

Examining care navigation: librarian participation in a team-based approach?

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Objective: This study investigated responsibilities, skill sets, degrees, and certifications required of health care navigators in order to identify areas of potential overlap with health sciences librarianship.

Method: The authors conducted a content analysis of health care navigator position announcements and developed and assigned forty-eight category terms to represent the sample's responsibilities and skill sets.

Results: Coordination of patient care and a bachelor's degree were the most common responsibility and degree requirements, respectively. Results also suggest that managing and providing health information resources is an area of overlap between health care navigators and health sciences librarians, and that librarians are well suited to serve on navigation teams.

Conclusion: Such overlap may provide an avenue for collaboration between navigators and health sciences librarians.

Keywords: Patient Navigation, Librarians, Cooperative Behavior, Delivery of Health Care

Much has been said about the evolving role of the medical librarian in recent years. Forces driving this evolution have included a challenging economic environment, dramatic changes in higher education and health care, emerging technologies, workflow and process changes to meet shifting constituent demands, and the need to keep the profession relevant. Budget cuts are forcing hospital libraries to provide new services with limited resources. Also while technology has enabled increased access to information, there is a great need for high-touch positions, characterized by emphasis on personal attention and service, to bridge the gap between technology and end users [1, 2].

In the midst of change, calls for increased collaboration with nontraditional library constituents and the exploration of emerging opportunities have frequented the literature, including a special issue of

the *Journal of the Medical Library Association* dedicated to this topic <<http://www.ncbi.nlm.nih.gov/pmc/issues/228328/>> [3, 4]. Similarly, in her 2014 Janet Doe lecture, Margaret Moylan Bandy, AHIP, FMLA, called on health sciences librarians to pivot into new roles by finding opportunities to build on existing skills and relationships and by initiating new services [5].

Patient navigation

One potential opportunity for pivoting that has received little attention in the literature is librarian collaboration with patient navigation services and participation on navigation teams. The Harold P. Freeman Institute defines a patient navigator as a person “who take[s] individual patients through the continuum of health care as it pertains to their specific disease, ensuring that any and all barriers to that care are resolved and that each stage of care is as quick and seamless as possible” [6].



Supplemental Figure 1 is available with the online version of this journal.

Little research has been conducted regarding the intersection of health navigation and health sciences librarianship. Recently, a study mapping the Medical Library Association's educational policy statement to the roles and responsibilities of patient navigators found promising areas of overlap, but also revealed a need to better define critical skills required to perform navigator activities [7]. This study relied on a predetermined set of roles and professional activities. Another study set out to describe what patient navigators do by conducting observations of three patient navigator programs [8]. Their analysis led to a two-dimensional matrix categorization of navigators, but their limited sample size impedes the generalizability of the findings. Attwood and Wellik described the success of collaborating with an American Cancer Society (ACS) navigator in providing comprehensive patient education and support services at the Mayo Clinic in Phoenix, Arizona [9]. The collaboration involved the placement of a cancer navigator in the clinic library, allowing for walk-in visits in conjunction with the patients' chemotherapy classes or visits to the library, as well as collaborative patient support opportunities between the navigator, the registered nurse educator teaching the chemotherapy classes, and the medical librarian. Attwood felt the initiative helped cancer patients to better understand their diagnosis, treatment options, and supportive care measures, and encouraged caregivers to be aware of patients' information needs and the wide variety of resources for meeting those needs [9]. The navigator assisted the librarian in collection development for cancer-related materials, collaborated in promotional projects, and increased opportunities to market ACS services in the organization. The initiative led to the creation of a cancer pathfinder, as well as the rollout of handheld audio players with preloaded patient resources that received positive feedback [9]. The collaboration "enhanced the quality of information resources that the patients and their families receive," and continuing collaborative efforts were planned [9].

To support a broader exploration of collaboration, the current study adds to existing research by enabling a more detailed view of the degrees and certifications required of navigators and by providing a diverse set of patient navigator roles and responsibilities to draw upon.

Background

According to Huber and colleagues, "The first patient navigation program was established in 1990 by Harold P. Freeman, who has been credited with coining the term in 1989 in an American Cancer Society report, *Cancer in the Poor: Report to the Nation*. Since then, navigator programs have grown tremendously to include nearly all aspects of the health care system, and research to investigate their impact and funding to support both have grown as well" [7]. The American Medical Association articulates that the "primary role of a patient navigator should be to foster patient autonomy and provide patients with information that enhances their ability to make appropriate health care choices and/or receive medical care with an enhanced sense of confidence about risks, benefits, and responsibilities" [10].

However, a standardized definition of the role has been elusive due to the diversity of navigators' job titles, work environments, and backgrounds. For example, the literature indicates they can be nurses [11, 12], social workers [13], community health workers [14], peer supporters [15], or lay individuals [16, 17]. As such, activities that navigators perform and roles that they fulfill often vary.

METHODS

Search strategy

Health care navigator position announcements were collected between September 2013 and April 2014 in order to perform a content analysis of roles, skill sets, degrees, and certifications associated with navigators. The search strategy employed was not intended to appraise the entirety of navigator position announcements but to compile a convenience sample of postings sufficient to analyze employers' self-reported needs and requirements.

The multidisciplinary research team consisted of four members. A library science research assistant collected and transcribed position announcement data, which were then reviewed by three researchers with expertise in health sciences librarianship and interprofessional health care. Several job aggregation websites were initially reviewed for postings; however, using a single source reduced the likelihood of gathering duplicate postings from multiple sites. Therefore, position announcements were gathered from a single job aggregation website,

Indeed.com, as it provided the greatest volume of relevant results. Initial searches were tested using combinations of the terms “health care,” “patient,” “advocate,” and “navigator.” The phrase “health care navigator” returned the greatest volume of relevant results and so was used as the preferred search phrase for the duration of the sample collection. All searches were conducted using only the search phrase and no additional parameters (e.g., geographic or salary filters). A researcher collected position announcements multiple times per week until saturation of position announcement themes (responsibilities, skill sets, degrees, and certifications) was achieved using the search strategy, and collection ended. Given this study’s focus on identifying areas of overlap between health care navigators and health sciences librarianship, 50 position announcements requiring primary patient care and/or a clinical degree or certification (e.g., registered nurse) were omitted. After removing duplicate position announcements, 100 unique navigator position announcements with 1,443 role and skill set instances remained.

Content analysis procedures

Content from the position announcements was divided into two groups for analysis: (1) degree and certification requirements, and (2) position roles and skill sets. Degree and certification requirements were tallied directly from the position announcements. In addition to degree and certification requirements, the researchers wished to quantify frequencies of the roles and skill sets listed in the announcements. However, quantifying role and skill set instances first necessitated a standardization of the position announcement language. Therefore, role and skill set descriptions were transcribed, and qualitative content analysis was used to develop categories with which to standardize the dataset.

Role and skill set categorization

Qualitative content analysis attempts to retrieve common themes until saturation has been reached [18]. Two researchers independently coded a subsample of the role and skill set data using self-selected classification terms. Inconsistencies between classification terms were then discussed for agreement between the two researchers, and the terms were organized into thematically consistent clusters. Finally, each theme cluster was assigned an

exemplary category descriptor, resulting in 48 final category terms. With category terms developed, one researcher coded each role and skill set in the sample, resulting in 1,816 coded-term instances.

Inter-rater agreement

An uncorrected percent agreement calculation was used to test for bias in the researcher’s role and skill set coding. Two researchers independently coded a subsample of the role and skill set sample. The coding was compared per role or skill set instance, and only the instances of identical agreement were counted as matches. The average percent agreement test yielded an agreement correlation of 0.604. Note that because *percent agreement* treats coding in similar categories (e.g., “Work collaboratively” and “Work well with others”) as reflecting the same degree of disagreement as assignment into highly dissimilar categories, the calculation can present a bias toward underestimation [19].

RESULTS

In the 100 position announcements, a bachelor’s degree was the most frequent highest preferred or required degree (n=56), followed by a high school diploma (n=40) and an associate’s degree (n=22). Bilingual fluency (n=52) was also a common preference or requirement. Online only Figure 1 shows a full accounting of required degrees and certifications. Note that because the highest preferred and required degrees were counted, respectively, the number of degrees exceeded the number of position announcements.

The most frequently assigned role and skill set category term was “Coordinate patient care,” which was represented in position announcement phrases such as: develops action plans with patient and caregivers to meet their needs; makes referrals to internal and external services including legal assistance, behavioral health, domestic violence assistance, and anger management; directly interfaces with physicians, health care teams, patients, and care givers in order to manage patient care; schedules appointments and provides a full range of support services including education; and ensures the patient has arranged for follow-up and other health care provider services.

The second most frequently assigned role and skill set category term was “Work collaboratively,”

represented by phrases such as: participates in learning collaboration among staff; manages resources through interdisciplinary collaboration to achieve optimal patient outcomes; and works with other members of the health care team to compassionately link patients to available resources. Figure 2 shows the frequency of each role and skill set category in the sample.

Roles or skill sets related to providing and managing health information resources appeared in 26% of the position announcements. Typically coded as “Educate,” such instances included: selects, adapts, and individualizes patient education information for the client or family by evaluating available brochures, printed materials, video tapes, and external resources in light of the age, culture, religious practices, and language of the client, family, and significant others; has knowledge of health-related materials; maintains supply of culturally competent reference and educational materials in a variety of media; and provides educational and research support by organizing and providing each patient with a personal diagnostic binder.

DISCUSSION

Health care navigation teams

These results indicate that managing and providing health information resources is an area of overlap between health care navigators and health sciences librarians. Such overlap can provide an avenue for collaboration between navigators and health sciences librarians. The need for the services provided by navigators is high, and the current health care system may not have the capacity to fulfill the demand [20, 21]. As demonstrated in the literature and in this content analysis, the credentials sought for navigators vary widely, as do navigator roles in supporting patient care. Navigators have been identified at each stage of the health care spectrum, with varying levels of responsibility and expertise, and a variety of labels. For this reason, Freeman emphasizes the need for navigators to be performing at the level for which they are trained in health care organizations [6]. While this study explores areas of overlap between health care navigators and health sciences librarians, the authors are not proposing that librarians assume clinical navigator roles. Rather, we emphasize that health sciences librarians are

well suited to assume information-related roles with a team-based navigation approach, although this has yet to be demonstrated in the literature.

The current study highlights the variation in degrees and certifications among navigators (e.g., positions requiring a high school diploma compared to positions requiring secondary degrees or advanced clinical certification). A team-based approach to navigation may offer the advantage of tailoring the wide range of backgrounds and, by extension, salaries, anecdotally associated with navigator positions. Such a model could potentially be more cost effective than staffing navigators of any particular credential level. For example, patients or caregivers could enter the care navigation model with assistance from navigators with base-level knowledge and skill sets and then have their needs triaged to the next level of expertise as appropriate. This model may also support collaborative practice across disciplines and allow health care professionals at all levels to practice at the top of their licenses.

Recently, scholars have begun to advance the idea of health care navigation teams. In discussing the future of patient navigators, Freeman projected navigation teams will “save lives, reduce pain, suffering, and death from cancer and other chronic diseases” [22]. Projects in Boston, Chicago, and San Antonio have shown promise for the use of navigation teams [23]. Nonzee and colleagues utilized a “multi-tiered care management team” that included a nurse practitioner, a social worker, and a lay health navigator in order to tailor navigation activities to each phase of the health care experience [24]. A study conducted by Palos and Hare extended the concept of navigation team to include patient’s caregivers [25].

In the navigation team approach, each individual brings a unique set of skills to the table, while enabling a cost-efficient distribution of responsibilities. Medical librarians contribute a unique set of skills in that they are ideally trained and experienced to provide effective patient health information in such a setting. Medical librarians are also adept at working collaboratively, a skill desired of navigators as demonstrated by this study. Recognizing and building upon professional expertise will allow what Freeman calls, “the timely movement of an individual patient” through the health care system, and it creates an environment for more patient-centered care [22, 26].



Figure 2
Navigator roles and skill sets

Interdisciplinary opportunities

With the growing interest in patient navigation programs at universities, there are opportunities to cross-train navigators and library and information science students. Interdisciplinary courses provide an opportunity for patient navigator students to learn about knowledge management and information retrieval concepts. Similarly, library and information science students would benefit from a deeper understanding of a special population with distinct information needs, barriers, and potential for outreach activities, and from having broader interdisciplinary experiences during their training.

Limitations

Decisions about creating and assigning category terms to the roles and skill sets were self-selected and were necessarily subjective. The agreement correlation of 0.604, indicating disagreement in about 40% of coding instances, emphasizes the subjectivity of classification. Because the position announcement sample was collected from only one website, it might not represent the entirety of navigator position announcements.

Additionally, this study did not analyze clinical nurse navigator position announcements that required primary care responsibilities or clinical credentialing. The omitted positions composed 33% of the initial sample and included a wide range of clinical qualifications, from associate's to master's degrees in nursing. It is unclear what roles and responsibilities besides clinical care would be required of professional degree-holding navigators or whether overlap with health sciences librarians would differ compared to nonclinical navigators. As such, the omission of these position announcements may reduce the generalizability of the current study with respect to patient navigation as a whole.

Areas of future research

A study comparing the roles and responsibilities of health sciences librarians and professional clinical navigators would elucidate any differences in overlap compared to nonclinical navigators. Recognizing that job postings and day-to-day responsibilities often differ, future research comparing navigator position announcements with

the skills identified by Parker et al. would help to understand any disconnects between position announcements and employees' actual roles. Finally, a study focusing on hospitals in which librarians and navigators and/or navigation teams are present would help to indicate the generalizability of this study's results and aid in the development of next steps for establishing and promoting collaborative services.

REFERENCES

1. Silver MP. Patient perspectives on online health information and communication with doctors: a qualitative study of patients 50 years old and over. *J Med Internet Res*. 2015 Jan;17(1):e19. DOI: <http://dx.doi.org/10.2196/jmir.3588>.
2. Bradley PV, Getrich CM, Hannigan GG. New Mexico practitioners' access to and satisfaction with online clinical information resources: an interview study using qualitative data analysis software. *J Med Libr Assoc*. 2015 Jan;103(1):31–5. DOI: <http://dx.doi.org/10.3163/1536-5050.103.1.006>.
3. McGowan JJ. Tomorrow's academic health sciences library today. *J Med Libr Assoc*. 2012 Jan;100(1):43–6. DOI: <http://dx.doi.org/10.3163/1536-5050.100.1.008>.
4. Plutchak TS. Breaking the barriers of time and space: the dawning of the great age of librarians. *J Med Libr Assoc*. 2012 Jan;100(1):10–9. DOI: <http://dx.doi.org/10.3163/1536-5050.100.1.004>.
5. Bandy MM. Pivoting: leveraging opportunities in a turbulent health care environment. *J Med Libr Assoc*. 2015 Jan;103(1):3–13. DOI: <http://dx.doi.org/10.3163/1536-5050.103.1.002>.
6. Harold P. Freeman Patient Navigation Institute. FAQ. [Internet]. The Institute; 2015 [cited 8 Jul 2015]. <<http://www.hpfreemanpni.org/faq/>>.
7. Huber JT, Shapiro RM, Burke HJ, Palmer A. Enhancing the care navigation model: potential roles for health sciences librarians. *J Med Libr Assoc*. 2014 Jan;102(1):55–61. DOI: <http://dx.doi.org/10.3163/1536-5050.102.1.011>.
8. Parker VA, Clark JA, Leyson J, Calhoun E, Carroll JK, Freund KM, Battaglia TA. Patient navigation: development of a protocol for describing what navigators do. *Health Serv Res*. 2010 Apr;45(2):514–31. DOI: <http://dx.doi.org/10.1111/j.1475-6773.2009.01079.x>.
9. Attwood CA, Wellik KE. Collaboration, collegiality, and cooperation. *Clin J Oncol Nurs*. 2012 Oct;16(5):487–90.
10. American Medical Association. Improving the health insurance marketplace: patient navigators [Internet]. The Association; 2012 [cited 8 Jul 2015]. <<http://>

- patientnavigator.com/blog/wp-content/uploads/2014/10/AMA-STATEMENT-ON-PATIENT-NAVIGATORS.pdf>.
11. Horner K, Ludman EJ, McCorkle R, Canfield E, Flaherty L, Min J, Miyoshi J, Lapham B, Bowles EJA, Wagner EH. An oncology nurse navigator program designed to eliminate gaps in early cancer care. *Clin J Oncol Nurs*. 2013 Feb;17(1):43–8. DOI: <http://dx.doi.org/10.1188/13.CJON.43-48>.
 12. Brown CG, Cantril C, McMullen L, Barkley DL, Dietz M, Murphy CM, Fabrey LJ. Oncology nurse navigator role delineation study. *Clin J Oncol Nurs*. 2012 Dec;16(6):581–5. DOI: <http://dx.doi.org/10.1188/12.CJON.581-585>.
 13. Davis C, Darby K, Likes W, Bell J. Social workers as patient navigators for breast cancer survivors: what do African-American medically underserved women think of this idea? *Soc Work Health Care*. 2009 Aug/Sep;48(6):561–78. DOI: <http://dx.doi.org/10.1080/00981380902765212>.
 14. Enard KR, Ganelin DM. Reducing preventable emergency department utilization and costs by using community health workers as patient navigators. *J Healthc Manag*. 2013 Nov–Dec;58(6):412–27.
 15. Mollica MA, Nemeth LS, Newman SD, Mueller M, Sterba K. Peer navigation in African American breast cancer survivors. *Patient Relat Outcome Meas*. 2014 Nov;5:131–44. DOI: <http://dx.doi.org/10.2147/PROM.S69744>.
 16. Meade CD, Wells KJ, Arevalo M, Calcano ER, Rivera M, Sarmiento Y, Freeman HP, Roetzheim RG. Lay navigator model for impacting cancer health disparities. *J Cancer Educ*. 2014 Sep;29(3):449–57. DOI: <http://dx.doi.org/10.1007/s13187-014-0640-z>.
 17. Allison AL, Ishihara-Wong DDM, Domingo JB, Nishioka J, Wilburn A, Tsark JU, Braun KL. Helping cancer patients across the care continuum: the navigation program at the queen's medical center. *Hawaii J Med Public Health*. 2013 Apr;72(4):116–21.
 18. Babbie ER. *The practice of social research*. Belmont, CA: Wadsworth Publishing; 1983.
 19. Jones AP, Johnson, LA, Butler, MC, Main, DS. Apples and oranges: an empirical comparison of commonly used indices of interrater agreement. *Acad Manage J*. 1983 Sep 1;26(3):507–19. DOI: <http://dx.doi.org/10.2307/256262>.
 20. Freeman HP. The origin, evolution, and principles of patient navigation. *Cancer Epidemiol Biomarkers Prev*. 2012 Oct;21(10):1614–7. DOI: <http://dx.doi.org/10.1158/1055-9965.EPI-12-0982>.
 21. Childress MT. Unlocking the complexity of the health care system: Kentucky's health navigators. Center for Business and Economic Research Report. 2012 Oct;paper 1. (Available from: <http://uknowledge.uky.edu/cber_researchreports/1>. [cited 14 Dec 2015].)
 22. Freeman HP. The history, principles, and future of patient navigation: commentary. *Semin Oncol Nurs*. 2013 May;29(2):72–5. DOI: <http://dx.doi.org/10.1016/j.soncn.2013.02.002>.
 23. Katz ML, Young GS, Reiter PL, Battaglia TA, Wells KJ, Sanders M, Simon M, Dudley DJ, Patierno SR, Paskett ED. Barriers reported among patients with breast and cervical abnormalities in the patient navigation research program: impact on timely care. *Womens Health Issues*. 2014 Jan–Feb;24(1):e155–e162. DOI: <http://dx.doi.org/10.1016/j.whi.2013.10.010>.
 24. Nonzee NJ, McKoy JM, Rademaker AW, Byer P, Luu TH, Liu D, Richey EA, Samaras AT, Panucci G, Dong X, Simon MA. Design of a prostate cancer patient navigation intervention for a Veterans Affairs hospital. *BMC Health Serv Res*. 2012 Sep 25;12(1):340–8. DOI: <http://dx.doi.org/10.1186/1472-6963-12-340>.
 25. Palos GR, Hare M. Patients, family caregivers, and patient navigators. *Cancer*. 2011 Aug;117(15 supp):3590–600. DOI: <http://dx.doi.org/10.1002/cncr.26263>.
 26. Huber JT, Shapiro RM, Gillaspay ML. Top down versus bottom up: the social construction of the health literacy movement. *Libr Q*. 2012 Oct;82(4):429–51. DOI: <http://dx.doi.org/10.1086/667438>.

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