

ORIGINAL ARTICLE

Using social media to engage nurses in health policy development

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Aims: To explore nurses' views on future priorities for the profession and to examine social media as an engagement tool to aid policy discussion and development.

Background: Nurses are often not directly involved in policy creation and some feel it is a process they cannot easily influence.

Methods: A descriptive mixed methods study of a Twitter chat hosted by the Chief Nursing Officer for Scotland was undertaken. Data were gathered using an analytics platform and NCapture software. The framework approach aided thematic analysis to draw out themes.

Results: Sixty-four people took part in the Twitter chat (#CNOScot) and posted 444 tweets. Nurses called for investment in technology, nursing research, education and mental health. Primary care and advanced practice roles to support older adults with complex health and social care needs were also seen as vital to develop further.

Conclusion: Social media can help reach and engage nurses in policy discussion and ensure there is better continuity between policy and practice but some groups risk being excluded using this digital medium.

Implications for Nursing Management: Nursing leaders should consider social media as one of many engagement strategies to ensure nurses and other stakeholders participate in policy debate that informs health strategy development.

KEYWORDS

engagement, leadership, nursing, policy, social media

1 | INTRODUCTION

The future of nursing is always a hotly debated topic as the profession continues to advance and diversify in different ways. Global trends such as ageing populations, rising numbers of people with chronic disease, economic slowdown, environmental challenges and information technology (IT) are some of the drivers that are changing the face of nursing going forward (IOM, 2011). Leaders in government and national health services are continuously adapting to this shifting landscape, devising and implementing policies to deliver public services that meet the needs of society. However, health policy can often be designed with little input from frontline nursing staff, whose clinical, educational and research expertise could add value to its scope and

direction (Gebbie, Wakefield, & Kerfoot, 2000; Shariff, 2014). It has been noted that few practising nurses engage in policy debate, as they do not see it as a key issue to become involved in or a process they can easily influence (Mason, Gardner, Hopkins Outlaw, & O'Grady, 2015; Toofany, 2005).

A number of factors can encourage and support nurses to actively participate in the design and creation of health policy such as having positive role models, personal connections, undertaking research or further education, or gaining direct experience in strategy development (Gimbel, Kohler, Mitchell, & Emami, 2017; Spenceley, Reutter, & Allen, 2006). Information technology has been noted as another potential avenue to encourage nurses to participate in policy design, by enabling them to network and communicate with senior leaders and legislators

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(Taylor, 2016). DiChiacchio (2014) developed a website that was used by advanced practice nurses and students to communicate information to policy makers about the importance and value of their role. The findings from this study suggest that digital platforms could help to improve the involvement of nurses in the policy making process. However, very little primary research exists on the use of technology, in particular social media, to engage nurses in health policy debate and development.

2 | BACKGROUND

Nursing leaders are primarily focused on developing the professional knowledge and skills of the workforce to improve practice and patient outcomes, by setting priorities and implementing policies that help shape the future direction of nursing (Antrobus & Kitson, 1999; Disch, Dreher, Davidson, Senioris, & Wainio, 2011). In response to a new national strategy called "2020Vision" to achieve high quality health care in Scotland, the Chief Nursing Officer (CNO) published plans to ensure the nursing profession could meet this new agenda (Scottish Government, 2014). These outline how to improve upon and expand the capacity of the nursing workforce in the coming years, to support the integration of health and social care, promote preventative health and person-centred care, and deliver services in the home or community where possible to enable patient self-management. In addition, a new national strategy called "2030 Vision for Nursing" is under development and the CNO is utilizing a range of engagement strategies to ensure nurses at all levels can participate in this process.

One avenue being used by the national health directorate to convey and exchange information with nurses throughout Scotland is social media, which now forms part of the CNO's communications strategy. Social media is a relatively new technological phenomenon that enables users to create personalized profiles and build open virtual communities where people can interact with each other and develop and share content (Kaplan & Haenlein, 2010). These online applications are being used in nursing to disseminate health information, communicate with patients and educate nurses among others (O'Connor et al., 2017; Skiba, 2008). The CNO organised a national Twitter chat to encourage nurses and other stakeholders to contribute ideas to and shape the refreshed strategy for nursing in Scotland that is currently under development. Therefore, the aim of this study is twofold; first to explore the views of those who participated in this Twitter chat to understand their opinions on the future direction of the nursing profession in Scotland, and second to examine social media as a digital tool to engage nurses in policy discussion and development. This will help address the dearth of literature on this topic and inform nursing leaders internationally about how online technologies, such as social media, can be leveraged to enable nurses to actively participate in policy formation.

3 | METHODS

This study adopted a mixed approach, assuming a qualitative inquiry grounded in an interpretivist paradigm to explore the perspectives of

nurses on the future development of the profession and quantitative methods were applied to examine the utility of social media to engage nurses in policy debate.

3.1 | Participants

Email invitations for the social media discussion were sent to all National Health Service (NHS) regional boards and higher education institutes as well as numerous related voluntary and government agencies associated with providing nursing and health services in Scotland. These informed the various organisations of the aims of the Twitter chat and how people could participate. The emails were further distributed to staff within these institutions and announcements were also posted online via several social media platforms. There were no inclusion or exclusion criteria and anyone was welcome to take part.

3.2 | Setting

Twitter was chosen as the social media setting for this discussion as it is a completely open online forum that anyone is free to use. In addition, any Twitter account can be followed and any content comment upon, retweeted or shared. The hashtag feature of Twitter is particularly useful as it can be used as a keyword to search, find and track of all the conversations on the topic as they happen in real-time. The hour long Twitter chat was conducted on 24 May 2016 under the hashtag #CNOScot. Four questions were posed and responded to by the CNO and her team during the online discussion to generate debate and crowdsource answers from a range of participants to help inform future nursing policy.

3.3 | Ethical considerations

As Twitter is an online public platform all data that users post, with the exception of private messages, is freely available and therefore formal ethical approval was not required for this study, as it consisted of secondary analysis of non-sensitive data already in the public domain. In order to protect the privacy of those who participated in the Twitter chat, any identifying information contained in the tweets (e.g. usernames, locations, organisations) were replaced with pseudonyms following best practice guidelines (Chretien & Kind, 2013; NCSBN 2011).

3.4 | Data collection

Twitter data were collected from the virtual focus group posthumously using the hashtag #CNOScot. The NCapture application on NVivo QSR 10.0 was used to extract the sample of tweets posted online. A manual assessment of the Twitter chat was also undertaken to verify the dataset. An online tool called Keyhole (<http://keyhole.co/>) was employed to gather analytics data.

3.5 | Data analysis

The framework approach was used to explore and understand the qualitative data and draw out ideas related to future priorities for nursing

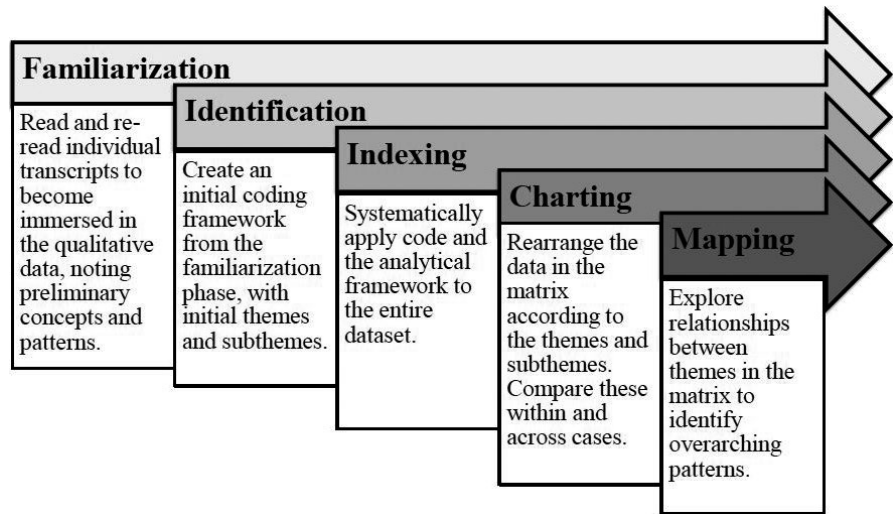


FIGURE 1 Steps in the framework approach

(Ritchie & Spencer, 2002). The five step analytical process outlined in Figure 1 was followed to organise data into key concepts and overarching themes. Codes and categories were developed in NVivo by considering each tweet, hashtag and Twitter handle used to summarize what the participants were debating. From this a coding matrix was generated that was applied rigorously to the entire dataset. This process enabled changes to be tracked and progress to be recorded over time in a structured way. Data were synthesised by refining the initial themes and categories until the “whole picture” of where future nursing policy should focus emerged, whilst remaining grounded in participants’ rich descriptions of issues in practice. A third party application called Keyhole was used to generate analytics on the #CNOScot hashtag. This provides a simple visual dashboard of metrics and descriptive statistics such as the number of tweets, number of users, the reach and impression of the hashtag, top posts, related topics in keywords and hashtags as well as demographics and location of participants among others. This dataset was used to help gauge the level of engagement in the Twitter chat.

3.6 | Rigour

The trustworthiness of the study encompassed the four main dimensions of qualitative rigour (Lincoln & Guba, 1985; Noble & Smith, 2015). Credibility in the findings were enhanced through the use of robust methods of data collection and analysis, the random sample of participants, examination of negative data and use of peer debriefing. Dependability was established by holding a coding clinic with a research colleague who checked samples of the analysis. Transferability can be seen in the rich descriptions of participants’ perspectives on the future of the nursing profession that were created and the depiction of the health landscape in Scotland. Finally, confirmability was addressed by triangulating data from numerous different types of participants in the Twitter chat.

4 | RESULTS

The Twitter chat generated discussion and debate on what nursing in Scotland needs to focus on for the future, which encompassed five

themes: (1) Technology and Informatics, (2) Research, (3) Education, (4) Mental Health and (5) Advanced Practice.

4.1 | Technology and informatics

Technology was seen as an area to invest in and several suggestions were made about how to develop this field in nursing. One conversation mentioned developing the informatics competence of the nursing workforce and the need to educate both students and practising professionals in this area. Another aspect was how nurses could leverage technology to reduce the geographical distances they faced between each other and their patients. Some thought that technology such as telehealth could be utilized for this purpose to deliver better care. However, participants highlighted the barrier that poor telecommunication networks in some areas caused, as slow or non-existent Internet access limited working in a mobile way. They wanted to see more capital spending to overcome this problem and equip nurses with modern mobile devices and other technologies (Table 1).

4.2 | Research

Research was also discussed as certain participants felt it must become fundamental to the profession and be directly relevant to clinical practice to bring about improvements in patient care. Some thought nurses focused too much on clinical audits and felt the culture of the NHS needed to adapt and support evidence based practice. Additional approaches to building the capacity of nursing researchers and clinical academics were mentioned such as stronger links with higher education and specialist nursing research centres.

4.3 | Education

Participants felt high quality education would continue to be critical to enhancing the nursing profession long-term. A focus on preparing the workforce to care for patients at home and in other community

TABLE 1 Participant tweets related to key themes

Theme	Participant tweets
Technology and informatics	'Agree re IT skills – we need to be intentional around development rather than assume' (Participant 7) 'currently working with DN colleagues telehealth project & supporting them with their new clinical skills' (Participant 56) 'IT and kit important but it's an enabler for nurses to deliver skills in caring' (Participant 41) 'we have to put effective mobile IT at the centre of our vision' (Participant 47)
Research	'#research with direct clinical impact and in workplace #education way to get the step-change we need' (Participant 12) 'It is in pre reg & then not used post reg. The culture is about audit & not research' (Participant 49) 'yes but #nurses in practice need more #research support to improve #patient outcomes #academia can help!' (Participant 48)
Education	'Need to consider educational preparation & support for nurses & midwives working in remote & rural settings as part of visioning' (Participant 46) 'We must look to see how to tear down the hospital walls and have students in community as the norm – yes key' (Participant 7) 'sounds good to connect remote and rural/urban communities #CNOScot use for learning and practice?' (Participant 40)
Mental health	'Need to blend aspects of general and mental health nursing and remove silos to ensure relationship based care' (Participant 41) 'Mental health must get bigger in nurse education. #CNOScot ? Future @nmcnews standards? #Scotland to lead!' (Participant 11) 'pilot of H/V and CMHN already happening in [x area]' (Participant 37) 'Mental health nurse training should have people wi 'lived experience' at heart of programme inc critical voices' (Participant 65)
Advanced practice	'Looking @ roles blending AP skills in 'primary care' & 'older people's care' essential to support future community care' (Participant 46) 'I think further development in MH might be a priority and specialist dementia care too?' (Participant 3) 'lots of great leaders in GP nursing needing space and support to ensure their voices heard' (Participant 41)

settings was evident and one person suggested nursing students undertaking more clinical placements in primary care to prepare them for future practice. For practising nurses it was felt that the challenges of reaching patients in remote parts of the country were being met, but best practice could be shared better between different areas.

4.4 | Mental health

Mental health was another area discussed as being necessary to develop for the future nursing workforce. Participants suggested additional training for mental health and generalist nurses to ensure they considered both physical and psychological aspects of care, to bridge the disciplinary divide and better support patients' needs. A few mentioned community mental health nurses who were being piloted in health visiting roles to enhance family centred care, as a positive initiative that could be rolled out nationwide. One person suggested involving people with mental health problems in education programmes to ensure that the patient voice is heard and understood.

4.5 | Advanced practice

The need for more advanced practice clinicians in the community was also debated as people felt older adults needed more specialist support at home to address the health and social care challenges of ageing, with dementia being mentioned as one example. This included palliative and end of life care, mental health as well as nurses skilled in dealing with frailty. The subject of nursing leadership was also brought up as some felt more senior role models in nursing could help bring about safe and effective changes in community care.

4.6 | Engaging nurses via social media

Engagement via social media can be viewed as the creation of connections between an individual or organisation and its audience members or followers, which contributes to a common goal or benefit. The level of engagement can range from low to medium or high and standards for measuring these on Twitter have been developed (Neiger, Thackeray, Burton, Giraud-Carrier, & Fagen, 2012). The #CNOScot

TABLE 2 Number and type of participants in the #CNOScot Twitter chat

Type of participant	No
No description given	9
Nurse (non-specific)	8
Nursing Director	7
Nurse Lecturer	5
Mental Health Nurse	4
Researcher	4
Professional Association	3
Higher Education Institute	3
Associate CNO	2
Carer	2
Nurse Consultant	2
AHP Senior Manager	1
Chief Medical Officer	1
Chief Nursing Officer	1
Community Nurse	1
Director of a Consultancy Company	1
Health Improvement Advisor	1
Journalist	1
Learning Disability Nurse	1
Nurse Team Leader	1
Nurse Manager	1
Patient Safety Improvement Advisor	1
Practice Nurse	1
Social Work Officer	1
Theatre Nurse	1
Writer	1
Total	64

TABLE 3 Top ten hashtags used during the #CNOScot chat

No	Hashtag (#)	Frequency
1	#CNOScot	446
2	#mhimprove	5
3	#nurses	4
4	#research	3
5	#education	3
6	#eolc	2
7	#IT	2
8	#NAHSCP	2
9	#nursing	2
10	#technology	2

chat would be considered as medium level engagement, due to the dialogic nature of the interactions. Sixty-four people took part in the hour-long online discussion, posting 444 tweets in total. The reach of the chat was 9095, the maximum size of the unique Twitter audience,

and it generated 43553 impressions, the number of times users saw the tweets on the platform (Ganis & Kohirkar, 2015). Based on information in individual Twitter handles, the participants were from various nursing and non-nursing backgrounds as can be seen in Table 2. The majority of participants were female ($n = 43$), several were male ($n = 16$) and the remaining six participants were organisations or institutions associated with nursing and health care and so were gender neutral. Most were based in Scotland but several people did not describe who they were or where they were located based in their Twitter handle. The top hashtags used during the Twitter chat can be seen in Table 3 and the most commonly used words are outlined in Figure 2, which mirror to some extent the main themes that emerged from the online discussion.

5 | DISCUSSION

The Twitter chat generated much debate and discussion about where the future focus of nursing in Scotland should lie. Technology was highlighted as necessary to deliver health services as it can provide efficiencies in supporting large numbers of patients and professionals in managing health and social care needs. This trend can be seen internationally as many countries are adopting electronic health records and other digital tools to improve their health system (WHO, 2016). Although telehealth and mobile health were mentioned, other specialist areas such as wearable devices, robotics, or Big Data, where large, diverse datasets are analysed using sophisticated software techniques to reveal new trends and patterns (Brennan & Bakken, 2015), were not brought up. Further research to explore what additional technologies are needed to support nurses and patients would be useful to ensure these are incorporated into national policies on workforce development and service delivery. Education on technology enabled care is also key and a review of nursing and midwifery education by the CNO in 2014 specified the inclusion of health informatics in pre-registration curricula (Scottish Government, 2014) which has not been uniformly adopted. Research exploring what pedagogical model of health informatics education would best suit nursing staff and students would be helpful and could be combined with international best practices on developing informatics competence as advocated by the Technology Informatics Guiding Education Reform (TIGER) Initiative (Hubner et al., 2016). It is likely the current impetus to educate nurses about technology will translate into future education standards and training programmes not only in Scotland but also worldwide.

Research and education were two areas identified as having a positive impact on nursing and the care of patients. Although the emphasis was to link these directly to clinical practice, literature shows many nurses do not value research and its application to the real-world (Brown, Wickline, Ecoff, & Glaser, 2009) and barriers exist which prevent the translation of Evidence Based Practice (EBP) (Mashiach Eizenberg, 2011). Although current nursing education standards include EBP, many in the workforce still lack an understanding of this area, which is a problem common to many countries that prevents



FIGURE 2 Word Cloud of the top 100 words used during the Twitter chat #CNOScot

new interventions translating into clinical practice (Kitson, 2004). Research exploring the extent of this issue and staff and settings most in need of a research culture, could help pinpoint where resources need to be invested which would inform future nursing strategies and help to advance this global agenda. As suggested during the Twitter chat stronger links could be forged between the health service, higher education and research centres with specialist expertise to help deliver this.

The focus on nurses working more in multidisciplinary teams in the community came across strongly, due to the necessity of providing integrated health and social care services in Scotland (Scottish Government, 2014) and the international emphasis to develop primary care as a means to support patient self-management at home. Given the organisational variations across health boards, local authorities and other agencies involved in this agenda, implementation is likely to progress differently across the country. What will be required is a nursing workforce with high levels of generalist knowledge along with excellent communication, coordination and leadership skills to ensure this complex landscape can be navigated and care is delivered effectively in the community by all those involved. In addition, advanced practice roles centring on the needs of older adults will be critical to develop care for ageing populations, which is a trend seen globally (WHO, 2011). Research on the specialized services required by this group, the level of demand for these and how best to develop and instill them into nursing education, practice and policy in line with the integration agenda is needed to ensure nurses are adequately prepared for the future.

Those who participated in the social media discussion from outside the profession had unique perspectives that added diversity to the mix of priorities discussed, such as the suggestion of involving patients in the development of nursing education and health services. Patients have been involved in co-designing health services (Pearce, Baraister, Smith, & Greenhalgh, 2011) and their engagement and participation is being recognized as critical to providing robust, safe and effective health systems in the United Kingdom, United States and elsewhere (Batalden et al., 2016). More research would be helpful to see what level of involvement works best to achieve better outcomes and how to implement co-production effectively. Further work exploring the views of non-nursing groups such as patients, the public and other health and social care providers towards the profession

would be useful to gain their perspectives on what the future of nursing in Scotland could look like.

While social media platforms such as Twitter are quick and easy to use, they do impose certain limitations. Only a fraction of the population of nurses in Scotland took part in the online chat and why so few participated is not clear. Certainly many nurses do not use social media or value it as a means of connecting with peers, some do not have the digital skills or access to equipment to do so easily and others are concerned with the privacy of information in online environments and potential breaches of professional behaviour (Barry & Hardiker, 2012). Social media only provides at best a partial picture so the results must be interpreted with caution. It should always be used in combination with other engagement approaches and so a national survey along with face-to-face events are also part of the CNO's communications strategy. More research on why and how nurses use social media would be helpful to gauge if this is a useful electronic medium to reach people in the profession en masse. Clear guidelines and policies on how nurses can make the most of social media and training opportunities to learn to use the various platforms effectively could help to improve engagement. Online environments, in particular social media, are being used by patients and the public in many countries to access health information and services and connect with others for social support (Chou, Hunt, Beckjord, Moser, & Hesse, 2009). Therefore, to support patient self-management further research on nurses' engagement with social media would be helpful.

One benefit of using Twitter is that it is an open platform so anyone who missed the conversation can see the discussions that took place, enhancing transparency in the process. Unfortunately, this can introduce problems as unsavoury content can be posted to hashtags, which occurred on a few occasions during the #CNOScot chat, as the platform is not moderated. This means there is an element of organisational risk in using social media professionally and a few nursing associations have guidelines in place to advise staff on how to successfully navigate this online environment (NMC, 2016). More research on the ethical and professional issues associated with using social media in nursing education, research and practice would be helpful to protect students, nurses, patients, educators and researchers and ensure they are competent in using these digital tools.

A final consideration must be given to the way social media analytics are designed and driven. There are few industry standard metrics,

and platforms vary in their definition and use, so they can be misleading. For example, the term “impression” is used to refer to tweets that have been delivered to a Twitter stream but not everyone who receives a tweet actually reads it. This figure also excludes social media data streamed to third party applications like Hootsuite, so whether it is a useful measurement or not is debatable, as it only reflects the size of your potential audience. Other engagement metrics such as retweets and replies are more accurate. However bots, which are automated software or algorithms posing in social media networks as real users, are problematic as they can inflate various engagement metrics by liking posts, following users and tweeting misinformation among others (Ruths & Pfeffer, 2014). Like any statistics, social media analytics must be interpreted within the context in which they are generated as they cannot fully predict or explain social behaviour and can be manipulated (Leonardi, Huysman, & Steinfield, 2013). More nursing research is needed to fully understand the advantages and disadvantages of social media analytics, to help educate everyone in the profession and to ensure nurses appreciate its benefits and drawbacks in interpreting online environments and virtual behaviours.

6 | LIMITATIONS

This study was limited to the secondary analysis of data in the public domain, which was generated over a short time period so it does not allow for generalisation. It was also not possible to verify with absolute certainty who the participants were, as information in personal Twitter handles is self-reported. The sample size was small and certain participants were more active than others which could have introduced bias.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

Nursing leaders may benefit from including social media in their engagement strategies and should consider the following when planning this type of activity. Social media policies that exist within health organisations or have been issued by professional associations may be useful to incorporate, where appropriate, into an engagement approach. For example, the National Council of State Boards of Nursing published a white paper on how nurses can use social media (National Council of State Boards of Nursing, 2011), which provides useful guidance on maximizing the benefits and limiting the risks of this type of online interaction. Additional expertise in running social media campaigns and tracking analytics may be necessary to support the design, delivery and evaluation of this type of communication, as it is a niche area that requires some specialist support (Thackeray, Neiger, Hanson, & McKenzie, 2008). Detailed plans of the social media engagement activity should drawn up and include: deciding what the ultimate goal or objective is; considering the audience that needs to be attracted and how best to recruit them; identifying what social media platforms to use; determining the hashtag and branding that are appropriate for the topic; agreeing how the online discussion will

be facilitated and run; selecting the analytics application and metrics to use and how the results of the online engagement will be evaluated and shared with relevant stakeholders (Tuten & Solomon, 2016). By taking these steps nurse managers and leaders can ensure their social media strategy is implemented correctly to achieve more engagement from nurses that can better inform health policy.

8 | CONCLUSION

Social media is gaining in popularity as a communications tool to reach and engage nurses on many topics. Nursing leaders could capitalize on the benefits that this digital channel creates to generate important discussion and undertake horizon scanning to identify future priorities for the profession. This could better inform health policy development and ensure high-quality patient care is delivered long term.

ACKNOWLEDGEMENTS

My thanks to the Chief Nursing Officer (CNO) for Scotland and her team for running the Twitter chat, to Wasim Ahmed (@was3210) for his helpful blog on social media research and Emma Blakey (@pascale_blakey) who checked samples of the analysis and offered advice on using Twitter for engagement purposes.

AUTHOR CONTRIBUTIONS

The author conceptualized and designed the study, undertook the data collection and analysis, and drafted and wrote the manuscript.

ETHICAL APPROVAL

Ethical approval was not required for this study due to the social media platform being an online open forum, which is in line with current best practice guidelines.

ABBREVIATIONS

Some abbreviations were used in the Twitter chat by participants and are included in the quotations used in this paper. Potential explanations for them are given here, although they may not be wholly accurate: Advanced Practice (AP), Community Mental Health Nurse (CMHN), District Nurse (DN), General Practitioner (GP), Health Visitor (H/V) and Mental Health (MH).

REFERENCES

- Antrobus, S., & Kitson, A. (1999). Nursing leadership: Influencing and shaping health policy and nursing practice. *Journal of Advanced Nursing*, 29, 746–753. <https://doi.org/10.1046/j.1365-2648.1999.00945.x>
- Barry, J. B., & Hardiker, N. (2012). Advancing nursing practice through social media: A global perspective. *OJIN: Online Journal of Issues in Nursing*, 17, 5. <https://doi.org/10.3912/ojin.vol17no03man05>

- Batalden, M., Batalden, P., Margolis, P., Seid, M., Armstrong, G., Opari-Arrigan, L., & Hartung, H. (2016). Coproduction of healthcare service. *BMJ Quality & Safety*, 7, 509–517. <https://doi.org/10.1136/bmjqs-2015-004315>
- Brennan, P. F., & Bakken, S. (2015). Nursing needs big data and big data needs nursing. *Journal of Nursing Scholarship*, 47, 477–484. <https://doi.org/10.1111/jnu.12159>
- Brown, C. E., Wickline, M. A., Ecoff, L., & Glaser, D. (2009). Nursing practice, knowledge, attitudes and perceived barriers to evidence-based practice at an academic medical center. *Journal of Advanced Nursing*, 65, 371–381. <https://doi.org/10.1111/j.1365-2648.2008.04878.x>
- Chou, W. Y. S., Hunt, Y. M., Beckjord, E. B., Moser, R. P., & Hesse, B. W. (2009). Social media use in the United States: Implications for health communication. *Journal of Medical Internet Research*, 11, e48. <https://doi.org/10.2196/jmir.1249>
- Chretien, K. C., & Kind, T. (2013). Social media and clinical care ethical, professional, and social implications. *Circulation*, 127, 1413–1421. <https://doi.org/10.1161/CIRCULATIONAHA.112.128017>
- DiChiacchio, T. (2014). *An Evidence Based Web Intervention to Facilitate Nurse Practitioner Participation in Policy Making Process Related to Scope of Practice*. (Doctoral Dissertation). Morgantown: West Virginia University.
- Disch, J., Dreher, M., Davidson, P., Sinioris, M., & Wainio, J. A. (2011). The role of the chief nurse officer in ensuring patient safety and quality. *Journal of Nursing Administration*, 41, 179–185. <https://doi.org/10.1097/NNA.0b013e318211874b>
- Ganis, M., & Kohirkar, A. (2015). *Social media analytics: Techniques and insights for extracting business value out of social media*. New York: IBM Press.
- Gebbie, K. M., Wakefield, M., & Kerfoot, K. (2000). Nursing and health policy. *Journal of Nursing Scholarship*, 32, 307–315. <https://doi.org/10.1111/j.1547-5069.2000.00307.x>
- Gimbel, S., Kohler, P., Mitchell, P., & Emami, A. (2017). Creating academic structures to promote nursing's role in global health policy. *International Nursing Review*, 64, 1–9. <https://doi.org/10.1111/inr.12338>
- Hübner, U., Shaw, T., Thye, J., Egbert, N., Marin, H., & Ball, M. (2016). Towards an International Framework for Recommendations of Core Competencies in Nursing and Inter-Professional Informatics: The TIGER Competency Synthesis Project. *Studies in Health Technology and Informatics*, 228, 655
- Institute of Medicine (2011). *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: National Academies Press.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53, 59–68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kitson, A. (2004). The state of the art and science of evidence-based nursing in UK and Europe. *Worldviews on Evidence-Based Nursing*, 1, 6–8. <https://doi.org/10.1111/j.1741-6787.2004.04010.x>
- Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, 19, 1–19. <https://doi.org/10.1111/jcc4.12029>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. California: Sage.
- Mashiach Eizenberg, M. (2011). Implementation of evidence-based nursing practice: Nurses' personal and professional factors? *Journal of Advanced Nursing*, 67, 33–42. <https://doi.org/10.1111/j.1365-2648.2010.05488.x>
- Mason, D. J., Gardner, D. B., Hopkins Outlaw, F., & O'Grady, E. T. (2015). *Policy & politics in nursing and healthcare*. St Louis: Elsevier.
- National Council of State Boards of Nursing (2011). White paper: A nurse's guide to the use of social media. *The Journal of Practical Nursing*, 61, 3.
- Neiger, B. L., Thackeray, R., Burton, S. H., Giraud-Carrier, C. G., & Fagen, M. C. (2012). Evaluating social media's capacity to develop engaged audiences in health promotion settings use of Twitter metrics as a case study. *Health Promotion Practice*, 14, 157–162. <https://doi.org/10.1177/1524839912469378>
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18, 34–35. <https://doi.org/10.1136/eb-2015-102054>
- Nursing and Midwifery Council (2016). *Guidance on using social media responsibly*. London: Nursing and Midwifery Council.
- O'Connor, S., Jolliffe, S., Stanmore, E., Renwick, L., Schmidtt, T., & Booth, R. (2017). A mixed study systematic review of social media in nursing and midwifery education: Protocol. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.13310>
- Pearce, V., Baraister, P., Smith, G., & Greenhalgh, T. (2011). Experienced-based co-design. In T. Greenhalgh, C. Humphrey, & F. Woodard (Eds.), *User involvement in health care*. Chichester: Wiley-Blackwell.
- Ritchie, J., & Spencer, L. (2002). Qualitative data analysis for applied policy research. In M. Huberman & M. B. Miles (Eds.), *The qualitative researcher's companion* (pp. 305–330). Thousand Oaks: Sage Publications. <https://doi.org/10.4135/9781412986274>
- Ruths, D., & Pfeffer, J. (2014). Social media for large studies of behavior. *Science*, 346, 1063–1064. <https://doi.org/10.1126/science.1261310>
- Scottish Government. (2014). *Setting the direction for nursing and midwifery education in Scotland. The strategic aims from the chief nursing officer's education review*. Edinburgh: Scottish Government.
- Shariff, N. (2014). Factors that act as facilitators and barriers to nurse leaders' participation in health policy development. *BMC Nursing*, 13, 1. <https://doi.org/10.1186/1472-6955-13-20>
- Skiba, D. J. (2008). Nursing education 2.0: Twitter & tweets. Can you post a nugget of knowledge in 140 characters or less? *Nursing Education Perspectives*, 29, 110–112.
- Spenceley, S. M., Reutter, L., & Allen, M. N. (2006). The road less traveled: Nursing advocacy at the policy level. *Policy, Politics and Nursing Practice*, 7, 180–194. <https://doi.org/10.1177/1527154406293683>
- Taylor, M. R. (2016). Impact of advocacy initiatives on nurses' motivation to sustain momentum in public policy advocacy. *Journal of Professional Nursing*, 32, 235–245. <https://doi.org/10.1016/j.profnurs.2015.10.010>
- Thackeray, R., Neiger, B. L., Hanson, C. L., & McKenzie, J. F. (2008). Enhancing promotional strategies within social marketing programs: Use of Web 2.0 social media. *Health Promotion Practice*, 9, 338–343. <https://doi.org/10.1177/1524839908325335>
- Toofany, S. (2005). Nurses and health policy. *Nursing Management*, 12, 26–30. <https://doi.org/10.7748/nm2005.06.12.3.26.c2028>
- Tuten, T. L., & Solomon, M. R. (2016). *Social media marketing*. California: Sage Publishing.
- World Health Organisation (2011). *Global health and aging*. Geneva: WHO.
- World Health Organisation (2016) *Atlas of eHealth Country Profiles. The Use of eHealth in Support of Universal Health Coverage*. Global Observatory for eHealth. Geneva: WHO.

How to cite this article: O'Connor S. Using social media to engage nurses in health policy development. *J Nurs Manag*. 2017;00:1–8. <https://doi.org/10.1111/jonm.12501>