

Writing Effective Scientific and Programmatic Abstracts

Presentation
by

Dr Jane Nakawesi S
Senior Technical Program Advisor
Baylor Foundation Uganda



Agenda

1. Definition of an abstract
2. Introduction
3. Purpose of the abstract
4. Components of the abstract
5. Writing a winning abstract
6. Reasons for rejection/Common mistakes
7. Abstract selection criteria
8. References

Baylor Foundation Uganda Strategic Plan Outlook

Vision: A world where children and their families live healthy and fulfilled lives

Perspectives:

Customer

"Leader in Innovations"

To provide high-quality family-centered health care, education, and Research

Internal Business

"Superior Reputation"

To provide quality and mutually beneficial services in collaboration with all key stakeholders

Learning and Growth

"Desired Workplace"

To become a desired workplace for top talented and high caliber cadres in Uganda

Financial Health

"Stability and Sustainability"

To achieve financial stability and sustainability through efficient utilization of funding, and attraction of new and diversified funding

Mission: To provide high-quality family-centered health care, education, and research

Enabled by:

Research and Innovation

ICT and Artificial Intelligence (AI)

Collaborations and Partnerships

Person-centered quality services

Resilient community and healthcare systems

Supportive Organization Culture

Goal: To reduce morbidity and mortality due to infectious, non-communicable, maternal, and childhood conditions

Strategic Objectives (SO):

SO1:

Increase access to and utilization of quality healthcare services

SO2:

Strengthen prevention, detection, and response to public health threats/emergencies

SO3:

Enhance the competencies of health workers to provide, quality, and specialized healthcare services

SO4:

Strengthen Health Sector Research to Inform Policy and Programming

SO5:

Strengthen organizational development systems that focus on accountability, best management practices, and good governance

SO6:

Setup and maintain agile and functional systems for Baylor Uganda's institutional and financial sustainability

Core Values: Care, Loyalty, Integrity, Excellence, Innovation, Teamwork (CLIENT)

Value proposition: #Service above and Beyond

What is an abstract?

- The word abstract comes from 2 Latin words: ab (out) and trahere (pull).
- Put together, the word abstractus means to pull out or extract from a more extensive work.
-
- Thus, an abstract pulls out the main points to briefly summarize a research project or topic.
- The intent of an abstract is for it to stand on its own. It should contain one clear message covering key points and omitting unnecessary details.
- The abstract and title may often be the only part of an article someone reads.
- Although abstracts are traditionally associated with manuscripts or with research conferences, increasingly, abstracts are also required for funding applications.

Introduction

- An abstract is often a factor in determining whether someone will access a manuscript, attend a conference presentation, or consider an application for funding in full.
- Researchers undertaking systematic searching and screening for a literature review will use the abstract to determine the relevance of the publication for the review.
- Abstracts published as part of conference proceedings may be searchable in academic and grey literature databases and, even if unpublished, may have relevance for a systematic review.
- Policy makers and journalists may also be other unintended audiences of an abstract, which can increase the reach, impact, and citation of a journal article.

Introduction

- A good abstract is one that is clear, concise, and critical
- It needs to be informative, providing a succinct (brief, to the point) of how the study was conducted, what it found, and what it means for practice.

Purpose of an abstract

General research abstracts

1. Quickly informs readers about your work
2. Helps others decide if your work is relevant
3. Used by editors and conference reviewers
4. Appears in databases and proceedings

Program abstracts

1. Communicate program achievements
2. Share lessons learned and best practices
3. Attract funding and partnerships
4. Support dissemination and policy influence

Before you write the abstract

What the submission guidelines?

Which track am I applying to?

What are the abstract submission guidelines?

- Word limit and structure. Do they accept graphs or tables?
- What are submission deadlines? Do you need any other approvals before submission?

Who are going to be the co-authors, and are they in agreement

- Title
- Background
- Methods
- Results
- Conclusions

- Title
- Issues
- Description
- Lessons learned
- Next steps.

- Title
- Introduction
- Context and aim
- Methods
- Findings
- Innovative contribution to policy, practice and research

27th Global Health Network Meeting

Abstract instructions

1. Abstract submission deadline is 22nd June 2026.
2. Abstract text body is limited to 400 words.
3. A maximum of 2 tables/figures can be included- do not count against your total word count.
4. Abstracts should be typed single-spaced in a standard font (e.g., Arial).
5. For studies involving human subjects, please include the approved IRB protocol number in a footnote
6. For each abstract, authors will select the appropriate abstract type and abstract thematic category.

Abstract themes

1. Theme 1: Advancing Self Reliance through Sustainable and Innovative Health Systems
2. Theme 2: Integrating priority health services into Primary Health Care to advance outcomes
3. Theme 3: Strengthening Global Health Security through , Response, and Innovation
4. Theme 4: Clinical and Programmatic innovations to Drive Quality of Care

Components of an Abstract

Research abstracts

1. Background: Context and importance
2. Objective: What you aimed to find out
3. Methods: How you conducted the study
4. Results: Key findings
5. Conclusion: Implications or next steps

Program abstracts

1. Background/Problem Statement- context and evidence. Why was the program necessary?
2. Program Description/Methods-what was implemented?
3. Results- outcomes or impact, lessons learned if relevant
4. Conclusion/Recommendations- implications/recommendations/scalability/sustainability.

Title

- The title should mention the purpose of the abstract and contain keywords that will produce search engine hits.
- Hence, it is usually easier to save creating the title for last.
- A fair guideline is that the title should contain 12 words or less. It is probably too long if you cannot read it aloud in one breath
- Program abstracts- Reflect the main program focus eg Improving HIV Testing Uptake Among Adolescents in Rural Uganda

Title

Short

Specific

Representative

Informati
ve

Question

Category

What

What was the objective of the study

Topic

Who

Who were the subjects?

Popn

How

How was the study designed?

Methods

Where

Where was the study done?

Setting

Title

- What different types of information does this title contain?
- Factors associated with loss to follow-up among women in Option B+ PMTCT programme in Northeast Ethiopia: a retrospective cohort study

What? Who? Where? How?

Title

What different types of information does this title contain?

Factors associated with loss to follow-up among women in Option B+ PMTCT programme in Northeast Ethiopia: a retrospective cohort study

What? Who? Where? How?

Sample program title

- **Data-Driven Deployment of an AI Mobile CXR Van to Accelerate TB Detection in Eastern Uganda**
- **What? Who? Where? How?**

Introduction/Background /context/aims

What was the topic of the abstract?



Why was the study done? What is the issue/gap?



What was the aim of the study?

Introduction / Background

- An abstract introduction usually comprises 2-3 sentences.
- The key elements include a brief background, rationale for the study, and research question or objective.
- Start with what is known about the subject and then describe what is unknown. In other words, what is the knowledge gap, question, or problem to be solved?
- Next, clearly state the purpose of the study or project and its relevance. If it is a scientific study (e.g., following the scientific method), this is where to state the hypothesis. For program, abstracts state why the program was necessary.
- If the study is descriptive (e.g., a survey), the aim of the study must be clearly expressed.

Is this a strong or weak introduction? Why?

- Robust metrics for national-level preparedness are critical for assessing global resilience to epidemic and pandemic outbreaks. However, existing preparedness assessments focus primarily on public health systems or specific legislative frameworks, and do not measure other essential capacities that enable and support public health preparedness and response..

Topic

Problem/issue?

Objective?

Is this a strong or weak introduction? Why?

- Ethiopia has recently adopted lifelong antiretroviral therapy (ART) for all HIV-positive pregnant and breastfeeding women (Option B+), regardless of CD4 count or clinical stage. However, the exact timing and predictors of loss to follow-up (LFU) are unknown. Thus, we examined levels and determinants of LFU under option B+ among pregnant and breastfeeding women initiated on lifelong ART for prevention of mother-to-child transmission (PMTCT) in Ethiopia.

Topic

Problem/issue?

Objective?

Sample program abstract background

- Eastern Uganda continues to miss a sizeable share of tuberculosis (TB) cases (about 40%) despite expanded facility-based screening. Routine surveillance through the electronic Case-Based surveillance System (eCBSS) and digital contact tracing provides granular spatiotemporal signals but remains underused for directing high-yield interventions. We used a data-driven approach that fused eCBSS and other routine “big data” streams to guide dynamic deployment of an AI-assisted mobile chest X-ray (CXR) van to accelerate TB detection.

Topic

Problem/issue?

Objective?

Methods/Description

INTRODUCTION

- Tells the reader how and where data was collected, analyzed, who comprised the focus population or what was the subject of the study.
- It describes the study design, sample size, participant demographics, data collection methods, and other variables.
- There is no need to be overly detailed in the methods section of an abstract, unlike the methods section of a full manuscript.
- Simply provide an outline or logical presentation of information related to the project goals or purpose previously stated in the introduction.
- Usually, the methods section accounts for around 20% of an abstract
- It also includes information such as details of the programme, training or intervention that is being reported on.
- **Program abstract-** What was implemented? Include the target population and setting, mention key strategies and partnerships

Methods

	Question	Category	Examples
Who?	Who was the subject of the study? Who was targeted by the programme?	Population Eligibility	“parents, who within the last six months, have lost a child to AIDS”
How?	How was the study designed?	Methodology	“a retrospective clinical chart review was performed”
	How was the outcome of interest measured?	Tools	“in-depth open-ended qualitative interviews were conducted”
	How was the data collected and analyzed?	Statistics	“a Fisher’s exact test was used”

Methods

	Question	Category	Examples
Where?	Where did the study take place? Where was the project implemented?	Setting	“Fort portal regional referral Hospital; Rwenzori region Kyenjojo Hospital”
What?	What was measured? What were the factors of interest?	Outcome Evaluation Effect	“survival rate over five years” “barriers to implementation”
When?	When did the study take place? When was the programme implemented?	Time	Between Jan 2018-Dec 2019

Sample program abstract methods

- During the September 2024 CAST+ campaign, we integrated eCBSS event data (case notifications and GPS data), digital contact-tracing outputs, EMR extracts, and community active-case finding logs into a harmonised data mart. A hotspot engine (kernel-density surfaces with time-weighted clustering) generated weekly micro-catchment risk maps at the parish/village level. An optimisation layer ranked outreach sites by expected yield, combining historical positivity and access. The mobile van conducted community CXR with on-site CAD/AI triage; clients exceeding predefined AI thresholds (50%) provided sputum for GeneXpert per NTLP guidance. A digitalised workflow supported consent, registration, geotagging, referrals, and linkage.
- Who? How? Where? What? When?

Results/Lessons learned

- Summarizes the data, findings and knowledge gained from the work.
- It also answers the initial research question (if applicable) and closely links back to the purpose of the work.
- Should be specific and only include results or lessons learned that are relevant to your previously stated objectives and motivations.
- Often, data disaggregated by race, sex or gender are of particular interest, and some conferences highlight this in their abstract submission guidelines.
- The results section is ideally the longest section of an abstract, or about 40%-50%.

Results/Lessons learned

Using graphs/tables

- Are graphs and tables allowed- Check the abstract call.
- Can the data be clearly and concisely presented in a graph or table?
- Is the table/graph readable and interpretable?

Is this a good results section?

- We found an overall retention rate of 65% which is comparable to rates achieved by TASO adult patients and adolescents in other studies in Africa. Variations in the risk of attrition by Treatment site and by clinical and demographic characteristics suggest the need for early diagnosis of HIV infection, use of innovative approaches to reach and retain adolescents living with HIV in treatment and identifying specific groups such as older adolescents, that are higher risk of dropping out of treatment for targeted care and support
- Does it discuss findings? Compares with other research? Implication/recommendations?

Program results

- Across 92 mapped hotspots, 2,424 community CXR screenings were completed, with 417 abnormal reads and 109 TB cases diagnosed and started on treatment. Yield in X-ray-defined hotspots was 11%, markedly higher than symptom-only screening streams (1.2%; 69 cases among 5,503 presumptives of the 38992 screened), despite similar community contexts. The integrated workflow supported rapid referral and traceability across registration, testing, and treatment initiation.
- Does it discuss findings? Compares with other research? Implication/recommendations?

Conclusion/next steps

- Summarizes the main outcomes of the study
 - Must reflect data presented in the text
 - Interpretation of results
 - Implication of findings, including scalability or sustainability.
 - Recommendations
 - Future results
 - limitations
- Key take-home messages
- 2-3 sentences
- **Avoid**
 - Repeating results and over-generalizing

Sample conclusion

- Integrating routine surveillance with an AI-enabled mobile CXR platform and geospatial targeting increased TB detection in Eastern Uganda. This precision model directs resources to high-need micro-catchments, strengthens real-time oversight, and scales within NTLP systems. Broader adoption could increase notifications, shorten time to treatment, and accelerate End TB progress where access barriers and delays persist.
- **Answers the why or question presented in the introduction?** **It summarizes the implications and significance of the findings?**
- Does it?

Writing a winning abstract

- 1. Choose the Right Name for Your Story-**The title is of the utmost importance and should be both appealing and accurate. Keep it short and Simple
- 2. Identify Your Problem-** After you capture the interest of the reader, the next things he/she will look for are novelty (originality) and significance. The best way to highlight the novelty is to put it in the context of what is already known, identifying and delivering clearly the gap of knowledge that your study is filling.
- 3. What Have You Done, and Why Should I Care?-**Once you have found the focus of your story, it should become clear which data should go in the abstract.
- 4. Wrap It Up and Put a Bow on It.** Your closing statement is just as important as your title. Repeat your main message and reiterate how this has significantly moved the field forward. Your last sentence should be definitive and not end with open-ended interpretations

Writing a winning abstract

- **Formatting Matters!**-No one likes to read an abstract filled with typos, so make sure you ask some peers to proofread your text
- **Don't Overstate Your Work**-Reviewers are turned off by the use of adjectives that overstate or exaggerate, such as “tremendous,” “exciting,” etc. These words can annoy a reviewer and reflect negatively on your abstract
- **Do NOT wait until the last minute to write and proofread the content**- Writing and reviewing the abstract for quality always takes more time than you initially thought it would. Moreover, glitches in the submission process are always possible, so you want to give adequate time.

Good practice

- Watch the word count
- Keep your audience and reviewers in mind
- Be clear and concise- only essential information
- Check spelling and grammar, ask a colleague for feedback
- Comply with submission guidelines

Reasons for rejection/common mistakes

Reasons for rejection

- Poor scientific content
- Fraud (plagiarism)
- Abstracts submitted to the wrong track (or conference)
- Abstracts poorly constructed/written
- Data presented are too preliminary
- Lack of novelty, already published or not sufficient contribution to the field.

Common mistakes

- Reasons and aims for study not clear
- Methods section incomplete
- The most important results are not concisely presented
- Conclusions are over-generalized
- Implications not highlighted

Abstract selection criteria

Three criteria

Rigour: Are the purpose and objectives clearly presented, and the methodology/study design appropriate?

Quality: Are the results clearly presented, and are the conclusions supported by the results?

Relevance: Significance of contribution: does the project help the advancement of knowledge and development in the field? Is it innovative?

Often, the clarity, quality of presentation, and adherence to guidelines also weigh in on the scoring.

Authorship

In general, authorship credits should follow the conventions of the International Committee of Medical Journal Editors (ICJME), whereby all authors contribute to the work across the following four criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
2. Drafting the work or revising it critically for important intellectual content; AND
3. Final approval of the version to be published; AND
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

The ordering of authors varies according to discipline, but in general, the order reflects the level of contribution of each author, with the exception that the mentor or senior investigator is listed last.

The first author is normally the person who conceives and writes the abstract and will normally be the person who presents the abstract at a conference or acts as the corresponding author for a manuscript.

References

1. Mary Beth Farrell, CNMT, FSNMMI-TS Crafting a Compelling Abstract That Gets Accepted. J Nucl Med Technol 2023; 51:327-330
2. Amanda Drury et al How to Write a Comprehensive and Informative Research Abstract. Seminars in Oncology Nursing 39 (2023) 151395
3. Christopher M. Sturgeon and Andrea Ditadi Let Me Speak! A Reviewers' Guide to Writing a Successful Meeting Abstract. 4 Stem Cell Reports Vol. 11 1324-1326 December 11, 2018
4. Juliana Carvalho Ferreira and Cecilia Maria Patino, Twelve tips to write an abstract for a conference: advice for young and experienced investigators. J Bras Pneumol. 2018;44(4):260-260

“

If you want to go fast, go alone. If you want to go far, go together.”

– African Proverb