

Diversity Awareness and Documentation Practices Among Oncology Advanced Practice Providers

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Authors' disclosures of conflicts of interest are
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Abstract

Advanced practice providers (APPs) care for widely diverse populations. The Institute of Medicine (IOM) states that bias, prejudice, and stereotyping by a health-care provider may contribute to disparities, which are associated with worse outcomes. The IOM called for efforts to increase awareness among health-care providers. The objective of this study is to assess the cultural self-awareness of oncology APPs who practice in a community-based outpatient cancer center and investigate the extent to which APPs include cultural care into patient assessments and document this data. Oncology APPs completed a questionnaire evaluating cultural self-awareness. A prospective, quality improvement chart review was performed to analyze the extent to which cultural themes were addressed during oncology clinic visits. A list of cultural keywords was used as a guide. About 10% of the 2015 cancer population at the institution was examined, which included a stratified sample of the top six disease groups. Responses were analyzed. All APPs demonstrated average or above-average cultural awareness. Documentation of cultural assessment was low. Of the 28 cultural keyword items, an average of 4.88 items were addressed during each visit. Multiple cultural items, including literacy, language, insurance status, and belief about the disease were addressed less than 5% of the time.

Health-care providers have the unique challenge of caring for widely diverse populations. The United States currently has the most polyracial, polyethnic, and polyreligious population in history (Andrews & Boyle, 2002). Health disparities are defined as “differences in health outcomes and their determinants between segments of the population, as defined by social, demographic, environmental, and geographic attributes” (Centers for Disease Control and Prevention, 2011).

HEALTH-CARE DISPARITIES IN THE US

The 2002 Institute of Medicine (IOM) landmark report titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* confirmed that disparities in health care exist and are associated with worse outcomes. Findings also suggest that bias, prejudice, and stereotyping by the health-care provider may contribute to disparities (IOM, 2003). The nation's health objectives are presented in the Healthy People 2020 initiative. One of the four goals of this initiative involves "achieving health equity, eliminating disparities, and improving health of all US population groups" (Centers for Disease Control and Prevention, 2016).

Oncology patients are not spared from health disparities. In fact, they may be highlighted in this population and have more detrimental consequences, even despite recent advances in cancer care. In addition to obvious factors, such as insurance coverage, factors such as genomics and clinical trial participation also contribute to cancer care disparities. Certain types of cancer are more common in certain ethnic groups and age groups. Many subgroups of patients, including African Americans and Hispanics, are underrepresented in or excluded from clinical trials, often eliminating low-cost care options and leading to clinical trial data that does not translate as accurately to real-world populations (Goss et al., 2009; Murthy, Krumholz, & Gross, 2004). It is thought that improving access to trials, changes in eligibility criteria, and increased invitations for clinical trial participation by minorities would improve representation (Goss et al., 2009). In an editorial that appeared in the January 2010 *Annals of Oncology*, Surbone (2010) noted that cultural differences compounded by an array of socioeconomic factors, such as income, education, environment, and social support, are a major reason why patients potentially receive unequal access to cancer prevention, screening, clinical trials, effective pain control, end-of-life care, or survivorship care.

In order to tackle these daunting national goals and health disparities, it is necessary for health-care professionals to be aware of the many variances that exist and be culturally competent

in the care of a diverse patient population. In fact, the IOM called for efforts to address health disparities, including increasing awareness among health-care providers (IOM, 2003).

CULTURAL COMPETENCE

The American Society of Clinical Oncology (ASCO) Health Disparities Agenda highlights the need for increased education and awareness of minority populations among oncology caregivers (Goss et al., 2009). The idea of cultural competence has long been important among health-care providers. It is well agreed upon that health-care providers should provide culturally competent care, that is, to "understand the importance of social and cultural influences on patients' health beliefs and behaviors," (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003). The Oncology Nursing Society (ONS) Oncology Nurse Practitioner Competencies describe the role of oncology-specialized nurse practitioners in providing culturally appropriate care to diverse populations (ONS, 2007).

Cultural self-awareness is one of the first steps to becoming culturally competent. To possess cultural self-awareness, one must have knowledge of one's own thoughts and feelings and have appreciation for the diversity of others (ONS, 2008). Critical reflection, as with the "Looking Glass Examination" (discussed further in the following pages), is an important part of the Guidelines for Practice of Culturally Competent Nursing Care (Matthews-Juarez & Weinberg, 2006). It is thought that nurses "shall engage in critical reflection of their own values, beliefs, and cultural heritage in order to have an awareness of how these qualities and issues can impact culturally congruent nursing care" (Douglas et al., 2014).

It is generally agreed upon that cultural competence is required among health-care providers. Yet, there is no standard assessment tool used to measure cultural competence. A 2013 literature review sought to analyze the tools used to measure cultural competence among nurses. Notably, none of the 11 tools identified were specific to oncology nurses (Loftin, Hartin, Branson & Reyes, 2013). A 2017 pilot study examined the cultural competence of pediatric oncology nurses and found them to be culturally aware, but with low

cultural knowledge and skill (Eche & Aronowitz, 2017). Additional review of the literature found no tools that were specific to oncology APPs. There were no tools that objectively measured cultural competency (Loftin et al., 2013). An extensive literature review shows no current research examining the cultural experience of oncology advanced practice providers.

The “Looking Glass Examination” (Table 1) is a tool used to evaluate cultural self-awareness and examine the intrinsic attitudes that providers may have when caring for patients with diverse backgrounds (Yeo, Phillips, Delengowski, Griffiths, & Purnell, 2011). This examination was initially published in *Cultural Competence in Cancer Care: A Health Care Professional’s Passport* (Matthews-Juarez & Weinberg, 2006) as an initial step in recognizing the effects of culture on the interactions and views of disadvantaged or ethnic groups in the health-care setting. While the tool has not been validated and its reliability is unknown, it is meant to improve the ability of health-care providers to serve a diverse population (Matthew-Juarez & Weinberg, 2006; Yeo et al., 2011).

A comprehensive review of the literature found no research examining the cultural documentation practices of oncology providers or APPs. While it is generally agreed upon that the care of the patient is paramount to the documentation of the visit, documentation is the primary and solitary record of what was done in the patient encounter. Therefore, it can be assumed that what was not documented was not done.

CULTURE, CARE, AND QUALITY IN NORTH CAROLINA

Cultural competence is relevant to health-care professionals in every setting. In the 2016 National Healthcare Quality and Disparities Report, North Carolina was the second-worst ranked state when grouped by overall quality of care. North Carolina is ranked among the worst states when comparing average differences in the quality of care for African Americans, Hispanics, and Asian Americans compared with Caucasians (Agency for Healthcare Research and Quality, 2017). North Carolina has a diverse population. There are 22.2% Black people/African Americans and 9.2% Hispanic people living in North Carolina. Over 11% percent

of the population of North Carolina speaks a language other than English at home, and 12.2% are uninsured according to US census data (United States Census Bureau, 2017). Over 9% of the population has a disability, and 15.4% are in poverty (United States Census Bureau, 2017).

QUALITY IMPROVEMENT PROJECT

The purpose of this quality improvement endeavor is two-fold. The first is to assess the cultural self-awareness of oncology APPs who practice in a community-based outpatient cancer center. The second is to investigate the extent to which oncology APPs include cultural care into patient assessments.

METHODS

Cultural Self-Awareness Assessment

The initial step was to assess the current cultural self-awareness of the participating oncology APPs at a community-based academic institution in the southeastern United States. The “Looking Glass Examination,” an eight-item dichotomous question tool identified by Matthew-Juarez and Weinberg (2006), was utilized as the assessment tool. Although this tool has not been validated and its reliability is not clearly known, it is a means to quantify each practitioner’s level of self-awareness as it applies to cultural sensitivity and diversity.

The tool is comprised of eight true/false questions with a scoring key at the end. The key places the participant in one of three categories: low, medium, and high level of cultural self-awareness, with recommendations for methods of improvement. The questionnaire was transcribed into an electronic survey. All twelve medical and radiation oncology-based APPs working in this institution were invited by email to complete the cultural assessment survey. A link to the survey was provided in the email invitation.

Documentation Practices

The Duke Raleigh Hospital Cancer Center 2016 Annual Report was used to identify 1,647 new oncology cases seen at the site in 2015. It can be assumed that numbers continue to rise annually based on previous trends. 10% (164) of the identified 1,647 new oncology cases were sampled. In addition, a stratified sample of the top six disease

Table 1. The Looking Glass Examination

Statement	True	False
1. I believe that my racial, ethnic, and socioeconomic background influences my relationship to my work, colleagues, and patients and families who are racial/ethnic and disadvantaged, and how I see the world.	2	1
2. I believe that my own values, family structure, and socioeconomic background give me insight about the ethnic minority patients who I see in my practice. Understanding me means I understand them.	2	1
3. Not speaking the language and/or understanding culture, family structure, or the communities from which the racial/ethnic and disadvantaged patients come should not matter to me as a healthcare professional.	1	2
4. Do I hold certain beliefs about particular racial/ethnic and disadvantaged patients that are stereotypes, such as African American patients can tolerate more pain than other racial/ethnic groups? Or first-generation Japanese women born in the United States do not get breast cancer?	1	2
5. Do I ask my racial/ethnic and disadvantaged patients about cancer prevention activities such as diet and exercise as part of the continuous quality improvement for the practice?	2	1
6. Early detection and screening for cancer do not need to be evidence-based for racial/ethnic minorities or the rural poor. Instead, general cancer screening standards for the general population should be applied.	2	1
7. As a healthcare professional, asking the right questions during history taking is critical in my understanding of the culture of my patients.	2	1
8. To generalize and classify racial/ethnic and disadvantaged patients are stereotypical behaviors.	2	1
Total score:		_____
Interpretation of score		
15-16	You have more than average awareness of the cultural sensitivity necessary to communicate with your patients of different racial/ethnic backgrounds.	
10-14	You are encouraged to think about how you can pay more attention to the cultural sensitivities and communication needs of your patients from different racial/ethnic minority backgrounds.	
1-9	You are encouraged to consider the cultural sensitivities and communication needs of your patients from different racial/ethnic and disadvantaged backgrounds. It is strongly recommended that you think about how you can pay more attention to these needs.	
<i>Note.</i> Used with permission from Matthew-Juarez & Weinberg (2006, pp 19-20).		

groups (breast, lung, gastrointestinal, genitourinary, hematologic, and gynecologic cancers) was included (Duke Cancer Institute, 2016). It was determined that the 10% sample size would offer a robust representation of the documentation practices of the oncology APPs at this institution.

Data Collection

A prospective quality improvement chart review was performed to analyze the extent to which cultural themes were addressed during oncology clinic visits. The project was approved for Quality Improvement Exempt status; no institutional review board approval was needed. Of the 12 APPs who were invited to participate in this project,

11 agreed to complete the cultural awareness assessment survey and 8 agreed to participate in the chart review portion of this project.

Each of the 8 APPs was asked to review approximately 16 charts over a period of 2 months. A project leader prospectively assigned charts to ensure that APPs did not review their own charts and that all disease groups were accurately represented. A 26-item list of cultural keywords and phrases was used as a guide for chart review (Table 2). These keywords were derived from various lists of physical and social determinants of health according to the Centers for Disease Control and Prevention, Healthy People 2020 initiative, and the World Health Organization (WHO; Centers

for Disease Control and Prevention, 2018; Office of Disease Prevention and Health Promotion, 2018a, 2018b; WHO, 2018). Cultural keywords included items such as education, ethnicity, family structure, parental status, and occupation, among others. Reviewers evaluated the most recent oncology clinic note written by the APP, as well as the initial oncology consult note for that patient, often written by the physician. Reviewers documented cultural assessment documentation on an Excel spreadsheet and returned it to the project leader when it was completed.

Data Analysis

For the quantitative data analysis, the chart reviewers entered data into an Excel spreadsheet. Using the Data Analysis ToolPak, one APP compiled all individual data into the spreadsheet for review. Excel functions were used to sort data by different categories and to count.

FINDINGS

A total of 154 charts were reviewed. The data are summarized in Table 3. Within each chart, the new patient oncology consult and most recent oncology return visit performed primarily by the APP was reviewed, totaling 308 patient visit notes reviewed. Of the 26 preidentified key words, only five cultural items on average were documented during each new patient visit, whereas 4.75 cultural items on average were documented during each return visit. Patient age and gender were documented over 90% of the time during any type of visit. Gynecologic patients had the smallest number of cultural items documented per visit—only 3.77 items per visit—while hematology patients had the most cultural items documented per visit, at 5.81 items per visit. Multiple cultural items, including caregiver status, language, use of herbal treatments, insurance status, and belief about disease were addressed less than 5% of the time. Literacy was not documented once in all of the visits reviewed.

The cultural awareness assessment survey was completed by 92% of the outpatient oncology APPs at the medical facility (11 of the 12 invited APPs, $n = 11$). Results were scored and interpreted according to the Looking Glass Examination criteria. Forty-five percent of APPs demonstrated

Table 2. Cultural Keywords

Age	Family structure
Gender	Caregiver status
Race	Disabilities
Country of origin	Religion
Language	Sexual orientation
Literacy level	Socioeconomic status/income
Ethnicity	Insurance status
Occupation	Diet
Military status	Exercise/physical activity
Marital status	Educational status
Availability of support/resources	Use of herbal/natural medicines or “folk” treatments
Parental status	Residential status
Belief about disease	Belief about health/wellness

more than average awareness of the cultural sensitivity necessary to communicate with patients of different racial/ethnic backgrounds (Matthew-Juarez & Weinberg, 2006). Fifty-five percent of APPs scored in the middle range and, according to the Looking Glass Examination recommendations, would be encouraged to think about how to pay more attention to the cultural sensitivities and communication needs of patients from different racial/ethnic minority backgrounds (Matthew-Juarez & Weinberg, 2006). None of the APPs surveyed scored in the lowest range, where the recommendation would be to consider the cultural sensitivities and communication needs of patients from different racial/ethnic and disadvantaged backgrounds (Matthew-Juarez & Weinberg, 2006).

LIMITATIONS

There are limitations to this study. The cultural assessment tool aimed to measure cultural self-awareness. It is possible that APPs reported the more socially acceptable answer instead of the answer that best reflected their true cultural awareness. The survey also preceded the prospective chart review, allowing for potential bias of the APP, potentially increasing cultural documentation practices. The chart review was completed by many different APPs, increasing the risk of inter-reviewer variability. It is possible

Table 3. Documentation Practices of Oncology Advanced Practice Providers (N = 308 Patient Visit Notes Reviewed)

Cultural keyword	Disease group, n (%)									
	Total (N = 308)	New (n = 153)	Return (n = 155)	Breast (n = 102)	Gastrointestinal (n = 46)	Genitourinary (n = 50)	Gynecologic (n = 22)	Hematologic (n = 32)	Lung (n = 56)	
Age	291	146 (95.4%)	145 (93.5%)	85 (83.3%)	46 (100%)	50 (100%)	22 (100%)	32 (100%)	56 (100%)	
Gender	305	151 (98.7%)	154 (99.4%)	101 (99%)	46 (100%)	50 (100%)	22 (100%)	32 (100%)	54 (96.4%)	
Race	91	46 (30.1%)	45 (29%)	24 (23.5%)	1 (2.2%)	43 (86%)	2 (9.1%)	17 (53.1%)	4 (7.1%)	
Country of origin	41	22 (14.4%)	19 (12.3%)	10 (9.8%)	6 (13%)	0	0	6 (18.8%)	19 (33.9%)	
Language	7	4 (2.6%)	3 (1.9%)	1 (1%)	2 (4.3%)	0	0	2 (6.3%)	2 (3.6%)	
Literacy level	0	0	0	0	0	0	0	0	0	
Ethnicity	14	7 (4.6%)	7 (4.5%)	6 (5.9%)	5 (10.9%)	3 (6%)	0	0	0	
Occupation	158	78 (51%)	80 (51.6%)	71 (69.6%)	14 (30.4%)	36 (72%)	5 (22.7%)	14 (43.8%)	18 (32.1%)	
Military status	5	3 (2%)	2 (1.3%)	2 (2%)	1 (2.2%)	0	0	0	2 (3.6%)	
Marital status	236	125 (81.7%)	111 (71.6%)	77 (75.5%)	34 (73.9%)	44 (88%)	18 (81.8%)	28 (87.5%)	35 (62.5%)	
Residential status	67	33 (21.6%)	34 (21.9%)	27 (26.5%)	12 (26.1%)	20 (40%)	0	6 (18.8%)	2 (3.6%)	
Parental status	112	60 (39.2%)	52 (33.5%)	49 (48%)	13 (28.3%)	21 (42%)	12 (54.5%)	13 (40.6%)	4 (7.1%)	
Family structure	31	18 (11.8%)	13 (8.4%)	22 (21.6%)	2 (4.3%)	2 (4%)	0	2 (6.3%)	3 (5.4%)	
Caregiver status	7	3 (2%)	4 (2.6%)	7 (6.9%)	0	0	0	0	0	
Disabilities	13	6 (3.9%)	7 (4.5%)	0	1 (2.2%)	4 (8%)	0	6 (18.8%)	2 (3.6%)	
Religion	4	2 (1.3%)	2 (1.3%)	2 (2%)	0	2 (4%)	0	0	0	
Sexual orientation	16	8 (5.2%)	8 (5.2%)	11 (10.8%)	3 (6.5%)	0	0	1 (3.1%)	1 (1.8%)	
Socioeconomic status/income	8	4 (2.6%)	4 (2.6%)	5 (4.9%)	1 (2.2%)	0	0	2 (6.3%)	0	
Insurance status	12	8 (5.2%)	4 (2.6%)	6 (5.9%)	2 (4.3%)	0	0	3 (9.4%)	1 (1.8%)	
Diet	8	4 (2.6%)	4 (2.6%)	6 (5.9%)	0	2 (4%)	0	0	0	
Exercise/physical activity	29	11 (7.2%)	18 (11.6%)	13 (12.7%)	1 (2.2%)	1 (2%)	0	10 (31.3%)	4 (7.1%)	
Educational status	14	7 (4.6%)	7 (4.5%)	4 (3.9%)	0	2 (4%)	1 (4.5%)	6 (18.8%)	1 (1.8%)	
Use of herbal/natural medicines or "folk" remedies	10	5 (3.3%)	5 (3.2%)	5 (4.9%)	0	4 (8%)	0	0	1 (1.8%)	
Availability of support/resources	21	10 (6.5%)	11 (7.1%)	2 (1.9%)	9 (19.6%)	0	0	6 (18.8%)	4 (7.1%)	
Belief about disease	5	3 (2%)	2 (1.3%)	3 (2.9%)	0	0	0	0	2 (3.6%)	
Beliefs about health/wellness	3	1 (0.7%)	2 (1.3%)	3 (2.9%)	0	0	2 (9.1%)	0	0	

that cultural items were addressed by the provider but not documented in the patient chart. Further, given the features of the electronic medical record, cultural assessments documented in the initial consult may have been carried through in subsequent visits without necessarily being readdressed or updated each time and thus could have been falsely represented in the data. It is possible that the use of herbal and natural treatments was discussed with the patient and the nurse during medication reconciliation and reviewed by the provider in that area of the chart. Perhaps some other items were also reviewed by the nurse or the physician (in the case of shared visits), and therefore not documented. The primary language may have been implied through patient interaction and not explicitly asked or documented.

IMPLICATIONS FOR ONCOLOGY ADVANCED PRACTICE

Cultural self-awareness of oncology APPs is average or above average, consistent with the IOM's request for health-care providers to increase cultural self-awareness as a critical step in decreasing health disparities (IOM, 2003).

Despite cultural self-awareness scores, cultural documentation is objectively low. If it is assumed that documentation adequately reflects the complete APP assessment, then cultural assessment of our oncology patients is therefore low. This is a profound statement given the cultural diversity of our country as a whole and the community in North Carolina. There is great room for improvement. Findings are consistent with the many entities calling for an increase in cultural competence of health-care providers and cultural care of patients, including the ONS, ASCO, the IOM, and Healthy People 2020 (Goss et al., 2009; IOM, 2003; ONS, 2007; Centers for Disease Control and Prevention, 2016).

Cultural assessment should be a standard part of oncology patient assessments. We propose the use of an open-ended cultural questionnaire by APPs and other oncology providers to better assess the cultural needs of patients. At our institution, a "Cultural Review of Systems" was created (Table 4). This series of cultural questions was built into the electronic medical record as a phrase that can

be populated into an outpatient encounter note with just a few keystrokes. It provides a quick and time-efficient way to assess and document our patients' cultural needs. This assessment can be shared and applied across the health system, even beyond the oncology realm. The "Cultural Review of Systems" includes such questions as, "Can you read and understand English? Are there any new insurance or financial issues that could impact your care? Do you feel you have adequate support and resources, as it relates to your cancer care?"

The lack of above-average cultural self-awareness responses in the Looking Glass Examination potentiates the need for additional diversity-related educational opportunities and ongoing cultural education of our oncology providers. Cultural experiences and topics specific to oncology APP practice should continue to be shared, and more educational opportunities should be made available to health-care providers.

CONCLUSION

The landscape of America has never been more diverse than at the present, and the aging population is expected to precipitate an increase of the already urgent need for oncology providers. With

Table 4. Cultural Review of Systems

What is your primary language? Can you read and understand English?

Are there any new insurance or financial issues that could impact your care?

Do you have any religious beliefs that relate to your care?

Are you using or planning to use any herbal, natural or home remedies for your cancer or cancer-related symptoms?

Are there any work or transportation issues that may influence your care?

Has there been any change to your living situation or marital status?

Is there anything related to your living situation that may influence your care? For example, do you have caregiver responsibilities or stable housing?

Do you feel you have adequate support and resources, as they relate to your cancer care?

Do you have any beliefs about your health or your cancer specifically that you would like to share?

Are there any other cultural concerns that you would like to discuss today?

the goal of decreasing cultural health-care disparities and improving health outcomes, it is crucial for oncology APPs to be culturally competent. Oncology APPs should strive for cultural awareness and education to increase the cultural assessment of oncology patients and ongoing documentation of that assessment in the patient chart. ●

Disclosure

The authors have no conflicts of interest to disclose.

References

- Agency for Healthcare Research and Quality. (2017). National Healthcare Quality and Disparities Report. Retrieved from <https://www.ahrq.gov/research/findings/nhqdr/nhqdr16/index.html>
- Andrews, M., & Boyle, J. (2002). Transcultural concepts in nursing. *Journal of Transcultural Nursing*, *13*(3), 178–180. <https://doi.org/10.1177%2F10459602013003002>
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. A. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, *118*(4), 293–302. <https://doi.org/10.1093%2Fpahr%2F118.4.293>
- Centers for Disease Control and Prevention. (2011). CDC Health Disparities and Inequalities Report - United States, 2011. *Morbidity and Mortality Weekly Report*, *60*. Retrieved from <https://www.cdc.gov/mmwr/pdf/other/SU6001.pdf>
- Centers for Disease Control and Prevention. (2016). Strategies for reducing health disparities - Selected CDC-sponsored interventions, United States, 2016. *Morbidity and Mortality Weekly Report*, *65*(1). Retrieved from <https://www.cdc.gov/minorityhealth/strategies2016/index.html>
- Centers for Disease Control and Prevention. (2018). Social determinants of health: Know what affects health. Retrieved from <https://www.cdc.gov/socialdeterminants/>
- Douglas, M. K., Rosenkoetter, M., Pacquiao, D. F., Callister, L. C., Hattar-Pollara, M., Lauderdale, J.,...Purnell, L. (2014). Guidelines for implementing culturally competent care. *Journal of Transcultural Nursing*, *25*(2), 109–121. <https://doi.org/10.1177/1043659614520998>
- Duke Cancer Institute. (2016). Duke Raleigh Hospital Cancer Centers 2016 Annual Report. Retrieved from http://dukecancerinstitute.org/sites/default/files/2016-duke-raleigh-cancer-center-annual-report_v11.pdf
- Eche, I. J., & Aronowitz, T. (2017). Evaluating cultural competence of pediatric oncology nurses at a teaching hospital: A pilot study. *Journal of Pediatric Oncology Nursing*, *34*(6), 422–426. <https://doi.org/10.1177/1043454217713452>
- Goss, E., Lopez, A. M., Brown, C. L., Wollins, D. S., Brawley, O. W., & Raghavan, D. (2009). American Society of Clinical Oncology policy statement: Disparities in cancer care. *Journal of Clinical Oncology*, *27*(7), 2881–2885. <https://doi.org/10.1200/JCO.2008.21.1680>
- Institute of Medicine. (2003). Unequal treatment: Confronting racial and ethnic disparities in health care. Retrieved from <http://www.nap.edu/read/10260/chapter/1>
- Loftin, C., Hartin, V., Branson, M., & Reyes, H. (2013). Measures of cultural competence in nurses: An integrative review. *Scientific World Journal*, *2013*, Article ID 289101. <http://dx.doi.org/10.1155/2013/289101>
- Matthew-Juarez, P., & Weinberg, A. (2006). *Cultural competence in cancer care: A health care professional's passport*. Houston, TX: Intercultural Cancer Council, Baylor College of Medicine.
- Murthy, V. H., Krumholz, H. M., & Gross, C. P. (2004). Participation in cancer clinical trials: Race-, sex-, and age-based disparities. *JAMA*, *291*(22), 2720–2726. <https://doi.org/10.1001/jama.291.22.2720>
- Office of Disease Prevention and Health Promotion. (2018a). Healthy People 2020. Retrieved from <https://www.healthypeople.gov/>
- Office of Disease Prevention and Health Promotion. (2018b). Healthy people 2020: Social determinants of health. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>
- Oncology Nursing Society. (2007). Oncology Nurse Practitioner Competencies. Retrieved from <https://www.ons.org/sites/default/files/npcompetencies.pdf>
- Oncology Nursing Society. (2008). Cultural competence. Retrieved from <http://diversity.vc.ons.org/132853>
- Surbone, A. (2010). Cultural competence in oncology: Where do we stand? *Annals of Oncology*, *21*(1), 3–5. <https://doi.org/10.1093/annonc/mdp546>
- United States Census Bureau. (2017). Quick Facts: North Carolina. Retrieved from <https://www.census.gov/quickfacts/fact/table/nc/PST045217>
- World Health Organization. (2018). Health impact assessment: The determinants of health. Retrieved from <http://www.who.int/hia/evidence/doh/en/>
- Yeo, T. P., Phillips, J., Delengowski, A., Griffiths, M., & Purnell, L. (2011). Oncology nursing: Educating advanced practice nurses to provide culturally competent care. *Journal of Professional Nursing*, *27*(4), 245–254. <https://doi.org/10.1016/j.profnurs.2011.03.004>