NSW Health entities can demonstrate improvement activities which directly relate to ambulance service performance in regional and rural areas.
 - c) NSW Health entities share information to identify opportunities for improvement and mitigate risks to ambulance service delivery in regional areas.

Audit exclusions

The audit did not seek to:

- specifically assess the efficiency and/or effectiveness of services defined in Sections 3.1.2 (trauma services, specifically aeromedical and retrieval services) and 3.1.4 (emergency management services and multi-agency operations) of the Service Agreement between the Secretary of NSW Health and NSW Ambulance (though the audit may consider how these services are planned for at a whole-of-system level, or comment on how those services relate to other services provided by NSW Ambulance).
- examine “effectiveness” as it relates to an assessment of the effectiveness of clinical activities or scopes of clinical practice.
- question the merits of government policy objectives.

Audit approach

Our procedures included:

1. Interviewing staff at the audited agencies (NSW Ministry of Health, NSW Ambulance, Murrumbidgee Local Health District, Southern NSW Local Health District, eHealth NSW and HealthShare NSW) with key roles and responsibilities for the provision and oversight of ambulance services in New South Wales.
2. Reviewing documents including:
 - a) NSW Health entity service agreements, service models and service plans
 - b) documentation related to workforce planning
 - c) documentation related to alternate referral pathways
 - d) documentation related to patient transport services
 - e) documentation related to risk management
 - f) resource allocation models and underlying data, analysis, and rationale
 - g) documentation related to ambulance service provision performance management, monitoring and reporting
 - h) documentation related to collaborative work across NSW Health entities to facilitate delivery of ambulance services
 - i) collaborative working models for integrated service delivery of ambulance services in New South Wales.
3. Examining and analysing data relating to the provision of ambulance services, including:
 - a) relevant Bureau of Health Information ambulance performance data
 - b) relevant NSW Health ambulance performance data
 - c) relevant NSW Ambulance performance data
 - d) relevant Local Health District ambulance performance data
 - e) patient experience data
 - f) workforce planning data
 - g) service planning data.

The audit approach was complemented by quality assurance processes within the Audit Office to ensure compliance with professional standards.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Auditing Standard ASAE 3500 Performance Engagements and other professional standards. The standards require the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with requirements specified in the *Government Sector Audit Act 1983* and the *Local Government Act 1993*.

Acknowledgements

We gratefully acknowledge the cooperation and assistance provided by the NSW Ministry of Health, NSW Ambulance, Murrumbidgee Local Health District, Southern NSW Local Health District, HealthShare NSW, and eHealth NSW.

Audit cost

The estimated cost of the audit, including staff costs and overheads is approximately \$640,000.

Appendix nine – Performance auditing

What are performance audits?

Performance audits assess whether the activities of State or local government entities are being carried out effectively, economically, efficiently and in compliance with relevant laws.

The activities examined by a performance audit may include a government program, all or part of an audited entity, or more than one entity. They can also consider particular issues which affect the whole public sector and/or the whole local government sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake audits is set out in the *Government Sector Audit Act 1983* for state government entities, and in the *Local Government Act 1993* for local government entities. This mandate includes audit of non-government sector entities where these entities have received money or other resources, (whether directly or indirectly) from or on behalf of a government entity for a particular purpose (follow-the-dollar).

Why do we conduct performance audits?

Performance audits provide independent assurance to the NSW Parliament and the public.

Through their recommendations, performance audits seek to improve the value for money the community receives from government services.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, State and local government entities, other interested stakeholders and Audit Office research.

How are performance audits selected?

When selecting and scoping topics, we aim to choose topics that reflect the interests of parliament in holding the government to account. Performance audits are selected at the discretion of the Auditor-General based on our own research, suggestions from the public, and consultation with parliamentarians, agency heads and key government stakeholders. Our three-year performance audit program is published on the website and is reviewed annually to ensure it continues to address significant issues of interest to parliament, aligns with government priorities, and reflects contemporary thinking on public sector management. Our program is sufficiently flexible to allow us to respond readily to any emerging issues.

What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team develops an understanding of the audit topic and responsible entities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the audited entity, program or activities are assessed. Criteria may be based on relevant legislation, internal policies and procedures, industry standards, best practice, government targets, benchmarks or published guidelines.

During the fieldwork phase, audit teams will require access to books, records, or any documentation that are deemed necessary in the conduct of the audit, including confidential information which is either Cabinet information within the meaning of the *Government Information (Public Access) Act 2009*, or information that could be subject to a claim of privilege by the State or a public official in a court of law. Confidential information will not be disclosed, unless authorised by the Auditor-General.

At the completion of fieldwork, the audit team meets with management representatives to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with management representatives to check that facts presented in the draft report are accurate and to seek input in developing practical recommendations on areas of improvement.

A final report is then provided to the accountable authority of the audited entity(ies) who will be invited to formally respond to the report. If the audit includes a follow-the-dollar component, the final report will also be provided to the governing body of the relevant entity. The report presented to the NSW Parliament includes any response from the accountable authority of the audited entity. The relevant Minister and the Treasurer are also provided with a copy of the final report for State Government entities. For local government entities, the Secretary of the Department of Planning and Environment, the Minister for Local Government and other responsible Ministers will also be provided with a copy of the report. In performance audits that involve multiple entities, there may be responses from more than one audited entity or from a nominated coordinating entity.

Who checks to see if recommendations have been implemented?

After the report is presented to the NSW Parliament, it is usual for the entity's Audit and Risk Committee / Audit Risk and Improvement Committee to monitor progress with the implementation of recommendations.

In addition, it is the practice of NSW Parliament's Public Accounts Committee to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report received by the NSW Parliament. These reports are available on the NSW Parliament website.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian standards.

The Public Accounts Committee appoints an independent reviewer to report on compliance with auditing practices and standards every four years. The reviewer's report is presented to the NSW Parliament and available on its website.

Periodic peer reviews by other Audit Offices test our activities against relevant standards and better practice.

Each audit is subject to internal review prior to its release.

Who pays for performance audits?

No fee is charged to entities for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 9275 7100.

OUR VISION

Our insights inform and challenge government to improve outcomes for citizens.

OUR PURPOSE

To help Parliament hold government accountable for its use of public resources.

OUR VALUES

Pride in purpose
Curious and open-minded
Valuing people
Contagious integrity
Courage (even when it's uncomfortable)

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