HSS

HSS Community Health Needs Assessment

2016 Report & Implementation Plan

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Hospital for Special Surgery (HSS) is the nation's oldest orthopedic hospital, world-renowned for its expertise in musculoskeletal and rheumatologic conditions. The Hospital's dedication to community service is exemplified by its history of implementing initiatives that improve the quality of life of patients and the public. In order to provide community programs that meet the needs of the community we serve, a community health needs assessment (CHNA) was implemented to provide insight to our community's: (1) health status and quality of life; (2) health behavior and lifestyle; (3) use of and access to care; and (4) socio-demographic characteristics.

BACKGROUND

Geographic Area

HSS' primary service area consists of the five boroughs of New York City (NYC) - Manhattan, Bronx, Brooklyn, Queens and Staten Island; while its secondary service area is comprised of suburban areas in Northern NY, Northern and Central New Jersey, Connecticut and Long Island.

About HSS

HSS is a 215-bed hospital specializing in musculoskeletal medicine - Orthopedics, Rheumatology and Rehabilitation where more than 29,000 surgical procedures are performed annually. HSS' commitment to providing the highest quality of care to its patients and improving the quality of life and mobility of the communities it serves is articulated in its Mission, Vision and Values statements, which are reviewed annually by the Hospital's Board of Trustees.

Mission

The Mission of HSS is to provide the highest quality patient care, improve mobility, and enhance the quality of life for all, while advancing the science of orthopedic surgery, rheumatology, and their related disciplines through research and education. We do this regardless of race, color, creed, sexual orientation, or ethnic origin.

Vision

The Vision of HSS is to lead the world as the most innovative source of medical care, the premier research institution, and the most trusted educator in the field of orthopedics, rheumatology, and their related disciplines.

Values

HSS sets and adheres to the highest possible standards based on excellence, integrity, teamwork, creativity and passion.

The Hospital's Mission, Vision and Values are the foundation that drive HSS's efforts to provide the highest quality care – inclusively, with cultural sensitivity and without discrimination – to both patients and the public. This is accomplished by working collaboratively with its extensive community partners, empowering the community through in-depth support, outreach initiatives, and ongoing education and training on diverse populations (race, ethnicity, religion, and sexual orientation) while positioning itself to be the most trusted educator.

Demographics of the Community

Target Population

HSS is committed to improving the health needs of many New Yorkers, particularly culturally diverse communities, children and older adults that suffer from or at risk of musculoskeletal and rheumatologic conditions**.** Understanding the musculoskeletal health needs of the population we are serving is crucial in identifying gaps and health disparities that exists.

According to 2014 census data, the NYC community consists of 8,354,889 people (42% of the State's population), which is comprised of 44% White, 29% Hispanic, 26% Black and 14% Asian residents. The data suggest that immigrants remain attracted to NYC – between 2010 and 2014, 37% of the City's population was foreign-born. At the same time, the older adult population continues to grow – the NYC Department of Planning projects that over 44% of the City's population will be age 65 and older by the year 2030. In fact, the Hispanic older adult population increased by 42% between 2000 and 2010. The majority of the residents in our primary service area are women (56.5%), White (84.1%) and high school graduates (97.1%) with a median age of 40.3.

HSS has remained dedicated to improving the health of communities where dramatic health disparities exist in our primary service area. According to the NYC Department of Health and Mental Hygiene (DOHMH) Community Health Profiles, the following health disparities exist:

- The birth rate to teenage mothers is higher in Inwood/Washington Heights than in Manhattan and NYC overall
- One in three adults in East Harlem is obese, which represents the highest group in Manhattan. Black and Hispanic residents are more likely to be obese, and residents in East Harlem are less like to engage in physical activity than residents of Manhattan as a whole
- One in five Inwood/Washington Heights adults is obese, and one half of adults do not participate in any physical activity

HSS is also dedicated to improving the health of Asian communities residing in Chinatown, Manhattan and Flushing, Queens. The Asian American community is the fastest growing racial group in the United States. New York State has the second largest Asian population behind California, estimated at 1.8 million in 2014. More than 70% of Asian New Yorkers live in NYC, making up 15% of the city's total population, up from 11% in 2000[1]. New York City is also the leading place in the United States where Asians reside[2]. As a community, Asians in NYC are primarily an immigrant population that is rich in cultural and linguistic diversity[3]. According to the NYC Department of Health and Mental Hygiene (DOHMH) Community Health Profiles and the American Community Survey 2014, additional health disparities highlighted below exist among the Asian population in Chinatown, the Lower East Side as well as Flushing, Queens:

[1] U.S. Census (2014*), American Community Survey*, retrieved from: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
[2] Hoeffel EM, Rastogi S., Kim MO, Shahid H. The Asian population: 2010; 2010 Census Briefs. March 2012
[3] Asian American Federation (2013). *Asian Americans of the Empire State: Growing Diversity and Common Needs*. New York, NY

- Less than half of Lower East Side adults (48%) are meeting Centers for Disease Control and Prevention (CDC) physical activity recommendations of exercising at least three days per week
- The poverty rate for Chinatown is 28%, significantly higher than that in Manhattan (18%) and NYC (21%)
- Close to 40% reported "speaking English less than very well", as compared to 16% of the entire population living in New York City

METHODS

An anonymous, large-scale CHNA was conducted between March 1, 2016 and April 15, 2016 in order to determine our community's health care, educational and support needs in relation to muscle, bone and joint health. The CHNA will help:

1. Guide strategic planning
2. Inform our education, outreach and support programs
3. Determine any gaps that may exist in current programming
4. Select the public health priorities of the CSP to support the statewide prevention agenda.

Review of Secondary Data

The CHNA process included the review and analysis of secondary data to better understand the health needs our community, and identify gaps and health disparities that exist. In addition, the 2013 CHNA served as a baseline to provide a deeper understanding of the impact of musculoskeletal conditions in our community. CHNA findings were compared with state and national data specifically for socioeconomic factors, health behavior and life style, and musculoskeletal conditions, and use and access to care. Sources of data include:

- Prevention Agenda 2013-17 indicators
- Community Health Indicator Reports
- Behavioral Risk Factor Surveillance System (BRFSS)
- U.S. Census Fact Finder (2014)
- NYC Health Department Community Health Profiles 2015

Survey Construction

A 54-question survey was developed through a collective effort by a five-member HSS CHNA steering committee, community partners, internal stakeholders and the public. The CHNA steering committee identified validated research questions to be addressed, drafted the individual survey questions, and identified community partners and internal stakeholders to review and provide input to survey development. Collaboration with the public, community partners and internal stakeholders was crucial to the success of this survey with valuable feedback provided on survey construction and length. In an effort to reach a culturally diverse community, the survey was translated into Spanish and Chinese using a culturally sensitive back translation approach. (See Appendix A for sample CHNA surveys in English, Spanish and Chinese).

Below outlines the list of community partners involved in survey construction:

- Arthritis Foundation – New York Chapter
- Clinical & Translational Science Center (CTSC) – Weill Cornell Medicine
- Memorial Sloan Kettering Cancer Center
- New York Presbyterian Hospital

- Lenox Hill Neighborhood House
- Medicare Rights Center
- NYC DOHMH – Office of Policy, Planning and Strategic Data Use
- New York City Department of Aging
- S.L.E. Lupus Foundation
- Self – Help Innovative Senior
- Isabella Geriatric
- Touro College Graduate School of Social Work

See Appendix B for detailed feedback from internal stakeholders and community partners

The CHNA survey was piloted over a two-week period in 2015. Administration of pilot survey was done outside of our primary and secondary service areas in order not to contaminate our survey community. Forty-eight people completed the survey pilot and provided meaningful input about the survey, its importance, and translations to Spanish and Chinese to ensure cultural relevancy, and health literacy. See Appendix C for detailed pilot feedback form and summary from the public

Survey Administration

The survey was administered via five methods; mail, email, web, social media and in-person. Mailed surveys were sent to existing lists maintained by the HSS Public & Patient Education Department (PPED) (9,943) and the Social Work Department (1,365). Household mailing lists were purchased and distributed to a randomly selected sample of 5000 households of individuals aged 18 years and older in our primary service area and northern New Jersey. In an effort to reach the medically underserved population, an oversampling approach was used in selecting zip codes identified as Medically Underserved Areas (MUA) derived from the U.S. Department of Health and Human Services (http://www.hrsa.gov/shortage/mua/index.html. Surveys were sent electronically via e-mail to HSS patients' and existing email lists maintained by PPED and the Social Work Department. Surveys were also posted on the HSS website, and social media outlets such as Facebook and Twitter. Lastly, in-person surveys were distributed or displayed with instructions in HSS Ambulatory Care Centers (ACC), while others were administered in educational lectures/workshops within the community hosted by PPED, Nursing and Social work, and Senior Centers in Chinatown and Manhattan.

Statistical Analysis

Descriptive statistics were used to analyze socio-demographic data, and Chi-square tests were used to assess relationships between variables. SPSS version 22 was used to analyze the data, and significance was set at $P < 0.05$. Primary analysis was performed for the total sample. In order to explore the data from the Hospital's more ethnically/racially diverse community members who come from lower socioeconomic backgrounds, three secondary analyses were performed – 1) patients who visited HSS Ambulatory Care Center (ACC); 2) respondents who either had government insurance (Medicaid or Medicare and Medicaid) or no insurance; and 3) respondents from MUAs.

CHNA Results

A total of 3,128 community members responded to the CHNA survey, which was mostly completed in English (95%); while the remaining were completed in Spanish (3%) and Chinese (2%). **Table 1** below shows the breakdown of responses by administration method - the majority were completed by email (58%) followed by mail (29%), in-person (11%), and the web/social media (3%).

Table 1: Response Breakdown by Administration Method

Admin. Method	Subset	Language	Original N	Response Total	Response Rate	% Response of Total
Web	Facebook	English	N/A	6	N/A	0.2%
	Twitter	English	N/A	6	N/A	0.2%
	HSS website	English	N/A	79	N/A	2.5%
		Spanish		1		
	Web Total		N/A	92	N/A	2.9%
Email	PPED	English	752	74	10.0%	2.4%
		Spanish		1		
	HSS Patient	English	17,015	1632	9.6%	51.4%
		Spanish		3		
	Purchased	English	10,000	110	1.1%	3.5%
	Social Work	English	616	10	1.8%	0.3%
		Spanish		1		
	Email Total		28,383	1 ,831	6.5%	57.5%
Mail	PPED	English	9943	462	4.6%	14.5%
	Social Work	English	1276	130	12.6%	5.1%
		Chinese		9		
		Spanish		22		
	Purchased	English	5,000	236	5.8%	9.1%
		Chinese		14		
		Spanish		39		
	Mail Total		16,219	912	5.6%	28.7%
In Person	PPED	English	10	5	60.0%	0.2%
		Spanish		1		
	ACC	English	425	201	52.7%	7.0%
		Chinese		2		
		Spanish		21		
	Lenox Hill	English	30	23	83.3%	0.8%
		Chinese		2		
	Chinatown Senior Center	English	35	1	85.7%	0.9%
		Chinese		29		
	Social Work	English	65	43	95.4%	1.9%
		Chinese		4		
		Spanish		15		
	In Person Total		562	347	61.7%	10.9%
Grand Total				**3,182**		

RESULTS

HSS shared results of the CHNA survey with internal stakeholders, the aforementioned community partners and the public. Details on how we used these results with each constituent are described in the latter part of this report. HSS will further disseminate these results to the public through community forums, the Hospital's website, digital media, annual community benefit report, and the New York State Department of Health's (NYSDOH) Community Service Plan (CSP). Below provides detailed findings from the CHNA survey. (See Appendix D for a summary of CHNA findings in the total and sub-groups).

Socio-Demographics

Findings from 3,128 respondents in the total sample revealed the following information regarding the socio-demographics of HSS' community:

- Majority was females (74%) with a mean age of 63.5 years (range: 18-100 years).
- Majority of the respondents were Whites (74%) and non-Hispanics/Latinos (86%) while others considered themselves to be Hispanics/Latinos (14%), African Americans (9%), Asians (8%), American Indians (1%), and other races (8%)
- Respondents had high educational backgrounds with about half (50%) completing college and postgraduate education
- Respondents were mid to high-level income earners with 26% earning $50,000 - $100,000K and 38% earning more than $100,000 of annual household income
- English (79%) was the predominant language spoken at home followed by Spanish (11%).
- Nearly half of respondents (44%) were married; while 61% of respondents do not live alone with a majority living in Manhattan
- Majority (91%) were proficient in English for discussing healthcare and reading medical instructions
- Majority (77%) indicated that they never needed assistance with reading medical instructions, suggesting adequate health literacy

In our sub-samples that represent our patient population from the ACC and respondents from MUAs, the majority were from racially/ethnically diverse communities with lower socio-economic backgrounds. Specifically, respondents in the ACC and MUAs sub-samples were more racially diverse (only 44% were whites for both samples, and 66% and 55% non-white respectively), less educated (9% and 29% were college graduates respectively), more likely to earn less than $50,000 of annual household income (72% and 58% respectively) and had public insurance or no insurance (86% and 38% respectively).

Health Status and Quality of Life

Overall health status of our community (78%) was rated positively (good to excellent). The leading musculoskeletal conditions in the community were Osteoarthritis (OA), some other form of arthritis and Osteoporosis (OP). Gender differences were seen in musculoskeletal conditions with females being more likely to have OA, Rheumatoid Arthritis (RA), Lupus, Fibromyalgia, and OP, while Gout was more common among males. Racial/ethnic disparities were also found with RA being more prevalent in American Indians and African Americans; Lupus in Native Hawaiians, African Americans and Asians; and Gout in African Americans. Among respondents diagnosed with a musculoskeletal condition, the most reported symptom experienced within 30

days were joint/bone pains or aches (88%), stiffness (82%) and muscle pains or aches (80%). Over half of the respondents reported some pain interference with usual/daily activities with a majority (67%) indicating that stooping, bending or kneeling as the top difficulty. Significant health disparities in pain interference of 14 days or more were found among American Indians and African Americans; those age 35-50 years; those who were not physically active; and those with musculoskeletal conditions.

Falls were an issue in the community, with 25% having fallen in the past year (28% of ACC; 32% of public/uninsured and 28% of MUA) and 18% sustaining fractures (12% of ACC and MUA; and 15% of public/uninsured). Approximately 67% of those who fell had not spoken to their healthcare provider about their fall (63% of ACC; 71% of public/uninsured; and 62% of MUA). Falls were most common among females; adults age 85+ years; African Americans; those with OA, RA, Fibromyalgia or OP, and those who were physically inactive. Moreover, Asians were the least likely group to discuss their falls with providers.

Mental distress was another issue identified in the community where 10% reported frequent mental distress in the past 30 days. Significant health disparities were found in mental health such that African Americans; Hispanics /Latinos; those age 51-65 years; those who lived in the Bronx; those who were physically inactive and those with musculoskeletal conditions reported frequent mental distress. Feeling nervous, anxious or on edge was the leading mental health problem reported.

Health Behavior and Lifestyle

Poor diet and lack of physical activity were a great concern in the community, as 20% of respondents rated their diet negatively and only 23% and 22% meeting CDC recommended levels of moderate and vigorous physical activity respectively. These issues were also major concerns among ACC, public/uninsured and MUA subgroups. Majority of ACC (64%), public/uninsured (60%) and MUAs (70%) respondents rated their diet negatively; while a smaller subset of these respondents (15% and 20% of ACC; 13% and 20% of public/uninsured; and 16% and 19% of MUAs) met CDC-recommended levels of physical activity. The majority of adults aged 50 and older (66% of total; 74% of ACC; 77% of public/uninsured and 74% of MUA) were physically inactive compared to 28% of American adults aged 50 and older. Significant health disparities were found in diet such that Native Hawaiian; adults' age 36-50 years; and those who had RA, Lupus, Fibromyalgia or Gout reported having a poor diet. The main barrier to eating healthy reported by over half of the respondents (53%) was "taking too much time and effort to prepare," followed by cost (39%) and friends and family do not eat that way (33%).

Use of and Access to Care

Although nearly all members of the community had insurance coverage, Asians and Hispanics/Latinos were the least likely racial/ethnic group to be insured due to cost (26%) being the leading barrier. In addition, 12% of total respondents (18% of ACC; 22% of public/uninsured and 15% of MUA) were unable to access healthcare when they needed it compared to 5% of Americans and 12% of New Yorkers. In addition, adults aged 51-65, Asians, Non-Hispanic Latinos and African Americans, individuals who lived in the Bronx and Queens, and individuals with household income < 10K were more likely to cite access issues. Cost, transportation and

accessibility issues were the leading barriers to accessing healthcare reported. While 94% of those surveyed stated that they generally followed their provider's medical advice, common barriers to adherence were concerns about side effects and refusal to believe that treatment would help. Moreover, lower levels of provider-patient communication were found among Native Hawaiians and Asians, and those with lower levels education and income. Results showed that low health literacy were more common among Hispanics/Latinos, with 25% needing assistance when reading instructions, pamphlets, or other written materials from doctors or pharmacies, compared to 8% of Non-Hispanics/Latinos. Asians and Hispanics/Latinos were the most likely racial/ethnic group to rate their English relatively poorly, and prefer non-English languages for discussing healthcare and reading medical instructions.

Though most members of the community reported taking preventive care measures such as annual flu shot, mammogram, pap smears and prostate exam over the past year, males, African Americans, Asians and Hispanics/Latinos were least likely to be immunized. Additionally, flu shots were less common among adults aged 30-39 and over 85 year in the total sample.

Lack of confidence in managing chronic conditions was a significant issue identified among community members. There was also a lack in educational awareness among 74% of community members (89% of ACC; 81% of public/uninsured and 79 % of MUA) who had not taken an educational course or class to learn how to manage their musculoskeletal condition.

DISCUSSION

Prioritization of Health Needs

HSS facilitated systematic, scheduled input and feedback from its varied constituents – internal stakeholders, the public, and community partners based on the CHNA results to guide the selection of the health needs and services to address in its community programming. Relevant national, state and city health data and needs assessment results were also utilized to drive community programming. Our approach in identifying, prioritizing and selecting significant health needs is described below:

Input from Internal Stakeholders

Recognizing that the development of community health programming requires a concerted effort by all members of the organization, we involved various representatives from HSS departments. The knowledge and experience of physicians, nurses, social workers and other staff that have a vested interest in serving the community was essential in identifying and addressing the community's health needs. An internal stakeholder meeting was held on May 26, 2016 with 15 HSS staff to discuss identified health priorities and explore areas for implementing initiatives, using results from the CHNA and stakeholders' awareness of community needs to guide the discussion. The group discussed focusing on increasing access to high quality, culturally relevant chronic disease preventive care and management of musculoskeletal and rheumatologic conditions and reducing obesity in adults and children, which aligns with the NYSDOH CSP priority areas. (See Appendix E for list of internal stakeholders).

Input from Community Partners

Feedback from community partner organizations was critical to driving the assessment and selection of public health priorities for the Hospital. Using results of the CHNA as the basis for discussion, HSS and its partners exchanged valuable information regarding community needs, explored areas for future collaboration, and solidified a mutual commitment to advancing public health. Furthermore, community partner knowledge of their respective community helped to identify gaps in community programming – or more specifically, areas where HSS could use its areas of expertise to make a lasting public health impact. Overall, feedback from these meetings solidified the direction for programs that improve the community's diet and increase physical activity to combat obesity among children and adults, examine specific communities in need of chronic disease preventive care and management of musculoskeletal and rheumatologic conditions, and provide culturally relevant education regarding musculoskeletal and rheumatologic issues.

HSS met with the Greater New York Hospital Association (GNYHA), a trade association, to inform the structure and process for selecting its public health priorities. In-person meetings and conference calls with GNYHA were held on 07/21/15, 07/28/15, 01/15/16, 03/11/16, 04/8/16, 04/13/16, 04/28/16, and 05/09/16 to discuss the NYS DOH CSP requirements and federal requirements for the CHNA.

HSS also attended one of the 29 community consultations hosted by the NYC DOHMH Take Care New York on January 26, 2016 in Central Harlem to foster continued partnership in improving health needs of New Yorkers. These community consultations provided New Yorkers the opportunity to rank health indicators outlined in the TCNY 2020, and discuss health goals of the community and resources that help meet these goals. Our involvement in this process provided valuable insight into the public's needs and helped in guiding the selection of public health needs to ensure it resonates with the health care needs of New Yorkers. In addressing the NYS prevention agenda, conference calls and in-person meetings were held with the NYCDOH on 03/21/16, 04/18/16 and 06/08/16 to explore areas of partnership.

Furthermore, a community partners meeting was held on May 25, 2016. Nine individuals from the community partner organizations (see appendix F) attended this meeting at which we shared the CHNA results, elicited feedback and ranked health issues according to the communities they serve. CHNA results were received positively and there was extensive discussion about how results accurately depicted the various communities served and how these results could be used to impact the community at large. Specifically, there were discussions about access to educational programs and ways in which HSS could extend the reach of its programs. Summary of community partners meeting is available in Appendix F.

Partnership – Community Resources

HSS works to strengthen its extensive community education, wellness, support and outreach initiatives through its collaborations with community organizations, public schools, city and state agencies, universities, clinical settings, and the private sector. Please refer to Appendix G for a listing of existing healthcare facilities/community resources available to respond to these community health needs.

Input from the General Public

To further HSS' commitment to developing programs that improve community health, obtaining feedback from the public and patient community was also instrumental in driving the Hospital's selection of significant health needs**.** Our approach in soliciting input from the public is described below.

Public Comments from the 2013 CHNA

HSS posted the 2013 CHNA implementation plan on its website (https://www.hss.edu/community.asp), allowing the public to review and provide feedback on the 2013 CHNA Report and Implementation Plan. An email address (pped@hss.edu) was provided on the website to receive questions or comments. However, no comments were received**.**

Community Forums

Four community forums were held to allow community members an opportunity to prioritize health needs that provided HSS with the appropriate direction in selecting its public health priorities. The main communication channel for notifying the public about the forums were through flyers distributed at HSS community programs and outpatient clinics and posting on digital media (web, Facebook and twitter). In addition, announcements were made during public and patient programs held at HSS, and a poster was strategically placed in a high traffic area of the Hospital to publicize the meeting. Furthermore, in order to reach at-risk and minority populations, HSS partnered with Senior Centers in Manhattan and Chinatown to advertise community forums to their community members. Specific dates, locations, and attendance for these Community forums were as follows:

- May 17, 2016 at Lenox Hill Neighborhood House, Manhattan (11 people present)
- May 21, 2016 at the Living Healthy with Lupus Workshop, HSS (50 people present)
- May 23, 2016 at Chinatown Community Center, Visiting Nurses Services New York (35 people present)
- May 25, 2016 at the Senior Health and Fitness Day, HSS (17 people present)

See Appendix H for summaries of community forums and details of ranking.

Community members were asked to rank the health needs most important to them and give their perspective on community health issues in an open discussion. Each significant health need identified in the CHNA results were ranked from 1 to 22. All rankings were added together across each location and health issues were re-ranked based on their overall score. Community health needs that were considered significant were ranked among the top five of identified needs, which are –

- Osteoarthritis/Osteoporosis/Rheumatoid Arthritis
- Muscle, Bone and Joint Pain
- Fatigue
- Falls
- Obesity

Selection of Health Needs

Based on significant health needs identified in the CHNA results, feedback from internal stakeholders and community partners, and ranking results of community members, the following community health needs have been identified –

- Musculoskeletal and Rheumatologic Conditions which includes osteoarthritis, osteoporosis, rheumatoid arthritis, and lupus
- Symptoms associated with musculoskeletal and rheumatologic conditions which includes falls, fatigue, stiffness, and muscle, bone and joint pain
- Obesity (Poor Diet & Lack of Physical Activity)

Musculoskeletal and Rheumatologic Conditions & its Symptoms

Public health data show that musculoskeletal and rheumatologic conditions are important concerns on the national and local level, and older adults and ethnically diverse individuals are disproportionately affected by these issues. Older adults are more likely to have musculoskeletal and rheumatologic conditions such as osteoarthritis, osteoporosis, rheumatoid arthritis and lupus that are associated with pain, fatigue and stiffness which can lead to falls. During 2010–2012, an estimated 52.5 million (22.7%) adults in the United States reported doctor-diagnosed arthritis, and 22.7 million (9.8%) reported arthritis-attributable activity limitation (AAAL) (43.2% of those with arthritis). OA, which is the leading cause of disability in the US (affecting 27 million Americans and 22% of New Yorkers), affects nearly half of older Americans[4], while all racial/ethnic groups have the condition: 34.3 million Whites, 4.4 million Blacks, and 2.6 million Hispanic/Latinos[5]. In addition, OP is the leading cause of fractures in the aging population, affecting nearly 10 million Americans and about half of all women older than 50, and up to one in four men[6]. Research has shown that Asian women are at increased risk for developing OP given their tendency for having lower bone mass and avoidance of dairy consumption due to lactose intolerance[7]. Furthermore, individuals suffering from Systemic Lupus Erythematosus (SLE), which is a life-threatening, multi-system autoimmune illness, disproportionately affects African Americans, Asians, and Latinos. Research demonstrates that these communities experience significant health disparities in illness severity and outcomes. Specifically, peer-reviewed literature has consistently demonstrated health disparities regarding prevalence, clinical features, disease severity and mortality rates among African Americans, Hispanics/Latinos and Asians with lupus. Research has also shown that many older adults are in need of better chronic disease preventive care and management education and exercise programming. Additionally, the need for culturally relevant education regarding chronic disease preventive care and management and its symptoms is evident in the literature.

Obesity (Poor Diet and Lack of Physical Activity) in Children and Adults

Public health data demonstrate that a reduction in obesity among children and adults is greatly needed. Compared with 25% of state residents, 56% of NYC's adults are overweight or obese[8].

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[4] CDC. (2013). Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation – United States, 2010-2012. *MMWR, 55*, 1089-1092

[5] CDC. (2001). Prevalence of disabilities and associated health conditions – US 1999.*MMWR, 50,* 120-125

[6] National Osteoporosis Foundation (NOF). What is osteoporosis? Retrieved from http://nof.org/articles/7

[7] National Institute of Arthritis and Musculoskeletal and Skin Diseases. (2012). *Osteoporosis and Asian American women.* Retrieved from http://www.niams.nih.gov/Health_Info/Bone/ Osteoporosis/Background/asian_american_women.asp

[8] NYS DOH. (2015). *Obesity statistics in NYC.* Retrieved from http://www.health.state.ny.us/statistics/prevention/obesity/county/newyorkcity.htm.

Moreover, data show that obesity begins early in life: nearly half of all elementary school children and Head Start children are not a healthy weight. In New York City, 1 in 5 kindergarten students, and 1 in 4 Head Start children, is obese[9]. Health disparities exist among racial/ethnic groups in obesity prevalence among American children and adolescents. Compared with Whites, higher obesity rates have been found among Blacks (48%) and Hispanics/Latinos (43%)[10]. In addition, nearly 1 in 3 Hispanic/Latino children and 14% of Asian children in NYC elementary schools are classified as obese[11]. Studies have suggested factors accounting for the increase of obesity include unhealthy eating habits, sedentary lifestyles, and inequitable economic conditions in some neighborhoods that have reduced access to healthy foods and diminished access to safe places to play and exercise[12]. These alarming trends illustrate that there is a strong need for a multifaceted approach to reducing obesity in children by improving the diet and exercise levels of the entire family, which HSS has incorporated into its obesity-focused programming.

Maintaining a healthy weight and being physically active plays an important role in the development and strength of bones and muscles throughout life. Bone and cartilage in children are continuously developing; however, the excess weight of obesity erodes weight-bearing joints and results in musculoskeletal health issues that may continue into adulthood.[13] Physical activity may be used to reduce the risk of obesity and alleviate symptoms of musculoskeletal conditions and its symptoms.

Information Gaps/Limitations

Although the Hospital employed a rigorous process to assess and identify the needs of the community it serves, there was one limitation that affected the ability to fully assess the entire community, as described below:

- While the intention of the CHNA was to assess a diverse population with both genders represented, most of the respondents in the total sample were Caucasian women, which is not representative of our community.
- We were unable to determine a response rate for surveys that were administered through the HSS website and social media outlets therefore limiting our ability to derive an overall response rate.

Evaluation of 2013 CHNA Strategies

It is essential that community programs are frequently evaluated to meet the changing healthcare needs of our diverse and aging community. To this end, HSS identified and developed specific outcome measures to assess its reach and impact on the community. A detailed description of the impact of our strategies to address health needs identified in the 2013 CHNA is provided below:

1. **Pediatric and adults obesity**: A seven-week interactive nutrition and physical activity education program was designed to provide children and families with essential knowledge

[9] Thorpe, L.E., List, D.G., Marx, T., May, L. Helgerson, S.D., & Frieden, T.R. (2004). Childhood obesity in NYC elementary school students. *American Journal of Public Health, 94*(9), 1496-1500.
[10] CDC. (2015). *CDC features: Obesity Data.* Retrieved from http://www.cdc.gov/obesity/data/adult.html
[11] Helmick, C.G., Felson, D.T., Lawrence, R.C., Gabriel, C., Hirsch, R., Kwoh, C. K., et al, for the National Arthritis Data Workgroup. (2008). Estimates of the prevalence of arthritis and other rheumatic conditions in the United States: Part I. *Arthritis and Rheumatism, 5,* 15-25.
[12] NYC DOHMH. (2010). Childhood overweight, physical activity, and "screentime" in NYC. *Epi Data Brief, 1.*
[13] Bowen, J.R., Assis, M., Sinha, K., Hassink, S., & Littleton. A. (2009). Associations among slipped capital femoral epiphysis, tibia vara, and type 2 juvenile diabetes. *Journal of Pediatric Orthopedics, 29*(4), 341-344.

about healthy eating and physical activity. Results show that 161 students from NYC public school students have been reached demonstrated statistically significant improvements in knowledge based pre/post and three-month follow-up scores on a battery of lesson-based questions. In particular, overall mean nutrition knowledge scores significantly increased from pre to post (47.2 to 60.5). Statistically significant knowledge gains were found in daily fruit servings, identifying healthier food choices, and using portion control. Statistically significant increases were found in consumption of high fiber cereal (58% to 67%) and vegetable consumption (73% to 79%). Participation in vigorous physical activity significantly increased (74% to 83%).

2. **Musculoskeletal and rheumatologic conditions:** We implemented culturally relevant lectures and workshops, aimed at increasing knowledge and self-management of chronic conditions. Improved knowledge and self-management, and program satisfaction were measured after participating in program to assess impact. Results show that we have implemented 529 lectures/workshops reaching 5,422 community members. Evaluation of program data demonstrates that these lectures/workshops have had a positive impact on participants' knowledge (92%), and self-management (91%). In addition, 96% of participants were satisfied with our programs, and would recommend to a friend or family.

   In addition to the educational lectures/workshop, we conducted exercise programs aimed at reducing the impact of musculoskeletal conditions on the community. Results show that our exercise classes reached over 1500 adults, demonstrating positive impact on key health outcomes (self-reported pain, pain severity and interference, stiffness, fatigue, balance, and level of physical activity). Specifically, there was a 22% decrease in the number of participants that had muscle/joint pain and a statistically significant decrease in pain interference on 5 of 7 quality of life items. In addition, there was a significant decrease in the number of participants feeling stiffness (18%) and fatigue (28%).

Implementation Strategy – Addressing Community Needs

HSS' implementation strategy is to provide targeted, culturally relevant programming that will address the community's specific musculoskeletal and rheumatologic health needs that were identified in the CHNA results and community forums. Specifically, HSS programs will address the following chronic conditions: osteoarthritis, osteoporosis, rheumatoid arthritis, and lupus in addition to symptoms associated with these conditions such as falls, stiffness, fatigue, muscle, bone and joint pain. Furthermore, programming will also address obesity (poor diet and lack of physical activity) as these gaps were also identified in the needs assessment process.

Identified Need 1: Managing Osteoarthritis, Osteoporosis, Rheumatoid Arthritis and Lupus and Related Symptoms

Below outlines the programs specifically designed to address these chronic conditions and related symptoms such as falls, fatigue, stiffness and muscle, bone and joint pain in HSS' ethnically diverse, older adult community.

Program 1: HSS Nursing Community Education Outreach Initiative

This initiative targets underserved older adults living in the community. The program's overall goal is to deliver evidence-based educational content germane to issues appropriate for older adults. The quality educational sessions use teaching strategies and educational principles

deigned to improve knowledge, skills and confidence to manage and prevent chronic diseases. Educational lectures are mainly delivered by HSS nursing staff, and topics are selected based upon needs assessment results and participant feedback, such as management of chronic conditions (i.e. osteoarthritis, osteoporosis and rheumatoid arthritis), falls prevention, nutrition and medication safety. The anticipated program impact includes increase in knowledge about managing their chronic conditions, maintaining a healthy lifestyle, identifying increased risk of falls and preventing likelihood of falls.

Program 2: Musculoskeletal Health Wellness Initiative (MHI)

To address the public health issue of musculoskeletal conditions, HSS developed the Musculoskeletal Health Wellness Initiative (MHI), comprised of educational and exercise programs, to raise awareness, educate and reduce the impact of musculoskeletal conditions in the community. The initiative offers lectures, workshops and webinars about musculoskeletal health-specific topics such as osteoarthritis, osteoporosis, and rheumatoid arthritis and some of the symptoms associated with these conditions (falls, fatigue, stiffness, and muscle, bone and joint pain), in addition to maintaining a healthy lifestyle. The exercise component of the initiative is comprised of weekly exercise classes such as Yoga, Pilates, Tai Chi, Dance, and Yogalates specifically designed for individuals that are suffering from or at risk of musculoskeletal and rheumatologic conditions. The anticipated program impact includes improved musculoskeletal health by decreasing musculoskeletal pain, stiffness, fatigue and falls, and increasing frequency of physical activity and self-efficacy.

Program 3: Pain and Stress Management Series

In response to the lack of confidence in managing chronic conditions, and mental health issues identified in the CHNA, HSS developed the pain and stress management series. This is comprised of educational, and mindfulness based coping techniques to raise awareness, educate and improve the ability to cope with pain and stress. This program offers mind/body workshops, exercises such as Yoga, and expert-guided meditation to help reduce physical and mental stressors. All the educational programs are taught by experienced physicians, nurses, physical and occupational therapists, while Yoga workshops are led by certified yoga instructors. The anticipated program impact includes improving confidence in managing chronic conditions and its symptoms such as pain, and improving ability to cope with stress.

Program 4: HSS Asian Community Bone Health Initiative

In response to the health needs of the growing number of Asian older adults living in NYC's Chinatown community and the CHNA results where Asians reported that they were told by their doctor to engage in more physical activity, HSS developed the Asian Community Bone Health Initiative (ACBHI). The overall goal of this initiative is to improve Asian seniors' management of their chronic musculoskeletal conditions (such as osteoarthritis and osteoporosis) and its symptoms (e.g. falls, stiffness, fatigue, muscle bone and joint pain) while also increasing access to care in this medically underserved community. The ACBHI is comprised of culturally relevant musculoskeletal health lectures and workshops, self-management education, yoga and low impact chair exercise programs. The anticipated program impact includes improved musculoskeletal health by decreasing musculoskeletal pain, stiffness, fatigue and falls, and increasing frequency of physical activity and self-efficacy.

Program 5: Resident Geriatric Training Program
This program is designed to enhance communication skills of third-year orthopedic surgery residents with older adults that are suffering from or at risk of musculoskeletal and rheumatologic conditions. The program includes meetings with the Program Coordinator, a licensed social worker, for the residents to explore their attitudes toward older patients, weekly resident rounds for selected residents to present and illustrate specific geriatric needs, and presentations to participants of the HSS Greenberg Academy for Successful Aging. Presentations cover topics such as management of musculoskeletal conditions (i.e. osteoarthritis and osteoporosis) and some of the symptoms associated with these conditions (such as muscle, back, bone and joint pain), and falls prevention. The anticipated program impact includes improving the ability of older adults to manage their musculoskeletal conditions and symptoms and improved doctor/patient communication.

Program 6: VOICES 60+ Senior Advocacy Program
This program was launched in recognition of the multiple challenges older adults face in effectively utilizing high quality chronic disease care to optimize health outcomes, and access needed social supports, particularly for those who are from low-income and Spanish speaking communities. VOICES 60+ is designed to enhance the medical care experience of low income, ethnically diverse (primarily Hispanic) HSS patients 60 and older in these areas. The program helps patients to navigate and access support, education and communication resources needed to manage their rheumatologic or musculoskeletal conditions and its symptoms to improve their quality of life. In addition, the program provides services focused on identifying and addressing communication barriers between older adult patients and healthcare providers to optimize health outcomes. Anticipated program impact includes improved provider/patient communication that will enhance communication skills of older adults and management of rheumatologic or musculoskeletal conditions and its symptoms.

Program 7: Rheumatoid Arthritis (RA) Support and Education Programs
This initiative addresses the psychoeducational needs of community members and their families living with long-standing rheumatoid arthritis, and for people newly diagnosed. These monthly programs feature a lecture on an RA-specific topic its management, presented by healthcare professionals, and are followed by a support group, co-facilitated by a social worker and a rheumatology nurse. Anticipated program impact includes enhancing self-management skills and self-efficacy around managing RA and its symptoms.

Program 8: LANtern® Lupus Asian Network
In response to the CHNA results highlighting health disparities in the Asian community specifically related to lupus, HSS will implement LANtern, which is a national model for support and education of Asian Americans with lupus and their families. LANtern is the only hospital-based support and education program designed specifically for Asians/Asian Americans with lupus. Through its bilingual (Chinese) SupportLine, publications, community and professional programs, and capacity building, the program seeks to enhance awareness, understanding, coping and knowledge for Asian Americans with lupus and their loved ones. Anticipated program impact includes increased knowledge about high quality preventive care for the Asian community and improved clinical management of lupus and its symptoms.

Program 9: Charla de Lupus/Lupus Chat®
The Charla de Lupus/Lupus Chat ("Charla") program addresses health disparities among African Americans and Latinos with lupus according to the CHNA findings. This social work led program engages and trains peer volunteers to become empowering role models by providing culturally relevant strategies to help increase understanding of this complex illness and its treatment, improve medical adherence, and enhance coping and healthy behaviors. Comprehensive bilingual (English/Spanish) services include: the Charla Line, a toll-free national support and education helpline; weekly Onsite Peer Support Outreach at four hospital-based clinics, monthly Charla Teen and Parent Lupus Chat Groups; numerous community, professional education and government collaborations. Anticipated program impact includes increased knowledge and self-management skills of lupus and its symptoms.

Identified Need 2: Obesity (Poor Diet and Lack of Physical Activity)
Based on significant health needs identified in the CHNA results and community forums, o*besity (poor diet and lack of physical activity)* were also identified as key community health needs in our community. Below highlights the programs specifically designed to address obesity in children and adults by improving the diet and physical activity.

Program 1: SNEAKER© Super Nutrition Education for All Kids to Eat Right
In response to the pediatric obesity epidemic, HSS developed and implemented the SNEAKER program. This 7-week interactive nutrition and physical activity education program is designed to provide children and families with essential knowledge about healthy eating and physical activity. The SNEAKER curriculum focuses on portion control, whole grains and fiber, fruits and vegetables, beverages, physical activity, protein and dairy, and fast food and snacks. The program provides interactive lessons that help to teach students the importance of eating a healthy, well-balanced diet and being physically active, encourage children to make healthier food choices, and educate students about how to be more physically active. Understanding the importance and influential role parents and caregivers have on a child's diet, SNEAKER© contains a parent/caregiver component wherein weekly newsletters are sent home to educate the parent/caregiver about the lessons their child learned in school so they can help foster healthy changes for the child and the entire family. The program is implemented in public schools and after-school programs largely located in medically underserved areas throughout NYC. Residents in these areas are predominantly Hispanic/Latino, African American and Asian. Anticipated program impact includes improving the nutrition knowledge of children and families as well as their food choices and level of physical activity.

Program 2: Musculoskeletal Health Wellness Initiative (MHI)
Through the Musculoskeletal Health Wellness Initiative (MHI), HSS offers lectures, workshops and webinars on nutrition and maintaining a healthy lifestyle, and weekly exercise classes (Yoga, Pilates, Tai Chi, Dance, and Yogalates) to improve diet and physical activity among adults. Anticipated program impact includes improved knowledge on how to eat healthy and maintain a healthy lifestyle and improved level of physical activity and self-efficacy for exercise.

Additional Need Identified: Influenza Immunization
While this is not a top identified health need, HSS will be addressing this statewide initiative to reduce the prevalence of Influenza in New York State.

Program 1: Patient flu initiative
During the influenza season, all patients admitted to the hospital are offered the Influenza vaccine before they are discharged. Anticipated impact includes preventing flu complications and pneumonia in patients that receive the vaccine leading to reduced health risk of patients admitted in the hospital.

Program 2: Employee flu initiative
HSS offers flu vaccinations for all personnel through its occupational health services (OHS). Non-vaccinated employees are required to wear a mask after Influenza has been declared widespread by the New York State Commissioner of Health. HSS staff vaccinated outside the Hospital are required to provide appropriate documentation. Anticipated impact include decreasing employee absenteeism (including flu-related absenteeism) leading to improved workforce productivity.

Unmet Health Needs
Given HSS' focus on musculoskeletal and rheumatologic conditions, CHNA results suggesting the need for increasing preventive care such as mammograms, pap smears and prostate exams extends beyond the scope of the Hospital. Nevertheless, HSS is committed to providing community health education to various audiences on topics that relate to general public health issues through efforts such as the HSS Nursing Community Education Outreach Initiative, to address the health education needs of older adult NYC residents. Moreover, HSS plans to continue developing wellness education and exercise programs to improve overall health outcomes and enhance the quality of life for all.

CONCLUSION

Using results of the 2016 CHNA and systematic feedback from varied parties representing the general community, HSS was able to identify and prioritize the health needs to meet the community's needs. This information will continue to form the basis for the Hospital's strong dedication to improving mobility and quality of life, which are values that extend beyond its specialized focus on musculoskeletal and rheumatologic care.

This Community Health Needs Assessment (CHNA) Report and Implementation Plan has been approved by HSS Community Benefit and Services Committee of the Board of Trustees.

Appendix A: CHNA Surveys in English, Spanish and Chinese

HOSPITAL FOR SPECIAL SURGERY

Community Health Needs Assessment (CHNA)

Hospital for Special Surgery wants to hear about your needs regarding muscle, bone, and joint conditions. This will help us to provide programs and services that are important to you. We do not need your name for this survey. Completing this survey will not affect any care that HSS provides for you. Please return this survey no later than **April 15, 2016**, so that we can make sure your opinion counts. Thank you for your help!

A. Health Status and Quality of Life: The following questions are about how you feel overall and about health conditions you may have. Please choose your response from the options listed. If you are unsure, please give the best answer you can.

A1. Would you say that in general your health is?

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't Know

A2. Now thinking about your **physical health**, which includes physical illness and injury, for how many days during the **past 30 days** was your physical health not good?

- ☐ None (0 day)
- ☐ 1-7 days
- ☐ 8-13 days
- ☐ 14 days or more

A3. Have you ever been told by a healthcare provider that you have…

		Yes	No
a)	Osteoarthritis (OA)	☐	☐
b)	Rheumatoid arthritis (RA)	☐	☐
c)	Lupus	☐	☐
d)	Fibromyalgia	☐	☐
e)	Gout	☐	☐
f)	Some other form of arthritis	☐	☐
g)	Osteoporosis	☐	☐
h)	Other: _____		

Note: If you answered "No" to ALL parts of Question A3, please SKIP to Question A6.

A4. Which of the following symptoms have you experienced within the **past 30 days due to your condition(s)**?

		Yes	No
a)	Joint / bone pain or aches	☐	☐
b)	Muscle pain or aches	☐	☐
c)	Stiffness	☐	☐
d)	Fatigue	☐	☐
e)	Weight changes	☐	☐
f)	Skin rash	☐	☐
g)	Hair loss	☐	☐
h)	Mood changes (feeling sad, irritable, etc.)	☐	☐
i)	Trouble with concentrating	☐	☐
j)	Changes in memory	☐	☐
k)	Problems with balance	☐	☐
l)	Other: _____		

A5. Are you now limited in any way in any of your usual activities because of your arthritis or joint symptoms?

☐ Yes ☐ No ☐ Don't know

A6. In the past year, have you fallen down?

☐ Yes ☐ No ☐ Don't know

Note: If you answered "No" to Question A6, please SKIP to Question A9.

A7. If ***Yes***, did you break any bones as a result of your fall?

☐ Yes ☐ No ☐ Don't know

A8. Did you talk to your doctor or other healthcare provider about your fall(s)?

☐ Yes ☐ No ☐ Don't know

A9. Now thinking about your **mental health**, which includes stress, depression, and problems with emotions, for how many days during the **past 30 days** was your mental health not good?

☐ None (0 day) ☐ 1-7 days
☐ 8-13 days ☐ 14 days or more

A10. Over the **last 30 days**, how often have you been bothered by these problems?

	Not at all	A little of the time	Some of the time	Most of the time	All of the time	Don't Know
a) Feeling nervous, anxious or on edge:	☐	☐	☐	☐	☐	☐
b) Not being able to stop or control worrying:	☐	☐	☐	☐	☐	☐
c) Feeling down, depressed or hopeless:	☐	☐	☐	☐	☐	☐
d) Little interest or pleasure in doing things:	☐	☐	☐	☐	☐	☐

A11. The next question asks about difficulties you may have doing certain activities because of a HEALTH PROBLEM. By "health problem" we mean any physical, mental, or emotional problem or illness (not including pregnancy).

By yourself and without using any special equipment, how difficult is it for you…

	Not at all difficult	Only a little difficult	Some-what difficult	Very difficult	Can't do at all	Do not do this activity	Don't know
a) to walk a quarter of a mile - about 3 city blocks?	☐	☐	☐	☐	☐	☐	☐
b) to walk up 10 steps without resting?	☐	☐	☐	☐	☐	☐	☐
c) to stoop, bend, or kneel?	☐	☐	☐	☐	☐	☐	☐
d) to use your fingers to grasp or handle small objects?	☐	☐	☐	☐	☐	☐	☐

A12. During the **past 30 days**, for how many days did **pain** make it hard for you to do your usual activities, such as personal care, work, or hobbies?

☐ None (0 day) ☐ 1-7 days
☐ 8-13 days ☐ 14 days or more

B. Health Behaviors & Lifestyle: The next series of questions are about *physical activities or exercise* you may do, about your *eating habits*, the foods and drinks you consume, and about your sexual behavior. Physical activity is anything that gets your body moving.

B1. How often do you do **vigorous leisure-time** physical activities for at least 25 minutes that cause **heavy** sweating or **large** increases in breathing or heart rate (such as running)?

- ☐ 5 or more times a week
- ☐ 3 – 4 times a week
- ☐ 1 – 2 times a week
- ☐ None

B2. How often do you do **light or moderate leisure-time** physical activities for at least 30 minutes that cause **only light** sweating or a **slight to moderate** increase in breathing or heart rate (such as walking)?

- ☐ 5 or more times a week
- ☐ 3 – 4 times a week
- ☐ 1 – 2 times a week
- ☐ None

B3. How often do you do leisure-time physical activities specifically designed to **strengthen your muscles** such as lifting weights or doing calisthenics (such as push-ups, pull-ups, squats, jumping jacks)?

- ☐ 1 – 2 times a week
- ☐ Unable to do such activities
- ☐ Never

B4. In the past 12 months, has a doctor or other health professional suggested that you lose weight?

☐ Yes ☐ No ☐ Don't know

B5. In the past 12 months, has a doctor or other health professional suggested that you do physical activity or exercise?

☐ Yes ☐ No ☐ Don't know

B6. In general, how healthy is your overall diet? A healthy diet includes lean protein, low-fat dairy, fruits and vegetables, whole grains, and healthy fat.

☐ Excellent ☐ Very good ☐ Good
☐ Fair ☐ Poor

B7. Would you like to eat healthier?

☐ Yes ☐ No ☐ Don't know

Note: If you answered "No" to B7, please SKIP to Question B9.

B8. If you would like to eat healthier, what keeps you from doing so?

		Yes	No
a)	Healthy foods cost too much	☐	☐
b)	I do not like the taste	☐	☐
c)	I do not have any places where I live to find healthy food	☐	☐
d)	It takes too much time and effort to prepare	☐	☐
e)	I do not know what foods to eat	☐	☐
f)	Family and friends do not eat that way	☐	☐
g)	Other: _____		
h)	Does not apply - I already eat healthy	☐	

B9. Have your muscle, bone or joint condition(s) affected your sexual health?

☐ Yes ☐ No ☐ Don't know

B10. If yes, choose all that apply:

- ☐ Pregnancy
- ☐ Decreased sexual desire and satisfaction
- ☐ Increased sensitivity to being touched
- ☐ Urinary tract infection
- ☐ Vaginal dryness
- ☐ Limitation of motion/pain
- ☐ Infertility
- ☐ Decreased sexual intercourse/intimacy
- ☐ Erectile dysfunction/ Impotence
- ☐ Decreased sense of sexual attractiveness
- ☐ Other:_____

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C. Use of and Access to Care: These questions are about your healthcare experiences and healthcare education needs. Please choose your response from the options listed. If you are unsure, please give the best answer you can.

C1. Do you currently have health insurance/coverage?

- ☐ Yes
- ☐ No
- ☐ Don't know

Note: If you answered "No" to Question C1, please SKIP to Question C3

C2. What is the primary source of your health care coverage?

- ☐ A plan purchased through an employer or union (includes plans purchased through another person's employer)
- ☐ A plan that you or another family member buys on your own
- ☐ Medicaid
- ☐ Medicare
- ☐ TRICARE (formerly CHAMPUS), VA, or Military
- ☐ Alaska Native, Indian Health Service, Tribal Health Services
- ☐ Some other source
- ☐ Don't Know

Note: Purchased health insurance through the Health Insurance Marketplace: If purchased on your own (or by a family member), select option 2, if Medicaid select option 3.

C3. If you do not currently have health insurance or you have not had insurance at any time in the **past 12 months**, what are the reasons why?

Check all that apply.

- ☐ My employer does not offer it
- ☐ I am self-employed
- ☐ I am currently unemployed
- ☐ I can't afford insurance
- ☐ I am healthy and don't think I need it
- ☐ Other reason: _____
- ☐ Not applicable

C4. Have you received a screening for the following **within the past 12 months**?

	Yes	No
a. Immunizations (such as flu shot)	☐	☐
b. Mammograms (Women only)	☐	☐
c. Pap smears (Women only)	☐	☐
d. Prostate Exam (Men only)	☐	☐
e. STD/STI/ HIV	☐	☐

C5. Was there a time in the **past 12 months** when you needed to see a doctor but could not?

- ☐ Yes
- ☐ No
- ☐ Don't know

Note: If you answered "No" to Question C5, please SKIP to Question C7

C6. If Yes, what were the reasons why you could not do so? Check all that apply.

- ☐ Could not afford it
- ☐ No health insurance
- ☐ Service not covered by insurance
- ☐ Lack of transportation
- ☐ Hard to get an appointment
- ☐ Not sure where to go
- ☐ Family responsibilities (such as no child care available)
- ☐ Language (such as could not get healthcare in my language)
- ☐ Office not patient-friendly (such as long wait time, hours not convenient)
- ☐ Other reason: _____

C7. How often do you follow your doctor or other healthcare provider's medical advice?

- ☐ Never
- ☐ Sometimes
- ☐ Usually
- ☐ Always

C8. Sometimes people don't follow their doctor or other healthcare provider's medical advice. Please tell us the reasons that may apply to you. Check all that apply.

		Yes	No
a)	Provider didn't explain treatment well enough (due to lack of time, uncaring attitude, or hard to understand)	☐	☐
b)	Did not feel treatment would help	☐	☐
c)	Concerned about the cost of treatment	☐	☐
d)	Forgot to take medicine / go for follow-up	☐	☐
e)	Provider doesn't understand my culture / language	☐	☐
f)	Condition not severe enough to require treatment	☐	☐
g)	Worried about side effects of treatment	☐	☐
h)	Prefer to use complementary / alternative treatment	☐	☐
i)	Did not fit my schedule / not convenient for me	☐	☐
j)	Did not agree with the doctor / provider	☐	☐
k)	Other reason: _____		
l)	Does not apply - always follow the medical advice of my doctor or other healthcare provider	☐	

C9. When you visit your doctor (or other healthcare provider), how often do you do the following:

		Never	Sometimes	Usually	Always
a)	Prepare a list of questions for your doctor (or other healthcare provider)	☐	☐	☐	☐
b)	Ask questions about the things you don't understand about your treatment	☐	☐	☐	☐
c)	Discuss any personal problems that may be related to your illness	☐	☐	☐	☐

C10. How confident are you that you can manage symptoms of your condition so that you can do the things that you want to do?

☐ Not at all confident ☐ Somewhat confident ☐ Confident ☐ Very confident

C11. How would you rate your ability to speak and understand English?

☐ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

C12. What is your preferred language for discussing healthcare?

☐ English ☐ Spanish ☐ Chinese ☐ Russian ☐ Other: _____

C13. In what language would you **prefer** reading medical or healthcare instruction?

☐ English ☐ Spanish ☐ Chinese ☐ Russian ☐ Other: _____

C14. How often do you need to have someone help you when you read instructions, pamphlets, or other written materials from your doctor or pharmacy?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Always

C15. Where do you usually obtain your health information/advice?

Check all that apply

- ☐ Clinic or health center
- ☐ Doctor's Office or HMO
- ☐ Hospital Emergency Room
- ☐ Hospital Outpatient Department
- ☐ Family
- ☐ Friends/Colleagues
- ☐ Internet
- ☐ Other: _____
- ☐ Don't seek health information or advice often

C16. Have you EVER taken an educational course or class to learn how to manage your bone, muscle and joint health/condition?

☐ Yes ☐ No ☐ Don't know

C17. Which of the following health education activities would you be interested in participating in? Check all that apply.

- ☐ Exercise Classes such as T'ai Chi, Pilates or Yoga
- ☐ Workshops allowing for hands-on, small group learning
- ☐ Onsite lectures at HSS about prevention or management of musculoskeletal or rheumatologic conditions and general wellness
- ☐ Web-based lectures on your computer about prevention or management of musculoskeletal or rheumatologic conditions and other health and wellness topics
- ☐ Podcasts, free audio and video programs available for downloading and viewing directly to your computer, consisting of interviews, patient testimonials, condition or treatment highlights and other subjects presented by our hospitals physicians and staff
- ☐ None of the above

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D. About You: Please tell us about you and your background so that we can learn more about the communities we serve.

D1. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Gender non-conforming
- ☐ Trans Female (MtF)
- ☐ Trans Male (FtM)
- ☐ Other: _____

D2. What is your sexual orientation?

- ☐ Straight
- ☐ Lesbian
- ☐ Gay
- ☐ Bisexual
- ☐ Something else
- ☐ Don't know

D3. What is your age? ____

D4. Do you consider yourself Hispanic/Latino?

☐ Yes ☐ No

D5. Which one of these groups would you say best represents your race?

Check all that apply

- ☐ American Indian / Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian/ Other Pacific Islander
- ☐ White
- ☐ Other: _____

D6. Please tell us about your ethnicity; you can list as many as you prefer (for example: Chinese, Nigerian, Italian, Puerto Rican, Russian, etc.)

D7. What is your current relationship status?

- ☐ Single (never married)
- ☐ Married
- ☐ Living together as a couple
- ☐ In a relationship
- ☐ Separated
- ☐ Divorced
- ☐ Widowed

D8. Do you live alone?

☐ Yes ☐ No

D9. What language(s) do you speak at home? Mark all that apply.

- ☐ English
- ☐ Spanish
- ☐ Chinese
- ☐ Russian
- ☐ Other: _____

D10. What is the highest grade or year of school you completed?

- ☐ No school completed
- ☐ Nursery or preschool through grade 12
- ☐ High school graduate or GED

D11. Are you currently…?

- ☐ Employed
- ☐ Self-employed
- ☐ Out of work for 1 year or more
- ☐ Out of work for less than 1 year
- ☐ A homemaker
- ☐ A student
- ☐ Retired
- ☐ Unable to work

D12. What is your annual household income from all sources?

- ☐ Less than $10,000
- ☐ $10,000 – $14,999
- ☐ $15,000 – $24,999
- ☐ $25,000 – $34,999
- ☐ $35,000 – $49,999
- ☐ $50,000 – $74,999
- ☐ $75,000 – $99,999
- ☐ $100,000 – $149,999
- ☐ $150,000 – $199,999
- ☐ $200,000 or more

D13. Where do you live?

☐ Brooklyn ☐ Bronx ☐ Manhattan ☐ Queens ☐ Staten Island
☐ Long Island, Nassau County ☐ Long Island, Suffolk County ☐ Westchester
☐ New Jersey ☐ Other: _____

D14. What is the zip code where you live? _____

D15. Please use the space below to share with us any other muscle, bone, joint, or rheumatology-related needs that you would like Hospital for Special Surgery to know about:

Thank you for completing this survey!

Please return this survey no later than April 15, 2016 so that we can make sure your opinion counts.

Please send the completed survey back to us in one of the following ways:

1. **Mail** using the enclosed pre-paid envelope
2. **Drop off** at: Hospital for Special Surgery Education & Academic Affairs Division office, located at: 517 East 71st Street, NY, NY 10021 – **Attn: Titilayo Ologhobo**

If you have any questions or concerns about the survey, please contact Titilayo Ologhobo, Public Health Outcomes Manager, at 212-774-2185.

HOSPITAL FOR SPECIAL SURGERY

Evaluación de necesidades de salud de la comunidad (CHNA)

El Hospital de Cirugía Especial (Hospital for Special Surgery) quiere conocer sus necesidades relacionadas con enfermedades de los músculos, los huesos y las articulaciones. Esto nos ayudará a ofrecer programas y servicios que sean importantes para usted. No necesitamos su nombre para esta encuesta. Completar esta encuesta no afectará de ningún modo la atención que el hospital le proporciona. Por favor regrese esta encuesta antes del **15 de abril del 2016** para poder asegurarnos de que su opinión sea tomada en cuenta. ¡Gracias por su ayuda!

A. Estado de salud y calidad de vida: Las siguientes preguntas se refieren a cómo se siente en general y los trastornos de salud que puede tener. Elija su respuesta de las opciones de la lista. Si no está seguro, responda de la mejor manera posible.

A1. En general, ¿diría que su salud es?

- ☐ Excelente
- ☐ Muy buena
- ☐ Buena
- ☐ Regular
- ☐ Mala
- ☐ No sé

A2. Considerando su **salud física**, incluyendo las enfermedades y lesiones físicas, durante los **últimos 30 días**, ¿cuántos días su salud física no fue buena?

- ☐ Ninguno (0 días)
- ☐ 1-7 días
- ☐ 8-13 días
- ☐ 14 días o más

A3. Alguna vez le ha dicho un proveedor de la salud que usted tiene...?

		Sí	No
a)	Osteoartritis (OA)	☐	☐
b)	Artritis reumatoide (AR)	☐	☐
c)	Lupus	☐	☐
d)	Fibromialgia	☐	☐
e)	Gota	☐	☐
f)	Otra forma de artritis	☐	☐
g)	Osteoporosis	☐	☐
h)	Otra: _____		

Nota: Si respondió "No" a TODAS las partes de la pregunta A3, PASE a la pregunta A6.

A4. ¿Cuál de los siguientes síntomas ha experimentado usted en los **últimos 30 días debido a su(s) enfermedad(es)**?

		Sí	No
a)	Achaques o dolores en las articulaciones/huesos	☐	☐
b)	Achaques o dolores en los músculos	☐	☐
c)	Rigidez	☐	☐
d)	Fatiga	☐	☐
e)	Cambios en el peso	☐	☐
f)	Erupción de piel,	☐	☐
g)	Pérdida del cabello	☐	☐
h)	Cambios en el estado de ánimo (sentirse triste, irritable, etc.)	☐	☐
i)	Dificultad para concentrarse	☐	☐
j)	Cambios en la memoria	☐	☐
k)	Problemas con el equilibrio	☐	☐
l)	Otro: _____		

A5. En la actualidad, ¿se encuentra limitado de manera alguna en cualquiera de sus actividades habituales debido a la artritis o los síntomas en las articulaciones?

☐ Sí ☐ No ☐ No sé

A6. En el año pasado, ¿ha sufrido una caída?

☐Sí ☐ No ☐ No sé

Nota: Si respondió "No" a la pregunta A6, PASE a la pregunta A9.

A7. En caso ***afirmativo***, ¿se fracturó algún hueso como consecuencia de la caída?

☐ Sí ☐No ☐No sé

A8. ¿Habló con su médico u otro proveedor de la salud sobre su(s) caída(s)?

☐ Sí ☐No ☐No sé

Evaluación de necesidades de salud de la comunidad (CHNA)

A9. Considerando su **salud mental**, incluyendo estrés, depresión y problemas emocionales, durante los **últimos 30 días**, ¿cuántos días su salud mental no fue buena?

☐ Ninguno (0 días) ☐ 1-7 días
☐ 8-13 días ☐ 14 días o más

A10. En los **últimos 30 días**, ¿con qué frecuencia le han preocupado los siguientes problemas?

	Nunca	En muy pocos momentos	Algunas veces	La mayor parte del tiempo	Todo el tiempo	No sé
a) Sentirse nervioso, ansioso o con los nervios de punta:	☐	☐	☐	☐	☐	☐
b) Incapaz de detener o controlar las preocupaciones:	☐	☐	☐	☐	☐	☐
c) Sensación de decaimiento, depresión o desesperanza:	☐	☐	☐	☐	☐	☐
d) Poco interés o placer en hacer las cosas:	☐	☐	☐	☐	☐	☐

A11. La siguiente pregunta trata sobre las dificultades que puede tener al realizar ciertas actividades a causa de un PROBLEMA DE SALUD. Por "problema de salud" nos referimos a cualquier problema o enfermedad física, mental o emocional (sin incluir el embarazo).

Sin ayuda y sin utilizar ningún equipo especial, ¿qué tan difícil es para usted…

	Para nada difícil	Solo un poco difícil	Algo difícil	Muy difícil	No pude hacerlo	No hice esta actividad	No sé
a) Caminar un cuarto de milla, aproximadamente 3 cuadras de ciudad?	☐	☐	☐	☐	☐	☐	☐
b) Caminar 10 pasos sin descansar?	☐	☐	☐	☐	☐	☐	☐
c) Agacharse, inclinarse o arrodillarse?	☐	☐	☐	☐	☐	☐	☐
d) Usar los dedos para tomar o manipular objetos pequeños?	☐	☐	☐	☐	☐	☐	☐

A12. En los **últimos 30 días**, ¿cuántos días le dificultó el **dolor** llevar a cabo sus actividades habituales? (tales como cuidado personal, trabajo o aficiones)

☐ Ninguno (0 días) ☐ 1-7 días
☐ 8-13 días ☐ 14 días o más

Evaluación de necesidades de salud de la comunidad (CHNA)

B. Comportamientos de salud y estilo de vida: La siguiente serie de preguntas se refiere a *actividades físicas o ejercicios* que usted puede hacer y sobre sus *hábitos alimenticios*, (alimentos y bebidas) que consume, y sobre su comportamiento sexual. La actividad física es cualquier cosa que ponga a su cuerpo en movimiento.

B1. ¿Con qué frecuencia realiza actividades físicas **vigorosas en su tiempo libre** durante al menos 25 minutos que causen sudoración **excesiva** o **grandes** aumentos en la frecuencia cardíaca o respiratoria (como corriendo)?

- ☐ 5 o más veces por semana
- ☐ 3 a 4 veces por semana
- ☐ 1 a 2 veces por semana
- ☐ Nada

B2. ¿Con qué frecuencia realiza actividades físicas **ligeras o moderadas en su tiempo libre** durante al menos 30 minutos que causen sudoración **ligera** o aumentos **ligeros a moderados** en la frecuencia cardíaca o respiratoria (como caminando)?

- ☐ 5 o más veces por semana
- ☐ 3 a 4 veces por semana
- ☐ 1 a 2 veces por semana
- ☐ Nada

B3. ¿Con qué frecuencia realiza actividades físicas en su tiempo libre diseñadas específicamente para **fortalecer los músculos**, tales como levantar pesas o hacer ejercicios de calistenia (como flexiones, dominadas, sentadillas, saltos)?

- ☐ 1 a 2 veces por semana
- ☐ No puedo hacer este tipo de actividades
- ☐ Nunca

B4. En los últimos 12 meses, ¿le ha sugerido un médico u otro proveedor de la salud perder peso?

☐ Sí ☐ No ☐ No sé

B5. En los últimos 12 meses, le ha sugerido un médico u otro proveedor de la salud hacer actividad física o ejercicio?

☐ Sí ☐ No ☐ No sé

B6. En general, ¿qué tan saludable es su dieta total? Una dieta saludable incluye proteína magra, productos lácteos con bajo contenido de grasa, frutas y verduras, granos enteros y grasa saludable.

☐ Excelente ☐ Muy buena ☐ Buena
☐ Regular ☐ Mala

B7. ¿Le gustaría comer más sano?

☐ Sí ☐ No ☐ No sé

Nota: Si respondió "No" a la pregunta B7, PASE a la pregunta B9.

B8. Si desea comer más sano, ¿qué le impide hacerlo?

		Sí	**No**
a)	Los alimentos saludables cuestan demasiado dinero	☐	☐
b)	No me gusta el sabor	☐	☐
c)	Cerca donde vivo, no hay ningún lugar dónde encontrar comida sana	☐	☐
d)	Se necesita mucho tiempo y esfuerzo para preparar comida saludable	☐	☐
e)	No sé qué alimentos comer	☐	☐
f)	Mis familiares y amigos no comen de esa manera	☐	☐
g)	Otro: _____		
h)	No aplica - Yo ya me alimento de manera saludable		☐

B9. ¿Ha afectado su enfermedad de músculos, huesos o articulaciones, su salud sexual?

☐ Sí ☐ No ☐ No sé

B10. En caso afirmativo, elija todas las opciones que apliquen:

- ☐ Embarazo
- ☐ Disminución del deseo y la satisfacción sexual
- ☐ Aumento de la sensibilidad a ser tocado
- ☐ Infección del tracto urinario
- ☐ Sequedad vaginal
- ☐ Dolor/limitación de movimiento
- ☐ Infertilidad
- ☐ Disminución de las relaciones sexuales/encuentros íntimos
- ☐ Disfunción eréctil/Impotencia
- ☐ Disminución de sentirse atractivo sexualmente
- ☐ Otro:_____

Evaluación de necesidades de salud de la comunidad (CHNA)

C. Uso y acceso al cuidado: Estas preguntas son sobre sus experiencias de atención médica y necesidades de educación en salud. Elija su respuesta de las opciones de la lista. Si no está seguro, responda de la mejor manera posible.

C1. ¿Actualmente, tiene seguro/cobertura de salud?

- ☐ Sí
- ☐ No
- ☐ No sé

Nota: Si respondió "No" a la pregunta C1, PASE a la pregunta C3.

C2. ¿Cuál es la fuente <u>principal</u> de su cobertura de salud?

- ☐ Un plan adquirido a través de un empleador o sindicato o unión (incluye planes comprados a través del empleador de otra persona)
- ☐ Un plan que usted u otro miembro de la familia compra por su cuenta
- ☐ Medicaid
- ☐ Medicare
- ☐ TRICARE (antes llamado CHAMPUS), VA, o militar
- ☐ Nativo de Alaska, Servicio de Salud Indígena, Servicios de Salud Tribal
- ☐ Algún otro seguro
- ☐ No sé

Nota: Compró un seguro de salud a través del mercado de Seguros de Salud: Si lo compró por su cuenta (o por medio de un miembro de la familia), seleccione la opción 2, si es Medicaid seleccione la opción 3.

C3. Si actualmente no tiene un seguro de salud o no ha tenido ningún seguro de salud en los **últimos 12 meses**, ¿cuáles son los motivos? Marque todas las opciones que correspondan.

- ☐ Mi empleador no lo ofrece
- ☐ Trabajo por mi cuenta
- ☐ Actualmente estoy desempleado
- ☐ No puedo pagar un seguro medico
- ☐ Estoy saludable y creo que no lo necesito
- ☐ Otro motivo: _____
- ☐ No aplica

C4. ¿Ha recibido lo siguiente **en los últimos 12 meses**?:

	Sí	**No**
a. Vacunas (como la vacuna contra la gripe)	☐	☐
b. Mamografías (Mujeres solamente)	☐	☐
c. Papanicolau(Mujeres solamente)	☐	☐
d. Prostate Exam (Hombres solamente)	☐	☐
e. ETS/ITS/VIHSTD/STI/ HIV	☐	☐

C5. ¿Hubo un momento en los **últimos 12 meses** cuando necesitó ver a un médico pero no pudo hacerlo?

- ☐ Sí
- ☐ No
- ☐ No sé

Nota: Si respondió "No" a la pregunta C5, PASE a la pregunta C7.

C6. En caso afirmativo, ¿cuáles fueron los motivos por los cuales no pudo hacerlo? Marque todas las opciones que correspondan.

- ☐ No podía pagar
- ☐ No tenía seguro de salud
- ☐ El servicio no está cubierto por el seguro
- ☐ Falta de transporte
- ☐ Es difícil conseguir una cita
- ☐ No estoy seguro de dónde ir
- ☐ Responsabilidades familiares (como no está disponible el cuidado infantil)
- ☐ Idioma (no pude conseguir atención médica en mi idioma)
- ☐ Consultorio no amigable con el paciente (como largas horas de espera, horarios no convenientes)
- ☐ Otro motivo: _____

C7. ¿Con qué frecuencia sigue los consejos de su médico o de otro proveedor de la salud?

- ☐ Nunca
- ☐ Algunas veces
- ☐ Usualmente
- ☐ Siempre

Evaluación de necesidades de salud de la comunidad (CHNA)

C8. En ocasiones las personas no siguen el consejo médico de su médico u otros proveedores de atención médica. Cuéntenos los motivos por los cuales esto puede aplicarse en su caso. Marque todas las opciones que correspondan.

		Sí	**No**
a)	El proveedor no explicó el tratamiento lo suficientemente bien (debido a falta de tiempo, actitud indiferente o difícil de entender)	☐	☐
b)	No pensé que el tratamiento sería útil	☐	☐
c)	Me preocupó el costo del tratamiento	☐	☐
d)	Me olvidé de tomar el medicamento / ir al seguimiento	☐	☐
e)	El proveedor no entiende mi cultura / idioma	☐	☐
f)	La condición no es lo suficientemente grave como para requerir tratamiento	☐	☐
g)	Me preocupé por los efectos secundarios del tratamiento	☐	☐
h)	Prefiero usar un tratamiento complementario / alternativo	☐	☐
i)	No encajaba en mis horarios / no era conveniente para mí	☐	☐
j)	No estaba de acuerdo con el médico/proveedor	☐	☐
k)	Otro motivo: _____		
l)	No se aplica – Siempre sigo los consejos de mi médico u otros proveedores de la salud		☐

C9. Cuando visita a su médico (u otro proveedor de atención médica), ¿con qué frecuencia hace lo siguiente?:

		Nunca	**Algunas veces**	**Habitual mente**	**Siempre**
a)	Prepara una lista de preguntas para su médico (u otro proveedor de la salud)	☐	☐	☐	☐
b)	Hace preguntas sobre las cosas que no entiende de su tratamiento	☐	☐	☐	☐
c)	Discute cualquier problema personal que puede estar relacionado con su enfermedad	☐	☐	☐	☐

C10. ¿Qué tan seguro está usted de poder manejar los síntomas de su enfermedad a fin de poder hacer las cosas que le gusta hacer?

☐ Para nada seguro ☐ Un poco seguro ☐ Seguro ☐ Muy seguro

C11. ¿Cómo calificaría su capacidad de hablar y entender el Inglés?

☐ Excelente ☐ Muy buena ☐ Buena ☐ Regular ☐ Mala

C12. ¿Cuál es su idioma preferido para discutir temas de salud?

☐ Inglés ☐ Español ☐ Chino ☐ Ruso ☐ Otro: _____

C13. ¿En qué idioma **preferiría** leer información médica o de salud?

☐ Inglés ☐ Español ☐ Chino ☐ Ruso ☐ Otro: _____

Evaluación de necesidades de salud de la comunidad (CHNA)

C14. ¿Con qué frecuencia necesita usted que otra persona le ayude a leer instrucciones, folletos u otros materiales por escrito que le haya dado su médico o la farmacia?

☐ Nunca ☐ Raras veces ☐ Algunas veces ☐ A menudo ☐ Siempre

C15. Por lo general, ¿dónde obtiene su información/consejos de salud?

Marque todo lo que corresponda

☐ Clínica o centro de salud
☐ Consultorio médico o HMO
☐ Sala de emergencia del hospital
☐ Departamento de pacientes ambulatorios del hospital
☐ Familia
☐ Amigos/colegas
☐ Internet
☐ Otro: _____
☐ No busco información o asesoramiento de salud con frecuencia

C16. ¿ALGUNA VEZ ha tomado un curso o clase educativa para aprender cómo manejar su salud/enfermedad de los huesos, músculos y articulaciones?

☐ Sí ☐ No ☐ No sé

C17. ¿En cuál de las siguientes actividades de educación de salud estaría interesado en participar? Marque todas las opciones que correspondan.

☐ Clases de ejercicio como T'ai Chi, Pilates o Yoga
☐ Talleres que permitan el aprendizaje práctico, en pequeños grupos
☐ Conferencias en el hospital HSS sobre prevención o manejo de enfermedades de los huesos, músculos y articulaciones o bienestar general
☐ Conferencias computarizadas basadas en el internet sobre prevención o manejo de enfermedades de los huesos, músculos y articulaciones u otros temas de salud y bienestar
☐ Podcasts, programas gratuitos de audio y video disponibles para descargar y ver directamente en su computadora, que consisten en entrevistas, testimonios de pacientes, aspectos a destacar de la enfermedad o el tratamiento y otros temas presentados por nuestros médicos y el personal del hospital
☐ Ninguna de las opciones anteriores

Evaluación de necesidades de salud de la comunidad (CHNA)

D. Acerca de usted: Cuéntenos acerca de usted y sus antecedentes para que podamos conocer más sobre las comunidades que atendemos.

D1. ¿Cuál es su sexo?

- ☐ Femenino
- ☐ Masculino
- ☐ No conforme con el género
- ☐ Trans mujer (MtF)
- ☐ Trans hombre (FtM)
- ☐ Otro: _____

D2. ¿Cuál es su orientación sexual?

- ☐ Heterosexual
- ☐ Lesbiana
- ☐ Gay
- ☐ Bisexual
- ☐ Algo diferente
- ☐ No sé

D3. ¿Qué edad tiene? ____

D4. ¿Se considera usted Hispano/Latino?

☐ Sí ☐ No

D5. ¿Cuál de estos grupos diría usted que representa mejor a su raza?

Marque todas las opciones que correspondan

- ☐ Indio americano/nativo de Alaska
- ☐ Asiático
- ☐ Negro o afroamericano
- ☐ Nativo de Hawái/ Otra isla del Pacífico
- ☐ Blanco
- ☐ Otro: _____

D6. Cuéntenos sobre su origen étnico; usted puede enumerar todas las que prefiera (por ejemplo: chino, nigeriano, italiano, portorriqueño, ruso, etc.)

D7. ¿Cuál es su estado civil?

- ☐ Soltero (no se casó nunca)
- ☐ Casado
- ☐ Vida en común como pareja
- ☐ En una relación
- ☐ Separado
- ☐ Divorciado
- ☐ Viudo

D8. ¿Vive solo?

☐ Sí ☐ No

D9. ¿Qué idioma(s) habla en casa? Marque todas las que correspondan.

- ☐ Inglés
- ☐ Español
- ☐ Chino
- ☐ Ruso
- ☐ Otro: _____

D10. ¿Cuál es el grado o año escolar más alto alcanzado?

- ☐ No termine mis estudios
- ☐ Desde guardería o preescolar hasta el grado 12
- ☐ Graduado de la escuela secundaria o GED
- ☐ Algunos créditos universitarios, sin título
- ☐ Diploma básico (por ejemplo, AA, AS)
- ☐ Título de licenciatura (por ejemplo, BA, BS)
- ☐ Posgrado (Maestría, PhD)

D11. ¿Es/está usted actualmente…?

- ☐ Empleado
- ☐ Trabajo por cuenta propia
- ☐ Sin trabajo por 1 año o más
- ☐ Sin trabajo por menos de 1 año
- ☐ Ama de casa
- ☐ Estudiante
- ☐ Jubilado o retirado
- ☐ Incapacitado para trabaja

D12. ¿Cuál es el ingreso anual de su hogar? (sumando todas las fuentes)

- ☐ Menos de $10,000
- ☐ $10,000 – $14,999
- ☐ $15,000 – $24,999
- ☐ $25,000 – $34,999
- ☐ $35,000 – $49,999
- ☐ $50,000 – $74,999
- ☐ $75,000 – $99,999
- ☐ $100,000 – $149,999
- ☐ $150,000 – $199,999
- ☐ $200,000 o más

D13. ¿Dónde vive?

☐ Brooklyn ☐ Bronx ☐ Manhattan ☐ Queens ☐ Staten Island
☐ Long Island, Condado de Nassau ☐ Long Island, Condado de Suffolk ☐ Westchester
☐ New Jersey ☐ Otro: _____

D14. ¿Cuál es el código postal del lugar donde vive? _____

D15. Use el espacio a continuación para compartir con nosotros cualquier otra necesidad relacionada con los músculos, los huesos, las articulaciones o de reumatología que le gustaría que el Hospital for Special Surgery conociera:

¡Gracias por completar esta encuesta!

Por favor regrese esta encuesta antes del 15 de abril del 2016 para poder asegurarnos de que su opinión sea tomada en cuenta.

Envíenos de regreso la encuesta completa en una de las siguientes maneras:

1. **Por correo** en el sobre prepago adjunto
2. **Entrega personal** en: Oficina de la división de asuntos académicos y educativos del Hospital for Special Surgery, ubicada en: 517 East 71st Street, NY, NY 10021 –
   Attn: Titilayo Ologhobo

Si tiene alguna pregunta o inquietud acerca de la encuesta, por favor póngase en contacto con Titilayo Ologhobo, Gerente de resultados en salud pública, llamando al 212-774-2185.

HOSPITAL FOR SPECIAL SURGERY

社區健康需求評估（CHNA）

HSS（Hospital for Special Surgery) 想要聆聽您有關肌肉、骨骼和關節狀況方面的需求。這將幫助我們提供對您重要的項目和服務。這份問卷調查中我們不需要您的姓名。完成這份問卷調查將不會影響 HSS 向您提供的任何照護。請不要遲於 **2016 年 4 月 15 日**交回這份問卷調查，那樣我們可以確保您的意見受到重視。感謝您的幫助！

A. 健康狀況和生活質量：以下是關於您的總體感覺如何以及關於您可能有的健康狀況的問題。請從所列選項中選擇您的回答。如果您不確定，請盡可能給出最佳答案。

A1.一般來說，您會怎樣形容您的健康狀況？

☐極佳
☐非常好
☐好
☐一般
☐不好
☐不知道

A2.現在考慮一下您的**身體健康**，包括身體疾病和損傷，在**過去 30 天**期間有多少天您的身體健康不好？

☐無（0 天）
☐ 1-7 天
☐ 8-13 天
☐ 14 天或更多

A3. 是否曾有醫護人員告訴您您患有……

		是	否
a)	骨關節炎(OA)	☐	☐
b)	風濕性關節炎(RA)	☐	☐
c)	狼瘡	☐	☐
d)	纖維肌痛	☐	☐
e)	痛風	☐	☐
f)	一些其他形式的關節炎	☐	☐
g)	骨質疏鬆症	☐	☐
h)	其他：_____		

注意：如果您對問題 A3 的所有部分的回答都是「否」，請跳至問題 A6。

A4.**在過去 30 天內由於您的疾病**您出現過以下哪些症狀？

		是	否
a)	關節/骨骼疼或痛	☐	☐
b)	肌肉疼或痛	☐	☐
c)	僵硬	☐	☐
d)	疲倦	☐	☐
e)	體重變化	☐	☐
f)	皮疹	☐	☐
g)	脫髮	☐	☐
h)	情緒變化（感覺悲傷、易怒等）	☐	☐
i)	無法思想集中	☐	☐
j)	記憶力變化	☐	☐
k)	平衡出現問題	☐	☐
l)	其他：_____		

A5. 您現在是否因為您的關節炎或關節症狀而在您的任何日常活動中受到任何形式的限制？

☐是 ☐否 ☐不知道

A6. 在過去一年中，您是否摔倒過？

☐是 ☐否 ☐不知道

注意：如果您對問題 A6 的回答是「否」，請跳至問題 A9。

A7. 如果***是***，您是否因摔倒而導致任何骨折？

☐是 ☐否 ☐不知道

A8. 您是否和您的醫生或其他醫護人員談論過您摔倒的事？

☐是 ☐否 ☐不知道

A9. 現在考慮一下您的**心理健康**，包括壓力、抑鬱和情緒問題，在**過去30天**期間有多少天您的心理健康不好？

☐無（0 天） ☐ 1-7 天
☐ 8-13 天 ☐ 14 天或更多

A10.在**過去30天**中，您受到這些問題困擾的頻率如何？

	完全沒有	很少的時候	一些時候	大多數時候	所有的時候	不知道
a) 感覺緊張、焦慮或煩躁不安：	☐	☐	☐	☐	☐	☐
b) 無法停止或控制擔憂：	☐	☐	☐	☐	☐	☐
c) 感覺情緒低落、憂鬱或無助：	☐	☐	☐	☐	☐	☐
d) 做事時沒有什麼興趣或樂趣：	☐	☐	☐	☐	☐	☐

A11. 這個問題詢問您在進行某些活動時因為**健康問題**而遇到的困難。健康問題是指任何身體、心理或情緒上的問題或疾病（不包括懷孕）。

在不使用任何醫療器件情況下自己完成，對您來說以下有多困難……

	一點都不困難	僅有一點點困難	有些困難	非常困難	完全無法做	不進行這一活動	不知道
a) 行走四分之一英里——大約 3 個城市街區	☐	☐	☐	☐	☐	☐	☐
b) 在不休息的情況下往上走 10 級台階	☐	☐	☐	☐	☐	☐	☐
c) 俯身、彎腰或跪下	☐	☐	☐	☐	☐	☐	☐
d) 用您的手指抓住小物件	☐	☐	☐	☐	☐	☐	☐

A12. 在**過去 30 天**期間，有多少天**疼痛**使您進行日常活動产生困難，比如個人護理、工作或興趣愛好？

☐無（0 天） ☐ 1-7 天
☐ 8-13 天 ☐ 14 天或更

B. 健康行為與生活方式：接下來的一系列問題是關於您可能進行的*身體活動或鍛煉*、關於您的*飲食習慣*、您食用的食品和飲用的飲品，以及關於您的性行為。身體活動是指使您身體移動的任何活動。

B1. 您一週會做多少次持續至少 25 分鐘、導致**大量**出汗或者呼吸或心律**大幅**加快的**劇烈的、業餘時間進行的**身體活動（比如說跑步）？

☐一週 5 次或更多
☐一週 3 – 4 次
☐一週 1 – 2 次
☐無

B2. 您一週會做多少次持續至少 30 分鐘、**僅**導致**少量**出汗或者呼吸或心律**輕微到中度**加快的**輕度或中度、業餘時間進行的**身體活動（比如說散步）？

☐一週 5 次或更多
☐一週 3 – 4 次
☐一週 1 – 2 次
☐無

B3. 您在業餘時間進行專門為鍛煉**肌肉**所設計的身體活動的頻率是怎樣的，比如舉重或做健身操（如俯臥撐、引體向上、深蹲、分腿跳）？

☐一週 1 – 2 次
☐沒有能力進行這樣的活動
☐從來沒有

B4. 在過去 12 個月中，是否有醫生或其他健康專業人士建議過您減輕體重？

☐是 ☐否 ☐不知道

B5. 在過去 12 個月中，是否有醫生或其他健康專業人士建議過您加強鍛煉？

☐是 ☐否 ☐不知道

B6. 一般而言，您的飲食健康如何？健康飲食包括瘦肉蛋白、低脂奶製品、水果和蔬菜、全穀類和健康的脂肪。

☐極佳 ☐非常好 ☐好
☐一般 ☐不好

B7.您想要吃得更健康嗎？

☐是 ☐否 ☐不知道

注意：如果您對問題 B7 的回答是「否」，請跳至問題 B9。

B8. 如果您想要吃得更健康，是什麼阻止您這樣做？

		是	**否**
a)	健康食品太貴	☐	☐
b)	我不喜歡這種味道	☐	☐
c)	在我住的地方沒有可以找到健康食品的地方	☐	☐
d)	需要太多的時間和精力來準備	☐	☐
e)	我不知道該吃什麼食品	☐	☐
f)	家人和朋友不這樣吃	☐	☐
g)	其他：_____		
h)	不適用——我已經吃得很健康	☐	

B9.您的肌肉、骨骼或關節狀況是否影響了您的生殖健康？

☐是 ☐否 ☐不知道

B10. 如果是，選擇所有適用項：

☐懷孕
☐性慾和滿意度下降
☐被觸摸時的敏感度增加
☐尿路感染
☐陰道乾澀
☐運動受限/疼痛
☐不育
☐性交/親密接觸減少
☐勃起功能障礙/陽痿
☐性吸引力的感覺下降
☐其他：_____

C. 醫療資源使用狀況：這些問題是關於您的醫療保健經歷和醫療保健教育需求。請從所列選項中選擇您的答案。如果您不確定，請盡可能給出最佳答案。

C1. 您目前是否有健康/醫療保險？

☐是
☐否
☐不知道

注意：如果您對問題 C1 的回答是「否」，請跳至問題 C3

C2.您醫療保險的主要來源是什麼？

☐通過僱主或工會購買的保險計劃（包括通過另一個人的僱主購買的保險計劃）
☐您或另一位家庭成員自己購買的保險計劃
☐聯邦醫療補助 (Medicaid/白卡)
☐聯邦醫療保險 (Medicare/紅蘭卡)
☐TRICARE（原 CHAMPUS）、VA 或軍隊(Military)
☐阿拉斯加原住民、印第安人健康服務、部落健康服務
☐某種其他來源
☐不知道

注意：通過健康保險市場（Health Insurance Marketplace）購買的健康保險：如果是您自己（或一位家庭成員）購買的，選擇選項 2，如果是聯邦醫療補助（Medicaid），選擇選項 3。

C3. 如果您在**過去 12 個月**中有过没有保险的情况，原因是什麼？

勾選所有適用項。

☐我的僱主不提供
☐我自僱
☐我目前失業
☐我負擔不起保險
☐我身體健康，認為我不需要
☐其他原因：_____
☐不適用

C4. 在過去 12 個月內，您是否接受過以下：

	是	否
a. 預防接種（比如流感疫苗）	☐	☐
b. 乳房 X 光檢查 (僅限女性)	☐	☐
c. 子宮頸抹片檢查(僅限女性)	☐	☐
d. 前列腺檢查 （僅限男性）	☐	☐
e. 性傳染疾病/ 艾滋病檢查	☐	☐

C5. 在**過去 12 個月**中，是否有過您需要看醫生但無法去看的時候？

☐有过
☐没有过
☐不知道

注意：如果您對問題 C5 的回答是「否」，請跳至問題 C7

C6. 如果有过，您無法看医生的原因是什麼？勾選所有適用項。

☐負擔不起
☐沒有健康保險
☐保險不承保該服務
☐缺乏交通工具
☐很難預約
☐不確定該去哪裡
☐家庭責任（比如無法照料小孩）
☐語言（比如没有懂我語言的医生）
☐診所不便於患者（比如等候時間長、營業時間不方便）
☐其他原因：_____

C7. 您遵循您的醫生或其他醫護人員的醫囑的頻率如何？

☐從來不遵循
☐有的時候不遵循
☐通常都遵循
☐總是

C8.有的時候人們並不遵循他們的醫生或其他醫護人員的醫囑。請告訴我們可能適用於您的原因。勾選所有適用項。

	是	否
a) 提供者對治療的講解不夠好（由於缺乏時間、漠不關心的態度或很難理解）	☐	☐
b) 感覺治療不會有所幫助	☐	☐
c) 對治療費用有所顧慮	☐	☐
d) 忘了服藥/前往後續複診	☐	☐
e) 提供者不理解我的文化/語言	☐	☐
f) 狀況沒有嚴重到需要治療的程度	☐	☐
g) 擔心治療的副作用	☐	☐
h) 更喜歡使用補充/替代治療	☐	☐
i) 不適合我的時間表/對我來說不方便	☐	☐
j) 與醫生/提供者意見不一致	☐	☐
k) 其他原因：_____		
l) 不適用——總是遵循我的醫生或其他醫療保健提供者的醫囑		☐

C9. 當您看醫生（或其他醫護人員）時，您做以下事項的頻率如何：

	從來不	有的時候	通常	總是
a) 為您的醫生（或其他醫療保健提供者）準備一份問題列表	☐	☐	☐	☐
b) 就有關治療中您不理解的事情提問	☐	☐	☐	☐
c) 討論可能與您的疾病有關的任何個人問題	☐	☐	☐	☐

C10. 對於能夠管理好疾病的症狀以進行您想要做的事情，您有多大的信心？

☐一點沒信心 ☐有些信心 ☐有信心 ☐非常有信心

C11. 您會如何評價您說英語和理解英語的能力？

☐極佳 ☐非常好 ☐好 ☐一般 ☐不好

C12. 您更傾向於用哪種語言討論健康問題？

☐英語 ☐西班牙語 ☐中文 ☐俄語 ☐其他：_____

C13. 您更傾向於閱讀哪種語言的醫療或保健說明書？

☐英語 ☐西班牙語 ☐中文 ☐俄語 ☐其他：_____

C14. 您是否需要他人的幫助來理解醫生的醫囑或藥房的說明書，小冊子以及其他書面材料嗎

☐從來不 ☐很少時候 ☐有的時候 ☐經常 ☐總是

C15. 您通常是從哪裡獲得您的健康資訊/建議？

勾選所有適用項。

☐診所或健康中心
☐醫生辦公室或健康維護組織(HMO)
☐醫院急診室
☐醫院門診部
☐家人
☐朋友/同事
☐互聯網
☐其它：_____
☐不經常尋求健康資訊或建議

C16.您是否**曾經**上過教育課程或教育課學習如何管理您的骨骼、肌肉和關節健康/疾病？

☐是 ☐否 ☐不知道

C17. 您會有興趣參加以下健康教育活動嗎？

勾選所有適用項。

☐鍛煉課程，比如太極、普拉提或瑜伽
☐允許親身實踐、小組學習的研討會
☐在 HSS 進行的有關預防或管理肌肉骨骼或風濕性疾病及一般健康的現場講座
☐在您電腦上進行的有關預防或管理肌肉骨骼或風濕性疾病及其他健康和保健話題的網上講座
☐可下載並直接在您電腦上觀看的播客、免費音頻和視頻節目，包含由我們醫院的醫師和工作人員展示的訪談、患者見證、疾病或治療集錦和其他題材
☐以上都沒興趣

D. 關於您：請向我們介紹一下您自己和您的背景，那樣我們可以對我們服務的社區了解得更多。

D1. 您的性別是什麼？

☐女
☐男
☐性別不適者
☐變性女(MtF)
☐變性男(FtM)
☐其他：_____

D2. 您的性取向是什麼？

☐異性戀
☐女同性戀
☐男同性戀
☐雙性戀
☐其他
☐不知道

D3. 您的年齡是多少？____

D4.您認為自己是西語裔/拉丁裔嗎？

☐是 ☐否

D5. 您認為以下這些團體中哪個最能代表您的種族？

勾選所有適用項

☐美國印第安人/阿拉斯加原住民
☐亞裔
☐黑人或非裔美國人
☐夏威夷原住民/其他太平洋島民
☐白人
☐其他：_____

D6.請告訴我們您的族裔；您想列舉多少就可以列舉多少（例如：華裔、尼日利亞裔、意大利裔、波多黎各裔、俄羅斯裔等）

D7. 您目前的婚戀狀況是什麼？

☐單身（從未結過婚）
☐已婚
☐如夫妻般同居
☐有戀愛關係
☐分居
☐離婚
☐喪偶

D8. 您一個人住嗎？

☐是 ☐否

D9.您在家中說什麼語言？標註所有適用項。

☐英語
☐西班牙語
☐中文
☐俄語
☐其他：_____

D10. 您完成的最高年級或學校是什麼？

☐沒有上過學
☐幼兒園或學前班到 12 年級
☐高中畢業或 GED
☐一些大學學分，無學位
☐副學士學位（如 AA、AS）
☐學士學位（如 BA、BS）
☐研究生（碩士、博士）

D11. 您目前是……嗎？

☐受僱
☐自僱
☐沒有工作 1 年或更久
☐沒有工作不到 1 年
☐家庭主婦/夫
☐學生
☐退休
☐不能工作

D12. 您家庭每年的總收入是多少？

☐少於$10,000
☐ $10,000 – $14,999
☐ $15,000 – $24,999
☐ $25,000 – $34,999
☐ $35,000 – $49,999
☐ $50,000 – $74,999
☐ $75,000 – $99,999
☐ $100,000 – $149,999
☐ $150,000 – $199,999
☐ $200,000 或更多

D13.您住在哪裡？

☐布魯克林 ☐布朗士 ☐曼哈頓 ☐皇后區 ☐史丹頓島
☐長島、納蘇郡 ☐長島、蘇福克郡 ☐韋斯切斯特
☐新澤西 ☐其他：_____

D14. 您居住地的郵政編碼是多少？_____

D15. 請使用以下空間與我們分享您想要 Hospital for Special Surgery 了解的，與您的肌肉、骨骼、關節或風濕病相關的任何其他需求：

感謝您完成這份問卷調查！

請不要遲於 2016 年 4 月 15 日交回這份問卷調查，那樣我們可以確保包括您的意見。

請將完成的問卷調查以下面一種方式送回給我們：

1. 使用隨附的預付郵資的信封**郵寄交至**：
   Titilayo Ologhobo
   HSS（Hospital for Special Surgery Education & Academic Affairs Division）
   517 East 71st Street, NY, NY 10021

如果您對問卷調查有任何問題或顧慮，請聯絡公共健康經理（Public Health Outcomes Manager）Titilayo Ologhobo，電話號碼為 212-774-2185

Appendix B: CHNA Survey Development - Feedback from Internal Stakeholders and Community Partners

2016 HSS CHNA Internal & External Feedback Summary

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
Health Status and Quality of Life	**A1 (V)**. Would you say that in general your health is?	**Susan Cha** - I think question A1 and A2 are basically asking the same thing – maybe they can be combined? **Carol Page** - Add poor to response options	**Moya Brown** – *Suggest rephrasing question to say "In* general, would you say that your health is?"
	A2 (V). Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?		**Sharon Diatz/Aicha Diallo Bennett** - Is there a way that the word 'not good' could be defined so that patients fully understand and adequately answer the question for the data you need? For instance, by 'not good' do you mean 'not healthy', 'healthy but not the best' etc.…?
	A3 (V). Have you ever been told by a healthcare provider that you have…		**Diane Gross** – *"Check all that apply"* I think this is unnecessary since you are asking people to check yes or no. If you were only asking them to check if they had the condition, then this would make sense
	A4 (V). Which of the following symptoms have you experienced within the past 30 days due to your condition(s)?		
	A5 (V). Are you now limited in any way in any of your usual activities because of your arthritis or joint symptoms?		
	A6 (V). In the past year, have you fallen down?		**Diane Gross** - Maybe indicate If no, skip to A9
	A7 (V). If ***Yes***, did you break any bones as a result of your fall?		**Diane Gross** – *"Response option"* Not clear what would lead someone to say not applicable?
	A8 (V). Did you talk to your doctor or other healthcare provider about your fall(s)?		**Diane Gross** – *"Response option"* Not clear what would lead someone to say not applicable?
	A9 (V). Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days	**Susan Cha** - A9 is a good question for mental health screen but A10 is only screening for depression.	**Kam Kwong** - "mental health not good"??? I can comment that my health or mental condition stable or not without

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
	was your mental health not good?	**Carol Page** - Long and complex (potential literacy issue). I would divide them into 2 sentences, something like: "Physical health includes physical illness and injury. For how many days in the past 30 days…."	symptoms or I have bright mood or not, but not sure mental health good or not. **Sharon Diatz/Aicha Diallo Bennett** - Is there a way that the word 'not good' could be defined so that patients fully understand and adequately answer the question for the data you need? For instance, by 'not good' do you mean 'not healthy', 'healthy but not the best' etc.…?
	A10 (V). Over the last 30 days, how often have you been bothered by these problems?	**Susan Cha** – Do we need this question?	
	A11 (V). The next question asks about difficulties you may have doing certain activities because of a HEALTH PROBLEM. By "health problem" we mean any physical, mental, or emotional problem or illness (not including pregnancy). By yourself, and without using any special equipment, how difficult is it for you…		
	A12 (V). During the past 30 days, for how many days did pain make it hard for you to do your usual activities, such as personal care, work, or hobbies?		
Health Behaviors &	**B1 (V)**. How often do you do vigorous leisure-time physical activities for at least 25 minutes that cause heavy sweating or large increases in breathing or heart rate?		**Kam Kwong -** Questions somewhat difficult for low literate populations because they lump several concepts in the same questions – having ideas to differentiate between rigorous, light, or moderate activities; leisure time activities or not; duration, 25 min, 30 min, more or less; own assessment of effects of exercising - heavy or light sweating, breathing, heart rates etc. let say they engage in such activity less than 25 minutes but feel heavy

2016 HSS CHNA Internal & External Feedback Summary

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
Lifestyle			sweating, or engage in moderate activity for more than 30 minutes but have no sweating. It may work better to break them down in separate questions for B1-B3 and have participants to describe what they do, for example, provide a list of activities with time duration (not necessary to ask participants to comment if these activities are rigorous or not, sweating, etc), ask them to check yes or not if they participate in such activity, then in the same row, ask them to indicate how many times a week if they do that? With their answers, we can tally if they follow certain recommended guidelines for physical activity.
	B2 (V). How often do you do light or moderate leisure-time physical activities for at least 30 minutes that cause only light sweating or a slight to moderate increase in breathing or heart rate?		**Kam Kwong –** Same comment as above
	B3 (V). How often do you do leisure-time physical activities specifically designed to strengthen your muscles such as lifting weights or doing calisthenics (such as push-ups, pull-ups, squats, jumping jacks)?	**Carol Page** - Add 3 or more times a week	**Diane Gross** - The order of the answers for this question switches from the questions above which I think can be confusing and there is no option for 3-4 times and 5+. Suggest making order the same as above two questions and adding the other categories. And is there a reason why this question has the option of unable to do such activities and the above questions don't?
	B4 (V). In the past 12 months, has a doctor or other health professional suggested that you lose weight?		**Diane Gross**. What if you have not seen a doctor in the past 12 months, you would say no, so you don't know if they are saying no because they have not sought out medical care or because they did see a doctor but were not told

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
			this. Maybe there should be a question about when was the last time they saw a doctor.
	B5 (V). In the past 12 months, has a doctor or other health professional suggested that you do physical activity or exercise?		
	B6 (V). In general, how healthy is your overall diet? A healthy diet includes lean protein, low-fat dairy, fruits and vegetables, and whole grains.		**Kam Kwong -** Ask participants to comment if they think their overall diet is healthy or not seems too general and subjective, A Chinese elderly may believe that eating a bun with congee is healthy. I wonder if any other questions about healthy diet that we can use to solicit more specific information to assess their eating choices and preference. **Karl Terry** – Suggest adding health fats (nuts, avocado, fatty fish, unsaturated oils) to the question **Moya Brown** – Suggest adding a new question "Would you like to eat healthier?"
	B7 (V). If you would like to eat healthier, what keeps you from doing so?		**Diane Gross** – *"Does not apply - I already eat healthy"* I found this a bit confusing because it looks like it's under No so suggest either Yes and No like the others or set it off somehow.
	B8. Have your muscle, bone and/or joint conditions(s), affected your sexual health in any way		
	B9. If Yes, choose all that apply		

2016 HSS CHNA Internal & External Feedback Summary

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
Use of and Access to Care	**C1 (V)**. Do you currently have health insurance/coverage?		
	C2 (V). What is the primary source of your health care coverage?		**Carol Ban –** *"Response option"* I would consider using "provided by" rather than "purchased from" an employer since some people may not consider the fact that they are paying their employer for their health insurance through paycheck deductions as "purchasing the insurance". I think you want to know who has insurance provided through an employer.
	C3 (V). If you do not currently have health insurance or you have not had insurance at any time in the past 12 months, what are the reasons why?		**Kam Kwong -** If you do not currently have health insurance or you have not had insurance at any time in the past 12 months seem redundant, what about just "If you have not had health insurance at any time in the past 12 months"?
	C4 (V). Have you received the following within the past 12 months:		**Diane Gross** –*"Response options"* For option b and c - this only pertains to women, what about men and how does this relate to muscle bone and joint health? Seems out of place. **Sharon Diatz/Aicha Diallo Bennett** - Some patients might have had their immunizations done but the example listed 'such as flu shot' might throw them off if they haven't received that particular shot and they might answer no.
	C5 (V). Was there a time in the past 12 months when you needed to see a doctor but could not?		
	C6 (V). If Yes, what were the reasons why you could not do so? Check all that apply.		**Kam Kwong** - one asks about reasons not seeing a doctor, one asks about not following doctor's advice, I feel that some answer choices particularly

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
			structural and socioeconomic barriers listed in both questions – concern about the cost, do not fit schedule, etc can be redundant, my suggestions, C6 asks about structural and socioeconomic barriers to seeking health care, maybe not getting necessary medical care rather than seeing a doctor and you can retain all answer choices currently listed.
	C7 (V). How often do you follow your doctor or other healthcare provider's medical advice?		**Diane Gross** - What if they have not seen a doctor? See comment to question B4.
	C8 (V). Sometimes people don't follow their doctor or other healthcare provider's medical advice. Please tell us the reasons that may apply to you. Check all that apply.		**Diane Gross** - Formatting is off on this questions, second line should be indented and answers should start with **a** not **i.** *"Response option* ***t*** *"*- Same comment as above. I found this a bit confusing because it looks like it's under No so suggest either Yes and No like the others or set it off somehow. **Kam Kwong -** You ask about barriers in working with doctors and completing treatment etc, you can list those responses related to working with doctors, inadequate communication, provider lack of understanding, etc, then individual personal health beliefs and help seeking preference such as do not believe that one's condition is severe, prefer to use complementary and alternative treatment, etc. Take out those answer choices that you have covered already in C6.
	C9 (V). When you visit your doctor (or other healthcare provider), how often do you do the following …		

2016 HSS CHNA Internal & External Feedback Summary

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
	C10 (V). How confident are you that you can manage symptoms of your condition so that you can do the things that you want to do?		
	C11 (V). How would you rate your ability to speak and understand English?		
	C12 (V). What is your preferred language for discussing healthcare?		
	C13 (V). In what language would you **prefer** reading medical or healthcare instruction?		
	C14 (V). How often do you need to have someone help you when you read instructions, pamphlets, or other written materials from your doctor or pharmacy?		
	C15 (V). Where do you usually obtain your health information / advice?		**Carol Ban -** In the section about where do you obtain information about health insurance, many obtain information from magazines and books (it does say "other" but you may want to add a separate category or include with internet. **Kam Kwong -** The first answer choice community-based clinic or community health center and the 4th answer choice will be hospital-based or affiliated outpatient department
	C16. Have you EVER taken an educational course or class to teach you how to manage your musculoskeletal or rheumatologic health?		
	C17. Which of the following health education activities would you be interested in participating in? Check all that apply.		**Diane Gross** – *"Response option"* I would explain what you mean by "onsite." Suggest changing to None of the above **Lydia Isaac** - I think an additional question would be if we were to offer these services how likely would you be to take part in them and ask why or why

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
			not so that you can get a handle on what the barriers people have to improving their health are.
About You	**D1 (V)**. What is your gender?		
	D2 (V). What is your sexual orientation?		**Loretta Au** - Not sure how this question may help with planning. If included – perhaps you may want an option of decline to answer.
	D3. What is your age?		
	D4 (V). Do you consider yourself Hispanic / Latino?		**Henrietta Ho-Asjoe** - You may consider to allow participants to check more than one box, especially those are mixed raced
	D5 (V). Which one of these groups would you say best represents your race?		
	D6. What is your current relationship status?		**Moya Brown** – The response categories are not all mutually exclusive. For example, a respondent could be divorced/separated/widowed and also currently in a relationship. Maybe say "check all that apply", make each option more specific, or separate into two questions. **Kam Kwong -** Any reason why we use "current relationship status" rather than "current marital status" and the answer choice "in a relationship", will that be engaged?
	D7 (V). Do you live alone?		
	D8 (V). What language(s) do you speak at home?		**Diane Gross** – *"Response option"* I don't believe there is an option here for

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)
	Mark all that apply.		someone with a two year associates degree. **Moya Brown** – *"Response option"* Change Chinese to Mandarin or Cantonese
	D9 (V). What is the highest grade or year of school you completed?		**Diane Gross** - I don't believe there is an option here for someone with a two year associates degree.
	D10 (V). Are you currently…?		**Moya Brown** – *"Response option"* add full time to Employed; add a new option - Employed part-time
	D11 (V). What is your annual household income from all sources?		
	D12. Where do you live?		**Lydia Isaac** - You ask about where a person lives but don't put that in context to how where they live can contribute to the conditions that your hospitals specializes in.
	D13. What is the zip code where you live?		
	D14. Please use the space below to share with us any other muscle, bone, and joint health needs that you would like Hospital for Special Surgery to know about:		
Additional Comments			

2016 HSS CHNA Internal & External Feedback Summary

CHNA Survey Domain	CHNA Survey Question	Internal Feedback (HSS stakeholders)	External Feedback (Community partners)

General

- Overall comprehensive, well written and easy to understand. Directions and survey questions are clear
- Overall, I think it's very comprehensive and will give you great insight into your patients' health!
- Overall the survey is thorough, inclusive, and although long, it isn't repetitive
- It seems like a very comprehensive survey for eliciting basic information about the patients but to me could use some more context and depth.
- Overall, it is very well written, comprehensive and it does a great job capturing the information you are seeking.

General Layout

- Survey would be a little easier if answers were organized similarly for similar questions, e.g. order choices from negative/least to positive/most and all either horizontal or vertical. For example, A1 choices are vertical with most positive on top. B2 is vertical with most on top but B3 and C7 have least on top. C10 is horizontal with most positive to the left and C10 with most positive to the right.

Length

- I am still concerned that some patients may still have trouble answering such a long survey. Pts who may have low literacy may struggle with the different choices and options of the questions (e.g. some questions ask that the participant choose one or more options for the answer.) I am wondering if you can offer participants an option to do the survey by phone with someone asking them or guiding them through the question by reading it to them.
- It seems really long but I know all of the questions are important. If there is any way to shorten it, that would be one recommendation
- Many of the questions are almost identical to a survey that the NYC NORC (Naturally Occurring Retirement Community) programs administered several times to assess the health needs of our communities, which consist of an over 60 population. So I appreciate the importance of asking all the questions you did, which unfortunately makes the survey long which could affect the participation rate.

Health Literacy

- I think the survey questions are quite complex and the health literacy level does not applied to the general public. We usually use a third grade reading level for community surveys. Your survey questions are designed for individuals with higher education status and take charge of their well-being.
- I noted many questions were bold/highlighted, so they were extracted from validated instruments. There are still some limitations of validated instruments when they are used to administer with lowly educated, low literate, linguistically isolated, or culturally diverse populations. We also need to consider the challenges to receive valid responses if the surveys are meant to be self-administered and not thru phone/face to face interviews because we don't have the chance to clarify for any misunderstanding of survey questions.

Appendix C: CHNA Survey Pilot Feedback Summary from the Public

2016 HSS Community Health Needs Assessment (CHNA)
Community Pilot Feedback Summary

Overall Statistics

Timeframe: 11/03/2015 – 11/16/2015

Total N in Pilot: 48

- English: 26
- Chinese: 13
- Spanish: 9

Pilot Audiences:

Spanish

- Mount Sinai Adolescent Health Center (MSAHC) focus group

Chinese

- Selfhelp Innovative Senior Center members (in person)
- Mott Street Senior Center (in person)
- Westerville, Ohio (Web version)

English

- HSS Education & Academic Affairs Division staff (Web version)
- PPED team pilot in their friend/ family (in person & Web)
- Jillian's class

General Feedback

Complete Time (Minutes)

Min-5; Max-49; Average- 13.5

- English: Min-5; Max-20, Average-9.7
- Chinese: Min-5; Max-49, Average-17.2
- Spanish: Min-5; Max-46, Average-17.7

Survey Gizmo Format

- Bolding not consistent
- Font size
- Alignment (heading should be aligned to the left)
- Dark the background
- Make some columns wider (C8&A11)

Summary

Mount Sinai Adolescent Health Center (MSAHC) - Overall teens/young adults felt that the survey was simple to read and follow. The wording and language was not difficult and easy to understand. They did say that the survey did not seem teen friendly and seemed like it was mostly for an older person. They didn't think the survey was too long. One participant did say that she felt the survey was lengthy and that it would take her at least 30 minutes to fill it out.

PPED Pilot – The survey gizmo link allowed me to go on without answering some questions. You might want to consider making all of them mandatory, otherwise you might end up with incomplete fields of data/unanswered questions.

Specific Questions Feedback

CHNA Survey Question	Feedback
A1 (V). Would you say that in general your health is?	
A2 (V). Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?	
A3 (V). Have you ever been told by a healthcare provider that you have…	**MSAHC -** "how about if the person doesn't know or recognizes their symptoms or not sure if their symptoms are related to their illness." Their suggestion would be to add option "not sure". **SG Spanish -** Because, I don't know if a provider can tell me what type of illness I have. I don't understand the term provider. (proveedor);
A4 (V). Which of the following symptoms have you experienced within the past 30 days due to your condition(s)?	**MSAHC** – Same as A3
A5 (V). Are you now limited in any way in any of your usual activities because of your arthritis or joint symptoms?	
A6 (V). In the past year, have you fallen down?	**MSAHC -** The participant suggested adding a question to ask patient how they fell.
A7 (V). If ***Yes***, did you break any bones as a result of your fall?	
A8 (V). Did you talk to your doctor or other healthcare provider about your fall(s)?	
A9 (V). Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?	
A10 (V). Over the last 30 days, how often have you been bothered by these problems?	

CHNA Survey Question	Feedback
A11 (V). The next question asks about difficulties you may have doing certain activities because of a HEALTH PROBLEM. By "health problem" we mean any physical, mental, or emotional problem or illness (not including pregnancy). By yourself, and without using any special equipment, how difficult is it for you…	**Education** - Consider changing the word health "PROBLEM" to health "CONDITION" **Chinese Senior Center –** "What does special instrument" mean?
A12 (V). During the past 30 days, for how many days did pain make it hard for you to do your usual activities, such as personal care, work, or hobbies?	**PPED** - "Pain" physical or emotional?
B1 (V). How often do you do vigorous leisure-time physical activities for at least 25 minutes that cause heavy sweating or large increases in breathing or heart rate?	**MSAHC** - "What does vigorous mean?" Their suggestion would be using intense or aggressive instead of vigorous. **Chinese Senior Centers** – add examples
B2 (V). How often do you do light or moderate leisure-time physical activities for at least 30 minutes that cause only light sweating or a slight to moderate increase in breathing or heart rate?	**MSAHC** - There's a difference between physical activity and exercising. One can interpret physical activity as simply just moving around or walking. They suggested adding some examples. **Chinese Senior Centers** – add examples
B3 (V). How often do you do leisure-time physical activities specifically designed to strengthen your muscles such as lifting weights or doing calisthenics (such as push-ups, pull-ups, squats, jumping jacks)?	**MSAHC** – Same as B2. **PPED** – what if I did more than 2 times a week?
B4 (V). In the past 12 months, has a doctor or other health professional suggested that you lose weight?	
B5 (V). In the past 12 months, has a doctor or other health professional suggested that you do physical activity or exercise?	
B6 (V). In general, how healthy is your overall diet? A healthy diet includes lean protein, low-fat dairy, fruits and vegetables, and whole grains.	
B7. Would you like to eat healthier?	
B8 (V). If you would like to eat healthier, what keeps you from doing so?	
B9. Have your muscle, bone and/or joint conditions(s),	**MSAHC** - Participants suggested adding an explanation of what sexual health

CHNA Survey Question	Feedback
affected your sexual health in any way	means. As well as adding an option for patients to choose, "not sexually active" and "if not sexually active then skip to B10".
B10. If Yes, choose all that apply	**MSAHC-** an STI/STD question should be added after B10
C1 (V). Do you currently have health insurance/coverage?	
C2 (V). What is the primary source of your health care coverage?	**MSAHC-** Participants said that the option (A plan that you or another family member buys on your own) is confusing or not sure what it means. Most teens don't know what the health insurance marketplace is
C3 (V). If you do not currently have health insurance or you have not had insurance at any time in the past 12 months, what are the reasons why?	
C4 (V). Have you received the following within the past 12 months:	
C5 (V). Was there a time in the past 12 months when you needed to see a doctor but could not?	
C6 (V). If Yes, what were the reasons why you could not do so? Check all that apply.	
C7 (V). How often do you follow your doctor or other healthcare provider's medical advice?	.
C8 (V). Sometimes people don't follow their doctor or other healthcare provider's medical advice. Please tell us the reasons that may apply to you. Check all that apply.	
C9 (V). When you visit your doctor (or other healthcare provider), how often do you do the following …	
C10 (V). How confident are you that you can manage symptoms of your condition so that you can do the things that you want to do?	
C11 (V). How would you rate your ability to speak and understand English?	
C12 (V). What is your preferred language for discussing healthcare?	

CHNA Survey Question	Feedback
C13 (V). In what language would you **prefer** reading medical or healthcare instruction?	
C14 (V). How often do you need to have someone help you when you read instructions, pamphlets, or other written materials from your doctor or pharmacy?	
C15 (V). Where do you usually obtain your health information / advice?	**MSAHC -** Adding, "Check all that apply" after the question **PPED -** Adding, "Check all that apply" after the question
C16. Have you EVER taken an educational course or class to teach you how to manage your musculoskeletal or rheumatologic health?	
C17. Which of the following health education activities would you be interested in participating in? Check all that apply.	
D1 (V). What is your gender?	
D2 (V). What is your sexual orientation?	
D3. What is your age?	
D4 (V). Do you consider yourself Hispanic / Latino?	
D5 (V). Which one of these groups would you say best represents your race?	
D6 (V). Please tell us about your ethnicity; you can list as many as you prefer (for example: Chinese, Nigerian, Italian, Puerto Rican, Russian, etc.)	**SG Spanish** - "I don't understand what you mean by the tem ethnicity. (etnico) (suggestion: Nacionalidad or origen etnico)
D7. What is your current relationship status?	
D8 (V). Do you live alone?	**MSAHC -** Participants suggested that there should be an option to ask if the patient lives in a shelter, group home or foster home. - Participants suggested that it'll be helpful to ask patients, "if someone helps them and in case of an emergency or if they feel very ill and can't go to their rheumatologist, if they have a nearby doctor they can go to". After D8.
D9 (V). What language(s) do you speak at home? Mark all that apply.	

CHNA Survey Question	Feedback
D10 (V). What is the highest grade or year of school you completed?	
D11 (V). Are you currently…?	**MSAHC** – Add, "Check all that apply" because some teens/young adults are employed and go to school as well.
D12 (V). What is your annual household income from all sources?	**MSAHC** - Suggested to add, "don't know" or "not sure" as options because most teens/young adults don't know what their household income is. **Chinese Senior Centers** – Question not clear. (translation issue)
D13. Where do you live?	
D14. What is the zip code where you live?	
D15. Please use the space below to share with us any other muscle, bone, and joint health needs that you would like Hospital for Special Surgery to know about:	

Appendix D: CHNA Key Findings and Summary Report

2016 HSS CHNA Key Findings Report

Sample Characteristics

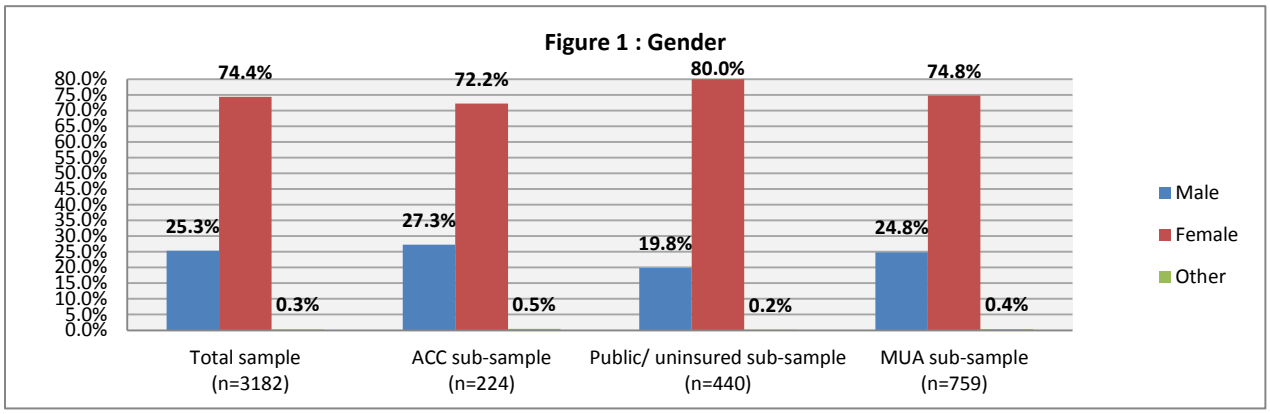
- A total of 3,182 members of the community responded to the CHNA survey, which was overwhelmingly completed in English (94.8%). The rest of the surveys were completed in Spanish (3.3%) and Chinese (1.9%).
- The CHNA was administered via the web, email, mail and in-person, with a breakdown of responses by category presented in Table 1 below. Results suggest that of the total responses, email yielded more than half (57.5%) of the responses.

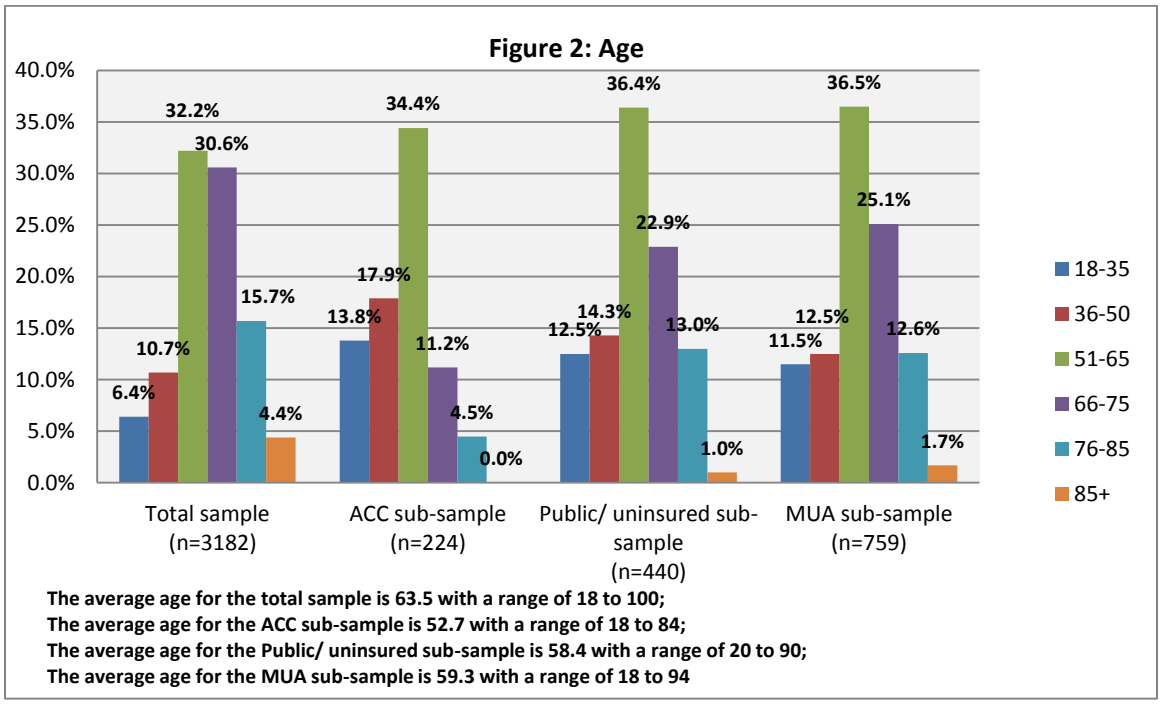
Table 1: Response Breakdown by Administration Method

Admin. Method	Subset	Language	Original N	Response Total	Response Rate	% Response of Total
Web	Facebook	English	N/A	6	N/A	0.2%
	Twitter	English	N/A	6	N/A	0.2%
	HSS website	English	N/A	79	N/A	2.5%
		Spanish		1		
	Web Total		N/A	92	N/A	2.9%
Email	PPED	English	752	74	10.0%	2.4%
		Spanish		1		
	HSS Patient	English	17,015	1632	9.6%	51.4%
		Spanish		3		
	Purchased	English	10,000	110	1.1%	3.5%
	Social Work	English	616	10	1.8%	0.3%
		Spanish		1		
	Email Total		28,383	1 ,831	6.5%	57.5%
Mail	PPED	English	9943	462	4.6%	14.5%
	Social Work	English	1276	130	12.6%	5.1%
		Chinese		9		
		Spanish		22		
	Purchased	English	5,000	236	5.8%	9.1%
		Chinese		14		
		Spanish		39		
	Mail Total		16,219	912	5.6%	28.7%
In Person	PPED	English	10	5	60.0%	0.2%
		Spanish		1		
	ACC	English	425	201	52.7%	7.0%
		Chinese		2		
		Spanish		21		
	Lenox Hill	English	30	23	83.3%	0.8%
		Chinese		2		
	Chinatown Senior Center	English	35	1	85.7%	0.9%
		Chinese		29		
	Social Work	English	65	43	95.4%	1.9%
		Chinese		4		
		Spanish		15		
	In Person Total		562	347	61.7%	10.9%
Grand Total				**3,182**		

- Primary analyses considered the total sample of 3,182 respondents
- Secondary analyses of three subgroups listed below were undertaken, with results presented throughout this report:
    - HSS Ambulatory Care Centers; ACC - (72nd street and HSS 7th floor) (n = 224) – This group represents HSS patients from more racially/ethnically diverse and lower socioeconomic backgrounds. Relative to the total CHNA respondent pool, a separate analysis was conducted to explore whether findings would also be affected.
    - Public/uninsured respondents (n = 440) – This group represent respondents who either lacked health insurance or were covered by Medicaid or Medicare/Medicaid
    - Medically Underserved Areas (MUA) (n=759) – This group represent respondents from zip codes of Medically Underserved Areas (MUA) (http://www.hrsa.gov/shortage/mua/index.html)

A. Socio-Demographic Profile





The average age for the total sample is 63.5 with a range of 18 to 100;
The average age for the ACC sub-sample is 52.7 with a range of 18 to 84;
The average age for the Public/ uninsured sub-sample is 58.4 with a range of 20 to 90;
The average age for the MUA sub-sample is 59.3 with a range of 18 to 94

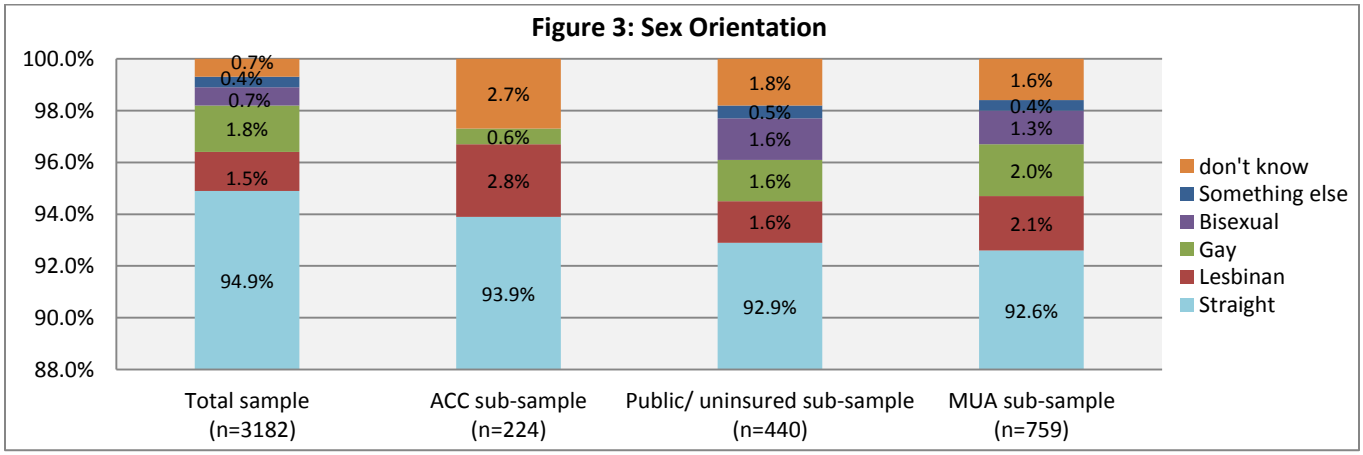


Figure 4: Race

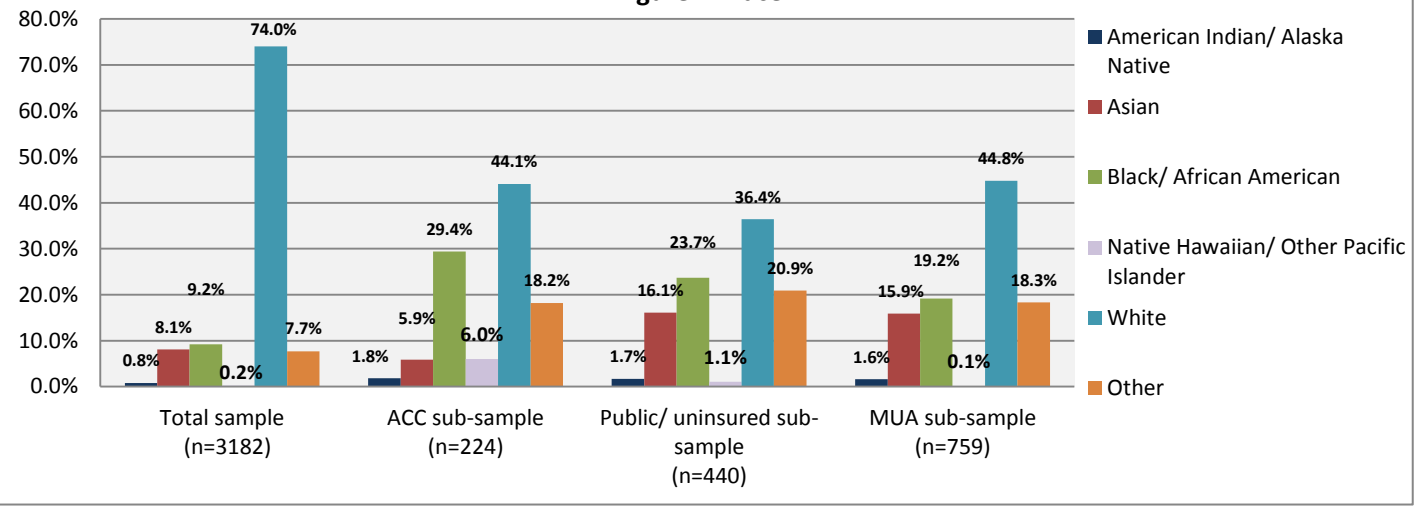


Figure 5 : Ethnicity

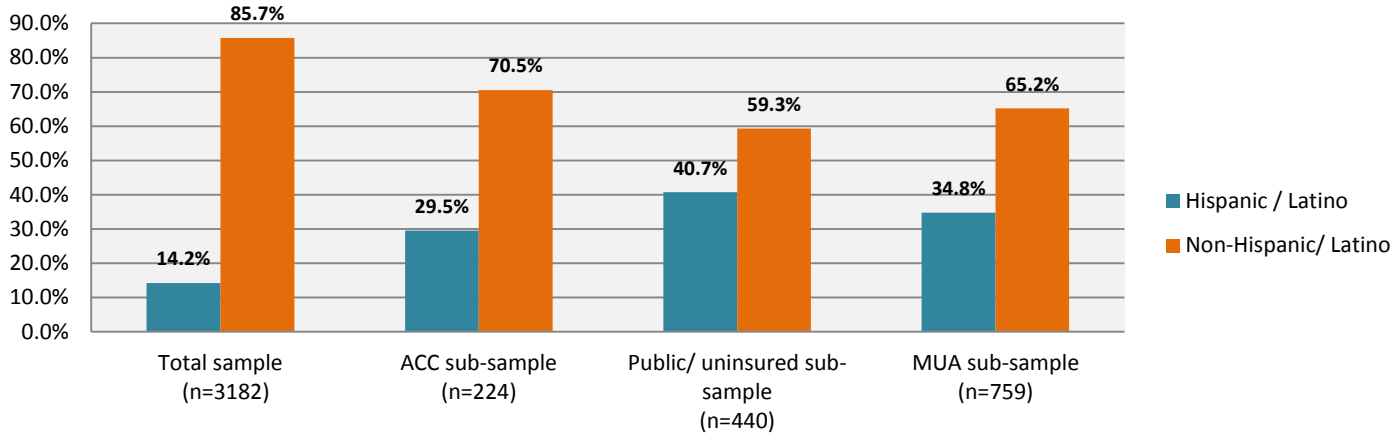


Figure 6: Relationship Status

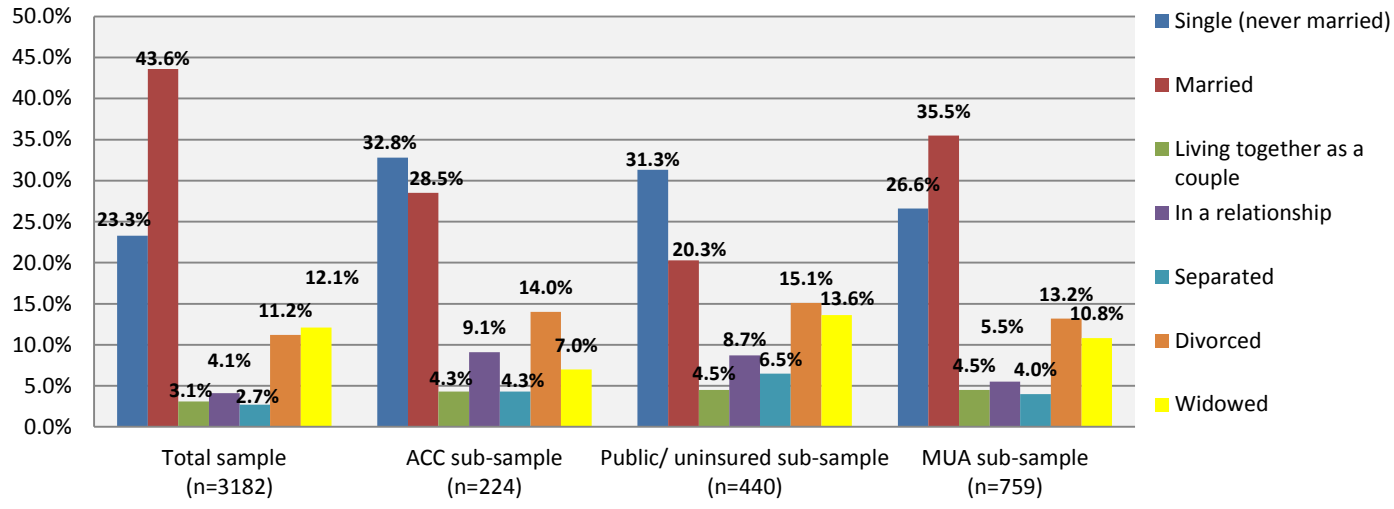


Figure 7: Do you live alone?

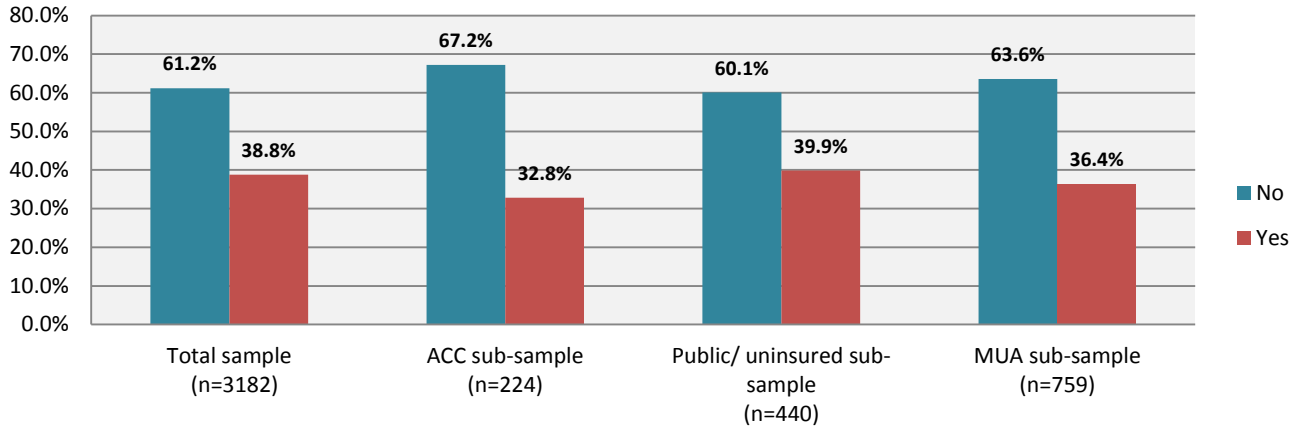


Figure 8: Language Spoken at Home

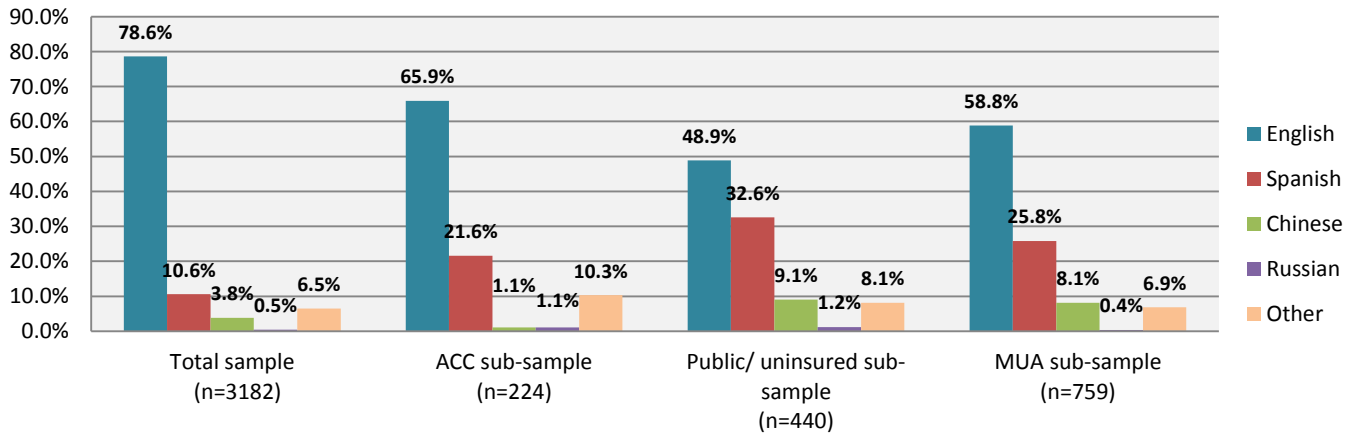


Figure 9 : Level of Education

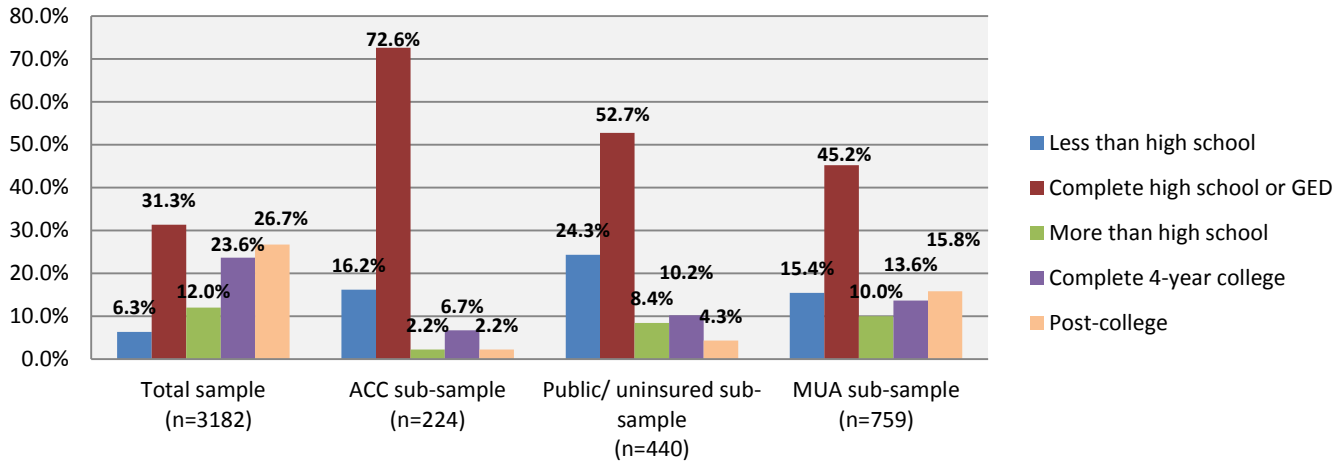


Figure 10: Annual Household Income

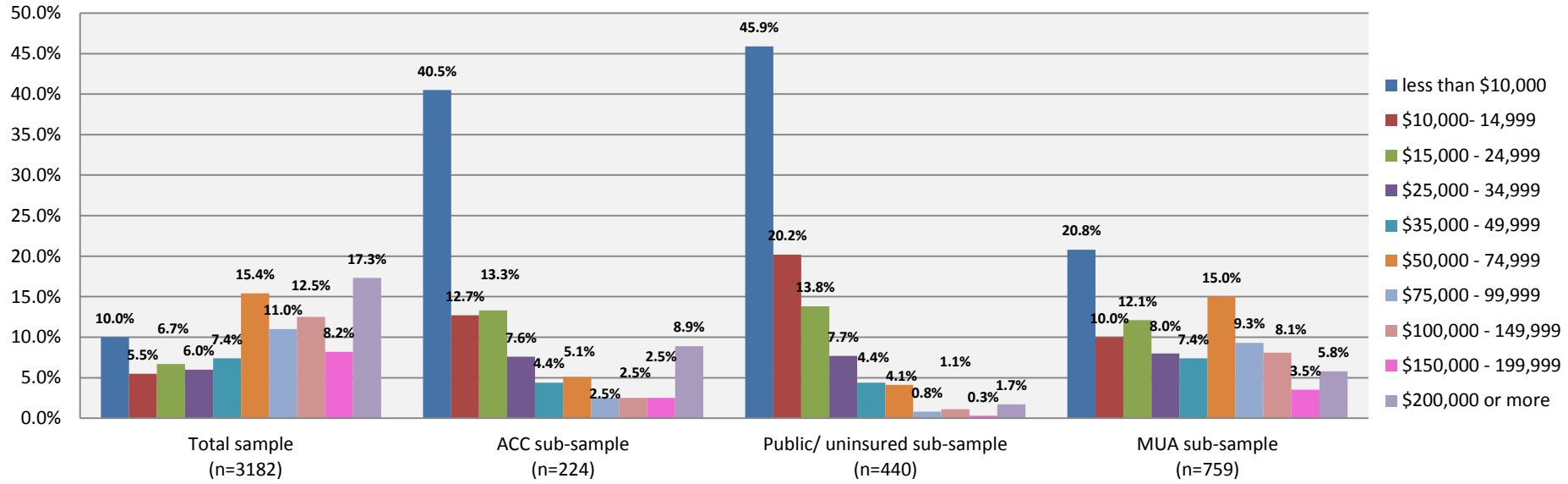


Figure 11: Work Status

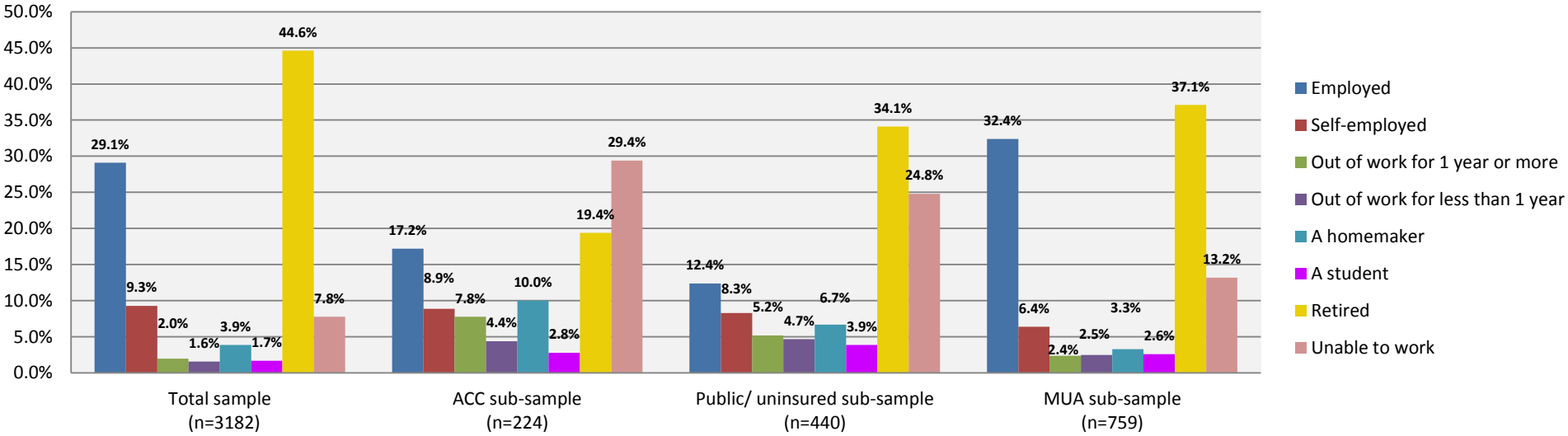
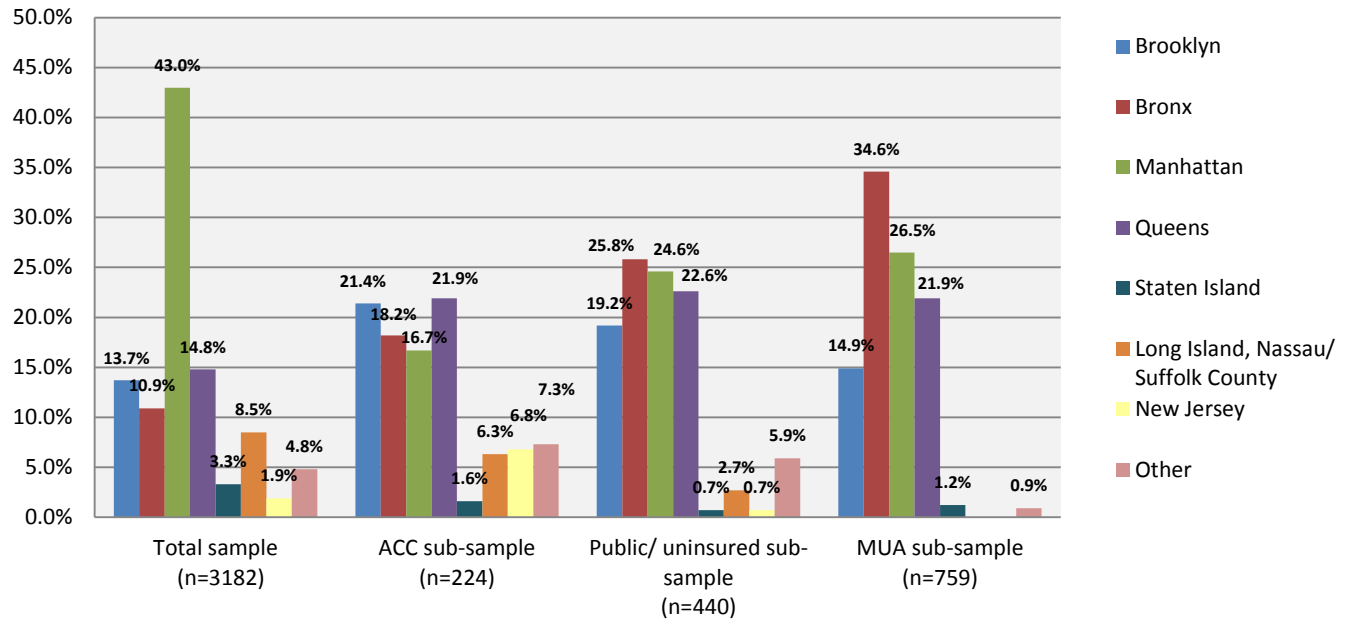


Figure 12: Geographic Location



- Sub-analyses of certain socio-demographic factors revealed the following about the samples under study:
  - Income was found to be significantly associated with geographic location in the total and all three subsamples ($p \leq 0.001$), as follows:
    - Respondents who lived in Bronx were more likely to have household income less than $10k, compared to other boroughs in all four samples
      - In the total sample, 25.9% respondents who lived in Bronx had household income less than $10k per year
      - In the ACC sub-sample, 64.3% respondents who lived in Bronx had household income less than $10k per year
      - In public/uninsured sub-sample, 53.2% respondents who lived in Bronx had household income less than $10k per year
      - In the MUA sub-sample, 26.3% respondents who lived in Bronx had household income less than $10k per year
    - In the total sample and MUA sub-sample, respondents who lived in Manhattan (total-27.9%; MUA-13.9%) represented the highest group having household income more than $200k
    - In the ACC sub-sample, respondents who lived in New Jersey (33.3%) represented the highest group having household income more than $200k
  - Income was found to be significantly associated with education level in the total ($p \leq 0.001$), public/uninsured ($p \leq 0.001$) and MUA sub-samples ($p \leq 0.001$), as shown in the table 2 below-

Table 2: Annual Household Income by Education level - Total, Public/Uninsured and MUA samples

	Less than High School			Completed High School or GED			More than High School			Completed 4-year College			Post-college		
	Total	**Public/ uninsured**	**MUA**	**Total**	**Public/ uninsured**	**MUA**	**Total**	**Public/ uninsured**	**MUA**	**Total**	**Public/ uninsured**	**MUA**	**Total**	**Public/ uninsured**	**MUA**
Less than $10,000	**48.9%**	**63.5%**	**52.0%**	15.8%	**45.6%**	**21.9%**	5.1%	**28.6%**	10.9%	3.5%	23.7%	7.5%	1.5%	18.2%	2.1%
$10,000 - $14,999	15.4%	18.8%	18.0%	9.0%	18.9%	12.2%	7.5%	**28.6%**	12.5%	2.1%	**31.6%**	2.2%	1.1%	9.1%	1.0%
$15,000 -$24,999	13.9%	9.4%	14.0%	12.3%	16.1%	15.3%	4.7%	14.3%	4.7%	4.9%	13.2%	11.8%	2.7%	18.2%	8.2%
$25,000 - $34,999	5.8%	4.7%	3.0%	11.4%	8.9%	12.2%	7.9%	10.7%	9.4%	3.3%	5.3%	2.2%	2.4%	0.0%	4.1%
$35,000 - $49,999	3.6%	2.4%	4.0%	10.9%	5.0%	7.3%	10.7%	7.1%	12.5%	5.9%	7.9%	8.6%	4.4%	9.1%	6.2%
$50,000 - $74,999	4.4%	1.2%	3.0%	**18.6%**	2.8%	17.7%	24.1%	7.1%	**25.0%**	14.1%	7.9%	17.2%	11.7%	9.1%	9.3%
$75,000-$99,999	2.9%	0.0%	3.0%	11.0%	1.1%	6.3%	11.5%	0.0%	12.5%	10.7%	0.0%	12.9%	13.9%	0.0%	20.6%
$100,000 or more	5.1%	0.0%	3.0%	10.9%	1.8%	7.3%	**28.4%**	3.6%	12.5%	**55.4%**	10.6%	**37.7%**	**62.3%**	**26.3%**	**48.5%**

Note: Income was found to be significantly associated with education in the total, public/uninsured and MUA samples (each at $p \leq 0.001$)

- In the total sample, respondents who received less than high school education were more likely to earn less than $10k a year; respondents who completed high school were more likely to earn between $50k and $75k a year; respondents who received more than high school education were more likely to earn more than $100k a year; respondents who completed college were more likely to earn more than $100k a year; respondents who had post-college education were more likely to earn more than $100k a year
- In the public/uninsured sub-sample, respondents who received less than high school education were more likely to earn less than $10k a year; respondents who completed high school were more likely to earn less than $10k a year; respondents who received more than high school education were more likely to earn less than $10k a year; respondents who completed college were more likely to earn less than S15k a year; respondents who had post-college education were more likely to earn more than $100k a year
- In the MUA sub-sample, respondents who received less than high school education were more likely to earn less than $10k a year; respondents who completed high school were more likely to earn less than $10K a year; respondents who received more than high school education were more likely to earn between $50k and $75k a year; respondents who completed college were more likely to earn more than $100k a year; respondents who had post-college education were more likely to earn more than $100k a year

- Annual household income was also found to be significantly associated with race in the total and MUA samples ($p \leq 0.001$), as shown in the table 3 below:

Table 3: Annual Household Income by Race - Total and MUA samples

	White		Black/ African American		Asian		Other	
	Total	**MUA**	**Total**	**MUA**	**Total**	**MUA**	**Total**	**MUA**
Less than $10,000	4.1%	10.6%	**19.3%**	17.7%	**21.2%**	**29.7%**	**37.1%**	**35.0%**
$10,000 - S14,999	3.3%	6.7%	10.7%	11.5%	7.3%	10.9%	10.8%	14.6%
S15,000 -$24,999	4.5%	8.4%	10.7%	13.3%	15.1%	19.8%	7.6%	9.8%
$25,000 - $34,999	4.8%	13.4%	7.1%	9.7%	8.4%	11.9%	8.7%	8.1%
$35,000 - $49,999	7.2%	8.3%	11.7%	13.3%	10.6%	4.0%	6.5%	6.5%
$50,000 - $74,999	15.7%	15.3%	16.8%	18.6%	13.4%	12.9%	14.7%	17.9%
$75,000-$99,999	12.3%	15.6%	10.7%	7.1%	5.6%	5.0%	5.9%	4.9%
$100,000 or more	**48.0%**	**19.7%**	14.4%	9.9%	18.4%	6.0%	8.8%	**3.3%**

Note: Income was found to be significantly associated with race in the total and MUA samples (each at $p \leq 0.001$)

  - Whites were more likely to earn more than $100k a year in both total and MUA samples
  - Asians were more likely to earn less than $10k a year in both total and MUA samples
  - African Americans were more likely to earn less than S10k in the total sample; and more likely to earn between $50k and $75k in the MUA sub-samples
- Income was found to be significantly associated with ethnicity in both the total and MUA samples ($p \leq 0.001$), as shown in the table 4 below:
  - In the total sample, Hispanics/Latinos (30.2%) were more likely to earn less than $10k a year, compared to non-Hispanics (6.1%)
  - In the MUA sub-sample, Hispanics/Latinos (35.0%) were more likely to earn less than $10k a year, compared to non-Hispanics (12.3%)

Table 4: Annual Household Income by Ethnicity - Total and MUA samples

	Hispanic/ Latinos		Non-Hispanic/ Latinos	
	Total	**MUA**	**Total**	**MUA**
Less than $10,000	30.2%	35.0%	6.1%	12.3%
$10,000 - S14,999	13.2%	15.5%	4.2%	6.8%
S15,000 -$24,999	11.3%	12.7%	5.6%	11.4%
$25,000 - $34,999	6.6%	6.8%	5.7%	7.5%
$35,000 - $49,999	6.9%	6.8%	7.8%	8.2%
$50,000 - $74,999	14.2%	12.7%	15.8%	16.7%
$75,000-$99,999	6.9%	5.5%	11.7%	12.3%
$100,000 or more	10.6%	5.0%	43.2%	24.9%

Note: Income was found to be significantly associated with race in the total and MUA samples (each at $p \leq 0.001$)

B. Health Status & Quality of Life

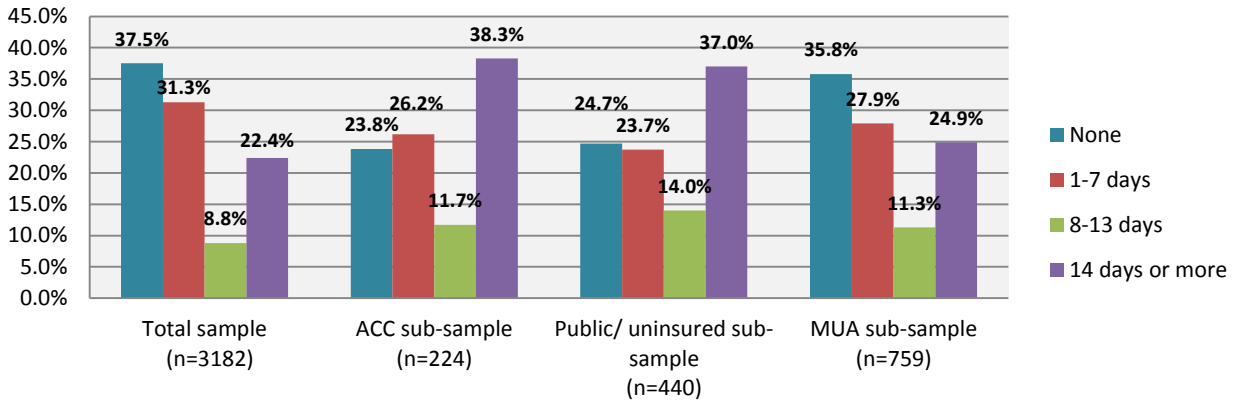
Health Status

- Majority of the respondents in the total sample (78.4%), ACC sub-sample (50.9%), public/uninsured sub-sample (50.5%) and MUA sub-sample (66.0%) rated their health status as excellent/very good/good
    - 21.6% of the total sample, 49.1% of the ACC sub-sample, 49.5% of the public/uninsured sub-sample and 34% of the MUA sub-sample rated their health negatively (poor or fair), compared to 22.4% in New York City and 15.9% in United States
    - Asians in the total sample (37.9%), and MUA sub-sample (40.6%) were more likely to rate their health negatively, followed by African Americans in the total sample (36.2%) and MUA sub-sample (34.4%), compared to Whites (total: 15.7%, MUA: 21.8%), each at the p ≤0.001 level

Physical Health

- Figure 13 shows the physically unhealthy days in the past 30 days (i.e. physical health including physical illness and injury) reported by respondents from the four samples:
    - Using the CDC Healthy Days measure and physically unhealthy definition to access physical health, results show that majority of respondents from the ACC sub-sample (38.3%) and the public/uninsured sample (37.0%) were physically unhealthy
    - In the total sample (37.5%) and MUA samples (35.8%), majority of respondents reported no physically unhealthy days

Figure 13: Physically Unhealthy Days in the Past 30 Days



- Significant associations were found among total respondents regarding physical health:
    - Significant associations were found among total respondents between those who reported 14+ days of being physically unhealthy and having OA (p ≤0.001), RA (p ≤0.001), Lupus (p ≤0.001), Fibromyalgia (p ≤ 0.001), Gout (p ≤ 0.001), some other form of arthritis (p ≤ 0.001) and Osteoporosis (p ≤ 0.001)
    - Females (76.8%) were more likely to report 14+ days of poor physical health (p ≤ 0.001)
    - American Indian/Alaska Natives (42.1%), followed by African Americans (25.9%), were more likely to report being physically unhealthy for 14+ days in a month, compared to Asians (17.3%); (p ≤ 0.001)
    - Those who did not participate in any moderate physical activity (PA) (36.8%) were more likely to report 14+ days of poor physical health than those who met CDC-recommended levels of moderate PA (17.3%), at the p ≤0.001 level

  - Those who did not participate in any vigorous PA (70.5%) were more likely to report 14+ days of poor physical health than those who met CDC-recommended levels of vigorous PA (14.2%), at the $p \leq 0.01$ level

- Significant associations were also found among public/uninsured and MUA sub-samples regarding physical health at the $p \leq 0.001$ level:
  - Significant associations were found among public/uninsured and MUA respondents between those who reported 14+ days of being physically unhealthy and having OA ($p \leq 0.001$), RA ($p \leq 0.001$), and Fibromyalgia ($p \leq 0.001$)
  - In the public/uninsured sub-sample, those who did not participate in any muscles strengthening PA were more likely to report 14+ days of poor physical health vs. those who *did* participate in CDC-recommended levels of muscles strengthening PA (43.8% vs. 20.5%)
  - In the MUA sub-sample, those who did not participate in any moderate physical activity (PA) were more likely to report 14+ days of poor physical health than those who met CDC-recommended levels of moderate PA (43.7% vs. 15.5%), at the $p < 0.001$ level
  - In the MUA sub-sample, those who did not participate in any vigorous PA were more likely to report 14+ days of poor physical health than those who met CDC-recommended levels of vigorous PA (72.7% vs. 11.0%), at the $p < 0.01$ level

Musculoskeletal Conditions

- Table 5 depicts respondents who had been diagnosed with various musculoskeletal and rheumatologic conditions
- Results suggest the top three musculoskeletal and rheumatologic problems differed among the four samples. Specifically, the sequence for each group is as follows:
  - Total sample – Osteoarthritis (54.7%), some other form of arthritis (30.3%) and osteoporosis (27.6%)
  - ACC sub-sample – Osteoarthritis (54.7%), Rheumatoid arthritis (41.3%) and some other form of arthritis (34.2%)
  - Public/uninsured and MUA sub-samples – Osteoarthritis (49.5% of public/uninsured; 46.8% of MUA), some other form of arthritis (43.7% of public/uninsured; 33.8% of MUA) and Rheumatoid Arthritis (38.9% of public/uninsured; 30.8% of MUA)

Table 5: Musculoskeletal Conditions

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Osteoarthritis (OA)	54.7%	49.3%	49.5%	46.8%
Some other form of arthritis	30.3%	34.2%	43.7%	33.8%
Osteoporosis (OP)	27.6%	26.0%	32.5%	26.6%
Rheumatoid arthritis (RA)	20.7%	41.3%	38.9%	30.8%
Lupus	9.2%	20.3%	22.3%	14.3%
Fibromyalgia	9.2%	19.0%	21.8%	11.2%
Gout	6.3%	7.2%	10.9%	7.9%

Table 6: Leading Musculoskeletal Conditions – Total CHNA Vs. U.S

US			HSS CHNA	
#	Condition	Prevalence	Condition	%
1	OA	27 million	OA	54.70%
2	Osteoporosis	10 million	Some other form of arthritis	30.3%
3	Gout	6 million	Osteoporosis	27.6%
4	Fibromyalgia	5 million	RA	20.7%
5	RA	1.6 million	Fibromyalgia / Lupus	9.2%

- Findings from all sample groups align with national statistics showing that OA is the most common form of arthritis (affecting about 27 million adults in 2010 per CDC). However, though national estimates have suggested that osteoporosis is the #2 most prevalent musculoskeletal condition (affecting 6.1 million), our CHNA results demonstrate some other form of arthritis was the second and osteoporosis the third most common condition in the sample under study. See Table 6 above for more details.
- Respondents diagnosed with musculoskeletal conditions reported various symptoms. Results show that joint/ bone pain or aches, muscle pain or aches and stiffness were the three most common symptoms, as depicted in table 7 below:

Table 7: Reported Symptoms Associated with Musculoskeletal Conditions

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Joint/ bone pain or aches	**87.6%**	**93.3%**	**90.0%**	**88.5%**
Muscle pain or aches	**80.5%**	**87.9%**	**84.9%**	**81.3%**
Stiffness	**82.2%**	**85.1%**	**79.7%**	**77.0%**
Fatigue	66.2%	77.6%	76.2%	68.8%
Weight changes	31.0%	50.5%	52.4%	40.6%
Skin rash	19.8%	31.0%	32.2%	23.9%
Hair loss	24.8%	39.5%	46.1%	33.5%
Mood changes	43.1%	59.4%	61.1%	51.7%
Trouble with concentrating	35.9%	54.1%	55.5%	43.5%
Changes in memory	32.9%	45.3%	54.4%	43.5%
Problems with balance	51.4%	62.5%	64.5%	53.6%

- Results demonstrate that respondents experienced certain symptoms based on their musculoskeletal conditions, with statistically significant associations found in the total sample only, as shown in Table 8
- Respondents in the total sample who had RA, Fibromyalgia and some other form of arthritis experienced all 11 symptoms highlighted in Table 8 below

Table 8: Musculoskeletal Conditions by Reported Symptoms – Total Sample

	OA	RA	Lupus	Fibromyalgia	Gout	Some other form of Arthritis	Osteoporosis
Joint/ bone pain or aches	***	***		***	**	***	
Muscle pain or aches	***	***	**	***	*	**	***
Stiffness	***	***		***	*	***	
Fatigue	***	***	***	***	**	***	***
Weight changes		***	***	***	***	***	**

Skin rash		***	***	***	***	***	***
Hair loss	**	***	***	***	*	***	***
Mood changes	***	***	***	***	***	***	***
Trouble with concentrating	***	***	***	***	***	***	***
Changes in memory	**	***	***	***	***	***	***
Problems with balance	***	***	**	***	***	***	***

***	denotes statistically significant associations between the condition and reported symptom at the $p \leq 0.001$ level
**	denotes statistically significant associations between the condition and reported symptom at the $p \leq 0.01$ level
*	denotes statistically significant associations between the condition and reported symptom at the $p \leq 0.05$ level

- Results demonstrate that majority of the respondents in the total (61.4%), ACC (72.8%), public/uninsured (72.4%) and MUA (62.0%) samples who reported arthritis or joint symptoms experienced limitations in their daily activities

The following statistically significant findings were found with regards to musculoskeletal conditions and its management in the total sample only:

- Musculoskeletal conditions were significantly associated with geographic locations, such that:
    - Respondents who lived in Queens (14.7%), followed by Bronx (14.0%) were more likely to be diagnosed with Fibromyalgia than those who lived in Manhattan (6.8%), at the $p \leq 0.01$ level
    - Respondents who lived in Bronx (16.4%), followed by Brooklyn (15.2%) were more likely to be diagnosed with Fibromyalgia than those who lived in Long Island, Nassau/ Suffolk County (1.7%), at the $p \leq 0.001$ level
- Musculoskeletal conditions were significantly associated with gender, such that:
    - Compared to males, females were more likely to report having OA (60.4% vs. 40.7%, $p \leq 0.001$), RA (22.6% vs. 18.9%, $p \leq 0.05$), lupus (12.0% vs. 3.7%, $p \leq 0.001$), fibromyalgia (11.7% vs. 3.5%, $p \leq 0.001$), and osteoporosis (35.1% vs. 11.1%, $p \leq 0.001$)
    - On the other hand, more males than females indicated that they had gout (11.3% vs. 4.6%, $p \leq 0.001$). The data aligns with CDC findings stating that most types of arthritis are more common in women, while gout is more common in men.
- Musculoskeletal conditions were significantly associated with age, such that:
    - Respondents aged over 85 years (73.8%), followed by 76-85 years (69.3%) were more likely to be diagnosed with OA, compared to respondents aged between 18 and 35 years (4.7%), at the $p \leq 0.001$ level
    - Osteoporosis was significantly associated with age ($p \leq 0.001$), as respondents aged 80-89 years (50%) were more likely to have the condition, followed by those aged 70-79 years (47%). This result supports the findings from the 2015 Arthritis Foundation Fact Sheet stating that arthritis prevalence increases with age
    - While OA appeared to increase with age ($p \leq 0.001$), the reverse was true for lupus: respondents aged between 18 and 35 years were more likely (22.3%) to have the condition, and the likelihood decreased with respondents age ($p \leq 0.001$)

- Musculoskeletal conditions were significantly associated with race and ethnicity, such that:
    - American Indians (53.8%), followed by African Americans (41.7%), were more likely to report having RA compared to Whites (17.0%), at the $p \leq 0.001$ level
    - Native Hawaiians (25.0%) and African Americans (25.0%), followed by Asians (19.1%), were more likely to report having lupus compared to Whites (4.9%), at the $p \leq 0.001$ level
    - African Americans (17.1%), followed by Asians (9.2%), were more likely to report having Gout compared to American Indians (0.0%), at the $p \leq 0.001$ level

Falls & Fractures

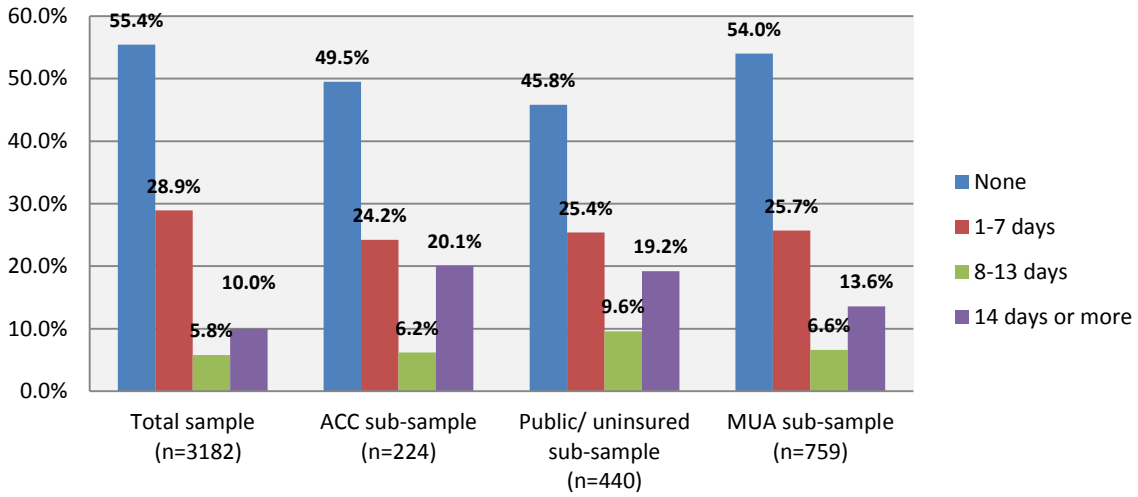
- Falls were a concern for many respondents, as 25.3% of the total, 27.5% of ACC, 31.7% of public/uninsured, and 27.6% of the MUA respondents had fallen within the past year
- In all four samples, 18.3% of the total, 12.3% of the ACC, 14.5% of public/uninsured and 12.4% of MUA respondents reported fractures from their falls
- Among those who had fallen, majority of respondents in the total (66.6%), ACC (63.2%), public/uninsured (71.1%) and MUA (61.7%) samples had not spoken to their healthcare provider about their fall
- Falls were more common among females than males in the total sample (30% vs. 24%, $p \leq 0.001$)
- In the total sample, the oldest respondents (aged 85+ years) were the more likely (50.0%) to fall, followed by those aged 76-85 years (35.5%), at the $p \leq 0.001$ level. This data supports research showing that the severity of falls-related consequences increase with age, such that in 2012, older New Yorkers accounted for more than 2/3 of all adult fall-related deaths and hospitalizations
- African Americans in the total (33.3%); ACC (35.1%); public/uninsured (41.0%) and MUA (30.6%) samples, followed by Whites in the total (29.0%); ACC(30.6%); public/uninsured(24.4%); and MUA (29.3%) samples, were more likely to fall, compared to Asians (18.7%); ACC (10%); public/uninsured (14.0%); and MUA (15.9%), at the $p \leq 0.01$ and $p \leq 0.05$ level
- In the total sample, compared to respondents who participated in CDC-recommended levels of moderate physical activity (25.2%), those who reported no moderate physical activity (34.2%) were more likely to fall, at the $p \leq 0.001$ level
- In the total sample, compared to respondents who participated in CDC-recommended levels of vigorous physical activity (16.4%), those who reported no vigorous physical activity (33.2%) were more likely to fall, at the $p \leq 0.001$ level. This data strongly supports research that has shown that physical inactivity and a sedentary lifestyle are risk factors for developing fragility fractures, and that PA reduces the risk of osteoporosis, fractures, and falls-related injuries
- Statistically significant associations were found between reported falls and musculoskeletal conditions
    - In the total sample, statistically significant associations were found between reported falls and having OA ($p \leq 0.001$), RA ($p \leq 0.05$), fibromyalgia ($p \leq 0.05$), and osteoporosis ($p \leq 0.001$)
    - In the ACC sub-sample, statistically significant associations were found between reported falls and having OA ($p \leq 0.05$), and osteoporosis ($p \leq 0.05$)
    - In the public/uninsured subsample, statistically significant associations were found between reported falls and having OA ($p \leq 0.01$), RA ($p \leq 0.01$), fibromyalgia ($p \leq 0.05$), and some other form of arthritis ($p \leq 0.05$)

- In the MUA sub-sample, statistically significant associations were found between reported falls and having OA ($p \leq 0.05$), RA ($p \leq 0.05$), gout ($p \leq 0.05$), some other form of arthritis ($p \leq 0.05$) and osteoporosis ($p \leq 0.001$)

Mental Health

- Figure 14 shows mentally unhealthy days in the past 30 days (i.e. mental health which included stress, depression, and problems with emotion) reported by the respondents from the four samples
  - Using the CDC Healthy Days measure and mentally unhealthy definition to access mental health, results show that 10.0% of the total sample, 20.1% of the ACC sub-sample, 19.2% of the public/uninsured sub-sample and 13.6% of the MUA sub-sample had frequent mental distress[1]
  - Majority of the respondents in the total (55.4%); ACC (49.5%); public/uninsured (45.8%); and MUA (54.0%) samples reported no mentally unhealthy days in the past 30 days

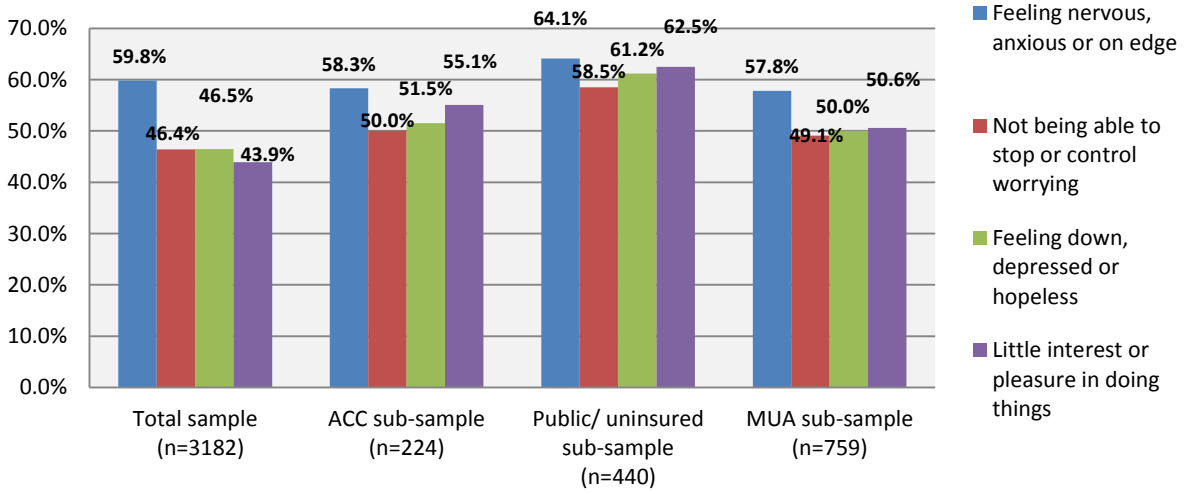
Figure 14: Mentally Unhealthy Days in the Past 30 Days



[1] CDC defines frequent mental distress as 14 or more days of mentally unhealthy days reported by the respondent.

- Figure 15 shows that feeling nervous, anxious or on edge was the leading mental problem reported by all samples (total - 59.8%; ACC- 58.3%; public/uninsured - 64.1; MUA - 57.8%)

Figure 15: Mental Problems



- In the total sample, frequent mental distress was found to be significantly associated with geographic locations. Respondents who lived in Bronx (16.2%), followed by Brooklyn (12.3%), were more likely to report frequent mental distress than those lived in Long Island, Nassau County (7.0%), at the $p \leq 0.001$ level
- In the total sample, frequent mental distress was found to be significantly associated with race, at the $p \leq 0.01$ level
  - African Americans (14.5%), followed by American Indians (12.5%), were more likely to report frequent mental distress than Whites (8.6%)
  - Hispanics/Latinos (16.6%) were more likely to report frequent mental distress than non-Hispanics/Latinos (9.0%), at the $p \leq 0.001$ level
- Frequent mental distress was found to be significantly associated with age
  - In the total sample, respondents aged between 51-65 years (12.2%) were more likely to report frequent mental distress than those aged 66-75 (7.0%), at the $p \leq 0.001$ level
  - In ACC sub-sample, respondents aged between 51-65 years (27.1%) were more likely to report frequent mental distress than those aged 66-75 years (4.3%), at the $p \leq 0.01$ level
  - In the MUA sub-sample, respondents aged between 76-85 years (17.1%) were more likely to report frequent mental distress than those aged 85+ years (10.0%), at the $p \leq 0.05$ level
- Frequent mental distress was found to be significantly associated with PA as well
  - In the total sample, those who did not participate in any moderate PA (19.1%) were more likely to report frequent mental distress than those who participate in CDC-recommended levels of moderate PA (5.7%), at the $p \leq 0.001$ level
  - In the total sample, those who did not participate in any vigorous PA (12.7%) were more likely to report frequent mental distress than those who participate in CDC-recommended levels of vigorous PA (7.8%), at the $p \leq 0.001$ level
  - In the MUA sample, those who did not participate in any moderate PA (24.1%) were more likely to report frequent mental distress than those who participate in CDC-recommended levels of moderate PA (9.9%), at the $p \leq 0.05$ level

- In the MUA sample, those who did not participate in any vigorous PA (17.4%) were more likely to report frequent mental distress than those who participate in CDC-recommended levels of vigorous PA (6.7%), at the $p \leq 0.001$ level

- Frequent mental distress was found to be statistically significantly associated with musculoskeletal conditions in all four samples
  - In the total sample, frequent mental distress was found to be significantly associated with OA ($p \leq 0.01$), RA ($p \leq 0.001$), lupus ($p \leq 0.001$), fibromyalgia ($p \leq 0.001$), gout ($p \leq 0.001$), some other form of arthritis ($p \leq 0.001$), and osteoporosis ($p \leq 0.05$)
  - In the ACC sub-sample, frequent mental distress was found to be significantly associated with OA ($p \leq 0.05$), RA ($p \leq 0.05$), fibromyalgia ($p \leq 0.01$), and gout ($p \leq 0.001$)
  - In the public/uninsured sub-sample, frequent mental distress was found to be significantly associated with OA ($p \leq 0.05$), RA ($p \leq 0.05$), fibromyalgia ($p \leq 0.001$), and gout ($p \leq 0.001$)
  - In the MUA sub-sample, frequent mental distress was found to be significantly associated with lupus ($p \leq 0.01$) and fibromyalgia ($p \leq 0.001$)

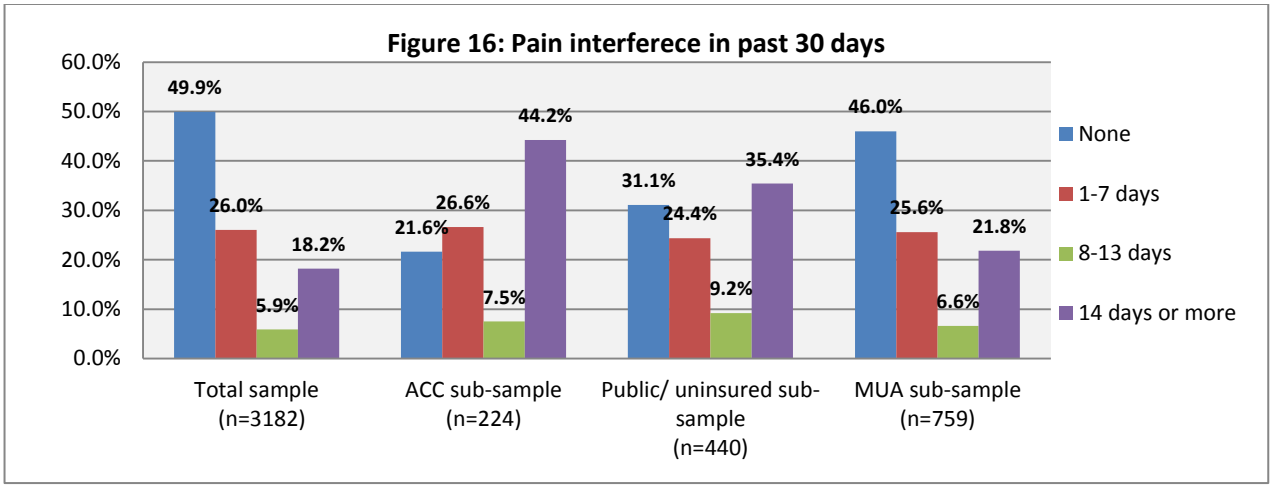
Difficulty in Certain Daily Activities

- Among respondents from all four samples, stooping, bending or kneeling was the most common reported difficulty (67.1% of total; 79.4% of ACC; 78.0% of public/uninsured; and 66.9% of MUA respondents)

Table 9: Difficulties in Certain Activities

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Stoop, bend, or kneel	67.1%	79.4%	78.0%	66.9%
Use fingers to grasp or handle small objects	43.7%	45.0%	47.8%	37.0%
Walk a quarter of a mile	43.0%	67.7%	65.9%	48.1%
Walk up 10 steps without resting	40.1%	58.0%	59.2%	44.7%

- Figure 16 shows pain interfered with usual activities in the past 30 days among the four samples:
  - Majority of the respondents in the total sample (49.9%) and MUA sub-sample (46.0%) experienced no pain interference in the past 30 days
  - Majority of the respondents in the ACC (44.2%) and public/uninsured (35.4%) sub-samples experienced 14 days or more of pain interference in the past 30 days



- Pain interference was significantly associated with race
    - In the total sample, American Indians (36.8%), followed by African Americans (25.1%), were more likely to report that pain interfered with their usual activities for 14 days or more in the past 30 days compared to Asians (13.3%), at the $p \leq 0.001$ level
    - In the public/uninsured sub-sample, Whites (40.3%), followed by African Americans (38.0%), were more likely to report that pain interfered with their usual activities for 14+ days in the past 30 days compared to Asians (21.8%), at the $p \leq 0.001$ level
    - In the MUA sub-sample, American Indians (45.5%), followed by African Americans (25.4%), were more likely to report that pain interfered with their usual activities for 14+ days in the past 30 days compared Asians(13.2%), at the $p \leq 0.01$ level
- Pain interference was significantly associated with age
    - In the total sample, respondents aged between 35-50 years (25.1%) were more likely to report that pain interfered with their usual activities for 14+ days in the past 30 days compared to those aged over 85 years (11.1%), at the $p \leq 0.001$ level
    - In the public/uninsured sub-sample, respondents aged between 35-50 years (46.91%) were more likely to report that pain interfered with their usual activities for 14+ days in the past 30 days compared to those aged between 18 and 35 years (19.1%), at the $p \leq 0.01$ level
- Pain interference was also found to be significantly associated with PA
    - In the total sample, respondents who did not participate in any vigorous PA (66.7%) were more likely to report 14+ days of pain interference in the past 30 days than those who met CDC-recommended levels of moderate PA (18.5%), at the $p \leq 0.001$ level
    - In the ACC sub-sample, respondents who did not participate in any vigorous PA (71.9%) were more likely to report 14+ days of pain interference in the past 30 days than those who met CDC-recommended levels of moderate PA (7.2%), at the $p \leq 0.05$ level
    - In the public/uninsured sub-sample, respondents who did not participate in any moderate PA (73.0%) were more likely to report 14+ days of pain interference in the past 30 days than those who met CDC-recommended levels of moderate PA (6.5%), at the $p \leq 0.05$ level
    - In the MUA sub-sample, respondents who did not participate in any moderate PA (42.8%) were more likely to report 14+ days of pain interference in the past 30 days than those who met CDC-recommended levels of moderate PA (9.0%), at the $p \leq 0.001$

- Pain interference was found to be significantly associated with musculoskeletal conditions as well
    - In the total sample, having 14+ days of pain interference in the past 30 days was found to be significantly associated with OA ($p \leq 0.01$), RA ($p \leq 0.001$), lupus ($p \leq 0.001$), fibromyalgia ($p \leq 0.001$), gout ($p \leq 0.001$), and some other form of arthritis ($p \leq 0.001$)
    - In the public/uninsured sub-sample, having 14+ days of pain interference in the past 30 days was found to be significantly associated with OA ($p \leq 0.001$), RA ($p \leq 0.001$), fibromyalgia ($p \leq 0.001$), and some other form of arthritis ($p \leq 0.001$)
    - In the MUA sub-sample, having 14+ days of pain interference in the past 30 days was found to be significantly associated with OA ($p \leq 0.001$), RA ($p \leq 0.001$), fibromyalgia ($p \leq 0.001$), gout ($p \leq 0.001$), and some other form of arthritis ($p \leq 0.001$) and osteoarthritis ($p \leq 0.05$)

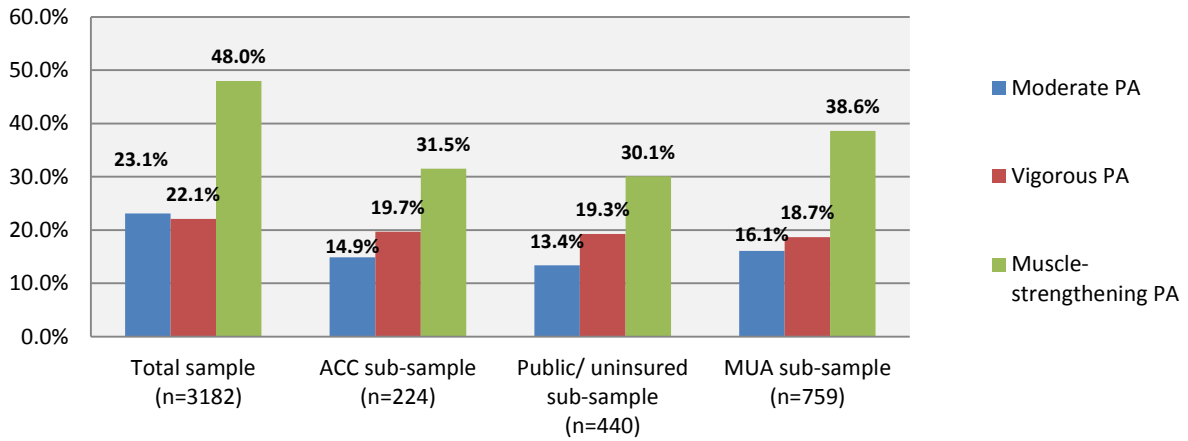
C. Health Behavior & Life Style

Physical Activity

According to CDC physical activity guidelines, adults need at least 150 minutes of moderate leisure-time physical activities, 75 minutes vigorous leisure-time physical activities, and also at least one day of muscle-strengthening activities per week.

- Figure 17 below illustrates the percentage of respondents across the four samples that meet CDC-recommended levels of PA
    - 23.1% of the total respondents, 14.9% of the ACC, 13.4% of the public/ uninsured and 16.1% of the MUA respondents meet CDC-recommended levels of moderate PA
    - 22.1% of the total respondents, 19.7% of the ACC, 19.3% of the public/ uninsured and 18.7% of the MUA respondents meet CDC-recommended levels of vigorous PA
    - 48.0% of the total respondents, 31.5% of the ACC, 30.1% of the public/ uninsured and 38.6% of the MUA respondents meet CDC-recommended levels of muscle-strengthening PA

Figure 17: CDC Recommended Levels of Physcial Activities



- In the total respondents, 32.3% and 52.7% had been told by their doctor in the past 12 months to lose weight and do physical activity respectively
- In the ACC respondents, 40.1% and 52.9% had been told by their doctor in the past 12 months to lose weight and do physical activity respectively

- In the public/uninsured respondents, 38.0% and 58.3% had been told by their doctor in the past 12 months to lose weight and do physical activity respectively
- In the MUA respondents, 39.6% and 54.4% had been told by their doctor in the past 12 months to lose weight and do physical activity respectively

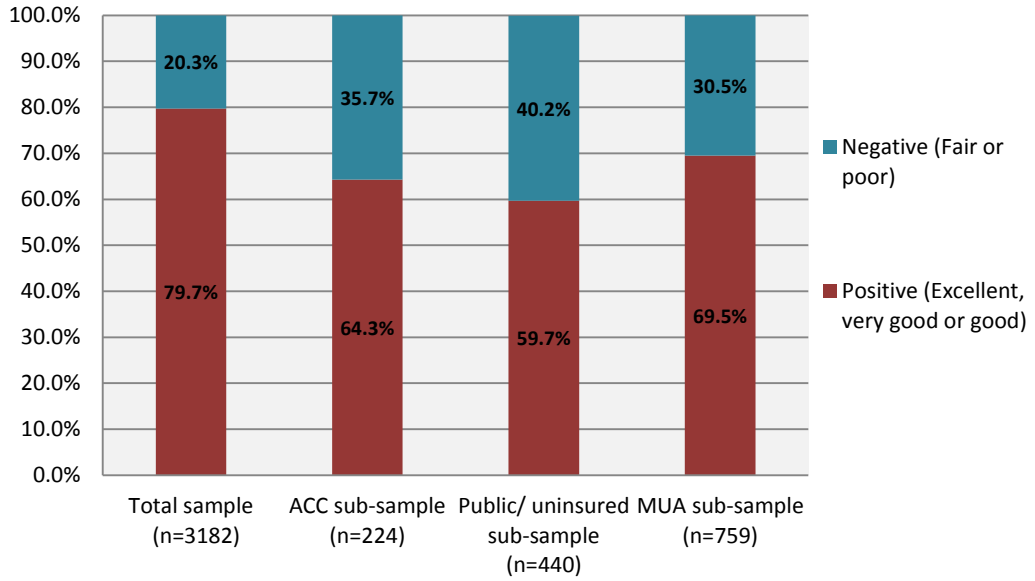
Significant associations were found among total respondents regarding PA:

- PA was found to be significantly associated with income levels. Respondents who earned more than $200k a year were more likely to meet CDC-recommended levels of moderate PA (25.1%), vigorous PA (24.9%) and muscle-strengthening PA (22.9%), compared to other income levels
- African Africans (86.7%), followed by Native Americans (60.0%) were more likely to be told by their doctor to lose weight, compared to Asians (24.0%), at the $p \leq 0.001$ level
- Asians (73.8%), followed by American Indians (57.9%) were more likely to be told by their doctor to do physical activity/exercise, compared to Whites (50.7%), at the $p \leq 0.05$ level

Diet

- Majority of respondents in the total (79.7%); ACC (64.3%); public/uninsured (59.7%); and MUA (69.5%) samples rated their overall diet positively (Excellent to Good). See figure 18 for more details

Figure 18: Overall Diet Rating



- The majority of respondents indicated that they would like to eat healthier (total - 94.1%; ACC - 95.0%; public/uninsured - 87.3%; MUA - 79.8%)

Diet ratings were found to be significantly associated with race among the total, MUA and public/uninsured respondents:

- In the total sample, Native Hawaiians (80%), followed by Blacks (33.6%), were more likely to consider their diet to be Fair/Poor, compared to Whites (15.9%), at the $p \leq 0.001$ level

- Similar trends were seen among the public/uninsured sub-group, as Native Hawaiians (90%), followed by Blacks (40.1%), were more likely to consider their diet to be Fair/Poor, compared to Whites (29.7%), at the $p \leq 0.05$ level
- Also, among the MUA sample, Native Hawaiians (100%), followed by American Indians (54.6%), were more likely to consider their diet to be Fair/Poor, than Whites (23.0%), at the $p \leq 0.001$ level

Diet ratings were found to be significantly associated with age among the total respondents:

- Respondents aged 36-50 years (25.8%) were more likely to rate their diet negatively, compared to adults aged 85+ years (1%), at the $p \leq 0.001$ level
- In the total sample, diet ratings and musculoskeletal conditions were significantly associated, such that respondents who rated their diet negatively were more likely to have RA, lupus, fibromyalgia and gout (each at the $p \leq 0.001$ level)

When asked to identify the barriers to eating more healthily, the leading responses involved "cost", "taking too much time to prepare", and "family/friend not eating healthy" across all samples, as seen in table 10 below:

Table 10: Healthy Eating Barriers

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Cost	38.8%	71.4%	72.7%	56.9%
Takes too much time to prepare	52.9%	43.3%	44.7%	49.9%
Family/ friend do not eat	32.7%	44.9%	43.2%	37.9%
Don't know what to eat	27.0%	37.1%	43.1%	37.7%
Don't like the taste	24.4%	28.7%	29.5%	26.3%
Don't have the place to buy	13.7%	20.7%	30.2%	24.3%

- Statistically significant associations were found between reported barriers to healthy eating and various socio-demographic characteristics in the total, public/uninsured and MUA sub-sample, as illustrated below
    - In the total sample, females (78.9%) were more likely to report "cost" as a barrier to eating healthy than males (20.3%), at the $p \leq 0.001$ level
    - In the total sample, respondents aged between 51 and 65 years (34.8%), followed by respondents aged 66-75 years, were more likely to report "cost" as a barrier to eating healthy than respondents aged 85+ years (2.3%), at the $p \leq 0.001$ level
    - In the total and MUA samples, American Indians (total-77.8%; MUA-100.0%), followed by African Americans (total- 61.0%; MUA- 61.6%) and Asians (total- 57.8%; MUA- 59.4%), were more likely to report "cost" as a barrier to eating healthy than Whites (total- 25.6%; MUA-35.2%), at the $p \leq 0.001$ level
    - In the total, public/uninsured and MUA samples, Hispanics/Latinos (total- 71.2%; public/uninsured-81.6%; MUA- 75.3%) were more likely to report "cost" as a barrier to eating healthy than Non-Hispanics/ Latinos (total- 31.5%; public/uninsured-63.2%; MUA- 44.9%), at the $p \leq 0.001$ level
    - In the total, public/uninsured and MUA samples, respondents who earned less than $10k a year (total- 81.3%; public/uninsured- 82.8%; MUA- 82.6%) ,followed by respondents who earned $10k-$15k a year (total- 71.8%; public/uninsured- 72.1%; MUA- 70.7%) and respondents who earned $15k-$20k a year (total- 68.2%; public/uninsured- 61.3%; MUA- 64.4%), were more likely to "cost" as a

barrier to eating healthy than respondents who earned more than $100k a year (total- 3.8%; public/uninsured- 0.6%; MUA- 0.9%), at the p ≤ 0.001, p ≤ 0.01, and p ≤ 0.001 level respectively

- In the total and MUA sample, respondents who lived in the Bronx (total - 21.7%; MUA - 33.1%), followed by those who lived Brooklyn (total - 20.7%; MUA - 21.5%) and Queens (total - 20.0%; MUA - 20.9%), were more likely to report "cost" as a barrier to eating healthy than respondents who lived in New Jersey (total - 0.2%; MUA - 0.0%), at the p ≤ 0.001 level
- In the total sample, females (76.9%) were more likely to report "taking too much time to prepare" as a barrier to eating healthy than males (23.5%), at the p ≤ 0.05 level
- In the total sample, respondents who earned $50k-$75k a year (16.6%) ,followed by respondents who earned $100k-$150k a year (14.0%) and respondents who earned $75k-$100k a year (12.8%), were more likely to report "cost" as a barrier to eating healthy than respondents who earned $10k-$15k a year (4.3%), at the p ≤0.05 level respectively

Reproductive Health

- 20.1% of the total, 29.8% of the ACC, 26.6% of the public/uninsured, and 23.2% of the MUA respondents indicated that their muscle, bone or joint condition(s) affected their sexual health
- When asked to specify the effect of muscle, bone or joint conditions on sexual health, the leading responses were limitation of motion; decreased sexual desire and satisfaction; and decreased sexual intercourse across all samples. See table 11 for more details:

Table 11: The effects muscle, bone or joint conditions on sexual health

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Limitation of motion/ pain	50.7%	44.4%	44.8%	47.2%
Decreased sexual desire and satisfaction	47.4%	53.7%	44.8%	49.1%
Decreased sexual intercourse/ intimacy	40.8%	38.9%	38.1%	33.1%
Decreased sense of sexual attractiveness	30.0%	37.0%	30.5%	27.0%
Vaginal Dryness	23.5%	14.8%	22.9%	16.6%
Erectile dysfunction/ impotence	13.9%	13.0%	5.7%	11.0%
Increased sensitivity to being touched	9.3%	9.3%	10.5%	6.1%
Urinary tract infection	6.6%	11.1%	10.5%	7.4%
Pregnancy	0.9%	0.0%	1.0%	1.8%
Infertility	0.8%	0.0%	1.0%	0.6%

- In the total sample, respondents aged between 51 and 65 years (38.9%) represents the largest group to indicate their musculoskeletal conditions had effect on their sexual health, at the p ≤ 0.001 level
- In the total sample, strong associations were found in those who indicated their musculoskeletal conditions affected their sexual health and those who had OA (p ≤ 0.001), RA (p ≤ 0.001), lupus (p ≤ 0.001), fibromyalgia (p ≤ 0.001), some other form of arthritis (p ≤ 0.001), and osteoporosis (p ≤ 0.001)
- In the ACC sample, strong associations were found in those who indicated their musculoskeletal conditions affected their sexual health and those who had OA (p ≤ 0.05) and RA (p ≤ 0.05)

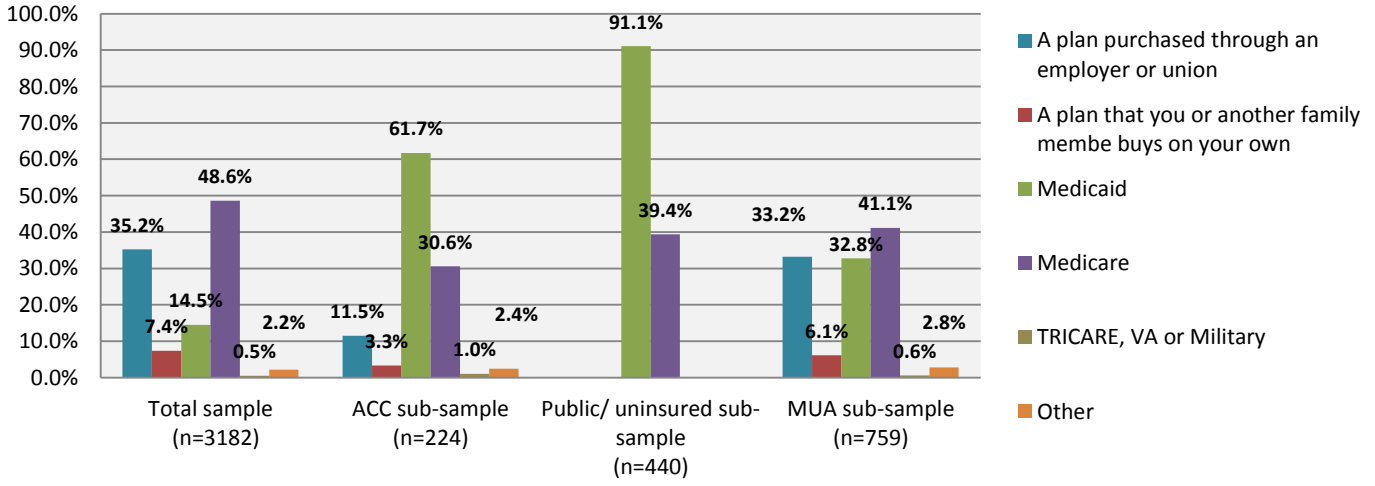
- In the public/uninsured sample, strong associations were found in those who indicated their musculoskeletal conditions affected their sexual health and those who had OA ($p \leq 0.001$), RA ($p \leq 0.001$), fibromyalgia ($p \leq 0.001$), and osteoporosis ($p \leq 0.05$)
- In the MUA sample, strong associations were found in those who indicated their musculoskeletal conditions affected their sexual health and those who had OA ($p \leq 0.001$), RA ($p \leq 0.001$), lupus ($p \leq 0.05$), fibromyalgia ($p \leq 0.05$), some other form of arthritis ($p \leq 0.01$), and osteoporosis ($p \leq 0.05$)

D. Use of and Access to Care

Insurance Coverage

- Nearly all (98.2% of total, 99.5% of ACC, 91.1% of public/ uninsured, 96.5% of MUA) respondents in all samples had some form of health insurance coverage compared to 86.5% of New Yorkers. See details on insurance type specified in figure 19 below:

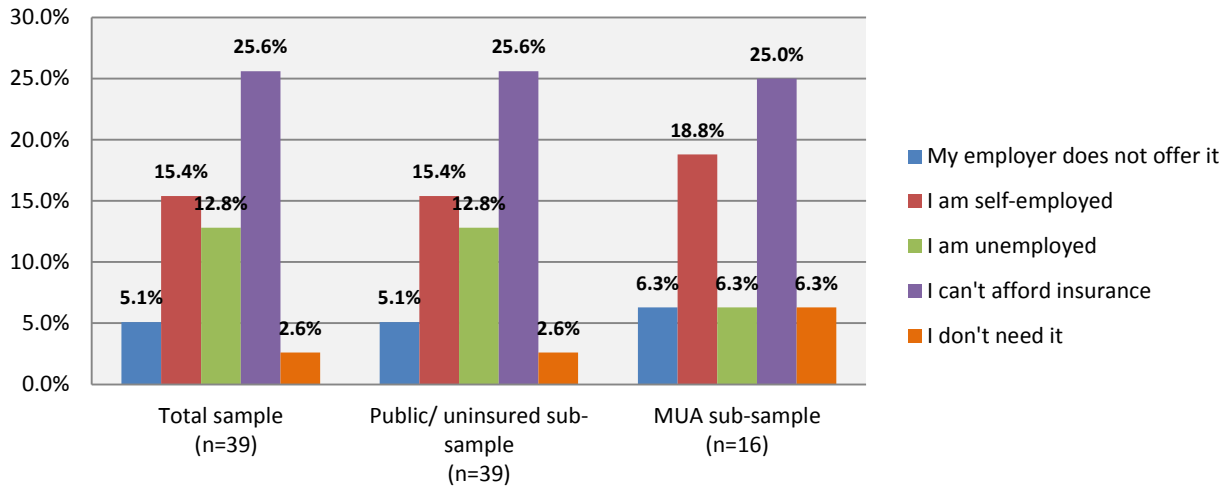
Figure 19: Insurance Coverage Type



- The following statistically significant associations were found in the total sample:
  - Lack of insurance was found to be associated with being Asian (4.0%), followed by African Americans (1.8%), compared to Whites (0.6%), at the $p \leq 0.001$ level
  - Hispanic/Latinos (3.4%) were more likely to have no insurance coverage, compared to non-Hispanics/Latinos (0.9%), at the $p \leq 0.001$ level
  - Respondents who had annual household income less than $10k (17.9%) were more likely to have no health insurance, compared to those earned more than $200k a year (0.0%), at the $p \leq 0.05$ level
- In the public/uninsured sub-sample, lack of insurance was associated with annual household income
  - Respondents who had annual household income less than $10k (17.9%) were more likely to have no health insurance, compared to those earned more than $200k a year (0.0%), at the $p \leq 0.001$ level
- The following statistically significant associations were found in the MUA sub-sample:
  - Lack of insurance was found to be associated with being Asian (2.8%), followed by White (2.0%), compared to American Indian (0.0%), at the $p \leq 0.001$ level
  - Hispanics/Latinos (3.3%) were more likely to have no insurance coverage, compared to non-Hispanics/Latinos (1.7%), at the $p \leq 0.01$ level

- Figure 20 below shows the reasons for not having health insurance across all samples except the ACC sub- due to very low sample size(n=1). Cost was the top reason for not having health insurance.

Figure 20: Reasons for Not Having Insurance Coverage



Immunizations & Health Screenings

- Table 12 below shows the health screenings received by all four samples:

Table 12: Health Screenings - Total, ACC, Public/Uninsured and MUA

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Immunizations	73.5%	66.5%	65.4%	68.6%
STD/ STI/ HIV	16.3%	42.5%	37.4%	28.8%
	Total sample (n=2367)	**ACC sub-sample (n=162)**	**Public/ uninsured sub-sample (n=352)**	**MUA sub-sample (n=568)**
Mammograms (women)	60.2%	56.8%	55.5%	56.5%
Pap smears (women)	48.6%	54.6%	45.6%	46.7%
	Total sample (n=805)	**ACC sub-sample (n=61)**	**Public/ uninsured sub-sample (n=87)**	**MUA sub-sample (n=188)**
Prostate exam (men)	31.2%	23.5%	20.0%	28.3%

* Sample size varies due to gender specific responses.

- The following associations were found in the total sample
  - Respondents who lived in Manhattan (46.6%) were more likely to receive immunizations, compared to respondents who lived in Bronx (10.0%), at the $p \leq 0.001$ level
  - Females (76.4%) were more likely to receive immunizations than males (23.3%), at the $p \leq 0.01$ level
  - Respondents aged between 66 and 75 years (34%) were more likely to receive immunizations, compared to respondents aged over 85+ years (5.3%), at the $p \leq 0.001$ level
  - Whites (76.2%) were more likely to receive immunizations, compared to African Americans (7.8%) and Asians (8.2%), at the $p \leq 0.001$ level

  - Non-Hispanics/Latinos (87.2%) were more likely to receive immunizations than Hispanics/Latinos (12.8%), at the $p \leq 0.01$ level
  - Respondents aged between 36 and 50 years (36.5%) were more likely to receive STD/STI/HIV screenings than respondents aged between 76 and 85 years (0.0%), at the $p \leq 0.05$ level
  - Whites (34.0%) were more likely to receive STD/STI/HIV screenings than American Indians (2.0%) and Asians (2.0%), at the $p \leq 0.01$ level
- The following associations were found in the public/uninsured sub-sample
  - Respondents who lived in Manhattan (26.1%) were more likely to receive immunizations, compared to respondents who lived in Brooklyn (19.7%), at the $p \leq 0.05$ level
  - Respondents aged between 51 and 65 years (33.5%) were more likely to receive immunizations, compared to respondents aged over 85+ years (1.7%), at the $p \leq 0.05$ level
  - Females (70.1%) were more likely to receive STD/STI/HIV screenings than males (29.9%), at the $p \leq 0.05$ level
  - Respondents aged between 51 and 65 years (39.4%) were more likely to receive STD/STI/HIV screening, compared to respondents aged between 76 and 85 years (4.3%), at the $p \leq 0.001$ level
  - Non-Hispanics/ Latinos (46.5%) were more likely to receive immunizations than Hispanics/ Latinos (32.4%), at the $p \leq 0.05$ level
- The following associations were found in the MUA sub-sample
  - Respondents aged between 51 and 65 years (34.1%) were more likely to receive immunizations, compared to respondents aged over 85+ years (2.2%), at the $p \leq 0.001$ level
  - Respondents aged between 51 and 65 years (39.9%) were more likely to receive STD/STI/HIV screenings than respondents aged over 85+ years (0.0%), at the $p \leq 0.001$ level
  - Non-Hispanics/Latinos (45.1%) were more likely to receive immunizations than Hispanics/ Latinos (20.9%), at the $p \leq 0.001$ level

Healthcare Access

- 11.7% of the total, 18.4% of the ACC, 22.4% of public/uninsured and 15.2% of the MUA respondents indicated that they could not access a healthcare provider when they needed to in the past 12 months, compared to 5.3% of Americans and 12% of New Yorkers
- Barriers to accessing necessary healthcare are listed in table 14 below, which indicates that cost, transportation and accessibility issues were the leading barriers cited across all samples

Table 13: Barriers to care- Total, ACC, Public/Uninsured and MUA

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Hard to get appointment	39.5%	41.7%	33.0%	40.2%
Cost	14.2%	16.7%	18.6%	14.3%
Lack of transportation	13.3%	19.4%	18.9%	14.3%
Office not patient-friendly	12.3%	5.6%	6.2%	8.9%
Service not covered	12.0%	11.1%	10.3%	12.5%
Not sure where to go	9.6%	5.6%	4.1%	7.1%
No insurance	6.6%	11.1%	17.5%	8.9%
Family responsibility	5.7%	2.8%	8.2%	8.9%
Language	1.8%	2.8%	2.1%	1.8%

- The following results were found among the total respondents:
    - Respondents who lived in Bronx (18.9%), followed by Queens (13.3%) were more likely to report that they were unable to access a healthcare provider in the past year ($p \leq 0.01$)
    - Respondents aged 51-65 years (35.5%), followed by those aged 66-75 (21.5%) were more likely to indicate that they were unable to access a healthcare provider in the past year ($p \leq 0.01$)
    - Asians (15.5%), followed by African Americans (13.7%) were more likely to report that they were unable to access a healthcare provider in the past year compared to Whites (9.6%), at $p \leq 0.001$ level
    - Non-Hispanics/Latinos (19.6%) were more likely to report that they were unable to access a healthcare provider in the past year than Hispanics/Latinos (10.2%), at the $p \leq 0.001$ level
    - Respondents with annual household income less than $10k (23.8%) were more likely to indicate that they were unable to access a healthcare provider in the past year than respondents earned more than $200k a year (1.9%), at the $p \leq 0.001$ level
- In the ACC sub-sample, with respect to barriers to accessing care, respondents who lived in Brooklyn (33.3%) and Queens (33.3%) were more likely to report transportation issue, compared to those who lived in Manhattan (0.0%), at $p \leq 0.05$
- In the public/uninsured sub-sample, African Americans (19.3%), followed by Asians (18.2%) were more likely to indicate that they were unable to access a healthcare provider in the past year, compared to Native Hawaiians (0.0%), at the $p \leq 0.01$ level
- In the MUA sub-sample, Non-Hispanics/Latinos (19.7%) were more likely to report that they were unable to access a healthcare provider in the past year than Hispanics/ Latinos (12.1%), at the $p \leq 0.05$ level

Adherence

- Nearly all respondents in the total (94.0%), ACC (94.2%), public/uninsured (91.0%) and MUA (91.7%) samples) reported high levels of adherence with their healthcare providers' medical advice, stating that they "always" or "very often" followed their advice. These data dramatically contrasts with research suggesting that around 40% of patients do not adhere to treatment regimens
- Statistically significant associations were found between adherence and socio-demographic variables:
    - In the total sample, Whites (95.2%), followed by African Americans (93.4%) and Asians (89.2%) were more adherent to medical advice than American Indians (80.0%), at the $p \leq 0.01$ level
    - In the total and MUA groups, Hispanics/Latinos were less adherent to medical advice than Non-Hispanics/Latinos (total: 90.2% vs. 95.8%, $p \leq 0.01$; MUA: 90.2% vs. 95.8%, $p \leq 0.01$)
    - In the total sample, respondents who earned less than $10k a year (19.5%), followed by respondents who earned $50k-$75k (12.5%) and respondents who earned $75- S100k(12.5%), were less adherent to medical advice than those who earned $150k-$200k a year (5.5%), at the $p \leq 0.05$ level
- In the total sample, respondents who had OA and RA were more adherent to medical advice, at the $p \leq 0.05$ level each

When asked to provide reasons for not adhering to medical advice, results demonstrate that "concerns about side effects" and "not feeling that treatment was necessary" were the top two barriers cited by all samples. See table 15 below for more details

Table 15: Barriers to following Healthcare Provider's Medical Advice

	Total sample (n=3182)	ACC sub-sample (n=224)	Public/ uninsured sub-sample (n=440)	MUA sub-sample (n=759)
Worried about side effect	37.5%	33.3%	45.8%	41.1%
Did not feel treatment would help	30.6%	29.9%	33.6%	33.7%
Condition not severe enough	28.1%	16.5%	28.4%	29.7%
Prefer alternative treatment	24.4%	18.8%	27.0%	26.9%
Not agree with the doctor	22.1%	17.3%	23.5%	23.7%
Concerned about the cost	20.7%	17.0%	21.3%	21.1%
Not convenient	19.3%	14.0%	17.4%	21.4%
Didn't explain well	17.7%	20.4%	23.3%	19.7%
Forgot to take medicine	16.1%	23.3%	24.6%	23.0%
Provider doesn't understand my culture	2.9%	5.1%	10.0%	6.7%

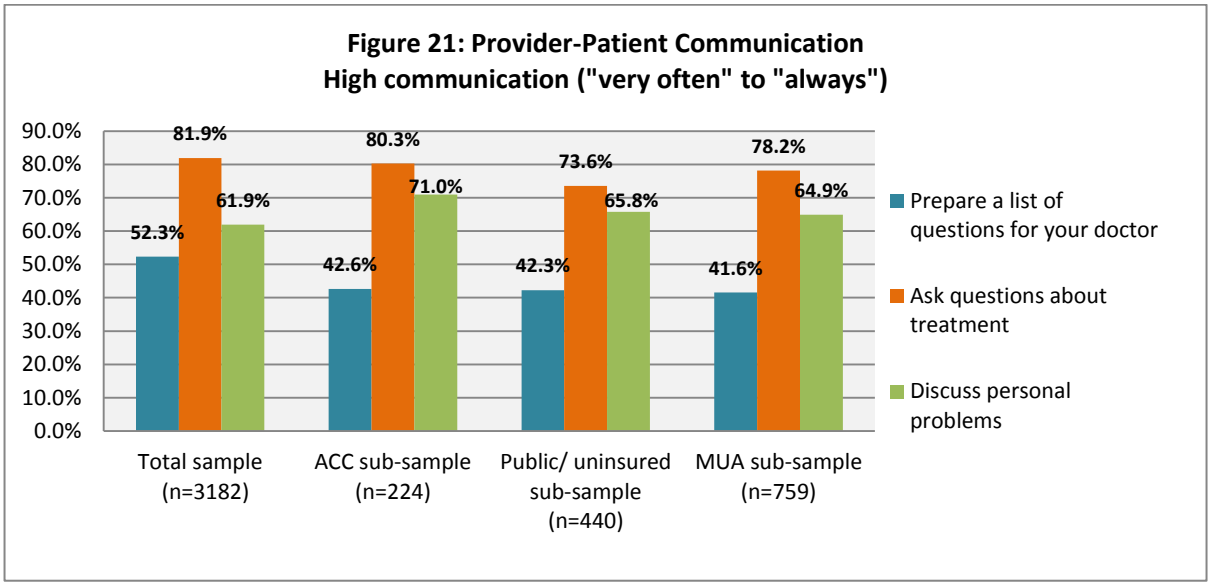
- The following results were found among total respondents:
    - Those who earned less than $10k (40.2%) a year were more likely to feel that treatment would not help, compared to those who earned more than $200k (30.4%) a year, at the $p \leq 0.05$ level
    - Respondents who received education less than high school (42.9%) were more likely to feel that treatment would not help, compared to those who went to college (21.9%) , at the $p \leq 0.001$ level
    - Having OA ($p \leq 0.001$), RA ($p \leq 0.01$), lupus ($p \leq 0.01$), fibromyalgia ($p \leq 0.05$) and osteoporosis ($p \leq 0.001$) were also found to be significantly associated with feeling that treatment would not help
    - American Africans (29.8%), followed by Asians (23.1%) were more likely to express concern about side effects than Whites (13.6%), at the $p \leq 0.001$ level
    - Non-Hispanics/Latinos (75.1%) were more likely to express concern about side effects than Hispanics/Latinos (24.9%)
    - Concerns about side effects were also found to be associated with having RA ($p \leq 0.001$), fibromyalgia ($p \leq 0.001$), osteoporosis ($p \leq 0.001$), OA ($p \leq 0.01$), and lupus ($p \leq 0.01$)
    - Whites (31%), followed by Asians (24%) and Hispanics/Latinos (20.2%), were more likely to feel that their condition was not severe enough to require treatment, compared to Blacks (20.0%), at the $p \leq 0.05$level
    - Having OA ($p \leq 0.001$), RA ($p \leq 0.01$), lupus ($p \leq 0.001$), fibromyalgia ($p \leq 0.01$) and osteoporosis ($p \leq 0.001$) were also found to be significantly associated with concerns about side effects
    - Higher levels of education ($p \leq 0.05$), and having fibromyalgia ($p \leq 0.01$), osteoporosis ($p \leq 0.05$), and gout ($p \leq 0.05$) were also found to be significantly associated with feeling that the condition was not severe enough to require treatment.
    - Those with higher levels of education were more likely to state they preferred to use complementary/alternative treatment ($p \leq 0.001$)
    - Those with lupus ($p \leq 0.05$) were more likely to be concerned about cost
    - Forgetfulness was found to be associated with having OA ($p \leq 0.05$), RA ($p \leq 0.01$), and lupus ($p \leq 0.001$)
    - Respondents who lived in the Bronx (7.2%), followed by those who lived in Brooklyn (5.2%), Queens (3.2%) and Manhattan (3.0%) were more likely to state that their provider did not

understand his/her culture/language, compared to those who lived in Long Island, Suffolk County (0.0%), at the p ≤ 0.01 level

- Asians (9.0%), followed by African Americans (8.9%) were more likely to state that their provider did not understand his/her culture/language, compared to Whites (1.1%), at the p ≤ 0.001 level
- Inability to understand the patient's culture was also cited by those with lower levels of education (p ≤ 0.001), and was found to be strongly associated with having RA (p ≤ 0.01), lupus (p ≤ 0.05), and osteoporosis (p ≤ 0.05)
- Findings from the CHNA support CDC's established links between race/ethnicity, education level, and linguistic/cultural barriers to adherence. Research has shown that language barriers have a demonstrably negative impact on access, quality, and patient satisfaction. Language assistance, including bilingual clinicians and interpreter services, is effective in improving care.

Provider-Patient Communication

- Figure 21 below shows the percentage of high provider-patient communication in four samples



- Lack of provider-patient communication was found to be associated with race/ethnicity, such as:
  - In the total sample, Native Hawaiians (40.0%), followed by Asians (32.3%) and African Americans (19.3%), were more likely to not ask questions about treatment, compared to Whites (15.1%), at the p ≤0.001 level
  - In the total sample, Asians (46.1%), followed by Whites (39.1%) and African Americans (31.3%) were more likely to not discuss personal problems with their provider, compared to Native Hawaiians (20.0%), at the p ≤0.05 level
  - In the public/uninsured sub-sample, Native Hawaiians (75.0%), followed by African Americans (67.1%) and Asians (66.7%) were more likely to not prepare a list of questions for their provider, compared to Whites (43.3%), at the p ≤0.01 level
  - In the public/uninsured sub-sample, Native Hawaiians (50.0%), followed by Asians (47.2%) and African Americans (21.8%) were more likely to not ask questions about treatment, compared to Whites (17.5%), at the p ≤0.001 level

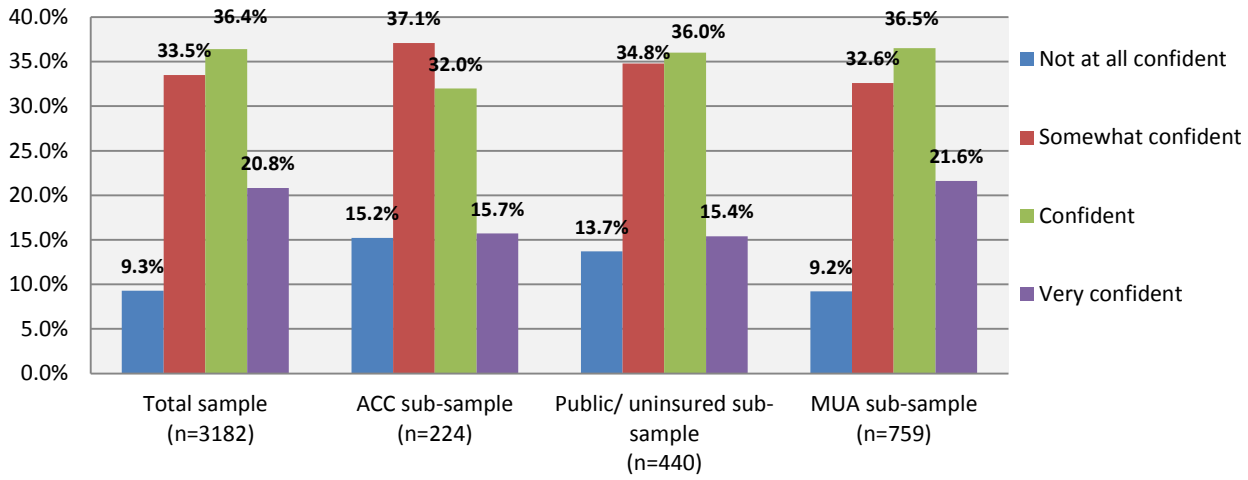
- In the public/uninsured sub-sample, Asians (52.8%), followed by African Americans (29.5%) and Whites (28.2%) were more likely to not discuss personal problems with their provider, compared to American Indians (16.7%), at the p ≤0.05 level
- In the MUA sub-sample, Native Hawaiians (100.0%), followed by American Indians (81.8%), Asians (73.2%) and African Americans (64.1%) were more likely to not prepare a list of questions for their provider, compared to Whites (51.0%), at the p ≤0.01 level
- In the MUA sub-sample, Native Hawaiians (100.0%), followed by Asians (49.0%) and Whites (37.9%) were more likely to not discuss personal problems with their provider, compared to African Americans (24.6%), at the p ≤0.01 level

- In the total and MUA samples, low communication in asking questions about treatment was also found among those with lower levels education (total: p ≤ 0.001, MUA: p ≤ 0.01) and lower income (total: p ≤ 0.001, MUA: p ≤ 0.05)

Self-Efficacy

- Majority of respondents in the total (47.8%), ACC (41.9%); public/uninsured (51.4%); and MUA (58.1) were very confident/confident in managing symptoms of their conditions. Figure 22 below shows more details

Figure 22: Self-Efficacy in Managing Symptoms of Respondents' Conditions



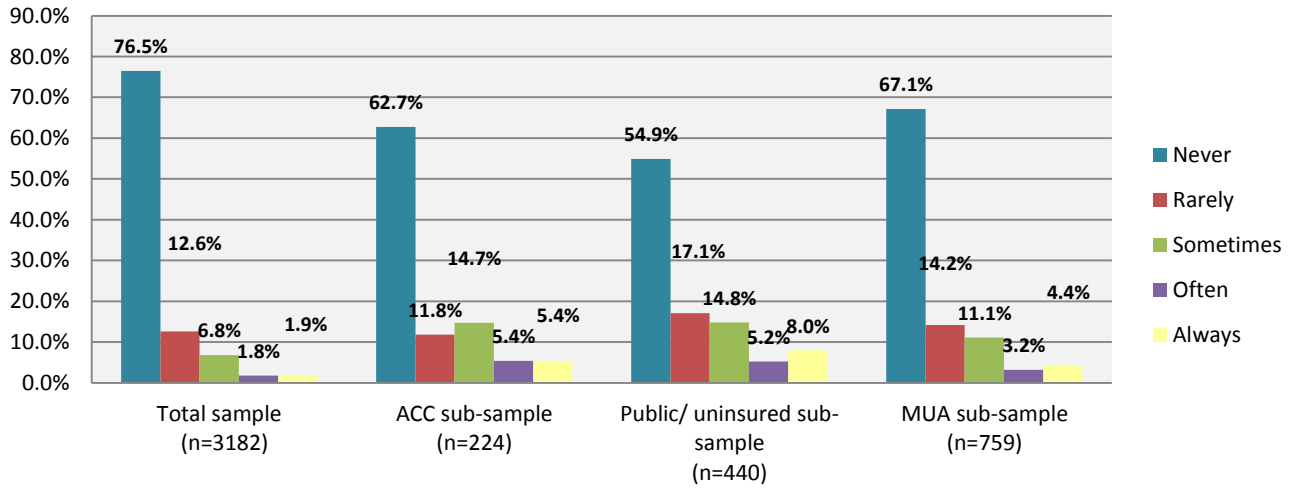
- Lack of confidence in self-management had statistically significant association in respondents with lower education (p ≤0.05 in total; p ≤0.05 in ACC), lower income (p ≤0.001 in total; p ≤0.001 in MUA group), older age (p ≤0.05 in total; p ≤0.05 in MUA samples)
- Lack of confidence in self-management had statistically significant association in respondents having musculoskeletal conditions, such as:
  - In the total sample, lack of confidence in self-management had significant association in respondents having OA (p ≤ 0.001), RA (p ≤ 0.001), lupus (p ≤ 0.01), fibromyalgia (p ≤ 0.001), gout (p ≤ 0.01), some other form of arthritis (p ≤ 0.001), and osteoporosis (p ≤ 0.001)
  - In the public/uninsured sample, lack of confidence in self-management had significant association in respondents having OA (p ≤ 0.01), RA (p ≤ 0.05), and fibromyalgia (p ≤0.05)

- In the MUA sample, lack of confidence in self-management had significant association in respondents having OA ($p \leq 0.001$), RA ($p \leq 0.001$), lupus ($p \leq 0.05$), fibromyalgia ($p \leq 0.01$), some other form of arthritis ($p \leq 0.05$), and osteoporosis ($p \leq 0.001$)

Health Literacy

- Majority of respondents in the total (94.0%); ACC (87.2%); public/uninsured (86.7%); and MUA (84.4%) rated their ability to speak and understand English from "good" to "excellent"
- Majority of the respondents in the total (91.6%); ACC (84.0%); public/uninsured (71.1%); and MUA (79.6%) preferred English for discussing health
- Majority of the respondents in the total (92.7%); ACC (86.3%); public/uninsured (74.8%); and MUA (82.4%) preferred English for reading healthcare instructions
- Majority of the respondents in the total (76.5%); ACC (62.7%); public/uninsured (54.9%); and MUA (67.1%) stated that they "never" needed assistance when reading instructions, pamphlets, or other written materials from doctors or pharmacies. See figure 23 below for details

Figure 23: Assistance needed for medical instructions



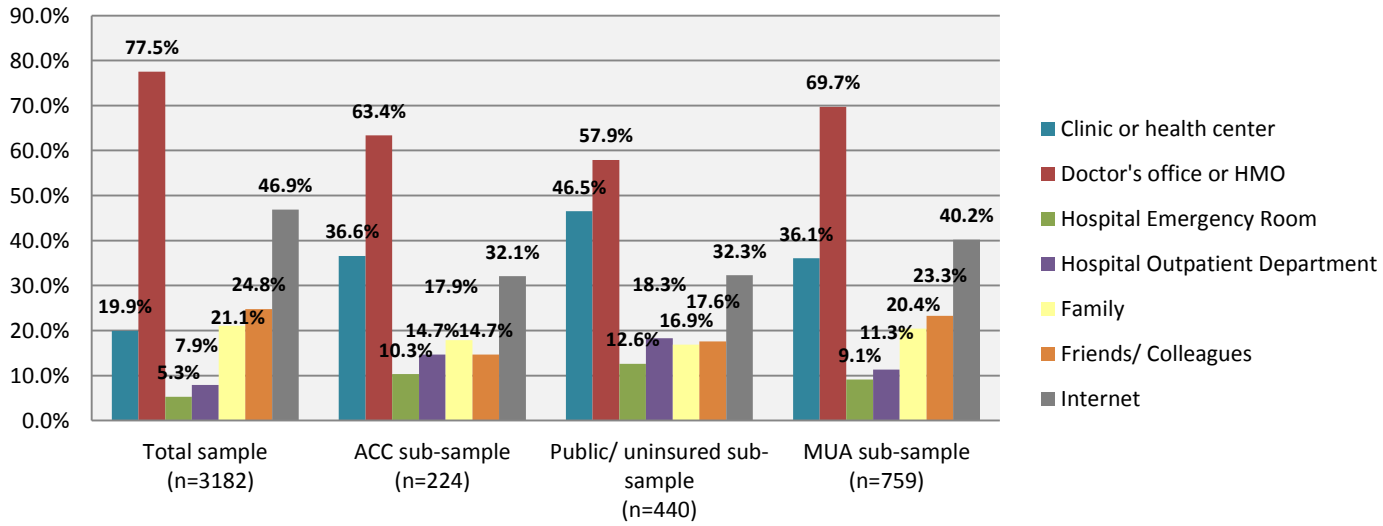
- Statistically significant associations were found between race, ethnicity and elements of health literacy in all samples, in particular:
  - Asians in all samples (total: 16.5%, ACC: 33.3%, public/uninsured: 36.8%, MUA: 27.3%), followed by American Indians (total: 15.8%; ACC: 30.0%; public/uninsured: 16.7%; MUA: 24.5%) and African Americans(total: 16.5%; ACC: 5.4%; public/uninsured: 7.8%; MUA: 3.3%) were more likely to rate their spoken English as "Poor" compared to Whites (total: 0.8%; ACC: 0.0%; public/uninsured: 1.2%; MUA: 0.8%), at the $p \leq 0.001$ level
  - Hispanics/Latinos in all samples were more likely to rate their spoken English as "Poor" compared to Non-Hispanics/ Latinos (total: 16.0% vs. 4.1%; ACC: 10.9% vs. 1.7%; public/ uninsured: 16.1% vs. 9.6%; MUA: 13.6% vs. 5.7%) , at the $p \leq 0.001$ level
  - Asians in all samples (total: 37.2%; ACC: 80.0%; public/ uninsured: 64.3%; and MUA: 50.5%) were more likely to prefer discussing healthcare in non-English ($p \leq 0.001$)

- Hispanics/Latinos were more likely to prefer discussing healthcare in non-English than Non-Hispanics/Latinos in all samples (total: 34.0% vs. 4.1%, ACC: 37.3% vs. 8.9%, public/ uninsured: 47.01% vs. 18.0%, MUA: 37.1% vs. 11.6%) , at the $p \leq 0.001$ level
- Asians in all samples (total: 32.5%, ACC: 60.0%, public/uninsured: 57.9%, MUA: 44.3%), were also more likely to prefer reading medical instructions in non-English languages ($p \leq 0.001$)
- In the total sample, Hispanics/ Latinos (24.9%) were more likely to indicate that they generally needed assistance when reading materials from doctors or pharmacies than Non-Hispanics/Latinos (8.1%), at the $p \leq 0.001$ levelIn all samples, American Indians (total: 42.1%, ACC: 66.7%, public/uninsured: 66.7%, MUA: 45.5%) were more likely to indicate that they generally needed assistance when reading materials from doctors or pharmacies, at the $p \leq 0.001$ level

Health Information Resources

- Results suggest that the clinic or doctor's office was the most popular place for respondents in all four samples to obtain health information or advice (77.5% of total, 63.4% of the ACC, 57.9% of public/uninsured, and 69.7% of the MUA)
- Results also suggest that the Internet was the second most popular place to obtain health information or advice in the total, public/uninsured and MUA samples (46.9% of total, 32.3% of public/uninsured, 40.2% of MUA), see figure 24 for more detail

Figure 24: Health Information / Advice Resources



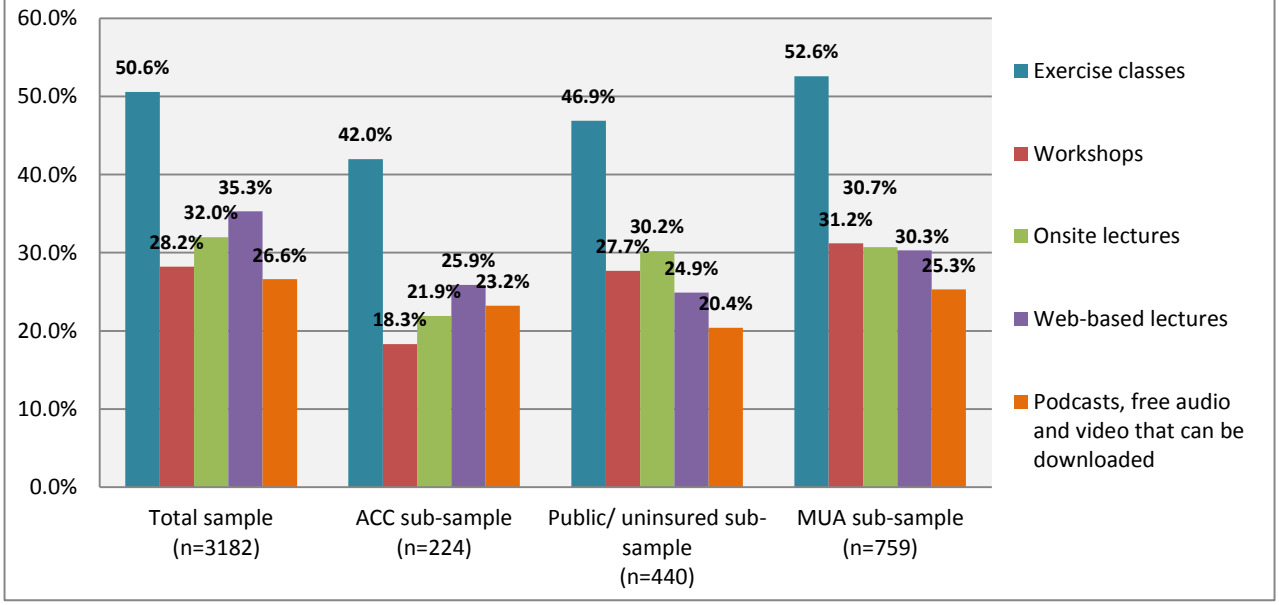
- Results show that health information resources are strongly associated with some socio-demographic characters, such as:
  - In the total sample, people with lower annual incomes tend to obtain health information from clinic, hospital emergency room or hospital outpatient department; while people with higher income tend to obtain health information from a doctor's office, at the $p \leq 0.001$ level
  - In the total and MUA samples, respondents with higher educations were more likely to obtain health information/advice from a doctor's office or HMO, at the $p \leq 0.001$ level
  - In the total and public/uninsured samples, younger respondents were more likely to obtain health information from the internet, at the $p \leq 0.001$ level

- In the ACC sample, American Indians (33.3%), followed by Asian (10.0%) were more likely to not seek health information often than Whites (1.3%), at the p≤ 0.05 level
- In the MUA sample, people with lower annual incomes tend to obtain health information from clinic or health center; while people with higher income tend to obtain health information from a doctor's office, at the p ≤ 0.001 level

Health Education Needs

- Majority of respondents in the total (74.4%); ACC (89.4%); public/uninsured (81.4%); and MUA (79.3%) samples indicated they had not taken an educational course or class to learn how to manage bone, muscle and joint health/condition
- Results also suggest that exercise class was the most preferred form of health education for respondents across all four samples. See figure 25 for more detail

Figure 25: Preferred Health Education Form



- In the total (p ≤ 0.05) and MUA (p ≤ 0.001) groups, respondents with higher income were more likely to indicate that they had taken an educational course or class
- In the total sample, respondents with higher education were more likely to indicate that they had taken an educational course or class , at the p ≤ 0.001 level
- In the total sample, respondents who lived in the Bronx (80.1%), followed by Queens (76.7%), Westchester (75.0%), Brooklyn (72.2%), and Manhattan (67.1%) represents the largest groups with no previous health education experience, at the p ≤ 0.001 level
- In the total and MUA samples, respondents with higher education were more likely to select exercise class as the preferred form of health education, at the p ≤ 0.01 level
- In the total sample, younger respondents were more likely to select exercise class as preferred health education activities, at the p ≤ 0.001 level
- In the total and MUA samples, respondents with at least one musculoskeletal condition (54.2%) were more likely to select exercise class as the preferred form of health education a than respondents with no musculoskeletal condition (33.3%) , at the p ≤ 0.01 level

Other Musculoskeletal Needs

- Survey respondents were also given the opportunity to report any other musculoskeletal or rheumatologic needs they would want HSS to be aware of, with major themes revealed in the table 16 below

Table 16: Other Musculoskeletal Needs (N=740)

	N	%
Had musculoskeletal conditions / had related surgeries	577	78.0%
Positive HSS experiences	48	6.5%
Interested in health education information	31	4.2%
More patient-physician communication at HSS	17	2.3%
Negative HSS experiences	15	2.0%
Expand HSS network/ add more locations	11	1.5%
Unrelated conditions	11	1.5%
Miscellaneous comments	11	1.5%
More exercise classes	10	1.4%
HSS should accept more insurance	9	1.2%

2016 HSS CHNA Summary Results - Major Highlights by Sample

Health Indicator	Total sample (n=357)	HSS Ambulatory Care Centers sub-sample (n=224)	Public/Uninsured sub-sample (n=440)	Medically Underserved Areas sub-sample (n=759)
Socio-Demographic Profile				
Gender	74.4% female; 25.3% male	72.2% female; 27.3 % male	80.0% female; 19.8% male	74.8% female; 24.8% male
Age	- 6.4% aged 18-35 - 10.7% aged 36-50 - 62.8% aged 51-75 - 10.1% aged 76+	- 13.8% aged 18-35 - 17.9% aged 36-50 - 45.6% aged 51-75 - 4.5% aged 76+	- 12.5% aged 18-35 - 14.3% aged 36-50 - 59.3% aged 51-75 - 14.0% aged 76+	- 11.5% aged 18-35 - 12.5% aged 36-50 - 61.6% aged 51-75 - 14.3% aged 76+
Race	74.0% white; 9.2% African American; 8.1% Asian	44.1% white; 29.4% African American; 5.9% Asian	36.4% white; 23.7% African American; 16.1% Asian	44.8% white; 19.2% African American; 18.3% Asian
Ethnicity	85.7% non-Hispanic/ Latino; 14.2% Hispanic/ Latino	70.5% non-Hispanic/ Latino; 29.5% Hispanic/ Latino	59.3% non-Hispanic/ Latino; 40.7% Hispanic/ Latino	65.2% non-Hispanic/ Latino; 34.8% Hispanic/ Latino
Relationship Status	- 43.6% married; 23.3% single - 61.2% not live alone	- 28.5% married; 32.8% single - 67.2% not live alone	- 20.3% married; 31.3% single - 60.1% not live alone	- 35.5% married; 26.6% single - 63.6% not live alone
Language Spoken at Home	English (78.6%)	English (65.9%)	English (48.9%)	English (58.8%)
Education	**Top 2 groups:** - Completed high school or GED (31.3%) - Post-college (26.7%)	**Top 2 groups:** - Completed high school or GED (72.6%) - Less than high school (16.2%)	**Top 2 groups:** - Completed high school or GED (52.7%) - Less than high school (24.3%)	**Top 2 groups:** - Completed high school or GED (45.2%) - Post-college (15.8%)
Annual Household Income	**Top 3 groups:** - 17.3% had $200,000 or more - 15.4% had $50,000 - $74,000 - 12.5% had $100,000 - $149,999	**Top 3 groups:** - 40.5% had less than $10,000 - 13.3% had $15,000 - $24,999 - 12.7% had $10,000 - $14,999	**Top 3 groups:** - 45.9% had less than $10,000 - 20.2% had $10,000 - $14,999 - 13.8% had $15,000- $24,999	**Top 3 groups:** - 20.8% had less than $10,000 - 15.0% had $50,000 - $74,999 - 12.1% had $15,000 - $24.999
Work Status	44.6% retired	29.4% unable to work	34.1% retired	37.1% retired
Geographic Location	Manhattan (43.0%)	Queens (21.9%)	Bronx (25.8%)	Bronx (34.6%)
Health Status & Quality of Life				
Health Status	78.4% rated their health positively (good to excellent)	50.9% rated their health positively (good to excellent)	50.5% rated their health positively (good to excellent)	66.0% rated their health positively (good to excellent)
Physical Health	37.5% reported no physically unhealthy days in the past 30 days	38.3% reported 14 days or more physical unhealthy days in the past 30 days	37.0% reported 14 days or more physical unhealthy days in the past 30 days	35.8% reported no physically unhealthy days in the past 30 days
Musculoskeletal Conditions	**Top Three:** 1) Osteoarthritis (54.7%) 2) Some other form of arthritis (30.3%) 3) Osteoporosis (27.6%)	**Top Three:** 1) Osteoarthritis (54.7%) 2) Rheumatoid arthritis (41.3%) 3) Some other form of arthritis (34.2%)	**Top Three:** 1) Osteoarthritis (49.5%) 2) Some other form of arthritis (43.7%) 3) Rheumatoid arthritis (38.9%)	**Top Three:** 1) Osteoarthritis (46.8%) 2) Some other form of arthritis (33.8%) 3) Rheumatoid arthritis (30.8%)
Falls	- 25.3% had fallen within the past year - 18.3% reported fractures from falls - 66.6% had not spoken to their healthcare providers about their fall	- 27.5% had fallen within the past year - 12.3% reported fractures from falls - 63.2% had not spoken to their healthcare providers about their fall	- 31.7% had fallen within the past year - 12.4% reported fractures from falls - 71.1% had not spoken to their healthcare providers about their fall	- 27.6% had fallen within the past year - 12.4% reported fractures from falls - 61.7% had not spoken to their healthcare providers about their fall
Mental Health	55.4% reported no mentally unhealthy days in the past 30 days	49.5% reported no mentally unhealthy days in the past 30 days	45.8% reported no mentally unhealthy days in the past 30 days	54.0% reported no mentally unhealthy days in the past 30 days
Difficulty in Daily Activities	- 67.1% reported stooping, bending or kneeling as the most common difficulty - 49.9% reported no pain interfered with usual activities in the past 30 days	- 79.4% reported stooping, bending or kneeling as the most common difficulty - 44.2% experienced 14 days or more pain interfered with usual activities in the past 30 days	- 78.0% reported stooping, bending or kneeling as the most common difficulty - 35.4% experienced 14 days or more pain interfered with usual activities in the past 30 days	- 66.9% reported stooping, bending or kneeling as the most common difficulty - 46.0% reported no pain interfered with usual activities in the past 30 days
Health Behavior & Life Style				
Physical Activity	- 23.1% meet CDC-recommended level of moderate PA - 22.1% meet CDC-recommended level of vigorous PA - 48.0% meet CDC-recommended level of muscle-strengthening PA	- 14.9% meet CDC-recommended level of moderate PA - 19.7% meet CDC-recommended level of vigorous PA - 31.5% meet CDC-recommended level of muscle-strengthening PA	- 13.4% meet CDC-recommended level of moderate PA - 19.3% meet CDC-recommended level of vigorous PA - 30.1% meet CDC-recommended level of muscle-strengthening PA	- 16.1% meet CDC-recommended level of moderate PA - 8.7% meet CDC-recommended level of vigorous - 8.6% meet CDC-recommended level of muscle-strengthening PA

Health Indicator	Total sample (n=357)	HSS Ambulatory Care Centers sub-sample (n=224)	Public/Uninsured sub-sample (n=440)	Medically Underserved Areas sub-sample (n=759)
Diet	- 79.7% rated their diet positively (good to excellent) - 94.1% would like to eat heathier	- 64.3% rated their diet positively (good to excellent) - 95.0% would like to eat heathier	- 59.7% rated their diet positively (good to excellent) - 87.3% would like to eat heathier	- 69.5% rated their diet positively (good to excellent) - 79.8% would like to eat heathier
Barriers to Eating Healthy	Top Three: 1) Taking too much time to prepare (52.9%) 2) Cost (38.8%) 3) Family/ friend do not eat (32.7%)	Top Three: 1) Cost (71.4%) 2) Family/ friend do not eat (44.9%) 3) Taking too much time to prepare (43.3%)	Top Three: 1) Cost (72.7%) 2) Taking too much time to prepare (44.7%) 3) Family/ friend do not eat (43.2%)	Top Three: 1) Cost (56.9%) 2) Taking too much time to prepare (49.9%) 3) Family/ friend do not eat (37.9%)
Reproductive Health	- 20.1% indicated that their muscle, bone or joint condition(s) affected their sexual health - The most common effects was limitation of motion/pain (50.7%)	- 29.8% indicated that their muscle, bone or joint condition(s) affected their sexual health - The most common effects was decreased sexual desire and satisfaction (53.7%)	- 26.6% indicated that their muscle, bone or joint condition(s) affected their sexual health - The most common effects was limitation of motion/pain (44.8%) and decreased sexual desire and satisfaction (44.8%)	- 23.2% indicated that their muscle, bone or joint condition(s) affected their sexual health - The most common effects was decreased sexual desire and satisfaction (49.1%)
Use of and Access to Care				
Health Coverage	98.2% had coverage	99.5% had coverage	91.1% had coverage	96.5% had coverage
Insurance Coverage Type	- 48.6% had Medicare - 35.2% had a plan purchased through employer or union	- 61.7% had Medicaid - 30.6% had Medicare	- 91.1% had Medicaid - 39.4% had Medicare	- 41.1% had Medicare - 33.2% had a plan purchased through employer or union
Immunizations & Health Screenings (last year)	- 73.5% received immunizations - 16.3% received STD/STI/HIV screenings - 60.2% female had mammograms and 28.6% had pap smears - 31.2% male had prostate exam	- 66.5% received immunizations - 42.5% received STD/STI/HIV screenings - 56.8% female had mammograms and 54.6% had pap smears - 23.5% male had prostate exam	- 65.4% received immunizations - 37.4% received STD/STI/HIV screenings - 55.5% female had mammograms and 45.6% had pap smears - 20.0% male had prostate exam	- 68.6% received immunizations - 28.8% received STD/STI/HIV screenings - 56.5% female had mammograms and 46.7% had pap smears - 28.3% male had prostate exam
Healthcare Access (past year)	11.7% had difficulties accessing a provider when needed	18.4% had difficulties accessing a provider when needed	22.4% had difficulties accessing a provider when needed	15.2% had difficulties accessing a provider when needed
Adherence with Medical Advice	94.0% "always/very often"	94.2% "always/very often"	91.0% "always/very often"	91.7% "always/very often"
Provider- Patient Communication	- 52.3% “very often” to “always” prepared a list of questions for their doctors - 81.9% “very often” to “always” ask questions when visiting their doctors - 61.9% “very often” to “always” discuss personal problems related to the illness with their doctors	- 42.6% “very often” to “always” prepared a list of questions for their doctors - 80.3% “very often” to “always” ask questions when visiting their doctors - 71.0 “very often” to “always” discuss personal problems related to the illness with their doctors	- 42.3% “very often” to “always” prepared a list of questions for their doctors - 73.6% “very often” to “always” ask questions when visiting their doctors - 65.8% “very often” to “always” discuss personal problems related to the illness with their doctors	- 41.6% “very often” to “always” prepared a list of questions for their doctors - 78.2% “very often” to “always” ask questions when visiting their doctors - 64.9% “very often” to “always” discuss personal problems related to the illness with their doctors
Self-Efficacy	47.8% were very confident/confident in managing symptoms of their conditions	41.9% were very confident/confident in managing symptoms of their conditions	51.4% were very confident/confident in managing symptoms of their conditions	58.1% were very confident/confident in managing symptoms of their conditions
Health Literacy	- 94.0% rated their ability to speak and understand English from “good” to “excellent” - 76.5% “never” needed assistance when reading instructions, pamphlets, or other written materials from doctors or pharmacies	- 87.2% rated their ability to speak and understand English from “good” to “excellent” - 62.7% “never” needed assistance when reading instructions, pamphlets, or other written materials from doctors or pharmacies	- 86.7% rated their ability to speak and understand English from “good” to “excellent” - 54.9% “never” needed assistance when reading instructions, pamphlets, or other written materials from doctors or pharmacies	- 84.4% rated their ability to speak and understand English from “good” to “excellent” - 67.1% “never” needed assistance when reading instructions, pamphlets, or other written materials from doctors or pharmacies
Health Information Resources	Doctor’s office or HMO (77.5%)	Doctor’s office or HMO (63.4%)	Doctor’s office or HMO (57.9%)	Doctor’s office or HMO (69.7%)
Preferred Form of Health Education	Exercise classes (50.6%)	Exercise classes (42.0%)	Exercise classes (46.9%)	Exercise classes (52.6%)

Appendix E: List of HSS Internal Stakeholders

Internal Stakeholders for the 2016 HSS CHNA

	Name	Title	Department
1.	Jack Davis	Manager	Nursing
2.	Trish Quinlan	AVP Chief Learning Officer	Nursing
3.	Terry Karl	Assistant Director	Nutrition
4.	Page Carol	Director, Quality/Operational Excellence	Rehabilitation
5.	Marita Baragiano	Patient Care Director	Ambulatory Care Center – 72nd Str
6.	Jessica Kovac	Senior Director	Ambulatory Care Center – Rheumatology, 7th floor
7.	Bella Ellogoodin	Senior Director	Service Excellence and Language Services
8.	Matt O'Malley	Senior Director	Satellite Management
9.	Margaret Oettinger	Director of Pastoral Care	Spiritual Care
10.	Chao Wu	Chief Patient Experience Officer	Patient Experience
11.	Lydia Dalley	Director	Patient Experience
12.	Susan Cha, MD	Pediatrician	Med Staff-Attendings
13.	Julie Pelaez	Senior Director	Digital Communications
14.	Reesa Kaufman	Senior Director	Development
15.	Alana Levine, MD	Rehabilitation	Med Staff-Attendings

Appendix F: Summary of Community Partners Meeting

Community Health Needs Assessment (CHNA)
Community Partners Meeting Summary
May 25, 2016

Attendees:

Names	Organization
Sandra Goldsmith	HSS
Roberta Horton	
Jillian Rose	
Titi Ologhobo	
Demi Wu	
Juliette Kleinman	
Toral Priscilla	
Dariana Pichardo	
Sharon Daitz	Arthritis Foundation
Aicha Diallo-Bennett	
Sandra Regenbogen-Weiss	New York Presbyterian
Miriam Colon	Isabella Geriatric
Jeff Zhu	Weill Cornell Medicine Clinical and Translational Science Center
Lula Mae	
Diane Gross	SLE Lupus Foundation
Denise Goodman	Memorial Sloan Kettering Cancer Center
Fred Riccardi	Medicare Right Center

Goal: The goal of the meeting was to share the CHNA results, elicit feedback and prioritize health needs.

CHNA Results

- CHNA results were presented at the meeting
- CHNA results were received positively and there was extensive discussion about how results accurately depict the various communities served and how these results could be used to impact the community at large.
- There were discussions about access to educational programs and ways in which HSS could extend the reach of its programs
    - More online educational programs are needed to reach more community members
- Discussion also focused on the disparities found in the three subgroups (ambulatory care center sub-group, no/ public insurance sub-group, and medically underserved area sub-group)

Community Health Needs Assessment (CHNA)
Community Partners Meeting Summary
May 25, 2016

Ranking Results

- Community partners ranked health issues according to the communities they serve, and the top five health priorities identified were:
    1. Joint/ Bone pain
    2. Falls
    3. Osteoarthritis
    4. Fatigue
    5. Muscle pain

Next Steps

- Future community forums planning - More community forums are needed to reach more diverse communities. Future community forums will be held in Brooklyn and the Bronx.

Appendix G: Listing of Existing Healthcare Facilities and Community Resources

Existing Healthcare Facilities/Community Resources
Available to Respond to Community Health Needs

Clinical/Academic Partnerships
• API Medical Student Association at SUNY Downstate
• Asian American/Asian Research Institute, City University of New York
• Audubon Family Planning Practice and Young Men's Clinic
• Burke Rehabilitation Hospital
• Center for Study of Asian American Health, New York University
• Charles B. Wang Community Health Center
• Chinese Community Partnership for Health, New York Downtown Hospital
• Clinical Translational Science Center, Community Engagement Core, Weill Cornell Medical College
• Gouverneur Healthcare Services, New York City Health and Hospitals Corporation
• Harlem Hospital
• Mount Sinai Adolescent Health Center
• Mount Sinai Peers Encouraging Empowerment though Knowledge (S.P.E.E.K) Peer Education Program
• New York – Presbyterian, Columbia University Medical Center
• New York – Presbyterian Morgan Stanley Children's Hospital, Pediatric Rheumatology Service
• Silberman School of Social Work at Hunter College
• Translational Research Institute for Pain in Later Life (TRIPLL)
• Weill Cornell Medical College, Department of Psychiatry

Community-Based Organization Partners
• Advent Lutheran Church
• All Community Adult Day Centers
• Arthritis Foundation – New York Chapter
• Asian American Federation of New York
• Asian Health and Social Service Council
• Boys and Girls Clubs of America
• Carter Burden Senior Center
• Children's Aid Society
• Chinatown Community Center, Visiting Nurses Services New York
• Chinese American Planning Council
• Chinese Community Center of Flushing
• Chinese Community Center – Flushing Civic Center
• Community Healthcare Network
• Corsi Senior Center
• Dorot Volunteer Corps for Homebound Seniors
• East Side Council on the Aging (ESCOTA)
• General Human Outreach in the Community, Inc. (GHO)
• Isabella Geriatric Center
• LaGuardia Senior Center
• Lenox Hill Neighborhood House
• Medicare Rights Center
• Mott Street Senior Center
• National Bone Health Alliance
• National Osteoporosis Foundation
• New York Chinatown Senior Center
• New York Foundation for Senior Citizens
• New York Golden Eagle Adult Day Care Center
• New York Road Runners Club (NYRR)
• Osteoarthritis Action Alliance
• Planned Parenthood New York City
• Prime Care Home Health Agency
• Private/community gyms (Method Gym, Erika Bloom Pilates Plus LLC)
• Selfhelp Innovative Senior Center
• Senior Companions at Henry Street Settlement
• S.L.E. Lupus Foundation
• Stanley Isaacs Community Center
• The Cathedral Church of Saint John the Divine / Cathedral Community Cares
• Urban Assembly Gateway School for Technology
• Washington Heights & Inwood YM & YWHA
• West Side Interagency Council on the Aging (WSIACA)

Government/Public Partners
• Office of Women's Health, Department of Health and Human Services
• New York City Catholic Schools
• New York City Day Care/Head Start Centers
• New York City Department of Health and Mental Hygiene
• New York Public Libraries
• New York City Public Schools
• New York State Department of Health
• New York State Department of Aging

Appendix H: Summary of Community Forums (Ranking of Health Needs)

HOSPITAL FOR SPECIAL SURGERY

2016 HSS CHNA Community Forum Report

Goal: To share the Community Health Needs Assessment (CHNA) results and provide the opportunity for community members to prioritize their health needs.

Method: Four community forums were hosted in the following locations below -

- May 17, 2016 at Lenox Hill Neighborhood House, Manhattan (11 people present)
- May 21, 2016 at the Living Healthy with Lupus Workshop, HSS (50 people present)
- May 23, 2016 at Chinatown Community Center, Visiting Nurses Services New York (35 people present)
- May 25, 2016 at the Senior Health and Fitness Day, HSS (17 people present)

A total of 113 community members participated in the community forums. At each community forum, participants were asked to rank the indicators outlined in CHNA according to the order of importance for their community (where 1 ranks the highest). Ranking results were calculated using a simple point system in which each ranking is assigned a point value from 1-22, with the indicator ranked 1 receiving 22 points and the indicator ranked 22 receiving 1 point. The indicators that received the most collective points were identified as the top priorities for the participants at the respective event.

Results: Community members were asked to rank the health needs most important to them and give their perspective on community health issues in an open discussion. Ranking of health issues differed by location as seen in **Table 1** below.

Table 1: Ranking Results (n = 90)

	Lenox Hill Neighborhood Senior Center	Senior Health and Fitness Day, HSS	Living Healthy with Lupus Workshop, HSS	Chinatown Community Center, VNSNY
1	Osteoporosis	Joint/ Bone pain	Joint/ Bone pain	Osteoarthritis
2	Fatigue/Stress/ Rheumatoid Arthritis	Obesity	Falls	Rheumatoid Arthritis
3	Muscle pain	Mental Health	Osteoarthritis	Osteoporosis
4	Stiffness	Stress	Fatigue	Joint/ Bone pain
5	Obesity	Poor Diet	Muscle pain	Muscle pain

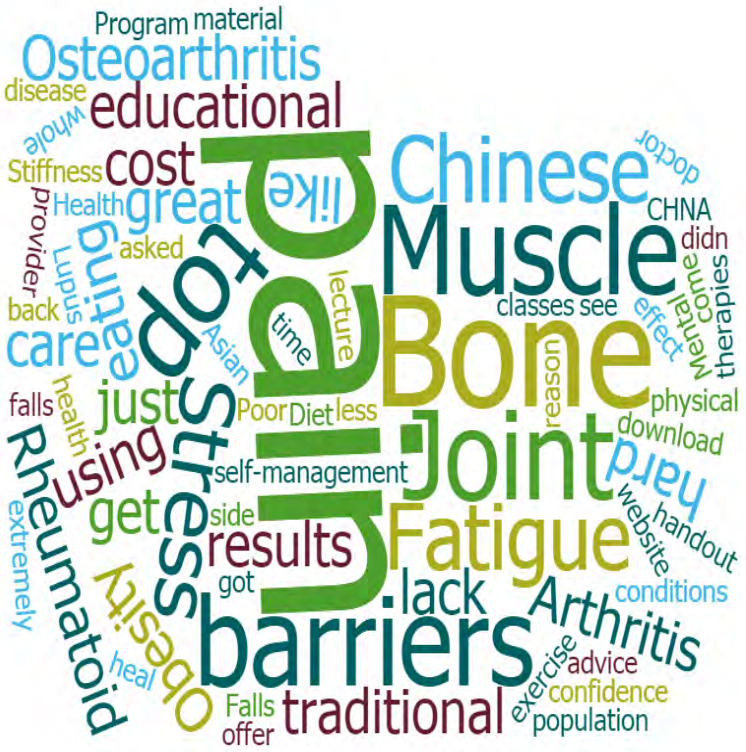
Health Concerns

HSS engaged community members to discuss about health issues and concerns in their local community. Although health needs differed across each location, one consistent theme across all community forums was the need for additional educational programs to help prevent and manage

muscle, bone and joint health conditions. See below for health needs identified in each community forum:

- **Lenox Hill Neighborhood Senior Center**: Community members considered cost as the top barrier to eating healthy.
- **Living Healthy with Lupus Workshop, HSS**: Community members talked about falls and the embarrassment associated with it. In addition, difficulty in getting an appointment was identified as the top barrier to medical access.
- **Chinatown Community Center, VNSNY**: Community members mentioned that they preferred traditional Chinese therapies and they needed more educational program in the community. Furthermore, they indicated that osteoarthritis and rheumatoid arthritis were big issues in the Chinese communities.
- **Senior Health and Fitness Day, HSS**: Community members talked about bone/ joint pain, fatigue, obesity associated with poor diet, and lack of physical activity

Figure 1: Health Needs Identified



HOSPITAL FOR SPECIAL SURGERY

2016 HSS CHNA Community Forum Report

Demographic information (n=61)

Nearly two-third (61%) of participants filled out an evaluation after the community forum. As seen below, majority of community members were female (89.9%), aged 70-79 (39.0%), non-Hispanics (88.7%) and Asians (50.9%).

Figure 2 : Gender

Figure 3: Age

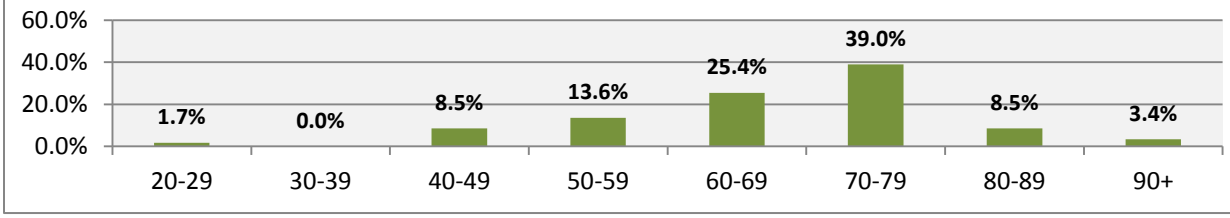


Figure 4 : Race

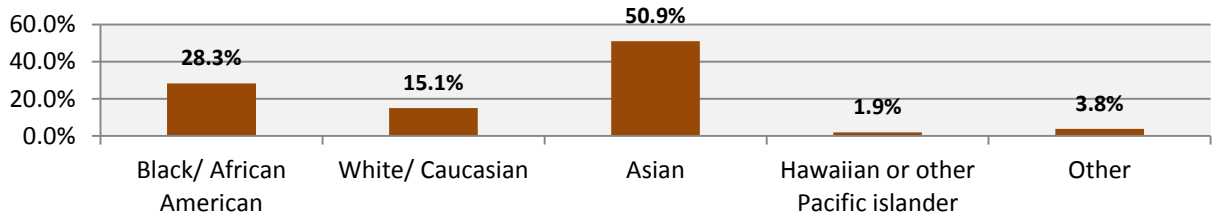
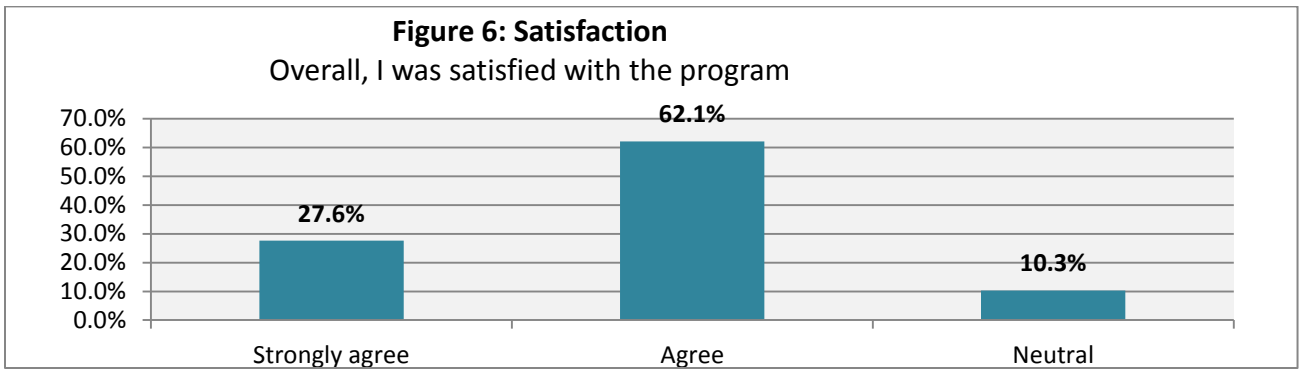


Figure 5: Ethnicity

Satisfaction (n=61)

The community forums were well received by participants as 89.7% of the strongly agree/agree that the community forum was helpful, see figure 6 below for details.



When asked about the most valuable component of the forum, 61.0% of the participants mentioned that the information presented was very helpful to them, 14.6% thought everything was valuable, 12.2% valued the discussion part. Also, when asked about how to improve the forum, 33.3% of the participants wanted the forum/ lecture to be offered more often, 24.2% wanted more detailed information, and 18.2% thought it was perfect.