

# Assessment of Preventive Healthcare Services Utilization Among Allegheny County Residents

-- 2015

## *Executive Summary -- Addressing Plan for a Healthier Allegheny*

The Plan for a Healthier Allegheny (PHA) — produced by the Allegheny County Health Department — is the product of months of collaborative work with an Advisory Coalition of more than 80 stakeholder organizations representing multiple sectors affecting health in Allegheny County. Of the nearly hundred objectives that were evaluated at baseline and will be measured over the next five years, some of the most challenging to measure are Access, which assesses not only Access to Health Care but also to fresh and healthy foods, recreational activities, or the transportation to any and all of the above.

One strategy for measurement to access to healthcare was to measure the number of individuals who received preventive care among those who were eligible for this type of care in a systematic fashion. The way in which ACHD chose to assess this was through evaluation of the 2015 Healthcare Effectiveness Data and Information Set (HEDIS). These are systematic assessments undertaken by each insurance company to determine their success in providing needed healthcare services to their customers. Because each insurer assesses these according to the same methodology, the information was aggregated to determine what proportion of all insured individuals are receiving these services.

The following measures were assessed: Breast Cancer Screening (BCS), Cervical Cancer Screening (CCS), Colorectal Cancer Screening (COL), HPV Vaccination (HPV), Chlamydia Screening (CHL), Ambulatory or Preventive Care Visit (AAP), Childhood Immunization Status (CIS). Between 50 and 60 percent of insurance company members were of unknown race, so the racial distribution of preventive screening is largely unknown. However, this was assessed geographically. Of those members eligible for breast cancer screening, 70% of women aged 50-74 received the screening. When this was assessed geographically, between 54 and 80% of eligible members received screening in the various regions within AC. Overall 63% of the female population aged 20-64 received cervical cancer screening, with the highest rate among those aged 21-29 (73%). This ranged from 48-100% by zip code in the county. The highest rate of compliance with colorectal cancer screening was among those aged 70-75; rates were equal by gender in every age group. Rates differed by age group, with the lowest screening rates (50%) among those aged 50-54 and the highest among those 70-75 at 70%. Screening rates also differed by geographic area, with lowest rates (40%) in the southernmost suburbs and the highest in the northern suburbs that approach 100%.

Rates of adolescent girls who are appropriately vaccinated against HPV (3 doses by age 13) are quite low in Allegheny County and in the US. Lower rates are found in the eastern and northern suburbs of AC, and are slightly higher in the south and west. Twenty five percent of females in the county have completed three doses by their 13<sup>th</sup> birthday. Chlamydia screening should occur among sexually active young women aged 16-24 who are most at risk of disease. In Allegheny County, about 50% of at-risk women were screened; screening was most frequent nearest the city center. Proportion screened was slightly higher among the older women (20-24) within this group. Frequency of ambulatory preventive care visits were assessed for those aged 20 and older. Proportion of individuals receiving an ambulatory care visit increased with decade of life and the frequency was higher close to the city center. Complete childhood immunizations include having received diphtheria, tetanus and acellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines. Uptake was greatest for VZV and MMR, at 93% complete and lowest for influenza at 52%. Overall completeness was 36%.

Usage rates of these preventive services provide some insight as to locations and age groups of people who are most likely and able to access these services to assure continued good health. Conversely, it enables ACHD and our community partners to focus outreach efforts in areas that appear to lack access to these services.

## **Introduction**

The Plan for a Healthier Allegheny (PHA) — produced by the Allegheny County Health Department — is the product of months of collaborative work with an Advisory Coalition of more than 80 stakeholder organizations representing multiple sectors affecting health in Allegheny County. Of the nearly hundred health objectives that were evaluated at baseline and will be measured over the next five years, some of the most challenging to measure are Access, which assesses not only Access to Health Care but also to fresh and healthy foods, recreational activities, or the transportation to any and all of the above.

One strategy for measurement to access to healthcare was to measure the number of individuals who received preventive care among those who were eligible for this type of care in a systematic fashion. The way in which ACHD chose to assess this was through evaluation of the 2015 Healthcare Effectiveness Data and Information Set (HEDIS). These are systematic assessments undertaken by each insurance company to determine their success in providing needed healthcare services to their customers. Because each insurer assesses these according to the same methodology, the information was aggregated to determine what proportion of all insured individuals who are eligible are receiving these services.

The following measures were assessed: Breast Cancer Screening (BCS), Cervical Cancer Screening (CCS), Colorectal Cancer Screening (COL), HPV Vaccination (HPV), Chlamydia Screening (CHL), Ambulatory or Preventive Care Visit (AAP), Childhood Immunization Status (CIS).

## **Methodology**

### *Study Population*

In April 2016 the Access Work Group for the Plan for a Healthier Allegheny (PHA) approved data templates to be used for the collection of 2015 Healthcare Effectiveness Data and Information Set (HEDIS) measures from the following managed care organizations: UPMC, UPMC for You, Highmark, Gateway, United and Aetna. These data are routinely and systematically collected by health insurers to compare the quality of health care plans. However, we have not utilized these data to compare our health plans but to assess if the population of Allegheny County is receiving appropriate health screening and vaccinations to prevent disease. As of October 11<sup>th</sup>, all MCOs, with the exception of Aetna, had provided data.

The following data therefore includes HEDIS measure data for members of UPMC, UPMC for You, Highmark, Gateway, and United. For each HEDIS measure, members were included if they met the continuous enrollment criteria and the eligible population criteria during the 2015 calendar year. Members were considered to have received the preventive care of interest if they met both these criteria and also have utilized the healthcare service of interest within each measures recommended timeframe.

### *Data*

Each HEDIS measure was collected in aggregate for the county as a whole and by ZIP code. Additionally, measures were stratified by race/ethnicity, gender, and age group where appropriate. UPMC, UPMC for You, Highmark and Gateway provided data at the ZIP code-level for each of these subcategories. United provided ZIP code-level data for the total eligible population of each measure only; county-level data was submitted for each of the subcategories.

Data for the following HEDIS measures were collected:

- Breast Cancer Screening (BCS)
- Cervical Cancer Screening (CCS)
- Colorectal Cancer Screening (COL)
- HPV Vaccination (HPV)
- Chlamydia Screening (CHL)

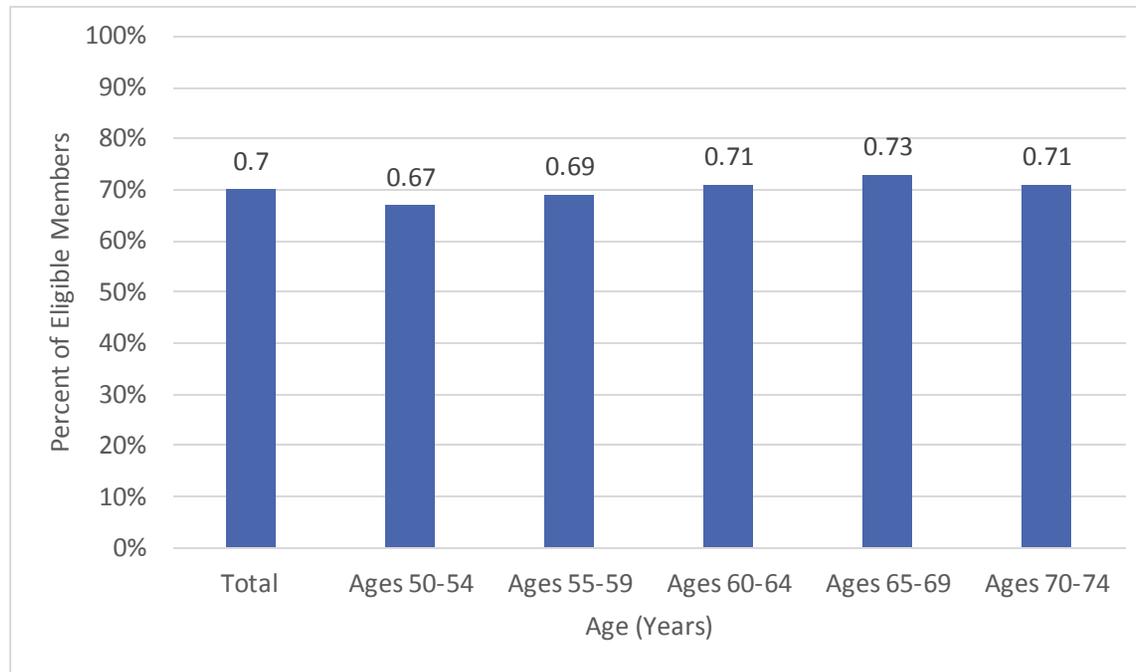
- Ambulatory or Preventive Care Visit (AAP)
- Childhood Immunization Status (CIS)

Definitions for each of these can be found in the appendix.

All MCOs provided data for each of these seven measures with the exception of United, which was unable to provide any data pertaining to the utilization of colorectal screening.

## Breast Cancer Screening (BCS)

FIGURE 1. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 50-74 YEARS OF AGE WHO MET MAMMOGRAM SCREENING GUIDELINES FOR BREAST CANCER AS OF 2015, BY AGE GROUP.



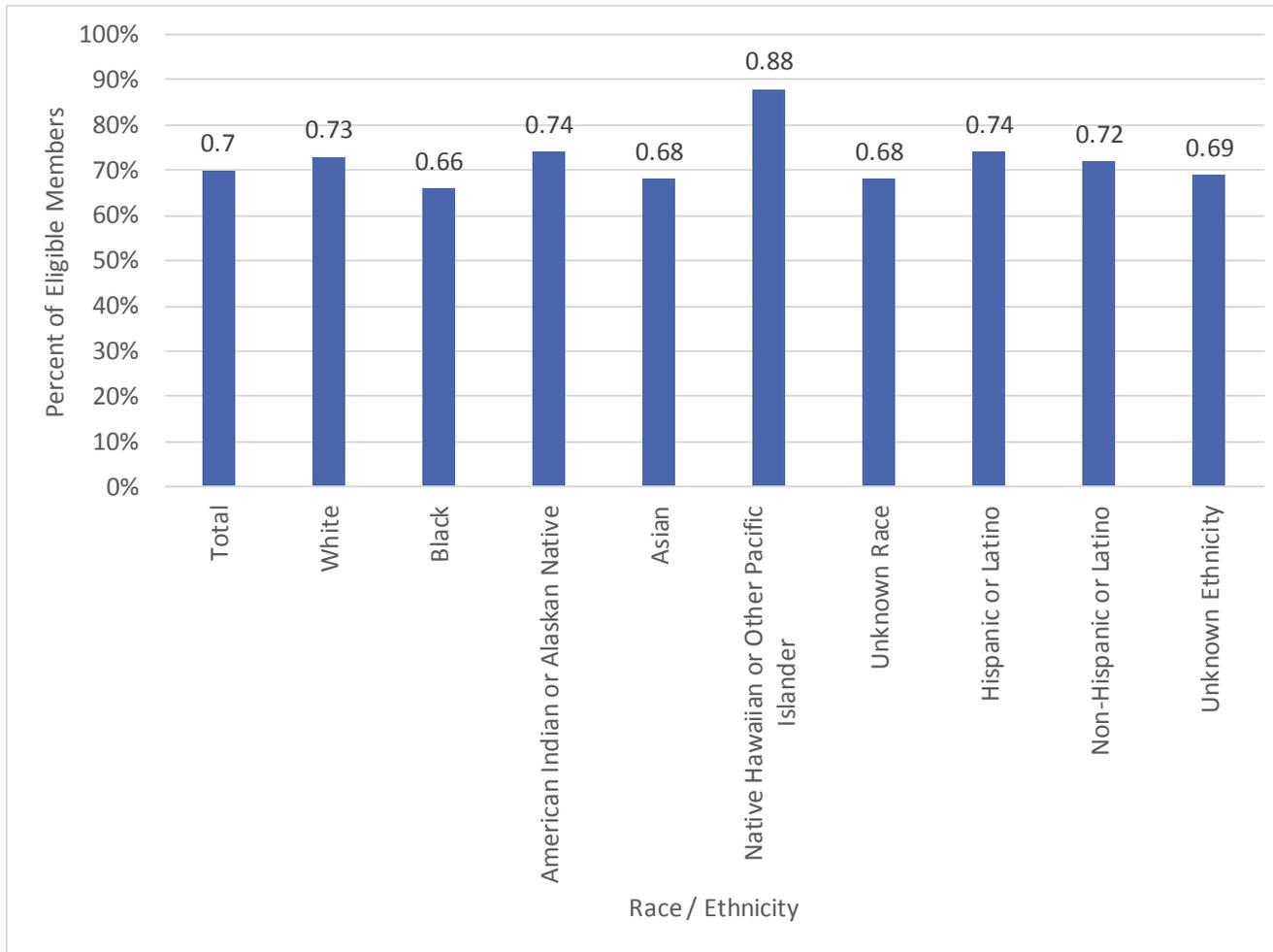
†Includes data from Highmark, Gateway, UPMC, UPMCforYou, and United.

TABLE 1. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 50-74 YEARS OF AGE WHO MET MAMMOGRAM SCREENING GUIDELINES FOR BREAST CANCER AS OF 2015, BY AGE GROUP.

Total	Ages 50-54	Ages 55-59	Ages 60-64	Ages 65-69	Ages 70-74
<b># Screened / # Eligible Members</b>					
59,677 / 84,940	8,054 / 11,989	15,341 / 22,240	15,403 / 21,730	10,321 / 14,214	10,558 / 14,767

†Includes data from Highmark, Gateway, UPMC, UPMCforYou, and United.

FIGURE 2. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 50-74 YEARS OF AGE WHO MET MAMMOGRAM SCREENING GUIDELINES FOR BREAST CANCER AS OF 2015, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 2. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 50-74 YEARS OF AGE WHO MET MAMMOGRAM SCREENING GUIDELINES FOR BREAST CANCER AS OF 2015, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members			
59,677 / 84,940	21,970 / 30,042	2,515 / 3,791	46 / 62	189 / 276	23 / 26	34,934 / 50,743

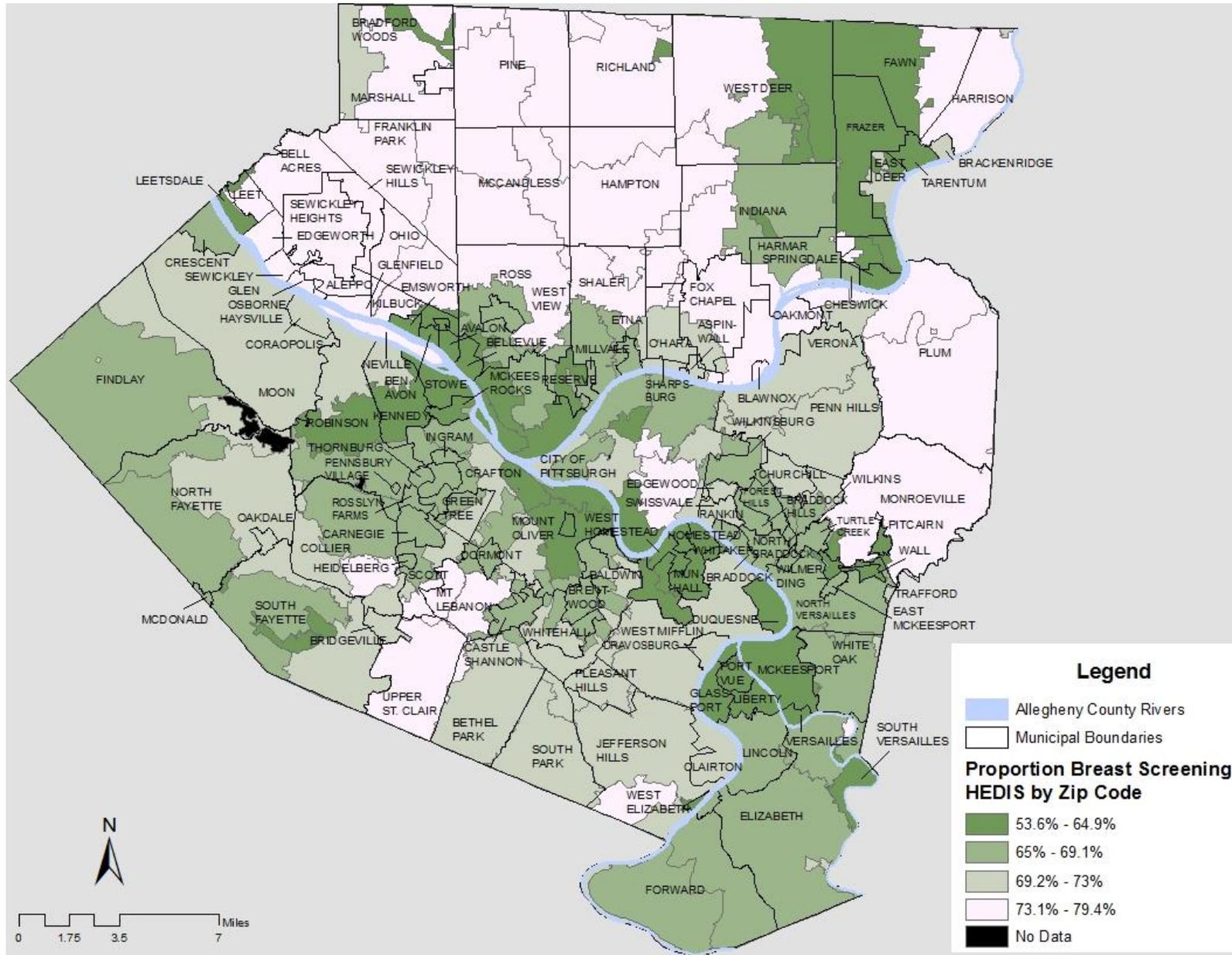
†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 3. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 50-74 YEARS OF AGE WHO MET MAMMOGRAM SCREENING GUIDELINES FOR BREAST CANCER AS OF 2015, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
# Screened / # Eligible Members			
59,677 / 84,940	107 / 144	20,719 / 28,615	38,851 / 56,181

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

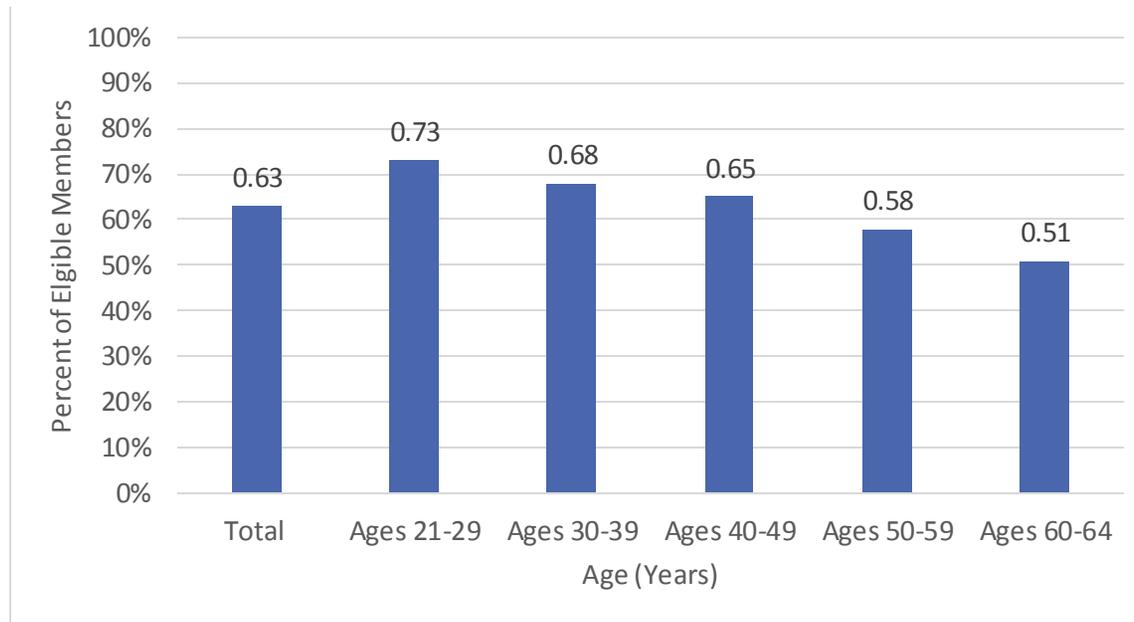
PERCENT OF COMBINED FEMALE MEMBERS† (BY QUARTILE), AGES 50-74 YEARS OF AGE WHO MET MAMMOGRAM SCREENING GUIDELINES FOR BREAST CANCER AS OF 2015.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

## Cervical Cancer Screening (CCS)

FIGURE 3. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO WERE SCREENED FOR CERVICAL CANCER USING EITHER OF THE SCREENING CRITERIA\* AS OF 2015, BY AGE GROUP.



†Includes data from Highmark, Gateway, UPMC, UPMCfor You, and United.

\*The two screening criteria definitions which meet HEDIS criteria are: (1) Women ages 21-64 years who had cervical cytology performed every 3 years; (2) Women ages 30-64 who had cervical cytology/human papillomavirus (HPV)

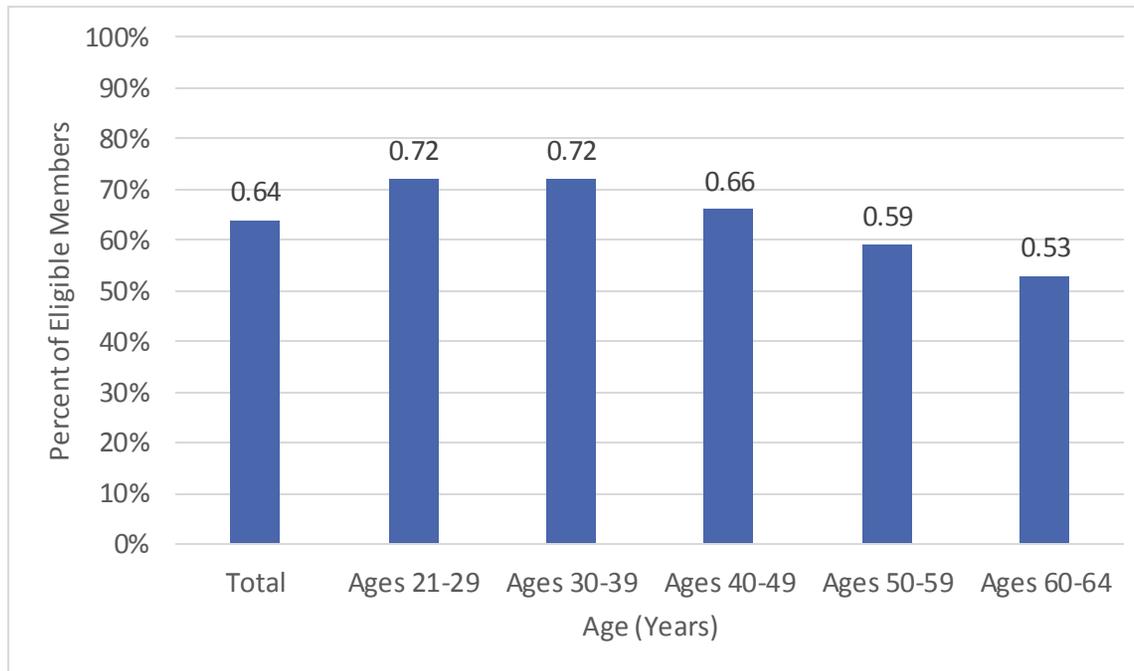
TABLE 4. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO WERE SCREENED FOR CERVICAL CANCER USING EITHER OF THE SCREENING CRITERIA\* AS OF 2015, BY AGE GROUP.

Total	Ages 21-29	Ages 30-39	Ages 40-49	Ages 50-59	Ages 60-64
<b># Screened / # Eligible Members</b>					
117,130 / 187,168	14,067 / 19,164	31,040 / 45,662	27,325 / 41,847	30,580 / 52,826	14,118 / 27,669

†Includes data from Highmark, Gateway, UPMC, UPMCfor You, and United.

\*The two screening criteria definitions which meet HEDIS criteria are: (1) Women ages 21-64 years who had cervical cytology performed every 3 years; (2) Women ages 30-64 who had cervical cytology/human papillomavirus (HPV).

FIGURE 4. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO HAD CERVICAL CYTOLOGY PERFORMED EVERY 3 YEARS AS OF 2015, BY AGE GROUP.



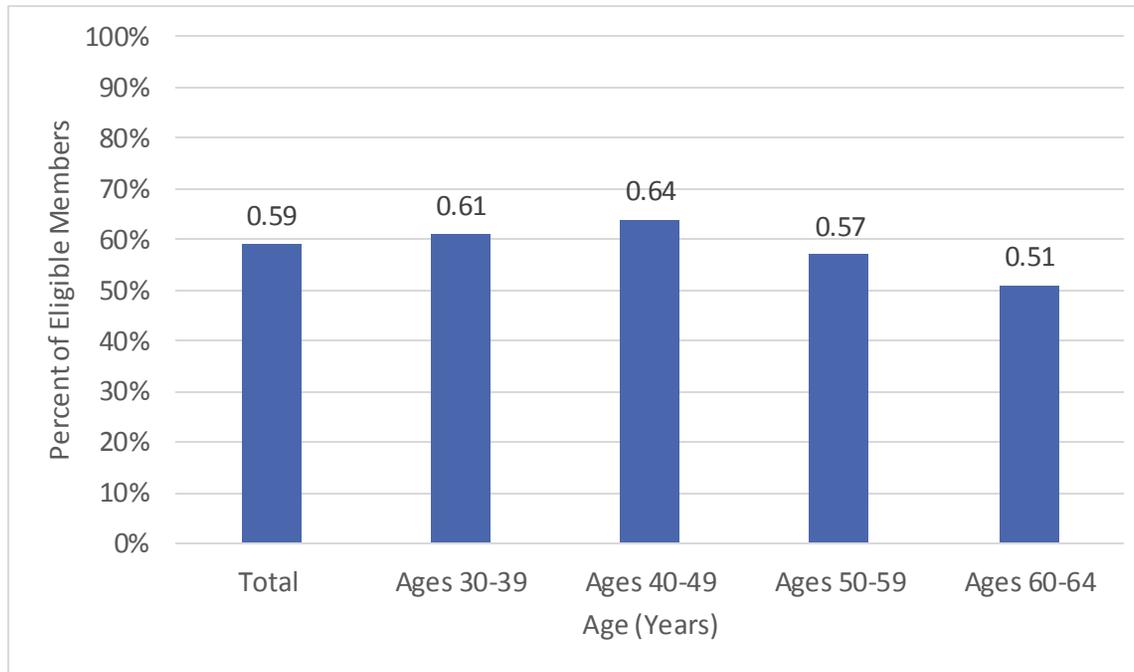
†Includes data from Highmark, Gateway, UPMC, UPMCfor You, and United.

TABLE 5. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO HAD CERVICAL CYTOLOGY PERFORMED EVERY 3 YEARS AS OF 2015, BY AGE GROUP.

Total	Ages 21-29	Ages 30-39	Ages 40-49	Ages 50-59	Ages 60-64
# Screened / # Eligible Members					
92,813 / 144,278	13,885 / 19,164	23,235 / 32,474	20,688 / 31,136	23,636 / 39,989	11369 / 21,515

†Includes data from Highmark, Gateway, UPMC, UPMCfor You, and United.

FIGURE 5. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 30-64 YEARS OF AGE WHO HAD CERVICAL CYTOLOGY/HPV CO-TESTING PERFORMED EVERY 5 YEARS AS OF 2015, BY AGE GROUP.



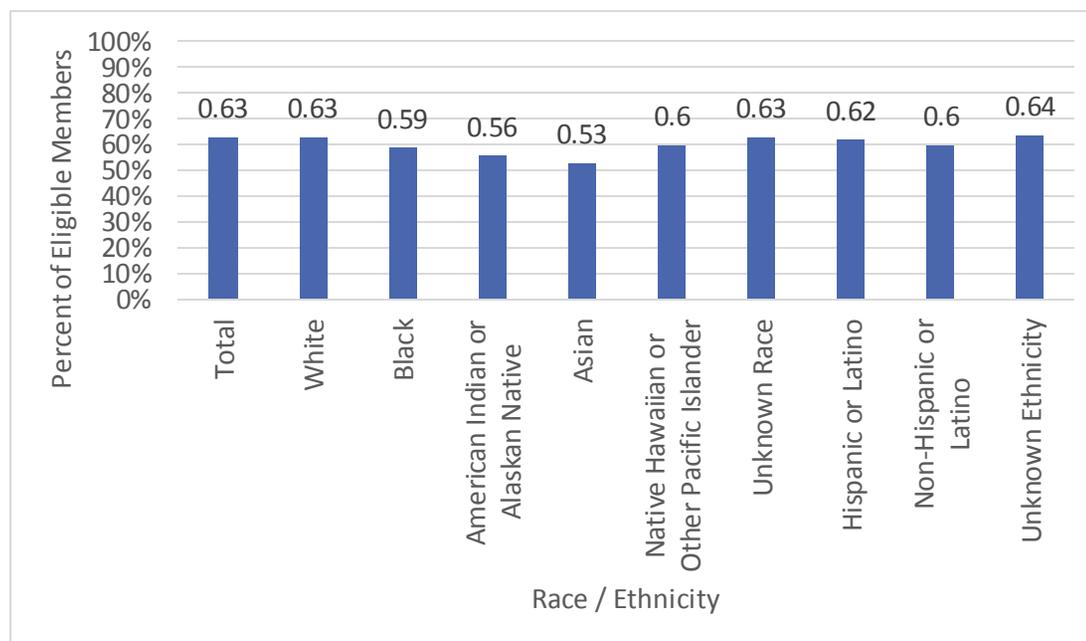
†Includes data from Highmark, Gateway, UPMC, UPMCfor You, and United.

TABLE 6. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 30-64 YEARS OF AGE WHO HAD CERVICAL CYTOLOGY/HPV CO-TESTING PERFORMED EVERY 5 YEARS AS OF 2015, BY AGE GROUP.

Total	Ages 30-39	Ages 40-49	Ages 50-59	Ages 60-64
# Screened / # Eligible Members				
76,291 / 125,116	19,746 / 32,474	19,778 / 31,136	22,714 / 39,989	10,963 / 21,515

†Includes data from Highmark, Gateway, UPMC, UPMCfor You, and United.

FIGURE 6. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO WERE SCREENED FOR CERVICAL CANCER USING EITHER OF THE SCREENING CRITERIA\* AS OF 2015, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\*The two screening criteria definitions which meet HEDIS criteria are: (1) Women ages 21-64 years who had cervical cytology performed every 3 years; (2) Women ages 30-64 who had cervical cytology/human papillomavirus (HPV).

TABLE 7. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO WERE SCREENED FOR CERVICAL CANCER USING EITHER OF THE SCREENING CRITERIA\* AS OF 2015, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members			
117,130 / 187,168	29,673 / 47,537	11,463 / 19,314	82 / 147	708 / 1,339	64 / 107	75,140 / 118,724

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\*The two screening criteria definitions which meet HEDIS criteria are: (1) Women ages 21-64 years who had cervical cytology performed every 3 years; (2) Women ages 30-64 who had cervical cytology/human papillomavirus (HPV).

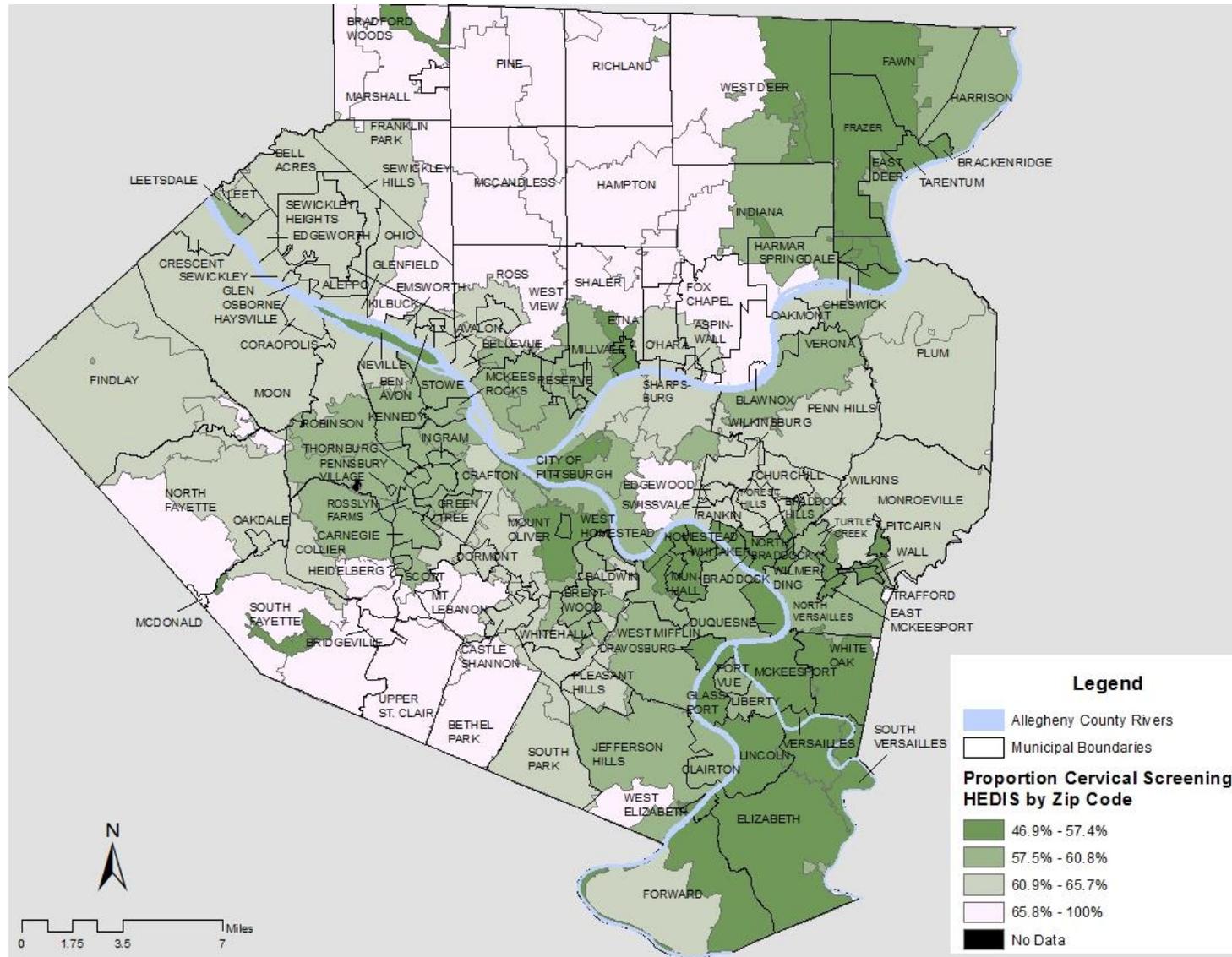
TABLE 8. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 21-64 YEARS OF AGE WHO WERE SCREENED FOR CERVICAL CANCER USING EITHER OF THE SCREENING CRITERIA\* AS OF 2015, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
# Screened / # Eligible Members			
117,130 / 187,168	391 / 630	35,395 / 59,290	81,342 / 127,246

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\*The two screening criteria definitions which meet HEDIS criteria are: (1) Women ages 21-64 years who had cervical cytology performed every 3 years; (2) Women ages 30-64 who had cervical cytology/human papillomavirus (HPV).

PERCENT OF COMBINED FEMALE MEMBERS† (BY QUARTILE), AGES 21-64 YEARS OF AGE, WHO WERE SCREENED FOR CERVICAL CANCER USING EITHER OF THE SCREENING CRITERIA\* AS OF 2015, BY ZIP CODE.

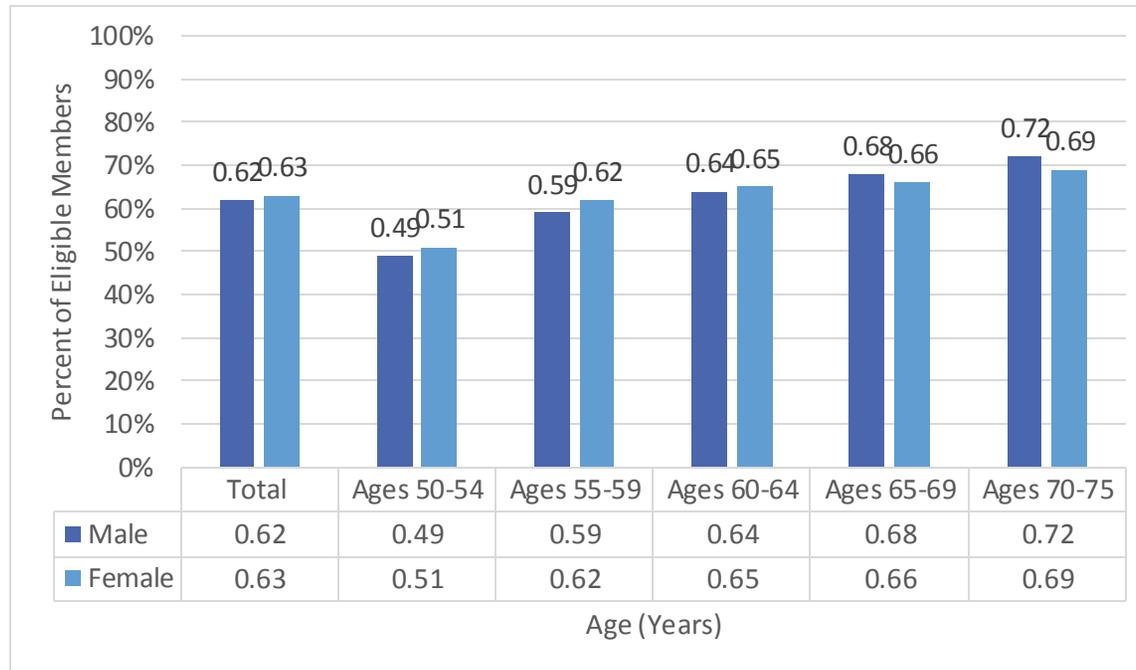


†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\*The two screening criteria definitions which meet HEDIS criteria are: (1) Women ages 21-64 years who had cervical cytology performed every 3 years; (2) Women ages 30-64 who had cervical cytology/human papillomavirus (HPV).

## Colorectal Cancer Screening (COL)

FIGURE 8. PERCENT OF COMBINED MEMBERST, AGES 50-75 YEARS OF AGE WHO HAD APPROPRIATE SCREENING FOR COLORECTAL CANCER\* AS OF 2015, BY AGE GROUP AND GENDER.



†Includes data from Highmark, Gateway, UPMC, and UPMC for You.

\* The three screening criteria definitions which meet HEDIS criteria are: (1) fecal occult blood test during the measurement year; (2) flexible sigmoidoscopy during the measurement year of the four years prior to the measurement year; (3) colonoscopy during the measurement year of the nine years prior to the measurement year.

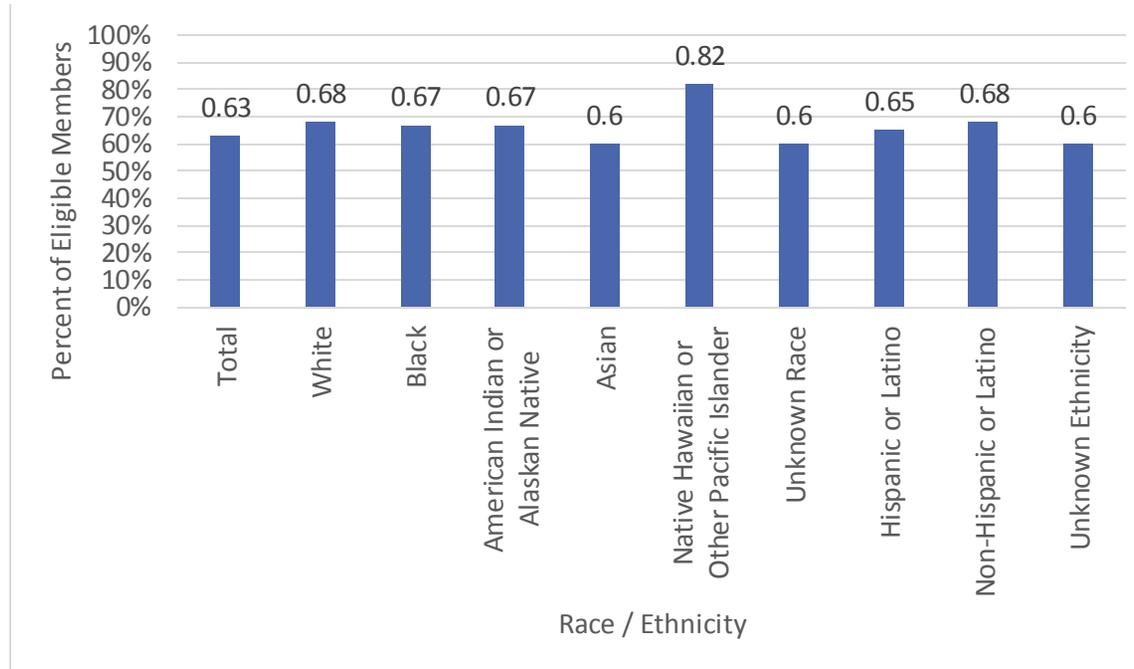
Table 9. Number of combined members†, ages 50-75 years of age who had appropriate screening for colorectal cancer\* as of 2015, by age group and gender.

Gender	Total	Ages 50-54	Ages 55-59	Ages 60-64	Ages 65-69	Ages 70-75
	# Screened / # Eligible Members					
Male	52,888 / 85,222	7,049 / 14,494	12,501 / 21,154	13,346 / 20,905	9,654 / 14,301	10,338 / 14,368
Female	64,963 / 103,500	8,810 / 17,145	15,391 / 24,993	15,889 / 24,469	11,398 / 17,269	13,475 / 19,624

†Includes data from Highmark, Gateway, UPMC, and UPMC for You.

\* The three screening criteria definitions which meet HEDIS criteria are: (1) fecal occult blood test during the measurement year; (2) flexible sigmoidoscopy during the measurement year of the four years prior to the measurement year; (3) colonoscopy during the measurement year of the nine years prior to the measurement year.

FIGURE 9. PERCENT OF COMBINED MEMBERST, AGES 50-75 YEARS OF AGE WHO HAD APPROPRIATE SCREENING FOR COLORECTAL CANCER\* AS OF 2015, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, and UPMC for You.

\* The three screening criteria definitions which meet HEDIS criteria are: (1) fecal occult blood test during the measurement year; (2) flexible sigmoidoscopy during the measurement year of the four years prior to the measurement year; (3) colonoscopy during the measurement year of the nine years prior to the measurement year.

TABLE 10. NUMBER OF COMBINED MEMBERST, AGES 50-75 YEARS OF AGE WHO HAD APPROPRIATE SCREENING FOR COLORECTAL CANCER\* AS OF 2015, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members			
117,851 / 188,722	39,151 / 57,512	3,585 / 5,387	71 / 106	209 / 349	18/22	74,766 / 125,239

†Includes data from Highmark, Gateway, UPMC, and UPMC for You.

\* The three screening criteria definitions which meet HEDIS criteria are: (1) fecal occult blood test during the measurement year; (2) flexible sigmoidoscopy during the measurement year of the four years prior to the measurement year; (3) colonoscopy during the measurement year of the nine years prior to the measurement year.

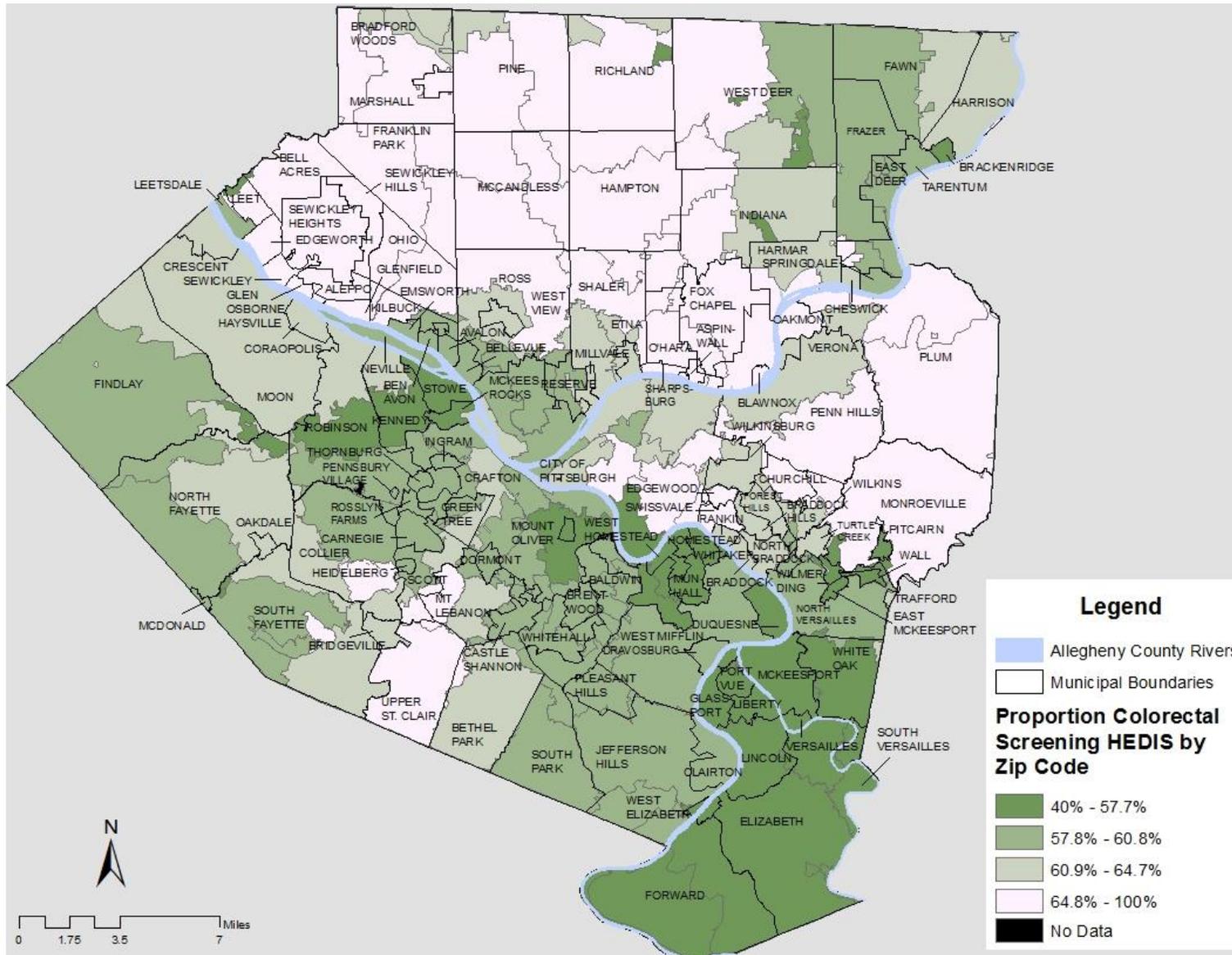
TABLE 11. NUMBER OF COMBINED MEMBER<sup>†</sup>, AGES 50-75 YEARS OF AGE WHO HAD APPROPRIATE SCREENING FOR COLORECTAL CANCER\* AS OF 2015, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
# Screened / # Eligible Members			
117,851 / 188,722	232 / 359	36,363 / 53,359	81,256 / 135,003

<sup>†</sup>Includes data from Highmark, Gateway, UPMC, and UPMC for You.

\* The three screening criteria definitions which meet HEDIS criteria are: (1) fecal occult blood test during the measurement year; (2) flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year; (3) colonoscopy during the measurement year or the nine years prior to the measurement year.

PERCENT OF COMBINED MEMBERS† (BY QUARTILE), AGES 50-75 YEARS OF AGE WHO HAD APPROPRIATE SCREENING FOR COLORECTAL CANCER\* AS OF 2015, BY ZIP CODE.

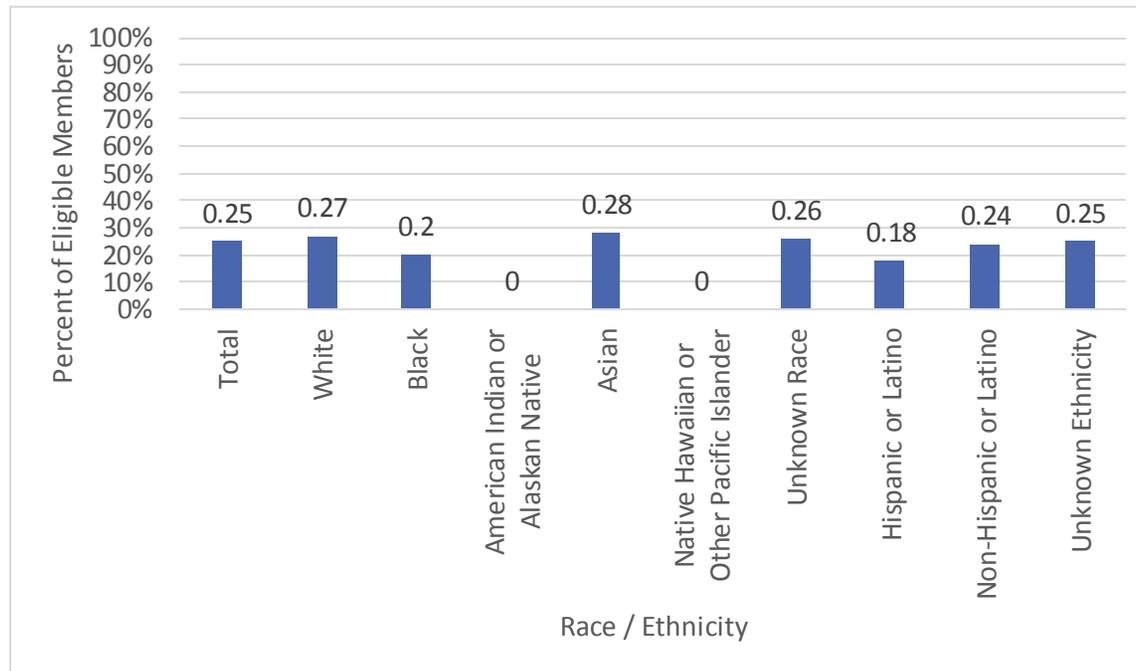


†Includes data from Highmark, Gateway, UPMC, and UPMC for You.

\* The three screening criteria definitions which meet HEDIS criteria are: (1) fecal occult blood test during the measurement year; (2) flexible sigmoidoscopy during the measurement year of the four years prior to the measurement year; (3) colonoscopy during the measurement year of the nine years prior to the measurement year.

## Human Papillomavirus Vaccine for Female Adolescents (HPV)

FIGURE 10. PERCENT OF COMBINED FEMALE ADOLESCENT MEMBERS† WHO TURNED 13 YEARS OF AGE DURING 2015 AND HAD THREE DOSES OF THE HUMAN PAPILLOMAVIRUS (HPV) VACCINE BY THEIR 13TH BIRTHDAY, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 12. NUMBER OF COMBINED FEMALE ADOLESCENT MEMBERS† WHO TURNED 13 YEARS OF AGE DURING 2015 AND HAD THREE DOSES OF THE HUMAN PAPILLOMAVIRUS (HPV) VACCINE BY THEIR 13TH BIRTHDAY, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
# Vaccinated / # Eligible Members	# Vaccinated / # Eligible Members					
1,066 / 4,276	259 / 963	146 / 748	0 / 3	17 / 45	0 / 11	644 / 2,506

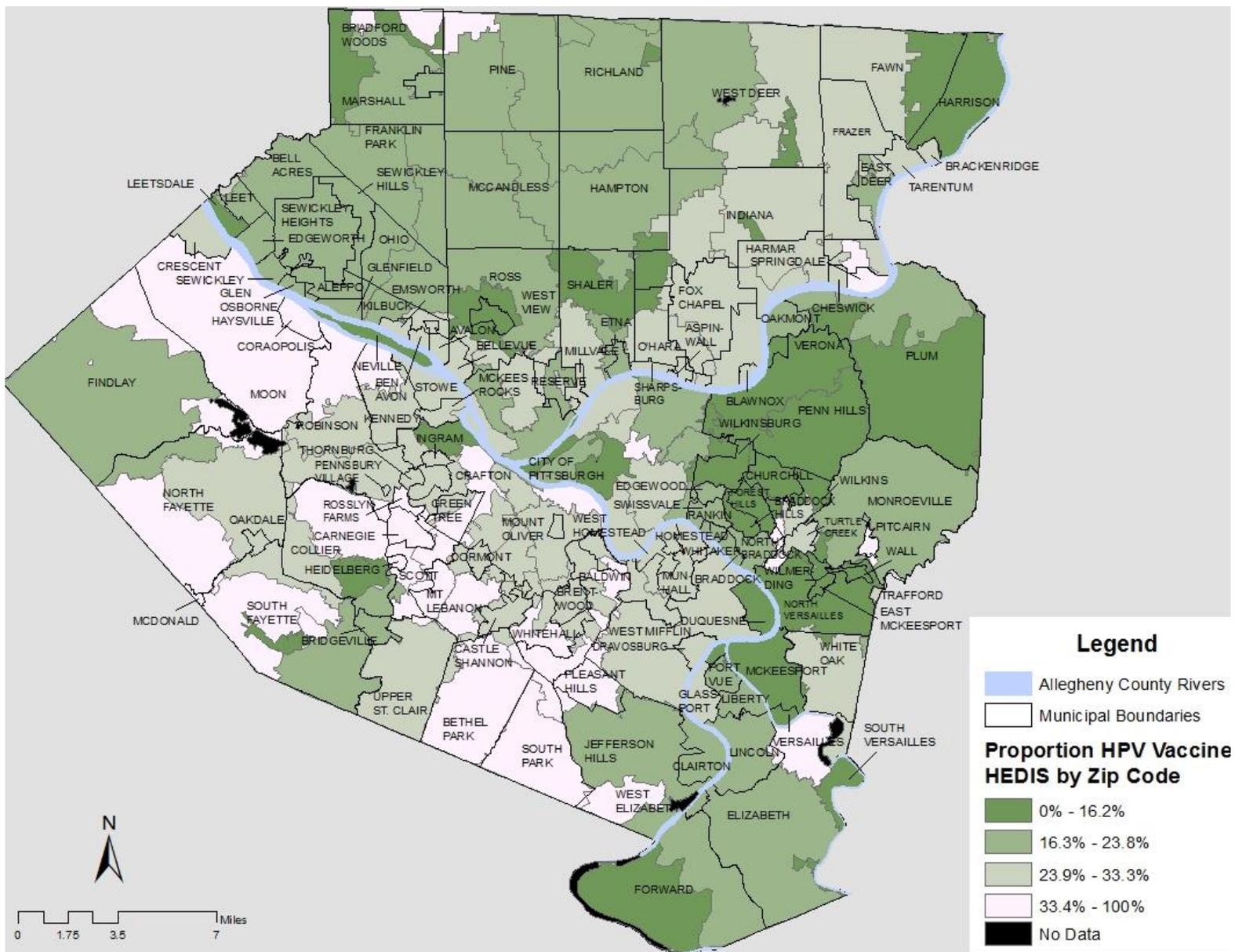
†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 13. NUMBER OF COMBINED FEMALE ADOLESCENT MEMBERS† WHO TURNED 13 YEARS OF AGE DURING 2015 AND HAD THREE DOSES OF THE HUMAN PAPILLOMAVIRUS (HPV) VACCINE BY THEIR 13TH BIRTHDAY, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
# Vaccinated / # Eligible Members			
1,066 / 4,276	3 / 17	415 / 1699	648 / 2,560

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

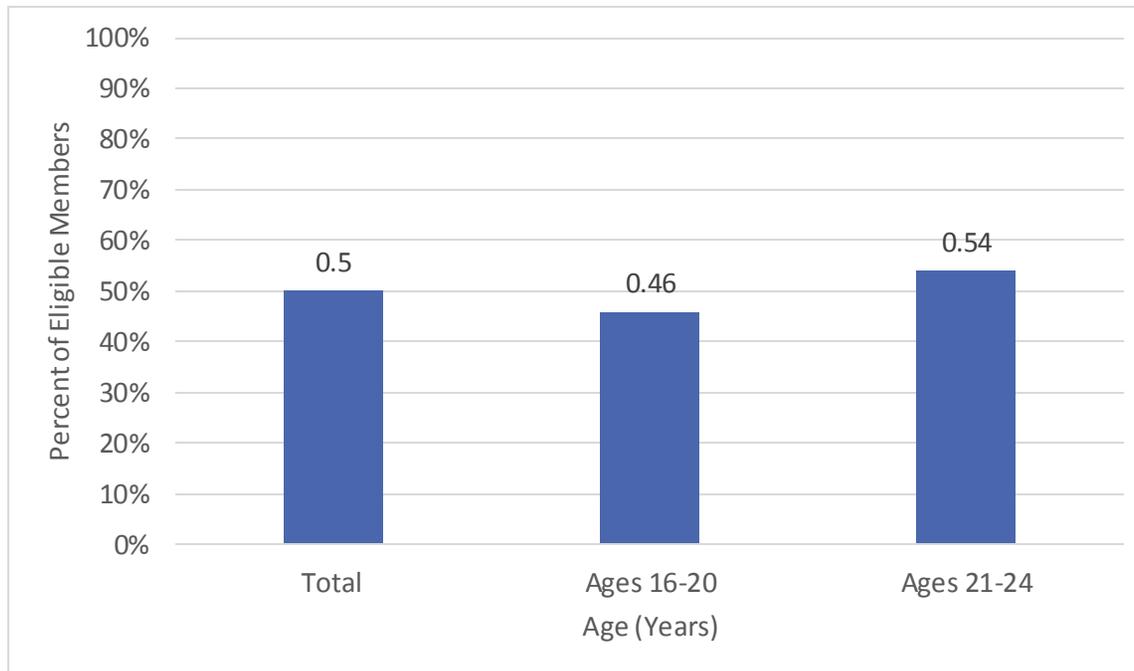
PERCENT OF COMBINED FEMALE ADOLESCENT MEMBERS† (BY QUARTILE), WHO TURNED 13 YEARS OF AGE DURING 2015 AND HAD THREE DOSES OF THE HUMAN PAPILLOMAVIRUS (HPV) VACCINE BY THEIR 13TH BIRTHDAY, BY ZIP CODE.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

## Chlamydia Screening in Women (CHL)

FIGURE 11. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 16-24 YEARS OF AGE WHO WERE IDENTIFIED AS SEXUALLY ACTIVE AND WHO HAD AT LEAST ONE TEST FOR CHLAMYDIA DURING 2015, BY AGE GROUP.



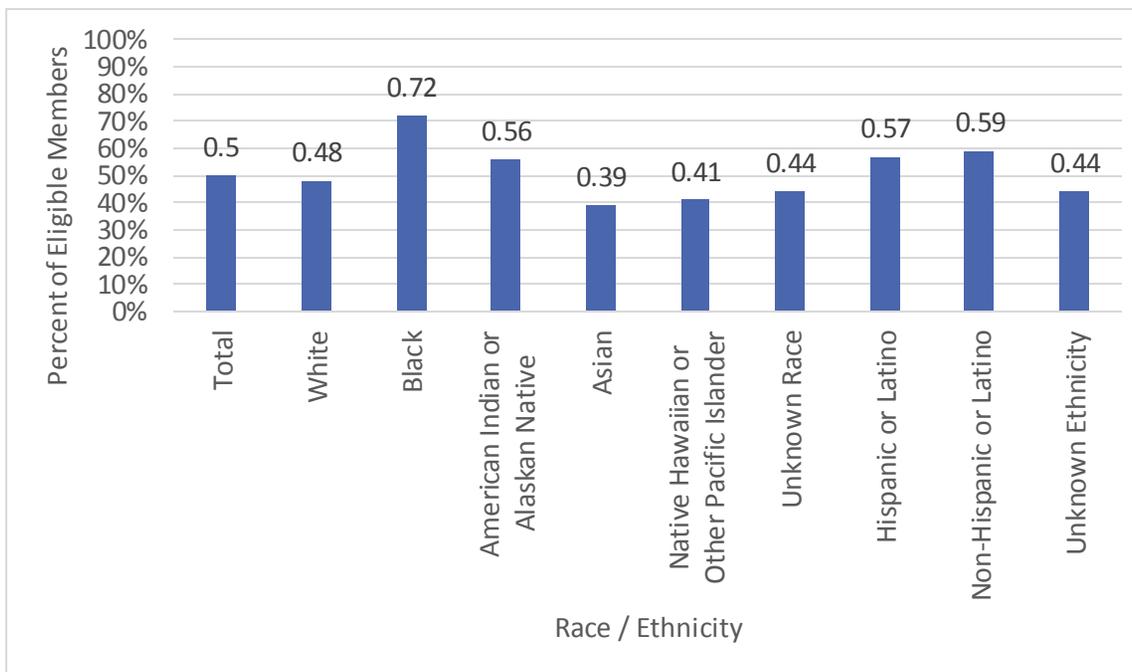
†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 14. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 16-24 YEARS OF AGE WHO WERE IDENTIFIED AS SEXUALLY ACTIVE AND WHO HAD AT LEAST ONE TEST FOR CHLAMYDIA DURING 2015, BY AGE GROUP.

Total	Ages 16-20	Ages 21-24
<b># Screened / # Eligible Members</b>	<b># Screened / # Eligible Members</b>	<b># Screened / # Eligible Members</b>
14,660 / 29,239	6,403 / 13,947	8,247 / 15,292

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

FIGURE 12. PERCENT OF COMBINED FEMALE MEMBERS†, AGES 16-24 YEARS OF AGE WHO WERE IDENTIFIED AS SEXUALLY ACTIVE AND WHO HAD AT LEAST ONE TEST FOR CHLAMYDIA DURING 2015, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 15. NUMBER OF COMBINED FEMALE MEMBERS†, AGES 16-24 YEARS OF AGE WHO WERE IDENTIFIED AS SEXUALLY ACTIVE AND WHO HAD AT LEAST ONE TEST FOR CHLAMYDIA DURING 2015, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members	# Screened / # Eligible Members			
14,660 / 29,239	3,092 / 6,417	4,132 / 5,761	14 / 25	34 / 88	23 / 56	7,365 / 16,892

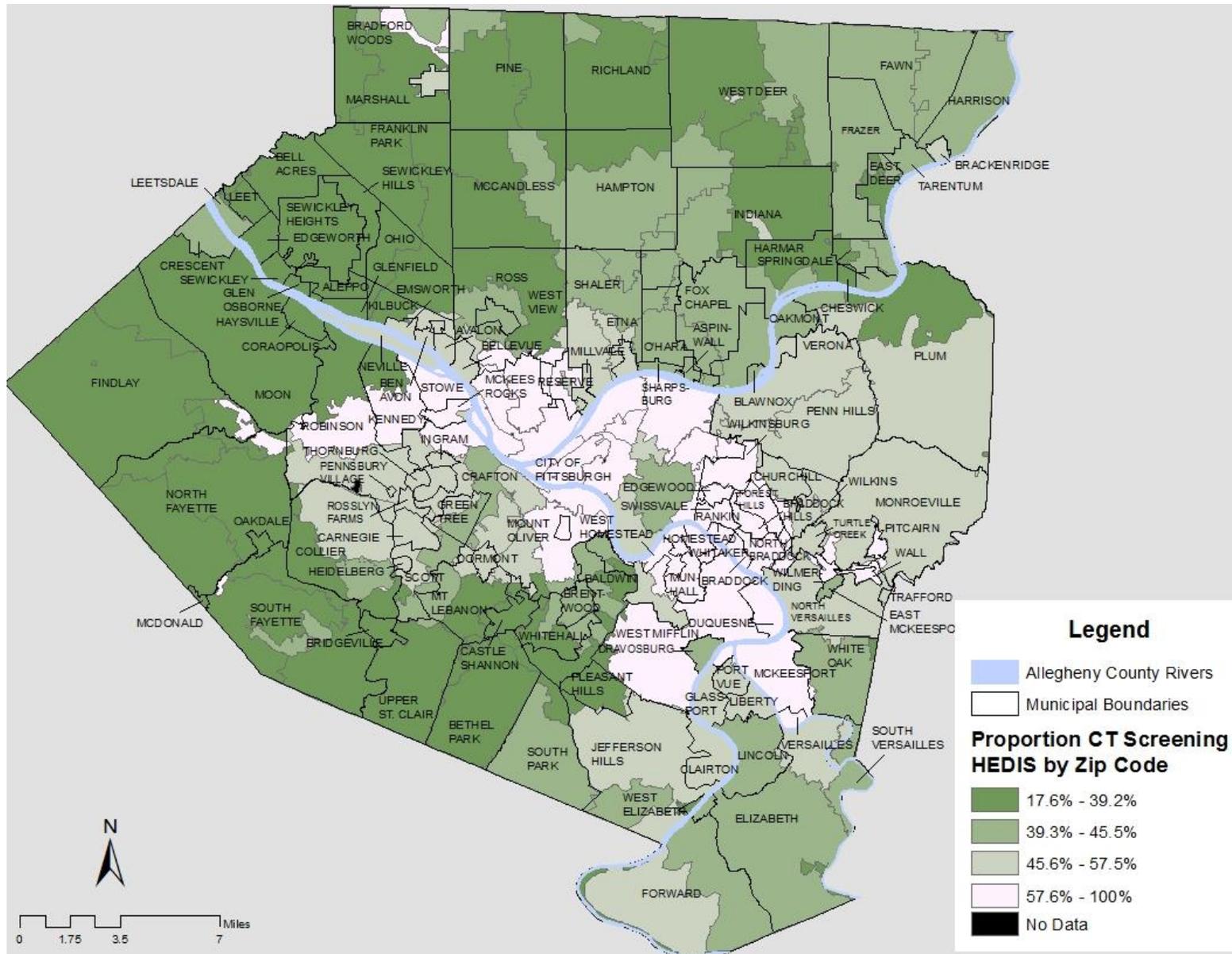
†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 16. NUMBER OF COMBINED FEMALE MEMBERS<sup>†</sup>, AGES 16-24 YEARS OF AGE WHO WERE IDENTIFIED AS SEXUALLY ACTIVE AND WHO HAD AT LEAST ONE TEST FOR CHLAMYDIA DURING 2015, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
# Screened / # Eligible Members			
14,660 / 29,239	50 / 88	7,000 / 11,919	7,610 / 17,232

<sup>†</sup>Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

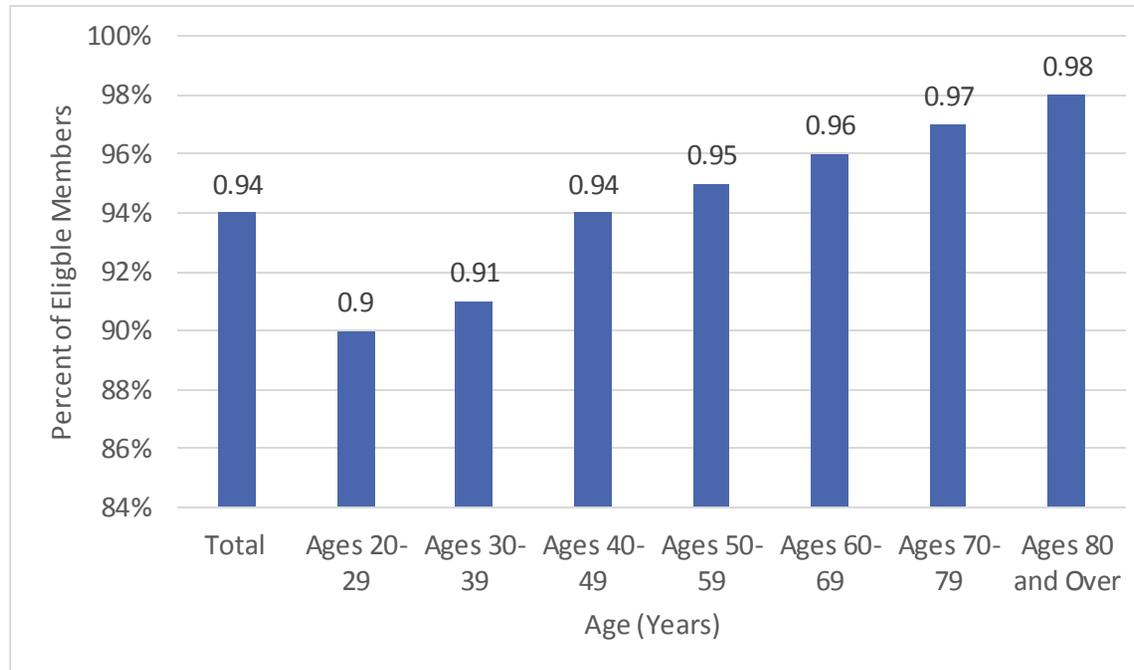
PERCENT OF COMBINED FEMALE MEMBERS<sup>†</sup> (BY QUARTILE), AGES 16-24 YEARS OF AGE WHO WERE IDENTIFIED AS SEXUALLY ACTIVE AND WHO HAD AT LEAST ONE TEST FOR CHLAMYDIA DURING 2015, BY ZIP CODE.



<sup>†</sup>Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

## Adults' Access to Preventive/Ambulatory Health Services (AAP)

FIGURE 13. PERCENT OF COMBINED MEMBERST, AGES 20 YEARS AND OLDER WHO HAD AT LEAST ONE AMBULATORY OR PREVENTIVE CARE VISIT DURING 2015, BY AGE GROUP.



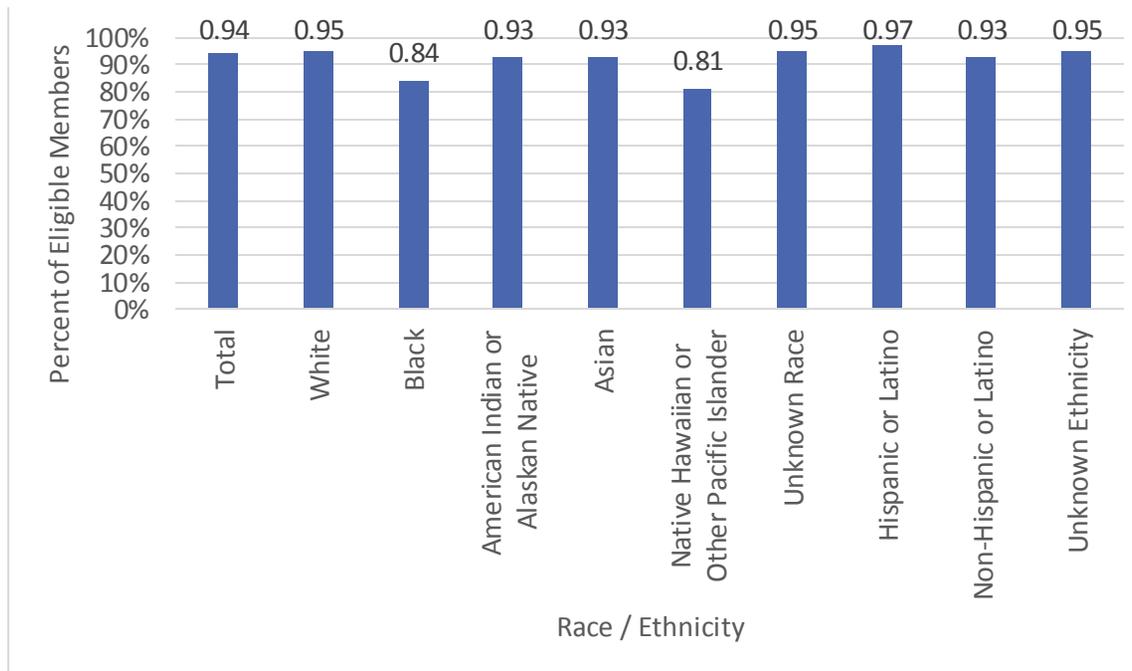
\*Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 17. NUMBER OF COMBINED MEMBERS†, AGES 20 YEARS AND OLDER WHO HAD AT LEAST ONE AMBULATORY OR PREVENTIVE CARE VISIT DURING 2015, BY AGE GROUP.

TOTAL	AGES 20-29	AGES 30-39	AGES 40-49	AGES 50-59	AGES 60-69	AGES 70-79	AGES 80 +
# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS	# WHO HAD VISIT / # ELIGIBLE MEMBERS
328,595 / 348,900	47,032 / 52,538	45,275 / 49,588	50,070 / 53,402	67,494 / 70,995	57,999 / 60,191	34,009 / 34,952	26,716 / 27,234

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

FIGURE 14. PERCENT OF COMBINED MEMBERS†, AGES 20 YEARS AND OLDER WHO HAD AT LEAST ONE AMBULATORY OR PREVENTIVE CARE VISIT DURING 2015, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 18. NUMBER OF COMBINED MEMBER†, AGES 20 YEARS AND OLDER WHO HAD AT LEAST ONE AMBULATORY OR PREVENTIVE CARE VISIT DURING 2015, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members
328,595 / 348,900	128,563 / 134,850	22,009 / 26,315	246 / 265	983 / 1,061	353 / 436	176,441 / 185,973

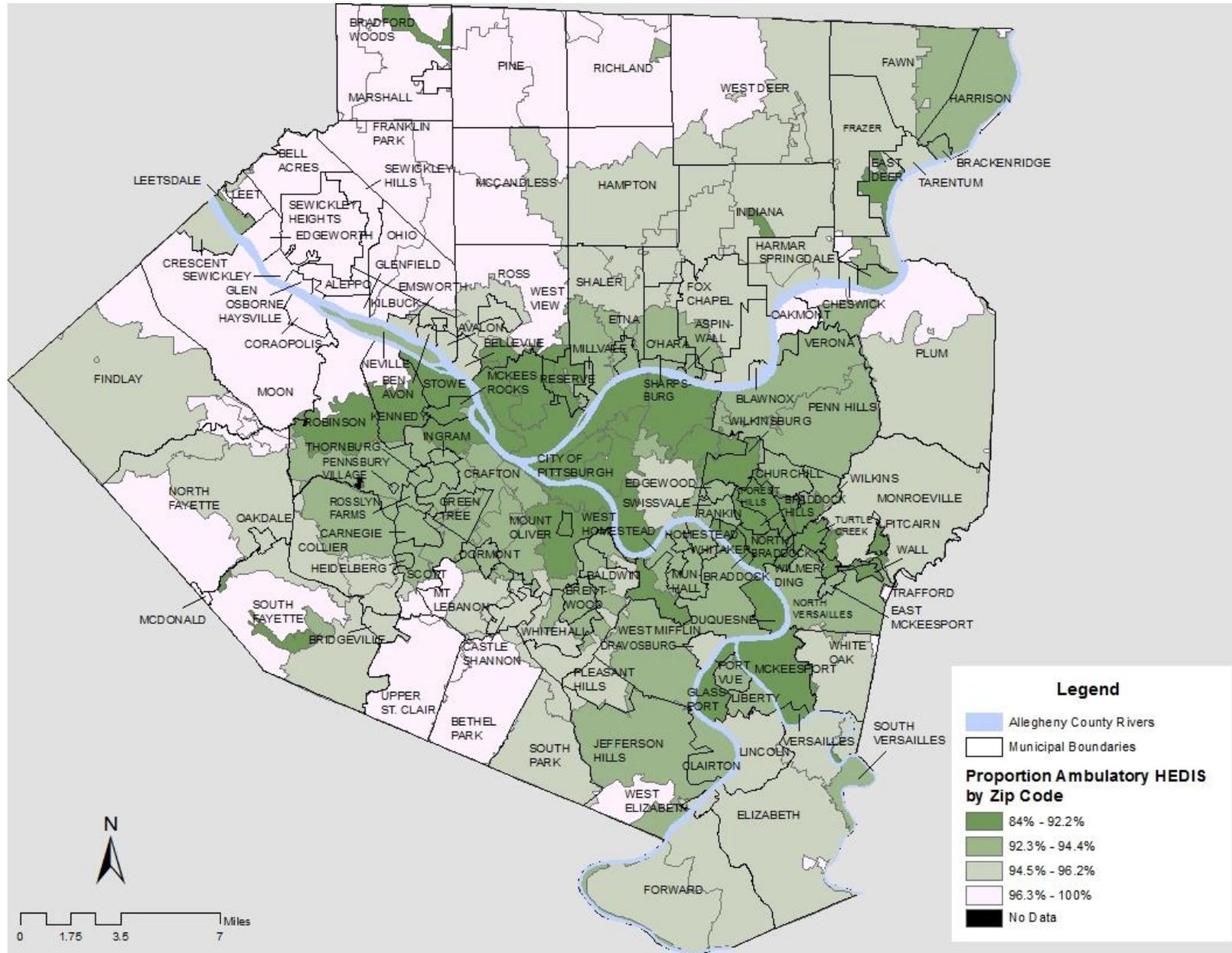
†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

TABLE 19. NUMBER OF COMBINED MEMBER†, AGES 20 YEARS AND OLDER WHO HAD AT LEAST ONE AMBULATORY OR PREVENTIVE CARE VISIT DURING 2015, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members	# Who Had Visit / # Eligible Members
328,595 / 348,900	583 / 602	122,714 / 131,923	52,538 / 205,297

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

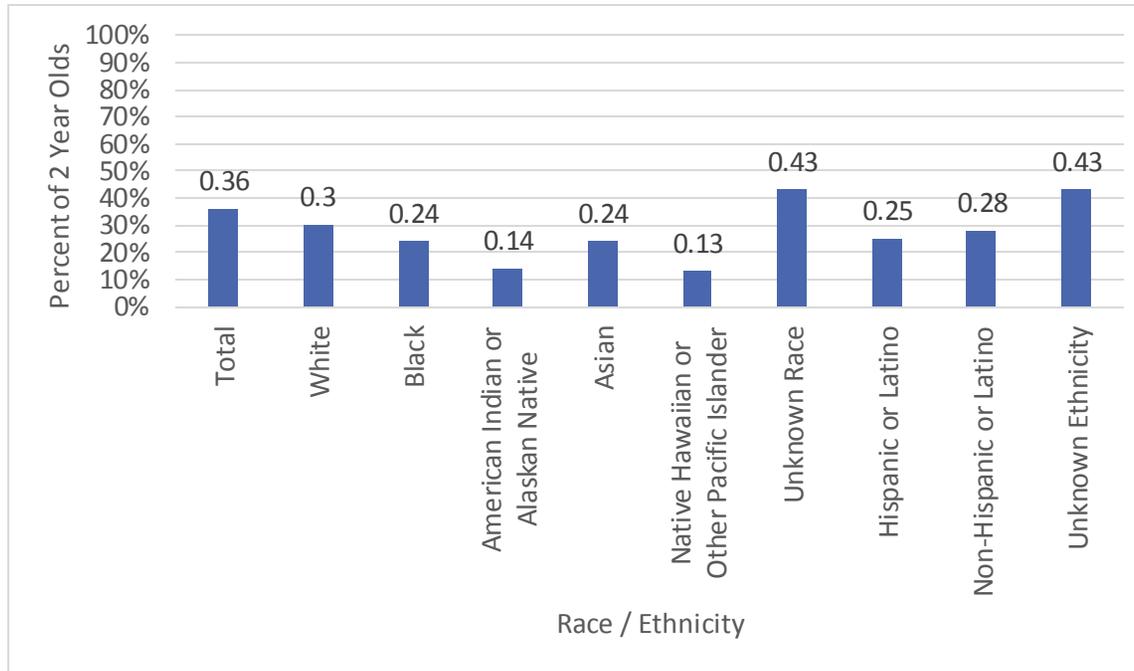
PERCENT OF COMBINED MEMBERS† (BY QUARTILE), AGES 20 YEARS AND OLDER WHO HAD AT LEAST ONE AMBULATORY OR PREVENTIVE CARE VISIT DURING 2015, BY ZIP CODE.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

## Childhood Immunization Status (CIS)

FIGURE 15. PERCENT OF COMBINED MEMBERS† 2 YEARS OF AGE WHO COMPLETED THE RECOMMENDED VACCINATIONS\* BY THEIR SECOND BIRTHDAY IN 2015, BY RACE AND ETHNICITY.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\* Recommended vaccinations include: four diphtheria, tetanus and a cellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines.

TABLE 20. NUMBER OF COMBINED MEMBERS† 2 YEARS OF AGE WHO COMPLETED THE RECOMMENDED VACCINATIONS\* BY THEIR SECOND BIRTHDAY IN 2015, BY RACE.

All Races	White	Black	American Indian or Alaskan Native	Asian	Native Hawaiian or Other Pacific Islander	Unknown Race
<b># Vaccinated / # Eligible Members</b>	<b># Vaccinated / # Eligible Members</b>					
2,996 / 8,256	503 / 1,689	419 / 1,729	1 / 7	28 / 116	2 / 16	2,043 / 4,699

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\* Recommended vaccinations include: four diphtheria, tetanus and a cellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines.

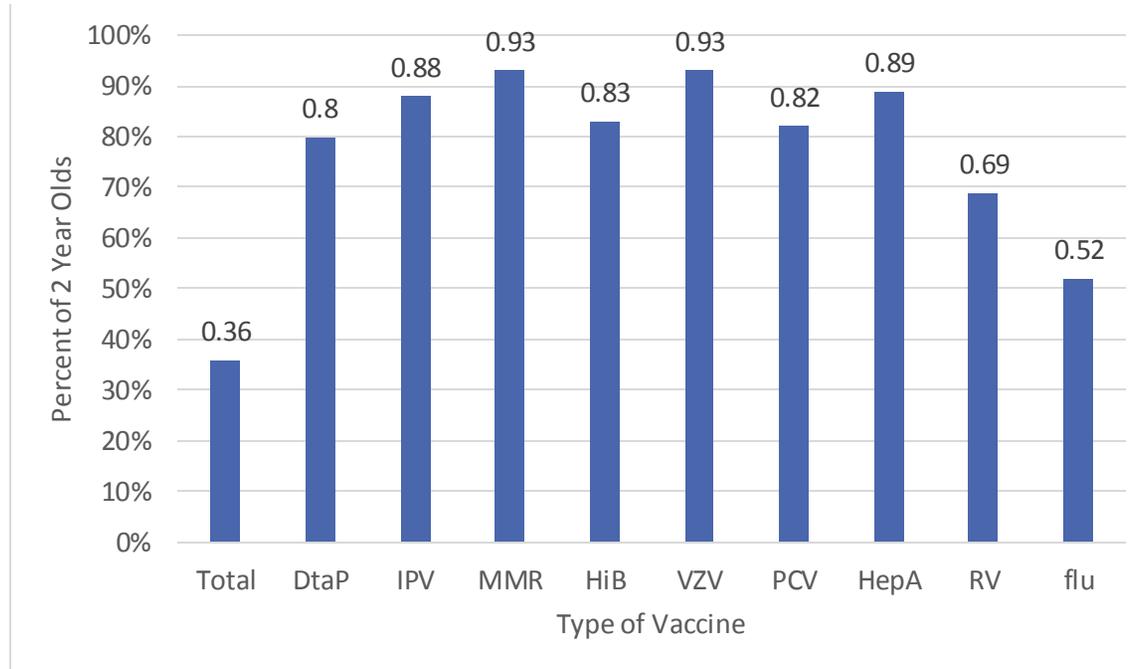
TABLE 21. NUMBER OF COMBINED MEMBERS† 2 YEARS OF AGE WHO COMPLETED THE RECOMMENDED VACCINATIONS\* BY THEIR SECOND BIRTHDAY IN 2015, BY ETHNICITY.

All Ethnicities	Hispanic or Latino	Non-Hispanic and Non-Latino	Unknown Ethnicity
<b># Vaccinated / # Eligible Members</b>			
2,996 / 8,256	18 / 72	1,007 / 3,611	1,971 / 4,573

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\* Recommended vaccinations include: four diphtheria, tetanus and a cellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines.

FIGURE 16. PERCENT OF COMBINED MEMBERS† 2 YEARS OF AGE WHO COMPLETED THE RECOMMENDED VACCINATIONS BY THEIR SECOND BIRTHDAY IN 2015, BY INDIVIDUAL VACCINATION.\*



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\* Individual vaccinations include: four diphtheria, tetanus and a cellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines.

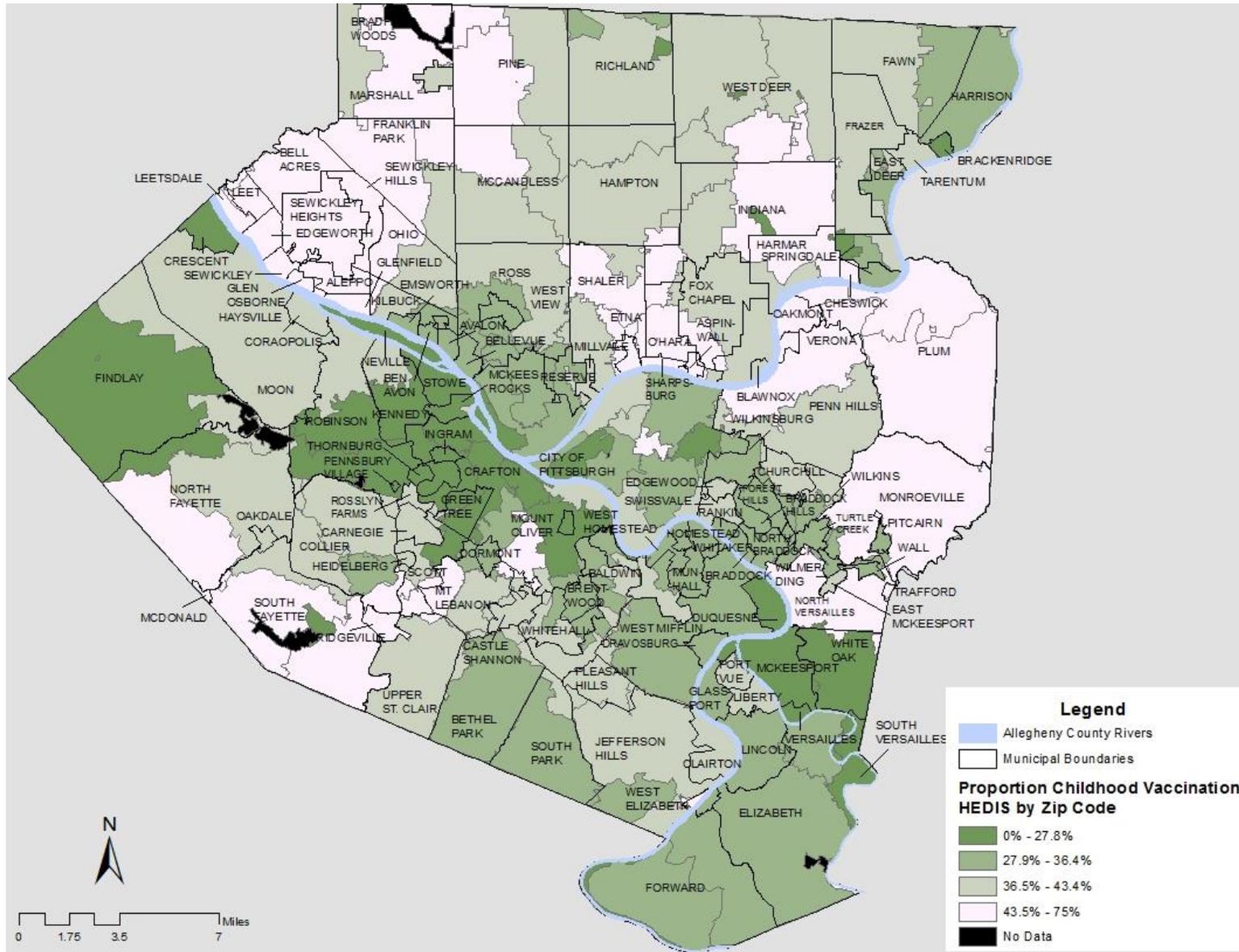
TABLE 22. NUMBER OF COMBINED MEMBERS† 2 YEARS OF AGE WHO COMPLETED THE RECOMMENDED VACCINATIONS BY THEIR SECOND BIRTHDAY IN 2015, BY INDIVIDUAL VACCINATION.\*

All Vaccines	DtaP	IPV	MMR	HiB	VZV	PCV	Hep A	RV	flu
# Vaccinated / # Eligible Members									
2,996 / 8,256	6,601 / 8,256	7,276 / 8,256	7,692 / 8,256	6,840 / 8,256	7,691 / 8,256	6,793 / 8,256	7,344 / 8,256	5,717 / 8,238	4,266 / 8,238

†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United.

\* Individual vaccinations include: four diphtheria, tetanus and a cellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines.

PERCENT OF COMBINED MEMBERS† (BY QUARTILE), 2 YEARS OF AGE WHO COMPLETED THE RECOMMENDED VACCINATIONS\* BY THEIR SECOND BIRTHDAY IN 2015, BY ZIP CODE.



†Includes data from Highmark, Gateway, UPMC, UPMC for You, and United

\* Recommended vaccinations include: four diphtheria, tetanus and a cellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three haemophilus influenza type B (HiB), three hepatitis B (HepB), one chicken pox (VZV), four pneumococcal conjugate (PCV), one hepatitis A, two or three rotavirus (RV), and two influenza (flu) vaccines.

## Appendix

### Breast Cancer Screening (BCS)

- Description: the percentage of women 50-74 years of age who had a mammogram to screen for breast cancer
- Eligible Population:
  - Product Lines: Commercial, Medicaid, Medicare
  - Ages: Women 52-74 years as of December 31 of the measurement year
  - Continuous Enrollment: October 1 two years prior to the measurement year through December 31 of the measurement year
  - Allowable Gap: No more than one gap in enrollment of up to 45 days for each full calendar year of continuous enrollment (i.e., the measurement year and the year prior to the measurement year). To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage during each full calendar year of continuous enrollment (i.e., the measurement year and the year prior to the measurement year).
- Denominator: The eligible population
- Numerator: One or more mammograms any time on or between October 1 two years prior to the measurement year and December 31 of the measurement year.

### Cervical Cancer Screening (CCS)

- Description: The percentage of women 21-64 years of age who were screened for cervical cancer using either of the following criteria;
  - Women age 21-64 who had cervical cytology performed every 3 years.
  - Women age 30-64 who had cervical cytology/human papillomavirus (HPV) co-testing performed every 5 years.
- Eligible Population:
  - Product Lines: Commercial Medicaid
  - Ages: Women 24-64 years as of December 31 of the measurement year.
  - Continuous Enrollment:
    - Commercial: The measurement year and the two years prior to the measurement year
    - Medicaid: The measurement year.
  - Allowable Gap; No more than one gap in enrollment of up to 45 days during each year of continuous enrollment. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have a more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months (60 days) is not considered continuously enrolled).
- Denominator: The eligible population
- Numerator: The number of women who were screened for cervical cancer, as identified in steps 1 and 2 below
  - 1: Identify women 24-64 years of age as of December 31 of the measurement year who had cervical cytology during the measurement year of the two years prior to the measurement year.
  - 2: From the women who did not meet step 1 criteria, identify women 30-63 years of age as of December 31 of the measurement year who had cervical cytology and a human papillomavirus (HPV) test with service dates four or less days apart during the measurement year of the four years prior to the measurement years AND who were 30 years or older on the date of both tests. For example, if the service date for cervical cytology was December 1 of the measurement year, then the HPV test must include a service date on or between November 27 and December 5 of the measurement year.

## Colorectal Cancer Screening (COL)

- Description: The percentage of members 50-75 years of age who had appropriate screening for colorectal cancer.
- Eligible Population:
  - Product Lines: Commercial, Medicare
  - Ages: 51-75 years as of December 31 of the measurement year.
  - Continuous Enrollment: The measurement year and the year prior to the measurement year.
  - Allowable Gap: No more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment.
- Denominator: The eligible population.
- Numerator: One or more screenings for colorectal cancer. Any of the following meet criteria:
  - Fecal occult blood test during the measurement year. For administrative data, assume the required number of samples were returned, regardless of the FOBT type.
  - Flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year.
  - Colonoscopy during the measurement year or the nine years prior to the measurement year.

## HPV Vaccination (HPV)

- Description: The percentage of female adolescents 13 years of age who had three doses of the human papillomavirus (HPV) vaccine by their 13<sup>th</sup> birthday.
- Eligible Population:
  - Product Lines: Commercial, Medicaid
  - Age: Female Adolescents who turn 13 years of age during the measurement year.
  - Continuous Enrollment: 12 months prior to the member's 13<sup>th</sup> birthday.
  - Allowable Gap: No more than one gap in enrollment of up to 45 days during the 12 months prior to the 13<sup>th</sup> birthday. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months (60 days) is not continuously enrolled.
- Denominator: The eligible population
- Numerator: At least three HPV vaccinations, with different dates of service on or between the member's 9<sup>th</sup> and 13<sup>th</sup> birthdays.

## Chlamydia Screening (CHL)

- Description: The percentage of women 16-24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year.
- Eligible Population:
  - Product Lines: Commercial, Medicaid
  - Ages: Women 16-24 years as of December 31 of the measurement year.
  - Continuous Enrollment: The measurement year.
  - Allowable Gap: No more than one gap in enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months (60 days) is not considered continuously enrolled).
- Denominator: The eligible population.
- Numerator: At least one chlamydia test during the measurement year.

## Ambulatory or Preventive Care Visit (AAP)

- Description: The percentage of members 20 years and older who had an ambulatory or preventive care visit. The organization reports three separate percentages for each product line.
  - Medicaid and Medicare members who had an ambulatory or preventive care visit during the measurement year.
  - Commercial members who had an ambulatory or preventive care visit during the measurement year or the two years prior to the measurement year.
- Eligible Population:
  - Product Lines: Commercial, Medicaid, Medicare.
  - Ages: 20 Years and older as of December 31 of the measurement year.
  - Continuous Enrollment:
    - Medicaid and Medicare: The measurement year.
    - Commercial: The measurement year and the two years prior to the measurement year.
  - Allowable Gap: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months (60 days) is not considered continuously enrolled).
- Denominator: The eligible population.
- Numerator:
  - Medicaid and Medicare: One or more ambulatory or preventive care visits during the measurement year.
  - Commercial: One or more ambulatory or preventive care visits during the measurement year or the two years prior to the measurement year.

## Childhood Immunization Status (CIS)

- Description: The percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB); three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (hepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate of each vaccine and nine separate combination rates.
- Eligible Population
  - Product Lines: Commercial, Medicaid
  - Age: Children who turn 2 years of age during the measurement year.
  - Continuous Enrollment: 12 months prior to the child's second birthday.
  - Allowable Gap: No more than one gap in enrollment of up to 45 days during the 12 months prior to the child's second birthday. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months (60 days) is not continuously enrolled).
- Denominator: The eligible population.
- Numerator:
  - For MMR, hepatitis B, VZV and hepatitis A, count any of the following:
    - Evidence of the antigen or combination vaccine
    - Documented history of the illness
    - A seropositive test result for each antigen
  - For DTaP, IPV, HiB, pneumococcal conjugate, rotavirus and influenza, count only the following:
    - Evidence of the antigen or combination vaccine
  - For combination vaccinations that require more than one antigen (i.e., DTaP and MMR), the organization must find evidence of all the antigens.