Your research study is complete and naturally you want to share the results with your colleagues. You’ve decided that you would like to write and submit a research abstract to ITNS Symposium this year. Good for you! But you’re worried because you have never written a research abstract and want to do a good job.

The following information will take you step-by-step through the process of writing an abstract for a quantitative research study. Remember, it is always helpful to have someone with experience in writing research abstracts review your work. The ITNS Research Interest Group has several qualified members who would be happy to review your abstract and offer suggestions. However, you need to get a draft down on paper first. Let’s begin. . .

Step 1  GUIDELINES
Locate the ITNS Abstract Guidelines available online at www.itns.org under “symposium” and then “abstracts”. Notice the several types of abstracts you may submit (Biancuzzo, 1994). The guidelines for the research abstract are clearly stated and a well-developed research abstract is included as an example. Read the guidelines and the example carefully. You may want to print the guidelines and check off the sections as you write them. Also refer to Table 1 as a checklist for developing your research abstract.

Step 2  TITLE
An abstract is a brief summary of the main components of the research project (Brockopp & Hastings-Tolsma, 2003). The ITNS guidelines limit the length of the abstract to 350 words, so you must be brief and to the point. Let’s start with the title which is not included in the 350-word count. The title for a quantitative study should include the study variables (independent variable and dependent variable, if appropriate) and the target population. In addition, it is helpful to include an indication of the design of the study, e.g. descriptive, intervention. For example, “A DESCRIPTIVE STUDY OF THE MEDICATION TAKING BELIEFS OF YOUNGER AND OLDER ADULT RENAL TRANSPLANT RECIPIENTS” contains all the necessary components — study variables (medication taking beliefs), and the population of interest (younger and older adult renal transplant recipients). In this case, independent and dependent variable do not apply. Note that the guidelines state that the title must be in all capital letters.

Step 3  BACKGROUND
The background section includes information about the problem and demonstrates that you have a good understanding of the literature related to this area. This section explains the concerning situation examined in the study. The context and the significance of the problem are explained. In addition, this section illustrates how your research contributes to what is already known about the problem. The following paragraph is a typical background section:

“Over 200,000 individuals currently are diagnosed with end-stage renal disease with 50% over the age of 65. Renal transplantation provides superior treatment outcomes including improving quality of
life and reducing costs. As such, the age of those receiving renal transplantation continues to rise.

Complications from transplantation such as infection and rejection may result in failure of the transplanted kidney and patient death. These complications are impacted by immunosuppressive medication noncompliance with rates of noncompliance at 20 to 50%. Prior to developing medication compliance intervention studies, it is imperative that we understand age-related medication taking beliefs in the adult renal transplant population.”

**Step 4 PURPOSE**
The purpose section lets the reader know the general direction of the study and summarizes the overall study goal (Polit & Hungler, 1999). The word “purpose” is usually contained in the purpose sentence (Polit & Hungler). In a quantitative study the purpose contains the study variables (independent variable and dependent variable, if appropriate), and the population of interest. The following sentence illustrates the purpose section:

“The purpose of the study was to describe medication taking beliefs of younger and older adult renal transplant recipients.”

**Step 5 METHODS - SAMPLE**
The methods section describes the details of how the study was carried out. The important subcomponents of this section include sample, procedure and instruments. Let’s take them one by one. The sample includes answers to the questions of who, where, and how many. The population from which the sample came is described as well as the setting for the research. The following sentence is an example of the sample section:

“A qualitative, descriptive design was used to study 16 adult renal transplant recipients, 8 older and 8 younger, recruited from a renal transplant program in the Midwest.”

You will notice that the design is also identified in the above statement. This is very helpful to the reader of your abstract.

**Step 6 METHODS - PROCEDURE**
The procedure subsection of the methods section includes a brief summary of how the study was completed. The following sentence is an example of this subsection:

“A semi-structured interview was conducted with the participants based upon the theory of planned behavior.”

Since a semi-structured interview procedure is a fairly well-known process involving specific questions as well as more open ended ones, the researcher doesn’t need to provide much more detail about the procedure.

**Step 7 METHODS - INSTRUMENTS**
The instruments subsection of the methods section identifies the instruments used in the study. Since instruments were not used in the study in our example, the following is an example from another study:

“Parents completed a 50-item Child Health Questionnaire (CHQ-50) that includes 14 health concepts assessing physical functioning, limitations, pain, behavior, mental health, self-esteem, and psychological functioning.”

**Step 8 RESULTS**
The results section summarizes the results of the study analyses. In a quantitative study, the descriptive statistics are usually presented first. These statistics describe the sample characteristics. The following sentences illustrate the descriptive statistics of the results section:

“The average age was 48.38 years (range 21-64); male (50%) and female (50%); type of renal transplant was cadaveric 11 (69%), living-related 3 (19%), and living-unrelated 2 (12%); average months since transplant were 16.9 months (range 2-47).”

If any inferential statistics (statistics that allow us to make judgments about or generalize the population from our sample) have been completed in the study, they are included next. Since inferential statistics were not used in the study in our example, another study will be used:

“A statistically significant difference seen was in physical functioning (PF) between the two groups using a paired t-test (p=0.0081).”

**Step 9 IMPLICATIONS FOR PRACTICE**
The final section is implications for practice. This section should clearly and specifically state how the results of the study can be used in practice. It is tempting to make broad non-specific statements here, but instead, remain focused on the purpose of your research. Specifically state how your findings will impact practice. The following example illustrates this section:

“This research expands our understanding of the similarities and differences between older and younger adult renal transplant recipients and their medication taking beliefs. The results will guide development of a medication taking patient education material addressing medication taking problems and proposed solutions. In a subsequent study, this material will be used as an intervention to assist this group with managing complex immunosuppressive medication regimens and improving renal transplant outcomes.”
Step 10 LEARNING OBJECTIVES
The ITNS abstract guidelines require two learning objectives and two references. Learning objective examples are provided on the website. Remember to begin each learning objective with the stem “At completion of the abstract session, the learner will be able to....;” followed by an action verb such as state, identify, discuss, describe, or analyze. Next include a phrase describing what the learner will be able to achieve.
For example:
“At completion of the abstract session the learner will be able to identify the beliefs of older and younger adult renal transplant recipients in the study.”

Step 11 REFERENCES
You must include at least two references in the ITNS abstract submission. Since research abstracts don’t usually include references within the text, this is a great opportunity for you to share at least two references who support your research study. You can use any referencing style, just be consistent. If you are unfamiliar with a style, the American Psychological Association (APA) has a website that you can easily access at www.apa.org. APA is a commonly used referencing style in healthcare writing.

References

Printing of this publication made possible through an educational grant by Hoffmann-LaRoche, Inc.

Additional Notes
Once you have a complete draft of your abstract, ask others to review your work and offer suggestions. Your colleagues can be most helpful in pointing out sentences that need clarification or explanation. Your writing may make perfect sense to you, but does it make perfect sense to your colleagues?
Table 1: Research Abstract Development Checklist

<table>
<thead>
<tr>
<th>Steps</th>
<th>Key Point</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Guidelines</td>
<td>Do you have a copy of the research abstract guidelines? Have you reviewed them?</td>
</tr>
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<td></td>
<td>Methods (Steps 5, 6, 7)</td>
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<tr>
<td>Step 5</td>
<td>Sample</td>
<td>Is there a sample section? Does the sample include answers to the questions of who? where?, and how many? Is the population sample described?</td>
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<tr>
<td>Step 6</td>
<td>Procedure</td>
<td>Does the procedure include a brief summary of how the study was completed?</td>
</tr>
<tr>
<td>Step 7</td>
<td>Instruments</td>
<td>Are the instruments used in the study identified?</td>
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<tr>
<td>Step 8</td>
<td>Results</td>
<td>Does the results section summarize the results of the study analyses? Are the descriptive statistics presented first? Are the sample characteristics described? Are the results of the inferential statistics described (if appropriate)?</td>
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<tr>
<td>Step 9</td>
<td>Implications for Practice</td>
<td>Is it clearly and specifically stated how the results of the study can be used in practice? Are the suggested implications for practice drawn from the study results?</td>
</tr>
<tr>
<td>Step 10</td>
<td>Learning Objectives</td>
<td>Are two learning objectives provided?</td>
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<tr>
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