

ADS Institute for Dental Safety and Science

Handbook for Development of Guidelines, Expert Guidance Documents, Consensus Statements, and Practice Statements

February 2026

Adapted from the SHEA Handbook for SHEA-Sponsored Guidelines, Expert Guidance Documents, Consensus Statements, and Practice Statements (2024), with permission. The ADS Institute gratefully acknowledges the Society for Healthcare Epidemiology of America (SHEA) for their leadership in developing rigorous methodologies for guideline development.

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Purpose and Scope

The ADS Institute Guidelines Committee has created this document to assist ADS Institute-sponsored writing groups in applying a consistent and rigorous methodology for the development of guidelines, expert guidance documents, consensus statements, and practice statements related to dental safety, infection prevention, and evidence-based dental practices.

This Handbook is a living document that will be updated at the discretion of the Guidelines Committee. This first version was published in January 2026 and applies to all documents developed after this date.

The processes outlined in this Handbook ensure that ADS Institute documents:

- Are based on systematic review of the best available evidence
- Incorporate expert consensus when evidence is limited
- Are transparent in methodology and free from conflicts of interest
- Include diverse perspectives from stakeholders
- Are subject to rigorous peer review and public comment
- Are updated regularly to reflect new evidence
- Follow established standards for guideline development
- Are accessible and implementable in diverse practice settings

Definitions of Document Types

The ADS Institute develops four distinct types of documents, each with specific methodological requirements, development processes, and intended uses.

Guidelines

Guidelines are systematically developed statements that include recommendations intended to optimize dental safety practices and patient care. They are based on systematic review of evidence and assessment of benefits and harms of alternative care options.

Key characteristics:

- Utilize formal evidence grading (GRADE or similar approved methodology)
- Include explicit recommendations with strength ratings (Strong or Conditional)
- Require adequate published evidence to support recommendations
- Follow rigorous systematic literature review with pre-specified search strategies
- Assess quality of evidence (High, Moderate, Low, or Very Low)
- Consider benefits, harms, patient values, preferences, and resource implications
- Undergo extensive peer review and public comment (minimum 30 days)
- Updated every 3-5 years or when significant new evidence emerges
- Include implementation considerations and tools
- Document the evidence-to-recommendation process transparently

Appropriate when:

- Adequate published evidence exists (RCTs, observational studies, systematic reviews)
- Topic addresses clinical/operational decisions with significant impact on safety
- Formal evidence grading and recommendation strength ratings are feasible
- Guidance will inform policy, regulation, or standard of care
- Resources available for comprehensive systematic review and GRADE assessment

Expert Guidance Documents

Expert guidance documents provide comprehensive guidance where evidence is mixed, evolving, or formal guideline development is not feasible. They combine systematic literature review with expert consensus.

Key characteristics:

- Systematic literature search and review (similar to guidelines)
- Incorporate expert consensus when evidence is limited or conflicting
- May include recommendations with less formal grading than GRADE
- Address practical implementation and real-world applicability
- Appropriate for emerging topics or evolving evidence
- Include expert interpretation of evidence and clinical experience
- Undergo peer review and public comment (minimum 30 days)
- Development timeline: 18-32 months
- May include algorithms, decision trees, or implementation frameworks
- Clearly distinguish evidence-based statements from expert opinion

Appropriate when:

- Evidence exists but is mixed, variable quality, or difficult to synthesize formally
- Topic requires integration of multiple evidence types
- Expert interpretation and contextualization adds value
- Systematic review important but formal GRADE not feasible
- Topic addresses complex, multifaceted issues requiring nuanced guidance

Consensus Statements

Consensus statements represent collective expert opinion where evidence is emerging, limited, or rapid guidance is needed. They utilize structured consensus processes and clearly identify areas of agreement and disagreement.

Key characteristics:

- Utilize expert consensus process (typically modified Delphi)
- May include literature review but not systematic review
- Appropriate for emerging issues requiring timely guidance
- Clearly identify areas of agreement and disagreement
- Document consensus process and level of agreement achieved
- Updated as new evidence becomes available
- Development timeline: 12-18 months
- Address topics where evidence insufficient for formal guidelines
- Include rationale for expert opinions and recommendations
- Undergo internal review and may include external peer review

Appropriate when:

- Evidence is emerging or very limited
- Rapid guidance needed (emerging infectious disease, new technology)
- Topic addresses areas where expert experience is primary knowledge source
- Formal systematic review not feasible or would not yield sufficient evidence
- Goal is to achieve expert consensus on controversial or uncertain topics

Practice Statements

Practice statements summarize views on dental safety program-related practices such as infrastructure, business cases, quality outcomes, implementation strategies, and workforce development.

Key characteristics:

- Do not require systematic literature review
- Focus on practical implementation and program development
- Include best practices and lessons learned
- Appropriate for operational and administrative topics
- May include case studies, examples, and real-world applications
- Development timeline: 12-18 months
- Address business cases, cost-effectiveness, or resource allocation
- Include practical tools, templates, and implementation guides
- Developed in response to specific stakeholder needs
- Undergo internal review and targeted stakeholder review

Appropriate when:

- Topic addresses program infrastructure or operational issues
- Goal is to provide practical implementation guidance
- Audience needs tools and resources rather than clinical recommendations
- Topic addresses business, administrative, or organizational aspects
- Sharing best practices and lessons learned is primary objective

Proposal Process

All guidelines, expert guidance documents, consensus statements, and practice statements require approval of a manuscript proposal by the Guidelines Committee, Publications Committee (if proposing journal publication), and the Core Advisory Committee.

Manuscript Proposal Form

Proposals are submitted by:

- Core Advisory Committee members
- Guidelines Committee members
- Liaison organization representatives
- Workgroup chairs
- ADS Institute staff
- External subject matter experts (with Core Advisory Committee member sponsorship)

The Manuscript Proposal Form must include:

- Topic title and rationale for development
- Proposed document type with justification
- Target audience and patient population
- Key questions or objectives to be addressed (PICO format when applicable)
- Preliminary literature search results demonstrating evidence availability
- Proposed writing panel composition with expertise areas
- Potential conflicts of interest
- Timeline and resource requirements
- Publication plans (journal submission, open access, etc.)
- Relationship to existing guidance documents
- Stakeholder input or needs assessment results

Proposal Review and Approval

The Guidelines Committee reviews proposals quarterly and evaluates them based on:

- Public health impact and urgency
- Availability of evidence to support the proposed document type
- Alignment with ADS Institute strategic priorities
- Gaps in existing guidance
- Stakeholder requests and needs
- Availability of resources and subject matter experts

- Potential for implementation and impact
- Regulatory or policy relevance

Approved proposals are prioritized and added to the development queue. The Guidelines Committee provides guidance on document type selection, methodology, and resource allocation.

Writing Panel Composition

Writing panels should include diverse expertise and perspectives relevant to the topic. Panel composition is critical to ensuring credibility, comprehensiveness, and implementability of guidance.

Panel Composition Considerations

Panels should include:

- Content expertise: Subject matter experts with relevant clinical, research, or public health experience
- Methodological expertise: Individuals with expertise in systematic review, evidence grading, or consensus methods
- Practice setting diversity: Representatives from private practice, academic, public health, and specialty settings
- Geographic diversity: Representatives from different regions when appropriate
- Professional diversity: Dentists, dental hygienists, dental assistants, infection preventionists, public health professionals
- Career stage diversity: Mix of early-career and senior professionals
- Demographic diversity: Consideration of gender, race, ethnicity, and other dimensions
- Patient/stakeholder representatives: When appropriate for the topic

Typical Panel Structure

- Chair(s): 1-2 Core Advisory Committee members or recognized experts who lead the panel
- Core writing group: 6-10 members with primary responsibility for document development
- Extended panel: Additional subject matter experts who contribute to specific sections
- Methodologist: Expert in systematic review and/or evidence grading (required for guidelines)
- Patient/stakeholder representative: When appropriate for the topic
- ADS Institute staff liaison: Provides administrative support and ensures adherence to Handbook

Panel size typically ranges from 8-15 members for guidelines and expert guidance documents, and 6-10 members for consensus statements and practice statements.

Conflict of Interest Policy

The ADS Institute is committed to ensuring that its guidance documents are free from bias and conflicts of interest. All writing panel members, peer reviewers, and others involved in document development must disclose potential conflicts of interest.

Disclosure Requirements

All participants must disclose:

- Financial relationships with commercial entities (consulting fees, honoraria, research funding, stock ownership, patents)
- Intellectual property interests related to the topic
- Leadership positions in organizations with interests related to the topic
- Public statements or advocacy positions related to the topic
- Personal or family relationships that could influence objectivity
- Any other relationships or activities that could be perceived as conflicts of interest

Disclosures must cover the 36 months prior to appointment and must be updated if circumstances change during the document development process. All disclosures are reviewed by the Guidelines Committee.

COI Review and Management

The Guidelines Committee reviews all conflict of interest disclosures and determines whether conflicts are manageable or require recusal. Management strategies include:

- Full participation with disclosure: Minor conflicts that do not compromise objectivity
- Limited participation: Participation in discussions but not voting on specific recommendations
- Recusal from specific topics: Participation in most of the document but recusal from sections with direct conflicts
- Complete recusal: Removal from the writing panel if conflicts are substantial and unmanageable

All conflicts of interest and their management are disclosed in the published document. The ADS Institute follows the principles outlined in the Institute of Medicine report "Clinical Practice Guidelines We Can Trust."

Panel Chair Requirements

Panel chairs must be free from conflicts of interest related to the topic. A majority of the writing panel must also be free from conflicts of interest.

Systematic Literature Search and Review

Guidelines and expert guidance documents require a systematic literature search and review to identify, evaluate, and synthesize the best available evidence relevant to the key questions or objectives.

Literature Search Protocol

The writing panel, in collaboration with a medical librarian or information specialist, develops a literature search protocol that includes:

- Key questions or PICO (Population, Intervention, Comparison, Outcome) statements
- Search terms and Boolean operators
- Databases to be searched (PubMed, Embase, CINAHL, Cochrane Library, dental-specific databases)
- Date range for search
- Language restrictions (if any)
- Study designs to be included (RCTs, observational studies, systematic reviews, etc.)
- Inclusion and exclusion criteria
- Grey literature sources (conference abstracts, dissertations, etc.)

Evidence Review Process

The evidence review process includes:

- Title and abstract screening by at least two independent reviewers
- Full-text review of potentially relevant articles
- Data extraction using standardized forms
- Quality assessment of individual studies using validated tools (e.g., Cochrane Risk of Bias tool, Newcastle-Ottawa Scale)
- Synthesis of evidence (narrative synthesis or meta-analysis when appropriate)
- Documentation of search results using PRISMA flow diagram
- Assessment of publication bias when applicable
- Grading of overall quality of evidence for each outcome

Disagreements between reviewers are resolved through discussion or consultation with a third reviewer. All decisions are documented.

Inclusion of Products, Services, or Treatments

When guidance documents address specific products, services, or treatments, the writing panel should:

- Base recommendations on evidence rather than specific brand names
- Use generic or descriptive terms when possible
- Disclose any conflicts of interest related to specific products
- Consider cost-effectiveness and accessibility
- Note when evidence is limited to specific products or settings
- Avoid endorsement of specific commercial products unless evidence clearly supports superiority

Grading Evidence Quality and Recommendation Strength (GRADE)

For guidelines, the ADS Institute uses the GRADE (Grading of Recommendations Assessment, Development and Evaluation) methodology. Expert guidance documents may use modified grading approaches appropriate to the evidence base.

GRADE Methodology Overview

GRADE assesses:

- Quality of evidence: High, Moderate, Low, or Very Low
- Strength of recommendation: Strong or Conditional (Weak)
- Balance of benefits and harms
- Patient values and preferences
- Resource considerations (cost, feasibility)

Quality of Evidence Levels

High Quality ($\oplus\oplus\oplus\oplus$):

Further research is very unlikely to change our confidence in the estimate of effect. Typically based on well-conducted randomized controlled trials without important limitations.

Moderate Quality ($\oplus\oplus\oplus\circ$):

Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate. Typically based on RCTs with important limitations or strong evidence from observational studies.

Low Quality ($\oplus\oplus\circ\circ$):

Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate. Typically based on observational studies or RCTs with very serious limitations.

Very Low Quality ($\oplus\circ\circ\circ$):

Any estimate of effect is very uncertain. Typically based on case series, case reports, or expert opinion.

Factors Affecting Quality of Evidence

Quality of evidence can be downgraded for:

- Risk of bias (study limitations)
- Inconsistency (unexplained heterogeneity)
- Indirectness (differences in population, intervention, comparator, or outcome)
- Imprecision (wide confidence intervals, small sample size)
- Publication bias

Quality of evidence can be upgraded for:

- Large magnitude of effect
- Dose-response gradient
- All plausible confounding would reduce the demonstrated effect

Strength of Recommendations

Strong Recommendation ("We recommend..."):

Benefits clearly outweigh harms (or vice versa) for most patients. Most patients would want the recommended course of action. Clinicians can confidently offer the intervention to most patients.

Conditional/Weak Recommendation ("We suggest..."):

Benefits and harms are closely balanced, or there is uncertainty about the balance. Patient values and preferences may vary. Clinicians should help patients make decisions consistent with their values.

Evidence-to-Recommendation Process

The writing panel considers:

- Quality of evidence
- Balance of benefits and harms
- Patient values and preferences
- Resource use and cost-effectiveness
- Equity and acceptability

- Feasibility of implementation

The panel documents the rationale for each recommendation, including the key factors that influenced the strength of the recommendation.

Expert Consensus Process

When evidence is limited or conflicting, the ADS Institute uses a structured expert consensus process to develop recommendations. This process is used for expert guidance documents and consensus statements.

Modified Delphi Process

The ADS Institute typically uses a modified Delphi process:

Round 1: Initial Rating

- Writing panel members independently rate proposed recommendations on a 1-9 scale
- 1-3 = Do not recommend
- 4-6 = Uncertain
- 7-9 = Recommend
- Ratings are anonymous and submitted electronically

Round 2: Discussion and Re-rating

- Panel reviews aggregated results
- Facilitated discussion of areas of disagreement
- Panel members explain rationale for their ratings
- New evidence or perspectives are considered
- Panel members re-rate recommendations after discussion

Round 3 and Beyond:

Additional rounds conducted as needed until consensus is reached or documented as not achievable. Typically 2-3 rounds are sufficient.

Consensus Definitions

Consensus thresholds:

- Strong consensus: $\geq 80\%$ agreement
- Consensus: 70-79% agreement
- Weak consensus: 60-69% agreement
- No consensus: $< 60\%$ agreement

Areas where consensus is not achieved are clearly identified in the document, along with the range of expert opinions and the rationale for different perspectives. The document explains why consensus could not be reached and what additional evidence would be needed.

Review and Approval Process

All ADS Institute documents undergo a rigorous multi-stage review process to ensure quality, accuracy, and credibility.

Internal Review

Internal review includes:

- Writing panel review: All panel members review and approve the draft
- Guidelines Committee review: Assessment of methodology and adherence to Handbook
- Core Advisory Committee review: Review of content, scope, and policy implications
- Legal review: Assessment of liability and copyright issues (when appropriate)
- Editorial review: Review for clarity, consistency, and readability

External Peer Review

External peer reviewers are selected based on content expertise, methodological expertise, and representation of key stakeholder groups.

Peer reviewer selection criteria:

- Have no significant conflicts of interest
- Represent diverse perspectives and practice settings
- Include at least one methodologist for guidelines
- Include patient or public health representatives when appropriate
- Include representatives from liaison organizations when relevant
- Typically 5-8 external reviewers per document

Peer reviewers assess:

- Accuracy and completeness of evidence review
- Appropriateness of methodology
- Clarity and feasibility of recommendations
- Balance and objectivity
- Relevance to practice
- Identification of gaps or areas needing clarification
- Implementation considerations

Public Comment Period

Guidelines and expert guidance documents undergo a public comment period of at least 30 days. The draft document is posted on the ADS Institute website with instructions for submitting comments.

The writing panel:

- Reviews all comments received
- Responds to substantive comments
- Revises the document as appropriate
- Documents how comments were addressed
- Prepares a summary of comments and responses for publication

Comments that result in changes to recommendations or significant content are highlighted in the final document. Comments that do not result in changes are explained in the response document.

Final Approval

Final approval requires:

- Writing panel approval of final version
- Guidelines Committee approval
- Core Advisory Committee approval
- Board of Directors approval (for major policy documents)

Publication and Dissemination

Publication Timeline

Typical development timelines:

- Guidelines: 36-48 months (depending on scope and evidence base)
- Expert Guidance Documents: 24-32 months
- Consensus Statements: 12-18 months
- Practice Statements: 12-18 months

Publication Venues

ADS Institute documents are published:

- On the ADS Institute website (all documents)
- In peer-reviewed journals (when appropriate)
- As standalone publications with DOI
- With executive summaries and implementation tools
- In formats accessible to diverse audiences

Endorsement Process

Following publication, the ADS Institute invites endorsement from liaison organizations and other professional societies.

Endorsing organizations:

- Review the final document through their internal processes
- Provide formal endorsement letter
- Are acknowledged in the document and on the Institute website
- May co-brand and disseminate the document to their members
- May provide feedback for future updates

Updates and Revisions

ADS Institute documents are reviewed for updates:

- Guidelines: Every 3-5 years or when significant new evidence emerges
- Expert Guidance Documents: Every 5 years or as needed

- Consensus Statements: As new evidence becomes available
- Practice Statements: Every 5 years or as needed

Interim updates or addenda may be issued when critical new evidence or safety concerns arise. The Guidelines Committee monitors the literature and receives input from stakeholders to identify when updates are needed.

Appendices

The following appendices provide templates and additional resources for guideline development. Detailed forms and templates will be made available on the ADS Institute website at www.adsinstitute.org/guidelines.

Appendix 1: Manuscript Proposal Form Template

Appendix 2: Conflict of Interest Disclosure Form

Appendix 3: Literature Search Protocol Template

Appendix 4: GRADE Evidence Profile Template

Appendix 5: Consensus Process Guidelines

Appendix 6: Peer Review Guidelines

Appendix 7: Public Comment Response Template

Appendix 8: Publication Checklist

Appendix 9: Glossary of Terms

Appendix 10: Acronyms and Abbreviations

This Handbook will be updated periodically to reflect evolving best practices in guideline development. Questions or suggestions for improvement should be directed to the ADS Institute Guidelines Committee.

Appendix 1: Manuscript Proposal Form

Complete this form to propose a new guideline, expert guidance document, consensus statement, or practice statement. Submit to the ADS Institute Advisory Committee for review.

Section 1: Basic Information

Proposal Title:

Submitted by (Name and Organization):

Date of Submission:

Proposed Document Type (check one):

- ☐ Guideline (GRADE methodology)
- ☐ Expert Guidance Document (systematic review + consensus)
- ☐ Consensus Statement
- ☐ Practice Statement

Justification for Document Type:

Section 2: Topic Description

Target Audience:

Target Patient Population:

Key Questions or Objectives (use PICO format when applicable):

1. _____

2. _____

3. _____

Rationale for Development (Why is this document needed?):

Section 3: Evidence Base

Preliminary Literature Search Results:

Number of relevant studies identified: _____

Types of studies: _____

Summary of Available Evidence:

Section 4: Proposed Writing Panel

Proposed Panel Chair(s):

Name: _____ Organization: _____

Proposed Core Writing Group Members (6-10 members):

1. Name: _____ Organization: _____ Expertise: _____

2. Name: _____ Organization: _____ Expertise: _____

3. Name: _____ Organization: _____ Expertise: _____

4. Name: _____ Organization: _____ Expertise: _____

5. Name: _____ Organization: _____ Expertise: _____

6. Name: _____ Organization: _____ Expertise: _____

7. Name: _____ Organization: _____ Expertise: _____

8. Name: _____ Organization: _____ Expertise: _____

Section 5: Resources and Timeline

Estimated Timeline: _____ months

Resource Requirements:

☐ Medical librarian for literature search

☐ Methodologist for evidence grading

☐ Statistical support

☐ Administrative support

Section 6: Publication Plans

Intended Publication Venue:

☐ ADS Institute website only

☐ Peer-reviewed journal (specify): _____

☐ Both website and journal

Signature Date

Appendix 2: Conflict of Interest Disclosure Form

All writing panel members, peer reviewers, and others involved in document development must complete this form. Disclosures must cover the 36 months prior to appointment.

Personal Information

Name: _____

Organization: _____

Role: ☐ Writing Panel ☐ Peer Reviewer ☐ Other: _____

Document Title: _____

Date: _____

Section 1: Financial Relationships

A. Consulting fees or honoraria:

☐ No

☐ Yes (provide details):

Entity: _____ Amount: _____ Nature: _____

B. Research funding or grants:

☐ No

☐ Yes (provide details):

Funder: _____ Amount: _____ Project: _____

C. Stock ownership or equity:

☐ No

☐ Yes (provide details):

Company: _____ Value: _____ Type: _____

D. Patents or intellectual property:

☐ No

☐ Yes (provide details): _____

Section 2: Other Relationships

A. Leadership positions in relevant organizations:

☐ No

☐ Yes (provide details): _____

B. Public statements or advocacy positions:

☐ No

☐ Yes (provide details): _____

C. Other relationships that could influence objectivity:

☐ No

☐ Yes (provide details): _____

Certification

I certify that the information provided above is complete and accurate. I agree to update this disclosure if my circumstances change during the document development process.

Signature

Date

Appendix 3: Literature Search Protocol Template

Use this template to document your systematic literature search strategy.

Section 1: Key Questions

Document Title: _____

Key Question 1 (PICO format):

Population: _____

Intervention: _____

Comparison: _____

Outcome: _____

Section 2: Search Strategy

Databases to be Searched:

☐ PubMed/MEDLINE

☐ Embase

☐ CINAHL

☐ Cochrane Library

☐ Dental databases (specify): _____

Date Range: From _____ to _____

Language Restrictions:

☐ English only ☐ No restrictions ☐ Other: _____

Search Terms and Boolean Operators:

Section 3: Inclusion/Exclusion Criteria

Study Designs to Include:

☐ RCTs ☐ Cohort ☐ Case-control ☐ Systematic reviews ☐ Other: _____

Inclusion Criteria:

1. _____
2. _____
3. _____

Exclusion Criteria:

1. _____
2. _____
3. _____

Section 4: Screening Process

Primary Reviewer: _____

Secondary Reviewer: _____

Quality Assessment Tool:

☐ Cochrane Risk of Bias ☐ Newcastle-Ottawa ☐ Other: _____

Librarian/Information Specialist: _____

Date: _____

Appendix 4: GRADE Evidence Profile Template

Use this template to document GRADE evidence assessments.

Question/Recommendation: _____

Quality of Evidence Assessment:

Starting Quality (check one):

☐ High (RCTs) ☐ Low (Observational studies) ☐ Very Low (Other)

Factors Decreasing Quality:

☐ Risk of bias (-1 or -2)

☐ Inconsistency (-1 or -2)

☐ Indirectness (-1 or -2)

☐ Imprecision (-1 or -2)

☐ Publication bias (-1)

Factors Increasing Quality:

☐ Large effect (+1 or +2)

☐ Dose-response gradient (+1)

☐ All plausible confounding would reduce effect (+1)

Final Quality of Evidence:

☐ High (⊕⊕⊕⊕) ☐ Moderate (⊕⊕⊕○) ☐ Low (⊕⊕○○) ☐ Very Low (⊕○○○)

Strength of Recommendation:

☐ Strong ("We recommend...") ☐ Conditional ("We suggest...")

Rationale for Recommendation Strength:

Appendix 5: Consensus Process Guidelines

Use these guidelines when conducting a modified Delphi consensus process for expert guidance documents and consensus statements.

Modified Delphi Process Overview

The modified Delphi process is a structured method for achieving consensus among experts through multiple rounds of anonymous rating and facilitated discussion.

Round 1: Initial Rating

Preparation:

- Develop clear, specific recommendation statements
- Provide background information and evidence summary for each recommendation
- Create rating form with 1-9 scale
- Distribute materials to all panel members at least 2 weeks before rating deadline

Rating Scale:

1-3 = Do not recommend (recommend against)

4-6 = Uncertain (neither recommend nor recommend against)

7-9 = Recommend

Instructions to Panel Members:

- Rate each recommendation independently
- Base ratings on evidence and clinical experience
- Provide brief rationale for ratings, especially for extreme ratings (1-3 or 7-9)
- Submit ratings anonymously by deadline

Round 2: Discussion and Re-rating

Preparation:

- Compile and analyze Round 1 results
- Calculate median and range for each recommendation
- Identify areas of agreement and disagreement
- Prepare summary of rationales provided by panel members
- Schedule facilitated discussion meeting (virtual or in-person)

Discussion Meeting:

- Present aggregated results (median, range, distribution)
- Share anonymized rationales for different perspectives
- Facilitate discussion of areas of disagreement
- Allow panel members to present new evidence or perspectives
- Clarify any misunderstandings about recommendations
- Do NOT pressure panel members to change ratings
- Emphasize that disagreement is acceptable and valuable

Re-rating:

- Panel members re-rate recommendations after discussion
- Ratings remain anonymous
- Panel members may change or maintain their original ratings
- Provide opportunity for additional comments

Round 3 and Beyond

Additional rounds may be conducted if consensus is not achieved. Typically 2-3 rounds are sufficient. If consensus cannot be achieved after 3 rounds, document the lack of consensus and the range of expert opinions.

Consensus Definitions

Strong consensus: $\geq 80\%$ of panel members rate 7-9 (or 1-3 for "do not recommend")

Consensus: 70-79% of panel members rate 7-9 (or 1-3)

Weak consensus: 60-69% of panel members rate 7-9 (or 1-3)

No consensus: $< 60\%$ agreement

Documentation Requirements

Document the following in the final manuscript:

- Number of panel members participating
- Number of rounds conducted
- Consensus level achieved for each recommendation
- Areas where consensus was not achieved
- Range of expert opinions for controversial recommendations
- Rationale for different perspectives

Appendix 6: Peer Review Guidelines

Guidelines for external peer reviewers of ADS Institute guidelines, expert guidance documents, consensus statements, and practice statements.

Peer Reviewer Selection

Peer reviewers should be selected based on:

- Content expertise relevant to the document topic
- Methodological expertise (especially for guidelines)
- Diverse perspectives and practice settings
- No significant conflicts of interest
- Representation of key stakeholder groups
- Geographic and demographic diversity

Typical peer review panel composition:

- 5-8 external reviewers per document
- At least 1 methodologist for guidelines
- At least 1 representative from liaison organizations (when relevant)
- At least 1 patient or public health representative (when appropriate)

Peer Review Process

Timeline:

- Peer reviewers receive draft document
- 4-6 weeks to complete review
- Submit written comments using standardized form
- Writing panel reviews and responds to comments

Peer Review Assessment Criteria

1. Evidence Review:

- Is the literature search comprehensive and systematic?
- Are the inclusion/exclusion criteria appropriate?
- Is the evidence synthesis accurate and complete?
- Are there important studies that were missed?
- Is the quality assessment of studies appropriate?

2. Methodology:

- Is the methodology appropriate for the document type?
- Is GRADE (or other grading system) applied correctly?
- Is the consensus process (if used) appropriate and well-documented?
- Are conflicts of interest adequately managed?
- Is the evidence-to-recommendation process transparent?

3. Recommendations:

- Are recommendations clear and specific?
- Are recommendations supported by the evidence?
- Is the strength of recommendations appropriate?
- Are recommendations feasible to implement?
- Are potential harms and benefits adequately addressed?
- Are patient values and preferences considered?

4. Balance and Objectivity:

- Is the document balanced and objective?
- Are alternative viewpoints acknowledged?
- Are limitations clearly stated?
- Is there evidence of bias?
- Are conflicts of interest adequately disclosed and managed?

5. Clarity and Usability:

- Is the document well-organized and easy to follow?
- Are recommendations easy to find and understand?
- Are tables and figures clear and helpful?
- Is the executive summary adequate?

- Are implementation considerations addressed?

6. Relevance to Practice:

- Is the document relevant to current practice?
- Are the recommendations applicable to diverse practice settings?
- Are barriers to implementation identified?
- Are resources needed for implementation considered?
- Will this document improve patient care or safety?

Providing Feedback

Peer reviewers should:

- Provide specific, constructive comments
- Identify both strengths and areas for improvement
- Cite specific page numbers or sections
- Suggest specific changes when possible
- Distinguish between major concerns and minor suggestions
- Be respectful and professional in tone

Types of comments:

- Major concerns: Issues that must be addressed before publication
- Suggestions: Recommendations for improvement that are not essential
- Minor edits: Typos, formatting, or clarity issues

Appendix 7: Public Comment Response Template

Use this template to document and respond to public comments received during the public comment period.

Document Title: _____

Public Comment Period: From _____ to _____

Total Comments Received: _____

Comment Response Table

For each substantive comment, complete the following information:

Comment #: _____

Commenter Information:

Name/Organization: _____

Affiliation: _____

☐ Individual ☐ Organization ☐ Anonymous

Comment Category:

☐ Evidence review ☐ Methodology ☐ Recommendations ☐ Clarity

☐ Implementation ☐ Other: _____

Section/Page Referenced: _____

Summary of Comment:

Writing Panel Response:

Action Taken:

- ☐ Recommendation revised
- ☐ Text clarified or expanded
- ☐ Additional evidence added
- ☐ No change made (explain rationale above)
- ☐ Other: _____

If recommendation was revised, describe change:

Summary of Public Comments

Prepare a summary document that includes:

- Total number of comments received
- Number of individual vs. organizational commenters
- Major themes identified in comments
- Number of comments resulting in changes to recommendations
- Number of comments resulting in text clarifications
- Number of comments not resulting in changes (with rationale)
- List of all commenters (unless anonymous)

The summary document and detailed responses should be published alongside the final document to demonstrate transparency and responsiveness to stakeholder input.

Appendix 8: Publication Checklist

Complete this checklist before submitting a document for final approval and publication.

Document Title: _____

Document Type: _____

Date: _____

Content Completeness

- ☐ Title page with all authors listed
- ☐ Executive summary (1-2 pages)
- ☐ Table of contents
- ☐ Introduction with background and rationale
- ☐ Methods section describing literature search and/or consensus process
- ☐ Results/Evidence summary
- ☐ Recommendations clearly stated and numbered
- ☐ Implementation considerations
- ☐ Future research needs identified
- ☐ References formatted correctly
- ☐ Tables and figures with clear legends
- ☐ Appendices (if applicable)

Methodology and Quality

- ☐ Literature search strategy documented
- ☐ PRISMA flow diagram included (for systematic reviews)

- ☐ Evidence grading applied correctly (GRADE or other)
- ☐ Consensus process documented (if applicable)
- ☐ Evidence-to-recommendation process transparent
- ☐ Limitations clearly stated
- ☐ Methodology adheres to Handbook requirements

Review and Approval

- ☐ All writing panel members have reviewed and approved final version
- ☐ Guidelines Committee approval obtained
- ☐ Core Advisory Committee approval obtained
- ☐ Board of Directors approval obtained (if required)
- ☐ External peer review completed
- ☐ Peer review comments addressed
- ☐ Public comment period completed (if applicable)
- ☐ Public comments addressed and documented
- ☐ Summary of public comments prepared

Conflicts of Interest

- ☐ All writing panel members completed COI disclosure forms
- ☐ All peer reviewers completed COI disclosure forms
- ☐ COI disclosures reviewed by Guidelines Committee
- ☐ COI management strategies documented
- ☐ All COI disclosures included in published document
- ☐ Panel chair free from conflicts of interest

- ☐ Majority of panel free from conflicts of interest

Acknowledgments and Disclosures

- ☐ ADS Institute acknowledgment included
- ☐ All contributors acknowledged
- ☐ Funding sources disclosed
- ☐ Endorsing organizations listed (if applicable)
- ☐ Liaison organization representatives acknowledged
- ☐ Patient/stakeholder representatives acknowledged

Publication Preparation

- ☐ Document formatted according to ADS Institute style guide
- ☐ Executive summary prepared as standalone document
- ☐ Implementation tools developed (if applicable)
- ☐ Slide deck prepared for dissemination
- ☐ Press release drafted (if applicable)
- ☐ Social media content prepared
- ☐ DOI assigned
- ☐ Copyright and permissions secured
- ☐ Journal submission prepared (if applicable)

Dissemination Plan

- ☐ Publication date set
- ☐ ADS Institute website updated

- ☐ Liaison organizations notified
- ☐ Endorsement requests sent
- ☐ Email announcement prepared
- ☐ Webinar or presentation scheduled (if applicable)
- ☐ Media outreach plan developed (if applicable)

Completed by: _____

Date: _____

Approved by Guidelines Committee Chair: _____

Date: _____

Appendix 9: Glossary of Terms

Consensus Statement: Document based on expert consensus when evidence is limited or emerging

Expert Guidance Document: Comprehensive guidance combining systematic review and expert consensus

GRADE: Grading of Recommendations Assessment, Development and Evaluation methodology

Guideline: Systematically developed recommendations based on rigorous evidence review

Modified Delphi: Structured consensus process with multiple rounds of rating and discussion

PICO: Population, Intervention, Comparison, Outcome framework for formulating questions

Practice Statement: Guidance on program implementation, infrastructure, and operational topics

Systematic Review: Comprehensive, structured review of evidence using pre-specified methods

Appendix 10: Acronyms and Abbreviations

ADS: Association for Dental Safety

CDC: Centers for Disease Control and Prevention

COI: Conflict of Interest

DUWL: Dental Unit Waterline

GRADE: Grading of Recommendations Assessment, Development and Evaluation

HICPAC: Healthcare Infection Control Practices Advisory Committee

PICO: Population, Intervention, Comparison, Outcome

PPE: Personal Protective Equipment

RCT: Randomized Controlled Trial

SHEA: Society for Healthcare Epidemiology of America

Appendix 11: Artificial Intelligence Policy

1. Purpose

This AI Policy outlines the ethical guidelines and procedures for the development, implementation, and use of artificial intelligence (AI) within the ADS Institute for Dental Safety and Science (the “Institute”). The goal is to leverage AI to enhance our mission while ensuring transparency, accountability, and respect for individual rights.

2. Scope

This policy applies to all employees, volunteers, contractors, and partners involved in AI initiatives within the Institute. It covers the use of AI technologies in all programs and operations, including fundraising, data analysis, outreach, and service delivery.

3. Ethical Principles

3.1 Transparency

- Ensure that AI systems are developed and used in a transparent manner. Stakeholders should be informed about how AI is utilized in decision-making processes.

3.2 Fairness

- Strive to eliminate biases in AI algorithms and data sets to prevent discrimination and ensure equitable treatment of all individuals.

3.3 Privacy

- Protect the personal information of individuals by adhering to data protection regulations and ensuring that AI systems comply with privacy standards.

3.4 Accountability

- Establish clear lines of responsibility for decisions made using AI. There should be mechanisms for reporting issues and addressing concerns related to AI use.

4. Data Management

- Prior to using AI, conduct a data assessment to ensure that data is accurate, up-to-date, and responsibly sourced.
- Implement measures to protect sensitive data and minimize data retention where possible.

5. Deployment and Evaluation

5.1 Pilot Projects

- Pilot new AI technologies in controlled environments before full implementation. The outcomes will be assessed for alignment with organizational goals.

5.2 Ongoing Evaluation

- Regularly evaluate AI applications for effectiveness, bias, and compliance with ethical standards. Feedback from stakeholders will inform continuous improvement.

6. Training and Education

- Provide training for staff and volunteers on AI technologies, ethical considerations, and best practices to empower informed and responsible use.

7. Collaboration

- Engage with other nonprofits, academic institutions, and industry experts to stay informed about emerging trends, challenges, and solutions in AI.

8. Compliance

- Adhere to all relevant laws and regulations governing AI use, including but not limited to data protection laws and sector-specific guidelines.

9. Review and Revision

- This policy will be reviewed annually and updated as necessary to reflect changes in technology, regulations, and best practices.

Conclusion

By adopting this AI policy, the Institute aims to responsibly harness the potential of AI to further its mission while safeguarding the rights and interests of the individuals and communities we serve.

Approval

This policy is approved by the Institute Advisory Committee on [date].