North Carolina Association of Pharmacists

The *North Carolina Pharmacist* is always interested in providing quality continuing education (CE) to our members. Authors are encouraged to submit CE articles for publication consideration. Instructions and requirements for CE articles can be found below.

**Guidelines for Authors**

*North Carolina Pharmacist* is published quarterly (February, May, August, November) by the North Carolina Association of Pharmacists, and is a benefit for NCAP members. *North Carolina Pharmacist* features articles of various types (research, reviews, advice for trainees, education, legislative updates, opinions, and letters) intended to inform, educate and motivate pharmacists, from students to seasoned practitioners in all areas of pharmacy, and to advance the care of patients and the pharmacy profession.

To ask any questions, or to submit a manuscript for consideration, please contact, Tina H. Thornhill, PharmD, FASCP, BCGP, Editor, at tina.h.thornhill@gmail.com.

**Types of Articles Accepted**

**Original Research and Quality Improvement Articles:** These articles focus on human subjects, non-human subjects research (e.g., compatibility/stability studies, MUEs, analysis of medication safety datasets), and QI projects (e.g., improving programs, services, technologies). There are no word or reference limits.

**Reviews:** Systematically driven, comprehensive, and reproducible summaries of current research in primary pharmacy and biomedical literature on clinical, administrative, legal, humanistic, or economic topics. The text is limited to 3000 words with a maximum of 3 tables and figures (total) and up to 20 references.

**Special Articles:** Reports in such areas as, but not limited to: new drugs/clinical knowledge, economic policy, legislative issues, education, ethics, law, and health care delivery. The text is limited to 3000 words with an abstract and a maximum of 3 tables and figures (total), and up to 20 references.

**Case Reports/Case Series:** Describe one or a series of patients exhibiting a new or unique clinical feature (e.g. receiving treatment with an investigational product, response to therapy, adverse reaction, etc.). Case reports/series should not discuss the usual course of therapy (see clinical problem solving below). The text is limited to 2500 words with an abstract and a maximum of 3 tables and figures (total), and up to 25 references.

**Clinical Problem-Solving:** Considers the step-by-step process of clinical decision-making. Information about a patient is presented in stages to simulate the way such information emerges in clinical practice in order to highlight the evolving management of that patient. The text should not exceed 2500 words, and there should be no more than 15 references.

**Business Model Articles:** Objective discussions of innovative pharmacy practices. The text is limited to 1500 words.

**Editorials/Commentary/Letters to the Editor:** Provide commentary and/or analysis concerning a previously published article in the Journal or on a current pharmacy practice issue. They may include one figure or table. Editorials are limited to 1000 words, with up to 10 references.

**Human Interest Articles:** These articles focus on the “human interest” side of pharmacy. Editors are looking for inspirational stories about NCAP members, successful patient outcomes, and more. Word count is limited to 1,250.

**Continuing Education (CE) Articles:** CE articles should be written with the expectation that 1 to 1.5 hours will be spent on the program and quiz. All CE articles should contain a title, learning objectives, manuscript, tables/figures (if applicable), references, and quiz questions. Refer to Formatting for specific information on CE article requirements.
Formatting Manuscripts for the *North Carolina Pharmacist*

**General**

1. The manuscript text is double-spaced in a 12-point Arial font throughout (including tables, references, footnotes, figure captions, and author identification [ID]) on 8.5 by 11-inch pages with margins of at least 1 inch all around.
2. All pages are numbered consecutively in the lower-right corner, beginning with the title page and including tables.
3. Each of the following elements begins on a separate page in this sequence: author(s) and title page, text, references, appendixes, tables, and figures.
4. When referring to specific medications, always use generic names throughout the manuscript, unless the specific trade name of a drug is directly relevant to the discussion.

**Author ID and title of manuscript page**

1. This author ID page facilitates blinding of the manuscript.
2. For each author, include name, professional degree(s), job title, and contact information.
3. Please specify the corresponding author.
4. Include a concise, informative title of the manuscript.
5. Authors should declare on this page whether there are any possible conflicts of interest.

**Text**

1. Names of authors, institutions, and patients are not mentioned, except in descriptive reports in which institutional identification is essential to understanding the program.
2. Descriptive headings are used to identify major sections of the manuscript; subheadings also may be used. For example, a research or quality improvement report would include Introduction, Methods, Results, and Discussion (including limitations and conclusions).
3. Case Studies/Reports are described in the following order: Problem (followed by Background, depending on content), Analysis and Resolution, Discussion, and Conclusion. The patient’s age, sex, race, weight, pertinent medical history, and baseline laboratory values are included, as well as generic names, manufacturers, formulations, and routes of administration of all drug products used. Include: adverse events, AE causality/probability assessment, and outcome.
4. Every reference, figure, table, and appendix is cited in the text in numerical order. (Order of mention in text determines the number given to each.)
5. For software important to the manuscript, information should be included in parentheses or a footnote with software version, manufacturer, city, and state.

**References**

1. Includes the heading “References.”
2. Are identified in text, tables, and legends by superscript Arabic numbers.
3. Are double-spaced on pages separate from the text and numbered consecutively as they appear in the text. References that appear only in tables or figure captions should receive consecutive numbers based on the placement of the first mention of the table or figure in the text.
4. Do not include any “unpublished observations” or “personal communications.” (References to written, not oral, communications may be inserted in parentheses in the text or included as footnotes.)
5. Have been verified by the author(s) against the original documents.
Authors are encouraged to follow the guidelines below when considering submitting a CE article for publication consideration.

1. **Consideration and Approval of Topic**

Individuals interested in authoring a CE article in the *North Carolina Pharmacist* should contact the journal's editor to discuss the proposed topic. Refer to Step 5 for the Editor's contact information.

2. **Writing Learning Objectives**

All CE articles should contain three or four specific (not vague) learning objectives. The objectives should be written using verbs from Bloom's Taxonomy. ([https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/](https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/)) Most objectives will be written from the “remember” and “understand” domains. When a patient case or problem-solving type question is used in the quiz, it may be possible to use a verb from a higher domain.

It is important to choose a verb based on how the learner will be assessed. The following verbs should NOT be used when writing learning objectives since these verbs are highly subjective, open to interpretation, and difficult to assess:

- Appreciate
- Explore
- Perceive
- Be aware of
- Behave
- Grasp significance of
- Perceive
- Know
- Believe
- Have faith in
- Understand
- Learn

Example Learning Objectives:

- Identify three risk factors for endocarditis.
- Recognize common drug interactions for the medications used to treat MRSA endocarditis.

3. **Writing the Manuscript**

Authors should follow the “Author Guidelines for The North Carolina Pharmacist.” As part of these guidelines the “Types of Articles” accepted are described. "Reviews" and "Special Articles" are the types of articles that can be used for home study continuing education. The text is limited to 3500 words with a maximum of 4 tables and figures (total) and up to 20 references. The author guidelines also provide pertinent information regarding formatting and referencing your article.

4. **Writing Quiz Questions**

To obtain CE credit, the reader must successfully complete quiz questions related to article. Authors are asked to provide 7-10 quiz questions in either a multiple choice and/or true/false format. The questions should be directed around the content of the article and stated learning objectives. In addition, when assessing a specific learning objective, the type of question asked should be based on the verb that was used in the learning objective.

While true/false questions are allowed, their use should be kept to a minimum when assessing learning; therefore, only one true/false question will be permitted as part of a quiz for a CE article.

Multiple choice questions should have four (4) options. Do NOT use “All of the above” or “None of the above” as one of the four options. Authors are asked NOT to use K-type questions or questions asking the reader to “select all that apply.”

For the stated learning objective, “Identify three risk factors for endocarditis,” there are a number of different ways to assess the learner’s knowledge that holds true to the verb “identify.” The question could be written as a true/false, a simple multiple choice, or a short case followed by a multiple choice [each emphasizing the learner’s ability to identify common cause(s)]:

Intravenous drug use with a contaminated needle can cause endocarditis.
A. True
B. False

Which of the following is found to be the three most frequent causes of endocarditis?
A. Living with a domestic pet, previous history of endocarditis, dental surgery
B. Urinary tract infection, use of a nasal cannula for oxygen, intravenous fluid administration
C. Prosthetic heart valve, history of endocarditis, congenital heart defects
D. Damaged heart valve, illicit intravenous drug use, hemodialysis

Or as another option, a short patient case describing a patient with endocarditis be written and the learner would have to identify the common causes that were present in the case and the options can be written in multiple choice such as above.

5. Submission

CE articles that meet the requirements above should be submitted electronically to the Editor at The North Carolina Pharmacist, Tina Thornhill, PharmD, FASCP, BCGP at tina.h.thornhill@gmail.com.