



Air Ambulance Quality and Patient Safety (AAQPS) Advisory Committee

May 8, 2025



**Federal Aviation
Administration**

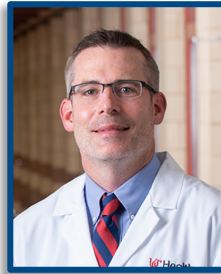
AAQPS Members Roll Call (1 of 2)

HHS Designee



Jeff Richey, RN, MHA, FACHE
Executive Director, Airlift Northwest;
Associate Administrator, University of
Washington Medical Center

Healthcare Provider



William Hinckley, MD
Associate Professor, Emergency
Medicine- University of Cincinnati

Accrediting Bodies Representative



Eileen Frazer, RN, CMTE
Executive Director & Founder of the
Commission on Accreditation of
Medical Transport Systems

HHS Additional Representative



Jason Clark
Senior Vice President of Field
Operations, APOLLO MedFlight

HHS Additional Representative



Mark Gamber, MD
Chief Medical Officer, Alacura
Medical Transport Management

Group Health Plans & Health Insurance Insurers



Jordan Pritzker, MD
Executive Regional Medical
Director, Aetna

State Insurance Regulator



Grace Arnold
Commissioner, Commerce
Department, Minnesota

AAQPS Members Roll Call (2 of 2)

DOT Designee



Robert Reckert
Deputy Director (A), Office of
Safety Standards
Flight Standards Service,
FAA

DOT Appointee



Ben Clayton
Chief Executive Officer,
LifeFlight Network

DOT Appointee



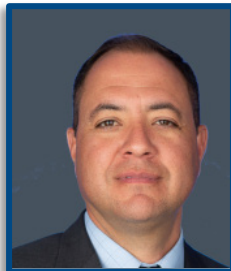
Jim Houser
President of the Center for Emergency
Medicine of Western Pennsylvania,
and CEO of STAT MedEvac

DOT Appointee



Thomas Judge
Founding Executive Director,
LifeFlight of Maine

DOT Appointee



Paul Julander
Chief Operating Officer,
PHI Health

DOT Appointee



Jason Quisling
Senior Vice President
Flight Ops/Air Methods

Patient Advocacy Group



Col. Steven Coffee
Chief of Staff, National Security and
Cofounder, Patient Safety U.S.

Agenda

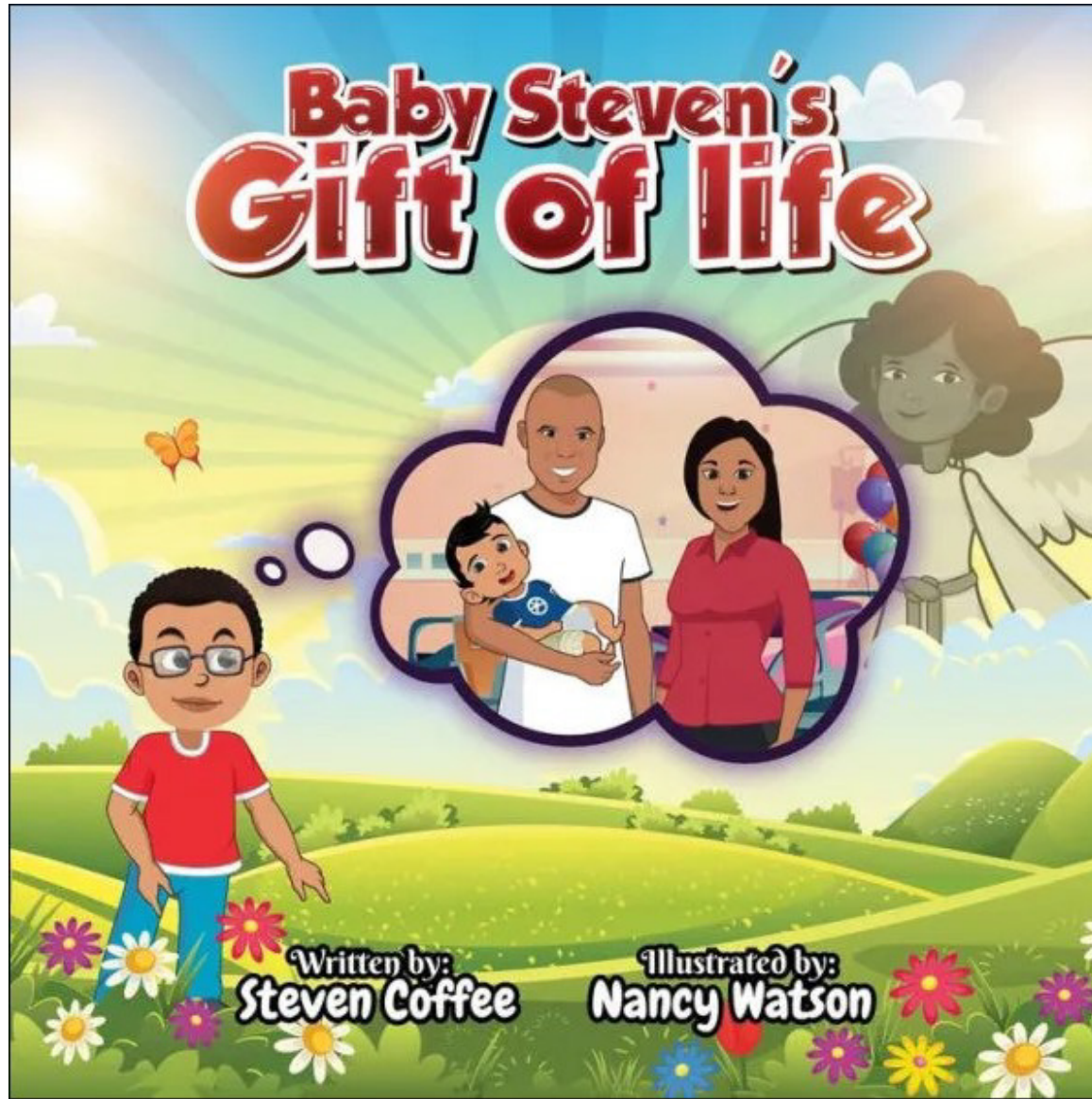


Time (EST)	Topic	Presenter(s)
10:00 – 10:30 AM	Introduction and Background	David Wright (DFO), Jeff Richey (Chair), Colonel Coffee, Jason Quisling, Kolby Kolbet, Keith McMinn
10:30 AM – 12:10 PM	Clinical Standards Subcommittee: Recommendations	Kolby Kolbet, Keith McMinn
12:10 – 1:00 PM	Lunch	
1:00 – 1:30 PM	Clinical Standards Subcommittee: Recommendations	Kolby Kolbet, Keith McMinn
1:30 – 2:00 PM	Recap of Clinical Standards Recommendations and Additional Discussion	Jeff Richey
2:00 – 2:10 PM	Break	
2:10 – 4:00 PM	Flight Safety Subcommittee: Recommendations	Jason Quisling, Nolan Crawford
4:00 – 4:20 PM	Recap of Flight Safety Recommendations and Additional Discussion	Jeff Richey
4:20 – 4:30 PM	Break	
4:30 – 4:45 PM	Public Comments	Public
4:45 – 5:00 PM	Closing	Jeff Richey

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

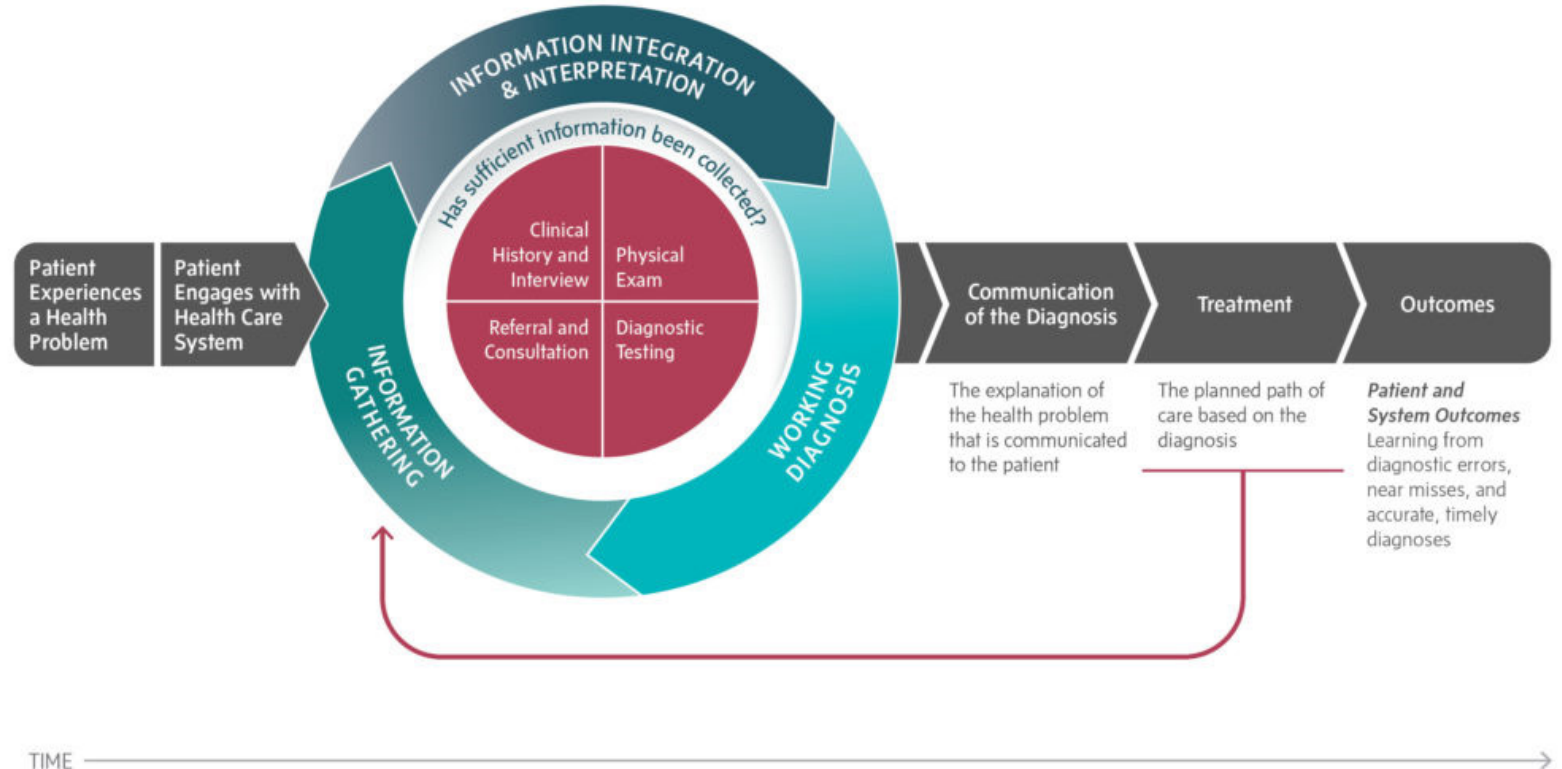
Patient Experience



Coffee Break

<https://youtu.be/eRju5HrVfpM>

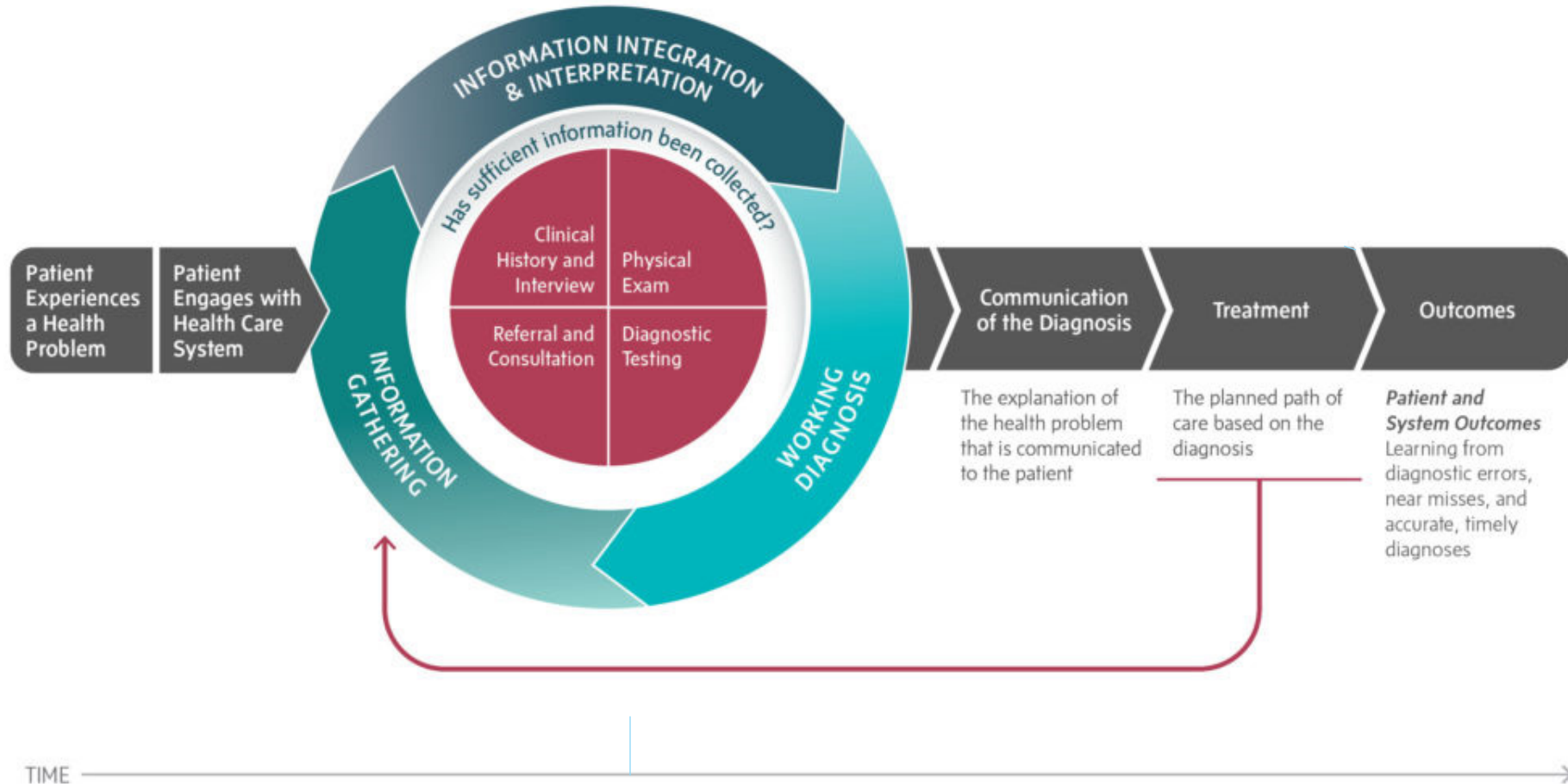
The Diagnostic Process



The National Academies of
SCIENCES • ENGINEERING • MEDICINE

SOURCE: National Academies of Sciences, Engineering, and Medicine. 2015.
Improving Diagnosis in Health Care. Washington, DC: The National Academies Press.

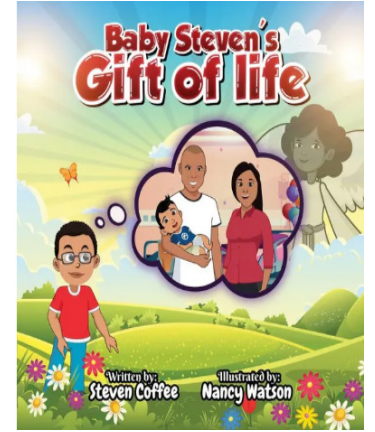
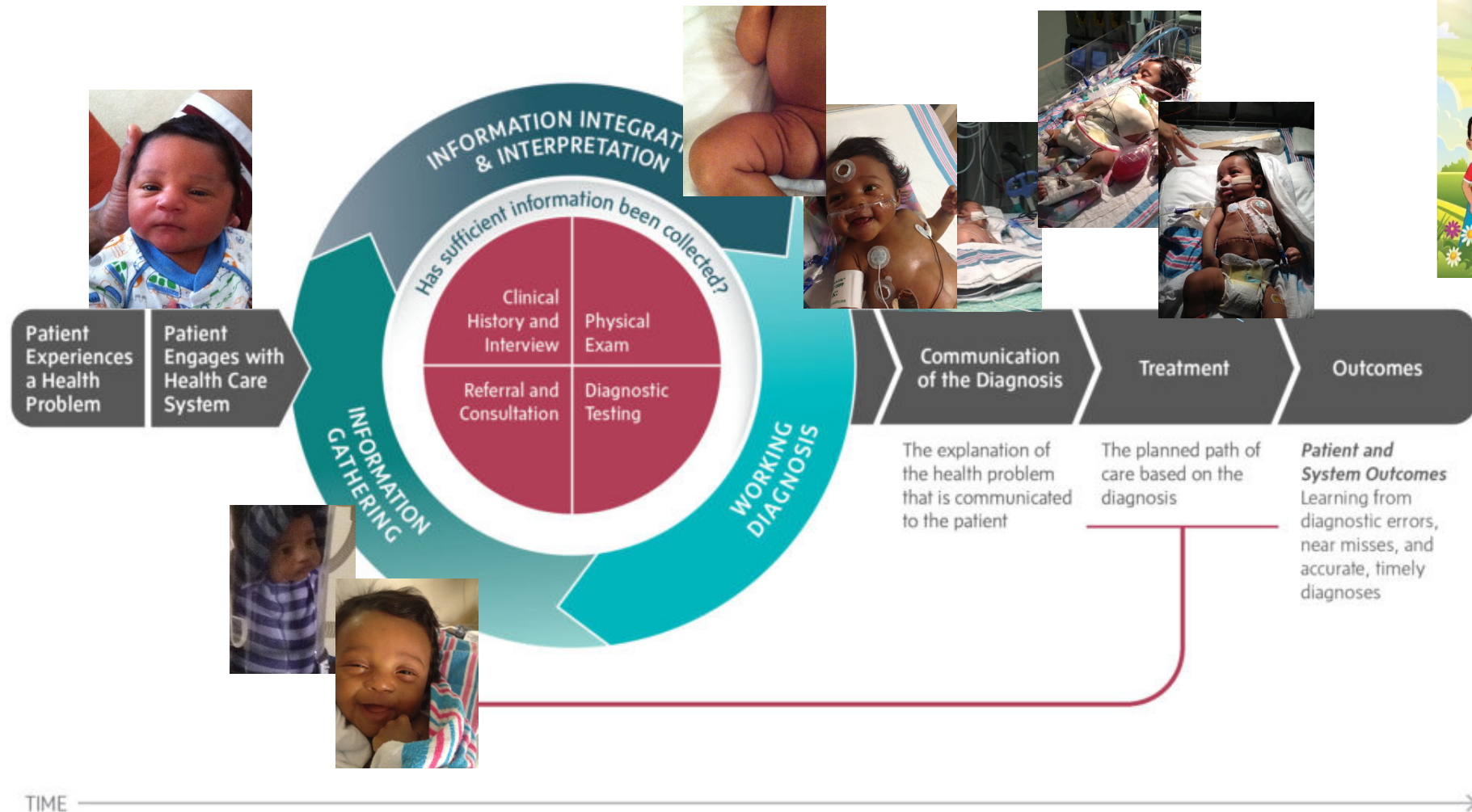
The Diagnostic Process



The National Academies of
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SOURCE: National Academies of Sciences, Engineering, and Medicine. 2015.
Improving Diagnosis in Health Care. Washington, DC: The National Academies Press.

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SOURCE: National Academies of Sciences, Engineering, and Medicine. 2015.
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**Access: to care,
to information,
to DxP...**

**Something important
was missing**

**I didn't know
who to call (or
when)**

“I felt like I wasn't heard”

Patients use different words/concepts than clinician-derived Dx error taxonomy
Missing important events

**Confusing or
conflicting
information**

Misalignments

Disrespect

Bell et al BMJQS 2023

Perspective



What we see depends on how we look
Patients/families: unique vantage point

Experiential intelligence
Connecting thread
Outside hospital/clinic

Long-standing patient safety tenet:
Multiple perspectives are needed to fully
characterize a problem

Multistakeholder Advisory Group
2 datasets of patient-reported events

Patient-Centered Framework for DxP Breakdowns



Patients as a Resource



Remember the Why



Report to Congress Overview

What is a Report to Congress?

- Reports to Congress investigate specific topics of interest to Congress and often provide recommendations
- Some reports are congressionally mandated; others are not
 - The AAQPS Committee's report is congressionally mandated through the No Surprises Act
- Congressionally mandated reports are required by statute to be submitted by Federal agencies to the Senate, the House of Representatives, or to congressional committees or subcommittees

AAQPS Statutory Mandate



The Department of Health and Human Services (HHS) Secretary and the Secretary of Transportation are required to establish an Advisory Committee on Air Ambulance Quality and Patient Safety for the purpose of reviewing 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 each of the following with respect to air ambulance services:

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

These recommendations will be used to enhance CMS's approach to air ambulance quality and safety and may be used to help establish an air ambulance quality reporting or value-based purchasing program in the future.

More info: <https://www.cms.gov/medicare/regulations-guidance/advisory-committees/advisory-committee-air-ambulance-quality-and-patient-safety>

What will be in this Report to Congress?

- The report will include:
 - An overview of the AAQPS Committee
 - An overview of the process by which the AAQPS Committee came to its recommendations
 - A summary of the AAQPS Committee's deliberations, including
 - Presentations made to the AAQPS Committee
 - Draft recommendations presented by the subcommittees to the AAQPS Committee
 - Any AAQPS Committee voting on recommendations
 - Final recommendations covering the AAQPS Committee's five statutorily mandated areas of focus

Introduction of Subcommittees

Clinical Standards Subcommittee Members



Co-Chair



Kolby Kolbet

Chief Innovation Officer,
Life Link III

Co-Chair



Keith McMinn

Director, Penn State Health
Life Lion



Emily Colyer

Director of Patient Safety, Air
Methods



Michelle Greeson

Infection Control Officer, University of
Vermont Health Network



Krista Haugen

Co-Founder, Survivors Network
for the Air Medical Community



Todd McDowell

Director of EMS, State of
Alaska

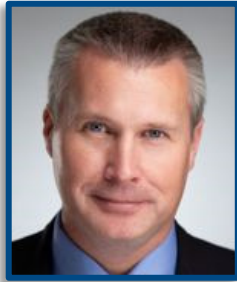


Frankie Toon

Program Director of AirMed, University
of Utah Hospitals and Clinics

Flight Safety Subcommittee Members

Chair



Jason Quisling

Senior Vice President
Flight Ops/Air Methods



Ben Clayton

Chief Executive Officer,
LifeFlight Network



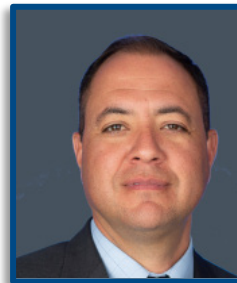
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Paul Julander

Chief Operating Officer,
PHI Health



Robert Reckert

Deputy Director (A), Office of Safety
Standards
Flight Standards Service, FAA

Presentation of Subcommittee Recommendations



- Subcommittee recommendations will be discussed in detail
- AAQPS Committee members are encouraged to ask questions, request changes and edits, and work together to determine a final recommendation to vote on
- The Chair will move the Committee to a vote once deliberations have reached consensus or near-consensus
- Committee members should voice any questions or concerns prior to voting
- Voting will occur after each Subcommittee recommendation is presented
- If the Committee cannot come to any type of consensus, voting may be delayed until the July 10 meeting, especially if the Committee agrees additional expertise is needed

Voting Process

- The Committee chair, Jeff Richey, will call a vote
- The voting choices will be: Yes, No, or Abstain
- All Committee members will send a private chat with their vote to a designated team member (yes, no, or abstain)
- The Committee chair will call out each member's name and they will read aloud the vote they submitted via chat and note if they have a conflict of interest
- The Committee chair will read the calculated votes aloud
- Recommendations will be incorporated into the Report to Congress if the majority of Committee members voting, vote "yes"

Clinical Standards Subcommittee

AAQPS Statutory Mandate



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

These recommendations will be used to enhance CMS's approach to air ambulance quality and safety and may be used to help establish an air ambulance quality reporting or value-based purchasing program in the future.

More info: <https://www.cms.gov/medicare/regulations-guidance/advisory-committees/advisory-committee-air-ambulance-quality-and-patient-safety>

Meetings and Process of the CS Subcommittee



- **January – April 2025:** The Subcommittee held 4 half-day working meetings
 - **January 31:** Identified key issues and challenges for each of the three topic areas outlined in the statute.
 - **February 18:** Refined and finalized specific problem statements for each of the three topic areas. Identified potential solutions for each problem statement.
 - **March 21:** Analyzed the options for addressing each problem statement, including benefits and challenges, and developed initial draft recommendations.
 - **April 25:** Refined and finalized draft recommendations. Developed and refined context and analysis to explain and justify each recommendation.
- **January – April 2025:** The CCSQ Internal Advisory Council served as a resource to this group and provided written explanations and presentations to help the subcommittee refine solutions and recommendations.

Summary of Problem Statements and Approach to Developing Recommendations

Problem Statements Identified by the Clinical Standards Subcommittee	Approach
Clinical triage criteria for air ambulances	
Problem statement: Claims can be denied due to medical necessity based on patient information collected after the transport or with lack of context regarding geography and available resources, even though it met triage standards (scene calls) or was certified by physician for air transport (interfacility transport) at the time of call.	Endorse outstanding AAPB recommendations
Qualifications of different clinical capability levels and tiering of such levels	
Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).	Endorse outstanding AAPB recommendations
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 OB, patients in rural areas).	Develop new recommendation
Patient safety and quality standards	
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.	Develop new recommendation
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.	Develop new recommendation

Summary of Relevant Recommendations from the Advisory Committee on Air Ambulance Patient Billing



AAPB Recommendations for Endorsement

Clinical Triage Criteria

Problem statement: Claims can be denied due to medical necessity based on patient information collected after the transport or with lack of context regarding geography and available resources, even though it met triage standards (scene calls) or was certified by physician for air transport (interfacility transport) at the time of call.

- ✓ Recommendation #CS-A is related to **medical necessity determinations**

Clinical Capability Levels

Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).

- ✓ Recommendation #CS-B is related to **adequacy of Medicare reimbursement**
- ✓ Recommendation #CS-C is related to **ADA preemption of state authority and the ambiguity this causes for regulating clinical aspects of care**
- ✓ Recommendation #CS-D is related to **collecting and analyzing data on the air ambulance industry to inform future policy and reimbursement conversations**

New Recommendations from Clinical Standards Subcommittee

Summary of Problem Statements and Goals



For each of the problem statements below, the Subcommittee brainstormed solutions and settled on an overall goal for each recommendation. The Subcommittee then analyzed options for achieving each goal and refined a specific recommendation for each.

Clinical Capability Levels

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 OB, patients in rural areas).

✓ **Goal:** Establish minimum national clinical standards

Patient Safety and Quality Standards

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

Patient Safety and Quality Standards

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-1a and 1b: Establish Minimum National Clinical Standards

Problem Statement and Recommendations



Clinical Capability Levels

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 OB, 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.

Background and Current State



Qualifications of Different Clinical Capability Levels: Establish Minimum National Clinical Standards

- Air ambulance (AA), like ground ambulance, is not a recognized Medicare provider type. Ambulance services are a covered Medicare benefit, and ambulance providers are considered suppliers in the Medicare program. AA is a “transport only” benefit reimbursed based on vehicle type and mileage – there is no differential payment for clinical capabilities requiring specialized personnel or equipment.
- Ambulance providers (air and ground) are required to demonstrate they have met very basic requirements (described in [42 CFR 410.41](#) and [42 CFR 414.610](#)) to be reimbursed by Medicare for supplying ambulance services. This is done as part of processing claims, rather than a periodic certification process that is common for institutional providers participating in Medicare. There are few requirements specific to air ambulance.
- Other types of Medicare providers subject to certification requirements (e.g., Conditions of Participation [CoPs]) must meet established health and safety standards and are “certified” by CMS. Certification by CMS includes surveys to evaluate compliance with the CoPs, which are conducted by State Survey Agencies, or by an accreditation organization approved by CMS.

Current ambulance supplier requirements:

<https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-410/subpart-B/section-410.41>

<https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-414/subpart-H/section-414.610>

Example CoPs (hospital ED): <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-482/subpart-D/section-482.55>

Background and Current State, Continued

Qualifications of Different Clinical Capability Levels: Establish Minimum National Clinical Standards

- The clinical components of AA are regulated by the states, like other healthcare providers. However, this picture is complicated by the Airline Deregulation Act (ADA), which preempts states from regulating anything which impacts “routes, prices, or services” for an air transport operator (including AA). There is some ambiguity regarding what clinical aspects of AA services (personnel, equipment) are subject to state regulation vs. preempted by the ADA. However, there is no specific federal regulation of the clinical aspects of AA.
- States do impose clinical requirements (when not preempted by ADA), resulting in a patchwork of requirements across states, which presents challenges as many AA operators must operate across state lines.
- Patients generally do not have a choice of supplier for AA transport, heightening the need to ensure all AA services meet a minimum standard.
- Many AA operators participate in voluntary accreditation programs such as Commission on Accreditation of Medical Transport Systems (CAMTS) and National Accreditation Alliance of Medical Transport Applications (NAAMTA). Some accreditation programs cover both clinical and flight safety. FAA does not have authority to accept accreditation in lieu of FAA oversight of compliance with flight safety standards.

Background: Options Analysis

Comparison of different approaches to establishing minimum national clinical standards

Note: these options are not mutually exclusive and may be recommended in combination.

Option	Actor and specific action	Rationale
Update existing Medicare supplier requirements for ambulance services	CMS issues rulemaking to update existing requirements for suppliers of ambulance services to add requirements specific to AA.	Builds on the current state in which AA (along with ground ambulance) are considered suppliers of a Medicare benefit/service. Updates to 42 CFR 410.41 are within existing HHS statutory authority but would be limited to very basic requirements.
Establish new Medicare provider type	Congress directs CMS to establish AA as a new Medicare provider type with CoPs.	The clinical care provided on AA includes advanced clinical capabilities and specialty care; providers delivering similar services in brick-and-mortar are considered Medicare providers and are subject to CoPs. This approach recognizes AA as a medical provider within the continuum of care and allows Medicare to add CoPs. This may also lay the foundation for further changes to how Medicare reimburses AA.
Compulsory accreditation for AAs seeking reimbursement as Medicare suppliers of ambulance services	Congress creates legislation giving HHS statutory authority to require accreditation for Medicare suppliers of ambulance services.	Would impose more meaningful minimum standards to all suppliers of AA services seeking reimbursement from Medicare. CMS would designate organizations to accredit suppliers; this could include existing accrediting organizations provided their requirements meet or exceed those established by Medicare.
Compulsory national accreditation for <u>all</u> air ambulance providers, regardless of Medicare participation	Congress creates new legislation to require accreditation of clinical aspects of AA at a national level (through HHS or FAA).	This would require <u>all</u> AA providers to be accredited as a requirement to operate – regardless of payer. This process could include existing accrediting organizations provided they are approved by CMS for this purpose. While most healthcare providers are regulated/licensed at the state level, there is precedent for national regulation – for example, laboratories are certified nationally because 1) they participate in interstate commerce and 2) patients generally do not have a choice of supplier. Both of those conditions are also true for air ambulance, and AA is already subject to federal regulation from FAA.

Discussion

Qualifications of Different Clinical Capability Levels: Establish Minimum National Clinical Standards

Subcommittee Recommendation	<p>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.</p> <p>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.</p>
Rationale	<p>This option would result in the most meaningful improvement in clinical standards and patient safety relative to the status quo. Building on existing supplier standards, or implementing CoPs without additional accreditation standards, would not be sufficient. In addition, establishing AA as a provider type is an important step in achieving recognition throughout the healthcare industry that AA providers are a critical component of the healthcare ecosystem, and provides a foundation for other subsequent recommendations.</p>
Benefits	<ul style="list-style-type: none"> ✓ Creates a survey and enforcement mechanism for basic patient safety requirements (CoPs) ✓ Creates a required, higher tier of more meaningful accreditation standards which are more flexible to update than CoPs ✓ Could leverage existing accreditation organizations (AOs) already widely adopted in industry, but would not be limited to existing AOs ✓ AA providers may continue to operate outside of Medicare if accreditation is not feasible ✓ Recognizes AA as a healthcare provider with an important role in the continuum of care, particularly in rural and frontier communities
Challenges	<ul style="list-style-type: none"> ⊗ Not within current HHS statutory authority (requires legislation and rulemaking to establish provider type and compulsory accreditation) ⊗ Complicates the regulatory environment for ambulance services (there are no CoPs for ground ambulance) ⊗ If the standard is unobtainable for certain AA companies (and cannot be resolved through the remediation process), and there is no exception or waiver process, this could leave certain regions with an insufficient number of AA to serve the population ⊗ If the standard is too low, would impose additional burden without meaningful improvement from status quo ⊗ High administrative burden (e.g., cost and time) on the AA provider to maintain compliance and accreditation requirements

Voting



Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Qualifications of Different Clinical Capability Levels: Establish Minimum National Clinical Standards	
Subcommittee Recommendation	<p>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.</p> <p>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.</p>
Voting options	<p><i>Committee members should vote for one (a or b), both (a and b), neither, or abstain.</i></p> <p><i>If committee recommends b, but not a, language should be updated to reflect “Medicare supplier” rather than “Medicare provider”.</i></p> <p><i>Committee members should note if they believe they have a conflict of interest.</i></p>

Additional Information: Options Analysis

ity

Comparison of different approaches to establishing minimum national clinical standards <i>(Note: these options are not mutually exclusive)</i>		
Options	Benefits	Challenges
Update existing Medicare supplier requirements for ambulance services	<ul style="list-style-type: none"> ✓ Creates basic national standards for suppliers of AA services ✓ Close to status quo; would not disrupt business practices ✓ Within existing HHS statutory authority 	<ul style="list-style-type: none"> ⊗ Very basic standards may have little impact on quality and safety ⊗ Does not resolve the ambiguity of ADA preemption ⊗ Little change to status quo ⊗ Requires rulemaking
Establish new Medicare provider type	<ul style="list-style-type: none"> ✓ <i>Same as above, plus:</i> ✓ Creates a survey and enforcement mechanism for basic safety requirements (currently no such mechanism exists for AA) ✓ AA would be recognized as a CMS-certified healthcare provider ✓ May lay the foundation for updating Medicare reimbursement or implementing additional quality and safety standards ✓ Requires legislative action, but builds on an existing framework 	<ul style="list-style-type: none"> ⊗ <i>Same as above, plus:</i> ⊗ Not within current HHS statutory authority (requires legislation) ⊗ May be disruptive for providers of both ground and air services ⊗ Complicates the regulatory environment for ambulance services (there are no CoPs for ground ambulance) ⊗ Unlikely to be a significantly higher standard than current state <i>(see example of CoPs provided as a handout)</i>
Compulsory accreditation for AAs seeking reimbursement as Medicare suppliers of ambulance services	<ul style="list-style-type: none"> ✓ Creates more meaningful national standards for AA providers ✓ States still retain oversight of licensure of clinicians ✓ Could potentially leverage existing accreditation organizations (AOs) already familiar and respected in industry ✓ AOs can more easily update standards to reflect current industry norms/best practices (does not require rulemaking) ✓ AA operators could continue to operate if not accredited, they just would not be eligible for Medicare reimbursement 	<ul style="list-style-type: none"> ⊗ Not within current HHS statutory authority (requires legislation) ⊗ If standard is too high, it may put operators out of business and reduce access in frontier and rural areas ⊗ If standard is too low, may have little impact on quality and safety ⊗ Administrative burden to maintain compliance ⊗ Need to assess capacity of existing accrediting organizations
Compulsory national accreditation for <u>all</u> air ambulance providers, regardless of Medicare participation	<ul style="list-style-type: none"> ✓ Creates more meaningful national standards for AA providers ✓ National oversight of a critical piece of the healthcare ecosystem (esp. frontier/rural) ✓ Resolve ambiguity of ADA preemption of states by clearly defining federal role in oversight of clinical aspects of AA ✓ Reduce impact of conflicting state standards on interstate AAs 	<ul style="list-style-type: none"> ⊗ <i>Same as above, plus:</i> ⊗ Need clear division of roles and coordination between HHS/FAA ⊗ Need to clarify to what extent this new national regulation preempts or is complementary to existing state and FAA oversight

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

Problem Statement and Recommendation



Patient Safety and Quality Standards

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.

✓ **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.

***CS Subcommittee's Definition of 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.

Background and Current State

Patient Safety and Quality Standards: Promote a Just Culture Framework for Patient Safety

- FAA mandates that Part 135 operators have in place a safety management system (SMS). While this was only recently made mandatory for air ambulance providers, many already had an SMS in place. However, the SMS does not include requirements specific to clinical operations or patient safety, only aviation safety.
- There are no other federal standards for clinical operations or patient safety. AA is not a recognized provider type for Medicare (though operators must demonstrate some very minimum requirements for claims to be reimbursed by Medicare).
- Patient safety has had significant national attention in recent years. The President's Council of Advisors on Science and Technology (PCAST) [issued a report in September 2023](#); among the recommendations was to support a just culture of patient and clinician safety.
- In response, CMS added a Patient Safety Structural Measure (PSSM) for the hospital inpatient quality reporting program. Structural measures provide a framework for advancing culture and practices at a system level to improve performance on a variety of individual process and outcome metrics. See 89 FR 69486, table IX.B.1-02.
- PSSM is an attestation-based measure. It consists of five domains, which have significant conceptual overlap with the four pillars of a flight SMS (policy, risk management, assurance, safety promotion). These go above and beyond the standards outlined in the hospital Conditions of Participation. Hospitals are scored on compliance with each of the five domains, though their score does not affect payment currently.
- CMS has a general process for developing and selecting measures for use in CMS quality programs, including convening of technical expert panels and accepting public comment, but this process has not previously been leveraged to develop any measures for AA.
- CMS would not have statutory authority to adopt a measure for AA providers unless it was in the context of a CMS program, e.g. a new quality reporting program (QRP) for AA, or was otherwise directed by Congress to do so (e.g., for incorporating into an FAA program).

PCAST report: https://bidenwhitehouse.archives.gov/wp-content/uploads/2023/09/PCAST_Patient-Safety-Report_Sept2023.pdf

Additional Information: Patient Safety Structural Measure (PSSM)



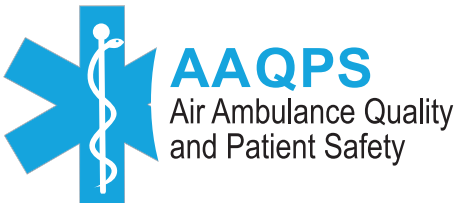
- The PSSM is a structural measure, meaning it measures organizational attributes that contribute to safety, rather than performance on process metrics or patient outcomes.
- Hospitals report their compliance with each of the domains of the PSSM to the CMS Inpatient Quality Reporting Program. This is an attestation only – it is based on self-assessment.
- The score is publicly reported, but there is no penalty or incentive associated with the score.
- PSSM has 5 domains, which are like the 4 domains of the SMS:
 - Domain 1: Leadership Commitment to Eliminating Preventable Harm
 - Domain 2: Strategic Planning & Organizational Policy
 - Domain 3: Culture of Safety & Learning Health Systems
 - Domain 4: Accountability & Transparency
 - Domain 5: Patient & Family Engagement

For the full list of attestation statements, see: <https://qualitynet.cms.gov/pch/measures/safety>

Discussion

Patient Safety and Quality Standards: Promote a Just Culture Framework for Patient Safety	
Subcommittee Recommendation	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.
Rationale	The PSSM provides a blueprint for how to continue advancing patient safety beyond accreditation requirements, without necessarily penalizing those providers that are unable to meet all the PSSM criteria. Adapting the measure for the AA setting would ensure that the requirements are meaningful and achievable for AA providers. HHS is better positioned than FAA to disseminate and update measures related to provision of healthcare services. The PSSM is complementary to existing SMS requirements, following many of the same principles as aviation SMS. Operators would be able to implement and integrate their clinical and flight safety programs in a way that makes sense for their organization without creating duplicative silos.
Benefits	<ul style="list-style-type: none"> ✓ Creates common framework for advancing patient safety and just culture leveraging proven practices for quality improvement ✓ Provides a blueprint and motivation for continuing to advance safety beyond accreditation requirements ✓ Complementary to FAA SMS; operators could use an integrated management system to meet both FAA and HHS requirements ✓ Builds on existing CMS PSSM which is familiar to hospital-based providers ✓ “Reporting-only” measure means there is shared goal-setting without imposing financial penalties on organizations unable to implement all items ✓ Establishing a QRP creates a platform for additional measures and/or pay-for-performance incentives in the future
Challenges	<ul style="list-style-type: none"> ⊗ Not within current HHS statutory authority (requires legislation) ⊗ Establishing a new QRP would likely also require CMS to establish AA as a provider type (see recommendation CS-1a) ⊗ High level of effort (federal staff/budget) and time required to set up a new CMS quality reporting requirement ⊗ Burden on AA providers associated with establishing a new reporting requirement

Voting



Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Patient Safety and Quality Standards: Promote a Just Culture Framework for Patient Safety	
Subcommittee Recommendation	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 options	<i>Committee members should vote yes/no/abstain for the recommendation (#CS-2).</i> <i>Committee members should note if they believe they have a conflict of interest.</i>

Additional Information: Options Analysis

Comparison of different approaches to promoting a Just Culture framework for patient safety

(Note: these options are not mutually exclusive and may be recommended in combination.)

Option	Actor and specific action	Benefits	Challenges
Add new patient safety requirements to SMS	Congress directs FAA to work with industry and HHS to develop additional mandatory clinical requirements as an “add-on” to SMS.	<ul style="list-style-type: none"> ✓ Builds on existing SMS structure which is familiar in industry ✓ Existing SMS structure is compatible with an “integrated management system” (IMS) which incorporates other risk management components 	<ul style="list-style-type: none"> ✗ Not within existing FAA statutory authority ✗ AA operators managing SMS may contract with clinicians and may not be best positioned to manage clinical requirements ✗ FAA may not have the required expertise in-house
Develop CMS PSSM for AA	CMS convenes technical experts to develop a structural measure for patient safety for AA.	<ul style="list-style-type: none"> ✓ Creates common framework for advancing patient safety and just culture ✓ Provides a blueprint and motivation for continuing to advance safety beyond accreditation requirements 	<ul style="list-style-type: none"> ✗ Existing CMS PSSM is hospital-specific and would need to be adapted for AA ✗ Unclear if this is within existing CMS statutory authority outside the context of a specific CMS quality program ✗ Requires significant level of effort, budget, and time ✗ Voluntary adoption may not be sufficient to drive change
Add CMS PSSM to SMS	Congress directs FAA to incorporate a CMS-developed PSSM as an add-on to existing FAA-mandated SMS.	<ul style="list-style-type: none"> ✓ Builds on existing SMS structure which is familiar in industry ✓ Builds on CMS PSSM 	<ul style="list-style-type: none"> ✗ Not within existing FAA statutory authority ✗ AA operators managing SMS may contract with clinicians and may not be best positioned to manage clinical requirements
Establish new mechanism to report PSSM to HHS	Congress directs HHS to create a new mechanism for air ambulances to report on the PSSM (could be a requirement, voluntary, or incentivized through a QRP)	<ul style="list-style-type: none"> ✓ Builds on existing CMS PSSM ✓ Operators can use an IMS which meets requirements for both PSSM and FAA SMS ✓ If a new CMS QRP, potential to add additional process or outcome metrics, at launch or in the future ✓ Providers unable to meet all requirements could still participate in Medicare program 	<ul style="list-style-type: none"> ✗ Not within current HHS statutory authority ✗ If required or incentivized, would likely also require CMS to establish AA as a provider type ✗ Requires significant level of effort, budget, and time

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

Problem Statement and Recommendations

Patient Safety and Quality Standards

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.

- ✓ **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.

Background and Current State

Patient Safety and Quality Standards: Improve Access to Patient Clinical Data

- AA providers transfer their patients to hospitals for care; the care provided enroute can make a critical difference in the patient's condition upon arrival and clinical outcome. However, AA providers often do not receive information about how the patient fared after transfer of care, making it difficult to identify patterns or opportunities for improvement.
- AA transports can be intense and emotional for crew; not knowing the patient outcome can have a negative impact on emotional wellbeing.
- AA providers indicated that some hospitals have declined to share patient clinical data back after transfer of care due to concerns about patient privacy and HIPAA compliance.
- There are conflicting interpretations of how to apply HIPAA in this context; it is not consistently clear to hospitals and AA providers under what circumstances this type of data sharing is permitted, and what the limitations of that data sharing would be under HIPAA.
- There is no standard dataset of what patient clinical data would help to inform AA providers' quality improvement activities, resulting in variance in what data is received in response to these requests.
- There is no standard process for sharing patient clinical data back to AA providers. AA providers must make an individual request each time, resulting in additional burden for both the AA provider and the hospital to respond to the one-off requests.
- There are very few existing health information exchange mechanisms actively used for bidirectional exchange of data between AA providers and hospitals for patients they share.

Discussion

Patient Safety and Quality Standards: Improve Access to Patient Clinical Data

Subcommittee Recommendation	<ul style="list-style-type: none"> ✓ 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.
Rationale	These two recommendations address two of the key barriers to bidirectional exchange of patient clinical data: 1) hesitancy to share data due to uncertainty over how HIPAA applies for this use case; and 2) limited use of existing health information exchange infrastructure by air ambulance providers due to lack of data standards specific to this setting and use case. These recommendations build on existing policy and technical infrastructure, making them relatively straightforward to implement.
Benefits	<ul style="list-style-type: none"> ✓ HHS issuing guidance on how HIPAA applies to this use case is straightforward to implement and addresses a key barrier ✓ Building on existing health information exchange efforts leverages existing infrastructure, investments, and policies ✓ Hospitals more likely to engage in information exchange if it is part of a system they already use ✓ Establishing a standard for data exchange makes it easier and more sustainable to exchange data on an ongoing basis
Challenges	<ul style="list-style-type: none"> ⦿ The scope and root causes of the problem are not well studied, so it is not entirely clear if addressing these efforts alone will improve exchange ⦿ Health information exchanges are run by states, with some federal funding and standards development; processes and progress may vary

Voting

Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Patient Safety and Quality Standards: Improve Access to Patient Clinical Data	
Subcommittee Recommendation	<ul style="list-style-type: none">✓ 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.
Voting options	<p><i>Committee members should vote for one (a or b), both (a and b), neither, or abstain.</i></p> <p><i>Committee members should note if they believe they have a conflict of interest.</i></p>

Additional Information: Options Analysis

Comparison of different approaches to improving access to patient clinical data

Option	Actor and specific action	Benefits	Challenges
Reduce hesitancy to share data by clarifying HIPAA implications	HHS OCR issues guidance to hospitals and AA providers clarifying that HIPAA does not prevent sharing patient clinical data for quality improvement purposes and clarifying the specific limitations of such data sharing.	<ul style="list-style-type: none"> ✓ Relatively simple to implement ✓ Addresses a key barrier, which is hospital concerns about patient privacy and HIPAA compliance 	<ul style="list-style-type: none"> ⦿ May have limited impact on status quo
Establish a committee to study the issue	Congress establishes a committee to study the current state and issue more specific recommendations on how to improve health information exchange for this use case.	<ul style="list-style-type: none"> ✓ Develop more targeted recommendations from technical SMEs in interoperability, HIPAA, health information exchange, etc. ✓ Collate data on the current state and impact to patient safety and crew wellbeing 	<ul style="list-style-type: none"> ⦿ Defers action to a later date ⦿ Cost and time required for administering committee
Bolster efforts to improve health information exchange between providers	Congress provides additional funding to bolster existing efforts to develop and promote health information exchange, specifically to support hospital/air ambulance data exchange.	<ul style="list-style-type: none"> ✓ Leverages existing technical infrastructure ✓ Compliance more likely with a system hospitals already use ✓ Standard data set makes it easier and more sustainable to exchange data 	<ul style="list-style-type: none"> ⦿ Health information exchanges are run by states, with some federal funding and standards development ⦿ May have limited impact on status quo
Require hospitals to share patient clinical data	CMS initiates rulemaking to establish a requirement or incentive for hospitals to share patient clinical data back to AA providers for QI purposes.	<ul style="list-style-type: none"> ✓ There is precedent for using CoPs to require hospitals to notify follow-up providers of patient admissions/transfers/discharges (42 CFR 482.43(b) and 482.24(d)(5)) ✓ Establishing a requirement but leaving the data specifications and exchange process open ended allows flexibility in how hospitals meet the requirement ✓ An alternative may be for CMS to implement a hospital quality measure or interoperability standard to advance this goal 	<ul style="list-style-type: none"> ⦿ Unclear if CoPs would drive meaningful change from status quo ⦿ Additional burden on hospitals ⦿ Certain hospitals may not be able to achieve compliance, potentially impacting participation in Medicare/access to care ⦿ Lack of standard dataset and/or process may still pose operational challenges ⦿ CMS would require data demonstrating the current barriers to justify adding this requirement to hospital CoPs

Lunch

AAPB Recommendations Relevant to AAQPS

Background: Air Ambulance and Patient Billing (AAPB) Advisory Committee



- The AAPB Advisory Committee issued its report in March 2022
 - **AAPB Report:** <https://www.transportation.gov/airconsumer/AAPB>
 - The AAQPS Clinical Standards Subcommittee tried to avoid venturing into topics related to billing, as these were discussed in depth by the AAPB and strayed from the AAQPS mandated focus areas.
 - Four existing AAPB recommendations have direct implications for two problem statements identified by the AAQPS Clinical Standards Subcommittee.
 - The Clinical Standards Subcommittee **recommends that the Report to Congress include these problem statements and endorse the existing AAPB recommendations** rather than generating new, potentially duplicative recommendations. This will help to highlight the importance of those recommendations for clinical standards and patient safety and allow time for those recommendations to be fully implemented and see their complete impact.

Clinical Standards Subcommittee

Summary of AAPB Recommendations Relevant to AAQPS



AAPB Recommendations for Endorsement

Clinical Triage Criteria

Problem statement: Claims can be denied due to medical necessity based on patient information collected after the transport or with lack of context regarding geography and available resources, even though it met triage standards (scene calls) or was certified by physician for air transport (interfacility transport) at the time of call.

- ✓ **Recommendation #CS-A:** Congress should direct HHS to implement AAPB recommendations clarifying that there should be a “rebuttable presumption” in the No Surprises Act Independent Dispute Resolution (IDR) process that the air ambulance service was medically necessary for purposes of adjudicating payment disputes for out of network services.

Clinical Capability Levels

Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).

- ✓ **Recommendation #CS-B:** Congress should enact legislation to implement the AAPB recommendation for HHS to evaluate the adequacy of Medicare reimbursement rates for air ambulance. This evaluation should specifically assess whether reimbursement should be differentiated for transports involving specialty care or more intensive procedures to ensure payment is adequate for the diversity of critical services provided in the air ambulance setting, and should consider use of add-on payments, modifier codes, and/or procedure codes commonly used across payors to ensure clarity and efficiency in claims processing. The evaluation should also assess adequacy of reimbursement for aviation operational and training costs in the context of current FAA requirements and advancements in best practices for flight safety.
- ✓ **Recommendation #CS-C:** Implement AAPB recommendation seeking clarification regarding how Airline Deregulation Act (ADA) preemption over states’ ability to regulate price, routes, and services applies or does not apply to states’ ability to regulate clinical aspects of air ambulance, such as use of Certificate of Need or regulating clinical scope of practice to ensure appropriate access to clinical services needed in a community.
- ✓ **Recommendation #CS-D:** Implement AAPB recommendation regarding implementation of data collection requirements authorized under No Surprises Act (section 106) and subsequent Notice of Proposed Rulemaking (CMS-9907-P, Document Number 2021-19797, 86 FR 51730-51779), which would allow CMS to collect operational data on the air ambulance industry for 2 years and issue a report on the current state of the air ambulance industry.

Problem Statement and Recommendation

Building on AAPB Recommendations

Clinical Triage Criteria

Problem statement: Claims can be denied due to medical necessity based on patient information collected after the transport or with lack of context regarding geography and available resources, even though it met triage standards (scene calls) or was certified by physician for air transport (interfacility transport) at the time of call.

- ✓ **Recommendation #CS-A:** Congress should direct HHS to implement AAPB recommendations clarifying that there should be a “rebuttable presumption” in the No Surprises Act Independent Dispute Resolution (IDR) process that the air ambulance service was medically necessary for purposes of adjudicating payment disputes for out of network services.

AAPB recommendation: The AAPB recommends that HHS should issue a regulation addressing medical necessity within the IDR process. Specifically, within the IDR process, there should be a rebuttable presumption that the air ambulance service was medically necessary, but an insurer can overcome that presumption by first presenting evidence that either the third-party first responder/medical professional who requested the transport was not a neutral third party, or that the air ambulance provider did not act in good faith.

How implementing this recommendation will support clinical standards and patient safety: Air Ambulance (AA) operators have reported that fear of a claim being denied can cause a chilling effect on providers ordering air transport which may be medically indicated, presenting a risk to patient safety. Many of these denied claims are related to out-of-network coverage. Implementing this recommendation would support AA operators in addressing unpaid claims through the IDR process by shifting the burden of proof to insurers denying claims based on medical necessity, which ideally will increase provider confidence in ordering medically indicated air transport. Further, denied claims cause financial hardship for AA operators and hospitals, and takes away revenue that could be used to invest in quality improvement and safety.

Problem Statement and Recommendation

Building on AAPB Recommendations

Clinical Capability Levels

Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).

✓ **Recommendation #CS-B:** Congress should enact legislation to implement the AAPB recommendation for HHS to evaluate the adequacy of Medicare reimbursement rates for air ambulance. This evaluation should specifically assess whether reimbursement should be differentiated for transports involving specialty care or more intensive procedures to ensure payment is adequate for the diversity of critical services provided in the air ambulance setting, and should consider use of add-on payments, modifier codes, and/or procedure codes commonly used across payors to ensure clarity and efficiency in claims processing. The evaluation should also assess adequacy of reimbursement for aviation operational and training costs in the context of current FAA requirements and advancements in best practices for flight safety.

AAPB recommendation: The AAPB recommends that legislation be enacted to require HHS to: (i) study Medicare rates for air ambulance services; and (ii) if warranted, for HHS to take steps to increase the reimbursement rates for air ambulance services upon conclusion of the study. The Advisory Committee also recommends that the study should be based on actual cost data, with “cost” including (1) the definition of cost as set forth in the Balance Billing Subcommittee’s recommendation; (2) cost elements set forth in Section 106 of the No Surprises Act; and (3) volume of transports.

How implementing this recommendation will support clinical standards and patient safety: AA providers have reported that Medicare rates are often insufficient to cover the costs of transport. The current payment model reimburses based on mileage and aircraft type only and does not account for the high fixed costs associated with readiness (the ability to respond 24/7 in an emergency). Inadequacy of payment is exacerbated for specialty transports, which require additional equipment, training, and staff. AA providers and clinicians have reported improper equipment available for specialty populations (e.g., neonatal) that could have negative impacts on patient care. Implementing this recommendation would help to ensure Medicare payment rates are adequate to ensure that these critical services are sustainable and available to the communities they serve.

Problem Statement and Recommendation

Building on AAPB Recommendations

Clinical Capability Levels

Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).

- ✓ **Recommendation #CS-C:** Implement AAPB recommendation seeking clarification regarding how Airline Deregulation Act (ADA) preemption over states' ability to regulate price, routes, and services applies or does not apply to states' ability to regulate clinical aspects of air ambulance, such as use of Certificate of Need or regulating clinical scope of practice to ensure appropriate access to clinical services needed in a community.

AAPB recommendation: The AAPB recommends that the ADA should not preempt State laws relating to licensing of medical services of air ambulance providers, even if they have incidental effect on prices, routes, and services.

How implementing this recommendation will support clinical standards and patient safety: The clinical components of air ambulance are largely regulated by states, similar to other healthcare providers. However, this picture is complicated by the Airline Deregulation Act, which preempts states from regulating anything which impacts “routes, prices, or services” for an air transport operator (including air ambulance). There is some ambiguity regarding what clinical aspects of AA services (personnel, equipment) are subject to state regulation vs. preempted by the ADA. Implementing this recommendation will provide clarification on the respective regulatory authorities of state vs. federal government, ensuring that there is clear and appropriate oversight over healthcare services.

In addition to clarifying the role and rights of states, the Subcommittee also recommends establishing some level of federal regulation over clinical aspects of AA care – see Recommendation #CS-1. The Subcommittee’s endorsement of this AAPB recommendation is focused on providing clarity of federal vs. state oversight rather than recommending that all oversight should fall to states.

Problem Statement and Recommendation

Building on AAPB Recommendations

Clinical Capability Levels

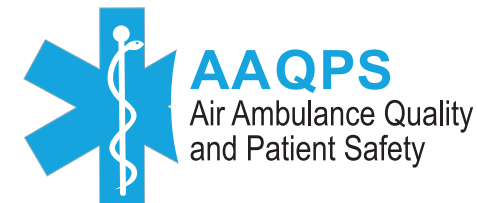
Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).

- ✓ **Recommendation #CS-D:** Implement AAPB recommendation regarding implementation of data collection requirements authorized under No Surprises Act (section 106) and subsequent Notice of Proposed Rulemaking (CMS-9907-P, Document Number 2021-19797, 86 FR 51730-51779), which would allow CMS to collect operational data on the air ambulance industry for 2 years and issue a report on the current state of the air ambulance industry.

AAPB recommendation: The AAPB recommends that HHS and DOT collect data from air ambulance providers and suppliers regarding: (1) average cost per trip; (2) air ambulance base rates and patient-loaded statute mileage rates; (3) ancillary fees for specialty services; (4) reimbursement data aggregated by payor type and per transport, based on median rate and ZIP code, with data regarding private insurance further identified by provider type; (5) alternate revenue sources (e.g., subsidies or membership programs) broken down per transport for reporting purposes; (6) volume of transports, segregated by aircraft type (fixed wing and rotary wing) and takeoff ZIP code for government purposes, or for public use when aggregated with other data; (7) market share for air transport, obtained from the FAA certificate holder and identifying the certificate holder's parent company; and (8) market share for health care, by looking at the program type for the FAA certificate holder.

How implementing this recommendation will support clinical standards and patient safety: AAPB recommended that this data be collected at the federal level to (a) advance the understanding of the air ambulance industry by policymakers, (b) increase transparency of market conditions impacting air ambulance services. The CS Subcommittee discussed that this transparency and understanding of the industry landscape would be critical to informing other recommendations regarding adequacy of reimbursement, availability of clinical capabilities in each market, and federal or state oversight of clinical standards and patient safety.

Discussion and Voting: Endorsement of AAPB Recommendations



AAQPS committee members shall officially vote on endorsing AAPB recommendations. **Each Committee Member will be asked to submit their vote (yes / no / abstain) via Zoom chat directly to a designated team member for each respective AAPB recommendation.**

AAPB Recommendations for Endorsement

Clinical Triage Criteria

Problem statement: Claims can be denied due to medical necessity based on patient information collected after the transport or with lack of context regarding geography and available resources, even though it met triage standards (scene calls) or was certified by physician for air transport (interfacility transport) at the time of call.

- ✓ **Recommendation #CS-A:** Congress should direct HHS to implement AAPB recommendations clarifying that there should be a “rebuttable presumption” in the No Surprises Act Independent Dispute Resolution (IDR) process that the air ambulance service was medically necessary for purposes of adjudicating payment disputes for out of network services.

Clinical Capability Levels

Problem statement: Clinical capabilities available may not be appropriately matched to the community (may have insufficient or excessive supply of specific clinical services).

- ✓ **Recommendation #CS-B:** Congress should enact legislation to implement the AAPB recommendation for HHS to evaluate the adequacy of Medicare reimbursement rates for air ambulance. This evaluation should specifically assess whether reimbursement should be differentiated for transports involving specialty care or more intensive procedures to ensure payment is adequate for the diversity of critical services provided in the air ambulance setting, and should consider use of add-on payments, modifier codes, and/or procedure codes commonly used across payors to ensure clarity and efficiency in claims processing. The evaluation should also assess adequacy of reimbursement for aviation operational and training costs in the context of current FAA requirements and advancements in best practices for flight safety.
- ✓ **Recommendation #CS-C:** Implement AAPB recommendation seeking clarification regarding how Airline Deregulation Act (ADA) preemption over states’ ability to regulate price, routes, and services applies or does not apply to states’ ability to regulate clinical aspects of air ambulance, such as use of Certificate of Need or regulating clinical scope of practice to ensure appropriate access to clinical services needed in a community.
- ✓ **Recommendation #CS-D:** Implement AAPB recommendation regarding implementation of data collection requirements authorized under No Surprises Act (section 106) and subsequent Notice of Proposed Rulemaking (CMS-9907-P, Document Number 2021-19797, 86 FR 51730-51779), which would allow CMS to collect operational data on the air ambulance industry for 2 years and issue a report on the current state of the air ambulance industry.

Recap of Recommendations and Additional Discussion

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**

July 10 Meeting Discussion



- **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.
 - *Waivers/exemptions:* discussion to focus on options for how these can be applied appropriately, balancing maintaining access in frontier communities while applying a consistent minimum standard nationally.
 - *HHS vs. FAA regulation:* discussion to focus on delineating regulatory roles to ensure HHS is not regulating flight safety and that there is sufficient collaboration to avoid unintended impacts of clinical standards on flight safety.
 - *ADA:* discussion to focus on the recommendation's possible interaction with the ADA, if any.
- **Recommendations #CS–A through #CS–D:** AAPB recommendations relevant to the AAQPS.

Break

Flight Safety Subcommittee

AAQPS Statutory Mandate



The Department of Health and Human Services (HHS) Secretary and the Secretary of Transportation are required to establish an Advisory Committee on Air Ambulance Quality and Patient Safety for the purpose of reviewing 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 each of the following with respect to air ambulance services:

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

These recommendations will be used to enhance CMS's approach to air ambulance quality and safety and may be used to help establish an air ambulance quality reporting or value-based purchasing program in the future

More info: <https://www.cms.gov/medicare/regulations-guidance/advisory-committees/advisory-committee-air-ambulance-quality-and-patient-safety>

Background on Air Ambulance Flight Safety

Quality and Patient Safety



- **Increased Demand for Air Ambulance Services:** The need for air ambulance operations has grown significantly, particularly in rural and remote areas where access to critical care facilities is limited. These services are vital for rapid patient transport during emergencies.
- **Safety Concerns in Adverse Weather Conditions:** Air ambulance operations in poor visibility, low ceilings, and adverse weather conditions continue to pose significant risks to patient and crew safety, highlighting the need for improved infrastructure and technology.
- **Focus on Crash Survivability:** Despite advancements, crash survivability remains a challenge, with ongoing efforts to improve aircraft design, such as energy-absorbing seats, stronger airframes, and fire-resistant fuel systems.
- **Focus on Technology Integration:** Although cost barriers have impeded the adoption of some advanced technologies, such as terrain awareness and warning systems (TAWS), autopilot systems, and enhanced GPS navigation, new technology can improve situational awareness and operational safety for air ambulance crews.
- **Performance-Based Standards:** The development of performance-based standards can help operators and manufacturers design more efficient and safety-compliant aircraft, streamlining the certification process.
- **Public and Legislative Attention:** Air ambulance safety has gained attention from policymakers and the public, prompting calls for continued investment in infrastructure, technology, and regulatory oversight to ensure patient and crew safety.

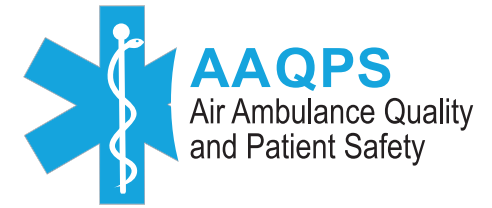
Meetings and Process of the Subcommittee



The subcommittee held **5** meetings from December 2024-April 2025

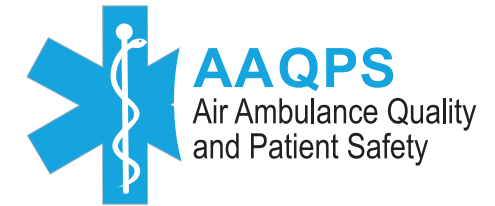
- **December 19:** Focused on understanding the two statutory areas of improving service reliability and enhancing patient safety, and identifying key concerns such as infrastructure gaps, human factors, low-altitude congestion, and unimplemented NTSB recommendations.
- **January 29:** Further discussed improving air ambulance safety through better weather reporting, updated infrastructure, unified standards, and enhanced technology and regulations.
- **February 18:** Reviewed problem statements developed in January and explored solutions, including NTSB recommendations, funding priorities, improved weather sensors, expanded weather cameras, and collaboration on helipad safety and patient protection.
- **March 20:** Prioritized solutions to improve air ambulance service reliability and patient safety, informed by subject matter experts who presented insights on vertical flight safety, heliport infrastructure challenges, and advancements in weather monitoring, with plans to finalize recommendations in April.
- **April 10:** Reviewed and finalized draft recommendations on improving weather reporting, helipad infrastructure, low-altitude instrument flight rules (IFR) systems, and safety of single pilot operations, while also prioritizing two additional recommendations to streamline technology certification and mandate occupant protection standards.

Subcommittee Subject Matter Experts



- The Flight Safety Subcommittee heard from the following external subject matter experts:
 - Chichoon Shin, NTSB
 - Austin Croft, Aviation Weather Center
 - Cliff Johnson, FAA's William J. Hughes Technical Center for Advanced Aerospace
 - Rex Alexander, Five-Alpha
 - Cohl Pope, FAA

Summary of Flight Safety Subcommittee Recommendations (1 of 2)



Adverse Weather (Gaps in Weather Reporting in Non-Terminal Areas)

Problem Statement: 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.

✓ **Recommendation #FS-1: Enhance Weather Reporting and Infrastructure in Non-Terminal Areas**

Facility Infrastructure (Hospital Helipad Safety and Data Gaps)

Problem Statement: 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 complicates safe operations.

✓ **Recommendation #FS-2: Modernize Helipad Data, Infrastructure, and Safety Standards**

Instrument Flight Rules (IFR) Infrastructure (Challenges with Low-Altitude IFR Operations)

Problem Statement: Air ambulance operations face significant limitations due to the lack of low-altitude Instrument Flight Rules (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 aviation, unmanned aircraft systems (UAS) including drones and advanced air mobility vehicles, is increasing airspace congestion near hospitals and airports, potentially delaying critical life-saving missions.

✓ **Recommendation #FS-3: Improve Low-Altitude IFR infrastructure**

Summary of Flight Safety Subcommittee Recommendations (2 of 2)



Single Pilot Operations (Addressing Safety and Airspace Challenges in Air Ambulance Operations)

Problem Statement: Air ambulance operations face significant safety challenges due to high pilot workload 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.

✓ **Recommendation #FS-4: Enhance Safety and Technology for Single-Pilot Operations**

Barriers to Innovation (New Technology and Medical Equipment Certification)

Problem Statement: 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.

✓ **Recommendation #FS-5: Streamline Certification and Expedite Approval Pathways for Air Ambulance Technologies and Medical Equipment**

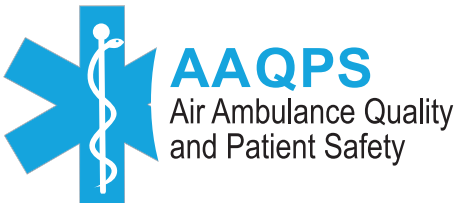
Occupant Safety Standards (Addressing NTSB Recommendations)

Problem Statement: 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.

✓ **Recommendation #FS-6: Mandate Critical Safety Standards for Air Ambulance Occupant Protection**

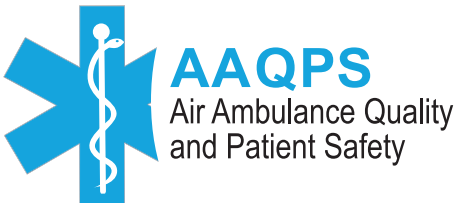
Recommendation #FS-1: Enhance Weather Reporting and Infrastructure in Non-Terminal Areas

Background



Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
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.
Rationale	<ul style="list-style-type: none">✓ The lack of detailed and reliable weather data can make it difficult for helicopter crews to safely complete missions, such as transporting patients. In some cases, they may unexpectedly encounter poor visibility or dangerous weather conditions, which can disrupt the transport and put both the crew and the patient at risk.✓ Improvements to weather reporting and infrastructure will provide critical real-time weather data to support safer air ambulance operations during departure, enroute and arrival.✓ Weather is responsible for the inability to accept or complete over 25% of patient transport requests by helicopter.✓ Encountering unforecasted or unknown conditions due to a lack of weather forecasting availability and reduced visibility increase the risk of an inadvertent instrument meteorological conditions (IIMC) encounter and unnecessary risk for the occupants.✓ More accurate weather information improves the accuracy of forecasting and aids pilots in making timely decisions around options for performing air ambulance operations safely.

Discussion



Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Subcommittee Recommendation	<p>Enhance Weather Reporting and Infrastructure in Non-Terminal Areas: 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:</p> <ul style="list-style-type: none">• 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 services into the National Airspace Data Interchange (NADIN) for Graphical Forecasts for Aviation – Low Altitude (GFA-LA)
Benefits	<ul style="list-style-type: none">✓ Improved Safety for Air Ambulance Operations: Enhanced weather reporting systems will provide real-time, localized weather data, enabling air ambulance pilots to make informed decisions about flight routes, departure, and landing conditions. This reduces the risk of accidents caused by unexpected weather changes.✓ More Reliable Emergency Response in Rural Areas: Pilot access to more accurate weather data can improve the safety and efficiency of air ambulance services, ensuring timely and reliable medical assistance for residents in remote regions. This could lead to better health outcomes and potentially save lives.✓ Improved Safety for All Low Altitude Aviation Operations: Investment in weather reporting capabilities benefits all aviation operations that utilize the National Airspace System.
Challenges for Consideration	<ul style="list-style-type: none">• Adequate Funding is necessary to assure the benefit for all regions of the country.• Geographic Locations are not all conducive to the efforts.

Voting

Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Options for improving service reliability during poor weather, night conditions, or other adverse conditions

Subcommittee Recommendation	<p>Enhance Weather Reporting and Infrastructure in Non-Terminal Areas: 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:</p> <ul style="list-style-type: none">• 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 services into the National Airspace Data Interchange (NADIN) for Graphical Forecasts for Aviation – Low Altitude (GFA-LA)
Voting Options	<p><i>Committee members should vote yes/no/abstain for the recommendation (#FS-1).</i></p> <p><i>Committee members should note if they believe they have a conflict of interest.</i></p>

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

Background

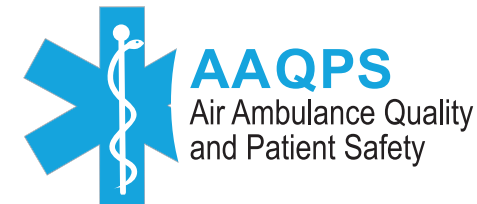
Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Problem Statement	Hospital Helipad Safety and Data Gaps: Many hospital helipads, critical for air ambulance operations, are not listed in the FAA's Airport Data and Information Portal (ADIP) 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 complicates safe operations.
Rationale	<ul style="list-style-type: none"> ✓ Hospital helipads play a vital role in air ambulance operations, yet incomplete data and inconsistent infrastructure standards undermine their safety and reliability. ✓ By improving accuracy of the FAA's ADIP database and upgrading helipad facilities, Congress can ensure pilots have access to accurate, real-time information, improving safety and route planning and reducing delays during critical missions. ✓ Investing in hospital helipad standardization and collaboration between the FAA and industry stakeholders will drive long-term improvements in safety and functionality.

Discussion

Options for improving service reliability during poor weather, night conditions, or other adverse conditions

Subcommittee Recommendation	<p>Modernize Helipad Data, Infrastructure, and Safety Standards: Congress should authorize funding and establish initiatives to modernize and digitize the Aeronautical 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.</p> <p>This effort should prioritize:</p> <ul style="list-style-type: none"> • 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 locations with medical services into the United States Notices to Airmen (NOTAM) system.
Benefits	<ul style="list-style-type: none"> ✓ Enhanced Air Ambulance Operations: Accurate and updated heliport data will improve operational safety and route planning, reduce delays, and support critical medical missions. ✓ Improved Airspace Awareness: Better oversight of areas near helicopter approach and departure paths, including updates to FAA tools like the "Know Before You Fly" app (B4UFly), will help notify drone operators of potential safety risks and reduce the likelihood of aircraft collisions. ✓ Streamlined Processes: Simplified submission forms and faster FAA reviews will encourage facilities to update data, keeping the database reliable. ✓ Stronger Collaboration: Improved communication between the FAA, hospitals, and the aviation industry will enhance coordination and problem-solving. ✓ Proactive Data Maintenance: Mandating updates and raising awareness will ensure facilities maintain accurate and comprehensive information. ✓ Enhanced Disaster Response: Improved safety and efficiency in emergency responses to multi-patient incidents and disaster events at regional or national levels.
Challenges for Consideration	<ul style="list-style-type: none"> ⊗ Administrative Challenges: Smaller facilities may struggle to meet new data requirements. ⊗ Resources for Enforcement: Voluntary compliance has not been effective in the past. ⊗ Funding Disparities: Grants could favor larger facilities, leaving smaller facilities and those in rural areas underfunded.

Voting



Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Options for improving service reliability during poor weather, night conditions, or other adverse conditions

Subcommittee Recommendation

Modernize Helipad Data, Infrastructure, and Safety Standards: Congress should authorize funding and establish initiatives to modernize and digitize the Aeronautical 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 IFR (Instrument Flight Rules) 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 locations with medical services into the United States Notices to Airmen (NOTAM) system.

Voting Options

Committee members should vote yes/no/abstain for the recommendation (#FS-2).

Committee members should note if they believe they have a conflict of interest.

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

Background

Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Problem Statement	<p>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 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.</p>
Rationale	<ul style="list-style-type: none"> ✓ Expanding low-altitude IFR infrastructure is vital for improving helicopter air ambulance operations, enhancing safety, and ensuring reliable patient transport during poor or low-visibility weather conditions. ✓ Modernizing helipad capabilities and establishing a traffic management framework for UAS, including drones and advanced air mobility vehicles, will future-proof the airspace and support coordinated operations. ✓ These investments will strengthen rural healthcare access and address the evolving needs of emergency medical transport.

Discussion

Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Subcommittee Recommendation	<p>Improve Low-Altitude IFR Infrastructure: 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.</p>
Benefits	<ul style="list-style-type: none"> ✓ Enhanced Safety: Dedicated low-altitude IFR infrastructure reduces reliance on visual flight rules (VFR), minimizing risks associated with poor visibility and adverse weather. ✓ Expanded Access: Rural and underserved areas will benefit from access to higher-level medical care, better connectivity, and enhanced reliability for patient transport. ✓ Future-Proofing Airspace: A traffic management framework for UAS drones and advanced air mobility will reduce potential airspace conflicts and ensure safe integration of emerging technologies and air ambulance operations.
Challenges for Consideration	<ul style="list-style-type: none"> ⦿ Implementation Delays: Developing IFR routes and upgrading infrastructure may face logistical and regulatory hurdles, slowing progress. ⦿ Cost Burden: Hospitals and air ambulance operators may struggle to afford IFR-compatible upgrades, even with funding incentives. ⦿ Oversight and Support Resources: The FAA may not have adequate resources without increased funding for added oversight and support functions.

Voting

Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Options for improving service reliability during poor weather, night conditions, or other adverse conditions

Subcommittee Recommendation	Improve Low-Altitude IFR Infrastructure: 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 Options	<i>Committee members should vote yes/no/abstain for the recommendation (#FS-3).</i> <i>Committee members should note if they believe they have a conflict of interest.</i>

Recommendation #FS-4: Enhance Safety and Technology for Single-Pilot Operations

Background



Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Problem Statement	Addressing Safety and Airspace Challenges in Air Ambulance Operations: Air ambulance operations face significant safety challenges due to high pilot workload 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.
Rationale	<ul style="list-style-type: none">✓ Equipping air ambulance helicopters with Stability Augmentation Systems (SAS) or Auto Flight Control Systems (AFCS) and enhanced vision technologies, consistent with NTSB recommendations, will improve helicopter air ambulance safety, reduce pilot workload, and ensure reliable and safe operations in challenging conditions.✓ Funding retrofits and supporting FAA research will promote innovative solutions, reduce pilot workload, and manage growing airspace complexity and other challenging human factors safety issues.

Discussion

Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Subcommittee Recommendation	Enhance Safety and Technology for Single-Pilot Operations: Congress should mandate that 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.
Benefits	<ul style="list-style-type: none"> ✓ Improved Air Ambulance Safety: SAS/AFCS systems and enhanced vision technologies will reduce pilot workload, improve situational awareness, and support safer single-pilot operations in challenging conditions. ✓ Improved Decision-Making Skills: By simulating complex scenarios, virtual reality (VR) training enhances situational awareness and aeronautical decision-making, preparing pilots for real-world challenges. ✓ Future-Ready Aviation: Investments in advanced simulation tools, like VR headsets and workload reduction systems, will prepare the industry for the growing demands of low-altitude aviation.
Challenges for Consideration	<ul style="list-style-type: none"> ⦿ Cost Challenges: Retrofitting existing helicopters and implementing new technologies may strain budgets for smaller operators, even with funding incentives. ⦿ Regulatory Challenges: <ul style="list-style-type: none"> • Expanding VR training authorization may require updates to existing regulations and standards, which could delay widespread adoption. • The certification process to incorporate new technologies is neither timely nor efficient and can be cost prohibitive.

Voting

Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Options for improving service reliability during poor weather, night conditions, or other adverse conditions	
Subcommittee Recommendation	Enhance Safety and Technology for Single-Pilot Operations: Congress should mandate that 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 Options	<p><i>Committee members should vote yes/no/abstain for the recommendation (#FS-4).</i></p> <p><i>Committee members should note if they believe they have a conflict of interest.</i></p>

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

Background

Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety

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.
Rationale	<ul style="list-style-type: none"> ✓ Modernizing certification processes is essential to keep pace with rapid advancements in technology and meet the evolving needs of emergency medical services. ✓ Streamlined and standardized certification systems would enable faster integration of innovative solutions, ensuring patients benefit from cutting-edge medical equipment and safer aircraft systems. ✓ Additionally, removing barriers to innovation supports operational efficiency, allowing providers to deliver higher-quality care while optimizing resources in critical, time-sensitive situations.

Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety	
Subcommittee Recommendation	Streamline Certification and Expedite Approval Pathways for Air Ambulance Technologies and Medical Equipment: 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 Branch to improve communication with operators and manufacturers, expedite approvals, and provide regulatory guidance.
Benefits	<ul style="list-style-type: none">✓ Faster Adoption of Life-Saving Technologies: 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.✓ Greater Operational Efficiency: Standardized policies and procedures, along with a dedicated FAA liaison team, will reduce delays and inconsistencies, allowing operators to deploy new technologies more effectively.✓ Improved Collaboration and Clarity: A dedicated liaison team will enhance communication between regulators, operators, and manufacturers, providing clear guidance and simplifying the implementation of critical technologies.✓ Performance-Based Standards: These will provide a pathway for original equipment manufacturers and operators to improve design efficiency while meeting certification requirements.
Challenges for Consideration	<ul style="list-style-type: none">⦿ Resource Constraints: Establishing expedited pathways and a dedicated liaison team may require significant funding and staffing, straining FAA resources.⦿ Regulatory Overhaul Complexity: Transitioning to performance-based standards and streamlined processes may involve extensive revisions to existing regulations, requiring time and stakeholder buy-in.⦿ Ensuring Safety and Accountability: Balancing expedited approvals with rigorous safety assessments may pose challenges in maintaining high safety standards while accelerating innovation.

Voting

Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety	
Subcommittee Recommendation	Streamline Certification and Expedite Approval Pathways for Air Ambulance Technologies and Medical Equipment: 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 Branch to improve communication with operators and manufacturers, expedite approvals, and provide regulatory guidance.
Voting Options	<p><i>Committee members should vote yes/no/abstain for the recommendation (#FS-5).</i></p> <p><i>Committee members should note if they believe they have a conflict of interest.</i></p>

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

Background



Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety	
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.
Rationale	<ul style="list-style-type: none">✓ Addressing this issue is vital because air ambulances operate in dynamic environments where safety measures are essential to protect lives.✓ Implementing proven protective technologies improves survivability for passengers and crew during accidents and strengthens public confidence in the industry.✓ Aligning practices with established safety standards reflects a commitment to accountability and continuous improvement, creating a safer operational framework while reducing the financial and societal consequences of preventable injuries and fatalities.

Discussion



Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety	
Subcommittee Recommendation	Mandate Critical Safety Standards for Air Ambulance Occupant Protection: Congress should mandate the implementation of FAA Part 135 Aviation Rulemaking Advisory Committee (ARAC) recommendations on 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.
Benefits	<ul style="list-style-type: none">✓ Enhanced Safety for Passengers and Crew: Implementing crashworthy and crash-resistant technologies significantly reduces the risk of injuries and fatalities during accidents, ensuring greater protection for those aboard air ambulances.✓ Alignment with Proven Safety Standards: Adopting these technologies brings industry practices in line with established safety benchmarks, fostering consistency and accountability while promoting a culture of safety.
Challenges for Consideration	<ul style="list-style-type: none">⦿ Financial Burden: Retrofitting aircraft or purchasing compliant models may impose significant costs on operators, particularly smaller ones, potentially impacting service availability.⦿ Operational Disruptions: Upgrading aircraft could temporarily disrupt air ambulance services, especially in underserved areas.⦿ Industry Resistance: Operators and manufacturers may resist due to cost concerns or perceived regulatory overreach, potentially delaying compliance.⦿ Regulatory Complexity: Enforcing the mandate will require coordination between Congress, the FAA, and stakeholders, potentially leading to lengthy processes and oversight challenges.

Voting

Each Committee Member will be asked to submit their vote via Zoom chat directly to a designated team member.

Differences between air ambulance vehicle types, services, and technologies, and other flight capability standards, and the impact of such differences on patient safety

Subcommittee Recommendation	Mandate Critical Safety Standards for Air Ambulance Occupant Protection: 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.
Voting Options	<i>Committee members should vote yes/no/abstain for the recommendation (#FS-6).</i> <i>Committee members should note if they believe they have a conflict of interest.</i>

Recap of Recommendations and Additional Discussion

Adopted Recommendation



- **Recommendation #FS-1:** Enhance Weather Reporting and Infrastructure in Non-Terminal Areas
 - **Voting Results:** 12 Yes; 0 No; 2 Abstain
- **Recommendation #FS-2:** Modernize Helipad Data, Infrastructure, and Safety Standards
 - **Voting Results:** 11 Yes; 0 No; 3 Abstain
- **Recommendation #FS-3:** Improve Low-Altitude IFR infrastructure
 - **Voting Results:** 12 Yes; 0 No; 2 Abstain
 - **Verbal Confirmation of Vote:** Mark Gamber
- **Recommendation #FS-4:** Enhance Safety and Technology for Single-Pilot Operations
 - **Voting Results:** 11 Yes; 0 No; 3 Abstain
 - **Verbal Confirmation of Vote:** Paul Julander, Mark Gamber
- **Recommendation #FS-5:** Streamline Certification and Expedite Approval Pathways for Air Ambulance Technologies and Medical Equipment
 - **Voting Results:** 13 Yes; 0 No; 1 Abstain
 - **Verbal Confirmation of Vote:** Paul Julander, Mark Gamber

July 10 Meeting Discussion

- **Recommendation #FS-6:** Mandate Critical Safety Standards for Air Ambulance Occupant Protection.
 - *ARAC Recommendations:* discussion to focus on the details of the ARAC recommendations and clarifying language around what exactly is being proposed with the recommendation.
- **Recommendations #FS-1 through #FS-6**
 - *Helicopter vs. Fixed-Wing:* discussion to focus on any language changes needed for adopted recommendations to clarify if they apply to helicopter or fixed-wing air ambulances.

Break

Public Comments

Closing and Next Steps

Recommendations Adopted by the Committee



- **AAQPS Recommendation 1:** 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.
- **AAQPS Recommendation 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.
- **AAQPS Recommendation 3:** 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.
- **AAQPS Recommendation 4:** 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.
- **AAQPS Recommendation 5:** 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).

Recommendations Adopted by the Committee



- **AAQPS Recommendation 6:** 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 locations with medical services into the United States Notices to Airmen (NOTAM) system.
- **AAQPS Recommendation 7:** 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.
- **AAQPS Recommendation 8:** Congress should mandate that 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.
- **AAQPS Recommendation 9:** 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.

Wrap Up



- AAQPS Committee members final reflections
- Next Meeting: July 10, 2025 10 AM EST – 5 PM EST focused on discussion and voting on remaining recommendations
- Procedure for providing additional comments: email CMS at AAQPS@cms.hhs.gov

Thank you!