

Supplementary Table 1
Cohort Selection

Criteria	2011, no. of subjects	2012, no. of subjects	2013, no. of subjects	2014, no. of subjects	2015, no. of subjects	2016	
						No. of Subjects	% of Previous Step
1-year Fee-for-Service (FFS) enrollment	2,101,257	2,093,624	2,030,574	2,047,235	1,999,812	2,016,997	
At least 1 MDS assessment	104,977	107,682	119,210	120,132	109,415	111,581	5.5
At least 1 qualified episode (120 d)*	54,543	56,250	63,877	63,342	52,670	47,631	42.7
Complete assessment on diagnosis and cognitive function†	54,212	55,847	63,427	62,921	52,334	47,397	99.5
Active diagnosis as Alzheimer's disease or non-Alzheimer's dementia	32,769	34,869	40,082	40,151	32,506	30,405	64.1
Severe cognitive impairment	6235	6190	6609	6285	4753	4576	15.1
Complete nutrition assessment on feeding tube	6234	6188	6599	6282	4750	4575	

MDS, Minimum Data Set.

*The duration of stay in skilled nursing home was not counted as part of facility stay, and the first episode in a calendar year was selected.

†The first MDS assessment during episode was selected.

Supplementary Table 2

Compare the Characteristics and Mortality Between Subjects With Only 1-Year Eligibility and With >1 Year

Variable	Only 1-y Eligibility, n (%) (n = 12,447)	>1 y Eligibility,* n (%) (n = 8135)	P Value
Age, y			<.001
<65	714 (5.7)	611 (7.5)	
66–75	1751 (14.1)	1442 (17.7)	
76–85	4545 (36.5)	3296 (40.5)	
>85	5437 (43.7)	2786 (34.2)	
Gender			<.001
Male	3581 (28.8)	1892 (23.3)	
Female	8866 (71.2)	6243 (76.7)	
Race			<.001
Non-Hispanic white	2291 (18.4)	1554 (19.1)	
Non-Hispanic black	8275 (66.5)	5209 (64.0)	
Hispanic	1427 (11.5)	1116 (13.7)	
Other	454 (3.6)	256 (3.1)	
Marital status			.007
Married	3394 (27.3)	2341 (28.8)	
Widowed	6478 (52.0)	4053 (49.8)	
Other	2575 (20.7)	1741 (21.4)	
Primary care provider			.09
<2 times in a year	1269 (10.2)	889 (10.9)	
Physician	7595 (61.0)	5017 (61.7)	
NP or PA	3583 (28.8)	2229 (27.4)	
Active diagnosis at initial MDS			
Anemia	3273 (26.3)	2129 (26.2)	.84
Heart failure	1928 (15.5)	957 (11.8)	<.001
Hypertension	9147 (73.5)	5652 (69.5)	<.001
PVD or PAD	623 (5.0)	252 (3.1)	<.001
Urinary tract infection	1285 (10.3)	858 (10.5)	.61
Diabetes	3332 (26.8)	1941 (23.9)	<.001
Thyroid disorder	1089 (8.7)	605 (7.4)	<.001
Arthritis	943 (7.6)	576 (7.1)	.18
Osteoporosis	745 (6.0)	463 (5.7)	.38
Stroke	2301 (18.5)	1473 (18.1)	.49
Anxiety	4084 (32.8)	2671 (32.8)	.97
Depression	6409 (51.5)	4225 (51.9)	.53
Asthma	1437 (11.5)	674 (8.3)	<.001
Mortality			<.001
Alive in the end of study	3598 (28.9)	3056 (37.6)	
Death during 2011 and 2016	8849 (71.1)	5079 (62.4)	
Nursing home location [†]			<.001
Health service region			
Region 1 (Lubbock)	485 (3.9)	284 (3.5)	
Region 2/3 (Arlington)	3799 (30.7)	2323 (28.8)	
Region 4/5N (Tyler)	1406 (11.4)	1081 (13.4)	
Region 6/5S (Houston)	2005 (16.2)	1160 (14.4)	
Region 7 (Temple)	1596 (12.9)	1116 (13.8)	
Region 8 (San Antonio)	1464 (11.8)	947 (11.7)	
Region 9/10 (El Paso)	619 (5.0)	335 (4.2)	
Region 11 (Harlingen)	987 (8.0)	823 (10.2)	
Metro area			<.001
Metro	9137 (73.9)	5683 (70.4)	
Nonmetro	3224 (26.1)	2386 (29.6)	
Border area			.002
Border	965 (7.8)	729 (9.0)	
Nonborder	11,396 (92.2)	7340 (91.0)	

NP, nurse practitioner; PA, physician assistant; PAD, peripheral arterial disease; PVD, peripheral vascular disease.

*Assessment from the first eligible episode.

[†]There were 152 subjects without facility address. County of facility location was used to define region, metro, and border (La Paz Agreement).

Supplementary Table 3

Algorithm to Determine Primary Care Visit and Primary Care Provider

Measure	Algorithm
Primary care visit	CPT code: 99201-99215, 99304-99350, 99363-99449, 99487-99490, 99495-99498, 98966-98969, G0463, G0438, G0439
Primary care physician	CMS provider specialty codes: general practice (01), family practice (08), internal medicine (11), geriatric medicine (38)
Primary care nurse practitioner	CMS provider specialty codes as nurse practitioner (50), and taxonomy code as primary care nurse practitioner (363L00000X, 363LA2200X, 363LF0000X, 363LG0600X, 363LP2300X, 363LW0102X)
Primary care physician assistant	CMS provider specialty codes as physician assistant (97) and taxonomy as physician assistant (363A00000X, 363AM0700X).

CMS, Centers for Medicare & Medicaid Services; CPT, Current Procedural Terminology.

Supplementary Table 4

Adjusted Prevalence Ratio Estimation on Feeding Tube Insertion Stratified by Year of Eligibility

Variable	1 y* PR (95% CI)	>1 y* PR (95% CI)
Year of residency		
2011	Ref	Ref
2012	0.92 (0.78-1.09) [†]	1.17 (1.09-1.25) [†]
2013	0.90 (0.75-1.08) [†]	1.33 (1.22-1.45) [†]
2014	0.83 (0.70-0.98) [†]	1.39 (1.28-1.52) [†]
2015	0.68 (0.55-0.82) [†]	1.48 (1.35-1.63) [†]
2016	0.71 (0.60-0.85) [†]	1.62 (1.46-1.78) [†]
Age, y		
<65	Ref	Ref
66-75	0.74 (0.60-0.90) [†]	0.80 (0.68-0.93) [†]
76-85	0.56 (0.45-0.68) [†]	0.67 (0.57-0.79) [†]
>85	0.49 (0.39-0.61) [†]	0.64 (0.54-0.76) [†]
Gender		
Male	Ref	Ref
Female	0.97 (0.86-1.08)	0.95 (0.84-1.07)
Race		
Non-Hispanic white	Ref	Ref
Non-Hispanic black	2.66 (2.32-3.03) [†]	2.77 (2.39-3.19) [†]
Hispanic	1.88 (1.61-2.19) [†]	2.00 (1.72-2.31) [†]
Other	2.49 (1.99-3.08) [†]	1.70 (1.47-1.96) [†]
Marital status		
Married	Ref	Ref
Widowed	0.84 (0.73-0.96) [†]	0.90 (0.80-1.02)
Other	0.95 (0.82-1.09)	0.97 (0.85-1.11)
Comorbidity		
Without disease	Ref	Ref
Anemia	1.27 (1.14-1.42) [†]	1.15 (1.07-1.24) [†]
Heart Failure	1.08 (0.93-1.24)	1.11 (1.00-1.24)
Hypertension	0.98 (0.86-1.12)	1.01 (0.94-1.09)
PVD or PAD	1.00 (0.80-1.25)	1.11 (0.98-1.24)
Urinary tract infection	1.31 (1.12-1.52) [†]	1.18 (1.09-1.27) [†]
Diabetes	1.38 (1.24-1.54) [†]	1.33 (1.20-1.48) [†]
Thyroid disorder	1.24 (1.03-1.49) [†]	1.06 (0.96-1.17)
Arthritis	0.78 (0.62-0.98) [†]	0.99 (0.89-1.11)
Osteoporosis	0.79 (0.60-1.03)	1.11 (1.00-1.23)
Stroke	2.49 (2.25-2.74) [†]	1.43 (1.31-1.57) [†]
Anxiety	0.85 (0.75-0.96) [†]	0.94 (0.88-1.00)
Depression	0.67 (0.60-0.75) [†]	0.84 (0.79-0.89) [†]
Asthma	1.20 (1.03-1.40) [†]	1.09 (0.97-1.23)
Provider type		
MD	Ref	Ref
NP/PA	0.93 (0.82-1.05)	0.90 (0.84-0.96) [†]
Ownership[‡]		
Profit	Ref	Ref
Nonprofit/government	0.93 (0.79-1.08)	0.95 (0.89-1.01)
Quality[§]		
Rank 1-3	Ref	Ref
Good (5-star rank >3)	0.99 (0.88-1.11)	1.04 (0.98-1.09)
RN staffing[§]		
≤Median	Ref	Ref
>Median	1.17 (1.05-1.29) [†]	1.01 (0.96-1.06)
Total staffing[§]		
≤Median	Ref	Ref
>Median	0.94 (0.85-1.05)	1.03 (0.98-1.08)
Certified beds[§]		
100	Ref	Ref
100-200	1.05 (0.92-1.20)	1.07 (0.97-1.18)
>200	0.87 (0.65-1.15)	1.03 (0.85-1.24)
Health service region		
Temple	Ref	Ref
Lubbock	1.00 (0.64-1.55)	0.71 (0.43-1.16)
Arlington	1.30 (1.03-1.62) [†]	1.25 (1.01-1.55) [†]
Tyler	1.90 (1.47-2.44) [†]	1.36 (1.05-1.73) [†]
Houston	2.12 (1.71-2.61) [†]	2.19 (1.78-2.67) [†]
San Antonio (border)	3.62 (2.43-5.13) [†]	4.46 (3.20-5.83) [†]
San Antonio (not border)	1.54 (1.19-1.99) [†]	1.47 (1.13-1.89) [†]
El Paso (border)	2.26 (1.53-3.25) [†]	1.78 (1.14-2.68) [†]
El Paso (not border)	1.04 (0.65-1.64)	0.44 (0.22-0.85) [†]

(continued)

Supplementary Table 4 (continued)

Variable	1 y* PR (95% CI)	>1 y* PR (95% CI)
Harlingen (border)	4.95 (4.01-5.99) [†]	3.88 (3.15-4.67) [†]
Harlingen (not border)	2.09 (1.48-2.89) [†]	1.96 (1.43-2.63) [†]
Metro county	1.26 (1.07-1.48) [†]	1.44 (1.25-1.66) [†]

CI, confidence interval; NP, nurse practitioner; PA, physician assistant; PAD, peripheral arterial disease; PR, prevalence ratio; PVD, peripheral vascular disease; Ref, referent; RN, registered nurse.

*Full model was applied.

[†]P < .05.

[‡]Ownership status in corresponding study year.

[§]Average of 4 quarterly assessments in corresponding study year. For 2013, the facility without quarterly report was determined with an average of 6 monthly assessments (July-December).