De Novo All Over Again

One of the peculiarities of scientific writing that make editing it so interesting is the surprising frequency with which authors say the opposite of what they mean. They write of “fluid containing cysts”, for example — disdaining the hyphen that would make their meaning clear — when what they actually mean is “cysts containing fluid.”

Another example of this perverse tendency is the anomalous way most medical writers use the Latin de novo, an adverbial phrase included in most English dictionaries that means “anew, again”. Webster’s Unabridged gives the example “a case tried de novo”. In medical contexts, however, the phrase is almost always used attributively — that is, to modify not a verb but a noun: “de novo coronary-artery lesions”. Since de novo means “again”, you might think its intended meaning as an adjective would be “recurrent”, but you would be wrong. Instead, it most often signifies “new”, a meaning that is very close to being the opposite of its dictionary definition.

At least, de novo means “new” when applied to coronary-artery lesions. According to Gregory Curfman MD, cardiologists use the phrase to describe a lesion that develops in a new location after bypass surgery or balloon angioplasty has been used to treat earlier lesions. “It really means ‘arising anew’”, explains Curfman, a cardiologist and a deputy editor at the New England Journal of Medicine.

In the context of cancer, however, de novo usually means something quite different — not “new” but “primary”. “It’s used, for example, to distinguish primary leukemia from secondary to ionizing radiation or certain drugs”, explains Robert S Schwartz MD, a hematologist who is also a deputy editor at the New England Journal. This article title from the journal Blood illustrates the point: “HRX Involvement in De Novo and Secondary Leukemias with Diverse Chromosome 11q23 Abnormalities”.

Why, then, say de novo when you mean simply “new” or “primary”? (Why, for that matter, say “de novo resistance to all-trans-retinoic acid” when what you mean is “initial resistance”?) Neither Curfman nor Schwartz knew of any good reason to use “de novo” instead of the more pretentious Latin phrase, and both agreed its use could be confusing. (At least 1 author asked to have an adjectival de novo restored to his manuscript — nobody remembers now what it was about — because he in fact did mean “recurrent”.)

Of the half-dozen dictionaries I consulted, only 1 — the Oxford English Dictionary, Second Edition — recognizes the attributive use of de novo. After defining the adverb as “anew, afresh, over again from the beginning”, the OED adds, “Rarely as adj= ‘new, fresh,’ and prefixed to sb [substantive].” It cites this example from an anatomy journal dated 1847-9: “A de novo development of such texture.” (Confusingly, Merriam Webster’s Collegiate Dictionary, 10th Edition, seems to recognize the attributive usage by identifying the phrase as “adv or adj” but then gives only the adverbial definition, “over again, anew.”)

A nonstandard word or phrase sometimes gains a foothold when it meets a clear linguistic need; the use of “hopefully” in place of the stilted “it is to be hoped that” is a controversial example (pitting prescriptive “snobs” against descriptive “slobs”). For the nonstandard use of de novo as an adjective, however — frequently to mean very nearly the opposite of its standard definition as an adverb — there seems to be no excuse.

The Word Watcher welcomes your comments and suggestions. Recently retired from the New England Journal of Medicine, she can be reached by mail: Lorraine Loviglio, The Word Watcher, 1347 Sudbury Road, Concord MA 01742; or e-mail: loviglio@ma.ultranet.com.

SOLUTION CORNER

A Question of Consent

Question
You are asked to edit a manuscript written by several members of a clinical service and a resident who works with them. You have worked with these authors on previous occasions and know that they write fairly well, so you expect few problems with the manuscript. However, in the methods section the authors state that they have used blood stored from a previous research study in their current analysis, and they do not mention having obtained institutional review board (IRB) approval to do so. When you ask them about it, they say that they didn’t think they needed it — that they got approval for the previous study and the current work could easily be viewed as an extension of the first protocol. Would you find it necessary to include a statement to this effect in the cover letter to the journal? Would this be your role, or would you expect and rely on the resident to follow through on conferring with the residency director or an IRB representative?

Solutions
The question here is the nature of the original informed consent. Assuming that the patients consented to use of the blood samples for the first study, were they also informed at that time of any plans to use the same blood for a later study? If the donors were not so informed, IRB approval would be required again. In the unlikely event that the authors have completed their new analysis of the previously collected blood samples and neither the principal author,
As an author’s editor who had worked with these authors before, I would talk with them about what they probably already know: that principal investigators and their coworkers should always think about obtaining consent from their patients. Principal investigators should remember that federal law requires researchers to obtain, through the local IRB, approval of almost all research projects that involve patients. I would remind the authors that the public (and some members of Congress) have accused the medical profession of failing to police itself and that such carelessness, if discovered, might further erode the public’s attitude toward scientific research. I would suggest that a simple call to the administrator of the IRB is always appropriate and could have quickly settled whether submission of a new application was necessary.

I would ask the representative author to go, hat in hand, to the IRB and explain why approval had not been requested before the present study began. I would suggest asking the IRB whether approval for this study might be expedited on the grounds that the present research involved prospectively collected residual specimens from a previously approved study. But before going to the IRB, the authors will need to have pulled charts to verify that the amounts of blood drawn were within specified time limits from patients of specified age, weight, and medical condition; they will have had to verify those exact human-subjects research protocol specifications previously with the institution’s administrator or chair of the IRB. If they cannot show that those conditions were met, they will probably need to submit a new application to the IRB for review.

Provided that they were still speaking to me, I would tell the representative author one piece of good news: If the research does fall within the expedited categories, such as a project that involved a questionnaire or survey or a previously approved project involving reanalysis of the same data, the IRB will usually move quickly to approve it.

Nancy D Taylor
Medical Research Writer
Department of Research
Greenville Hospital System
Greenville, South Carolina

If the work reported was truly an extension of the initial project and was included in the initial informed consent, there would be no problem. The editor should ask that a statement reflecting IRB review be added to the methods.

If the work was not closely related, IRB review should be questioned, and the authors should furnish some evidence that the IRB has been consulted (such as an amendment or reapproval).

The institution should make investigators aware that use of samples collected for previous research requires some type of IRB review. The IRB would decide whether further consent was necessary or whether consent could be waived for the additional use of the collected data.

Edward C Conradi
Chair
Institutional Review Board
Medical University of South Carolina
Charleston, South Carolina

New Question:
A Question of Terminology

A physician studies the prevalence among his patients of a common condition that is receiving attention in the popular media. He finds that the distribution of the condition among ethnic groups differs from that previously reported and does not seem attributable to the demographics of the population he is studying. The physician therefore believes that his finding would be useful to others and wishes to publish it. However, the commonly used US Census Bureau designations “American Indian or Alaska Native”, “Asian or Pacific Islander”, “Black, not of Hispanic origin”, “Hispanic”, “White, not of Hispanic origin”, and “Other or Unknown” are not sufficiently specific to describe at least 2 subpopulations of the affected patients — one in which all appear to have Irish surnames and another in which all are of Caribbean origin. The physician consults you, an editor, about how to proceed.

The situations described as New Questions in this column are not necessarily based on actual situations, and the ones that are may have been modified to focus the question. Send your responses to the new question to Della Mundy, Kaiser Foundation Research Institute, Department of Medical Editing, 1800 Harrison Street, 16th Floor, Oakland CA 94612-3429; telephone 510-987-3573; fax 510-873-5131; e-mail della.mundy@ncal.kaiserperm.org.