The "Medical Neighborhood" Advanced Alternative Payment Model (Revised Version):

Quantitative Analysis for the PRT

April 24, 2020

The goal of ACP-NCQA's proposed "Medical Neighborhood" Advanced Alternative Payment Model (MNM; Revised Version) is to improve care coordination for patients of primary care practices referred to specialty practices. To support PTAC's review of the MNM proposal, this analysis uses all Medicare Fee-for-Service (FFS) claims nationally in CY2017 for eligible beneficiaries who had a usual primary care practice at the outset of the year. The analysis examines the distribution of specialist visits for the eligible beneficiary population to gauge how many beneficiaries, visits, and specialist practices might be covered by the MNM were it to be implemented nationwide. The submitters proposed that the MNM be initially implemented in the Center for Medicare & Medicaid Innovation's (CMMI) Comprehensive Primary Care Plus (CPC+) regions, and subsequently be considered for implementation in CMMI's Primary Care First regions.

Eligible Beneficiary Population

The eligible population included 100 percent of Medicare FFS enrollees with Part A and Part B coverage with the two sets of inclusion criteria described in the Appendix:

- **Enrollment and service use:** Eligible beneficiaries were not enrolled in a Medicare Advantage plan, not institutionalized in a nursing facility, not receiving hospice benefits, and not identified as having end-stage renal disease.
- **Nonparticipation in other CMS shared savings initiatives:** Eligible beneficiaries did not participate in other Centers for Medicare & Medicaid (CMS) shared-savings models, including Independence at Home, Financial Alignment Initiative, Next Generation ACO model, and Shared Savings Program ACOs. Eligible beneficiaries did not include those in Vermont and Maryland who were covered by their states' all-payer models. Beneficiaries in CPC+ were included.

The analysis subsets the eligible population to those beneficiaries with an apparent primary care medical home at the beginning of 2017, using simplified attribution rules established for the CPC+ initiative, described in the Appendix:

- Beneficiaries were attributed to a primary care practice that rendered the plurality of their chronic care management visits, Annual Wellness or Welcome to Medicare visit, and evaluation and management (E&M) visits from primary care practitioners in CY2016.
- The primary care practice was identified based on the Tax Identification Number (TIN) or CMS Certification Number (CCN); primary care practitioners were identified based on their specialty code on Medicare carrier claims.

Eligible Population by Number of Specialist Visits

At the outset of 2017, the eligible population with a usual primary care practice comprised 13.2 million of 40.2 million Medicare FFS beneficiaries nationally (33 percent). The analysis examined the extent to which the eligible population with a usual primary care practice obtained E&M visits from specialist "practices" in 2017. The analysis used a similar definition for a specialist practice as for other Medicare

models: grouping together specialist practitioners billing the same practice (TIN) on the CMS-1500 form (see Appendix).

Among the 13.2 million beneficiaries with a usual primary care practice, 11 million (84 percent) had one or more E&M visits to a different specialist practice during CY2017. The analysis defined "different specialist practice" as a TIN that was not the beneficiary's usual primary care practice. The remainder either had no specialist visits (14 percent) or visited a specialist within their usual primary care practice (3 percent).

Because MNM will likely apply *only to those visiting a different specialist practice*, the detailed breakout of beneficiaries, specialist visits, and specialist practices is reported for this subgroup. The majority of the eligible population who visited a different specialist practice in 2017 had six or fewer specialist visits (60 percent).

Because ACP-NCQA expressed interest in piloting the MNM model with cardiology, infectious disease, and neurology, the analysis examined the distribution of visits for practices with these specialties, in addition to all specialty practices. Twenty-five percent of the eligible population who visited a different specialist practice visited cardiology practices, 13 percent visited neurology practices, and only 2 percent visited infectious disease practices. More than 90 percent of the population who visited these specialist practices had six or fewer specialist visits.

Eligible Population by Number of Specialist Practices Visited

The analysis also examined the distribution of the eligible population who visited a different specialist practice (10.9 million) by the number of specialist practices visited. Additionally, the distribution of specialist practices visited for the three specialties of interest was examined.

Overall, 47 percent of the eligible population visited one to two specialist practices, 38 percent visited three to five specialist practices, and 13 percent visited six or more specialist practices. For the eligible population who visited cardiology, infectious disease, or neurology practices, approximately 99 percent visited one to two practices of the respective specialty.

Distribution of Specialist Practices by Number of Eligible Medicare Beneficiaries

The volume of the eligible population in specialist practices was assessed by examining the distribution of specialist practices by the number of eligible Medicare beneficiaries who visited them in 2017.

Overall, only 50 percent of the 141,450 specialist practices had more than 50 beneficiaries; only 37 percent had more than 100 beneficiaries. The three specialties of interest accounted for just 12 percent of the total specialist practices, with cardiology and neurology accounting for 5 percent each, and infectious disease for the remaining 2 percent. Over two-thirds of the cardiology and neurology practices and over half the infectious disease practices had more than 50 beneficiaries.

Table of Exhibits

Exhibit 1: Eligible Medicare Enrollees[1] with a Usual Primary Care Practice,[2] by Number of Specialist Visits,[3] CY2017

Number of Visits	Practitioner Specialty				
	Any Specialist[3]				
	All Beneficiaries	CPC+ Attributed Beneficiaries	Cardiology[4]	Infectious Disease[5]	Neurology[6]
All beneficiaries	13,155,801	905,000			
No specialist visits	1,780,475	103,061			
Some specialist visits — within Usual Primary Care Practice	381,500	27,375			
Some specialist visits — to Different Specialist Practice[7]	10,993,826	774,564	2,783,267	270,976	1,392,892
1–6 visits	6,570,877		2,598,792	236,086	1,338,142
7–10 visits	1,924,578		120,125	19,868	39,686
11–15 visits	1,189,248		41,440	8,484	11,603
16 visits or more	1,309,123		22,910	6,538	3,461

NOTES:

[1] Eligible enrollees exclude those who are enrolled in Part A only or in Part B only; those who are enrolled in a Medicare Advantage plan; those who have end-stage renal disease; those institutionalized in nursing facilities; those who received hospice benefits, those for whom Medicare is not the primary payer, those who are covered by an existing Medicare shared-savings model (such as Next Generation ACO, Independence at Home, Financial Alignment Initiative, and SSP ACOs); and those residing in Maryland or Vermont who are covered by all-payer models.

[2] A usual primary care practice is determined by application of attribution methods from the CPC+ model at the beginning of CY2017. Attribution is based on the plurality of chronic care management, Annual Wellness or Welcome to Medicare, and evaluation and management (E&M) visits in CY2016, provided by primary care practitioners: general medicine (01), family medicine (08), internal medicine (11), palliative (17), geriatric medicine (38), nurse practitioner (50), clinical nurse specialist (89), and physician assistant (97).

[3] Specialist visits are defined as E&M visits using Berenson-Eggers Type of Service (BETOS) code and the provider specialty code on a carrier claim line. A "specialist" is any practitioner except those with specialty codes 01 (general practice), 08 (family practice), 11 (internal medicine), 12 (osteopaths), 16 (obstetrics/gynecology), 17 (palliative), 35 (chiropractors), 38 (geriatric medicine), 48 (podiatrists), 50 (nurse practitioner), 80 (licensed clinical social worker), 84 (preventive medicine), 89 (clinical nurse specialist), or 97 (physician assistant).

[4] Cardiology is specialty code 06.

[5] Infectious disease is specialty code 44.

[6] Neurology comprises specialty codes 13 (physician–neurology) and 14 (physician–neurosurgery).

[7] The analysis defined different specialist practice as a TIN that is not the beneficiary's usual primary care practice with at least one rendering specialist.

Exhibit 2: Eligible Medicare Enrollees[1] with a Usual Primary Care Practice,[2] by Number of Specialist Practices Visited,[3] CY2017

Number of Visits	Practitioner Specialty			
	Any Specialist[3]	Cardiology[4]	Infectious Disease[5]	Neurology[6]
All beneficiaries	13,155,801			
No specialist visits	1,780,475			
Some specialist visits—within Usual Primary Care Practice	381,500			
Some specialist visits—to Different Specialist Practice[7]	10,993,826	2,783,267	270,976	1,392,892
1–2 practices[8]	5,150,818	2,753,900	266,078	1,364,811
3–5 practices	4,220,242	29,077	4,849	27,859
6–10 practices	1,464,312	278	49	*suppressed
11 practices or more	158,454	12		*suppressed

NOTES:

[1] Eligible enrollees exclude those who are enrolled in Part A only or in Part B only; those who are enrolled in a Medicare Advantage plan; those who have end-stage renal disease; those institutionalized in nursing facilities; those who received hospice benefits; those for whom Medicare is not the primary payer; and those who are covered by an existing Medicare shared-savings model (such as Next Generation ACO, Independence at Home, Financial Alignment Initiative, and SSP ACOs); and those residing in Maryland or Vermont who are covered by all-payer models.

[2] A usual primary care practice is determined by application of attribution methods from the CPC+ model at the beginning of CY2017. Attribution is based on the plurality of chronic care management, Annual Wellness or Welcome to Medicare, and evaluation and management (E&M) visits in CY2016, provided by primary care practitioners: general medicine (01), family medicine (08), internal medicine (11), palliative (17), geriatric medicine (38), nurse practitioner (50), clinical nurse specialist (89), and physician assistant (97).

[3] Specialist practice is a TIN that is not the usual primary care practice (CPC+ or other usual primary care practice) with at least one rendering specialist. Specialist visits are defined as E&M visits using Berenson-Eggers Type of Service (BETOS) code and the provider specialty code on a carrier claim line. A "specialist" is any practitioner except those with specialty codes 01 (general practice), 08 (family practice), 11 (internal medicine), 12 (osteopaths), 16 (obstetrics/gynecology), 17 (palliative), 35 (chiropractors), 38 (geriatric medicine), 48 (podiatrists), 50 (nurse practitioner), 80 (licensed clinical social worker), 84 (preventive medicine), 89 (clinical nurse specialist), or 97 (physician assistant).

[4] Cardiology is specialty code 06.

[5] Infectious disease is specialty code 44.

[6] Neurology comprises specialty codes 13 (physician–neurology) and 14 (physician–neurosurgery)

[7] The analysis defined different specialist practice as a TIN that is not the beneficiary's usual primary care practice with at least one rendering specialist.

[8] A "practice" is defined to include all practitioners with the same TIN on a carrier claim or the same CMS Certification Number (CCN) on an intermediary claim.

*Suppressed cells have fewer observations whose size cannot be disclosed.

Exhibit 3: Distribution of Specialist Practices,[1] by Number of Eligible Medicare Enrollees,[2] with a Usual Primary Care Practice,[3] Who Visited a Different Specialist Practice, CY2017

Number of Eligible Medicare Beneficiaries (who visited specialists in a different practice)	Practitioner Specialty			
	All Specialties[4]	Cardiology[5]	Infectious Disease[6]	Neurology[7]
All practices	138,446	6,561	2,424	6,556
1–20 beneficiaries	47,537	1,248	551	1,303
21–50 beneficiaries	21,072	730	416	884
51–100 beneficiaries	18,557	823	486	997
101 beneficiaries or more	51,280	3,760	971	3,372

NOTES:

[1] Specialist practice is a Tax Identification Number (TIN) that is not the usual primary care practice (CPC+ or other usual primary care practice) with at least one rendering specialist. Specialist visits are defined as E&M visits using Berenson-Eggers Type of Service (BETOS) code and the provider specialty code on a carrier claim line. A "specialist" is any practitioner except those with specialty codes 01 (general practice), 08 (family practice), 11 (internal medicine), 12 (osteopaths), 16 (obstetrics/gynecology), 17 (palliative), 35 (chiropractors), 38 (geriatric medicine), 48 (podiatrists), 50 (nurse practitioner), 80 (licensed clinical social worker), 84 (preventive medicine), 89 (clinical nurse specialist), or 97 (physician assistant). A "practice" is defined to include all practitioners with the same TIN on a carrier claim or the same CMS Certification Number (CCN) on an intermediary claim.

[2] Eligible patients are enrollees excluding those who are enrolled in Part A only or in Part B only; those who are enrolled in a Medicare Advantage plan; those who have end-stage renal disease; those institutionalized in nursing facilities; those who received hospice benefits; those for whom Medicare is not the primary payer; and those who are covered by an existing Medicare shared-savings model (such as Next Generation ACO, Independence at Home, Financial Alignment Initiative, and SSP ACOs); and those residing in Maryland or Vermont who are covered by all-payer models.

[3] A usual primary care practice is determined by application of attribution methods from the CPC+ model at the beginning of CY2017. Attribution is based on the plurality of chronic care management, Annual Wellness or Welcome to Medicare, and evaluation and management (E&M) visits in CY2016, provided by primary care practitioners–general medicine (01), family medicine (08), internal medicine (11), palliative (17), geriatric medicine (38), nurse practitioner (50), clinical nurse specialist (89), and physician assistant (97).

[4] Practices whose members include any specialist.

[5] Practices whose members include at least one cardiologist (specialty code 06).

[6] Practices whose members include at least one infectious disease specialist (specialty code 44).

[7] Practices whose members include at least one neurologist or neurosurgeon (specialty codes 13 and 14).

Appendix for Quantitative Analysis Relating to
The Proposed "Medical Neighborhood" Advanced Alternative Payment Model (Revised Version)
Prepared for the PRT

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Appendix A: Specialist Visits in 2017 for the Eligible Population with a Usual Primary Care Practice

The following two steps were used to determine the number of specialist visits in 2017 for the eligible population with a usual primary care practice:

1. Determine the eligible population with primary care practice
   a. Alignment-eligible beneficiaries were identified at the beginning of CY2017 using the enrollment database (Master Beneficiary Summary File – Base with Medicare Part A/B/C/D). Alignment-eligible beneficiaries had to (1) be enrolled in both Medicare Parts A and B; (2) not have Medicare as their secondary payer; (3) not have end-stage renal disease (ESRD) and not be enrolled in hospice; (4) not be in a Medicare Advantage or other Medicare managed care plan; (5) not be long-term institutionalized using the Minimum Data Set files; and (6) not be enrolled in any other program or model that includes a Medicare fee-for-service (FFS) shared savings opportunity. These programs or models included Independence at Home, Financial Alignment Initiative, Next Generation Accountable Care Organization (ACO) model, and Shared Savings Program ACOs. We also excluded beneficiaries residing in Vermont and Maryland who were covered by their states' all-payer models. Beneficiaries in the Comprehensive Primary Care Plus (CPC+) initiative upon which the applicants based their model were included in the eligible population.
   b. Primary care practices in CY2016 were identified as practitioners within practices or, in the case of federally qualified health centers, rural health clinics, and in the case of critical access hospitals, practitioners within facilities. The primary care practices and practitioners were identified based on a combination of tax identification number (TIN) and national provider identifier (NPI), or Centers for Medicare & Medicaid Services (CMS) certification number (CCN) and NPI. Practitioners had selected primary care designations (see Appendix B).
   c. The eligible population was subset to those beneficiaries with an apparent primary-care medical home at the beginning of 2017, using simplified attribution rules established for the

CPC+ initiative.[1] The simplified attribution used the prior year's Medicare visits to determine the total visits for all primary care eligible services received from each primary care practice during the preceding year (see Appendix C).

   d. An eligible beneficiary was attributed to the primary care practice that rendered the highest percentage of the beneficiary's total visits for primary care eligible services in CY2016. The attribution rules considered recency of the primary care eligible services to break ties among practices that rendered equal percentages of a beneficiary's primary care eligible services.

2. Summarize specialist practice visits for the eligible population during CY2017
   a. Specialist practice visits in CY2017 were identified for all eligible beneficiaries based on their Part B Carrier Claims' Evaluation and Management (E&M) services defined by Berenson-Eggers Type of Service (BETOS) codes. Specialist visits had to be rendered by specialist practitioners who were not primary care practitioners (see Appendix E). Specialist practices were defined by their TIN, based on having one or more specialist practitioners.
   b. Two separate files were created: (1) beneficiaries who received at least one specialist visit at a specialist practice that was different from their usual primary care practice, and (2) beneficiaries who received a specialist visit from a specialist practitioner within their usual primary care practice.
   c. These two files were used to summarize the overall count of beneficiaries, the count of visits to a specialist, the number of practices with at least one specialist, and the count of beneficiaries at the practice level.

[1] Centers for Medicare & Medicaid Innovation, "CPC+ Payment and Attribution Methodologies for Program Year 2020," December 2019. https://innovation.cms.gov/files/x/cpcplus-methodology-py20.pdf.

Appendix B: Primary Care Practitioners for Attribution of Beneficiaries to Primary Care Practice

Specialty Code	Specialty Code Description
01	General Practice
08	Family Practice
11	Internal Medicine
17	Palliative Care
38	Geriatric Medicine
50	Nurse Practitioner
89	Certified Clinical Nurse Specialist
97	Physician Assistant
Source: Medicare Provider/Supplier to Healthcare Provider Taxonomy Crosswalk. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/Downloads/TaxonomyCrosswalk.pdf.	

Appendix C: Primary Care Eligible Services for Attribution of Beneficiaries to Primary Care Practice

Procedure Code Description	Procedure Codes (HCPCS Codes)
Office/outpatient visit E&M	99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215
Home care	99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99339, 99340, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
Welcome to Medicare and Annual Wellness Visits	G0402, G0438, G0439
Advance care planning	99497
Collaborative care model	G0502, G0503, G0504, 99492, 99493, 99494
Cognition and functional assessment for patient with cognitive impairment	G0505, 99483
Outpatient clinic visit for assessment and management (critical access hospitals only)	G0463
Transitional care management services	99495, 99496
Prolonged non-face-to-face E&M services	99358
Chronic care management (CCM) services	99490, 99491
Complex CCM services	99487
Assessment/care planning for patients requiring CCM services	G0506
Care management services for behavioral health conditions	G0507, 99484
Source: CPC+ Payment and Attribution Methodologies.	

Appendix D: BETOS Evaluation and Management Codes Used for Specialist Visits

Berenson-Eggers Type of Service (BETOS) Codes	BETOS Code Description
M1A	Office Visits – New
M1B	Office Visits – Established
M2A	Hospital Visit – Initial
M2B	Hospital Visit – Subsequent
M2C	Hospital Visit – Critical Care
M3	Emergency Room Visit
M4A	Home Visit
M4B	Nursing Home Visit
M5A	Specialist – Pathology
M5B	Specialist – Psychiatry
M5C	Specialist – Ophthalmology
M5D	Specialist – Other
M6	Consultations
Source: BETOS Code Description. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareFeeforSvcPartsAB/downloads/betosdesccodes.pdf. Note: All E&M visits (including those rendered in offices, hospital/ED, and nursing facility/home) were included, as the MNM proposal did not appear to exclude specialist visits in hospital/ED or nursing facility/home.	

Appendix E: Specialist Practitioners Excluding the Following Practitioner Specialties

Specialty Code	Specialty Code Description
01	General Practice
08	Family Practice
11	Internal Medicine
12	Osteopathic Medicine
16	Obstetrics & Gynecology
17	Palliative Care
35	Chiropractic
38	Geriatric Medicine
48	Podiatry
50	Nurse Practitioner
80	Licensed Clinical Social Worker
84	Preventive Medicine
89	Certified Clinical Nurse Specialist
97	Physician Assistant
Source: Medicare Provider/Supplier to Healthcare Provider Taxonomy Crosswalk. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/Downloads/TaxonomyCrosswalk.pdf.	