

RECRUITMENT & RETENTION

Increasing the Diversity of Washington State's
Nursing Workforce:

Barriers and Supports in the
K-12 and Higher Education Systems

Report to the Washington Center for Nursing
through the WCN Diversity Initiative

Mary Fertakis, M.Ed. - Education Policy
University of Washington, College of Education

With Christine Espina, RN MN DNP
WCN Diversity Network Director

December 2013

Acknowledgements

I would like to acknowledge all the interviewees who voluntarily participated in this project, and contributed the insights that gave this report its depth and breadth. I especially want to thank the students and nurses who shared their personal stories and experiences in the hope that the path to attaining a nursing degree will be smoother for those who follow them.

Thank you to WCN communications staff, Olena Rypich and Maddie Maloney, for their expert assistance with editing and formatting the final version.

I appreciate the WCN Diversity Initiative Advisory Committee's input, which both validated the work and enhanced the final version.

I would also like to thank Dr. Christine Espina, WCN Diversity Network Director, whose passion for increasing diversity within the nursing profession, support for this project, and belief in its importance, provided constant inspiration. Dr. Espina's support for giving voice to every issue raised by the interviewees, and for broadening the scope of the original report to encompass the volume of information shared is reflected in the depth of the report, and is greatly appreciated.

Last, I want to thank the "readers": Maggie Baker, PhD, RN, UW School of Nursing; Jenny Capelo, MAE, RN Wenatchee Valley College; and Marianna Goheen, BS, MA, Office of the Superintendent of Public Instruction.

-Mary Fertakis M.Ed.

This report is funded by Grants #N14191 & #N20173 from the Department of Health, State of Washington, and the Robert Wood Johnson Foundation Academic Progression in Nursing Grant #70275

TABLE OF CONTENTS

Executive Summary.....	4
Background	7

FINDINGS

Barriers in K-12 and Higher Education

Academic Issues & Perceptions	11
ELL Student Barriers.....	13
Financial Issues.....	14
Cultural and Family Issues.....	16
Institutional and System Barriers.....	19

Supports in K-12

Academic Supports	23
Cultural and Family Supports.....	24
Institutional and System Supports.....	25

Higher Education Supports

Academic Supports	26
ELL Student Supports.....	27
Cultural and Family Supports	29
Financial Supports.....	29
Institutional and System Supports.....	30

RECOMMENDATIONS

K-12 Recommendations.....	33
Higher Education Recommendations	35
Conclusion.....	38
Appendix A.....	39
Resources	42

EXECUTIVE SUMMARY

National recommendations have highlighted the need to increase the diversity of the healthcare workforce. Evidence indicates that increased diversity strengthens ***cultural agility**** among providers, increases health care access, and improves the care experience for racial and ethnic minority patients (Sullivan Commission, 2004; IOM, 2004). State-level efforts have sought to bring attention to the need for more racial and ethnic minorities in the health care profession (Governor’s Interagency Council on Health Disparities State Action Plan to Eliminate Health Disparities, 2010) and the nursing profession (Washington Center for Nursing, 2008; Washington Center for Nursing, 2009). The Washington Center for Nursing’s (WCN) *Master Plan for Nursing Education* (MPNE) called for focused efforts to increase diversity in nursing students and faculty (2008).

In Washington State, Hispanic and non-White persons remain under-represented among nurse practitioners and the nursing profession as a whole (Skillman et al., 2008). This is inclusive of both immigrant and U.S.-born nurses. The racial/ethnic composition in the state is projected to change as the Black, Asian/Pacific Islander, Two or More Races, and Hispanic populations increase in proportion to the total population through 2030 (Washington State Board for Community and Technical Colleges, 2009). According to the 2010 U.S. Census, Washington State ranked as the seventh-highest state with people who self-identify as American Indian/Alaska Native (AI/AN) alone or in combination (multiple race combination). Between the 2000 and 2010 U.S. Census, most counties with an AI/AN population of 100 people or more experienced AI/AN population growth (Norris, Vines, & Hoeffel, 2012). Thus, the need to prepare a competent nursing workforce that is representative of the population is critical.

Historically, Washington community and technical colleges (CC/TC) have an increasing racially and ethnically diverse student population.

High attrition rates among under-represented and minority (URM) students in nursing education have been a concern, yet there is a lack of consistent documentation for measuring these rates (Loftin et al., 2012). A number of nursing education programs are working to reverse this trend by implementing innovative strategies to recruit and retain URM students into and through nursing education. However, these on-the-ground practices need to be identified and described from a regional and state level in preparation for increasing the awareness of innovations, and for eventual dissemination and implementation.

Recruitment and retention as measurable goals is a focused approach to addressing the complex and systemic forces that contribute to the under-representation of racial/ethnic minority nursing students and faculty. Identification of the barriers that URM students experience in the kindergarten through 12th grade (K-12) and higher education systems, and the supports that are helping them to persist to attain their RN degrees is a critical first step. Integrating these innovative strategies with seamless progression through the academic program and into the first professional position as an RN across WA is the desired outcome.

*** For the purposes of this report, we’re using the term ‘cultural agility,’: the ability to adapt to cultural differences and ambiguities while being aware of your own biases, behaviors and world views. It is not about putting on someone else’s culture, but about being authentic and interacting with people from a culture other than your own in a way that is relevant and important to them (Caliguiri, 2013).**

We know that racial and ethnic minorities are under-represented in the RN workforce in the U.S., and that baccalaureate and graduate programs at U.S. nursing schools have turned away more than 75,000 qualified applicants due to limited capacity and budget constraints (*Future of Nursing Campaign for Action* website, 2013). The *Future of Nursing Campaign for Action* has a national focus to increase the number of RNs with a baccalaureate degree and to promote racial/ethnic and gender diversity in the nursing workforce.

The 2010 Institute of Medicine report “The Future of Nursing: Leading Change, Advancing Health” called for a re-visioning of how nurses are, and can be, positioned to lead in improving health care delivery for safe, patient-centered and family-centered care. The nursing workforce must be prepared to manage and care for the growing complexity of patients’ health care needs using sophisticated technology, which requires a highly skilled, competent nursing workforce. The report recommends that nurses achieve higher levels of education and training through an improved education system that promotes seamless academic progression (IOM Future of Nursing Report Brief, 2010). The goal is to increase the proportion of nurses with a bachelor’s degree or higher to 80% by 2020. Over several years, Washington State leaders in nursing policy and education have sought to collaborate around creating seamless academic progression through the baccalaureate level. In 2012, the Washington Center for Nursing was one of nine recipients of the Robert Wood Johnson Foundation’s Academic Progression in Nursing (APIN) grant aimed at creating a more highly-educated, diverse and representative nursing workforce.

This report gives voice to the real-life barriers and supports that students of color encounter in the K-12 system and higher education nursing programs. We also identify and describe some local and regional innovative strategies taking place throughout the educational pipeline. WCN partnered with the University of Washington Masters in Education Policy Program and worked with a graduate student over several quarters in 2013 to complete this report.

This report is a representation of the personal experiences gathered from 31 qualitative interviews between March and July 2013 which included faculty of nursing programs, staff serving URM students in the Washington post-secondary system, K-12 guidance counselors and family engagement staff, executive directors of non-profit organizations serving URM populations, current URM nursing students and licensed URM nurses. The intent of the report is to generate conversations on how to address the issues raised in the interviews.

Limitations to the report: The financial and structural impact that implementing these recommendations would have, are not identified. Also, the number of interviews, while representative of specific categories of stakeholders, is not large.

The two guiding questions for this project were:

1. What are the barriers under-represented and students of color experience in the K-12 system that hinder their ability to pursue a nursing degree/career?
2. What are the supports under-represented and students of color who are in the nursing pipeline need in order to persist and earn their BSN degree?

Moving Forward

The information shared by interviewees about the challenges they have experienced may not surprise those who work in the nursing or education sectors. However, the extent to which these barriers exist may not be apparent to both sectors due to a lack of intentional policy, resources, or pipeline alignment between K-12, higher education and the nursing profession. Our interviews have shown that the range and breadth of barriers that students experience are staggering. Under-represented students are experiencing academic, financial, family/cultural and system barriers across all three sectors as they try to achieve their dream of becoming a nurse.

The range and breadth of barriers that students experience are staggering.

It is the responsibility of policy makers, educators, and members of the nursing profession to develop rapport with and earn the trust of under-represented students, and those with insights into these issues. In order to move forward, challenging conversations must take place about how to eliminate these barriers and sustain the current supports that are contributing to positive outcomes for URM nursing students. Under-represented students play an important role in addressing the health care needs in our state and local communities.

The students in these interviews gave voice to their experiences, hoping that by sharing their encounters with the education system, changes would result—changes that would ease the path to a nursing degree and encourage the various faces of our population to join the nursing community. It is up to each of us to make the changes necessary so they succeed in their chosen profession.

The Washington Center for Nursing’s Diversity Initiative is committed to supporting under-represented students and nurses in the nursing education and professional experience, with the initial step to expand the mentoring network of nurses who are dedicated to promoting a more inclusive workforce.

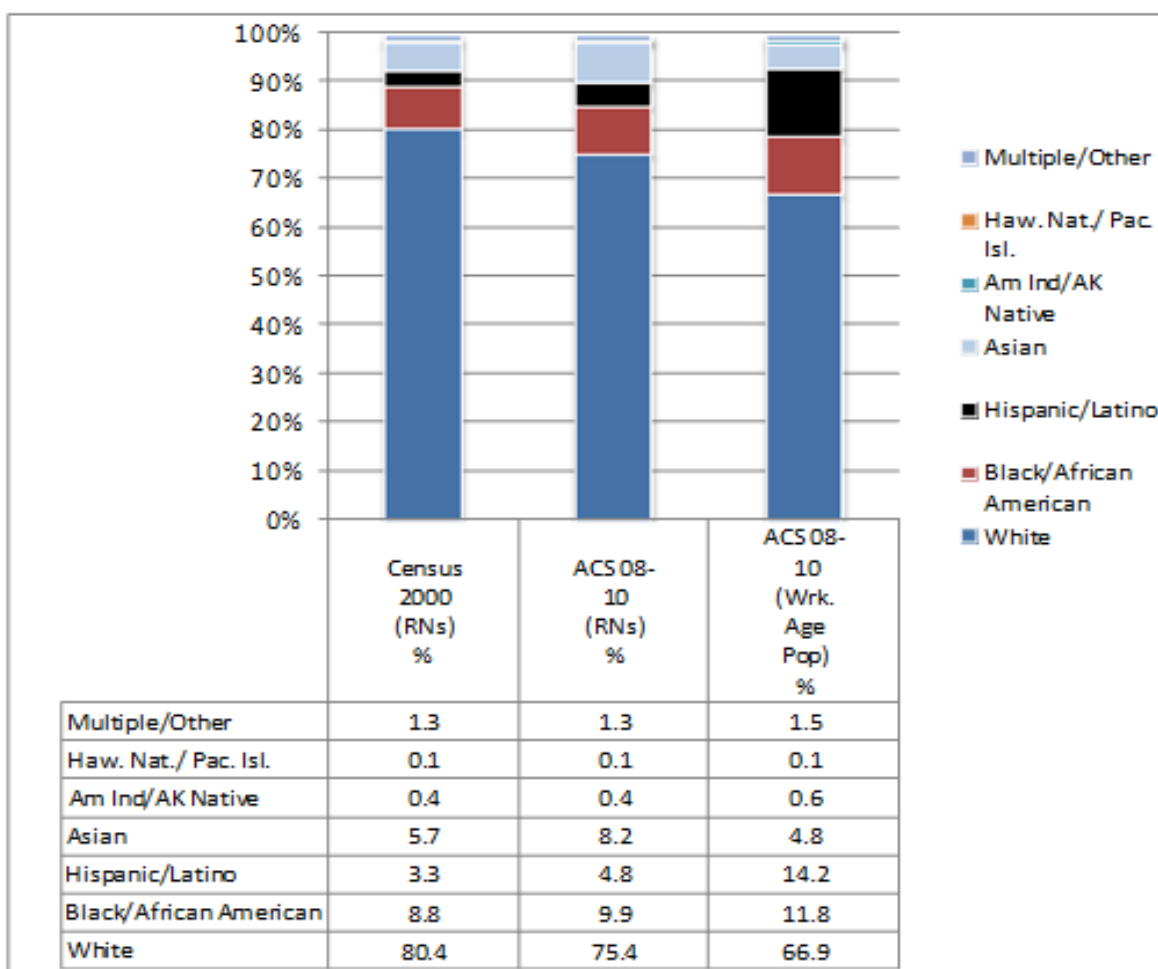
To learn more or get connected with WCN’s diversity work, please visit the WCN website at www.wacenterfornursing.org

BACKGROUND

Diversity within the nursing workforce—in terms of race/ethnicity and gender—is essential because it can improve both access and care quality for minorities and medically underserved populations (The Sullivan Commission, 2004). The highest need in the health care professions, currently, is for health care providers who are bi-lingual or multi-lingual, and have experience in bi-cultural or multi-cultural settings. This need is a reflection of the changing demographics in the United States.

Nursing has historically been dominated by white females, and as Figure 1 shows, the nursing workforce is still predominantly white. Black/African Americans, Asians, American Indian/Alaska Native (AI/AN), and Hispanics/Latinos proportions of the RN population have increased slightly in the last decade, while whites have declined in proportion, from just over 80% in 2000 to about 75% in the American Community Survey (ACS) 2008 to 2010. These increases, while positive, are not keeping pace with the demographic changes

Figure 1



Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

“Barriers and supports among URM students in K-12 and higher education system”

Figure 1 shows a comparison with the current U.S. working-age population (i.e., the population aged 16 and older) for race/ethnicity. The working-age population has a lower percentage of whites (67% vs. 75% for RNs). The RN workforce has a smaller percentage of Hispanic/Latinos, AI/AN, and Black/African Americans, and a larger percentage of Asians, when compared with the total working-age population. The percentage difference for Hispanics/Latinos is particularly notable: They compose 14% of the working-age population but only 5% of the RN workforce.

Diversity within the nursing workforce — in terms of race/ethnicity and sex — is essential because it can improve both access and care quality for minorities and medically underserved populations.

While the proportion of non-white RNs increased from 20 % to 25% during the past decade, the proportion of men in the RN workforce across all ethnicities increased by about one percentage point and is currently at 9%. Figure 2 compares the distribution of the RN workforce in the United States in urban and rural areas.

Figure 2

Residential Distribution of the RN Workforce Across Urban and Rural Areas	Urban Areas (%)	Rural Areas (%)	All Areas (%)
White	72.4	91.2	75.4
Black/African American	10.9	4.3	9.9
Hispanic/Latino	5.4	1.8	4.8
Asian	9.6	0.9	8.3
American Indian/Alaska Native	0.7	0.3	0.4
Multiple/Other	1.4	1.1	1.3
Total	100	100	100
Percent Male	9.4	7.8	9.1

Data Source: HRSA analysis of the ACS 2008-2010 three-year file

Analysis of Census data shows a small increase in the number of bachelor’s and graduate degree holders (about 5%) over approximately nine years. Currently, about 55% of the RN workforce holds a bachelor’s or higher degree. Only 34% of RNs in rural areas hold a bachelor’s or higher degree.

Nearly 28,000 RNs were awarded a post-licensure bachelor’s degree in nursing (RN-BSN) in 2011. There has been an estimated 86.3% increase in the annual number of RN-BSN graduates over just the past four years.

“Barriers and supports among URM students in K-12 and higher education system”

The number of internationally educated nurses who passed the NCLEX-RN fluctuated significantly over the past decade (2001= 6,682; 2007 = 22,879; 2011 = 6,108). Steady increases in the earlier part of the decade were followed by a substantial decrease after 2007, immediately following the economic recession. U.S.-educated NCLEX-RN candidates, on the other hand, experienced 107.7% growth from 2001 to 2011, more than doubling their numbers by the end of the decade. This was an increase of 68,561 passing in 2001 to 142,390 passing in 2011.

These data suggest that the immigration of internationally-educated nurses may be sensitive to the effects of the macro-economic climate as well as the domestic production of nurses. There are likely to be fewer U.S. job opportunities for internationally-educated nurses as a result of the doubling of domestic production over the past decade.

The top five countries of internationally-educated NCLEX-RN passers in 2010 (most recent year available) are: The Philippines (5,188), South Korea (750), India (640), Canada (425), and Nigeria (166).

The most current Washington State data for the RN and LPN workforce (from 2010) is below the national average of 963 per 100,000 for RNs and 250 per 100,000 LPNs.

The RN Workforce, by State, per 100,000 Population State	RNs	Total Population	RNs per 100,000
Washington	56,607	6,658,052	850.2

The LPN Workforce, by State, per 100,000 Population State	LPNs	Total Population	LPNs per 100,000
Washington	8,226	6,658,052	123.5

Data Source: HRSA analysis of the ACS 2008-2010 three-year file

Looking at Washington State’s numbers, the most recent available data shows the following in comparison to U.S. statistics for RNs of color and nursing faculty of color:

Federal Race/ethnic categories	Overall U.S. Population	National RN	WA population	RNs in WA(2007)	Nursing Faculty in WA (2010)
African American	12.4%	5.4%	3.5%	0.8%	2.5%
Asian & Pacific Islander	4.5%	5.8%	7.2%	4.7%	6.5%
Hispanic or Latino/a	15.1%	3.6%	10.2%	2%	1.6%
American Indian or Alaska Native (non-Hispanic)	0.8	0.3%	1.4%	0.4%	1.6%
2 or more races, non-Hispanic	2.2%	1.7%	2.8%	3.3%	n/a
Total minority population	35%	16.8%	25%	9.2%	12.8%

Sources: Bureau of Health Professions, 2010; Seago et al., 2004; Skillman et al 2008; U.S. Census, 2009; Washington Office of Financial Management, 2010; WCN Faculty Diversity Survey, 2010.

National statistics quoted are from the U.S. Department of Health & Human Services, Health Resources and Services Administration (HRSA) report *The U.S. Nursing Workforce: Trends in Supply in Education*, published in April, 2013.

As illustrated in the chart, Washington State’s nursing workforce has yet to reflect our population’s demographics. As we begin to explore some of the barriers in place, it is important to step back and see how we are each responsible and accountable for working together to reduce these barriers, which may be difficult to recognize. We acknowledge that many people are working to transform the existing systems into more equitable health care and education systems. These barriers are complex, deeply-rooted in historical experiences, and cannot simply be attributed to “laziness” or individual choices. Our hope is to provide recognition for current on-going work, and to invite others to join the work of transformation toward more equitable systems.

“Barriers and supports among URM students in K-12 and higher education system”

FINDINGS From The INTERVIEWS

The following issues were mentioned as barriers to pursuing a nursing degree from both the K-12 and higher education systems during 31 qualitative interviews of nursing faculty, staff serving URM students in Washington State’s post-secondary system, K-12 guidance counselors and family engagement staff, executive directors of non-profit organizations serving URM populations, current URM nursing students, and licensed URM nurses.

Barriers in K-12 and Higher Education

1. Academic Issues and Perceptions

- Students will not have the foundational academic knowledge to compete for nursing program spots if they are not taking advanced classes, or are tracked into easier classes based on their URM or ELL designation (ELL specific barriers are listed separately).
- Nursing program acceptance is highly competitive, and students perceive that grades are the sole basis for admissions. In addition, students lack confidence in their skills and the ability to succeed in the K-12 or higher education school systems. They feel unprepared and worry they will fail and not be accepted into a nursing program.

Guidance counselors are unaware of the many nursing career pathways and the requirements necessary to be successful in them, resulting in students not receiving the information in the timely manner needed to apply successfully to these programs
- Students are unfamiliar with standardized tests and how to prepare to take one.
- Immigrant parents may have low levels of education or not know how to maneuver the American K-12 system. They may be unaware of the classes their children should take and how many credits they need to graduate to be eligible for higher education opportunities and prepared for a nursing program.
- Guidance counselors are not aware of the many programs, camps, scholarships and other supports for middle and high school students who are interested in pursuing a nursing degree. College & Career Specialists, an additional category of support staff at many schools, may be the individuals to help students.
- Guidance counselors in K-12 schools may also be unaware of the many nursing career pathways and the requirements necessary to be successful in them, resulting in students not receiving information that is needed to successfully apply to these programs. This can include required math and science classes, as well as the need to be involved in leadership and community service opportunities that can provide the recommendations for them.

“Barriers and supports among URM students in K-12 and higher education system”

- Students struggle to get guidance counselors' attention because they perceive that counselors have lower expectations for URM students academically. Without the support from counselors, they do not feel encouraged to pursue their career interests if it involves taking rigorous classes.
- Students lack information about the many options possible in the nursing field and do not realize the versatility of the degree. They assume nursing is limited to working in a hospital or clinic.
- A student from a small high school in a rural and/or low-resourced community may be less prepared than his/her peers from a school in a large or suburban area which has better access to high-level preparatory classes.
- The realities of what it will take to get to college (having a plan and taking rigorous courses) are not necessarily understood.
- Students often put off taking their required, pre-requisite math classes for as long as possible, which can negatively impact the timing of their applications if they have to retake the class. The math class which causes stress for many students is statistics. The need to take developmental math classes and/or receiving low scores on placement tests like the COMPASS or ACCUPLACER has a negative effect on college completion rates.
- Some institutions will not accept an application if the student's transcript shows he/she took a class multiple times to improve the grade.
- The level of preparation students have coming into nursing programs (in academics, language/communication skills and critical thinking skills) is concerning to counselors, faculty and program directions and can contribute to the attrition rate in nursing programs. Programs are also concerned about not passing URM students and the potential legal challenges they could face if too many URM students are failing.
- Advisors are not available to help students be application-ready. Additionally, if students are not accepted into the nursing program, there is no assistance to help them prepare for the next time they apply.

There is a need for intentional advising to help students choose classes that complement and build on each other, rather than overwhelming or overloading the students with their course loads.

- The baseline score to pass the NCLEX has been raised several times in the last few years, resulting in declining pass rates on the test. Students use word-of-mouth regarding which nursing programs and clinical settings are supportive or non-supportive environments for students of color, and they make choices of where to apply based on peer information. One or a few negative experiences for an under-represented student may inadvertently hinder the diversity of a nursing program’s applicant pool.
- Academic advisors at two-year and four-year institutions are not always aware of many programs, camps, scholarships, and other supports on their campuses for under-represented students and students of color who are interested in pursuing a nursing degree. They can also be unaware of the classes necessary for the nursing career pathway. Because of this, students are not getting foundational preparation for success in these programs, and sometimes the students are receiving incorrect information that hampers their efforts.

2. English Language Learners (ELL) Student Barriers

A significant sub-set of academic barriers for URM students is related to learning the English language. The issues that emerged in interviews are as follows:

- URM students do not see themselves or their cultures reflected in curriculum, which gives them a sense that different cultures are not valued.
- The length of time some students take to become proficient enough in English to complete the pre-requisite nursing classes can be as long as three years, which contributes to quitting the path to nursing. Students can feel misled by counselors and the system when they are told it takes two to four years to obtain a nursing degree, as it often does for the dominant, mainstream student, but are not informed about how much additional time will be needed to address English skills.
- If students lack adequate math and science grades, they will not make it into the nursing program. Academic struggles among English Language Learner (ELL) students are often a language issue, not an inability to do well in math and science. Many students received instruction in these subjects at schools in their country of origin or in the refugee camps, but need the English skills to be able to show what they already know.
 - * An effect of this barrier is inaccurate student placement when students arrive at an American school. The ELL designation when English is not a student’s first language does not necessarily mean a lack of English proficiency. Many countries start teaching English in their equivalent of a U.S. middle school.
- Students may have the academic knowledge, but if they don’t have the necessary English verbal and written communication skills, this becomes a safety issue in a healthcare environment.
- Many students come from countries with significant health care needs. This perspective can impede their view of what a normalized scenario in the U.S. health care setting looks like.

- Under Washington State’s K-12 system, ELL classes are considered “elective” classes, rather than a core class where students can earn English credits. The number of ELL classes students need to take so their English skills will allow them to be successful in a mainstream class environment contributes to them not being able to take the core and high-level math and science classes they need to be admitted into, and successful in, a nursing program.
- Because some questions in standardized tests require students to choose the “best” answer among several, or be able to identify all the correct responses within the same question, advanced knowledge of the English language is necessary for their success.
- The academic language and vocabulary are difficult and require reading with a dictionary, or having some type of translation aid available. A student may spend several hours trying to read a chapter of a nursing text book. When reading in another language, it is hard to decipher what is important and what is not important – everything is treated with equal weight instead of having the ability to distinguish where time should be spent and on what material.
- In order to qualify for registration in pre-requisite classes, students can potentially spend up to an additional year taking ELL classes. The amount of time spent mastering English is contingent on extracurricular activities such as work.
- Academic writing, such as research or position papers, requires correct grammar and punctuation, which is challenging for ELL students, especially if they come from countries without a written language, or with a recently-established written language. Literacy issues contribute to struggling with math concepts when they are presented as word problems, and the practical application of them in a nursing setting (i.e. numbers and lines for taking blood pressure).
- Internationally-educated nurses who are taking classes to become licensed in Washington State are required to take the Test of English as a Foreign Language (TOEFL), language competency test, in addition to their other paperwork.

When reading in another language, it is hard to decipher what is important and what is not important – everything is treated with equal weight instead of having the ability to distinguish where time should be spent, and on what material.

3. Financial Issues

- Students feel pressure to help support their families. They want to do something that will get them a job sooner rather than later. The four years to get a BSN seems like a very long time.
- The high costs for tuition and school expenses, and the need to work to support their families, also contributes to high attrition rates among URM students in pre-nursing and nursing.

- Students' and families' experiences of living paycheck to paycheck do not support a long-term view of the value of the degree over time (see Financial Issues, below).
 - * This results in students choosing a two-year degree, thinking they cannot afford to stay in school longer than this time period.

- When financial aid arrives, the money is sometimes used to pay rent and other bills rather than tuition and other school expenses because there is an expectation that this is the student's contribution to supporting the family.

- Students may receive significant scholarships to attend a college or university, but many of these institutions have fees and deposits that need to be paid in the spring of their senior year, and financial aid is not distributed until the fall. Many of the students' families cannot afford these fees and deposits upfront, so students are forced to decline scholarships for which they qualify.

Students look at the total cost of getting a nursing degree and decide not to pursue it, rather than looking at the potential cost offsets provided by scholarships, grants, and loans.

- Students often lack opportunities to develop and follow a budget, or to practice the longer-term planning that a budget entails.
- Students are often unaware of the importance of meeting deadlines for the Free Application for Federal Student Aid (FAFSA) submission and other application forms for scholarships, grants and loans. Students indicated that the process appears mysterious and convoluted since they are not able to see the amount of available funds. This is important because student need grants and scholarships are distributed on a first come, first served basis, so missing the FAFSA deadline impacts funding availability and options.
- Moms need to work while attending school to support their children and sometimes multiple families. Women from many countries work part-time to pay for school so there is no financial burden on their husbands or families for their education, which they are often pursuing without spouse or family support. This also increases the length of time they are in school without the family seeing the return on investment in education, which also contributes to a lack of support.
- In some immigrant groups it is expected that the person/family who relocated to the U.S. sends money to support family members in their country of origin, in addition to supporting themselves here.
- Students who are undocumented are hesitant to apply for financial aid and to fill out the paperwork required for loans even if they are eligible.
- For Muslim students, religious practice prohibits taking out an interest-bearing loan, which eliminates federal or bank loans and makes them dependent on scholarships and grants, or personal funds.
- Students look at the total cost of getting a nursing degree and decide not to pursue it, rather than looking at potential cost offsets provided by scholarships, grants, and loans. Additionally, they do not calculate

“Barriers and supports among URM students in K-12 and higher education system”

how the salary they earn will enable them to pay off the loans.

- In some cases, refugees have to pay back the travel loans they incur for airplane tickets (\$800-\$1000 per person). It becomes very difficult for parents to support their children in school when they are working at low-paying jobs to retire these loans, make ends meet, and send money to family members still in their country of origin.
- Students will sometimes take out a short-term loan. These go to a collection agency after three months, which can hold up students' class registration, and can result in students dropping out in order to pay back the loan and because they could not register for classes. The university is obligated to collect the loan if it is federal money. This responsibility puts schools in the position of a collection agency, and is raising concerns about the interest or fee rates schools are starting to charge students.
- The cost difference between a nursing degree at a community college, technical school, or four-year institution, as well as public vs. private institutions (i.e. about \$34,000 at PLU; about \$12,000 at WSU; and \$5,000 at Highline CC) is a deciding factor for students wanting to pursue higher education. If the community or technical college does not have an RN-BSN program, and financial aid does not increase to accommodate the tuition increase at a four-year institution, it is difficult to pursue a BSN.
- If a student works during the year prior to starting a nursing program, their income level is considered too high to need financial aid, or their amount is reduced because the tax return used is from the prior year. The financial aid formulas fail to account for a decrease in income because, while in school the student might not work, or the amount of work might be reduced.
- The Expected Family Contribution (EFC) that is not covered by financial aid can be difficult to meet when a student is actually in the nursing program because it is recommended that they not work due to rigorous course loads and clinical rotation. If the student has children, but no family members to help, their child-care costs are often not subsidized.

4. Cultural and Family Issues

- Students try to balance their wants with their family's hopes, dreams, expectations, and financial needs. While parents want their children to be successful, the time and energy to provide support competes with demands of finding and keeping a job and paying bills, and expectations of family members back home to send money, leaving little time for parents to provide academic support and supervision to their children.
- Being a first-generation college student may create a feeling of isolation and ostracism. Students can lack a social network, information about how to maneuver the system, or role models within their community to talk to or emulate ("If they can do this, I can too.").
- Class simulations and scenarios may not incorporate culturally-relevant or relatable experiences for URM students, raising the issue of cultural bias in coursework assignments and test questions on both entrance exams and the NCLEX.

- * Cultural bias on test questions includes knowledge of cultural idioms, figurative language, class assumptions, and a comparison of objects seen specifically in Western culture.

For many first and second generation women from under-represented ethnic communities, it is a struggle to pursue their nursing education in the face of significant social and cultural expectations related to being a wife and a mother.

- URM students lack role models within the profession, creating difficulty envisioning themselves as nurses or in other health care careers. If they do not have family members or acquaintances in these fields, or if their primary healthcare provider does not share their cultural background, it is difficult to envision themselves in the health care community.
- In nursing schools, developing “critical thinkers” is prioritized and valued. Critical thinking can be seen as questioning or analyzing a situation or order to ensure the patient’s care is safe and appropriate. Some immigrant students may experience conflicting values in developing this skill, particularly if they are from countries where questioning authority in an academic setting is perceived as disrespectful.
- The practice of student-led conferences can put students from many cultures in an awkward position between their parent(s) and the teacher. In some countries, the position of a teacher is highly regarded, and parents want a relationship with the teacher. Parents want to hear what the teacher has to say about their student, not what the student has to say.
- Students of color are sometimes called upon in class to give “the Latino,” “the Asian,” “the Native,” or “the Black” perspective and put in a position of speaking for an entire race or ethnic group instead of being treated as individuals with their own perspectives. This was also mentioned as an issue when completing clinical rotations.
- Many immigrant parents expect their children to get an education, but the high school diploma is the ultimate goal - not going to college - as a high school diploma is more than what parents are likely to have themselves.
- Many URM families worry about their children leaving home for school and “losing” them after they leave. Students also worry about leaving the support network of their family and community.
- In many cases, if the children’s conversational skills are satisfactory, parents assume their children are fluent in English. However, students may still lack the foundation in academic English needed to do well in math and science.
- Many cultures expect children to care for younger siblings and elders, and manage the home while parents are working. The family is their first priority and responsibility. If the students are needed to provide child or elder care, they may have no choice but to skip school, miss tests, meetings, and deadlines for events such as financial aid forms and college application workshops, or they may turn homework in late. All of these can negatively impact their grades and future opportunities.

“Barriers and supports among URM students in K-12 and higher education system”

- An impact of the above expectation for students who have undocumented parents is that the parents have very little control over their work schedules and are often exploited by their employers. If the parent has to work an extra shift, overtime, or is called in and they do not have childcare arrangements, there is a ripple effect for older students, who are expected to fill in as caregivers. Major family or community events, such as funerals or weddings in some Pacific Islander cultures can impact student attendance. They can be out of school for up to two weeks. If communication and understanding between the student, parents, and teachers are not in place, it is difficult to arrange for make-up work, tutoring on what they missed, and to avoid activating the truancy process.
- Students from many cultures are taught to respect persons who are older and in positions of authority. Questioning an individual, especially one in a position of power, is considered disrespectful. This prevents some students from speaking up in class when they don't understand something. The assumption is that the person in authority knows everything. If the student challenges or questions the professor, the student must have the problem, not the professor. In these cultures, showing disrespect for an authority figure can bring dishonor to the student's family.
 - * Related to this dynamic is that students who are undocumented have been conditioned not to draw attention to themselves, so they may try to be as invisible as possible and will often be hesitant to speak up or participate in class.
 - * While undocumented students can sometimes behave like this in the K-12 system, in order to be seen as engaged and involved in college classes, students need to speak up so they are noticed by their professors.
- Many cultures expect women to marry early, care for their husband, possibly his family, and their children, rather than pursuing a higher level of education and a nursing career.
- The impacts of historical trauma continue to affect AI/AN students and families within the education system. Historical trauma is the culmination of emotional and psychological wounding over a lifespan and across generations caused by significant group traumatic experiences (Brave Heart, 2001).
- While nursing, healing, and caring for others is perceived as a highly valuable asset in communities, and is a respected role in many cultures, nursing is still thought of as "women's work," rather than an appropriate career for men. For example, in Mexico, nursing does not pay well and requires a great deal of education. The high cost of a nursing degree and the low salary creates the perception that the nursing career is not suitable for a man. Men from hyper-masculine cultures may want to pursue this degree but feel out of place or labeled in a negative way for doing so.
 - * There is a correlation between the amount of pay one receives for a specific job and the respect level it is accorded.
 - * The "macho" and "tough guy" image in some Latino and African-American cultures also impacts perceptions of nursing as a choice for men.
 - * In many African cultures there is a hierarchy in health care professions, and some are "acceptable" (e.g. doctor, pharmacist) for a male, while others are not.

- Poverty is a factor for many URM students. Students' living conditions may make it difficult to find a quiet place to concentrate on their studies and access technology needed to do research, work on applications, or type papers. Living conditions could include: multiple generations living in a small home or apartment, transiency, living with someone not in their family, and homelessness.
- Students are also confronted with many issues for which they don't necessarily have coping skills, such as: the need for a safe space; drug and alcohol issues; death of peers; domestic violence; negative encounters related to deportation/undocumented situations; suicide; abandonment; single-parent households; lack of stability; unresolved grief; mental health issues; gang culture; food scarcity; transportation; and clothing and shoe needs. Any one, or several of these issues combined, impacts students' abilities to focus on academics.
- Cultural restraint about sharing personal issues is a common norm in many cultures. Even if counseling is available, students might not access this resource unless they have developed a strong relationship with a staff or faculty member, or until higher-level interventions in addition to counseling are needed to support them. Authority figures, such as academic faculty or staff who single out a student to talk to may mean to a student that she/he is in trouble, not that the staff/faculty want to help.
- Minority stereotypes can impede the ability of students, as well as teachers, to meet their unique, individual, academic needs. For example, one myth is that all Asian students are smart and don't need help. Another myth is that all Pacific Islanders are loud, noisy, don't care about and don't want to be in school.
- There are restrictions within some Muslim cultures related to working with and/or caring for members of the opposite sex and non-Muslim members of the opposite sex. This also means that there is a preference for a same-sex primary doctor and gynecologist, as well as a same-sex nurse.
- For students whose families own businesses, there is an expectation that they will be working at the family business when they are not in class. Parents do not understand that college-level work involves several hours of additional work for each hour of actual class time to complete the reading, research, labs, and project work.
- Based on past experiences, many students may mistrust both the education and health care systems.

5. Institutional and System Issues

- Federal law says K-12 funding stops for students when they age out at 21 years old. Immigrant students who arrive when they are in high school have a limited timeframe to acquire the required credits to meet Washington State graduation requirements and the classes required to be able to apply for college, since many have to take ELL classes first. The level of math and science necessary to do well in a nursing program can be difficult to attain within this timeframe.
- Some institutions will not accept an application if the student's transcript shows he/she took a class multiple times to improve the grade.

- While education is available to all students in the public K-12 system, undocumented students run the risk of dropping out when they realize they cannot access financial aid for higher education and their nursing program.
- Several health care professions, including nursing, require a background check for RNs to work, thus excluding those who are undocumented *and* multi-lingual/multi-cultural, from becoming or practicing as registered nurses. For undocumented workers interested in the nursing profession, this limits their ability to pursue an RN degree. Instead, they often choose other pathways, such as certification programs within health care that do not require a background check, hindering their ability to earn a family-wage job. These multi-system barriers prohibit quality nursing care to be accessible to under-represented and growing ethnic communities.
- For families coming to the United States as refugees, resettlement agencies only work with them for three to four months. After this, families are expected to manage on their own.
- Accurate data collection for under-represented and students of color is hampered by federal race and ethnic categories. While U.S. Census race categories have been expanded to include specific Asian, Pacific Island and Latino countries, this has not been adopted by the Department of Education or state education agencies as a factor in program development. Many Asian cultures are grouped under the “Asian” designation, many Spanish-speaking countries are combined into one ethnic category, and there is no way of knowing what is included in the “two or more race” category. Disaggregating the data to get a more accurate picture of what is really happening within different groups is difficult and the Family Educational Rights and Privacy Act (FERPA) regulations further restricts these efforts.
- Transition from elementary to secondary school includes multiple teachers instead of one, which increases students’ sense of detachment and often decreases the relationship with their teachers at a critical time in their development. This transition can cause students to lose faith in the school’s ability to prepare them for their future.
- Students don’t feel they are being seen as individuals with varied interests like those in the dominant group. They feel they lose individually by being grouped based on race/ethnicity, and/or language skill level.
- There is a correlation between health disparities and educational achievement disparities for children in poverty across all races and ethnicities. Research shows a higher number of school nurse visits by children in poverty than their better-resourced peers (Fleming, 2011). Access to preventive and regular health care from infancy on, like early screening for vision and hearing that directly impacts a student’s ability to learn, must be addressed.
- The current expectation is for students to fit into the existing education system instead of changing the system to respond to the changing demographic of students who are entering it.

- The focus on diversity and cultural agility (individual-level focus), instead of class and privilege (societal level focus), detracts from addressing the larger systemic issues contributing to the significant underrepresentation of students of color in higher education.
- The use of placement tests or exam questions that have not been reviewed for cultural and language biases presents barriers for students of color in the education system.
- There are few, if any, unique financial incentives to assist in recruiting and retaining nurses of color to serve as nursing faculty because faculty salaries compete unfavorably with clinical salaries, which are much higher.
- Faculty may not be representative of the students in their classrooms, and efforts to bring in URM adjunct faculty to do workshops and teaching, as well as to be role models for students, has been hampered at some institutions by union contracts.
- A school's retention rate is a factor in their reputation. If schools place students who might struggle in difficult classes, the chances of dropping out increases. Because of this, students of color often find themselves tracked into classes or fields where they will presumably be more successful.
- Some campuses are not perceived as "welcoming" to URM students in the institutional environment. For example, food available on campus is Euro-American, or there is not a designated place for students to pray.
- Only a few programs offer evening or night class options for required nursing classes to accommodate students who work while in school.
- Most nursing programs have a yearly application and acceptance timeframe. If a student is not accepted, he/she is likely not to apply again in order to secure employment. Students felt that a year is too long to wait to apply again.
- Class simulations and scenarios may not incorporate culturally-relevant or relatable experiences for URM students, raising the issue of potential cultural bias in coursework assignments and test questions on both entrance exams and the NCLEX.
- There is a high demand for nursing and limited capacity in nursing programs, leaving hundreds of applicants from all groups rejected from their schools of choice.
- Students have experienced difficulty within their clinical placements because staff nurses objected to working with someone who has an accent. Students have been told that their preceptors and co-workers claim they cannot understand what they are saying.

"Barriers and supports among URM students in K-12 and higher education system"

- Many health care professionals may assume that if a URM student comes from a specific country or speaks a specific language that they can function in the role of medical interpreter for a nurse or doctor. They are expected to be able to speak on behalf of an entire ethnic or language group, and if the students are unwilling or feel uncomfortable doing so, then they are perceived as difficult, un-cooperative, and perhaps “non-compliant.” There is a general lack of understanding of the diversity that exists within a culture as well as the diversity that exists between cultures.
- Inconsistency in clinical rotations throughout the school year present challenges to students. Clinical rotation schedules change every few weeks which leaves limited time for students to plan in advance for, or to find, childcare or transportation to the different sites, or adapt their work schedules to meet education requirements. URM students may have increased challenges with supporting and accommodating these unpredictable changes due to limited social capital or networks.

Supports in K-12 and Higher Education

The following items were mentioned as supports and current innovative strategies to pursuing a nursing degree from both the K-12 and higher education systems during 31 qualitative interviews with faculty of nursing programs, staff serving URM students in the Washington state post-secondary system, K-12 guidance counselors and family engagement staff, executive directors of non-profit organizations serving URM populations, current URM nursing students, and licensed URM nurses.

A comment was made in the interviews that there are many programs and supports to help students get into college, but not a lot of programs to help students once they are in college. The intent of this section is to provide some examples of programs, supports, and activities that have had a positive impact on URM students in high school, and which are helping them to persist once they are in college.

The supports in this section are examples of what is currently going on. However, more investigation needs to occur to understand the sustainability of these programs and long-term impacts of these supports on students and ultimately communities of color.

Supports in K-12

1. Academic Supports

- Dual-credit college prep classes in high schools offering a nursing focus in science and Career and Technical Education (CTE) help students prepare for a nursing career.
- For ELL students entering the U.S. school system at the secondary level, providing instruction in math and science in their native language. Many of them have had some type of school experience in their country of origin or in the refugee camps, so this allows them to start from where they left off with content while they are learning English.
- Before and after school programs provide homework help and other academic supports, as well as a safe place with structured activities.

Dual credit, college prep classes in high schools offering a nursing focus in science and CTE (Career and Technical Education) help students prepare for a nursing career.

- Nurses visiting schools and presenting information about their jobs can introduce students to the different kinds of nursing opportunities and let students know nurses work in a variety of care settings.
- Career Link, a high school completion program, helps older students (ages 16 - 21) receive their diplomas so they are eligible for federal financial aid (students must demonstrate their “ability to benefit” to receive aid and this requires either a high school diploma or GED). Students receive high school and college credit for completing this program in the Highline School District and at South Seattle Community College.

“Barriers and supports among URM students in K-12 and higher education system”

- Access to and use of technology helps with academic and communication issues.
 - * Recordings of lectures (Tegrity), or Podcasts and Webinars, and Power Points with notes allow ELL students to access class information to go over the material and fill in gaps.
 - * Google Docs for group projects so that students do not have to be in the same place to do their work which helps with family and work schedules.
 - * GoPost as a way to communicate what students are thinking during class rather than speaking up in class if they feel uncomfortable.
 - * Canvas has the capability for students to use voice submissions – oral rather than written – for assignments.
- Examples of completed assignments and study guides help students identify important concepts. Inviting students to write out questions and turn them in at the end of class or to use email to submit questions promotes a non-threatening environment.
- School-based nursing and health profession programs that are incorporated into the school day and science and health curriculums. An example that was offered to 300 middle and high school ELL students in the Seattle School District was the *Cross Cultural Education in Public Health* curriculum developed through a grant from the Robert Wood Johnson Foundation. This six-week long class allowed students to learn about health professions, infectious diseases, nutrition and healthy living, public health, and cultural agility in public health. The class was followed by a career fair with many different health professions present and represented by a URM individual in that career path. Despite the effectiveness of the curriculum, which was confirmed by a professional evaluation process, the class was not continued after the grant was finished because of budget constraints in the school district.

2. Cultural & Family Supports

- Incorporating students’ cultures into class activities provides for a more relevant and meaningful learning experience.
 - * Provide time at the beginning of a class for students to do presentations about their country of origin
 - * Have a culture day incorporating a potluck and dancing.
 - * Show videos depicting different cultures in daily life or during special events/celebrations.
- Family liaisons who do outreach and engagement can bridge the gap between home and school for non-native English speaking families, instead of expecting parents to reach out to the school first
 - * Natural Leaders is a Washington State program that helps non-native English speaking families connect with their child’s school.
- Parents want their children to be successful academically – the issue is helping them know how to support their children to be successful.

3. Institutional and System Supports

- Providing opportunities for middle and high school students to explore nursing opportunities and have hands-on experiences that replicate the real world. For example:
 - * Culturally-relevant summer nursing camps for high school students. Several excellent examples are the 12-day *Na-ha-shnee* (for AI/AN students) and *Creating a Nursing Pathway* (for Latino students from Spokane, Yakima and the Tri-Cities) camps at Washington State University (<http://nursing.wsu.edu/Media-Dashboard/News&Media/Nahashnee-Camp.html>), and the 5-day UW - Seattle summer nurse camp for URM students (<http://nursing.uw.edu/about/diversity/dawg/nurse-camp-2013.html>). The *Na-ha-shnee* program has been in existence for 17 years, and about 85% of the AI/AN students who participate go on to college – not all go into nursing programs, but they are continuing on a post-secondary education pathway.
 - * Partnerships with high schools to provide instructors or technical support for nursing or health care course, such as the sports medicine program at Kentlake High School in partnership with Renton Technical College.
 - * Summer internship programs to get students into local hospitals and health care facilities.
 - * A field trip for high school students to a Nursing Assistant program at a Regional Skills Center.
 - * Visiting the labs or an operating room at a technical or community college.
 - * Nursing internship programs, such as a partnership that started with URM Mercer Middle School students and the VA Hospital, and which continued for seven years as the students attended Rainier Beach, Franklin, Cleveland, Garfield, Roosevelt and Chief Sealth High Schools. Students worked at the hospital and received a small salary, had access to the VA career counseling services and learned about many areas of nursing. Approximately 20% of the 49 students in the internship are currently in health care and almost all of them went on to post-secondary education. When the program coordinator at the VA retired, the internship program was not sustained.
 - * While this did not emerge from interviews, another example of a summer nursing camp is Nurse Camp at MultiCare Health System for high school students, based at Tacoma General Hospital. The camp completed its tenth year in 2013, and had 100 high school participants go through hands-on station rotation, job shadowing, operating room experience, emergency department experience, college campus visits, a college fair, a culminating project, and graduation.
- Bi-lingual instructional assistants provide support, one-on-one or, small group instruction in math and science classes.

- Career Fairs with a focus on a specific ethnic groups with speakers from those ethnic groups, help students envision themselves in nursing.
- Providing opportunities for students to get individualized attention and guidance in thinking about career options, doing the paperwork for college applications and how to plan for academic and personal success, such as:
 - * Partnerships with a local community college to establish an Upward Bound program to help URM students make a plan for their future and how to overcome the obstacles to get into college (South Seattle Community College: <http://www.youtube.com/watch?v=mZLPCpZErjU>)
 - * TRiO Talent Search provides help with finding financial aid, writing personal statements and scholarship applications, workshops on how to get into college, and career pathway information (through community colleges).
 - * The College Success Foundation connects with students through their school-based staff in several middle and high schools in the Seattle, Highline, Tacoma and Yakima school districts. The districts pay part of the cost and students have opportunities for internships, mentors, help with resumes and developing interviewing skills in grades 6-8 and 10-12.

Higher Education Supports

1. Academic Supports

- Using a cohort model in nursing programs helps students develop relationships and support systems.
 - * Creating cohorts according to age and life experience (those who are older, returning to school after a break, coming into the program from a different career, or who are fresh out of undergrad) creates continuity within the cohort (the Seattle University model).
- Intentional efforts to help students navigate the complexity and breadth of nursing care and career options in the U.S. clarifies the variety of opportunities within the field.
 - * Incorporating social justice principles into program curriculum and pedagogy creates an environment of equal participation.
 - * Writing Centers with student volunteers (English majors) who tutor and check papers for grammatical errors, help students who are learning English. (Highline Community College)
 - ◇ South Seattle Community College has a tutor who works specifically with nursing students.
- The Health Care Discovery class exposes students to different careers within the health care system; introduces them to medical terminology and HIV awareness; provides CPR training; provides vaccinations for students; completes background checks for students; and provides opportunities for students to make phone calls to get medical information.
 - Because this is a class for college credit, it allows the students to get their CPR training, vaccinations and background checks done for free, eliminating additional costs for students

and allowing them to complete necessary steps as a part of their nursing program application process. (South Seattle Community College)

- The Health Care Pathways Bridge class supplements the pre-requisites classes and teaches students: how to interview and communicate; how to do presentations; and how to work in a team. The Health Care Pathways Bridge class is also set up using a cohort model. (South Seattle Community College)
 - * The top 15 in the cohort are granted conditional admittance to the nursing program (conditions include >3.0 GPA in their core classes and successful completion of spring quarter classes).
- When nursing program staff monitor students weekly, students are encouraged to stay on top of emerging academic issues. (South Seattle Community College)
- Providing math supports through a math lab and on-line or in-person tutoring helps students access support anywhere. (South Seattle Community College)
- Assessing general assignment questions helps eliminate cultural biases. (Tacoma Community College)
- ATI Program (on-line, standardized test predictor of N-CLEX success) is being embedded into the curriculum rather than being a stand-alone tool. This allows students to learn how to take the test and for ELL students to repeat the material for practice. (Tacoma Community College)
- StatWay is a math package designed to help students complete the community college math sequence in one to two quarters, rather than prolonging it, which can lead to discouragement. (Tacoma Community College)

2. ELL Student Supports

- Integration of basic skills (reading, writing and math) into the nursing program curriculum helps ELL students transfer knowledge learned previously in their first language, to knowledge in the English language. (Renton Technical College).
- Offering the iBEST model (tutorial for English and Math) through a tutor who works with nursing students on building vocabulary, pronunciation and confidence in speaking, or, incorporating the iBEST model into class curriculum and engaging students as peer helpers, gives ELL students extra, needed support. (Renton Technical College and South Seattle Community College).
- The Reading Apprenticeship program teaches students how to read for concepts, not just the words on a page. It uses exemplars and ties content to context to facilitate developing problem-solving skills. (Renton Technical College)

- Using competency-based/standards-based coursework and testing, and starting with lab classes, gives students feedback right away and in an on-going manner, which lets them know what to work toward. Traditional practice has students figure things out independently, which can lead to confusion and discouragement.
- Minimizing lecture-style classes, putting more emphasis on group work, and using hands-on experiences gives ELL students opportunities to understand by doing, rather than just by listening. Renton Technical College developed 30 scenarios that will be an open-source product for all nursing programs and hospitals in Washington State and nationally through a grant from the Washington State Workforce Development Board. The material will eventually be housed at the University of Washington, but is currently accessible through the www.pnwhsc.org website.
- To address the aging-out issue, ELL classes are offered for free until just below the college proficiency level (South Seattle Community College)
- ELL students benefit from tutoring in English, Math, Biology and some Chemistry. (South Seattle Community College)
- Access to and use of technology helps with academic and communication issues.
 - * Recordings of lectures (Tegrity), or Podcasts and Webinars, and Power Points with notes allow ELL students to access class information to go over the material and fill in gaps.
 - * Google Docs for group projects so that students do not have to be in the same place to do their work which helps with family and work schedules.
 - * GoPost as a way to communicate what students are thinking during class rather than speaking up in class if they feel uncomfortable.
 - * Canvas has the capability for students to use voice submissions – oral rather than written – for assignments.
- Putting ELL students onto a career course track while they are doing their remedial classes supports persistence and a higher rate of classwork success. (Tacoma Community College)
- Providing NCLEX-style questions as a part of class work exposes students to the test questions and format ahead of time.
- English language translation dictionaries and thesauruses help students navigate their class assignments.

3. Cultural and Family Supports

- Incorporating students' cultures into class activities provides a more relevant and meaningful learning experience.
 - * Provide time at the beginning of a class for students to do presentations about their country of origin.
 - * Have a culture day incorporating a potluck and dancing.
 - * Show videos depicting different cultures in daily life or during special events/celebrations.
- Nursing skills are highly respected and considered a desirable career in many cultures.
- Developing relationships with the religious/spiritual leaders in ethnic communities helps build an understanding about requirements for the nursing profession (i.e. styles of uniforms vs. traditional dress).
- Students who have struggled themselves want to help those who are following them so that their successors will have an easier path.
 - * A mentor of color (faculty member or a student who is further along in the program) can offer culturally-appropriate support, encouragement, and accountability.
- Designated grant money that allows the college to connect with community members can inform the college of how to effectively reach out to specific ethnic communities. (South Seattle Community College)

4. Financial Supports

- Receiving adequate financial aid would allow students to focus on school, instead of splitting their time between work and their studies.
- The salary a nurse makes is high enough to be able to pay off the debt incurred to earn the degree – students just need to understand how the numbers work to support them being able to do this. Access to a financial literacy class or a counselor showing them the debt/salary ratios can help them with this.
- Some institutions offer scholarships to undocumented students so they do not need to apply for loans which require a Social Security Number. This allows them to attend an undergraduate program where they can complete their nursing pre-requisites. However, current immigration policy makes it impossible for them to pursue a nursing degree because of the background check that is required.
- The Fund for Excellence (UW-Seattle) provides assistance for students who get into financial difficulties, and helps them bridge funding gaps for their education.
- Scholarships and grants cover most, if not all, of college expenses.
- Scholarships are available once a student has their RN degree to be able to earn their BSN degree. (UW-Bothell)

“Barriers and supports among URM students in K-12 and higher education system”

5. Institutional and System Supports

- Intentional efforts to help students navigate the complexity and depth of nursing care in the U.S. demystifies the process and encourages application.
- Officially designated student organizations/clubs provide affinity groups for students in these areas:
 - * Culture
 - * Language
 - * Degree
 - * Interest
- UW-Bothell, Bellevue College and the University of Lyon partner to bring Spanish-speaking nurses to the U.S. and streamline the licensing process they need to go through in order to work here.
- Institutions that provide support services help first-generation students feel confident about their ability to be successful.
- Some institutions have implemented programs dedicated to increasing the enrollment of URM and undocumented students, and are undertaking intentional efforts to recruit from this demographic.
- Ensuring that a counselor for each under-represented ethnic group is on staff provides specific support for each student. (UW – Seattle, Academic Center)
- The UW-Seattle established an ethnic Culture Center to provide social supports for URM students.
 - * A new addition will be for AI/AN students to have a hall similar to a longhouse.
- Mentors of color from the faculty or students of color who are further along in their program provide encouragement and accountability.
 - * Nursing fraternity (Delta Iota Chi) at Pacific Lutheran University is starting a mentoring program for underclassmen in the nursing program.
- Designation as an AANAPISI (Asian American, Native American, Pacific Islander Serving Institution) college encourages URM students to apply. This federal grant provides scholarships and funding to develop programs and hire staff to support the specific needs of these traditional URM students.
 - * South Seattle Community College Example: <http://www.southseattle.edu/programs/aanapisi/>
 - ◇ Hired two Cultural Specialists (written into the grant) to work with faculty on adapting the current curriculum to be more culturally relevant to Southeast Asian and Pacific Islander students. This work is taking place across disciplines in English, Math, Biology and Psychology classes.
 - ◇ Hired two Educational Planners (academic advisors who specialize in professional, technical and transfer student issues) who have an understanding of the various cultures and take a culturally appropriate perspective in how they advise students and how students are supported in their education path.

- ◇ Videos such as “Samoan Youth: Ensuring our Success” (<http://www.youtube.com/watch?v=SAFYJnbJHZY>) are created to educate people about the culture and students’ needs.
 - ◇ Incorporated the family into as many aspects of their student’s education as possible and worked to integrate the family, community and institution.
- Student clubs that provide opportunities for students to share their cultures let students know that they don’t have to leave their cultures behind in order to be successful in school.
- Implementing a lottery system for nursing program admissions rather than a GPA-only-based admissions process can increase the diversity of a program.
 - * Highline Community College started its lottery in 2010 and allows those with an average GPA of 3.5 or higher in the nursing pre-requisite classes to be entered.
 - * Tacoma Community College also uses a lottery.
- Implementing a rolling admissions process, rather than just a once-a-year fall entry would garner more applicants from various backgrounds. (Highline Community College and Tacoma Community College)
- While this did not emerge in interviews, another example of an innovative strategy is to allot points towards admission for proficiency in a second language other than English when processing and prioritizing applications for admission. (Yakima Valley Community College)
- Having a speaker come to talk with students about continuing their nursing education can encourage students to pursue their BSN degree. (South Seattle Community College)
- Employing or designating a staff member who functions as a “one-stop” source of information about nursing programs, requirements, types of supports, and referrals when students want to talk to about specific issues/needs, helps guide students through the process. Having this staff member also function as a cultural “translator” or “mediator” between students, college faculty, and other staff (i.e. “What they mean is...”) can disbar communication issues. (Everett Community College)
- “Peer navigators” who have taken nursing classes can mentor students, as well as attend orientations and meetings to make connections with students to build relationships and answer questions. (South Seattle Community College)
- The Welcome Back Initiative for international students takes into account prior education and experience to fast-track international students into and through the nursing program so they can be licensed. (Highline Community College)
- Offering an independent study option gives students who are working or caring for families more flexibility and a better chance at completing the program.
- An early learning/daycare center on the institution’s campus provides support for students with children. (Tacoma Community College)

“Barriers and supports among URM students in K-12 and higher education system”

- Counseling services for personal issues and connecting students to needed services supports the emotional needs of URM students. (Tacoma Community College)
- A strong advising system with an advisory “dashboard” containing an education plan for each student can help keep students on track. This can be reviewed by an advisor and flagged with any early alert concerns from classwork and transcripts. (Tacoma Community College).

Recommendations for K-12

1. Academic

- Provide enhanced training for guidance counselors & College/Career Specialist about:
 - * The classes needed to successfully prepare for a nursing career.
 - * The large number of options within the nursing field that students can choose to pursue.
 - * The components of a nursing school application, which include math and science classes as well as leadership and community service opportunities so they can get the recommendations needed for their applications.
- Give presentations in both middle and high school by nurses of color that cover the variety of jobs available if one has a nursing degree. Include the salary schedule for these jobs so students can see this is a living-wage profession with opportunities for career advancement.
- Provide opportunities for students and parents to access college fairs, college resource fairs, career fairs, and college/FAFSA application assistance events for specific ethnic groups to ensure focused attention.
- Increase collaboration between health care professions and K-12 schools to support activities such as school visits and the promotion of the sciences and science careers.
- Establish an academic, on-line “early warning system” for students in nursing pathways that triggers a “follow-up” with the student to determine what type of assistance is needed before the problem becomes overwhelming.
- Expand access to and use of technology to help with academic and communication issues.
 - * Recordings of lectures (Tegrity), or Podcasts and Webinars, and Power Points with notes allow ELL students to access class information to go over the material and fill in gaps.
 - * Google Docs for group projects so that students do not have to be in the same place to do their work which helps with family and work schedules.
 - * GoPost as a way to communicate what students are thinking during class rather than speaking up in class if they feel uncomfortable.
 - * Canvas has the capability for students to use voice submissions – oral rather than written – for assignments.
- Provide extended testing time for ELL students.

Increase the cultural agility, skills, and awareness of all school staff with intentional professional development at the district level, and add cultural agility coursework to teacher training programs.

2. Cultural and Family

- Provide role models and hands-on opportunities to see what nursing entails. URM students need to see people of color in the nursing profession, and have the opportunity to see the work settings of these professions.
 - * Field trips
 - * Nursing programs
 - * Summer camps
- Increase the cultural agility, skills, and awareness of all school staff with intentional professional development at the district level, and add 'cultural agility' coursework to teacher training programs . Many educators do not understand what students are struggling with due to lack of support in their personal, home, and academic lives.
- Expand and provide sustainable funding for culturally-relevant summer camp experiences for URM high school students. Camps provide hands-on-nursing experiences, the ability to talk with nurses about their careers, and networking opportunities for students from different schools and backgrounds who share a common career interest.
 - * These programs need to be embedded into the curriculum so their continuation is not subjected to non-renewal of grant-funding or budget cuts because it's considered an "enrichment program" or "add-on."
- Ensure school district presence at ethnic community and cultural events to connect with students and parents in their neighborhoods and communities.
- Ensure students see their cultures, and therefore themselves, represented in textbooks, class projects, and classroom materials.
- Create student clubs that provide opportunities for students to share their cultures and know that they do not have to deny or leave their cultures behind in order to be successful in school.

3. Financial

- Provide a financial literacy class for both students and parents to help them understand college tuition and associated expenses, how scholarship and grant monies offset tuition and associated expenses, and how to make and follow a budget.
- Allow students to waive any fees or deposits associated with attending that institution until the fall when their financial aid is available.

4. Intuition and system

- Create a clear pathway from graduation to the degree they want to attain. The progression should make sense to both students and parents. Students should know exactly what they need to do to earn a BSN, and students and parents should have this information by 8th grade so they can be taking the correct classes beginning in their freshman year of high school.

- Standardize application forms for nursing programs – like the college “Common Application” - so students and their families only have to work with one system.
- Provide opportunities for students to complete dual-credit high school and college classes that meet both math and science requirements for high school graduation and nursing prerequisites.

Recommendations for Higher Education

1. Academic

- Have a speaker come in during class time to talk with students specifically about continuing their nursing education to get a BSN degree as an intentional recruitment tool.
- Establish an academic, on-line “early warning system” for URM nursing students that triggers a “follow-up” with the student to determine what type of assistance is needed before the problem becomes overwhelming.
- Increase access to and use of technology which helps with academic and communication issues.
 - * Recordings of lectures (Tegrity), or Podcasts and Webinars, and Power Points with notes allow ELL students to access class information to go over the material and fill in gaps.
 - * Google Docs for group projects so that students do not have to be in the same place to do their work which helps with family and work schedules.

2. Cultural and Family

- Provide access to URM mentors and role models for encouragement, support, and networking.
- Increase the cultural agility of all faculty, with intentional professional development at the department and institution level. Many educators do not understand what students are struggling with due to lack of support in their personal, home, and academic lives.
- Provide on-going opportunities to learn about other cultures as a part of the nursing curriculum. Cultural awareness will help the students interact with each other and their patients which will transfer into their professional careers.
- Engage the family in their student’s college experience by creating a PTA-like experience for post-secondary institutions. Many cultures are family-centered and by engaging the whole family in the college experience, they can better understand their student’s needs and obligations. Creating a family connection also informs family members of the many opportunities that are available for financial aid, work study, and advising.

Look at the “whole person” in the application. Consider multiple factors in the application such as what the data shows in terms of workforce and demographic needs.

- Ensure there is a higher education institution presence at community and cultural events to connect with students and parents in their neighborhoods and communities.
- Create a Department/Office of Minority Affairs within the nursing schools, or hire staff whose function within the nursing school is to focus on supporting URM students.

- Provide opportunities to network with other URM nurses and to discuss issues that they are encountering and possible ways to address them as a collective voice. Use social media (i.e. Facebook group page) to create an online community of support.
- Create student clubs that provide opportunities for students to share their cultures and know that they do not have to deny or leave their cultures behind in order to be successful in school.

Creating a culture of “who can be successful as a nurse” instead of “who has the best grades for admittance to the program,” encourages the selection of a diverse group of applicants.

3. Financial

- Incorporate financial literacy tools and practices into all counseling and advising.
- Provide classes that incorporate nursing application requirements such as CPR training, current immunization records, and background checks so that the costs of these items are covered as a part of the class and are not additional expenses for students.

4. Intuitional and system

- Standardize application forms for nursing programs – like the college “Common Application” - so students and their families only have to work with one system.
- Allow students to waive any fees or deposits associated with attending that institution until the fall when their financial aid is available.
- Create a staggered application and acceptance process that facilitates students being able to apply to multiple nursing programs at multiple times throughout the year.
- Look at the “whole person” in the application. Consider multiple factors in the application such as what the data shows in terms of workforce and demographic needs.
- Streamline the process and create a clearer pathway so students know exactly what is entailed to earn a BSN.
- Offer evening and night classes for required nursing program classes.
- Allow students to submit their highest grades from their transcripts in the pre-requisite classes on their applications, rather than penalizing them for taking a class more than once. This is currently allowed for students who take the SAT when they submit their college applications.
- Employ or designate a staff member who functions as a “one stop” source of information about nursing programs, requirements, types of supports, and referrals when students want to talk to about specific issues/needs, to help guide students through the process. Having this staff member also function as a cultural “translator” or “mediator” between students, college faculty, and other staff (i.e. “What they mean is...”) can disbar communication issues. (Everett Community College)
- Continue social and professional support after graduation and during the first two years in the workforce.

“Barriers and supports among URM students in K-12 and higher education system”

- Expand academic, practical, and emotional supports for URM nursing students via a regional level “Retention Specialist” through RNB program completion. This “Retention Specialist” position might serve as a link among students, educators, and employers. The position could be shared by practice and education in a region and housed in a neutral organization, such as a Workforce Development Council.
- Provide extended testing time for ELL students.

CONCLUSION

Eliminating the barriers URM students face when pursuing a nursing career can ultimately increase the quality of care we can provide for our communities. This report was issued in response to research that shows the need for a nursing population that matches its patient population. When nurses understand and come from the community they are serving, we have a better chance at attaining an equitable healthcare system.

One strategy to work toward health equity is to improve the cultural and linguistic agility and the diversity of the health-related workforce (U.S. Department of Health & Human Services National Partnership for Action, 2011). There is growing national interest in understanding how nursing workforce diversity, health disparities, and the social determinants of health are inter-related (U.S. Department of Health & Human Services HRSA, 2012). The World Health Organization defines the social determinants of health as “the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels. The social determinants of health are mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries” (WHO, 2013). As health care providers and leaders, the nursing workforce is positioned to see beyond the formal health care delivery system and lead in addressing underlying social determinants of health that structure health inequities (Lathrop, 2013), to collaborate across sectors and professions to promote transformative K-12 and higher educational policy, and advocate for a more diverse nursing workforce.

APPENDIX A

General Summary of the Literature on ELL Nursing Students (Compiled by Julie Benson and Rebecca Callahan, Tacoma Community College)

Language Strategies:

1. Using a vocabulary notebook or note cards with all words that are unfamiliar builds a strong vocabulary.
2. Listening to a lecture several times helps students go back to key areas they missed. (Students can access Tegrity or should be allowed to tape class.
3. Provide lecture outlines or handouts to help students follow along during the lecture.
4. Explaining the content the student learns helps solidify understanding
5. Learning in their native language can bridge the gap between learning in English.
6. Studying aloud or presenting content to family/friends who speak the student's language helps build English language proficiency. Also, encouraging family and friends to ask questions gets the student thinking critically and using different words in English.
7. Using English at home as one of the primary languages is shown to have a positive impact on a student's ability to successfully learn the language.
8. Provide an English Language translation dictionary to help bridge the gap between the student's home language and English. Studying with a medical dictionary or thesaurus can also help a student familiarize themselves with the language.
9. Gradually introduce oral contributions to class to help the students to feel comfortable speaking English in front of their peers. Pair-share is a great technique that gives students the opportunity to first practice sharing with a partner because talking in front of the class.
10. Provide advanced notice for oral presentations to help students mentally prepare for speaking in front of their peers. State their name before they will present or give the students numbers with an order on the board.
12. Use role play to promote learning by helping the students make meaningful connection to content.
13. Record simulated patient reports which allows students to listen to them multiple times in order to help them develop listening skills.
14. Provide a standard form for taking verbal reports to help students identify and organize important information.

15. Use groups that are as small as possible (three is a great group size for the classroom), to keep students' stress at a minimum and allow them to make more contributions.
16. Create mixed-ability groups that puts stronger students with weaker students. Both groups of students learn by teaching their peers and by being taught by their peers.
17. Create a hand-out of the components of an effective study group to help students navigate the seemingly independent nature of studying.
18. Use a clinical evaluation tool to assess clinical communication skills.

Active Educational Model:

1. Make expectations clear. Explain what active learning is and the role students play in their own learning.
2. Have the writing and tutoring center staff attend class to reinforce active learning.
3. Set up peer mentors (buddy system). This helps with English immersion in social settings.
4. Have students locate specific topic information in their text book (think about using a case study approach and reference text book).
5. Provide examples of completed assignments and study guides to identify important concepts.
6. Invite ELL (all students) to ask questions, having them practice with a classmate or an adviser in order to gain confidence.
7. Have ELL (all students) write out questions to turn in at the end of class or use e-mail to submit questions (make non-threatening environment).

Test Taking:

1. Utilize concept maps (mind mapping) when presenting new information (students can learn to create their own maps). Students can use the ATI Concept Maps to facilitate this process.
2. Form study groups (see feedback on groups above). Members of the study group should divide the material to be studied so that each participant provides both an oral and written summary.
3. Provide extended testing time if possible.

4. Provide alternative testing setting for ELL students
5. Provide NCLEX-style questions in class setting.
6. Allow use of a bilingual dictionary for students who are building skills.
7. Teach students how to take multiple choice tests, dissect and analyze test items.
8. Assign test questions weekly.
9. Provide additional practice for psychosocial questions and work with a tutor as this content is culturally based.
10. Develop expertise on how to avoid both structural and cultural bias in test questions.

Sources for Appendix A

- Bosher, S. & Bowles, M. (2008). The Effects of linguistic modification on ESL students' comprehension of Nursing. *Nursing Education Perspectives, Vol 29, No. 3.*
- Chiang, V. & Crickmore, B.L., (2009). Improving English Proficiency of Post-Graduate International Nursing Students Seeking to Further Qualifications and Continuing Education in Foreign countries. *The Journal of Continuing Education in Nursing, 329-336.*
- Dandridge-Dosher, S. & Dexheimer-Pharris, M., (2009). *Transforming Nursing Education: The Culturally Inclusive Environment.* New York: Springer Publishing Company, LLC.
- Hansen, E. & Beaver, S., (2012). Faculty Support for ESL Nursing Students: Action Plan for Success. *Nursing Education Perspectives, 246-249.*

Resources

Academic Progression in Nursing (APIN) Grant Application (2012). Washington Center for Nursing. Seattle, WA.

Bosher, S. & Bowles, M. (2008). The Effects of linguistic modification on ESL students' comprehension of nursing. *Nursing Education Perspectives, Vol 29, No. 3.*

Brave Heart, M.Y.H. (2001). *Clinical interventions with American Indians*. In R. Fong & S. Furoto (Eds.), *Cultural Competent Social Work Practice: Practice Skills, Interventions, and Evaluation* (pp. 285-298). Reading: Longman Publishers. Available at: <http://historicaltrauma.com/>

Bureau of Health Professions (2010). *The registered nurse population: Findings from the March 2008 National Sample Survey of Registered Nurses*. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration.

Available at: <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

Bureau of Health Professions (2013). *The US nursing workforce: Trends in supply in education*. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration. Available at: <http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf>

Caliguiri, P. (2013). Develop your cultural agility. *T + D, Vol. 67, No. 3.*

Chiang, V. & Crickmore, B.L. (2009). Improving English proficiency of post-graduate international nursing students seeking to further qualifications and continuing education in foreign countries. *The Journal of Continuing Education in Nursing, Vol 40 (7): 329-336.*

Dandridge-Dosher, S. & Dexheimer-Pharris, M. (2009). *Transforming Nursing Education: The Culturally Inclusive Environment*. New York: Springer Publishing Company, LLC.

Fleming, R., Berkowitz, B. & Cheadle, A. (2005). Increasing minority representation in the health professions. *The Journal of School Nursing, Vol. 21, No. 1.*

Fleming, R. (2011). "Use of school nurse services among poor ethnic minority students in the urban Pacific Northwest." *Public Health Nursing, Vol.28, No. 4.*

Future of Nursing Campaign for Action (2013). "Evidence: Quick facts." Available at: <http://campaignforaction.org/evidence/quick-facts>

Hansen, E. & Beaver, S. (2012). "Faculty support for ESL nursing students: Action plan for success." *Nursing Education Perspectives, Vol 33, No. 4: 246-249.*

"Barriers and supports among URM students in K-12 and higher education system"

Institute of Medicine (2010). *The future of nursing: Leading change, advancing health*. Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine. Washington, DC: National Academies Press. Available at: <http://www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx>.

Katz, J. (2005). "Native American high school students' perceptions of nursing." *Journal of Nursing Education, Research Brief*. Washington State University, Pullman, WA.

Katz, J., Smart, D., Paul, R. (2010). "Creating a path: American Indian/Alaska Native High School Students Pursuing College and a Career in Nursing." *International Journal of Nursing Education Scholarship*. Washington State University, Pullman, WA.

Katz, J., Oneal, G., Paul, R. (2011). "I don't know if I can make it": Native American students considering college and career. *Online Journal of Cultural Competence in Nursing and Healthcare, Vol. 1, No. 4*. Available at: www.ojccnh.org.

Lathrop, B. (2013). "Nursing leadership in addressing the social determinants of health." *Policy, politics, nursing practice, Vol. 14, No. 41*.

Missing persons: Minorities in the health professions. A Report of the Sullivan Commission on Diversity in the Healthcare Workforce. (2004). WW Kellogg Foundation. Available at: www.aacn.nche.edu/Media/pdf/SullivanReport.pdf.

Office of Financial Management (2010). *Washington State population by race and Hispanic origin: 2000 and 2010* (Executive Summary). Olympia, WA: Office of Financial Management. Available at: <http://www.ofm.wa.gov/pop/race/10estimates/executivesummary10.pdf>

National Council of State Boards of Nursing (2011). *Number of candidates taking the NCLEX examination and percent passing, by type of candidate*. Chicago, IL. Available at: http://www.ncsbn.org/Table_of_Pass_Rates_2011.pdf

Norris, T., Vines, P. & Hoeffel, E. (2012). "The American Indian and Alaska Native Population: 2010. 2010 Census Briefs." *U.S. Census Bureau*. Available at: <http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf>

Seago, J.A., Spetz, J., Chapman, S., Dyer, W., Grumbach, K.. (2004). Supply, demand, and use of licensed practical nurses. *Center for Health Workforce Distribution Studies*, University of California, San Francisco. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration. Available at: <http://bhpr.hrsa.gov/healthworkforce/reports/nursing/lpn/default.htm>

Skillman, S.M., Andrilla, C.H.A., Tieman, L., Doescher, M.P. (2008). "Demographic, education, and practice characteristics of registered nurses in Washington State: results of a 2007 survey. Final Report #120." Seattle, WA: *WWAMI Center for Health Workforce Studies*, University of Washington.

U.S. Census Bureau (2010). American Community Survey 5-Year Estimates, Data Profile. Available at: <http://www.census.gov/acs/www/>

U.S. Department of Health & Human Services, Health Resources and Services Administration (2012). *Nursing in 3d: Workforce diversity, health disparities, and social determinants of health*. Available at: <http://bhpr.hrsa.gov/nursing/summit.html>

U.S. Department of Health & Human Services Office of Minority Health (2011). *Learn about the National Partnership for Action*. Available at: <http://minorityhealth.hhs.gov/npa/templates/browse.aspx?lvl=1&lvlid=11#goal>

Washington Center for Nursing (2008). *A Master Plan for Nursing Education in Washington State*. Seattle, WA. Available at: <http://www.wacenterfornursing.org/uploads/file/nursing-education/wcn-master-plan-04-02-08.pdf>

Washington Center for Nursing (2012). *A Master Plan for Nursing Education in Washington State: Update 2012*. Seattle, WA. Available at: http://www.wacenterfornursing.org/uploads/file/MPNE_Update_1_8_13.pdf

Washington State Board for Community and Technical Colleges (2012). *Integrated Basic Education and Skills Training (I-BEST)*. Available at: http://www.sbctc.ctc.edu/college/e_integratedbasiceducationandskillstraining.aspx

World Health Organization (2013). *What are the social determinants of health?* Available at: http://www.who.int/social_determinants/sdh_definition/en/