

Digital Communication

Hi Everyone,

In this latest Digital Communications piece, we turn to a topic that has been increasingly relevant in our field: multi-channel digital marketing strategies. Nidhi and her colleagues show that, when guided by data and continuous improvement frameworks, engagement can be meaningfully increased. At the same time, their study reminds us that visibility alone isn't enough; content relevance, audience understanding, and removing barriers to participation remain just as critical. So, I hope you enjoy this piece on leveraging multi-channel digital strategies for professional development.

Writing this editorial is also a bittersweet moment for me, as this will be the last article I edit as Section Editor of the Digital Communication section of *Medical Writing*. It has truly been a privilege to contribute to this journal and be a part of this community that sits at the intersection of science, communication, and continuous learning. Over the past 5 years, I've had the chance to work with thoughtful authors, explore how our field continues to evolve, and help shape conversations around how we work and communicate in an increasingly digital world. It's been both professionally enriching and personally meaningful.

I would also like to warmly welcome my

SECTION EDITOR



Nicole Bezuidenhout

njbezuidenhout@gmail.com

successor, Senior Disclosure Manager and Medical Writer Kathi Künnemann, PhD. I feel confident that Digital Communication is in excellent hands, and I look forward to seeing how it continues to grow and evolve.

Thank you to the editorial team, the authors, and you, the readers, for being part of this journey!

Happy reading!

Best, Nicole

Evaluating multi-channel digital marketing strategies for professional development: A mixed-methods analysis of CPD promotion for a medical writing and communication course

Nidhi Pandya¹, Steven Walker², Mile Vasić³

¹ SRH University of Applied Sciences
Berlin, Germany

² St Giles Medical GmbH.
Berlin, Germany

³ Mile Vasić
SRH University of Applied Sciences
Berlin, Germany

<https://doi.org/10.56012/qkrr6919>

Correspondence to:

Nidhi Pandya

nidhipandya0912@gmail.com

Steven Walker

steven.walker@stgmed.com

Mile Vasić

Mile.Vasic@srh-hochschulen.de

Abstract

This study examines the effectiveness of multi-channel digital marketing strategies in raising awareness of, and driving engagement with, Continuing Professional Development (CPD) courses among healthcare professionals, educators, science writers, and members of the medical communication community. A four-month mixed-methods evaluation of a medical writing and communication course, hosted on Udemy and promoted via LinkedIn, email newsletters, and Medium, used Plan-Do-Check-Act and Kaizen frameworks to refine tactics based on real-time analytics. Key performance indicators improved, including a 26% rise in LinkedIn followers, a reduction in email bounce rates from 92% to 27%, and a doubling of peak monthly engagement rate from 8% to 16%. Career-focused and educational content achieved the highest click-through and engagement rates across platforms, and Medium articles reached an average read rate of 50% despite late implementation. These findings provide practical, data-driven insights to help CPD providers promote their courses, for example, by prioritising LinkedIn and segmented email, using high-performing content types, and monitoring key metrics to optimise campaigns.

Introduction

Continuing Professional Development (CPD) represents a fundamental requirement for maintaining clinical competence and ensuring quality patient care in the rapidly evolving healthcare landscape.¹ Despite its critical importance, participation rates among HCP (Healthcare Professionals) remain

concerningly low, with recent evidence indicating that only approximately 33% of HCPs actively engage in CPD programmes.^{2,3} In practice, however, a substantial proportion of professional learning occurs through informal channels, including daily clinical experience, peer exchange, and institution-based training. While



Image: Freepik

these learning formats are valuable, they may not consistently offer the structured reflection, standardisation, and formally documented competency development that accredited CPD activities are designed to support. As a result, the gap between the acknowledged need for continuous professional development and participation in accredited CPD activities continues to present challenges for maintaining consistent standards of care and professional accountability.

The digital transformation of healthcare education, particularly accelerated by the COVID-19 pandemic, has created new opportunities for accessible and flexible CPD delivery.^{4,5} CPD encompasses a range of learning activities from formal academic courses to e-learning and peer discussions, all aimed at ensuring continued improvement in professional skills and knowledge.^{6,7} Digital CPD solutions, including webinars, online modules, and interactive learning communities, have demonstrated effectiveness at least

equivalent to traditional models in producing educational gains, particularly in fostering knowledge retention and practical skill acquisition.^{1,5,8} Online learning platforms offer HCPs the ability to engage with educational content according to their schedules and from any location, addressing traditional barriers such as time constraints and geographical limitations endemic to healthcare work.^{4,8}

Simultaneously, digital marketing has emerged as a powerful tool for enhancing the visibility and accessibility of CPD opportunities, utilising platforms such as social media, targeted email campaigns, and specialised e-learning environments.^{9,10} The role of social media and professional networking platforms in CPD promotion has gained increasing attention, with LinkedIn and Twitter emerging as important channels for both CPD delivery and promotion.

They support interactive, flexible learning and connect professionals to relevant resources and peers.^{11,12,13} Structured social

media initiatives can increase participation in CPD activities, while their effectiveness is enhanced when integrated into multi-channel strategies combining email campaigns, professional networks, and social media.^{9,12,13,14,15} Analytics and audience segmentation have become central pillars in effective healthcare marketing, enabling organisations to track user journeys, measure campaign effectiveness, optimise marketing return on investment, and deliver highly relevant, personalised messages timed according to audience receptivity.^{11,15,16}

Despite these advances, significant barriers to CPD engagement persist, including time constraints, course fees and other financial costs, lack of institutional support, poor internet connectivity, and low self-perceived necessity for ongoing development.^{2,3,17} Studies consistently identify these systemic, personal, and structural barriers as recurring impediments, highlighting the need for comprehensive strategies that address not only content delivery but also effective promotion and engagement tactics.

At the same time, a notable gap exists in the literature on the application of digital marketing strategies specifically for promoting professional development among healthcare workers.^{9,18} While digital marketing has been extensively studied in the context of patient engagement, limited research focuses on its effectiveness in

Despite these advances, significant barriers to CPD engagement persist, including time constraints, course fees and other financial costs, lack of institutional support, poor internet connectivity, and low self-perceived necessity for ongoing development.

reaching and engaging HCPs for CPD purposes.^{11,19} The literature also emphasises the importance of quality management and iterative process improvement in CPD programme promotion. Methodologies such as the Plan-Do-Check-Act (PDCA) cycle and Kaizen principles have been successfully adapted from industrial quality control to healthcare and marketing contexts. The PDCA cycle structures continuous improvement through iterative planning, implementation, evaluation, and refinement. In contrast, Kaizen principles focus on small, ongoing changes to optimise processes and eliminate waste. Together, these approaches enable continuous refinement based on real-time engagement data.^{20,21,22}

This study addresses this gap by evaluating and optimising multi-channel digital marketing strategies to increase HCP engagement with CPD courses. The primary objectives of this research were to: 1) measure the impact of coordinated digital marketing efforts on CPD engagement; 2) identify which digital channels yield the strongest engagement metrics; 3) analyse the effectiveness of content marketing, platform-specific strategies, and analytics-driven decision-making in promoting CPD; and 4) provide actionable recommendations for CPD providers to strengthen their digital outreach and improve participation outcomes.

Methodology

This study employed a mixed-methods research design combining quantitative analytics and qualitative content analysis to evaluate digital marketing strategies for CPD promotion.²³ The research was conducted over a four-month period (March–June 2025) in collaboration with St. Giles Medical GmbH, focusing on the promotion of a medical writing CPD course targeted at HCPs.

Research design and framework

The methodological approach integrated three interrelated process management tools:

- First, **process mapping** was employed to visually identify and standardise each component of the marketing process, including content production, publishing, performance monitoring, and adjustment.
- Second, the **PDCA** served as a framework for iterative campaign management, with each marketing campaign designed with specific key performance indicators (KPIs), executed on chosen platforms, assessed through analytics, and adjusted based on results.²⁰
- Third, **Kaizen philosophy** guided continuous improvement through small, data-

driven changes in post timing, call-to-action language, and visual formatting.²¹

Data collection and analysis

Data collection utilised platform-specific analytics tools across four primary channels:

1. **LinkedIn** analytics tracked follower growth, post impressions, engagement rates, click-through rates (CTR), and audience demographics.
2. **Google Analytics** monitored website traffic, session duration, bounce rates, and conversion funnels through UTM-tagged campaign links. UTM codes are Urchin Tracking Module codes that identify which marketing channel, such as LinkedIn or Newsletters, drove each visitor to the site.
3. **Udemy’s** instructor dashboard (the e-learning marketplace hosting the medical writing and communication course) provided metrics on course page visits, enrolment numbers, and conversion rates.
4. **Medium** analytics (the publishing platform used for long-form awareness articles, introduced in June) tracked article views, read rates, and referral traffic sources.

To aid interpretation of these measures, key metrics (e.g., engagement rate, CTR, bounce rate, conversion rate, and read rate) were defined and summarised in Table 1.

Qualitative analysis involved systematic content classification of all published materials. LinkedIn posts were categorised by type (Education, Career, Course Behind-the-Scenes, Event, Engagement, Appreciation, Commentary/Opinion) and analysed for language tone, structure, length, and visual elements. High-engagement content patterns were identified and correlated with quantitative performance metrics.

Quantitative analysis was conducted using Microsoft Excel, with weekly metrics compiled into comprehensive dashboards. Descriptive statistics tracked longitudinal trends and cross-channel comparisons. A/B testing compared different content formats (carousel vs. static images vs. text-only posts) and newsletter subject line variants to identify optimal engagement strategies.

Sample and scope

The study’s target audience comprised HCPs (e.g. physicians, nurses, researchers, medical educators, healthcare support staff) as well as science writers, medical communicators, and other members of the wider healthcare communication community. Initial platform audiences included 377 LinkedIn followers, approximately 2,000 newsletter subscribers, and 12 Medium followers. Participation was voluntary, determined by engagement with published

Table 1. Metrics reference table

Metric	Definition	Platform-specific notes
Engagement rate (%)	How actively users interact with content (likes, comments, shares, clicks) relative to views	● LinkedIn: interactions per view
Click-through rate (%)	Percentage of viewers who clicked a link in the post or email	● LinkedIn: post link clicks per view ● Newsletters: link clicks per email opened
Bounce rate (%)	Percentage of visitors who leave the site after viewing only one page	● Google Analytics only: High rates suggest content is not engaging enough to explore further
Conversion rate (%)	Percentage of visitors who complete a desired action (e.g., course enrolment)	● Udemy: enrolments increase during the campaign
Read rate (%)	Percentage of visitors who read the article for a meaningful time (>30s or 70% length)	● Medium only: Shows if the content holds attention beyond a quick scan

content, with no incentives offered.

The study's scope was limited to digital marketing activities across the specified platforms, with one supplementary physical outreach initiative at the Bionnale 2025 conference in Berlin. Geographic reach was primarily concentrated in Germany, England, and India, reflecting the demographics of the existing follower base. Although the LinkedIn account and follower base pre-dated the campaign, pre-campaign activity consisted of infrequent, ad hoc posts without consistent KPIs or archived analytics. As a result, no directly comparable baseline time series from the preceding year was available, and the analysis focuses on within-campaign trends from March to June 2025 rather than a formal pre – post comparison.

Results

LinkedIn performance

LinkedIn emerged as the primary organic content distribution channel, with 64 posts published over the four-month period. As shown in Figure 1, total followers increased from 377 to 476 (26% growth), with the most significant expansion occurring in June (56 new followers). Monthly post frequency increased progressively from 2 posts in March to 30 in June, correlating with improved click-through and engagement rates (Figure 2).

Content type analysis revealed distinct performance patterns. Table 2 shows that aggregated metrics with career-focused content achieved the highest average CTR (7%) and engagement rate (9%).

Email newsletter analytics

Weekly newsletter campaigns demonstrated progressive improvement in engagement metrics. Bounce rates decreased substantially from 92% in March to 27% in June, indicating enhanced email deliverability and list quality. Peak performance occurred in April, with 41 sessions (total user visits to the Udemy course page) originating from newsletters and 130 landing page sessions (course page visits to the website).

Average engagement time varied significantly, reaching a maximum of 34 seconds in May. The newsletter titled “Medical Communication – One field, many paths” achieved the highest engagement rate at 88%, and “Where can Medical Writing take you?” generated the longest average engagement time at 76 seconds.

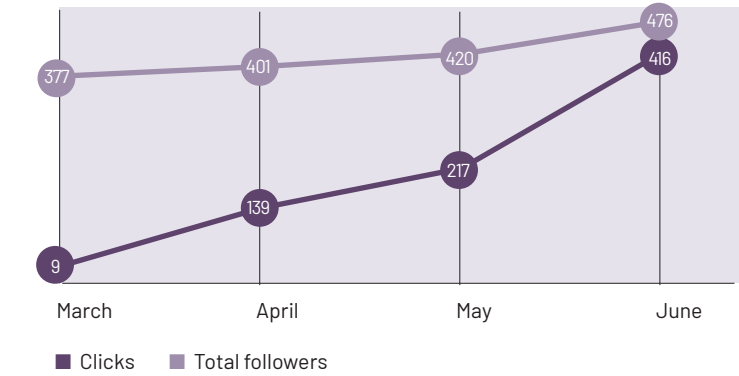


Figure 1. Total monthly LinkedIn followers and clicks

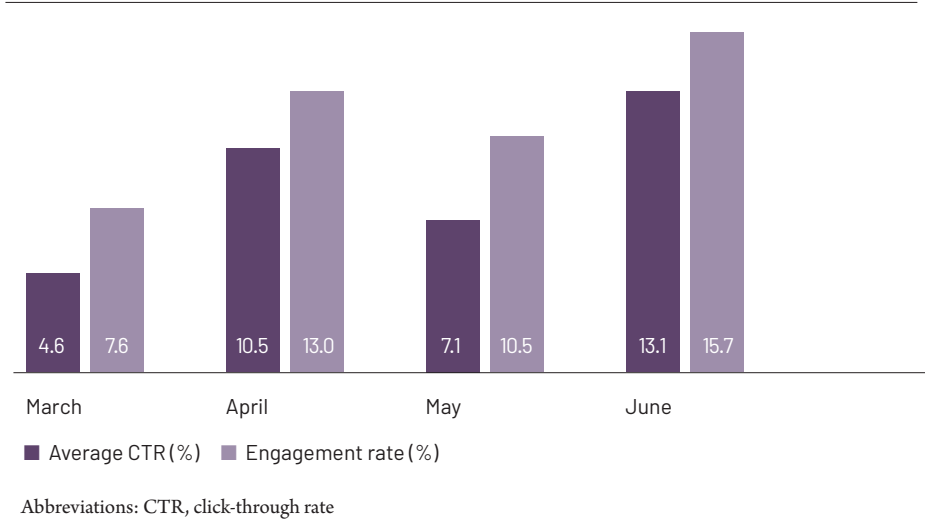
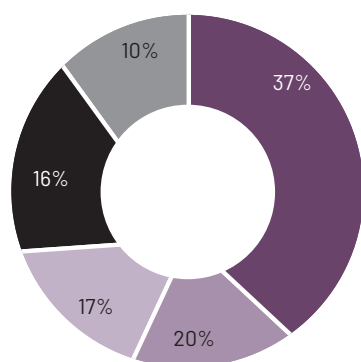


Figure 2. Monthly LinkedIn click-through and engagement rates

Table 2. LinkedIn content type performance

Content Type	Number of Posts	Average CTR (%)	Average Engagement Rate (%)
Career	11	7.2	8.9
Course behind-the-scenes	4	6.8	8.3
Education	19	6.3	7.7
Engagement	4	5.3	7.4
Event	6	4.5	6.7
Commentary / Opinion	3	4.2	5.0
Appreciation	2	2.9	4.0



■ Media and communications
 ■ Business development
 ■ Healthcare services
 ■ Research
 ■ Education

Figure 3. LinkedIn follower distribution by job function

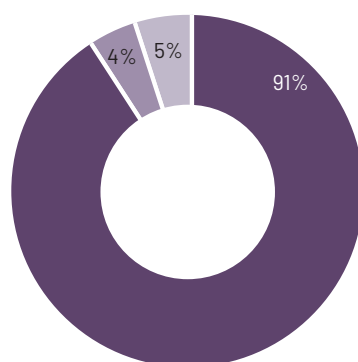
Audience segmentation analysis identified key professional segments: Media and Communication (89 followers), Business Development (47), Healthcare Services (41), Research (37), and Education (25), with 237 followers categorised as “Others.” Industry distribution showed strong representation from relevant industries (Figure 3), including Pharmaceutical Manufacturing (76 followers), Research Services (32), Hospitals and Health Care (28), Biotechnology Research (27), and Medical Equipment Manufacturing (27).

Medium performance

Medium articles, introduced in June, achieved a collective 137 views and 68 reads (50% average read rate). The article “From Whiteboard to Worldwide” performed best with 85 views and 46 reads (54% read rate). Traffic sources were distributed across email/direct (91%), LinkedIn (4%), and Google (5%) (Figure 4).

Udemy performance

Table 3 depicts Udemy metrics showing variable monthly performance, with total visitors peaking at 148 in April. Course enrolments ranged from



■ Email / direct
 ■ LinkedIn
 ■ Google

Figure 4. Traffic sources across all the Medium articles

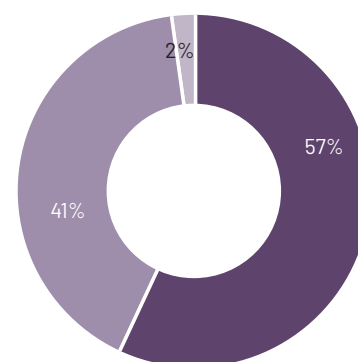
2 to 6 per month, with June recording the highest number. Conversion rates fluctuated between 1.4% and 3.6%, with gradual improvement observed over the study period. Newsletter referrals contributed the most visitors (57% of total), followed by LinkedIn (41%) and Medium (2%) (Figure 5).

Physical outreach results

The Bionnale 2025 conference flyer distribution generated 11 QR code scans, representing a minor but complementary contribution to overall campaign reach. This physical touchpoint served primarily as an awareness-building initiative alongside digital efforts.

Discussion

The study’s findings demonstrate that multi-channel, personalised digital marketing strategies can effectively engage HCPs in CPD opportunities, though success requires continuous optimisation and platform-specific adaptation.⁹



■ Newsletter
 ■ LinkedIn
 ■ Medium

Figure 5. Visitors to Udemy Page from Newsletter, LinkedIn, and Medium (Over 4 months)

The results align with and extend existing literature on digital healthcare marketing while revealing unique insights specific to professional development contexts.¹⁰

Platform effectiveness and content strategies

LinkedIn’s emergence as the most effective engagement platform confirms previous research highlighting the value of professional networks in promoting healthcare CPD. The superior performance of career-focused and educational content suggests that HCPs respond most strongly to content directly relevant to professional advancement and skill development, supporting literature that emphasises relevance and professional applicability in CPD engagement. However, the substantial increase in LinkedIn posting frequency from 2 posts in March to 30 in June reflects a marked expansion in content production capacity, which may not be feasible for all CPD providers. Higher output alone can improve content discoverability and algorithmic visibility, so some of the observed performance gains may be attributable to increased volume rather than to content optimisation alone. This should be considered when transferring these findings to lower-capacity teams.

The progressive improvement in email newsletter metrics, particularly the dramatic reduction in bounce rate from 92% to 27%, demonstrates the value of iterative list refinement and content optimisation. In practice, this

Table 3. Udemy Platform metrics

Metric	Mar	Apr	May	Jun
Total visitors	94	148	122	111
Visitors from Newsletters	16	20	21	28
Visitors from LinkedIn	2	18	15	25
Visitors from Medium	–	–	–	3
Enrolments	3	2	3	6
Conversion rate (%)	3.2%	1.4%	2.5%	3.6%

Table 4. Replicable framework

Step	Action	Tools/Output
1. Map	Visualise content workflow	Process maps
2. PDCA	Plan/test content variants	LinkedIn carousels, newsletters
3. Analyse	Weekly multi-channel metrics	GA4, platform dashboards
4. Kaizen	Refine top performers	Increase frequency of high-CTR types

involved removing invalid or inactive addresses, correcting obvious formatting errors, and gradually segmenting the list to focus on subscribers with a demonstrated interest in medical communication and CPD topics. Basic deliverability measures, such as revising subject lines to avoid spam triggers and monitoring sender reputation, also contributed to improved inbox placement. These relatively simple, stepwise adjustments illustrate how CPD providers can enhance accessibility and engagement without major technical investment.

Udemy metrics showed fluctuating but ultimately improving conversion rates, ranging from 3.2% in March, dropping to 1.4% in April, then recovering to 2.5% in May and 3.6% in June. Rather than a linear increase, this pattern reflects an initial drop after the baseline month, followed by gradual recovery as campaign elements were refined. A plausible explanation is that the initial March audience comprised highly motivated early adopters drawn from an existing warm network, whereas April's larger visitor numbers included more top-of-funnel traffic from new

campaigns, diluting conversion until messaging, targeting, and landing-page content were better aligned. As PDCA cycles informed adjustments to content type, call-to-action language, and audience targeting, later months showed that conversion performance could be restored and even improved, despite a broader, less pre-qualified audience.

Analytics-driven optimisation

The successful application of the PDCA cycle and Kaizen principles validates their transferability from industrial quality management to digital marketing contexts. Real-time analytics enabled rapid identification of successful content patterns and immediate strategy adjustments. For instance, the correlation between increased post frequency and follower growth in June suggests that consistent, high-quality content publication drives audience expansion and consequently, CPD course enrolment. Content optimisation shifted to career-pathway carousels (e.g. "5 Exciting Roles in Medical Communications") over generic posts, using data-driven visuals, concise

calls to action, and post timing. This boosted engagement, validating PDCA adjustments.

The integration of multiple analytics platforms (LinkedIn Insights, Google Analytics, Udemy metrics) provided comprehensive visibility into the user journey from awareness through conversion. This multi-touchpoint tracking revealed that while newsletters generated the highest volume of course page visitors (57%), LinkedIn referrals showed stronger engagement quality, as evidenced by longer session durations and lower bounce rates.

Barriers and limitations

Despite demonstrable improvements in engagement metrics, overall CPD course enrolment remained modest (14 total enrolments), highlighting persistent barriers beyond marketing reach. This aligns with the literature, which identifies time constraints, institutional support gaps, and content relevance as fundamental barriers to participation that marketing alone cannot fully address. Although the LinkedIn account and follower base pre-dated the campaign, systematic pre-campaign analytics (e.g. post-level engagement rates, monthly follower growth, and CTRs) were not captured, and earlier activity consisted of infrequent, ad hoc posts without defined KPIs. As a result, the study cannot provide a rigorous comparison with the same period in the preceding year, and observed improvements should be interpreted as within-campaign associations rather than



Image: Freepik



definitive causal effects of the revised strategy.

The study's geographical concentration and four-month duration limit generalisability. Longer-term analysis would be necessary to assess seasonal variations, sustained engagement patterns, and the full impact of content strategies on learning outcomes. Additionally, the late introduction of Medium prevented a comprehensive evaluation of its potential contribution to the marketing ecosystem.

Theoretical and practical implications

The research extends existing digital marketing theory by demonstrating its specific application to HCP education. The finding that segmented, profession-specific content significantly outperforms generic messaging supports the audience segmentation literature and provides concrete metrics for healthcare contexts.

Practically, the study offers a replicable framework (Table 4) for CPD providers seeking to enhance digital outreach. The combination of process mapping, iterative optimisation cycles, and multi-channel analytics provides a structured approach adaptable to various healthcare education contexts. The documented correlation between content type and engagement rates offers immediate guidance for content strategy development.

Conclusion

This study demonstrates that data-driven, multi-channel digital marketing strategies, guided by PDCA and Kaizen frameworks, significantly enhance engagement with CPD opportunities for HCPs. Career-oriented and educational content consistently outperformed other formats, driving measurable improvements, such

as 26% growth in LinkedIn followers and a reduction of approximately 70% relative to the baseline bounce rate. CPD providers can adopt replicable frameworks integrating process mapping, real-time analytics, and platform-specific content strategies to optimise reach and conversions. These evidence-based tactics offer healthcare organisations a clear pathway to scale professional development efforts amid the demands of ongoing digital transformation.

Acknowledgments

The author thanks St. Giles Medical GmbH for access to analytics data and for supporting the implementation of the CPD campaign, and Dr Steven Walker and Dr Mile Vasić for their supervision and guidance during the underlying master's thesis.

Disclosures and conflicts of interest

The author declares no conflicts of interest. No AI tools were used in the preparation of this manuscript.

Data availability statement

For inquiries about data and other supplemental information, please contact the corresponding author.

References

1. Chaker R, Hajj-Hassan M, Ozanne S. The effects of online continuing education for healthcare professionals: a systematic scoping review. *Open Educ Stud*. 2024;6(1):20220226. <https://doi.org/10.1515/edu-2022-0226>
2. Yadeta TA, Mohammed A, Alemu A, et al. Utilization of continuous professional
3. Mohamed EBS, Eltahir YAM, Abukaraig EAB, et al. Health professionals' engagement in continuing medical education at Kordofan University, Sudan. *Am J Biomed Res*. 2024;12(2):16-21. <https://doi.org/10.12691/ajbr-12-2-2>
4. Guillaume D, Troncoso E, Duroseau B, et al. Mobile-social learning for continuing professional development in low- and middle-income countries: integrative review. *JMIR Med Educ*. 2022;8(2):e32614. <https://doi.org/10.2196/32614>
5. Lawn S, Zhi X, Morello A. An integrative review of e-learning in the delivery of self-management support training for health professionals. *BMC Med Educ*. 2017;17(1):183. <https://doi.org/10.1186/s12909-017-1022-0>
6. Filipe HP, Silva ED, Stulting AA, et al. Continuing professional development: best practices. *Middle East Afr J Ophthalmol*. 2014;21(2):134-41. <https://doi.org/10.4103/0974-9233.129760>
7. Manley K, Martin A, Jackson C, et al. A realist synthesis of effective continuing professional development (CPD): a case study of healthcare practitioners' CPD. *Nurse Educ Today*. 2018;69:134-41. <https://doi.org/10.1016/j.nedt.2018.07.010>

8. Aleo G, Pagnucci N, Walsh N, et al. The effectiveness of continuing professional development for the residential long-term care workforce: A systematic review. *Nurse Educ Today*. 2024;137:106161. <https://doi.org/10.1016/j.nedt.2024.106161>
9. Popa AL, Țarcă NN, Sasu DV, et al. Exploring marketing insights for healthcare: trends and perspectives based on literature investigation. *Sustainability*. 2022;14(17):10499. <https://doi.org/10.3390/su141710499>
10. Huda N, Suanda J, Ahamed N. Systematic literature review on digital marketing in women's healthcare using the PRISMA model. *Bangladesh J Med Sci*. 2024;23(2):104-12. <https://doi.org/10.3329/bjms.v24i2.81525>
11. Ghasroddashti A, Sorefan-Mangou F, Fernandes RD, et al. Learning outcomes and educational effectiveness of social media as a continuing professional development intervention for practicing surgeons: a systematic review and narrative synthesis. *Ann Surg Open*. 2024;5(3):e470. <https://doi.org/10.1097/AS9.00000000000000470>
12. Alanzi T, Al Madani RA, Saadah AM, et al. Saudi Arabian healthcare professionals' perceptions of using LinkedIn for professional development. *Inform Med Unlocked*. 2020;20:100414. <https://doi.org/10.1016/j.imu.2020.100414>
13. Grover-Hinds L. How effective is LinkedIn marketing for healthcare? Conteur – Your Story, Told Better. 2024 [cited 2024]. Available from: <https://conteur.co.uk/how-effective-is-linkedin-marketing-for-healthcare-2/>
14. Barasa C. Mastering healthcare audience segments for enhanced marketing outcomes. Health Union, LLC; 2025 [cited 2025]. Available from: <https://healthunion.com/blog/healthcare-audience-segments-for-marketing-outcomes/>
15. Geonetric. Healthcare marketing analytics. Geonetric; 2024 [cited 2024]. Available from: <https://www.geonetric.com/insights/general/healthcare-marketing-analytics/>
16. Matuszewska K, Poddebniak M. How to perform successful audience targeting with a CDP. Piwik PRO; 2025 [cited 2025]. Available from: <https://piwik.pro/blog/how-to-use-a-cdp-for-successful-audience-targeting/>
17. Magwenya RH, Ross AJ, Ngatiane LS. Continuing professional development in the last decade – a scoping review. *J Adult Contin Educ*. 2022;29(2):408-37. <https://doi.org/10.1177/14779714221147297>
18. Shaikh A, Harita CK, Mullick A, et al. Revolutionizing healthcare: the pivotal role of digital marketing in the modern healthcare industry. *IJFMR*. 2023;5(6). <https://doi.org/10.36948/ijfmr.2023.v05i06.10963>
19. Van Ravenswaay L, Parnes A, Nisly SA. Clicks for credit: an analysis of healthcare professionals' social media use and potential for continuing professional development activities. *Med Educ Online*. 2024;29(1):2316489. <https://doi.org/10.1080/10872981.2024.2316489>
20. Moen R, Norman C. Circling back: clearing up the myths about the Deming cycle and seeing how it keeps evolving. *Qual Prog*. 2010;42:23-8.
21. Dang-Pham D, Hoang A, Vo D, et al. Digital Kaizen: an approach to digital transformation. *Australas J Inf Syst*. 2022;26. <https://doi.org/10.3127/ajis.v26i0.3851>
22. Plank RE, Lindquist JD. Developing process mapping skills: a case study. In: *Proceedings of the Academy of Marketing Science. Developments in Marketing Science*. Cham: Springer; 2014. p. 322-6. https://doi.org/10.1007/978-3-319-13147-4_81
23. Creswell JW, Clark VL. Designing and conducting mixed methods research. 3rd ed. Thousand Oaks (CA): SAGE Publications; 2017.



Author information

Nidhi Pandya, MPharm, MBA, is a healthcare professional with a background in pharmacy and healthcare management. Her work focuses on digital marketing strategies, medical education, and data-driven approaches to improving engagement with continuing professional development content for healthcare professionals.



Dr Steven Walker is a physician and medical communications specialist, and Director of St Giles Medical Ltd. He leads multi-stakeholder education and communication projects, focusing on improving how complex medical information is translated for healthcare professionals, patients, and the public across diverse therapeutic and societal contexts.



Prof. Dr Mile Vasić is Professor of Management and Marketing and Director of MBA/EMBA programmes at SRH Berlin University of Applied Sciences. He combines academic leadership with international industry experience, focusing on management, marketing, and healthcare-related education, and is the founder and president of the European Marketing and Management Association.