

Puns, promises, and metaphors: Medical device trade names



Raquel Billiones

Clinipace Worldwide, Zurich, Switzerland

Correspondence to:

Raquel Billiones
Clinipace Worldwide
Chriesbaumstrasse 2
CH-8604 Volketswil / Zurich
Switzerland
rbilliones@clinipace.com

Abstract

Medical writing covers not only drugs but also medical devices. This article looks at the lighter side of writing about medical devices. It shares observations about the vocabulary used and especially focuses on trade names. It also looks at the use of metaphors, analogy, and puns in medical device nomenclature and in describing techniques and concepts used in interventional cardiology.

Writing for medical devices

Medical communicators write documents that cover medical therapies involving drugs, procedures, and medical devices. I started my medical writing career preparing regulatory documents for drugs. Four years ago, I had the opportunity to manage a project to write clinical evaluation reports for medical devices used in interventional cardiology. That was when I

discovered certain differences in the vocabulary we use when writing about drugs vs. devices.

As starting point, let's have a look at the text below:

We first advanced a BMW Elite and then deployed a Taxus Express... However, the Navifocus WR did not work... The procedure was eventually achieved using a Xience Xpedition followed by a Sprinter.

No, this text is not something out of Sports Car Illustrated or Autosport magazine, but a paragraph describing a hypothetical percutaneous coronary intervention (PCI); the commercial names are those of devices used in this procedure.

Like drugs, medical devices also have generic or non-proprietary names and these are found in the Global Medical Device Nomenclature database (<https://www.gmdnagency.org/>). When writing documents about drugs, we almost invariably use the generic name as required by biomedical journals and regulatory authorities. This is not the case for medical devices, where trade names are commonly used in publications. The American Medical Association (AMA) Manual of Style states that for equipment and devices, nonproprietary names are preferred but trade names, as well the manufacturer and location, are to be provided to enhance clarity, especially if several brands of the same products are compared.¹

Written correctly with the generic names and additional information as recommended by the AMA, the text above should read:

We first advanced a Balance Middleweight (BMW) Elite coronary guide wire (Abbott Vascular, Santa Clara, CA) and then deployed a Taxus Express paclitaxel-eluting stent (Boston Scientific, Natick, MA)... However, the Navifocus WR intravascular ultrasound (Terumo, Tokyo, Japan) did not work... The procedure was eventually achieved using a Xience Xpedition everolimus-eluting stent (Abbott Vascular, Santa Clara, CA), followed by post-dilation with a Sprinter balloon dilatation catheter (Medtronic, Minneapolis, MN).

What's in a name?

The rules governing approval of proprietary names are similar for drugs and devices. In theory, trade names should not a) be confusingly similar to names of other products, b) imply unique effectiveness, or c) exaggerate effectiveness or superiority claims.²

In practice, the evaluation of proprietary names is much more stringent for drugs than for medical devices. This is due to the high rate of medication errors associated with drugs. Most drugs come in standard formulations for oral use (pills or solutions) or for injection or intravenous infusion and similarity in physical appearances is not uncommon. Strict control of proprietary names aims to avoid look-alike preparations having sound-alike brand names to minimise medication mix ups. This type of error is rarely encountered in medical devices, where a health practitioner is highly unlikely to confuse an insulin pump with a pacemaker.²

Metaphors and analogy

Devices used to be named after their inventors. The Grüntzig balloon catheter was named after Andreas Grüntzig, who successfully performed the first balloon angioplasty, and the Palmaz Genesis stent after Julio Palmaz, who invented the balloon-expandable stent.³ But this practice has now become passé. Because of the relatively relaxed nomenclature rules, medical device names nowadays tend to be racier, more exciting, and less abstract compared to those of drugs. Real (not coined) words are often used but metaphorical and analogous names abound.

For example, Fox, Coyote, and Mustang are not occupants of a menagerie, but commercial names of balloon catheters. Freestyle, WaveSense

Jazz, and BGStar are not music bands, but glucose monitoring devices.

Buddy wires and kissing stents

If you think these names are fascinating, check out the metaphors used in describing some of the techniques and concepts in PCI: buddy wires, kissing stents, monorails, and mother-and-child are just a few examples I have found in interventional cardiology. See Table 1 for the definitions of these terms. The metaphors get more interesting as the interventions become more complicated, such as the “double-kissing crush” approach⁴ or the “4-in-5 mother-child” technique.⁵

Promises to keep

A lot of device names are superlatives and imply strength and power: Supera is a peripheral stent, Quantum Apex a balloon catheter, Conquest Pro a guide wire, and Tornado an embolisation coil. The surgical robots Zeus and Da Vinci follow the Greco-Latin naming route to imply superpower and genius, respectively. But can the Miracle guide wire family deliver the promise its name implies? What about the knee replacement devices Journey and Triathlon? Or the TRUResult glucose meter?

Unique and punny

As device manufacturers scramble to find that blockbusting brand name, it is increasingly difficult to come up with something unique and

catchy. Still, I can appreciate a punny brand name like the InsuLinx glucose meter or the Guidezilla guide extension catheter. And just when I thought no device name could surprise me, see what I came across the other day – the Chocolate percutaneous transluminal angioplasty balloon catheter, with its special features of “pillows and grooves” (see Table 1).⁶

Opportunities

Metaphors and puns aside, writing about medical devices requires the same skills and expertise as writing about drugs. For medical communicators, there is a lot of opportunity and fun in writing for medical devices (see p. 71).

Conflicts of Interest and Disclaimers

Raquel is employed as a medical and regulatory writer at Clinipace Worldwide, a global contract research organisation. In this professional capacity, she has written regulatory documents for some of the medical devices mentioned in this article. The views and opinions in this article are those of the author alone and do not necessarily reflect those of her employer.

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Table 1. Use of metaphors and analogy in percutaneous coronary intervention

Term	Definition
Buddy wire technique	Use of an additional guide wire along with the one being routinely used to advance balloons, stents, or other devices to help accomplish otherwise challenging procedures during percutaneous coronary intervention (PCI) ⁷
Kissing or snugging technique	Technique that deploys two or more balloons or stents in arterial bifurcations; these devices eventually meet in the vasculature where they “kiss” or “snug.” ^{8,9}
Mother-and-child configuration	Technique wherein a small catheter (child) is inserted into a larger conventional guiding catheter (mother) during PCI ¹⁰
Monorail balloon shaft and guide wire	Concept named after the monorail train system of the 1980s, with the balloon catheter running over the guide wire ³
Pillows and grooves	Balloon segments that make contact with the blood vessel walls and function to minimise local forces, interspersed by grooves ⁶

Author information

Raquel is Senior Director, Medical & Regulatory Writing at Clinipace Worldwide. She is based in Zurich where she heads Clinipace’s Swiss subsidiary. She has been writing regulatory documents for >11 years and is a long-time EMWA member, *Medical Writing* section editor, and EMWA workshop leader.