



POSTER PERFECT:

THE DO'S AND DON'TS OF SCIENTIFIC
POSTER ABSTRACT WRITING

AANA 2026 ANNUAL CONGRESS

Poster Categories



Research

Research uses the scientific process to generate new knowledge and evidence about a subject using methodology including measurements of variables, collection, and statistical analysis of data and conclusions based on results of the study.

EBP/QI

EBP uses the best evidence from published research studies and combines it with clinical expertise to answer a specific question and guide clinical practice resulting in the best patient outcomes.

QI is a data-driven strategy to improve processes, costs, productivity, and outcomes within an organization based on evidence from the literature, with a focus is on the current structure within the institution that needs to be changed.

Case Study/Innovation

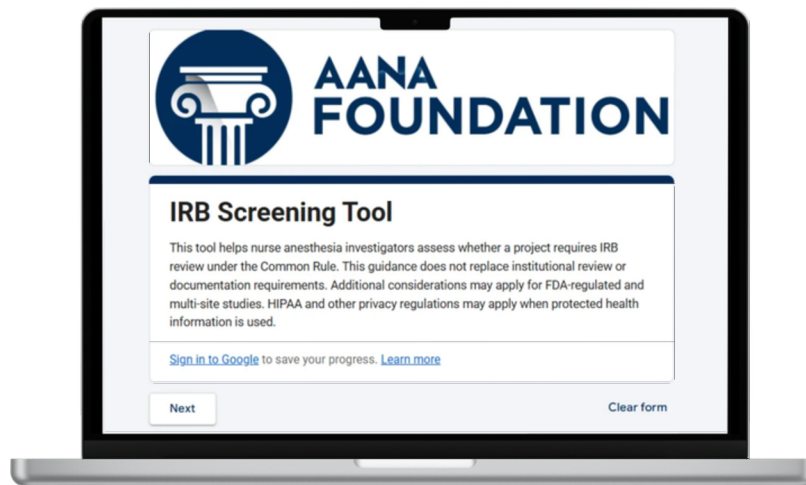
A **case study** describes an unusual, complicated or novel case of the symptoms, signs, diagnosis, treatment, and follow-up of an individual patient and includes the relevant literature on the topic.

An **innovation** project describes a new invention of a product or process that demonstrates adherence to scholarly standards and practices with proof of concept backed by evidence from the literature which may include pilot studies.

IRB

- Describe IRB status and process for determination
 - Determination of non-human subjects research, OR
 - Provide evidence of IRB approval or IRB exemption (can be separate from abstract)

Free Resource



Research:
Quantitative or
Qualitative

PURPOSE/QUESTION

45 words/290 characters

Describe the purpose and research question clearly and concisely.

METHODS

100 words/600 characters

Describe the research design, sample, setting, outcomes, and a high-level overview of the analysis approach.

RESULTS

110 words/700 characters

Describe the key findings of analyses in a factual manner with specific data points (including demographics), noting any themes that emerged from analysis. Include information on reliability, validity, and statistical testing, as appropriate.

IMPLICATIONS/CONCLUSION

70 words/400 characters

Describe the significance and implications of the findings for practice, noting any limitations, and future research needs. Ensure the conclusions are supported by the results and minimize over-generalization.

Research:

Quantitative or Qualitative

PURPOSE/QUESTION

1

Does the **title** reflect the research project?

2

Is the **significance** of the problem and/or phenomena as **evidenced in the literature** clearly described?

3

Is the **need for the study** clearly demonstrated?

4

Is the **research question clearly stated** and aligned with title/background (quantitative research) or is the **theoretical framework appropriate** to inform study (qualitative research)?

PURPOSE/QUESTION

Poor Example

A low-cost, 3-D printed video laryngoscope was compared to two commercially available laryngoscopes in a simulation design to determine if the device performs comparably, examining first-pass success, intubation time, and ease of use. This device may improve training and airway management.

Does not describe the significance of the problem.

Good Example

Video laryngoscopy improves first-pass success rates and airway visualization; high costs limit availability. A low-cost, 3-D printed video laryngoscope was compared to two commercially available laryngoscopes in a simulation design to determine if the device performs comparably, examining first-pass success, intubation time, and ease of use.

Title: Revolutionizing and Transforming Difficult Airway Management Modalities through Sustainable, Cost-Effective and Reusable 3D-Printed Video Laryngoscope Blades and Stylets

Research: Quantitative or Qualitative

METHODS

1

Is protection of live/animal subjects addressed adequately and is a statement regarding IRB/IACUC approval/exemption included?

May be submitted separately

2

Is the research design appropriate and logically consistent for research question(s) posed?

3

Are the sample, setting and data collection clearly described and consistent with methodological approach including instruments/specific methods?

4

Is the data analysis clearly described and consistent with research design and methodological approach?

METHODS

Poor Example

This quantitative study utilized a randomized, crossover simulation design to compare a 3D-printed video laryngoscope with two commercially available devices. Participants included student registered nurse anesthetists, registered nurses, certified registered nurse anesthetists, and other practicing providers who each performed three intubations on a standardized airway manikin, one with each device in randomized order. Data collection included: first-pass success rate, Cormack-Lehane view grade, and post-scenario Likert-scale surveys rating ease of use along overall preference.

Data analysis plan is not fully described.

Good Example

This quantitative study utilized a randomized, crossover simulation design to compare a 3D-printed video laryngoscope with two commercially available devices. Participants included student registered nurse anesthetists, registered nurses, certified registered nurse anesthetists, and other practicing providers who each performed three intubations on a standardized airway manikin, one with each device in randomized order. Data collection included: first-pass success rate, Cormack-Lehane view grade, and post-scenario Likert-scale surveys rating ease of use along overall preference. [Chi-square and Friedman Repeated-Measures Tests were utilized to evaluate Ergonomics/Handling, View/Visibility, and overall performance. Bonferroni Post-hoc Pairwise Comparisons to further evaluate the ergonomics of the three devices.](#)

Title: Revolutionizing and Transforming Difficult Airway Management Modalities through Sustainable, Cost-Effective and Reusable 3D-Printed Video Laryngoscope Blades and Stylets

Research: Quantitative or Qualitative

RESULTS

- 1 Are the results reported in a clear, concise and accurate manner?
- 2 Are the results aligned with the research design, purpose, and goals?
- 3 Does the statistical (Quantitative Research) or thematic (Qualitative Research) analysis support the results and is the interpretation of results sound?
- 4 Are reliability and validity addressed (Quantitative Research) or is trustworthiness addressed (Qualitative Research)?

RESULTS

Poor Example

With the 3D-printed video laryngoscope, 97.2% achieved first-pass intubation success, and only 8.7% required external laryngeal manipulation. Grade 1 glottic views were frequently obtained, with 76% reporting optimal visualization. Friedman tests demonstrated significantly superior ergonomics/handling for the 3D-printed device compared with the GlideScope ($p=0.0010$), with no significant differences in view/visibility or overall performance rankings. Participants most often ranked the 3D-printed device first in ergonomics, visualization, and overall preference. The 3D-printed device compared to Glidescope had a significant ergonomic rating ($p = 0.00034$); no statistical difference was found between the 3D-printed device compared to McGrath.

Results are not fully reported - sample size is not mentioned.

Good Example

A total of 184 participants completed the study and evaluated all three devices. With the 3D-printed video laryngoscope, 97.2% achieved first-pass intubation success, and only 8.7% required external laryngeal manipulation. Grade 1 glottic views were frequently obtained, with 76% reporting optimal visualization. Friedman tests demonstrated significantly superior ergonomics/handling for the 3D-printed device compared with the GlideScope ($p=0.0010$), with no significant differences in view/visibility or overall performance rankings. Participants most often ranked the 3D-printed device first in ergonomics, visualization, and overall preference. The 3D-printed device compared to Glidescope had a significant ergonomic rating ($p = 0.00034$); no statistical difference was found between the 3D-printed device compared to McGrath.

Title: Revolutionizing and Transforming Difficult Airway Management Modalities through Sustainable, Cost-Effective and Reusable 3D-Printed Video Laryngoscope Blades and Stylets

Research:
Quantitative or
Qualitative

IMPLICATIONS/CONCLUSIONS

- 1 Are the discussion and conclusion supported by the results?
- 2 Are implications and recommendations for practice discussed?
- 3 Are study limitations discussed adequately?
- 4 Are suggestions for future research included?

IMPLICATIONS/CONCLUSIONS

Poor Example

A low-cost, 3D printed video laryngoscope can achieve airway visualization and intubation success rates comparable to commercially available devices. These findings support integration into simulation curricula and low-resource settings, allowing more widespread practice of advanced airway skills. Future research should explore of biocompatible materials and multicenter studies to confirm generalizability and impact.

Study limitations are not discussed adequately.

Good Example

A low-cost, 3D printed video laryngoscope can achieve airway visualization and intubation success rates comparable to commercially available devices. These findings support integration into simulation curricula and low-resource settings, allowing more widespread practice of advanced airway skills. **Limitations include the simulation-only setting, small sample size, and use of FDM-printed PLA/PETG, which may limit repeated sterilization.** Future research should explore of biocompatible materials and multicenter studies to confirm generalizability and impact.

Title: Revolutionizing and Transforming Difficult Airway Management Modalities through Sustainable, Cost-Effective and Reusable 3D-Printed Video Laryngoscope Blades and Stylets

**Evidence-Based
Practice/QI:**
Implemented/
Non-Implemented

PURPOSE/QUESTION

45 words/290 characters

Describe the purpose and EBP/QI question clearly and concisely.

METHODS

100 words/600 characters

Describe the implementation plan, QI framework (i.e., Plan-Do-Study-Act, Six Sigma, RCA, etc.), evaluation methods, and analysis strategy. For projects that do NOT include implementation, there MUST be a plan for implementation and analysis.

RESULTS

110 words/700 characters

Describe the key findings of analyses in a factual manner with specific data points (including demographics), noting any themes that emerged from analysis. For QI projects, provide results of statistical testing, if conducted.

IMPLICATIONS/CONCLUSION

70 words/400 characters

Describe the significance and implications of the findings for practice, noting any limitations, and future research needs. Ensure the conclusions are supported by the results and minimize over-generalization.

Evidence-Based Practice/QI: Implemented/ Non-Implemented

METHODS

1

Is protection of live/animal subjects addressed adequately and is a statement regarding IRB/IACUC approval/exemption included?

May be submitted separately

2

Is the **methodology** clearly **described**?

3

Is the **implementation plan** or process **described**?

4

Is a plan for **data analysis** and/or evaluation **described**?

METHODS

Implemented

Poor Example

Among CRNA preceptors, does completion of a structured, web-based Preceptor Training Program versus usual practice without formal training improve self-assessed competency over three months? Bandura's social cognitive theory of self-efficacy guided the project conducted in five teaching hospitals. Three web modules were developed with high-fidelity trigger films, reflective prompts, and downloadable resources targeting 40 domains in the Preceptor Self-Assessment Tool (PSAT-40). Data were collected with the PSAT-40 at baseline and three months; 93 preceptors completed baseline and 47 completed three-month follow-up.

Data analysis plan is not fully described.

Good Example

Among CRNA preceptors, does completion of a structured, web-based Preceptor Training Program versus usual practice without formal training improve self-assessed competency over three months? Bandura's social cognitive theory of self-efficacy guided the project conducted in five teaching hospitals. Three web modules were developed with high-fidelity trigger films, reflective prompts, and downloadable resources targeting 40 domains in the Preceptor Self-Assessment Tool (PSAT-40). Data were collected with the PSAT-40 at baseline and three months; 93 preceptors completed baseline and 47 completed three-month follow-up. [Pre/post medians and reliability indices were computed; inferential testing used t-tests \(\$\alpha=.05\$ \) to evaluate domain and total-score changes.](#)

Title: Utilizing Simulation to Enhance the Emotional Intelligence Among Student Registered Nurse Anesthetists

Evidence-Based
Practice/QI:
Implemented/
Non-Implemented

METHODS
Non-Implemented

Poor Example

A systematic literature search was conducted using PubMed and CINAHL databases. Results showed that emotional intelligence tends to be low among SRNAs, 81% of whom report significant burnout. Evidence will be synthesized to create an emotional intelligence-based simulation and data collection tool. Results will determine if an EI-based simulation improves EI and burnout among SRNAs and how demographics influence EI.

Plan for implementation and data analysis are not fully described.

Good Example

A systematic literature search was conducted using PubMed and CINAHL databases. Results showed that emotional intelligence tends to be low among SRNAs, 81% of whom report significant burnout. Evidence will be synthesized to create an emotional intelligence-based simulation and data collection tool. SRNAs will receive a lecture on utilizing EI tools, then participate in a simulation designed to apply their EI skills to diffuse an interpersonal conflict. Students will take pre-and post-test surveys to assess their confidence in using EI skills and degree of burnout using the validated Burnout Assessment Tool. Results will be analyzed using paired t-tests to determine if an EI-based simulation improves EI and burnout among SRNAs and how demographics influence EI.

Title: Utilizing Simulation to Enhance the Emotional Intelligence Among Student Registered Nurse Anesthetists

Abstract: Final Check

✓	Select the correct abstract type (research, EBP/QI, case study/innovation)
✓	Follow word limits
✓	Clearly describe the clinical question/problem and gap that will be filled
✓	Align the title, purpose, methods, results, and conclusions
✓	Use specific, measurable language when possible (e.g., sample size, specific outcomes addressed, analyses employed)
✓	Provide data points, when appropriate (e.g., quantitative statistics, p-values, reliability/validity)
✓	Provide clear implications for policy or practice
✓	Specify the study limitations and potential next steps
✓	Supplement the abstract with appropriate human subjects/animal research documentation



We thank the following investigators for sharing
abstract content for educational purposes:

Dr. Marc Petrykowski

Dr. Alexandra Schlitz

This content was provided by the
AANA Foundation Research and Scholarly Activities Committee

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