



Table 1. Community clinician panel characteristics, as defined from Medicare and other administrative data sources, for LINKAGE: data dictionary

Variable Name	Variable Definition	Source data (year)
Clinician characteristics		
TAXONOMY_2024	Primary taxonomy code for the clinician	NPPES (April 2024)
CLINICIAN_TYPE	1 = primary care MD/DO 2 = primary care nurse practitioner (NP) 3 = non-surgical physician assistant (PA) 4 = psychiatry MD 5 = psychiatric NP 6 = neurology MD	NPPES (April 2024)
RUCA	Primary rural-urban community area (RUCA) code of the clinician’s main practice address: 1 = Metropolitan area core: primary flow within an urbanized area (UA) 2 = Metropolitan area high community: primary flow 30% or more to a UA 3 = Metropolitan area low commuting: primary flow 10% to 30% to a UA 4 = Micropolitan area core: primary flow within an urban cluster of 10,000 to 49,999 (large UC) 5 = Micropolitan high commuting: primary flow 30% or more to a large UC 6 = Micropolitan low commuting: primary flow 10% to 30% to a large UC 7 = Small town core: primary flow within an urban cluster of 2,500 to 9,999 (small UC) 8 = Small town high community: primary flow 30% or more to a small UC 9 = Small town low commuting: primary flow 10% to 30% to a small UC 10 = Rural areas: primary flow to a tract outside a UA or UC 99 = Not coded: Census tract has zero population and no rural-urban identifier information	IQVIA data for main practice address (2024); NPPES for main practice address, if IQVIA data unavailable (April 2024); U.S. Department of Agriculture data for RUCA codes (2010)
RURAL	= 1 if the clinician’s main practice address is assigned to RUCA = {7 – 10} = 0 otherwise	IQVIA and NPPES for address USDA for RUCA codes

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_SZ_PTS_ALL	Number of Medicare FFS beneficiaries who had a visit with the clinician (dementia and non-dementia patients)	Medicare FFS carrier and outpatient ^a claims (2023)
PANEL_SZ_PTS_ADRD_ANY	Number of Medicare FFS beneficiaries with dementia (diagnosed by <i>any</i> clinician) who had a visit with the clinician	Medicare FFS carrier and outpatient ^a claims (2023)
PANEL_SZ_PTS_ADRD	Number of Medicare FFS beneficiaries with dementia who had a visit with the clinician where a dementia dx <i>was recorded by the clinician</i>	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_ANY	Number of total visits by FFS beneficiaries with dementia to this clinician	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD	Number of total visits by FFS beneficiaries with dementia to this clinician where the diagnosis <i>was recorded by the clinician</i>	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_OUTPT_ANY	Number of visits in an outpatient setting with Medicare FFS beneficiaries with dementia (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_OUTPT	Number of visits in an outpatient setting with Medicare FFS beneficiaries where a dementia dx <i>was recorded by the clinician</i> (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_INPT_ANY	Number of visits in an inpatient setting with Medicare FFS beneficiaries with dementia (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_INPT	Number of visits in an inpatient setting with Medicare FFS beneficiaries where a dementia dx <i>was recorded by the clinician</i> (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_RES_ANY	Number of visits in a residential setting with Medicare FFS beneficiaries with dementia (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_RES	Number of visits in a residential setting with Medicare FFS beneficiaries where a dementia dx <i>was recorded by the clinician</i> (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_HOME_ANY	Number of visits in a beneficiary's home with Medicare FFS beneficiaries with dementia (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_HOME	Number of visits in a beneficiary's home with Medicare FFS beneficiaries where a dementia dx <i>was recorded by the clinician</i> (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare FFS carrier and outpatient ^a claims (2023)
VISITS_ADRD_TELE_ANY	Number of telehealth visits with Medicare FFS beneficiaries with dementia (See table 3 for definition of telehealth visits)	Medicare FFS carrier and outpatient ^a claims (2023)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
VISITS_ADRD_TELE	Number of telehealth visits with Medicare FFS beneficiaries where a dementia dx <i>was recorded by the clinician</i> (See table 3 for definition of telehealth visits)	Medicare FFS carrier and outpatient ^a claims (2023)
Panel demographics, Medicare enrollment, and geographic characteristics		
Demographics and enrollment characteristics		
<i>Among beneficiaries with dementia in 2023 FFS claims with at least one visit with the clinician</i>		
PANEL_D_AGE_MEAN	Mean age of all Medicare FFS beneficiaries with dementia with a visit with the clinician	MBSF (2023)
PANEL_D_AGE_CAT	Distribution of age among Medicare FFS beneficiaries with dementia in the clinician's panel: 1 = less than 65 years 2 = 65 to 69 3 = 70 to 74 4 = 75 to 79 5 = 80 to 84 6 = 85 and older	MBSF (2023)
PANEL_D_NUM_FEMALE	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are female	MBSF (2023)
PANEL_D_NUM_WHITE	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are non-Hispanic White	MBSF (2023)
PANEL_D_NUM_BLACK	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are non-Hispanic Black	MBSF (2023)
PANEL_D_NUM_HISPANIC	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are Hispanic	MBSF (2023)
PANEL_D_NUM_ASIAN_PI	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are Asian or Pacific Islander	MBSF (2023)
PANEL_D_NUM_AIAN	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are American Indian or Alaska Native	MBSF (2023)
PANEL_D_NUM_OTH_RACE	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who are of all other races and ethnicities or unknown race and ethnicity	MBSF (2023)
PANEL_D_NUM_DUAL	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who were dually eligible for Medicare or Medicaid (full or partial) in at least one month in the year	MBSF (2023)
PANEL_D_NUM_MA_ENRLD	Number of Medicare beneficiaries with dementia with a visit with the clinician who were enrolled in Medicare Advantage for at least one month in the year	MBSF (2023)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_LIS	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who were eligible for a Part D low-income drug subsidy in at least one month in the year	MBSF (2023)
PANEL_D_NUM_DUALORLIS	Number of Medicare FFS beneficiaries with dementia with a visit with the clinician who were dually eligible for Medicare and Medicaid in at least one month of the year or who were eligible for a part D low-income drug subsidy in at least one month of the year	MBSF (2023)
PANEL_D_NUM_PARTD	Number of beneficiaries with dementia with a visit with the clinician who were enrolled in Part D in any month of the year	MBSF (2023)
Geographic characteristics		
PANEL_D_NUM_RURAL	Number of beneficiaries with dementia with a visit with the clinician who have a rural address – that is, it maps to RUCA code = {7-10} (see above for RUCA definition)	Carrier and outpatient claims for beneficiary 9-digit zip code (2023); USDA for RUCA codes
PANEL_D_DSTNC_50P	Median distance from centroid of beneficiaries' addresses to centroid of clinician's practice zip code among all beneficiaries with dementia with a visit with the clinician	Carrier and outpatient claims for beneficiary address and clinician practice site zip codes (2023)
PANEL_D_DSTNC_25P	25th percentile of distance from centroid of beneficiaries' addresses to centroid of clinician's practice zip code among all beneficiaries with dementia with a visit with the clinician	Carrier and outpatient claims for beneficiary address and clinician practice site zip codes (2023)
PANEL_D_DSTNC_75P	75th percentile of distance from centroid of beneficiaries' addresses to centroid of clinician's practice zip code among all beneficiaries with dementia with a visit with the clinician	Carrier and outpatient claims for beneficiary address and clinician practice site zip codes (2023)
PANEL_D_NUM_TOP2_DCL_ADI_NTL	Number of beneficiaries with dementia with a visit with the clinician who have a zip code in the top two deciles of the national distribution of the Area Deprivation Index	Carrier and outpatient claims for beneficiary 9-digit zip code (2023); Publicly available Area Deprivation Index
PANEL_D_NUM_TOP2_DCL_ADI_ST	Number of beneficiaries with dementia with a visit with the clinician who have a zip code in the top two deciles of their state's distribution of the Area Deprivation Index	Carrier and outpatient claims for beneficiary 9-digit zip code (2023); Publicly available Area Deprivation Index
Among all beneficiaries found in 2023 with at least one visit with the clinician (beneficiaries with and without dementia)		
PANEL_ALL_AGE_MEAN	Mean age of all Medicare FFS beneficiaries with a visit with the clinician	MBSF (2023)
PANEL_ALL_AGE_CAT	Distribution of age among Medicare FFS beneficiaries in the clinician's panel: 1 = less than 65 years 2 = 65 to 69	MBSF (2023)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
	3 = 70 to 74 4 = 75 to 79 5 = 80 to 84 6 = 85 and older	
PANEL_ALL_NUM_FEMALE	Number of Medicare FFS beneficiaries with a visit with the clinician who are female	MBSF (2023)
PANEL_ALL_NUM_WHITE	Number of Medicare FFS beneficiaries with a visit with the clinician who are non-Hispanic White	MBSF (2023)
PANEL_ALL_NUM_BLACK	Number of Medicare FFS beneficiaries with a visit with the clinician who are non-Hispanic Black	MBSF (2023)
PANEL_ALL_NUM_HISPANIC	Number of Medicare FFS beneficiaries with a visit with the clinician who are Hispanic	MBSF (2023)
PANEL_ALL_NUM_ASIAN_PI	Number of Medicare FFS beneficiaries with a visit with the clinician who are Asian or Pacific Islander	MBSF (2023)
PANEL_ALL_NUM_AIAN	Number of Medicare FFS beneficiaries with a visit with the clinician who are American Indian or Alaska Native	MBSF (2023)
PANEL_ALL_NUM_OTH_RACE	Number of Medicare FFS beneficiaries with a visit with the clinician who are of all other races and ethnicities or unknown race and ethnicity	MBSF (2023)
PANEL_ALL_NUM_DUAL	Number of Medicare FFS beneficiaries with a visit with the clinician who were dually eligible for Medicare or Medicaid (full or partial) in at least one month in the year	MBSF (2023)
PANEL_ALL_NUM_MA_ENRLD	Number of Medicare beneficiaries with a visit with the clinician who were enrolled in Medicare Advantage for at least one month in the year	MBSF (2023)
PANEL_ALL_NUM_LIS	Number of Medicare FFS beneficiaries with a visit with the clinician who were eligible for a Part D low-income drug subsidy in at least one month in the year	MBSF (2023)
PANEL_ALL_NUM_DUALORLIS	Number of Medicare FFS beneficiaries with a visit with the clinician who were dually eligible for Medicare and Medicaid in at least one month of the year or who were eligible for a part D low-income drug subsidy in at least one month of the year	MBSF (2023)
PANEL_ALL_NUM_PARTD	Number of beneficiaries with a visit with the clinician who were enrolled in Part D in any month of the year	MBSF (2023)
Clinical characteristics of beneficiaries with dementia with at least one visit with the clinician (beneficiaries with dementia found in 2023 FFS claims data)		
PANEL_D_HCC_MEAN	Mean HCC score among all beneficiaries with dementia with a visit with the clinician	Medicare FFS inpatient, SNF, hospice, home health, outpatient, and carrier claims (2022); Publicly available HCC software
PANEL_D_CFI_MEAN	Mean frailty score using claims-based frailty index (CFI) ^b among beneficiaries with dementia with a visit with the clinician	Medicare FFS inpatient, SNF, hospice, home health, outpatient,

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
		carrier, and DME claims (2022); Publicly available claims-based frailty index (CFI)
PANEL_D_NUM_CFI_ROBUST	Number of beneficiaries with dementia with a visit with the clinician whose CFI score ^b indicates they are robust (CFI score < 0.15)	Medicare FFS inpatient, SNF, hospice, home health, outpatient, carrier, and DME claims (2022); Publicly available claims-based frailty index (CFI)
PANEL_D_NUM_CFI_PREFRL	Number of beneficiaries with dementia with a visit with the clinician whose CFI score ^b indicates they are prefrail (CFI score ranges from 0.15 to 0.24)	Medicare FFS inpatient, SNF, hospice, home health, outpatient, carrier, and DME claims (2022); Publicly available claims-based frailty index (CFI)
PANEL_D_NUM_CFI_MILD	Number of beneficiaries with dementia with a visit with the clinician whose CFI score ^b indicates they are mildly frail (CFI score ranges from 0.25 to 0.34)	Medicare FFS inpatient, SNF, hospice, home health, outpatient, carrier, and DME claims (2022); Publicly available claims-based frailty index (CFI)
PANEL_D_NUM_CFI_MODSVR	Number of beneficiaries with dementia with a visit with the clinician whose CFI score ^b indicates they are moderately to severely frail (CFI score >= 0.35)	Medicare FFS inpatient, SNF, hospice, home health, outpatient, carrier, and DME claims (2022); Publicly available claims-based frailty index (CFI)
PANEL_D_NUM_AMI	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for acute myocardial infarction	MBSF (2022 end of year flag)
PANEL_D_NUM_ALZ	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for Alzheimer's disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_ANEMIA	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for anemia	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_ASTHMA	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for asthma	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_AFIB	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for atrial fibrillation and flutter	MBSF (2022 end-of-year-flag)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_BHP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for benign prostatic hyperplasia	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_BRCA	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for breast cancer	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_CRC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for colorectal cancer	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_ENDC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for endometrial cancer	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_LUNGC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for lung cancer	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PRSTC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for prostate cancer	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_UROLC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for urologic cancer	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_CATRCT	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for cataract	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_CKD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for chronic kidney disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_COPD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for chronic obstructive pulmonary disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_DEPBIPMOOD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for depression, bipolar, or other depressive mood disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_DIAB	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for diabetes	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_GLAUC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for glaucoma	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_HF	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for heart failure and non-ischemic heart disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_HPFRAC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for hip/pelvic fracture	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_HYPERL	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for hyperlipidemia	MBSF (2022 end-of-year-flag)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_HYPERT	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for hypertension	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_HYPOTH	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for hypothyroidism	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_IHD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for ischemic heart disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_NONALZDE	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for non-Alzheimer's dementia	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_OSTEOP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for osteoporosis with or without pathological fracture	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PRKNSNS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for Parkinson's disease and secondary Parkinsonism	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PNEU	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for pneumonia, all-cause	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_RAOA	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for rheumatoid arthritis/osteoarthritis	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_STRKTIA	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for stroke/transient ischemic attack	MBSF (2022 end-of-year-flag)
<i>Other chronic health, mental health, and potentially disabling conditions</i>		
PANEL_D_NUM_ADHD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for ADHD, conduct disorders, and hyperkinetic syndrome	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_ALC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for alcohol use disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_ANX	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for anxiety disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_AUTISM	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for autism spectrum disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_BIP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for bipolar disorder	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_CP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for cerebral palsy	MBSF (2022 end-of-year-flag)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_CYSTFIB	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for cystic fibrosis and other metabolic developmental disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_DEP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for depressive disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_DUD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for drug use disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_EPILEP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for epilepsy	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_FIBRO	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for fibromyalgia, chronic pain and fatigue	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_HIVAIDS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for HIV/AIDS	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_INTDIS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for intellectual disabilities and related conditions	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_LRNDIS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for learning disabilities	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_LEUK	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for leukemias and lymphomas	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_LIVERDIS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for liver disease, cirrhosis, and other liver conditions (except viral hepatitis)	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_MIGRN	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for migraine and other chronic headache	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_MOBIMPR	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for mobility impairments	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_MS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for multiple sclerosis and transverse myelitis	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_MUSCDYST	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for muscular dystrophy	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_OBESITY	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for obesity	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_OUD_1	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for opioid use disorder 1: Overarching opioid use disorders	MBSF (2022 end-of-year-flag)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_OUD_2	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for opioid use disorder 2: diagnosis and procedure-code basis for OUD	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_OUD_3	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for opioid use disorder 3: opioid-related hospitalizations/ED visits	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_OUD_4	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for opioid use disorder 4: utilization of medication-assisted therapy (MAT)	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_OTHDD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for other developmental delays	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PVD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for peripheral vascular disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PERS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for personality disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PTSD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for post-traumatic stress disorder	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_PRSULCR	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for pressure ulcers and chronic ulcers	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_SCHIZ	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for schizophrenia	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_SCHIZPSYCH	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for schizophrenia and other psychotic disorders	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_BLNDVIS	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for sensory-blindness and visual impairment	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_DEAF	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for sensory – deafness and hearing impairment	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_SCD	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for sickle cell disease	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_SPBFDA	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for spina bifida and other congenital anomalies of the nervous system	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_SCI	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for spinal cord injury	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_TOBAC	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for tobacco use disorders	MBSF (2022 end-of-year-flag)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_TBI	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for traumatic brain injury and nonpsychotic mental disorders due to brain damage	MBSF (2022 end-of-year-flag)
PANEL_D_NUM_VRLHEP	Number of beneficiaries with dementia with a visit with the clinician who met the CCW chronic condition criteria for viral hepatitis	MBSF (2022 end-of-year-flag)
Service use among beneficiaries with dementia with at least one visit with the clinician		
Parts A and B-related service use (beneficiaries with dementia found in 2023 FFS claims data)		
PANEL_D_NUM_ACP_VST	Number of beneficiaries with dementia on the clinician's panel who had an advance care planning visit with <i>this</i> clinician (CPT code = 99497, 99498)	Medicare FFS carrier and outpatient claims (2023)
PANEL_D_NUM_ACP_VST_ANY	Number of beneficiaries with dementia on the clinician's panel with an advance care planning visit with <i>any</i> clinician (CPT code = 99497, 99498)	Medicare FFS carrier and outpatient claims (2023)
PANEL_D_NUM_CCM_VST	Number of beneficiaries with dementia on the clinician's panel with a visit with <i>this</i> clinician for chronic care management, transitional care management or other care managed services (See table 4 for definition of care management visits)	Medicare FFS carrier and outpatient claims (2023)
PANEL_D_NUM_CCM_VST_ANY	Number of beneficiaries with dementia on the clinician's panel with a visit with <i>any</i> clinician for chronic care management, transitional care management or other care managed services from any clinician (See table 4 for definition of care management visits)	Medicare FFS carrier and outpatient claims (2023)
PANEL_D_NUM_AWV	Number of beneficiaries with dementia on the clinician's panel with a visit with <i>this</i> clinician for an annual wellness visit (CPT code = G0438, G0439, G0402, G0468)	Medicare FFS carrier and outpatient claims (2023)
PANEL_D_NUM_AWV_ANY	Number of beneficiaries with dementia on the clinician's panel with a visit with <i>any</i> clinician for an annual wellness visit (CPT code = G0438, G0439, G0402, G0468)	Medicare FFS carrier and outpatient claims (2023)
PANEL_D_NUM_ACUTE_IP_DAYS	Among beneficiaries with dementia on the clinician's panel, the number who had at least 1 acute inpatient hospital day	Medicare inpatient claims (2023)
PANEL_D_TOT_ACUTE_IP_DAYS	Among beneficiaries with dementia on the clinician's panel, the total number of inpatient days among all beneficiaries with dementia	Medicare inpatient claims (2023)
PANEL_D_NUM_READMIT	Among beneficiaries with dementia on the clinician's panel, the number who had at least one 30-day unplanned readmission	Medicare inpatient claims (2023)
PANEL_D_TOT_READMIT	Among beneficiaries with dementia on the clinician's panel, the total number of 30-day unplanned readmissions among all beneficiaries with dementia	Medicare inpatient claims (2023)
PANEL_D_NUM_ED_VISIT	Among beneficiaries with dementia on the clinician's panel, the number who had at least one ED visit (either an outpatient ED visit or an ED visit that led to an inpatient admission)	Medicare inpatient claims (2023)
PANEL_D_TOT_ED_VISIT	Among beneficiaries with dementia on the clinician's panel, total number of ED visits (outpatient and those leading to an inpatient admission) among all beneficiaries with dementia	Medicare inpatient claims (2023)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_HHA_VISIT	Among beneficiaries with dementia on the clinician's panel, the number who had at least one home health visit (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare carrier and outpatient claims (2023)
PANEL_D_TOT_HHA_VISIT	Among beneficiaries with dementia on the clinician's panel, the total number of home health visits (See table 2 for definition of outpatient, residential, inpatient, and home settings)	Medicare carrier and outpatient claims (2023)
PANEL_D_NUM_SNF	Among beneficiaries with dementia on the clinician's panel, the number who had at least one day in a skilled nursing facility (SNF)	Medicare SNF claims (2023)
PANEL_D_TOT_SNF_DAYS	Among beneficiaries with dementia on the clinician's panel, the total number of days in a SNF	Medicare SNF claims (2023)
PANEL_D_NUM_HSPC	Among beneficiaries with dementia on the clinician's panel, the number who had at least one day in hospice	Medicare hospice claims (2023)
PANEL_D_TOT_HSPC_DAYS	Among beneficiaries with dementia on the clinician's panel, the total number of days in hospice	Medicare hospice claims (2023)
PANEL_D_NUM_IMG	Among beneficiaries with dementia on the clinician's panel, the total number who had at least one imaging service	Medicare carrier and outpatient claims (2023)
PANEL_D_TOT_IMG	Among beneficiaries with dementia on the clinician's panel, the total number of imaging services	Medicare carrier and outpatient claims (2023)
Part D-related service use (beneficiaries with dementia found in 2022 FFS claims data and who were enrolled in Part D for at least one month in 2022)		
PANEL_SZ_PTS_ADRD_PARTD_2022	Number of Medicare FFS beneficiaries with dementia in 2022 (diagnosed by any clinician) who had a visit with the clinician and were enrolled in Part D in at least one month in 2022	Medicare FFS carrier and outpatient ^a claims and enrollment data, and Part D claims (2022)
PANEL_D_TOT_PDE_RX_ANY	Among beneficiaries with dementia on the clinician's panel, total number of Part D events/fills/claims prescribed by <i>any</i> clinician	Cost and Use (2022)
PANEL_D_TOT_PDE_RX	Among beneficiaries with dementia on the clinician's panel, total number of Part D events/fills/claims prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_PDE_PMT_OOP	Among beneficiaries with dementia on the clinician's panel, total Part D beneficiary co-payments (prescribed by <i>any</i> provider)	Cost and Use (2022)
PANEL_D_TOT_PDE_PMT_MCAR E	Among beneficiaries with dementia on the clinician's panel, total Part D Medicare payments (prescribed by <i>any</i> provider)	Cost and Use (2022)
PANEL_D_NUM_OPIOID_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an opioid prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_OPIOID	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an opioid prescribed by <i>this</i> clinician	Part D claims (2022)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_TOT_OPIOIDS	Among beneficiaries with dementia on the clinician's panel, total number of claims for opioids prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_OPIOIDS	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for opioids prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTIBIOTIC_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antibiotic prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTIBIO	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antibiotic prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_ANTIBIO	Among beneficiaries with dementia on the clinician's panel, total number of claims for antibiotics that were prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_ANTIBIO	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for antibiotics prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTIPSY_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antipsychotic prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTIPSY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antipsychotic prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_ANTIPSY	Among beneficiaries with dementia on the clinician's panel, total number of claims for antipsychotics that were prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_ANTIPSY	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for antipsychotics prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTIDEP_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antidepressant prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTIDEP	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antidepressant prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_ANTIDEP	Among beneficiaries with dementia on the clinician's panel, total number of claims for antidepressants that were prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_ANTIDEP	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for antidepressants prescribed by <i>this</i> clinician	Part D claims (2022)

Community Clinician Data Dictionary for LINKAGE

Variable Name	Variable Definition	Source data (year)
PANEL_D_NUM_BENZO_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for a benzodiazepine / Z-drug prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_BENZO	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for a benzodiazepine / Z-drug prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_BENZO	Among beneficiaries with dementia on the clinician's panel, total number of claims for benzodiazepines / Z-drugs that were prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_BENZO	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for benzodiazepines / Z-drugs prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTISEI_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antiseizure medication prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTISEI	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for an antiseizure medication prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_ANTISEI	Among beneficiaries with dementia on the clinician's panel, total number of claims for antiseizure medications that were prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_ANTISEI	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for antiseizure medications prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_NUM_CHOLMEM_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for a cholinesterase inhibitor or memantine prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_CHOLMEM	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for a cholinesterase inhibitor or memantine prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOT_CHOLMEM	Among beneficiaries with dementia on the clinician's panel, total number of claims for cholinesterase inhibitors or memantine that were prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_CHOLMEM	Among beneficiaries with dementia on the clinician's panel, total number of days' supply for cholinesterase inhibitor or memantine prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTICHOL_ANY	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for a strongly anticholinergic medication prescribed by <i>any</i> clinician	Part D claims (2022)
PANEL_D_NUM_ANTICHOL	Among beneficiaries with dementia on the clinician's panel, the number who filled a prescription for a strongly anticholinergic medication prescribed by <i>this</i> clinician	Part D claims (2022)

Variable Name	Variable Definition	Source data (year)
PANEL_D_TOT_ANTICHOL	Among beneficiaries with dementia on the clinician’s panel, total number of claims for a strongly anticholinergic medication prescribed by <i>this</i> clinician	Part D claims (2022)
PANEL_D_TOTDAYS_ANTICHOL	Among beneficiaries with dementia on the clinician’s panel, total number of days’ supply for a strongly anticholinergic medication prescribed by <i>this</i> clinician	Part D claims (2022)

^a Outpatient claims were limited to claims from federally qualified health centers (FQHCs), rural health centers (RHCs), and type II critical access hospitals (CAHs).

^b Additional information about the claims-based frailty index (CFI) is available at: ([Measuring Frailty in Medicare Data: Development and Validation of a Claims-Based Frailty Index - PubMed \(nih.gov\)](#) and [Validation of a Claims-Based Frailty Index Against Physical Performance and Adverse Health Outcomes in the Health and Retirement Study - PubMed \(nih.gov\)](#)).

Table 2. Place of service codes (from carrier claims) and revenue center codes (from outpatient claims from FQHCs, RHCs, and Type II CAHs) used to classify service location

Service location	Place of service codes (carrier claims)	Revenue center codes
Outpatient	<p>05 = Indian health service - free-standing facility. A facility or location, owned and operated by the Indian health service, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services to American Indians and Alaska Natives who do not require hospitalization</p> <p>07= Tribal 638 — free-standing facility. A facility or location owned and operated by a federally recognized American Indian or Alaska Native tribe or tribal organization under a 638 agreement, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services to tribal members who do not require hospitalization</p> <p>10 = Telehealth Provided in Patient’s Home</p> <p>11 = Office</p> <p>17 = Walk-in retail health clinic</p> <p>19 = Off campus — outpatient hospital</p>	Any revenue center code on a claim from a FQHC, RHC, or Type II CAH, except for the codes listed below and 0528 (visit by RHC/FQHC practitioner to other non-RHC/FQHC site (e.g., scene of accident))

Service location	Place of service codes (carrier claims)	Revenue center codes
	<p>20 = Urgent care facility — location, distinct from a hospital emergency room, an office, or a clinic, whose purpose is to diagnose and treat illness or injury for unscheduled, ambulatory patients seeking immediate medical attention</p> <p>22 = Outpatient hospital — portion of a hospital which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization</p> <p>49 = Independent clinic — location, not part of a hospital and not described by any other Place of Service code, that is organized and operated to provide preventive, diagnostic, therapeutic, rehabilitative, or palliative services to outpatients only</p> <p>50 = Federal Qualified Health Center — facility located in a medically underserved area that provides Medicare beneficiaries preventive primary medical care under the general direction of a physician</p> <p>62 = Comprehensive outpatient rehabilitation facility — facility that provides comprehensive rehabilitation services under the supervision of a physician to outpatients with physical disabilities. Services include physical therapy, occupational therapy, and speech pathology services</p>	

Service location	Place of service codes (carrier claims)	Revenue center codes
	<p>71 = Public health clinic — facility maintained by either state or local health departments that provides ambulatory primary medical care under the general direction of a physician</p> <p>72 = Rural health clinic - certified facility which is located in a rural medically underserved area that provides ambulatory primary medical care under the general direction of a physician</p>	
Inpatient	<p>06 = Indian health service - provider-based Facility. A facility or location, owned and operated by the Indian health service, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services rendered by, or under the supervision of, physicians to American Indians and Alaska Natives admitted as inpatients or outpatients</p> <p>08 = Tribal 638 provider-based facility — facility or location owned and operated by a federally recognized American Indian or Alaska Native tribe or tribal organization under a 638 agreement, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services to tribal members admitted as inpatients or outpatients</p> <p>21 = Inpatient hospital - facility, other than psychiatric, which primarily provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services by, or under, the supervision of physicians to patients admitted for a variety of medical conditions</p> <p>61 = Comprehensive inpatient rehabilitation facility- facility that provides comprehensive</p>	n.a.

Community Clinician Data Dictionary for LINKAGE

Service location	Place of service codes (carrier claims)	Revenue center codes
	<p>rehabilitation services under the supervision of a physician to inpatients with physical disabilities. Services include physical therapy, occupational therapy, speech pathology, social or psychological services, and orthotics and prosthetics services</p>	
Residential	<p>13 = Assisted-living facility - congregate residential facility with self-contained living units providing assessment of each resident's needs and on-site support 24 hours a day, seven days a week, with the capacity to deliver or arrange for services including some health care and other services</p> <p>14 = Group home - residence, with shared living areas, where clients receive supervision and other services such as social and/or behavioral services, custodial service, and minimal services (e.g., medication administration)</p> <p>31 = Skilled nursing facility - facility which primarily provides inpatient skilled nursing care and related services to patients who require medical, nursing, or rehabilitative services but does not provide the level of care or treatment available in a hospital</p> <p>32 = Nursing facility - facility which primarily provides to residents skilled nursing care and related services for the rehabilitation of injured, disabled, or sick persons, or, on a regular basis, health-related care services above the level of custodial care to other than individuals with intellectual disabilities</p> <p>33 = Custodial care facility - facility which provides room, board, and other personal assistance services, generally on a long-term basis, and which does not include a medical component</p>	0524, 0525

Service location	Place of service codes (carrier claims)	Revenue center codes
	<p>34 = Hospice. A facility, other than a patient's home, in which palliative and supportive care for terminally ill patients and their families are provided</p> <p>54 = Intermediate care facility/Individuals with Intellectual Disabilities - facility which primarily provides health-related care and services above the level of custodial care to individuals but does not provide the level of care or treatment available in a hospital or SNF</p>	
Home	<p>12 = Home - location, other than a hospital or other facility, where the patient receives care in a private residence</p> <p>14 = Group home - residence, with shared living areas, where clients receive supervision and other services such as social and/or behavioral services, custodial service, and minimal services (e.g., medication administration)</p>	<p>0522 = Free-standing clinic – home visit by RHC/FQHC practitioner</p> <p>0527 = Free-standing clinic – RHC/FQHC visiting nurse service(s) to a member's home when in a home health shortage area</p>

Source: Chronic Conditions Warehouse Medicare Fee-For-Service Claims (version L). January 2024, version 1.11. Available at: <https://www2.ccwdata.org/web/guest/data-dictionaries>

Note: Type II CAH's are those where the professionals working at the CAHs have reassigned their billing rights to the CAH, and the CAH claim reflects both the facility and professional services delivered.

CAH = Critical access hospital; FQHC = Federally qualified health center; n.a. = not applicable; RHC = rural health center.

Table 3. List of codes to indicate telehealth

Code / specification	Definition
Any CPT or HCPCs code allowed to be provided via telehealth (per here: https://www.cms.gov/medicare/coverage/telehealth/list-services and [place of service = {02, 10} or any of the following modifiers: {95, GO, GQ, GT,FQ or FR}] ^a)	Services delivered via telehealth
99421-99423	Online digital E&M services
98966-98968	Telephone assessment & mgt
99441-99443	Telephone E&M
98969	Online assessment & mgt
99444	Online E&M
99453-99454	Chronic Care Remote Patient Monitoring Codes
99457	Remote physiologic monitoring treatment management services
99458	Additional time
99473	Self-measured blood pressure using a device validated for clinical accuracy; patient education/training and device calibration
99474	Separate self-measurements of two readings one minute apart, twice daily over a 30-day period (minimum of 12 readings), collection of data reported by the patient and/or caregiver to the physician or other qualified health care professional, with report of average systolic and diastolic pressures and subsequent communication of a treatment plan to the patient
99091	Remote Physiologic Patient Monitoring
G2010	Remote evaluation of recorded video and/or images submitted by an established patient (e.g. store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related E/M service provided within the previous 7 days nor leading to an E/M service or procedure within the next 24 hours or soonest available appointment
G2012	Virtual check-in by a physician or other qualified health care professional who can report E&M services
G2061	Qualified nonphysician healthcare professional online assessment and management service, for an established patient, for up to seven days, cumulative time during the 7 days; 5-10 minutes (source: https://hcpcs.codes/g-codes/G2061/)
G2062	Qualified nonphysician healthcare professional online assessment and management service, for an established patient, for up to seven days, cumulative time during the 7 days; 11-20 minutes (source: https://hcpcs.codes/g-codes/G2062/)
G2063	Qualified nonphysician healthcare professional online assessment and management service, for an established patient, for up to seven days, cumulative time during the 7 days; 21 or more minutes (source: https://hcpcs.codes/g-codes/G2063/)
G9978-G9986	Remote in-home visit for the E&M of a patient
98970-98972	Online digital assessment
G2250	Remote assessment of recorded video and/ or images submitted by an established patient

G2251	Brief communication technology-based service, e.g., virtual check-in, by a qualified health care professional who cannot report E&M services
G2252	Brief communication technology-based service, e.g., virtual check-in, by a physician or other qualified health care professional who can report E&M services
98975-98977	Remote therapeutic monitoring services. Code 98975 represents the initial setup and patient education for the equipment. Codes 98976 (respiratory system) and 98977 (musculoskeletal system) represent the device supply w/ scheduled recording and/or programmed alert transmission for a 30-day period.
98980	Remote therapeutic monitoring treatment management services,
98981	Remote therapeutic monitoring treatment management services each additional 20 minutes
0702T	Remote therapeutic monitoring of a standardized online digital cognitive behavioral therapy program ; supply and technical support
0703T	Remote therapeutic monitoring of a standardized online digital cognitive behavioral therapy program; physician or other qualified health care professional
99458	E&M - Office/outpatient services, RPM – each addtl 20 minutes (new in 2022)
FQHC/RHC Telehealth codes	
HCPCS_CD = G2025 and REV_CNTR = '052x' (except 0524, 0525, and 0526)	Telehealth services on or after July 1, 2020 and through the end of the COVID-19 public health emergency
G0071	Non face-to-face communication between RHC/FQHC practitioner and patient in lieu of an office visit

a Source: <https://data.cms.gov/resources/medicare-telehealth-trends-methodology>

Table 4. List of codes to indicate chronic care management, transitional care management or other care managed services from the clinician

Code	Definition
99487	Complex Chronic Care Management Services
99489	addtl 30 min
99490	Chronic Care Mgt
99491	Chronic care management services, provided personally by a physician or other qualified health care professional
99492-99493	Psychiatric Collaborative Care Mgt
99494	addtl 30 min
99495 -99496	Transitional Care Management Services
99484	General Behavioral Health Integration Care Management
G0076- G0087	Care management home visit
G0506	Comprehensive assessment and care planning for patients needing chronic care
G2064	Principal care management service at least 30 minutes
G2065	Principal care management service at least 30 minutes – clinical staff time directed by a physician or other qualified health care professional
G2076	Intake activities, including a physician assessment,
99439	Chronic Care Mgt each additional 20 minutes (this code replaced G2058 in 2021)
G2214	Psychiatric Collaborative Care Mgt
99424, 99426	Principal care management services
99425, 99427	PCM - each additional 30 minutes
99437	Subsequent 30 minutes of care for 99491 (chronic care management)
G0077-G0079	E&M - Care management/coordination - Chronic & Transitional Care Management
G0023-G0024	Principal Illness Navigation Services (new in 2024)
G3002-G3003	Chronic Pain Mgt (new in 2023) ¹
G9886-G9887	Behavioral Counseling For Diabetes Prevention, In-Person, Group or distance learning (new in 2024)
G2211	E&M- Care management/coordination - Chronic and Transitional Care (new in 2021, delayed until 2024) - Visit complexity - add-on code, list separately in addition to office/outpatient evaluation and management visit, new or established (new in 2024)
G0323	Care management services for behavioral health conditions, at least 20 minutes of clinical psychologist or clinical social worker time, per calendar month (new in 2023)
G0140, G0146	Principal Illness Services related to behavioral health (new in 2024)
G0511	General Care Management
G0512	Psychiatric CoCM

¹ [An Introduction to Medicare Chronic Pain Management Codes for 2023 \(asra.com\)](https://www.asra.com)