Frequently Asked Questions (FAQ): Writing Effective Scientific Abstracts for the USPHS Symposium

The purpose of this FAQ is to provide supportive information to Commissioned Corps officers when submitting abstracts to the annual USPHS Scientific and Training Symposium. Submitting a well-written abstract is important for both abstract approval and successfully conveying the overall impact of your work.

Where should I begin in developing an abstract?
First, thoroughly read the annual Call for Abstracts issued by the Abstract Subcommittee. The Call for Abstracts will include the Symposium theme, scientific track descriptions, and instructions on abstract submission requirements. Following guidance issued and aligning your abstract writing with a specified track or the overall theme are critical first steps toward an accepted abstract.

What should be the content of my abstract?
You should decide on the content. The Call for Abstracts is typically broad so the diverse and exciting work done by Commissioned Corps officers across the globe can be considered. Track descriptions typically emphasize priority areas established by the Surgeon General and the Symposium organizing committee. However, if you have an exciting clinical initiative, case study, scientific research, or effective management project (for example), submitting an abstract is a great opportunity to disseminate your work and highlights its impacts.

What if my project is still in progress and does not have much in the way of results yet?
Such a "work in progress" may be made stronger from peer review and feedback. If you feel this way, consider whether there are any preliminary results and findings that can be included in the abstract to strengthen your submission. Other options include possible submission to Category Day, informal peer discussion, or waiting until results are collected for a future submission.

How are abstracts structured?
Broadly speaking, scientific abstracts typically have 5 components: Title with Authors, Background, Methods, Results, and Conclusions. An alternative format may include Background (a short summary or background of a problem), Description (describes the program, project, experience, or specific case), Lessons Learned (or results), and Recommendations (or next steps). This is accompanied by a strict word limit with variations specific to the conference or publication. Placing content in one section that belongs in another may confuse readers and result in a lower peer review rating.

Do you have any tips for a title?
Your title should clearly describe your abstract while piquing interest among the audience. Try drafting a few options and share with a colleague or two for feedback.

Who should be an author on the abstract?
Deciding who and who not to list as a co-author can be difficult. Strongly consider consulting your agency's authorship policy if one exists. Broadly speaking, individuals should be listed as a co-author only if they provided substantive contributions to the project or content development. Acknowledgments can also be used on a poster or presentation to recognize others. Each presentation is limited to a maximum of two presenters.

What makes a strong Background section?
Your goal is to clearly and concisely describe the problem (which is often public health-related for our purposes) that is being addressed by the abstract. Avoid including unnecessary information on context that does not directly relate to the project, research, policy, etc. being described later in the abstract. For example, if the abstract focuses on an initiative to

improve blood pressure control among patients at IHS Clinic X, then the background should avoid describing other unrelated population health issues.

What makes a strong Methods section?
Focus on clearly describing what was done in a succinct and ordered way. There is no one size fits all for this section given the abstract diversity typically submitted to the Symposium. If data were collected, how was it collected, organized, and analyzed? If a policy was developed, describe the development process so that implications and outcomes can be highlighted later. Avoid including any findings or description of impact in this section.

What makes a strong Results section?
Key relevant findings or lessons learned are stated with sufficient detail to allow accurate interpretation. A common mistake is introducing results that do not relate to the background or methods previously introduced. Also, avoid including any interpretation or commentary on the results themselves. For example, "the mean systolic blood pressure among participants after our clinic intervention was impressively reduced to 128 mmHg ($P < 0.05$) compared to the pre-intervention period" inappropriately includes interpretation and should focus on stating the findings only.

What makes a strong Conclusions section?
The abstract findings are synthesized and interpreted with any key limitations stated. Ideally, the implications for advancing public health practice and any recommendations that are clearly supported by the findings are included. Another point to consider is how generalizable or adaptable findings are to PHS officers assigned to other agencies or duty stations.

What makes a strong Learning Objective?
Learning objectives focus the reviewer and audience on key knowledge they will acquire from the presentation. Authors must submit **three** learning objectives related to their abstract. The following tips are recommended to develop strong learning objectives:
1) Identify important concepts you would like the audience to acquire from the presentation.
2) Begin with a measurable action verb (e.g. describe, assess, explain, develop, analyze).
3) Use only one action verb per objective.

Additionally, SMART principles should be used to write effective learning objectives. SMART is an acronym that emphasizes characteristics of useful objectives, notably objectives that are **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**ime-Oriented.

Examples of strong learning objectives:
1) Identify three key community stakeholders for successful interprofessional partnerships in emergency preparedness following a rapid review with state health authorities.
2) Explain two ways in which state and tribal leaders are developing partnerships with organizations that use different electronic medical records to improve transitions of care.

How will abstracts be scored for the 2020 USPHS Symposium?
Peer reviewers on the Abstract Subcommittee will score submissions using the following criteria: topic relevance to the overall symposium theme, quality of learning objectives, implications/conclusions for public health policy/program/research/practice, innovation/originality, and overall clarity of abstract.

Who can I contact with questions or for feedback before submission?
The Call for Abstracts has contact information for any questions related to the Call or submission logistics (symposium@phscof.org). It is always important to ensure that your co-authors have had adequate time to review and contribute to an abstract draft. Seeking out abstract writing mentorship is another great way to hone your skills. Consider reaching out to colleagues in your agency or other officers for feedback.