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Air Ambulance Quality and Patient Safety (AAQPS) Advisory Committee Public Meeting #2 – Meeting Summary May 8, 2025

The Air Ambulance Quality and Patient Safety (AAQPS) Advisory Committee met virtually via Zoom.gov on May 8, 2025. The attached appendix identifies the AAQPS Advisory Committee members, agency employees, and others who attended the meeting. In accordance with the Federal Advisory Committee Act (FACA), 5 U.S.C. App. 2, the meeting was open to the public and meeting information was made available on the Federal Register here: <https://www.federalregister.gov/d/2024-27740>. The transcript and slides of the meeting are available at: [AAQPS Advisory Committee](#).

The meeting covered several topics: (1) an overview of the Committee and its Report to Congress; (2) recommendations from the Clinical Standards Subcommittee; and (3) recommendations from the Flight Safety Subcommittee. Meeting sessions included presentations and opportunities for discussion. The presentation materials are available for public review and comment at [AAQPS Advisory Committee](#). The agenda for the meeting and a list of the AAQPS Advisory Committee members are attached to this summary as an appendix.

Introduction and Background

Welcome

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

David Wright, Center for Clinical Standards and Quality (CCSQ), Designated Federal Officer

The AAQPS Advisory Committee (Committee) meeting began at 10:00 AM EST on May 8, 2025. Mr. Jeff Richey, serving as the Chair of the Committee, conducted a roll call of the Committee members, and outlined the meeting objectives and the agenda. Following this, Mr. David Wright, the Designated Federal Officer (DFO), delivered welcoming remarks, and provided an overview of logistical arrangements for the meeting. Mr. Wright thanked Committee members for their ongoing commitment to patient safety.

Patient Experience

Colonel Steven Coffee, MA, EMCQSL, Founding Member, Patients for Patient Safety US

Col. Coffee delivered an address that underscored the importance of improving the patient experience in healthcare systems. He began by sharing a video about his son's journey as a baby through the healthcare system, which ultimately led to a diagnosis of a metabolic condition called galactosemia, an air ambulance transfer between two hospitals, and a life-



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saving liver transplant. Drawing from his personal experience, Col. Coffee highlighted significant challenges he encountered during the diagnostic process, including communication barriers between providers and parents. He noted that providers across two hospitals relied heavily on the parents, who used lay terminology rather than clinical language, to convey vital information about their son's symptoms, test results, and care. This reliance on parent descriptions, coupled with the dismissal of parent concerns, created gaps in care coordination and delayed critical interventions. He emphasized that patients and their families are an invaluable resource in the care process, and their insights and experiences should not be overlooked or ignored. To do so, he argued, is to lose a valuable source of information that could enhance care delivery and improve outcomes.

In closing, Col. Coffee encouraged Committee members to ensure that patient-centered care remains at the forefront of their recommendations. He reminded the Committee of the significant role air ambulances play in delivering critical care and urged them to consider this unique aspect of healthcare delivery in their discussions.

Report to Congress Overview

David Wright, Center for Clinical Standards and Quality (CCSQ), Designated Federal Officer

Mr. Wright provided an overview and a detailed explanation of the purpose and significance of a Report to Congress, emphasizing its role as a foundational tool for informing both Congressional and Executive level policymaking. He highlighted that the Committee's report is congressionally mandated under the No Surprises Act (NSA) and will serve as a critical resource for the Centers for Medicare and Medicaid Services (CMS) and the Federal Aviation Administration (FAA) in shaping future policies.

The Committee's report will describe the five statutory areas mandated by the NSA and include an overview of the Committee's composition, its deliberation process, and final recommendations developed through collaborative discussions. He underscored the relevance of the Reports to Congress, reminding Committee members that these documents often influence policy decisions for many years beyond their initial publication. In his final remarks, Mr. Wright urged Committee members to draw on their diverse experiences and perspectives to develop the best recommendations to inform the work of the federal government.

Introduction of AAQPS Subcommittee Members

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey introduced the Co-Chairs of the Clinical Standards Subcommittee, Mr. Kolby Kolbet and Mr. Keith McMinn, who in turn introduced the members of the Clinical Standards



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Subcommittee. Mr. Richey also introduced Mr. Jason Quisling, the Chair of the Flight Safety Subcommittee, who introduced members of the Flight Safety Subcommittee.

Presentation of Subcommittee Recommendations and Voting Process

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey described the structured process for deliberating and voting on each recommendation. He explained that each recommendation presented by the Subcommittee Chairs would be discussed in detail, during which Committee members would be encouraged to ask questions, propose modifications, and work collaboratively to refine the recommendation to reach a final version on which to vote. Mr. Richey discussed how he would move the Committee to a vote once deliberations had reached consensus or near-consensus, and he emphasized the importance of the Committee members voicing any concerns or questions prior to the voting process to ensure all perspectives are considered. He explained that voting would occur following the Committee's deliberations on each Subcommittee recommendation, and in instances where consensus could not be reached, the Committee could defer voting until the next scheduled meeting on July 10, particularly if additional expertise or information was needed to inform the decision-making process.

Clinical Standards Subcommittee: Recommendations

Background

Kolby Kolbet, MSN, RN, FACHE, CMTE, FAASTN, Chief Innovation Officer, Life Link III, Clinical Standards Subcommittee Co-chair

Mr. Kolbet began his remarks by reiterating the statutory mandate for the AAQPS Advisory Committee and highlighting the Clinical Standards Subcommittee's three primary focus areas for recommendations: (1) qualifications of different clinical capability levels and tiering of such levels; (2) patient and quality standards; and (3) clinical triage criteria for air ambulances.

Mr. Kolbet provided an overview of the Subcommittee's deliberative process, noting that the Subcommittee convened four times between January and April 2025 to develop its recommendations. He emphasized the valuable contributions of the CMS Center for Clinical Standards and Quality Internal Advisory Council, which served as a resource by providing written analysis and oral presentations to inform the Subcommittee's recommendations. This collaborative approach ensured that the recommendations were grounded in an understanding of CMS policy and aligned with broader federal healthcare standards.

Mr. Kolbet shared the five key problem areas identified by the Clinical Standards Subcommittee during its deliberations. These problem areas include: (1) claims denials related to medical



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necessity; (2) market availability of the appropriate clinical capabilities; (3) the lack of minimum national standards for air ambulance clinical quality; (4) promoting a Just Culture¹ framework for patient safety; and (5) availability of patient clinical information following transfer of care to inform quality improvement initiatives.

In response to the first two problem areas, the Clinical Standards Subcommittee proposed endorsing four existing recommendations from the Air Ambulance and Patient Billing (AAPB) Advisory Committee, a federal advisory committee established under the [FAA Reauthorization Act of 2018](#), that met between January 2020 to August 2021 and developed a Report to Congress in March 2022. The AAPB recommendations address problem areas related to medical necessity determinations; adequacy of Medicare reimbursement; the preemption of state authority under the Airline Deregulation Act (ADA) and the resulting ambiguity in regulating clinical aspects of care; and collecting and analyzing data on the air ambulance industry to inform future policy and reimbursement conversations. For the remaining three problem areas, the Subcommittee developed five new recommendations tailored to address the identified gaps.

Overview of Recommendations CS-1a and 1b

Keith A. McMinn, Director, Life Lion, Penn State Health Milton S. Hershey Medical Center, Clinical Standards Subcommittee Co-chair

Mr. McMinn explained that the Clinical Standards Subcommittee engaged in a collaborative brainstorming process to identify potential solutions for addressing the three problem statements identified as gap areas. Through this approach, the Subcommittee established the following goals for each recommendation: (1) establish minimum national clinical standards, (2) promote a Just Culture framework for patient safety, (3) and improve access to patient clinical data.

Mr. McMinn introduced the first problem statement developed by the Clinical Standards Subcommittee, which focused on the variability in clinical capability levels across air ambulance

¹ The Clinical Standards Subcommittee developed the following definition for a “Just Culture”: Just Culture in healthcare is an approach to accountability and organizational learning that supports a collaborative culture of reliability, where healthcare professionals, teams, and systems work together to ensure high-quality, safe patient care, while minimizing harm and improving outcomes. It recognizes that while human errors are inevitable in complex care environments, most adverse events result from system vulnerabilities rather than individual negligence.

A Just Culture fosters a culture of psychological safety in which staff are empowered and expected to report errors (regardless of outcome), near misses, and unsafe conditions without fear of retribution—fostering transparency, trust, and continuous improvement. It promotes shared accountability: organizations are responsible for designing systems to mitigate risk to the highest degree possible, and individuals are responsible for reporting system vulnerabilities and for the quality of their choices within those systems.



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providers. To address this, the Subcommittee proposed recommendations CS-1a and 1b as initial steps toward establishing minimum national clinical standards. Recommendation CS-1a specifically proposed establishing air ambulance as a provider type regulated by Medicare, ensuring consistent minimum standards and oversight nationwide and providing a foundation for other recommendations put forth by the Subcommittee. Recommendation CS-1b proposed establishing compulsory accreditation for Medicare air ambulance providers, further standardizing clinical capabilities and promoting safe, high-quality care. The problem statement and recommendations are as follows:

Problem statement: Variability in the equipment and clinical capabilities available on air ambulances can present a clinical risk to patient safety when the available equipment, personnel, and training are not adequately matched to the needs of the patient; this presents particular risks for specialty populations and low frequency/high risk patients (e.g., neonatal/pediatric, high-risk obstetrics, patients in rural areas).

- ✓ **Recommendation CS-1a:** Congress should pass legislation to establish air ambulance as a provider type regulated by Medicare so that CMS may establish Conditions of Participation and enforce basic clinical safety standards.
- ✓ **Recommendation CS-1b:** Congress should pass legislation to require compulsory accreditation for Medicare air ambulance providers. The minimum standards assessed by the accrediting organization(s) should include specific standards for safe transport of specialty populations. The process must include periodic reassessment of compliance and must include exceptions or waivers for operators in rural/frontier areas where certain standards may not be feasible to implement without creating barriers to access (e.g., due to shortage of specialists). Accreditation standards should be reassessed on a periodic basis, soliciting industry input on proposed changes.

Mr. McMinn then reviewed background and current state information related to establishing minimum national clinical standards. Specifically, he noted that under the Medicare program, air ambulance organizations are currently considered suppliers of a transportation benefit rather than recognized as a Medicare provider type. As a result, Medicare reimbursement for air ambulance services is limited to transportation costs only, with no differentiation for healthcare services requiring specialized personnel or equipment.

To qualify for Medicare supplier claims reimbursement, ambulance providers must demonstrate basic requirements, such as being equipped with a stretcher and emergency medical supplies, but do not undergo periodic certification to maintain their participation in the Medicare program. In contrast, Medicare providers are subject to certification requirements, known as Conditions of Participation (CoPs), which include minimum health and safety standards. These providers must undergo periodic certification by CMS, conducted by state



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survey agencies or CMS- approved accreditation organizations. If a provider cannot meet those standards, and cannot come into compliance through the remediation process, they can no longer participate in the Medicare program. While these requirements are more specific than the supplier requirements, they are still very high level.

Mr. McMinn further clarified that clinical aspects of air ambulance services are regulated at the state level, similar to other healthcare providers. However, this causes complications for the air ambulance setting, as most air ambulances operate across state lines. This is further complicated by the ADA, which, as Subcommittee members discussed, has in some cases,² caused ambiguity regarding the extent to which states can and cannot regulate clinical services in the air ambulance setting. This lack of clarity, along with geographic and population variability, has resulted in inconsistent requirements across state lines, creating challenges for providers and patients alike. For this reason, the Clinical Standards Subcommittee determined that establishing national minimum clinical standards is essential to reduce the inconsistency of requirements across state lines, foster a shared vision for safety across the industry, and ensure that patients requiring air ambulance services can be assured that these meet a minimum safety standard.

Mr. McMinn then outlined the four options considered by the Subcommittee to establish minimum national clinical standards, including two options the Subcommittee ultimately decided not to propose in their recommendations. These included: (1) updating existing Medicare supplier requirements for ambulance services, (2) establishing air ambulance as a new Medicare provider type (CS-1a), (3) requiring compulsory accreditation for air ambulances seeking reimbursement as Medicare suppliers of ambulance services (CS-1b), and (4) requiring compulsory national accreditation for all air ambulance providers regardless of Medicare participation. Mr. Wright then noted the distinctions between the four options to help inform the Committee's deliberations and vote.

Committee Discussion CS-1a and 1b

Clinical Standards Subcommittee Co-Chairs

AAQPS Committee Members

Mr. McMinn proposed recommendations CS-1a and CS-1b for Committee consideration and opened the floor for discussion.

The discussion first focused on the accreditation process, with Ms. Eileen Frazer inquiring about how CMS would evaluate an accreditation agency and the specific criteria that would be utilized to do so. Further, Ms. Frazer requested clarity on whether CMS would review the accrediting organizations to ensure they follow good processes to set their individual standards. Mr.

² [Federal Preemption of State Regulation Over Air Ambulances.](#)



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Wright, the CMS DFO, responded that the standards for accreditation would be established through rulemaking and public comment and shared that CMS does review the accrediting organizations, including financial solvency and other important attributes.

Committee members noted that recommendation CS-1b, focused on requiring compulsory accreditation for air ambulance providers seeking Medicare reimbursement, positions CMS to become another safety regulation body in addition to the FAA, potentially creating overlapping regulatory roles. Committee members went on to share their concerns that this might result in conflicting requirements, unintended impacts of healthcare requirements on aviation, or confusion about respective roles and responsibilities. Mr. Wright responded that the scope of each Agency's authority would be defined clearly, and that adding clinical standards requirements overseen by CMS would not preclude FAA from continuing to oversee flight safety.

Mr. Jason Quisling asked if there was current research or data that could provide insight into the current state of clinical quality and patient safety in air ambulances. Mr. Kolbet discussed that current standards vary across states and that it was very important for the Clinical Standards Subcommittee to have the same standards and quality of care regardless of what state a patient was transported in.

Mr. Kolbet further clarified that the Subcommittee focused on the care delivered in the back of the aircraft rather than operations in the cockpit and that both recommendations were intended to reflect that clinical care. Mr. Kolbet reminded Committee members that the levels of care would be discussed in later recommendations, but recommendations CS-1a and CS-1b were focused on defining the base level of care (the "floor") before defining higher levels of care.

Committee members also discussed potential unintended consequences of CMS regulations impacting aviation operations. In response, Mr. Tom Judge stated his belief that the Clinical Standards Subcommittee recommendations envisioned a different way of thinking about air ambulance operations, commending the Subcommittee for being forward-thinking about where the industry should strive to go in the future. He stressed the importance of thinking about the patient and making sure the patient receives the best care possible, regardless of the state where they receive that care, and he also mentioned concerns about rural and frontier locations adhering to a lower level of care. He emphasized that clinical standards should be similar across the country, and any waivers or exemptions should be used sparingly, and only when strictly necessary, such as in very remote frontier areas.

Mr. Quisling cautioned against focusing on billing during these safety-focused conversations. He also asked how one would quantify the impact of these proposals on improving patient care. Finally, he shared concerns that imposing a minimum national standard might limit access to



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care, noting that in the United States there are different levels of care provided to ensure there is access to some level of emergency transport even if the highest level of care is not available in each community due to resource constraints.

Col. Coffee shared his support for recommendations CS-1a and CS-1b and how they will improve care from the patient perspective. He underscored the importance of these recommendations, serving as a first step in getting the whole of government to improve the quality of care delivered in air ambulances.

Several Committee members expressed their support for recommendations CS-1a and CS-1b including Dr. Jordan Pritzker, Dr. Mark Gamber, and Dr. William Hinckley. Dr. Pritzker encouraged the Committee to prioritize the quality of patient care, while acknowledging the administrative burden and costs. Dr. Gamber stressed the importance of recognizing the excellent care provided by air ambulance providers, and Dr. Hinckley noted concerns about waivers for rural and frontier areas. He agreed with having some exceptions for frontier areas such as upper Alaska but stated that the vast majority of air ambulance programs in America operate in rural areas, and he felt that those operators should not be exempted from minimum national requirements, such as those proposed in CS-1b.

Mr. Wright acknowledged the tension between accounting for variances in resources and geography, so that operators are still able to serve their communities and avoid a two-tiered system of quality and safety. He outlined solutions CMS has previously considered or implemented, including delayed implementation in which some communities are allowed a longer time frame to come into compliance, individual operator waivers, or categorical exemptions, such as for communities of a certain size.

Mr. Robert Reckert noted how the FAA has leveraged consensus standards to improve the safety levels within aviation; however, he expressed hesitation in the FAA's ability to properly regulate patient care.

Some Committee members, including Mr. Ben Clayton and Mr. Jason Clark, expressed support for moving the vote of these recommendations to the July meeting to enable additional discussion on unintended consequences.

Committee members agreed to vote on recommendation CS-1a and defer the vote for CS-1b until the July AAQPS Committee Meeting.

Voting CS-1a

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair



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Mr. Richey facilitated the voting process. Recommendation CS-1a was adopted by the Committee. Recommendation CS-1b was deferred for further discussion in the July AAQPS meeting.

Voting Member	CS-1a
Com. Arnold	Abstain
Mr. Clark	Yes
Mr. Clayton	Abstain
Col. Coffee	Yes
Ms. Frazer	Yes
Dr. Gamber	Yes
Dr. Hinckley	Yes
Mr. Houser	Yes
Mr. Judge	Yes
Mr. Julander	No
Dr. Pritzker	Yes
Mr. Quisling	No
Mr. Reckert	Abstain
Mr. Richey	Yes
Vote Count	Yes: 9 No: 2 Abstain: 3

Overview of Recommendation CS-2: Promote a Just Culture Framework for Patient Safety

Kolby Kolbet, MSN, RN, FACHE, CMTE, FAASTN, Chief Innovation Officer, Life Link III, Clinical Standards Subcommittee Co-chair

Krista Haugen, Co-founder, Survivors Network for the Air Medical Community, Clinical Standards Subcommittee member

Emily Colyer, Director of Patient Safety, Air Methods, Clinical Standards Subcommittee member

Mr. Kolbet presented the next problem statement, the goal for addressing the problem statement, and proposed recommendation developed by the Clinical Standards Subcommittee:

Problem statement: There is no consistently used, non-retaliatory framework for advancing patient safety in the air ambulance setting (analogous to the Aviation Safety Action Program, Maintenance Safety Action Program, or Safety Management System for aviation safety) which follows the principles of a Just Culture based on trust, fairness, and learning.

Goal: Promote a Just Culture framework for patient safety

- ✓ **Recommendation CS-2:** Congress should direct the Department of Health and Human Services (HHS) to develop a Patient Safety Structural Measure (PSSM) adapted for the



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air ambulance setting, and to establish a new quality reporting program for air ambulance which includes reporting on the PSSM.

Mr. Kolbet discussed that there is no widely adopted non-retaliatory framework in the air ambulance setting that supports patient safety, despite having such frameworks and programs for aviation safety including the Aviation Safety Action Program (ASAP), Maintenance Safety Action Program (MSAP), and Safety Management System (SMS). Creating a culture of safety requires a system-based, non-retaliatory approach to identifying, reporting, and managing risks. This mindset is deeply embedded in aviation and is equally essential in clinical care. To help promote this on the clinical side, Mr. Kolbet explained that the Clinical Standards Subcommittee was recommending developing a Patient Safety Structural Measure (PSSM) that would be tailored for air medical transport and integrated into a new federal quality reporting program specifically designed for air ambulance providers. Mr. Kolbet then invited two members of the Clinical Standards Subcommittee to present additional background and details of this recommendation.

Ms. Krista Haugen shared a personal story related to an air medical transport crash and the importance of applying a systematic approach to managing risk and promoting a Just Culture to prevent such a tragedy from recurring. She noted that the air medical industry operates at the intersection of two highly complex and high-risk industries, healthcare and transportation. The industry needs a systematic approach, resources, and infrastructure to both reactively and predictively manage clinical hazards and risks. She emphasized that aviation has this approach, mandated by the FAA, in the form of SMS, which outlines expectations around safety policy, risk management, safety assurance, and safety promotion that help to organize and standardize safety practices within organizations and industry. She noted that there are no such federal standards for patient safety or risk management in air medical care. However, HHS has recently mandated reporting of a PSSM for the hospital setting, and Ms. Haugen highlighted the parallels of this measure to an aviation SMS, noting a PSSM-style framework could essentially serve as a clinical SMS for air medical transport.

Ms. Haugen further noted that harm from preventable medical errors is a significant national issue, one that was highlighted in a 2023 report from the President's Council of Advisors on Science and Technology (PCAST). She also discussed that the full scope of preventable harm in air ambulance care is unclear due to underreporting and the lack of a framework and consistent processes to manage clinical risks.

Ms. Emily Colyer then provided an overview of the PSSM in the CMS Inpatient Quality Reporting (IQR) Program and described the requirements providers must meet under this framework. She noted that in the Hospital IQR Program, there is no penalty or incentive associated with a provider's score on the measure – they do not need to demonstrate a perfect program, but



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they are required to demonstrate thoughtful review about their organization's progress in each of the five domains.

Ms. Colyer emphasized the conceptual overlap between the PSSM and aviation SMS, and the underlying principle widely accepted in industry that building a process-based structure in more consistent and improved outcomes. She then outlined the five domains of the PSSM, drawing parallels to the conceptual pillars of aviation SMS. She noted that the final pillar aligns directly with Col. Coffee's earlier presentation regarding the importance of patient and family engagement in advancing safety and quality.

Ms. Colyer explained that CoPs for Medicare providers (recommendation CS-1a) offer a very basic standard, and accreditation (recommendation CS-1b) represents a more rigorous clinical standard. The PSSM acts as the next level, a shared framework and vision for advancing patient safety beyond the requirements of CoPs or accreditation.

Mr. Kolbet concluded by noting that the recommendation would complement existing aviation SMS frameworks and create opportunities for integrated management of clinical and aviation safety risks.

Committee Discussion CS-2

CS Subcommittee Co-chairs

AAQPS Committee Members

Many Committee members voiced their support for this recommendation, including Col. Coffee. Mr. Judge commended the Clinical Standards Subcommittee's thoughtful approach to the recommendation. In particular, he appreciated the idea of having a shared vision and framework for the industry, particularly of being able to develop an integrated risk, safety, and quality management system across aviation and clinical operations. Mr. Quisling echoed Mr. Judge's comments and noted the importance of fostering a learning culture to drive meaningful safety results. Mr. Houser voiced his support for the recommendation, citing the success of similar aviation initiatives such as ASAP and SMS. He asked for these current mechanisms to be kept in place as this new mechanism (PSSM) is adopted.

Ms. Frazer also voiced her support, noting that Commission on Accreditation of Medical Transport Systems (CAMTS) has noticed through accreditation that even though they are working from a list of accreditation standards, each program has their own approach to reporting, and felt that a shared framework would be beneficial.

Mr. Reckert reiterated the current frameworks from FAA (i.e., SMS, ASAP) and voiced concern about challenges with the voluntary nature of the reporting, specifically citing that FAA does not have authority to provide protection to a provider who reports a concern related to clinical



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safety. Ms. Colyer addressed his concerns and stated there are policy and statutory protections for providers who report safety events, citing the Patient Safety and Quality Assurance Act of 2005 and protections provided for voluntary reporting to Patient Safety Organizations (PSOs). She noted that these protections would apply to pre-hospital providers as well.

Voting CS-2

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendation CS-2 was adopted by the committee.

Voting Member	CS-2
Com. Arnold	Yes
Mr. Clark	Yes
Mr. Clayton	Yes
Col. Coffee	Yes
Ms. Frazer	Yes
Dr. Gamber	Yes
Dr. Hinckley	Yes
Mr. Houser	Yes
Mr. Judge	Yes
Mr. Julander	Yes
Dr. Pritzker	Yes
Mr. Quisling	Yes
Mr. Reckert	Yes
Mr. Richey	Yes
Vote Count	Yes: 14 No: 0 Abstain: 0

Overview of Recommendations CS-3a and 3b: Improve Access to Patient Clinical Data

Keith A. McMinn, Director, Life Lion, Penn State Health Milton S. Hershey Medical Center, Clinical Standards Subcommittee Co-chair

Emily Colyer, Director of Patient Safety, Air Methods, Clinical Standards Subcommittee member

Mr. McMinn reviewed the problem statement, goal for addressing the problem statement, and two recommendations proposed by the Clinical Standards Subcommittee:



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Problem statement: It is difficult for air ambulance providers to get follow-up information on patient clinical data after transfer of care, limiting quality improvement activities and negatively impacting crew wellbeing.

Goal: Improve access to patient clinical data

- ✓ **Recommendation CS-3a:** HHS should issue guidance to hospitals and air ambulance providers clarifying that HIPAA does not prevent sharing patient clinical data for quality improvement purposes and clarifying the specific limitations and requirements for hospitals to share patient clinical data back to air ambulance providers.
- ✓ **Recommendation CS-3b:** Congress should provide additional funding to bolster existing state and federal efforts to develop and promote health information exchange. This funding should specifically support improving the bidirectional exchange of patient clinical data between air ambulance providers and hospitals.

Ms. Colyer provided an overview of the current state related to the exchange of patient clinical data. Her overview emphasized that patient clinical outcomes data is a cornerstone of patient safety across the country and that providers are interested in understanding the effectiveness of the care they deliver and whether their interventions lead to improved patient outcomes. For most medical systems, there is no bi-directional flow of data from air ambulance transports and healthcare settings (health systems, hospitals, etc.). Ms. Colyer stressed that there is no standard process for sharing patient data, no standard data set, and no industry-wide consensus on the importance of sharing this type of data across providers.

Ms. Colyer stated the importance of air ambulance providers having the same clinical standards and protections that other provider types have when it comes to sharing data with one another. Establishing these standards would enable air ambulance providers to study air medical outcomes and improve patient care.

Committee Discussion CS-3a and 3b

CS Subcommittee Co-chairs

AAQPC Committee Members

Mr. Quisling noted this is not often an area of focus, but it is essential to determine whether providers are delivering the right care to patients and improving the overall quality of care for patients.

Multiple Committee members supported recommendation CS-3a, focused on clarifying Health Insurance Portability and Accountability Act (HIPAA) compliance. Dr. Pritzker asked whether patients would be required to provide consent for their clinical data to be released back to the air ambulance provider after the transfer of care. Mr. Wright noted that oversight of HIPAA compliance falls outside of CMS responsibility, and that any such guidance would likely come



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from the HHS component responsible for HIPAA compliance (currently the HHS Office of Civil Rights), as appropriate.

Col. Coffee inquired about a comment made by Mr. McMinn about the scope and scale of the challenges associated with patient clinical data exchange among providers. Mr. McMinn clarified that there is not enough data to truly understand the magnitude of the issue. He noted that some hospital-based air medical programs are very successful at getting patient clinical data to inform their quality improvement efforts and other programs struggle to receive follow-up patient data. Col. Coffee responded that this lack of transparency in the exchange of patient clinical data supports his earlier argument about patients needing access to this type of data as well to enable them to be the “third set of eyes” in the clinical setting.

Mr. Richey further clarified that the intent of this recommendation, CS-3a, would be to release guidance to hospitals and air ambulance providers on how patient clinical data can be exchanged in accordance with HIPAA regulations, including clarification on release forms and paperwork.

Mr. Judge complimented the intent of this recommendation and that it further supports the PSSM recommendation the Committee approved. He noted that air ambulance patients are a unique set of patients, and the exchange of patient clinical data is essential for continuity of care. Mr. Judge provided an example of how patient information exchange is done in Maine and emphasized that there are ways to do this legally, but it may require some initial investment.

Mr. Reckert encouraged the Committee to think about how this data can be used to study general aviation safety management trends, in addition to clinical trends, at a systemic level. He voiced his support for collecting de-identified data as a way for addressing safety issues, similar to what has been done in aviation.

Voting CS-3a and 3b

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendations CS-3a and CS-3b were adopted by the committee.

Voting Member	CS-3a	CS-3b
Com. Arnold	Abstain	Abstain
Mr. Clark	Yes	Yes
Mr. Clayton	Yes	Yes
Col. Coffee	Yes	Yes



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Voting Member	CS-3a	CS-3b
Ms. Frazer	Yes	Yes
Dr. Gamber	Yes	Yes
Dr. Hinckley	Yes	Yes
Mr. Houser	Yes	Yes
Mr. Judge	Yes	Yes
Mr. Julander	Yes	Yes
Dr. Pritzker	Yes	Yes
Mr. Quisling	Yes	Yes
Mr. Reckert	Yes	Abstain
Mr. Richey	Yes	Yes
Vote Count	Yes: 13 No: 0 Abstain: 1	Yes: 12 No: 0 Abstain: 2

AAPB Recommendations Relevant to AAQPS

Due to time constraints, discussion of AAPB recommendations was deferred to the July meeting. Mr. Judge requested that the original language of the AAPB recommendations be included, as it reflected careful deliberation from that Committee (Mr. Judge was a member of the AAPB Advisory Committee).

Recommendations and Additional Discussion

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey shared a summary of the Clinical Standards Subcommittee recommendations and respective voting results.

Adopted recommendations:

- **Recommendation CS-1a:** Congress should pass legislation to establish air ambulance as a provider type regulated by Medicare so that CMS may establish Conditions of Participation and enforce basic clinical safety standards.
 - Voting Results: 9 Yes; 2 No; 3 Abstain
- **Recommendation CS-2:** Congress should direct HHS to develop a Patient Safety Structural Measure (PSSM) adapted for the air ambulance setting, and to establish a new quality reporting program for air ambulance which includes reporting on the PSSM.
 - Voting Results: 14 Yes; 0 No; 0 Abstain
- **Recommendation CS-3a:** HHS should issue guidance to hospitals and air ambulance providers clarifying that HIPAA does not prevent sharing patient clinical data for quality

improvement purposes and clarifying the specific limitations and requirements for hospitals to share patient clinical data back to air ambulance providers.

- Voting Results: 13 Yes; 0 No; 1 Abstain
- **Recommendation CS-3b:** Congress should provide additional funding to bolster existing state and federal efforts to develop and promote health information exchange. This funding should specifically support improving the bidirectional exchange of patient clinical data between air ambulance providers and hospitals.
 - Voting Results: 12 Yes; 0 No; 2 Abstain

Clinical Standards Subcommittee recommendations: Voting results

Voting Member	CS-1a	CS-2	CS-3a	CS-3b
Com. Arnold	Abstain	Yes	Abstain	Abstain
Mr. Clark	Yes	Yes	Yes	Yes
Mr. Clayton	Abstain	Yes	Yes	Yes
Col. Coffee	Yes	Yes	Yes	Yes
Ms. Frazer	Yes	Yes	Yes	Yes
Dr. Gamber	Yes	Yes	Yes	Yes
Dr. Hinckley	Yes	Yes	Yes	Yes
Mr. Houser	Yes	Yes	Yes	Yes
Mr. Judge	Yes	Yes	Yes	Yes
Mr. Julander	No	Yes	Yes	Yes
Dr. Pritzker	Yes	Yes	Yes	Yes
Mr. Quisling	No	Yes	Yes	Yes
Mr. Reckert	Abstain	Yes	Yes	Abstain
Mr. Richey	Yes	Yes	Yes	Yes
Vote Count	Yes: 9 No: 2 Abstain: 3	Yes: 14 No: 0 Abstain: 0	Yes: 13 No: 0 Abstain: 1	Yes: 12 No: 0 Abstain: 2

Recommendations held for further discussion during the July AAQPS Committee Meeting:

- **Recommendation CS-1b:** Congress should pass legislation to require compulsory accreditation for Medicare air ambulance providers. The minimum standards assessed by the accrediting organization(s) should include specific standards for safe transport of specialty populations. The process must include periodic reassessment of compliance and must include exceptions or waivers for operators in rural/frontier areas where certain standards may not be feasible to implement without creating barriers to access (e.g., due to shortage of specialists). Accreditation standards should be reassessed on a periodic basis, soliciting industry input on proposed changes.
- The four AAPB recommendations relevant to AAQPS will also be discussed in the July AAQPS Committee Meeting. Mr. Judge and Dr. Pritzker recommended incorporating the exact recommendation language from the AAPB Advisory Committee into the



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recommendations for AAQPS Committee vote. Ms. Arnold requested that the discussion incorporate the payor landscape.

Before closing the discussion of recommendations from the Clinical Standards Subcommittee, Dr. Hinckley asked whether the July meeting would include any discussion of a recommendation around tiering of clinical capability levels, citing the statutory language authorizing the AAQPS Advisory Committee. He wanted to ensure the AAQPS Committee would meet its statutory mandate to address the topics. The Clinical Standards Subcommittee members shared that the Subcommittee had discussed tiering and understood and supported the intent behind a tiering approach, but they felt that tiering was fundamentally not the most appropriate way to categorize clinical capabilities for air ambulance. Instead, the Subcommittee recommended prioritizing the establishment of a “floor” or basic set of minimum national standards (recommendations CS-1a and CS-1b) and also establishing air ambulance operators as a provider type (recommendation CS-1a) and then reimbursing according to procedure and modifier codes for specialty services (recommendation CS-B). The latter recommendation will be discussed further during the July meeting. Mr. Wright also noted that the Committee’s responsibility is to explore each topic, and provide recommendations only as appropriate, not necessarily to put forward a recommendation on every topic.

Flight Safety Subcommittee: Recommendations

Background

Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reiterated the statutory mandate guiding the AAQPS Committee and outlined the two key recommendation focus areas for the Flight Safety Subcommittee: (1) options for improving service reliability during poor weather, night conditions, or other adverse conditions; and (2) differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety.

Mr. Quisling presented the six key problem areas identified by the Flight Safety Subcommittee, which included the following topics: (1) increased demand for air ambulance services; (2) safety concerns in adverse weather conditions; (3) focus on crash survivability; (4) focus on technology integration; (5) performance-based standards; and (6) public and legislative attention.

To provide context for the Subcommittee’s recommendations, Mr. Quisling summarized the five Flight Safety Subcommittee meetings and highlighted the contributions of five subject matter experts who presented to the Subcommittee members offering critical insights and expertise to inform its work. These experts included: Mr. Chichoon Shin from the National



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Transportation Safety Board; Mr. Austin Croft from the Aviation Weather Center; Mr. Cliff Johnson from the FAA William J. Hughes Technical Center for Advanced Aerospace; Mr. Rex Alexander from Five-Alpha; and Mr. Cohl Pope from the FAA. Mr. Quisling emphasized the importance of these expert contributions in shaping the Subcommittee's recommendations and ensuring alignment with the broader goals of the AAQPS Advisory Committee. He concluded by noting that the Subcommittee's work reflects a commitment to advancing patient safety and operational reliability in the air ambulance industry and provided an overview of the Subcommittee's recommendations.

Overview of Recommendation FS-1: Enhance Weather Reporting and Infrastructure in Non-Terminal Areas

Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reviewed the problem statement, goal for addressing the problem statement, and recommendation proposed by the Flight Safety Subcommittee:

Problem statement:

Gaps in Weather Reporting in Non-Terminal Areas: Adverse weather creates significant challenges for smaller aircraft, especially helicopters that often take off and land at small, private hospital helipad and scene locations (non-terminal areas) rather than large, well-equipped airports with full weather forecasts. Weather information for flights close to the ground—below 5,000 feet—is often incomplete or unavailable, particularly in non-terminal areas where there are fewer weather stations and limited access to approved weather sources.

Goal: Enhance weather reporting and infrastructure in non-terminal areas

- ✓ **Recommendation FS-1:** Congress should allocate funding to expand weather services in non-terminal areas and invest in the research and development of new and innovative weather reporting and forecasting technologies through targeted grants and initiatives. Congress should direct the FAA to expand access to FAA-approved sources of real-time weather data and advanced predictive capabilities, prioritizing non-terminal areas. This effort should prioritize:
 - Deploying additional new Visual Weather Observation Systems (VWOS).
 - Installing weather cameras to enable real-time monitoring across the United States.
 - Increasing access to Terminal Doppler Weather Radar (TDWR) systems.
 - Enhancing surface detection capabilities, improving forecasting accuracy, and advancing predictive analysis tools.



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- Integrating approved weather sources into the National Airspace Data. Interchange (NADIN) for Graphical Forecasts for Aviation – Low Altitude (GFA-LA).

Mr. Quisling highlighted a number of benefits for consideration including improved safety for air ambulance operations, more reliable emergency response in rural areas, and improved safety for all low-altitude aviation operations. He also discussed challenges including that adequate funding is necessary to assure the benefit for all regions of the country, and that geographic locations are not all conducive to the efforts.

Mr. Quisling concluded by emphasizing the importance of addressing gaps in weather reporting infrastructure to improve safety and reliability for air ambulance operations and other low-altitude aviation activities. He noted that recommendation FS-1 represents a significant opportunity to enhance operational safety, particularly in underserved and rural areas, while fostering innovation in weather reporting technologies.

Committee Discussion FS-1

Flight Safety Subcommittee Chair
AAQPS Committee Members

Mr. Judge suggested revising the language in the last bullet of the recommendation, by replacing “approved weather services” with “approved weather sources.” The Committee agreed with this edit, and the change is reflected in the recommendation above.

Mr. Nolan Crawford, from the FAA, highlighted the high number of air ambulance mission declines due to lack of information about current weather conditions or adverse weather conditions encountered after takeoff, emphasizing the need for improved weather reporting and forecasting capabilities.

Col. Coffee emphasized that weather infrastructure is fundamental to safety and voiced his support for the recommendation.

Voting FS-1

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendation FS-1 was adopted by the Committee.



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Voting Member	FS-1
Com. Arnold	Abstain
Mr. Clark	Yes
Mr. Clayton	Yes
Col. Coffee	Yes
Ms. Frazer	Yes
Dr. Gamber	Yes
Dr. Hinckley	Yes
Mr. Houser	Yes
Mr. Judge	Yes
Mr. Julander	Yes
Dr. Pritzker	Yes
Mr. Quisling	Yes
Mr. Reckert	Abstain
Mr. Richey	Yes
Vote Count	Yes: 12 No: 0 Abstain: 2

Overview of Recommendation FS-2: Modernize Helipad Data, Infrastructure, and Safety Standards

Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reviewed the problem statement, goal for addressing the problem statement, and recommendation proposed by the Flight Safety Subcommittee:

Problem statement:

Hospital Helipad Safety and Data Gaps: Many hospital helipads, critical for air ambulance operations, are not listed in the FAA's Airport Data and Information Portal (ADIP) database, leaving over a third unaccounted for. This lack of comprehensive data, combined with voluntary heliport design standards and inconsistent oversight, results in safety risks such as airspace conflicts, substandard facilities, and inadequate disaster management capabilities. Additionally, the absence of standardized markings and unclear weight and size limitations further complicate safe operations.

Goal: Modernize Helipad Data, Infrastructure, and Safety Standards

- ✓ **Recommendation FS-2:** Congress should authorize funding and establish initiatives to modernize and digitize the Airport Data Information Portal (ADIP) in collaboration with the FAA and industry stakeholders. This effort should ensure accurate and comprehensive data on heliports, helipads, and landing zones, including critical



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information such as weight limits, markings, and Instrument Flight Rules (IFR) compatibility. This effort should prioritize:

- Integrating updated helipad and heliport data into commercially available pilot navigation tools.
- Establishing competitive grants to upgrade substandard helipads and heliports to meet FAA design standards (e.g., Advisory Circular 150/5390-2D).
- Including maintenance of hospital helipad data in the ADIP as a Condition of Participation to be evaluated by hospital accreditation organizations.
- Adding IFR-compatible infrastructure to improve safety and reliability, especially in rural and underserved areas (non-terminal areas).
- Incorporating locations with medical services into the United States Notices to Airmen (NOTAM) system.

Mr. Quisling highlighted many benefits of this recommendation. He discussed that accurate and updated heliport data would improve operational safety and route planning, reduce delays, and support critical medical missions. It would also improve airspace awareness and create streamlined processes. Further, he discussed that improved communication between the FAA, hospitals, and the aviation industry would enhance coordination and problem-solving. Lastly, he noted that mandating updates and raising awareness would ensure facilities maintain accurate and comprehensive information, and that the recommendation could lead to improved safety and efficiency in emergency responses to multi-patient incidents and disaster events at regional or national levels.

Mr. Quisling also highlighted several challenges for consideration including that smaller facilities may struggle to meet new data requirements, voluntary compliance has not always been effective in the past, and that grants could favor larger facilities, leaving smaller facilities and those in rural areas underfunded.

Committee Discussion FS-2

FS Subcommittee Chair

AAQPS Committee Members

Dr. Hinckley asked for clarification on what IFR infrastructure refers to. Mr. Quisling explained that it primarily involves clean data about infrastructure.

Mr. Judge noted the need for investment on both the regulatory and hospital sides, as many heliports lack compliance due to insufficient oversight. In addition, the National Transportation Safety Board (NTSB) often attributes issues to pilots, but improved helipad standards could address systemic safety concerns.

Voting FS-2



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Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendation FS-2 was adopted by the Committee.

Voting Member	FS-2
Com. Arnold	Abstain
Mr. Clark	Yes
Mr. Clayton	Yes
Col. Coffee	Abstain
Ms. Frazer	Yes
Dr. Gamber	Yes
Dr. Hinckley	Yes
Mr. Houser	Yes
Mr. Judge	Yes
Mr. Julander	Yes
Dr. Pritzker	Yes
Mr. Quisling	Yes
Mr. Reckert	Abstain
Mr. Richey	Yes
Vote Count	Yes: 11 No: 0 Abstain: 3

Overview of Recommendation FS-3: Improve Low-Altitude Instrument Flight Rules (IFR) Infrastructure

Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reviewed the problem statement, goal for addressing the problem statement, and recommendation proposed by the Flight Safety Subcommittee:

Problem statement:

Challenges with Low-Altitude Instrument Flight Rules (IFR) Operations: Air ambulance operations face significant limitations due to the lack of low-altitude IFR infrastructure, including IFR approaches to helipads. This restricts operations during poor weather, delays patient transport, and increases safety risks. The complexity of accessing the IFR system and the absence of mandated standards for helipad design exacerbate these challenges, hindering reliable and timely emergency medical services. Additionally, the rapid growth of low-altitude



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aviation, unmanned aircraft system (UAS), including drones and advanced air mobility vehicles, is increasing airspace congestion near hospitals and airports, potentially delaying critical life-saving missions.

Goal: Improve Low-Altitude Instrument Flight Rules (IFR)

- ✓ **Recommendation FS-3:** Congress should direct the FAA to develop low-altitude IFR routes and enhance air traffic control (ATC) capabilities. Congress should increase Helicopter Air Ambulance (HAA) use of the IFR system by funding the required infrastructure and directing the FAA to adopt policies and procedures to support its use by all low-altitude aircraft, crewed and uncrewed. Infrastructure needs include adding additional Automatic Dependent Surveillance–Broadcast (ADS-B) transmitters, radar systems, controller–pilot data link communications (CPDLC), and communication equipment and incentivizing hospitals and operators to adopt IFR-compatible infrastructure. Necessary policies and procedures include expansion of low-altitude IFR routes and approaches, including an HAA Performance Based IFR route structure. Additionally, Congress should direct the FAA to develop a traffic management framework to mitigate risks associated with the growth of unmanned aircraft system (UAS) and advanced air mobility operations.

Mr. Quisling provided an overview of the benefits associated with adopting this recommendation. He highlighted that this recommendation would enhance safety by reducing reliance on visual flight rules (VFR), minimizing risks associated with poor visibility and adverse weather. He also discussed that rural and underserved areas would benefit from access to higher-level medical care, better connectivity, and enhanced reliability for patient transport. Lastly, he mentioned that a traffic management framework for UAS drones and advanced air mobility would reduce potential airspace conflicts and ensure safe integration of emerging technologies and air ambulance operations.

Mr. Quisling also noted several potential challenges including that developing IFR routes and upgrading infrastructure could face logistical and regulatory hurdles, and that hospitals and air ambulance operators may struggle to afford IFR-compatible upgrades, even with funding incentives. Lastly, he discussed that the FAA may not have adequate resources without increased funding for added oversight and support functions.

Committee Discussion FS-3

Flight Safety Subcommittee Chair
AAQPS Committee Members

Mr. Clayton, a member of the AAQPS Committee and the Flight Safety Subcommittee, added further context to the importance of this recommendation, noting that establishing consistent procedures across operators would help the FAA maintain safety.



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Dr. Hinckley asked for clarification on the nature of proprietary (privately developed and owned) approaches at hospitals and Mr. Clayton responded with an overview of the current system including that hospitals often pay private companies to develop and maintain approaches. Additionally, Mr. Judge noted he has supported efforts in the Northeast to develop and share approaches. He emphasized the importance of public oversight over proprietary systems, especially with new entrants into the airspace. Lastly, Mr. Richey noted that he participates in a subscription program in Alaska as opposed to a proprietary system.

Mr. Crawford added that just over a decade ago, the country had 200-300 proprietary procedures, however that has quickly expanded, and the current number is now in the thousands. Mr. Crawford and Mr. Reckert highlighted the lack of FAA investment in low-level operations compared to Part 121 airspace, stressing the need for future-focused infrastructure development. Mr. Crawford stated that Controller Pilot Data Link Communications (CPDLC) has been available to Part 121 operations for a long time and would be beneficial to helicopter air ambulances and other air operations like offshore flights to oil rigs. He then discussed ZK routes which are low-altitude routes which can improve safety, access, and efficiency, for example by often allowing aircraft to remain below icing conditions.

Commissioner Arnold raised concerns about cost burden and how to quantify the expense compared to the return on that investment. Mr. Judge suggested that a public-private partnership model would help to spread costs between public and private funding, again noting that this area has traditionally lacked significant investment. Commissioner Arnold had further questions about on whom the cost burden would fall, and if it would be primarily born by the hospitals. Mr. Judge discussed that it would take a combination of funding and investment from hospitals, states, the federal government and others. Lastly, Mr. Quisling mentioned that currently, industry bears the majority of the cost.

Voting FS-3

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendation FS-3 was adopted by the Committee.

Voting Member	FS-3
Com. Arnold	Yes
Mr. Clark	Yes
Mr. Clayton	Yes
Col. Coffee	Abstain



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Voting Member	FS-3
Ms. Frazer	Yes
Dr. Gamber	Yes
Dr. Hinckley	Yes
Mr. Houser	Yes
Mr. Judge	Yes
Mr. Julander	Yes
Dr. Pritzker	Yes
Mr. Quisling	Yes
Mr. Reckert	Abstain
Mr. Richey	Yes
Vote Count	Yes: 12 No: 0 Abstain: 2

Overview of Recommendation FS-4: Enhance Safety and Technology for Single-Pilot Operations
Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reviewed the problem statement, goal for addressing the problem statement, and recommendation proposed by the Flight Safety Subcommittee:

Problem statement:

Addressing Safety and Airspace Challenges in Air Ambulance Operations: Air ambulance operations face significant safety challenges due to high pilot workloads in demanding conditions like adverse weather, low visibility, and night flights, which can impact situational awareness and decision-making. Additionally, the rapid growth of low-altitude aviation, including unmanned aircraft systems (UAS) and advanced air mobility vehicles, is increasing airspace congestion and pilot workload near hospitals and airports, potentially interfering with critical life-saving missions.

Goal: Enhance Safety and Technology for Single-Pilot Operations

- ✓ **Recommendation FS-4:** Congress should mandate new air ambulance helicopters be equipped with Stability Augmentation Systems (SAS) or Auto Flight Control Systems (AFCS) and require pilot training on their use. Additionally, Congress should provide funding incentives to retrofit existing helicopters and support FAA research into enhanced vision technologies, workload reduction systems, and advanced simulation tools (including virtual reality), with expedited development through industry collaboration.



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Mr. Quisling highlighted the benefits associated with this recommendation. He noted SAS and AFCS systems and enhanced vision technologies would reduce pilot workload, improve situational awareness, and support safer single-pilot operations in challenging conditions. Further, by simulating complex scenarios, virtual reality (VR) training would enhance situational awareness and aeronautical decision-making, preparing pilots for real-world challenges. Lastly, he noted that investments in advanced simulation tools, like VR headsets and workload reduction systems, would prepare the industry for the growing demands of low-altitude aviation.

Mr. Quisling also explained the possible challenges of adopting this recommendation including that retrofitting existing helicopters and implementing new technologies could strain budgets for smaller operators, even with funding incentives and that there might be a few regulatory challenges to implementing this recommendation. For example, expanding VR training authorization could require updates to existing regulations and standards, which could delay widespread adoption. He also noted the certification process to incorporate new technologies is neither timely nor efficient and could be cost prohibitive.

Committee Discussion FS-4

FS Subcommittee Chair

AAQPS Committee Members

Flight Safety Subcommittee members discussed that training would be an important part of the implementation of this recommendation, but Mr. Quisling clarified that the focus of the recommendation is on equipping pilots with advanced technology.

Voting FS-4

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendation FS-4 was adopted by the Committee.

Voting Member	FS-4
Com. Arnold	Yes
Mr. Clark	Yes
Mr. Clayton	Yes
Col. Coffee	Abstain
Ms. Frazer	Yes
Dr. Gamber	Yes
Dr. Hinckley	Abstain
Mr. Houser	Yes



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Voting Member	FS-4
Mr. Judge	Yes
Mr. Julander	Yes
Dr. Pritzker	Yes
Mr. Quisling	Yes
Mr. Reckert	Abstain
Mr. Richey	Yes
Vote Count	Yes: 11 No: 0 Abstain: 3

Overview of Recommendation FS-5: Streamline Certification and Expedite Approval Pathways for Air Ambulance Technologies and Medical Equipment

Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reviewed the problem statement, goal for addressing the problem statement, and recommendation proposed by the Flight Safety Subcommittee:

Problem statement:

Barriers to Innovation – New Technology and Medical Equipment Certification: Current certification requirements restrict the timely adoption of new technologies, including advanced aircraft systems, medical equipment, and safety technologies, and limit the ability to enhance patient care and improve operational efficiency in emergency medical services.

Goal: Streamline Certification and Expedite Approval Pathways for Air Ambulance Technologies and Medical Equipment

- ✓ **Recommendation FS-5:** Congress should mandate that the FAA develop performance-based standards and establish standardized policies and procedures, across all offices, to streamline the certification process for advanced aircraft systems and medical equipment. Congress should also mandate the development of expedited approval pathways for technologies critical to patient care and operational safety, ensuring timely certification of innovations that enhance emergency medical services to include a dedicated liaison team within the FAA Aircraft Certification Service to improve communication with operators and manufacturers, expedite approvals, and provide regulatory guidance.

Mr. Quisling highlighted the many benefits associated with adopting this recommendation. He discussed that streamlined certification and expedited approval pathways will enable quicker integration of advanced aircraft systems and medical equipment, improving safety and patient care in emergency medical services. He noted that standardized policies and procedures, along



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with a dedicated FAA liaison team, would reduce delays and inconsistencies, allowing operators to deploy new technologies more effectively. Further, he described how this recommendation would lead to improved collaboration and clarity by developing a dedicated liaison team to enhance communication between regulators, operators, and manufacturers, providing clear guidance and simplifying the implementation of critical technologies. Lastly, he explained this recommendation would provide a pathway for original equipment manufacturers and operators to improve design efficiency while meeting certification requirements.

Mr. Quisling also offered a few challenges for the Committee to consider in their deliberations including that establishing expedited pathways and a dedicated liaison team could require significant funding and staffing, straining FAA resources. He also discussed that transitioning to performance-based standards and streamlined processes could involve extensive revisions to existing regulations, requiring time and stakeholder buy-in. Lastly, he mentioned that balancing expedited approvals with rigorous safety assessments may pose challenges.

Committee Discussion FS-5

Flight Safety Subcommittee Chair
AAQPS Committee Members

Mr. Clayton, a Flight Safety Subcommittee member, provided additional context to this recommendation for Committee members explaining how his team had to wait over a year for FAA approval to provide essential liquid oxygen to patients on fixed-wing aircraft during the COVID-19 pandemic.

Mr. Reckert suggested an edit to the language of the recommendation noting the term “branch” was incorrect and should be updated to “service.” The Committee agreed with this change and the updated language is reflected in the recommendation above.

Voting FS-5

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey facilitated the voting process. Recommendation FS-5 was adopted by the Committee.

Voting Member	FS-5
Com. Arnold	Yes
Mr. Clark	Yes
Mr. Clayton	Yes
Col. Coffee	Yes
Ms. Frazer	Yes



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Voting Member	FS-5
Dr. Gamber	Yes
Dr. Hinckley	Yes
Mr. Houser	Yes
Mr. Judge	Yes
Mr. Julander	Yes
Dr. Pritzker	Yes
Mr. Quisling	Yes
Mr. Reckert	Abstain
Mr. Richey	Yes
Vote Count	Yes: 13 No: 0 Abstain: 1

Overview of Recommendation FS-6: Mandate Critical Safety Standards for Air Ambulance Occupant Protection

Jason Quisling, SVP Flight Operations and Aircom, Air Methods, Flight Safety Subcommittee Chair

Mr. Quisling reviewed the problem statement, goal for addressing the problem statement, and recommendation proposed by the Flight Safety Subcommittee:

Problem statement:

Occupant Safety Standards (Addressing NTSB Recommendations): To date, recommendations from the FAA Part 135 Aviation Rulemaking Advisory Committee (ARAC) regarding air ambulance occupant protective technologies for crash worthy fuel systems, crash resistant seating, and crash resistant interiors have not been widely adopted voluntarily, leaving passengers and crew vulnerable to preventable injuries and fatalities during accidents. Addressing this issue is essential to ensure the safety of occupants, align industry practices with proven safety standards, and reduce the human and economic costs of rotorcraft accidents.

Goal: Mandate Critical Safety Standards for Air Ambulance Occupant Protection

- ✓ **Recommendation FS-6:** Congress should mandate the implementation of FAA Rotorcraft Occupant Protection Working Group (ROPWG) Part 135 Aviation Rulemaking Advisory Committee (ARAC) recommendations on helicopter air ambulance occupant protective technologies, including crashworthy fuel systems, crash-resistant seating, and crash-resistant interiors. Legislative action is necessary to ensure industry-wide compliance with proven safety standards, protect passengers and crew from preventable injuries and fatalities, and reduce the human and economic impact of rotorcraft accidents.



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Mr. Quisling explained that this recommendation is supported by substantial data demonstrating the effectiveness of these technologies, such as energy-attenuating seats, helmets, and Nomex flight suits, in improving safety outcomes. He discussed that implementing these standards would ensure consistent safety measures across the air ambulance sector, ultimately enhancing protection for patients and crew.

Committee Discussion FS-6

Flight Safety Subcommittee Chair

AAQPS Committee Members

Dr. Hinckley asked for clarification on how older aircraft would be handled with this mandate and if there would be waivers for older models that could not be retrofitted. Mr. Reckert explained that Congress needs to decide on the approach to address this and Dr. Hinckley requested additional clarity on what was being recommended as part of the ARAC recommendation. Mr. Judge emphasized the importance of retrofitting older aircraft, despite potential cost concerns. Mr. Judge also emphasized the importance of enforcing safety for aircraft if better equipment is available. Mr. Reckert noted that the FAA has to account for economic impact in addition to safety during the rulemaking process but any direction from Congress would supersede that.

Ms. Frazer requested clarification on whether this recommendation also applied to fixed-wing aircraft. Further, she requested that all of the recommendations be revisited to ensure they were clear as to which type of aircraft they applied to. Mr. Quisling noted that the wording refers to specific ARAC recommendations aimed at helicopter air ambulances, and Ms. Frazer said the word “helicopter” should be added to make that clear.

Ms. Haugen, who was a part of the ROPWG, referenced in this recommendation, provided additional context saying that further study and research into the recommendations might be necessary. She noted that at the time of the report, the ROPWG did not have cost data that is now available.

Mr. Crawford suggested verifying the language, noting that the language of the recommendation included what was presented to the ARAC but not what the ARAC officially recommended. He posed the option of delaying voting on the recommendation until July to ensure alignment with ongoing external working group efforts applicable to this recommendation. Mr. Judge added to this that the FAA Safety Alert for Operators (SAFOs) did not address legacy aircraft, which is the focus of the recently established workgroup.

The Committee agreed to postpone further discussion on this recommendation until the next meeting where the Committee could review additional information.



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Voting FS-6

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

The Committee agreed to delay the vote on recommendation FS-6 until the July 10 AAQPS Committee Meeting.

Recap of Recommendations and Additional Discussion

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair

Mr. Richey shared a summary of the Flight Safety Subcommittee recommendations and respective voting results.

Adopted recommendations:

- **Recommendation FS-1:** Congress should allocate funding to expand weather services in non-terminal areas and invest in the research and development of new and innovative weather reporting and forecasting technologies through targeted grants and initiatives. Congress should direct the FAA to expand access to FAA-approved sources of real-time weather data and advanced predictive capabilities, prioritizing non-terminal areas. This effort should prioritize: Deploying additional new Visual Weather Observation Systems (VWOS); Installing weather cameras to enable real-time monitoring across the United States; Increasing access to Terminal Doppler Weather Radar (TDWR) systems; Enhancing surface detection capabilities, improving forecasting accuracy, and advancing predictive analysis tools; Integrating approved weather sources into the National Airspace Data Interchange (NADIN) for Graphical Forecasts for Aviation – Low Altitude (GFA-LA).
 - Voting Results: 12 Yes; 0 No; 2 Abstain
- **Recommendation FS-2:** Congress should authorize funding and establish initiatives to modernize and digitize the Airport Data Information Portal (ADIP) in collaboration with the FAA and industry stakeholders. This effort should ensure accurate and comprehensive data on heliports, helipads, and landing zones, including critical information such as weight limits, markings, and Instrument Flight Rules (IFR) compatibility. This effort should prioritize: Integrating updated helipad and heliport data into commercially available pilot navigation tools; Establishing competitive grants to upgrade substandard helipads and heliports to meet FAA design standards (e.g., Advisory Circular 150/5390-2D); Including maintenance of hospital helipad data in the ADIP as a Condition of Participation (CoP) to be evaluated by hospital accreditation organizations; Adding IFR-compatible infrastructure to improve safety and reliability, especially in rural and underserved areas (non-terminal areas); Incorporating



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locations with medical services into the United States Notices to Airmen (NOTAM) system.

- Voting Results: 11 Yes; 0 No; 3 Abstain
- **Recommendation FS-3:** Congress should direct the FAA to develop low-altitude IFR routes and enhance air traffic control (ATC) capabilities. Congress should increase Helicopter Air Ambulance (HAA) use of the IFR system by funding the required infrastructure and directing the FAA to adopt policies and procedures to support its use by all low altitude aircraft, crewed and uncrewed. Infrastructure needs include adding additional Automatic Dependent Surveillance–Broadcast (ADS-B) transmitters, radar systems, controller–pilot data link communications (CPDLC), and communication equipment and incentivizing hospitals and operators to adopt IFR-compatible infrastructure. Necessary policies and procedures include expansion of low-altitude IFR routes and approaches, including an HAA Performance Based IFR route structure. Additionally, Congress should direct the FAA to develop a traffic management framework to mitigate risks associated with the growth of unmanned aircraft system (UAS) and advanced air mobility operations.
 - Voting Results: 12 Yes; 0 No; 2 Abstain
- **Recommendation FS-4:** Congress should mandate new air ambulance helicopters be equipped with Stability Augmentation Systems (SAS) or Auto Flight Control Systems (AFCS) and require pilot training on their use. Additionally, Congress should provide funding incentives to retrofit existing helicopters and support FAA research into enhanced vision technologies, workload reduction systems, and advanced simulation tools (including virtual reality), with expedited development through industry collaboration.
 - Voting Results: 11 Yes; 0 No; 3 Abstain
- **Recommendation FS-5:** Congress should mandate that the FAA develop performance-based standards and establish standardized policies and procedures, across all offices, to streamline the certification process for advanced aircraft systems and medical equipment. Congress should also mandate the development of expedited approval pathways for technologies critical to patient care and operational safety, ensuring timely certification of innovations that enhance emergency medical services to include a dedicated liaison team within the FAA Aircraft Certification Service to improve communication with operators and manufacturers, expedite approvals, and provide regulatory guidance.
 - Voting Results: 13 Yes; 0 No; 1 Abstain

Flight Safety Subcommittee recommendations: Voting results

Voting Member	#FS-1	FS-2	FS-3	FS-4	FS-5
Com. Arnold	Abstain	Abstain	Yes	Yes	Yes
Mr. Clark	Yes	Yes	Yes	Yes	Yes



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Voting Member	#FS-1	FS-2	FS-3	FS-4	FS-5
Mr. Clayton	Yes	Yes	Yes	Yes	Yes
Col. Coffee	Yes	Abstain	Abstain	Abstain	Yes
Ms. Frazer	Yes	Yes	Yes	Yes	Yes
Dr. Gamber	Yes	Yes	Yes	Yes	Yes
Dr. Hinckley	Yes	Yes	Yes	Abstain	Yes
Mr. Houser	Yes	Yes	Yes	Yes	Yes
Mr. Judge	Yes	Yes	Yes	Yes	Yes
Mr. Julander	Yes	Yes	Yes	Yes	Yes
Dr. Pritzker	Yes	Yes	Yes	Yes	Yes
Mr. Quisling	Yes	Yes	Yes	Yes	Yes
Mr. Reckert	Abstain	Abstain	Abstain	Abstain	Abstain
Mr. Richey	Yes	Yes	Yes	Yes	Yes
Vote Count	Yes: 12 No: 0 Abstain: 2	Yes: 11 No: 0 Abstain: 3	Yes: 12 No: 0 Abstain: 2	Yes: 11 No: 0 Abstain: 3	Yes: 13 No: 0 Abstain: 1

Recommendations held for further discussion during the July AAQPS Committee Meeting:

- **Recommendation FS-6:** Congress should mandate the implementation of FAA Rotorcraft Occupant Protection Working Group (ROPWG) Part 135 Aviation Rulemaking Advisory Committee (ARAC) recommendations on helicopter air ambulance occupant protective technologies, including crashworthy fuel systems, crash-resistant seating, and crash-resistant interiors. Legislative action is necessary to ensure industry-wide compliance with proven safety standards, protect passengers and crew from preventable injuries and fatalities, and reduce the human and economic impact of rotorcraft accidents.

Additionally, each Flight Safety recommendation will be reviewed for language to ensure it is clear whether it applies to helicopters only or to fixed-wing aircraft as well. Any changes will be reviewed at the next meeting.

Public Comments

The public was offered an opportunity to provide comments to the AAQPS Committee. There were no public commenters, although the public provided comments via the chat on Zoom, which were answered during the Committee meeting to ensure transparency and engagement. The public did not provide comments via email.

Next Steps

Jeff Richey, RN, MHA, FACHE, Associate Administrator, Airlift Northwest, AAQPS Committee Chair



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Mr. Richey expressed his gratitude for the Subcommittee chairs and members for their participation in and preparation for the meeting. Mr. Richey noted he was impressed with the leadership demonstrated by Committee members during the meeting's discussions. Lastly, he reminded everyone that the public can provide additional comments by emailing CMS at AAQPS@cms.hhs.gov.

A third Committee meeting will be held on July 10, 2025. The meeting agenda will be publicly available, and members of the public will have the opportunity to register for and attend that meeting.

Finally, Mr. Richey noted he is open to feedback on the meeting's format and suggestions for improvement for future meetings.

The meeting was adjourned by the DFO, Mr. Wright, around 4:30 PM EST.

Questions and Answers

The following questions were sent by the public via email or were sent via the Zoom chat function during the meeting but were not answered live. The following are each of those questions and answers, where needed.

Question: Why am I not able to vote?

Answer: The vote is just for the AAQPS Committee Members. If you would like to provide public comment, please feel free to do so at any time via email: AAQPS@cms.hhs.gov.



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AIR AMBULANCE QUALITY AND PATIENT SAFETY (AAQPS)

Federal Advisory Committee Meeting 2

Meeting Date: May 8, 2025

Note: This Advisory Committee is governed by the provisions of the Federal Advisory Committee Act (FACA), P.L. 92-463 (Oct. 6, 1972), as amended, 5 U.S.C. App. 2.

This is a public meeting that is being watched live by members of the public and is being recorded. By staying in this meeting, you are consenting to being recorded and for the transcript of this meeting to be posted publicly.

Committee Purpose

The Advisory Committee will advise the Secretary of Health and Human Services and the Secretary of Transportation on options to establish quality, patient safety, and clinical capability standards for each clinical capability level of air ambulances. The Advisory Committee shall study and make recommendations, as appropriate, to Congress regarding the following with respect to air ambulance services:

1. Qualifications of different clinical capability levels and tiering of such levels.
2. Patient safety and quality standards.
3. Options for improving service reliability during poor weather, night conditions, or other adverse conditions.
4. Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety.
5. Clinical triage criteria for air ambulances.

The recommendations will be collated into a report to Congress.

Committee Structure

The Advisory Committee will hold three public meetings. In addition, there will be two subcommittees: a Flight Safety subcommittee and a Clinical Standards subcommittee. Each subcommittee will hold nonpublic meetings and report their recommendations to the main committee during the public meetings.

Meetings will be announced through the Federal Register and registration will be posted at:
<https://www.cms.gov/es/node/1974466>.

Committee Members

Chair:

Jeff Richey, RN, MHA

Members:

William Hinckley, MD



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Eileen Frazer, RN
Jason Clark
Mark Gamber, MD
Jordan Pritzker, MD
Commissioner Grace Arnold
Col. Steven Coffee
Ben Clayton
Jim Houser, MSN, APRN
Thomas Judge
Paul Julander
Jason Quisling
Robert Reckert

Reference Documents

Please see the CMS Air Ambulance Quality and Patient Safety Committee website for reference and pre-reading materials here: <https://www.cms.gov/es/node/1974466>.



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Agenda: Second Full Committee Meeting

Overall Meeting Objectives:

- Review the findings of the subcommittees on each topic area, including problem statements and recommendations.
- Hear from Committee members and other subject matter experts, as needed, to provide additional context around subcommittee recommendations.
- Come to consensus and vote on subcommittee recommendations.
- Discuss gaps in subcommittee recommendations.

(See next page for agenda)



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Agenda: Second Full AAQPS Committee Meeting

Introduction and Background		
10:00 – 10:30 AM	Welcome	David Wright (DFO)
	AAQPS Committee Goals	Jeff Richey (Chair)
	Patient Experience	Col. Coffee
	Report to Congress Overview	Jeff Richey and David Wright
	Introduction of Subcommittees, Subcommittee Chairs, and the Presentation of Subcommittee Recommendations	Jeff Richey Jason Quisling Kolby Kolbet Keith McMinn
Clinical Standards Subcommittee: Recommendations		
10:30 AM – 12:10 PM	Recommendations <ul style="list-style-type: none">• Problem• Justification• Benefits and challenges	Kolby Kolbet Keith McMinn
	AAQPS discussion and questions	AAQPS Committee Members
	AAQPS consensus and voting	Jeff Richey
12:10 – 1:00 PM	Lunch	
Clinical Standards Subcommittee: Additional Recommendations and Review		
1:00 – 1:30 PM	Recommendations <ul style="list-style-type: none">• Problem• Justification• Benefits and challenges	Kolby Kolbet Keith McMinn
	AAQPS discussion and questions	AAQPS Committee Members
	AAQPS consensus and voting	Jeff Richey
1:30 – 2:00 PM	Recap of recommendations and additional discussion	Jeff Richey



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2:00 – 2:10 PM		Break	
Flight Safety Subcommittee: Recommendations			
2:10 – 3:30 PM	Recommendations <ul style="list-style-type: none">• Problem• Justification• Benefits and challenges		Jason Quisling Nolan Crawford
	AAQPS discussion and questions		AAQPS Committee Members
	AAQPS consensus and voting		Jeff Richey
	Flight Safety Subcommittee: Additional Recommendations and Review		
3:30 – 4:00 PM	Recommendations <ul style="list-style-type: none">• Problem• Justification• Benefits and challenges		Jason Quisling Nolan Crawford
	AAQPS discussion and questions		AAQPS Committee Members
	AAQPS consensus and voting		Jeff Richey
4:00 – 4:20 PM	Recap of recommendations and additional discussion		Jeff Richey
4:20 – 4:30 PM		Break	
Public Comments			
4:30 – 4:45 PM			Public
Closing			
4:45 – 5:00 PM	Final Reflections <ul style="list-style-type: none">• Committee final reflections• Recommendations for future discussion topics• Future meeting date and agenda• Email/procedure for providing additional comments		Jeff Richey



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Subcommittee Members

Clinical Standards Subcommittee Members

Co-Chairs:

Kolby Kolbet
Keith McMinn

Members:

Emily Colyer
Michelle Greeson
Krista Haugen
Todd McDowell
Frankie Toon

Flight Safety Subcommittee Members

Chairs:

Jason Quisling

Members:

Ben Clayton
Jim Houser
Thomas Judge
Paul Julander
Robert Reckert



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Acronyms

Acronym	Definition
AAPB	Air Ambulance and Patient Billing
AAQPS	Air Ambulance Quality and Patient Safety
ADA	Airline Deregulation Act
ADIP	Airport Data Information Portal
ADS-B	Automatic Dependent Surveillance–Broadcast
AFCS	Auto Flight Control Systems
ARAC	Aviation Rulemaking Advisory Committee
ASAP	Aviation Safety Action Program
ATC	Air Traffic Control
CAMTS	Commission on Accreditation of Medical Transport Systems
CCSQ	Center for Clinical Standards and Quality
CMS	Centers for Medicare & Medicaid Services
CoP	Condition of Participation
CPDLC	Controller–Pilot Data Link Communications
DFO	Designated Federal Officer
FACA	Federal Advisory Committee Act
FAA	Federal Aviation Administration
GFA-LA	Graphical Forecasts for Aviation – Low Altitude
HAA	Helicopter Air Ambulance
HHS	Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
IFR	Instrument Flight Rules
IQR	Inpatient Quality Reporting
MSAP	Maintenance Safety Action Program
NADIN	National Airspace Data. Interchange
NOTAM	United States Notices to Airmen
NSA	No Surprises Act
NTSB	National Transportation Safety Board
PCAST	President’s Council of Advisors on Science and Technology
PSO	Patient Safety Organization
PSSM	Patient Safety Structural Measure
ROPWG	Rotorcraft Occupant Protection Working Group
SAFOs	Safety Alerts for Operators
SAS	Stability Augmentation Systems
SMS	Safety Management Systems
TDWR	Terminal Doppler Weather Radar
UAS	Unmanned Aircraft System
VFR	Visual Flight Rules
VR	Virtual Reality
VWOS	Visual Weather Observation Systems