Educating the medical writer: A 5-year update

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Abstract

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This article is a 5-year follow-up to a 2013 publication: On Educating the Medical Writer. The current study was performed to examine the evolution of degree programme titles, certificate programmes, and the current trend toward so-called micro-credentials and nanodegrees. The return on educational investment is discussed.

Background

In 2013, Danny Benau (DB) published an overview of the educational and training opportunities for medical writers. The observations were based on 5-years' experience as Director of Biomedical Writing (BW) Programmes at the University of the Sciences (USciences). 1 Now, after the passage of another 5 years, the field of medical writing has changed and with it some changes in the education and training of its practitioners. Some reassessment may be in order. The results of the current project were produced by DB and Amy Urbine, a Master of Science (MS) candidate in BW who is conducting research on the job market for medical writers. In the prior paper, a distinction was made between education and training. Education was defined as being provided by an organisation accredited by a government-recognised agency with the goal of knowledge to be retained over the long term. Training may be provided by educational



organisations, professional organisations, or commercial enterprises with the goal of just-intime information for immediate use.1

The current education/training scene

A non-comprehensive list of degree-granting and certificate-granting organisations is displayed in Tables 1-5. The list is not comprehensive due to variations in search engine optimisation strategies used by the organisations. It should also be noted that the searcher's location can affect search results. When the search term medical writing degree was used with the search engine Google), the only programmes in the first 50 hits awarding a graduate degree in medical writing that was not a certificate or track in a science writing degree programme

were at the USciences, the James Lind Institute, and the Medical University of Innsbruck.

The USciences MS degree is a traditional non-thesis MS. The programme at the James Lind Institute awards a Professional Diploma in Medical Writing (PDMW); the PDMW is similar to other diploma programmes of the Postgraduate Diploma (PGD) type. These postgraduate programmes are more common outside of the US; many are the equivalent of MS degrees while some are more like certificates. The medical writing programme at the Medical University of Innsbruck does not show when that programme will start again.

Of the search terms used for degree-granting programmes, the one with the most relevant hits among the first 50 was healthcare communication degree. The website mastersincommunication. com, owned by acgtMedia, LLC, lists over 65 US degree programmes in healthcare communi-

Non-academic organisations closely tied to

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the medical writing field are listed in Table 6 along with certificate training and, where available, certification programmes that they offer. While few certificate programmes have significant entry prerequisites beyond holding a bachelor's degree, certification programmes may require experience in the field as well. While certificates show that the holder has participated in training, certification assesses the holder's grasp of training and competence gained through experience.

Trends

As mentioned in the 2013 paper, 1 the most common route into medical writing before

the 1990s was through on-the-job training. The emergence of degree programmes in the field offered formalised experience with in-depth knowledge. The expense of academic

degree programmes fostered the proliferation of certifi-cate programmes from academic institutions, professional organisations, commercial enterprises. Even these have increased in cost over the years, and the current trend is toward even narrower-focused instruction that has been termed microcredentialing or nanodegrees.3 One such microcredential is the digital badge. In a 2017 paper, Dyjur and Lindstrom reviewed the field of digital badges in higher education. 4 Basically, the badge is similar to a workshop certificate, but should be accompanied by assessment and may be part of a cumulative programme. In such a programme, the accrued badges may lead to a higher credential. The PGD programmes mentioned previously may work in such a fashion.

Table 1: Medical writing degree programmes

Organisation	Programme(s)	Comments	
University of the Sciences	Master of Science in Biomedical Writing Certificate in Marketing Writing Certificate in Regulatory Writing	Online MS: 36 credits Certificate: 12 credits	
Medical University of Innsbruck	M. Sc. Medical Writing	2 years, 94 credits, does not seem to be recruiting at this time	
Johns Hopkins University	MA in Science Writing (MW is a track), Certificate in Science Writing	9 online courses, including a residency and thesis	
University of Chicago Graham School	Medical Writing and Editing Certificate	Online 5 core courses 1 elective	
Massachusetts Institute of Technology	Graduate Programme in Science Writing	1-year programme, 17 courses plus summer internship	
James Lind Institute	Professional Diploma in Medical Writing	Online 14-module, 18 credits	
University of Findlay	Medical Writing Certificate	3-credit course certificate in one of following: Fundamentals in Medical Writing, Clinical Trial Disclosure, Medical Writing of New Drug Applications Clinical Modules	
Lenoir-Rhyne University	MS in writing with Graduate certificate in Narrative Healthcare		

Table 2: Medical writing education/training

Organisation	Programme(s)	Comments
UConn	Certificate in Health Professions Education	9 credits online
AMWA	Medical Writing Certification	
EMWA	Medical Writing workshops	
Bioscience writers	Workshops	

Table 3: Medical writing certificates

Organisation	Programme(s)	Comments
AMWA	Medical Writing Certificate	
Johns Hopkins	Health Communication Certificate	
USciences	Marketing or Regulatory Certificate	
CfPIE (Center for Professional Innovation and Education)	Certified Medical Writing Professional	
University of Findlay	Medical Writing Certificate	3-credit course certificate in one of following: Fundamentals in Medical Writing, Clinical Trial Disclosure, Medical Writing of New Drug Applications Clinical Modules



Return on education/training investment

Information gained from informal discussions with recruiters and hiring managers at lunches and breaks over many years of professional meetings suggests that the higher the level of programme validation, the more seriously the resulting credential is taken. The advantage of accredited degree programmes is that they are periodically assessed to maintain their accreditation. This becomes a measure of quality control and assurance in the knowledge passed to the students. A look at many recruiting sites will show that a degree will often be accepted as a substitute for a certain amount of experience. An example would be a job description requiring 5 years' experience with a bachelor's degree but only 3 years with a master's. Certification is direct evidence of knowledge acquisition and competence. Certificates and micro-credentials may vary in quality and acceptance.

One of the ironies of the proliferation of the healthcare communicator title has been the lack of correlation between the credential and job listings. The results of some preliminary online job searches have revealed that the communicator

search term frequently becomes a qualification as part of a job description rather than a job title. A search on the term medical writer always results in that term being in the job title itself. The communicator term and the job title will likely converge over time, but for now the medical writer term seems to produce better results.

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Table 4: Healthcare communication degrees

Organisation	Programme(s)	Comments
Boston University	Master of Science in Health Communication	40 credits
Northwestern University	Master of Science in Health Communication	
Bellevue University	Bachelor of Arts in Health Communication, Master of Science in Health Communication	127 credits
Tufts School of Medicine	Master of Science in Public Health in Health Education and Health Communication	
Johns Hopkins University	Certificate in Health Communication	
Columbia University	Master of Science in Health Communication	Open to students enrolled in select programmes
Illinois College of Liberal Arts & Sciences	Health Communications Concentration	
Harvard TH Chan School	Health Communication Online Master of Science	
University of Illinois Online	Public Health Communication and Marketing Master of Arts in Health and Risk Communication	
George Washington University	Master of Arts Health Communication	
Michigan State University	Master of Arts in Health Communication	
Gannon University	Master of Health Communication	
University of Minnesota	Master in Health Communication	
Chatham University	Health Communications Major	
University of Sydney		
Cornerstone University		



Table 5 : Healthcare communication certificate

Organisation	Programme(s)	Comments
Loyola University of Maryland	Healthcare Communications Certificate	
Tufts School of Medicine	Certificate in Digital Health Communication	
University of Wisconsin	Health Communication Professional Development Certificate	
Johns Hopkins	Health Communication Certificate	Must be enrolled in graduate or degree programme
Columbia University	Certificate in Health Communication	
Usciences	Certificate in Marketing, Certificate in Regulatory	
Boston University	Online Visual and Digital Health Communication Graduate Certificate	
Illinois College of Liberal Arts & Sciences	Health Communication Online Certificate	
University of Illinois	Health Communication Online Master of Science	
University of Kentucky	Health Communication Undergraduate Certificate	Must be accompanied by degree or seeking degree
George Washington University	Public Health Communication and Marketing Certificate	
University of South Carolina	Certificate of Graduate Study in Health Communication	
University of Utah	Interdisciplinary Certificate in Health Communication	
University of North Carolina	Interdisciplinary Certificate in Health Communication	
USC Annenberg	Post-Master's Certificate in Health Communication Management	
Stony Brook University	The Advanced Certificate in Health Communications	

Disclaimers

The opinions expressed in this article are those of the authors and not necessarily shared by their employer or EMWA.

Conflicts of interest

Danny Benau is Director of Biomedical Writing Programmes at the University of the Sciences; this programme is mentioned in the article.

Amy Urbine is a student in the MS in Biomedical Writing Programme at the University of the Sciences; this programme is mentioned in the article.

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Table 6. Certificates and certifications from relevant non-academic organisationsa

Organisation	Certificate	Requirement	Certification	Prerequisites
AMWA	AMWA Essential Skills	8 credits via self-study work books, in person workshops	Medical Writing Certification, 125 question exam	Bachelor degree; at least 2 years medical writing experience
EMWA	EMWA Professional Development Programme	8 credits via workshops		
DIA	Certificates: Clinical Research, Clinical safety and Pharmacovigilance, project management, Regulatory Affairs	35 core units and 6 elective units, 16 core units and 16 elective units, 48 core units and 8 elective units, 28 core units and 16 elective units		
RAPS	Regulatory Affairs Certification: medical Devices, Pharmaceuticals or Dual, RAC Credential Exam	4 core classes, 9 electives	Regulatory Affairs Certificate, 100 Question Exam	Recommended for those in the regulatory field
ICMJE	None			
BELS			Board Certified Editor Exam	Bachelor degree; at least 2 years life sciences manuscript editor experience

AMWA: American Medical Writers Association; EMWA: European Medical Writers Association; DIA: Drug Information Association; RAPS: Regulatory Affairs Professionals Society; ICMJE: International Committee of Medical Journal Editors, BELS: Board of Editors in the Life Sciences.

^a List is representative but may be not comprehensive

