

Aeromedical Commissioning Programme – outcomes from the collaborative design process

1. Dispatch and coordination

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Establish a new dispatch and coordination function Highest priority. There was significant sector support to establish an integrated dispatch and coordination function that combines rotary wing and fixed wing resources. This was deemed the most transformational aspect of the design. This function will include prehospital responses, interhospital transfers and road to air transfers where required. Feedback highlighted the importance of clinical oversight and decision making, and support for easy access for clinicians.	High	1
2	Road interhospital transfers with clinical supervision There was support for the function to coordinate all road interhospital transfers that require clinical supervision using hospital staff however more work is required.	Medium	2
3	Delivery models for the dispatch and coordination function There was no clear preference regarding operating model options and this was deferred to detailed design.	High	1

2. Assets and Infrastructure

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Long-term asset and infrastructure planning for rotary-wing and fixed-wing air ambulance There was support for this activity from the sector, which will inform standardisation and modernisation of assets.	Medium	1
2	Standardisation and modernisation of assets For rotary-wing, this includes completing the current asset replacement plan. For longer term fleet management, feedback supported standardising rotary wing assets. When asked about single or multiple manufacturers, there was support for standardising to the extent possible, while maintaining more than one aircraft type for redundancy.	High (rotary-wing) Medium (fixed-wing)	1
3	Base location review and implementation Feedback highlighted that work is required to confirm base locations, that is evidence and data informed, modelled on population growth. The review should include the national capability for search and rescue, ECMO, PICU and NICU Distribution of larger rotary-wing aircraft Feedback reflected that larger rotary-wing aircraft should be in areas of	Medium	1-2

	concentrated clinical demand, particularly for complex missions like NICU, PICU, ECMO, prioritising proximity to major tertiary hospitals.		
4	Rotary-wing heliports There was significant support to improve high-traffic and potential high-risk heliports (including bases) and to develop and implement a heliport design standard.	High	1
5	Rotary-wing infrastructure Participants support improving rotary-wing infrastructure including addressing weather station risks and developing and implementing a national fuel infrastructure plan.	Medium	1
6	IFR routes There was significant support to establish priority new IFR routes and provide funding for maintenance of existing routes.	High	1
7	Fixed-wing infrastructure There was significant support to assess and improve fixed-wing infrastructure deficits. This includes fuel provision, runway maintenance and aerodrome infrastructure.	Medium	2
8	Investment in training simulators There was significant support for increased investment in simulators to improve aviation safety. Feedback included shared simulator access across providers to improve training consistency, reduce costs, and enhance operational safety. This would need to build from existing simulator infrastructure across the country and consider the needs of both rotary-wing and fixed-wing services. Decision: Whilst the priority is high, tranche 3 delivery timeframe was deemed acceptable as operationally, rotary-wing providers have brought simulators into service during this process and the fixed-wing solution will be incorporated into a future procurement process.	High	3
9	Improve air to road transfer services There was support for dedicated air to road transfer services in high volume areas, and feedback highlighted the impact this has made where it is already in place. Feedback also highlighted the need to improve the reliability of non-dedicated air to road transfers. Decision: Deferred to years 2 and 3 of tranche 1.	High	1
10	Standardisation of equipment and coordinated procurement approach There was support for standardising equipment (hospital and provider), to improve safety, efficiency, and interoperability across the system. The majority supported a national procurement approach where the sector develops a nationally mandated list of minimum equipment that is then procured collectively. This would be supported by an equipment register, and improve interoperability, reduce costs, and streamline operations. Decision: Confirmed tranche 2 delivery timeframe.	Medium	2

3. Workforce

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Experience and qualification Feedback supported to define minimum experience and qualification requirements for the air ambulance workforce, noting the specialist nature of air ambulance and the aviation environment. Decision: Year 1 tranche 1 delivery	High	1
2	Standardised training There was support to develop and implement standardised multidisciplinary training across the sector, and participants highlighted specific skills required for both clinical and aviation professions involved. Prehospital and retrieval medicine training It was widely supported that if doctors were dedicated¹ clinical crew, they should have PHRM training. For doctors who are ad hoc clinical crew, the majority of respondents did not see comprehensive PHRM training as a requirement. Instead, base aviation medicine specific training was recommended. Centres of excellence Most of the feedback advocated for a combined model, establishing centres of excellence and a standardised curriculum in addition to providing local training opportunities at bases. Decision: Development of standardised training in year 1 tranche 1. Work in tranche 1 will further define training requirements for all clinical crew (dedicated and ad hoc) for prehospital events and interhospital transfers.	High	1
3	Rotary-wing air ambulance crewing model Number of dedicated rotary-wing crew There was majority support for a four-crew model (with two aviation crew and two clinical crew) due to increased aviation and clinical safety, however some stakeholders identified that this could impact the ability to be flexible with occupancy of a fourth seat and also have budget implications. Feedback included potential limitations of the three-crew model around safety, flexibility, and limited support for workforce training, though there is an absence of evidence supporting these being contemporary issues in the New Zealand context. The current model in many places of three person crews where the second clinical crew also acts as the ACO was deemed acceptable as a minimum as there was no evidence that this model was resulting in poorer patient outcomes. This is open to review should new evidence indicate otherwise.	Medium	2

¹ In this context, 'dedicated' refers to those who are part of the air ambulance provider clinical crew

Decision: As a minimum, a dedicated three-person crewing model will be accepted until further evidence evolves to support change.

The dedicated rotary wing crewing model will continue to be reviewed alongside the rollout of tranche 1 initiatives.

Crewing model for rotary-wing air ambulance

There was significant interest in the rotary-wing crewing model.

Several crewing options were presented.

- 57% supported either two critical care paramedics (CCPs), or one CCP and one paramedic.
- 37% supported a pre-hospital and retrieval medicine doctor and a paramedic or flight nurse (note that at the time of consultation 1 of 21 primary helicopters utilise a doctor / paramedic crewing model).
- There was limited support for flight nurses working as dedicated rotary-wing air ambulance crew.

Decision: The CCP/Paramedic dedicated clinical crewing model was preferred, as there was no evidence that this model was delivering poorer patient outcomes in the New Zealand context.

It was universally recognised that doctors play a critical role in the quality and safety of the air ambulance service, including clinical leadership, governance, education and training, audit, and quality improvement. Therefore, an increase in Medical Director capacity from 0.5 FTE to 1 FTE per provider has been approved from Year 1 of tranche 1.

It was also recognised that doctors will continue to be involved as clinical crew where clinically indicated, for example high-acuity, complex pre-hospital and interhospital transfers (including mass casualty incidents).

Air Crew Officer Role

The majority of the sector supported a paramedic qualification as the minimum clinical qualifications for air crew officers in a three-crew rotary-wing model.

However, feedback from Air Crew Officers highlighted concerns about dilution of the role from an aviation focus, and advocated for a dedicated, non-clinical ACO within a four-person crew to prioritise aviation safety.

Decision: Given the acceptance of a three-person crewing model above, there was no proposed change to the current dual role expectation of the ACO for three-person dedicated crew, as there is no evidence this model has impacted aviation safety. The modernisation of the entire fleet to SPIFR capability will further improve aviation safety margins.

It was recognised that currently some ACOs either have no clinical qualification or an EMT qualification. The expectation is that all ACO role holders in a three-person crew will have at least a paramedic qualification.

Employment for rotary-wing air ambulance crew

The majority of feedback supports clinical crew being employed directly by air ambulance providers. This approach aligns with AOC requirements, fosters

	specialist skill development, enhances provider control over staffing and training, and mitigates the risk of Health NZ recalling staff to cover shortages in other parts of the health system. Consistent or variable crewing across bases Participant feedback on rotary-wing crewing models was evenly split, with support for both standardised crewing and variable approaches. While some advocated for national consistency to ensure interoperability and safety, others preferred a model allowing Tier 1 or Tier 2 bases with regional flexibility based on workload and capability. The concept supports different crewing at different bases. Decision: The minimum crewing model is a consistent Pilot / CCP / ACO however providers can increase the crewing level at their cost (creating variability). A Tier 1 / 2 model may be looked at in the future when the National Fleet Plan is reviewed.		
4	Fixed-wing air ambulance crewing model Crewing model for fixed-wing air ambulance There was equal sector feedback between the minimum dedicated clinical crewing model being a flight nurse, and a flight nurse and Paramedic or CCP. Supporters for a minimum crewing of flight nurse and Paramedic or CCP cite the flexibility to respond to a greater number of jobs. Employment for fixed-wing air ambulance crew The slight majority of participants supported Health NZ employing clinical crew for fixed-wing air ambulance, due to maintenance of skills, and connection to hospital work. This question related to nurse and doctor crewing and did not ask the question in relation to paramedics on fixed wing air ambulances. These resources when rostered must be dedicated to the air ambulance service and protected from competing Health NZ duties.	Medium	2
5	ICU clinicians join or replacing crew There was interprofessional tension in response to this question. This was a greater issue for rotary-wing clinical crewing, where there is existing clinical capability in the dedicated crew. Approximately 70% of rotary wing IHTs are currently managed solely by the rotary-wing clinical crew. Some respondents agreed that ICU clinicians should only supplement rather than replace air ambulance crews when the patient's clinical needs exceed the scope of the existing team; whereas other ICU clinicians supported replacing dedicated air ambulance crew for all ICU jobs to ensure the same level of care regardless of patient's clinical needs. There is an important distinction between trainee clinicians and additional senior specialist capacity (for example, a Paediatric or ICU consultant supporting a high-acuity transfer), with the latter providing additive expertise for complex cases. PHRM-led model advocates suggested narrowing the scope for the involvement of ICU clinicians to highly specialised transfers like ECMO, NICU, or PICU. This view was disputed by ICU clinicians.	Medium	2

	Decision: It is proposed that the future dispatch and coordination function will determine clinical crewing requirements based on patient clinical need, once fully operational.		
6	Standardise practice and protocols There was wide support to develop and implement standardised air ambulance practice and protocols across the sector.	Medium	1
7	Enable a diverse and representative workforce Feedback highlighted the need to increase the diversity and representation of the workforce. There was support to implement initiatives to support a diverse and representative workforce including recruitment pathways and to ensure this was a focus of Governance activities.	Medium	1
8	Platform mobility Feedback highlighted how mobility across platforms and practice contexts so that clinicians could maintain clinical currency, including clinical resources within the dispatch and coordination function.	Medium	1

4. Funding and investment

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Long term contracts Strong sector support for long-term contracts for both rotary-wing and fixed-wing air ambulance. Long term contracts enable sustainable service planning with lower financing costs through alternate financing.	High	1
2	Improved commissioning, contract and performance management for fixed-wing air ambulance Strong sector support for standardised fixed-wing commissioning, strengthened reporting, performance and contract management and risk management. This will include establishing consistent pricing models.	High	1
3	Increased oversight and visibility of hospital spend There was strong support over increased visibility and monitoring of hospital spend on air ambulance services, as air transport should “ <i>only be used when absolutely necessary.</i> ”	High	1
4	Proportion of Government funding of air ambulance services Currently air ambulance community trusts financially contribute to the rotary-wing and fixed-wing air ambulance services via fundraising activity and sponsorship. Total contributions are unknown by Joint Purchasers. Multiple submissions asked the question about why ACC and Health NZ do not fully fund air ambulance services. Decision: There is no proposed change to the use of air ambulance community trust contributions to offset service costs at this stage, regardless of funding source (Health NZ or ACC).	Medium	2
5	Role of Community Trusts There were mixed perspectives in the feedback on the role of air ambulance community trusts in the sector. Some were critical of their role, some identified strengths and weaknesses, while others put forward a positive view of their role in supporting air ambulance services. The submissions from the air ambulance community trusts themselves were unanimously supportive of	Medium	2

	their continued role in financially supporting air ambulance services. Further work in this area is planned for tranche 2.		
6	Search and Rescue funding Review and implement funding arrangement for search and rescue taskings for rotary-wing air ambulance.	Medium	2

5. Service Model

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Patient engagement and feedback There was strong support from the sector to improve patient engagement and feedback with the service. This initiative involves implementing increased patient feedback into the air ambulance service.	Medium	1
2	Improve patient experience There was strong support to improve policy, process and training to better support patient experience, and experience of family, whānau and support people.	Medium	1
3	Review and update KPIs Review and update KPIs for rotary-wing and fixed-wing air ambulance to improve patient outcomes.	Medium	1

6. Data and digital

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Implement Electronic Patient Clinical Record (e-PCR) There was support to establish an electronic Patient Clinical Record for all ambulance services that integrates with hospital patient information systems. There is a planned project for the Ambulance Team to progress this work and funding from Budget 26 and ACC Board.	High	1
2	Technology to enable dispatch and coordination Feedback highlighted the importance of establishing technology to support the dispatch and coordination function.	High	1
3	National systems There was strong support to establish shared national systems for each key function supporting the air ambulance service. This includes consolidating data and standardising digital platforms. Feedback highlighted the need for enhanced visibility of the air ambulance system, flight tracking, and comprehensive telehealth support for IHT-referring clinicians.	High	2
4	Connect all systems to a single data repository Establish a data repository to measure performance and analyse the impacts of change.	High	2

7. System Governance

#	Key feedback from the sector-led design process	Priority, as determined through the DBC	Tranche, as reflected in the DBC
1	Establish system oversight There was majority sector support to establish sector oversight for the air ambulance system (78%). Feedback highlights that oversight must be transparent, independent, data-driven, have appropriate representation from the air ambulance ecosystem (providers, clinicians, referrers, receiving services, patients and whanau), and learn from overseas jurisdictions.	High	1
2	Shared learning Feedback emphasised that enabling shared learning and information across the air ambulance ecosystem and between road and air ambulance services was key to support continuous improvement.	Medium	2
3	Data and technology to support system governance Feedback highlighted the importance of data use, KPIs, and continuous quality improvement to inform system oversight. There was sector support to develop and embed a data framework across the system to inform insights.	Medium	2