Title

What Do Urban College Students Really Think about Health Insurance? A Qualitative Study

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**Abstract** 

Objective: To determine barriers and opportunities to health insurance enrollment among an

undergraduate students at a large urban university. Participants: Participants were 31 college

students enrolled in 4-year and community colleges in the City University of New York

(CUNY), and six health services and insurance enrollment specialists who facilitate and assist in

the health insurance enrollment process for CUNY students. Methods: Focus groups were

conducted with students and in-depth interviews with key informants in May 2017. Results: The

research revealed important insights into how students perceive and value insurance and yielded

recommendations for the university to improve enrollment of its students. Conclusions: Many

colleges can increase student enrollment in health insurance by informing and educating students

about the process. Improving enrollment processes can increase insurance rates and improve

student population health.

Keywords: Health education; health insurance; student health; communications

Introduction

In 2010, the United States passed the Patient Protection and Affordable Care Act (ACA),

and within six years of implementation, more than 20 million uninsured people gained access to

health insurance. The ACA's Medicaid expansion provision contributed an estimated 13 million

new enrollees by the end of 2016, making a positive and strong impact on urban college

students around the nation.<sup>2</sup> College students also benefitted from the ACA's dependent

coverage provision, which raised the age for children claimed as dependents from 19 to 26 years

old. This provision resulted in an estimated 2.3 million new health insurance enrollees between 2010 and 2013.<sup>3</sup>

Following ACA comprehensive implementation in 2014, some universities engaged in recruitment efforts to enroll students into marketplace plans (or into Medicaid, if students were eligible). Formative research conducted in Illinois to inform a campaign for community college students identified the need to build more favorable attitudes about the personal benefits of enrolling in a health insurance plan, (i.e. security, independence, peace of mind). The same research confirmed that messages should emphasize social norms (i.e. your friends believe that health insurance is important). <sup>4</sup> The California State system initiated a grant-funded \$1.25 million campaign to educate students about the opportunity provided by the ACA to obtain affordable health insurance. Representatives were employed at 15 California State campuses to engage with students and present information about the new options available to them. Following the campaign, representatives recommended a more streamlined enrollment process and clearer guidelines for students in unusual situations.<sup>5</sup>

The City University of New York (CUNY) is the city's public university system, and serves approximately 275,000 undergraduate and graduate students. By race, ethnicity and national origin, CUNY is one of the most diverse university systems in the U.S.<sup>6</sup> After ACA implementation, from 2011 to 2015, the uninsured rate dropped from 19 percent to 9.4 percent among students 18-30 years old attending CUNY colleges (see Table 1).<sup>7</sup> While national policies are likely to have been the direct cause of these advances, marketing programs directed at individuals can also play an important role in reducing the current number of uninsured students.<sup>8</sup> At any given time, more than 25,000 CUNY students are uninsured.

The aim of our research was to identify barriers and opportunities for increasing insurance enrollment among CUNY students. We conducted student focus groups and in-depth interviews with key informants involved in on-campus insurance recruitment and enrollment. While our study was administered after the 2016 U.S. presidential election, during a time when several attempts were made to dismantle the ACA, this research examines student perceptions of health coverage and insurance generally, recognizing that specific elements of the policy landscape will change over time.

Insurance coverage has numerous health benefits. Insured individuals with chronic conditions are more likely to experience better health outcomes than those who are uninsured. Health insurance also protects against financial costs related to illness, which can force a student to withdraw from college. At CUNY, low graduation rates are a concern. Only 32 percent of CUNY community college students and 56 percent of undergraduates complete their degree within six years of enrollment.

The New York Office of Citywide Health Insurance Access (OCHIA) and the CUNY Central Office of Student Affairs (COSA) are responsible for connecting CUNY students with on-campus health insurance enrollment opportunities. OCHIA coordinates health insurance enrollers for all CUNY campuses. The nonprofit organization Single Stop is a one stop shop for low-income students and facilitates access to public assistant programs. Single Stop serves CUNY's community colleges and John Jay College of Criminal Justice, a four-year college. Forprofit and nonprofit insurance organizations provide insurance enrollment for CUNY campuses not covered by Single Stop. In addition to private market plans, these insurers offer students Medicaid and the Essential Plan. See Table 2 for CUNY campuses health insurance enrollment by plan type.

#### Methods

We implemented two qualitative methods for data collection: key informant interviews and focus groups. We conducted interviews with key informants because of these individuals' strategic roles in designing outreach campaigns to reach college students, as well as their engagement with student enrollment. We chose to complement these interviews with student focus groups to gain the student perspective on insurance generally and the campus enrollment process specifically.

Participants and Settings. Students from the City College of New York (CCNY), a four-year college, and the Borough of Manhattan Community College (BMCC) were recruited to attend on-campus focus groups. We selected these colleges because of their large student bodies which have experienced high levels of uninsured students in the past and which serve populations particularly susceptible to be uninsured. Students were recruited through campus-wide emails, and were compensated with a meal and a \$25 Amazon gift card. Focus groups were selected because they encourage students to share opinions and often help facilitate an exchange of information about campus resources. <sup>13, 14</sup> The method is also useful for eliciting insights in a relatively time-efficient manner.

Key informants were recruited for in-depth interviews based on their professional experience with health insurance enrollment across CUNY campuses. Discussions with those responsible for enrolling students at the university level and specific campuses guided the key informant recruitment process. In-depth interviews were selected for key informants because of this method's applicability in collecting high quality data from a relatively small sample. <sup>15</sup> Key informants were not compensated for their time. Focus group participants and key informants

provided consent prior to data collection. Research protocols were approved by the CUNY School of Public Health institutional review board (IRB File Number 2017-0068).

Data Collection. Student focus groups and key informant interviews each employed a semi-structured interview guide with open-ended questions by a facilitator trained in qualitative data collection (CP). Both guides were developed by reviewing the literature on perceptions of health insurance among college students and strategies to increase student enrollment. The questions were refined and expanded to address the six constructs of the Health Belief Model (HBM), a psychological framework that helps explain and predict health-related behaviors. The model was developed during the 1950's in response to lower-than-anticipated participation in a free tuberculosis screening program. <sup>16</sup> We applied the HBM's framework to support our understanding of barriers and opportunities to increase health insurance enrollment among college students (See Table 3).

During data collection, the focus group facilitator explained that "Obamacare" is synonymous with "Affordable Care Act," and "ACA" <sup>17</sup>; therefore, participants should use the term they are most familiar with. All focus groups and interview sessions were audio-recorded, professionally transcribed, and uploaded into Dedoose Version 7.6.21 software to assist with analysis.

Data Analysis. An inductive approach was used to guide analysis of the transcripts. The initial focus group and key informant interview codebooks were developed by one member of the research team (KFM) who reviewed the transcripts and was not present at any of the focus groups or interviews. These codebooks were confirmed by researchers present in the focus groups and interviews (CP and EM). Using these codebooks, two researchers independently coded each focus group transcript (EM and KFM) and key informant interview (EM and JG),

and met to iteratively add/collapse codes in the codebook and negotiate final codes. Patterns across focus groups and interviews were identified and summarized using Dedoose software code occurrence visualizations and matrix analyses. The research team met several times to discuss patterns, transcript highlights, and to synthesize themes. Representative quotes were chosen to illustrate themes that emerged from the analysis. All study procedures were approved by CUNY's Institutional Review Board (#2017-0068).

#### **Results**

Four student focus groups and six key informant interviews were conducted. Focus group participants (N=38) were all full-time matriculated CUNY students, and self-reported their race/ethnicity as Black/African American, West Indian, Hispanic, Asian, White, and Not Listed included: West Indian, North African/Middle Eastern, North African/Egyptian, American White/Persian. Five (13%) of the students had no insurance, while the remaining students had some form of insurance (See Table 4 for focus group participant characteristics). Our six key informants included management representatives and enrollment representatives from both New York City Office of Citywide Health Insurance Access (OCHIA) and Single Stop, the national nonprofit charged with enrolling students on select CUNY campuses. The two other informants included an insurance enrollment representative from the CUNY Office of Student Affairs and an enrollment representative from a private health insurance company assigned to on-campus enrollment of CUNY students.

Because our research was occurring while bills were being introduced at the federal level to partially dismantle the Affordable Care Act, we were aware that the political climate might have an impact on attitudes toward health insurance. While political uncertainty was never a

central organizing theme of our interview guides, the political climate was referenced in the context of discussions around immigrant students, documentation status, distrust of government, fear of government access to personal information, and barriers to health insurance access. These discussions occurred within the context of the larger themes reported here. (See Table 5 for a summary of coded themes discussed here).

## Attitudes and Perceptions toward Health and Health Insurance

Three themes around attitudes and perceptions of health and health insurance emerged from our interviews: the value of health; how personal experiences shape one's perceptions of insurance; and health insurance as a personal finance issue. Together the themes reveal key tensions between the value people place on health insurance and the barriers to enrollment.

*The value of health and health insurance* 

Focus groups participants were asked what health means to them. Their definitions fell into three general categories: physical, mental, and social. They listed independence, social benefits, living longer, avoiding death, peace of mind, and the ability "to find someone special in your life" as underlying reasons for valuing good health. They connected physical health with mental health and overall well-being, and some expressed that health is more important to them than money.

As one participant said:

"I think a lot about how physical health affects mental health. The less you take care of yourself physically, the more your mental health deteriorates...It's harder to find a job, harder to have social relationships, and all of that stuff."

The sense of responsibility for being healthy for the benefit of others was expressed by some students. Recognizing that the cost of bad health can spread beyond the individual to the family and community was a repeated theme among students. As one participant said about taking care of one's own health, "not only are you helping yourself, but you're helping the individuals around you, because they want you, they support you, they love you."

Some students said health insurance coverage should be a basic human right. Many shared that their awareness of health insurance typically arises only when confronted with a medical emergency. Our key informant interviews corroborated this sentiment; an on-campus enroller said, "Young people ... they don't care. They think they're young forever and healthy forever." This same informant noted that students seem more likely to be interested in health insurance when they have spouses and children. Other key informants reported that nearly all students who did not qualify for Medicaid or the Essential Plan considered commercial insurance prohibitively unaffordable.

Personal experiences shape perception of insurance

Students shared personal experiences that shaped their perception of health insurance.

Many connected their own background with how they value health insurance, and why they may or may not have it. For example, one participant said health insurance was always emphasized in

the home growing up. The following statement encapsulates how experiences of friends also influenced focus group participants' perception of health insurance:

"She was a perfectly healthy teenager, and everything was fine with her, and then one day...she had a concussion, and then she fell into a coma. She had a Facebook status the other day. She was like, 'I'm so grateful for Obamacare. I wouldn't have been able to pay for all these tests without it."

## Health Insurance as a personal finance issue

Across focus groups, participants emphasized that protection from financial hardship is a primary motivation for obtaining health insurance. As one student said, "I like to have insurance (because) if I am sick, I'm not scared to go to the doctor because of the bills." However, health insurance was also recognized as a financial burden itself. One key informant reported that students often say, "it's more important for me to have income than it is to have health insurance." Some students discussed the contradiction of having an income and not qualifying for an affordable health insurance plan or having no income and qualifying for public health insurance.

## Motivations to Acquire Health Insurance

Focus group participants were asked about the fundamental motivating factors that would lead them to seek insurance. Peace of mind, security, and prevention of serious medical conditions were most often discussed as central motivators. Avoiding financial hardship was also a motivator. A common theme in this discussion was prevention. As one student explained,

prevention messages resonate and "make more sense" to college students. Another student connected prevention with an unforeseen health accident and financial concern as follows:

"If you have a minor headache and you ignore it, and then over time it just gets worse and then it turns out to be a tumor in your head ... And if you don't have health insurance, it's like you've got to pay all that money."

# Barriers to Acquiring Health Insurance

Students and key informants were asked to specifically identify the most salient barriers to becoming enrolled in health insurance. The following were the central themes that emerged from this domain:

## Expense

The expense of health insurance as a barrier to care was a central theme throughout our research. Each focus group included at least one student reporting on the expense of health insurance as an enrollment barrier. As one participant said:

"First off, why is it so high, the prices? Second off, like we mentioned before, 'I'm going to cover this one, but I'm not going to cover this one...I just feel like my health and my life shouldn't be contingent upon how much I could pay."

Key informants reported that nearly all CUNY students they encounter are unable to afford commercial marketplace health plans. One informant stated that for students with annual

incomes above the cutoff for Medicaid (\$9,900 per person at the time of the research) and the Essential Plan (\$23,760) the least expensive plan without a tax credit is \$350 a month. "Therefore," this same informant told us, "students will go without health insurance coverage."

Some students stated they had chosen to pay the tax penalty assessed for being uninsured over the high monthly cost of marketplace plans. Students talked of prioritizing "day to day" expenses over health insurance. A key informant described a common attitude among students as "I'll just suck it up at the end of the year when I file my taxes and get the penalty." The mandate is currently scheduled to be discontinued in 2019.

## Complex and Obscure Enrollment Process

Focus group participants and key informants uniformly expressed that the complicated, multi-step, multi-appointment process for acquiring insurance is a critical barrier to enrollment. Students mentioned the lack of communications about enrollment opportunities and the difficulty finding locations make the complex process even more opaque. As a key informant said, "when there are extra steps, students don't come back sometimes." Students reported that these complex processes were stressful and anxiety-producing.

## *Perceptions of Susceptibility – And lack thereof*

Our focus group participants said that being young and "invincible" were reasons to not acquire health insurance. One participant said, "like most of the people here are mentioning, we're young; we don't think that anything may happen to us." Key informants consistently expressed this concern as well and emphasized the importance of countering this attitude to students.

Despite this, some students without insurance expressed concerned about getting sick, and shared stories about themselves and their friends. As one participant stated, "the fear is, like, getting sick, and then not being able to afford, you know, medicine, or even going to the hospital. That's scary."

## Choosing Alternatives to Health Insurance

Many students shared strategies for coping without insurance. They discussed using herbal alternatives, over the counter medications, and other forms of treating illness without doctors, hospitals or pharmaceutical therapies. One student recounted her sister "riding out" a urinary tract infection for more than six weeks due to lack of coverage. Another shared a friend's behavior:

"She's undocumented, and in the wintertime, she wears so many layers just to not get sick. She wears, like, a scarf, and a hat, and gloves, and four layers, and a big heavy winter jacket."

# Insurance Literacy

Lack of health insurance literacy was a common theme as students and key informants extensively discussed student confusion around eligibility, enrollment, costs, and coverage. One student stated that her lack of understanding about the insurance system causes her anxiety, and expressed a desire for health insurance literacy courses in high school or in college. While some focus group participants reported a lack of awareness around health insurance because it is something their parents manage. Key informants reinforced this concern, stating "to have

someone there to support them with questions, even if it's not enrolling them, is definitely something that needs to happen."

Attitudes toward Health Policy and the Government's Role

Our focus groups and key informant interviews both revealed distrust and suspicion with government as possible barriers to enrollment. As one student reported:

"It just makes me feel, like, kind of distrustful towards the government. Because I just feel, like, the way that they're viewing the public, and the people, it's like they're putting price tags on people."

These concerns were also described in terms of fears about immigration status. One key informant shared that students often felt a distrust of the system as it pertained to immigration and documentation. Students expressed fear that providing personal information could put undocumented students or their family members at risk. One said:

"I believe, either because there are some undocumented people in the country who can't go to a doctor ... they just don't want to be in the system. If they go to the doctor, their information's being logged to another system that they're not familiar with."

Key informants discussed this concern as well. One said that it is common for undocumented students to describe health insurance marketing as a "scam," which may result in

deportation. Two key informants reported that undocumented students sometimes ask to be unenrolled from the Essential Plan because of worries about deportation.

However, for some students, health care policy uncertainties *increased* their motivation to acquire insurance. As one participant said:

"Before, I didn't really care about it, whether I had it or not. But now... I'm like okay, this has to be really important if they're having this big debate about it. So yeah, I value it a lot more."

Several key informants stated that the Affordable Care Act helped increase health insurance enrollment on college campuses. New client-facing enrollment tools, made available through the ACA, where potential customers can interface directly with insurance plans, were cited as an important development in the health insurance process.

Stigma of Medicaid and Other Means-tested Programs

Key informants reported that, for some students, social stigma is a barrier to enrolling in Medicaid. One key informant stated, "Medicaid sort of has a stigma, and so they don't necessarily want to be a part of government sponsored health services." Our student participants, however, did not discuss stigma in terms of their own insurance. In fact, during one focus group, the discussion process seemed to ameliorate stigma, as one participant shared information with another about Single Stop and the assistance it provides to students on their campus.

Complex Coordination of Insurance Process

Participants in our research consistently pointed to institution-wide complexity and bureaucracy as a barrier to insurance enrollment. At the City University of New York, several institutions and offices play roles in the student enrollment process. These include the CUNY Central Office of Student Affairs (COSA), college student health centers, college offices of student affairs, and specific college campus clubs. Key informants expressed frustration about inconsistent relationships between their colleges, insurance enrolling entities, and the university system which oversees the process.

Key informants stated that improved centralized coordination and communication were necessary to increase student enrollment; however, they also recognized the role their own organizational communications plays in the process. One stated that maintaining strong communications requires "presence," that one must "monitor the relationship, maintain the relationship." Another informant emphasized the ongoing efforts to maintain the relationship between Single Stop and specific campuses, calling it "the persistence network ... getting buy-in from all these different groups on campus, instead of kind of operating in a silo on campus."

#### Comment

The City University of New York system does not offer a student health plan or require health insurance coverage as a condition to enroll in classes. CUNY provides information about insurance options through the Office of Citywide Health Insurance Access (OCHIA) and campus Health Services Centers. The Health Service Centers will provide students with information for scheduling appointments with certified enrollment navigators, but students must take the

initiative to initiate the enrollment process. Our research yielded insights into strategies that may help increase health insurance enrollment at CUNY and other large university systems.

Key informants agreed that health insurance enrollment should be a higher priority for college campuses. Some key informants suggested that promoting the benefits of Medicaid and the Essential Plan would be an opportunity to reduce the stigma of government plans by providing cues to action and normalizing these options through campus-based promotions.

Many of our findings are consistent with previous research, <sup>18,19</sup> and with the Health Belief Model's theoretical framework, that people are more likely to engage with a health promotion action only when they perceive their own risks are serious and can be mitigated by the action. <sup>20</sup> Our research clearly revealed that students perceive commercial insurance as too expensive, and that feelings of invincibility prevent many from enrolling in any type of health insurance, especially commercial plans.

## Recommendations

Our research revealed a need for coordinated marketing strategies that promote oncampus health insurance enrollment. Our recommendations are generalizable for urban colleges or universities that are working to increase health insurance enrollment among their student population, and in most cases can be summarily implemented on campuses without complex administrative or regulatory requirements:

Provide insurance information to students during registration process

The importance of connecting accessible health insurance information and options to students during the matriculation process was repeated across focus groups and key informant

interviews. Suggested interventions included insurance information and assistance with admission acceptance letters, course registration, and campus orientation. Focus group and key informant participants consistently suggested that incoming students declare their health insurance status, and without penalty uninsured students would be directed to on-campus health insurance enrollment resources. Health insurance literacy services surfaced as an option to help.

Universities in the United States require proof of insurance coverage for students in certain circumstances (e.g., health professionals, students with an F or J visa). Although CUNY, along with most large universities, does not require coverage as a condition of enrollment, the same internal system that requires proof of insurance in specific cases may be an opportunity for universities to expand the disclosure requirement to the entire student body.

# *Improve on-campus student engagement*

The need to engage students with on-campus enrollment information was a strong theme across interviews. Students suggested that signage and behavioral nudges would increase their awareness about eligibility for health insurance, food benefits, and additional assistant programs. Participants from separate focus groups on separate campuses recommended visible arrows on the floor that guide students to assistance programs such as Single Stop. Students also suggested promoting assistant programs and health insurance enrollment through banners, posters, flyers, and television monitors in common areas. They also recommended a greater health insurance enrollment presence at campus events and working directly with student clubs. Students also underscored that communication efforts should clearly state that health insurance enrollment consultations are free of charge.

Key informants reported that the majority of CUNY students they enroll qualify for Medicaid. Therefore, they recommended more peer-engagement programs, where students are trained to talk to other students about Medicaid eligibility and benefits. A key informant responsible for health insurance enrollment shared that every semester a professor invites the key informant to present health insurance enrollment options to students, and the exchange usually results in enrollments. The triangulation of professor, student, and health insurance enroller are an example of how any university campus can facilitate health insurance enrollment. One key informant mentioned that some campuses charge health insurance enrollers a \$50 fee to set up health insurance tables that market government and commercial health insurance plans. The financial burden of the \$50 charge is cited as a barrier to enrolling students.

Implement targeted enrollment strategies for specific populations

Most CUNY students enrolling in health insurance plans qualify for government programs, such as Medicaid. Our key informants stated that students who do not qualify for Medicaid are often not eligible because their income is too high. However, the same students who are not eligible for Medicaid feel private health insurance is unaffordable. Key informants also revealed that most students enrolling in a private insurance plans are international students.

Research indicates that most immigrant and undocumented students are unaware of their eligibility for affordable health insurance programs. Key informants and focus group participants suggested that discussing documentation status as part of the enrollment process would help reduce stigma, misinformation, and increase overall enrollment.

Improve Insurance Status Monitoring through Data Collection

Key informants expressed that improved data collection would assist with reaching different population segments. Applying population health analytics is an opportunity to reach students with insurance plans that align with their needs. For example, one key informant recommended specifically focusing a communication effort to reach parents who qualify for the Child Health Plus government program. Key informants indicated that data analytics could be conducted by the CUNY Graduate School of Public Health and Health Policy (CUNY SPH), and could inform tailored campaigns that promote on-campus health insurance enrollment.

## Limitations

While we sought to ensure transferability of this research to students enrolled throughout the City University of New York system, external validity is limited by the fact that we were constrained to four focus groups on two CUNY campuses. Similarly, more key informant interviews may have led to additional insights and recommendations for improving access to student health insurance opportunities. Further, ongoing policy changes at the state and national levels can modify the relevance of this research over time.

# Conclusions

Our research provides new insights into the value college students place on health and health insurance. It also yielded recommendations for strategies to increase enrollment among young adults — an important demographic for marketplace and premium stability.<sup>21</sup> It is clear from our research that students place a high value on health and health insurance; what prevents them from coverage is often the costs and complexity associated with enrolling. Additionally, some students reported fear and lack of trust in registering with government-run systems.

Today's public urban universities reflect the increasing racial, ethnic, and income diversity within the United States. <sup>22,23</sup> Our research provides a roadmap for universities and community colleges seeking interventions to increase insurance rates among students. Focus on students who qualify for no-cost government health insurance is one important strategy for public universities, as there is no reason students who qualify for public health benefits should remain uninsured. Health insurance benefits extend well beyond the student, to their families, communities, and the university itself. Furthermore, academic success is largely contingent on a student's health and well-being<sup>24</sup>, making it that much more urgent for colleges and universities to do what they can to keep students healthy and insured.

## **Conflict of Interest Disclosure**

The authors have no conflicts of interest to report. The authors confirm that the research presented in this article met the ethical guidelines, including adherence to the legal requirements, of the United States and received approval from the Institutional Review Board of the City University of New York Graduate School of Public Health and Health Policy.

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## References

- 1. Gaffney A, McCormick D. The Affordable Care Act: implications for health-care equity. *Lancet*. 2017;389(10077):1442-1452;
- 2. Bruening M, Brennhofer S, van Woerden I, Todd M, et al. Factors related to the high rates of food insecurity among diverse, urban college freshmen. *J Acad Nutr Diet*. 2016;116(9):1450-1457.
- 3. Antwi, Y. A., Moriya, A. S., & Simon, K. Effects of federal policy to insure young adults: evidence from the 2010 Affordable Care Act's dependent coverage mandate. *Am Econ J Econ Policy*. 2013;5(4):1-28.
- 4. Huhman, M., Quick, B., and Payne, L. "Community College Students' Health Insurance Enrollment, Maintenance, and Talking With Parents Intentions: An Application of the Reasoned Action Approach," *J Health Commun*, 21: 487–495, 2016
- 5. Sandoval, G. A Perspective of the Affordable Care Act during the First Enrollment Period. *CA Journal of Health Promotion*. 2014 12(2): vi-ix.
- City University of New York Office for Institutional Research. 2017 Current Student Data Book. Available at: <a href="http://www2.cuny.edu/about/administration/offices/oira/institutional/data">http://www2.cuny.edu/about/administration/offices/oira/institutional/data</a>; Published May 1, 2017. Accessed June 13, 2017.
- 7. CUNY Graduate School of Public Health and Health Policy. "Promoting Health for Academic Success: An Assessment of Challenges and Opportunities at City University of New York." February 2018. Available at: www.sph.cuny.edu/healthycuny
- 8. Mackert, M., Koh, H., Mabry-Flynn, A., Chaplin, S., & Beal, A. Domestic and international college students: Health insurance information seeking and use. *Journal of International Students*, 2017; 7(3), 542-554.
- 9. Anderson M, Dobkin C, Gross T. The effect of health insurance coverage on the use of medical services. *Am Econ J Econ Policy*. 2013; 4(1):1-27.
- 10. Price JH, Khubchandani J, Dake JA, Thompson A, Schmalzried, et al. College students' perceptions and experiences with health insurance. *J Natl Med Assoc*. 2010;102(12):1222-1230.
- 11. Freudenberg N, Ruglis J. Reframing school dropout as a public health issue. *Prev Chronic Dis.* 2008;5(2): A69.
- 12. City University of New York Office of Institutional Research and Assessment. CUNY 2015 Institution and Graduation Rates. Available at: http://www2.cuny.edu/about/administration/offices/oira/institutional/data. Published: July 15, 2017. Accessed June 26, 2017.
- 13. Kitzinger J. The methodology of focus groups: the importance of interaction between research participants. *Sociol Health Illn*. 2010;16(1):103-121.
- 14. Yang L. Assessing Young Adults' Attitudes and Perceptions on Health Insurance and their Health Insurance Literacy Levels [dissertation]. Mankato: Minnesota State University; 2016.
- 15. Marshall MN. The key informant technique. Fam Pract. 1996; 13(1), 92-97.
- 16. Rosenstock IM. Historical origins of the health belief model. *Health Educ Monogr.* 1974; 2(4):328-335.

- 17. Bergeron CD, Friedman DB, Sisson DC, Tanner A, et al. Awareness, perceptions, and communication needs about the Affordable Care Act across the life span. *J Health Educ*. 2016; 47(2):108-116.
- 18. The Urban Institute. Health insurance coverage of young adults: Issues and broader considerations. Available at:
  <a href="https://www.urban.org/sites/default/files/publication/31826/411691-Health-Insurance-Coverage-of-Young-Adults.PDF">https://www.urban.org/sites/default/files/publication/31826/411691-Health-Insurance-Coverage-of-Young-Adults.PDF</a>. Published June 2008.
- 19. Douglas KA, et al. Results from the 1995 national college health risk behavior survey. *J Am Coll Health.* 1997;46.2:55-67.
- 20. Rosenstock, IM, Strecher, VJ, & Becker, M. H. Social learning theory and the health belief model. *Health Educ Q.* 1988;15(2):175-183.
- 21. The Commonwealth Fund. Young adult participation in the health insurance marketplaces just how important is it? Available at: <a href="http://www.commonwealthfund.org/publications/fund-reports/2014/feb/young-adult-participation-in-the-health-insurance-marketplace">http://www.commonwealthfund.org/publications/fund-reports/2014/feb/young-adult-participation-in-the-health-insurance-marketplace</a>. Published February 2014.
- 22. Smith DG. Diversity's promise for higher education: Making it work. JHU Press; 2015.
- 23. Frey WH. *Diversity Explosion: How New Racial Demographics are Remaking America*. Washington DC: Brookings Institution Press; 2014.
- 24. Freudenberg N, Manzo L, Mongiello L, Jones H., Boeri N, Lamberson P. Promoting the health of young adults in urban public universities: a case study from City University of New York. *J Am Coll Health*. 2013;61(7):422-430.