

**Appendix S1. Demographics of Early vs. Not-Early before Propensity Score Matching**

	Before Propensity Score matching		
	Not Early Palliative Care (N = 90,347)	Early Palliative Care (N = 53,959)	SD
<b>Variables that were Hard Matched</b>	<b>N (%)</b>	<b>N (%)</b>	
Mean Age ± Standard Deviation (SD)	72 ± 13	69 ± 14	0.21
Female	41,994 (46.5)	27,113 (50.2)	0.59
Cancer Type at Diagnosis			
Breast	10,539 (11.7)	5,850 (10.8)	0.03
Colorectal	12,051 (13.3)	8,579 (15.9)	0.07
Hematology	10,546 (11.7)	4,150 (7.7)	0.13
Lung	17,444 (19.3)	13,050 (24.2)	0.12
Prostate	9,041 (10.0)	4,384 (8.1)	0.07
Stage at Diagnosis			
Stage III	6,222 (6.9)	5,858 (10.9)	0.14
Stage IV	7,347 (8.1)	10,832 (20.1)	0.35
Unavailable	70,351 (77.9)	32,731 (60.7)	0.38
CHESS Score (when RAI-HC completed)			
No health instability	1,704 (1.9)	2,221 (4.1)	0.13
Low health instability	3,433 (3.8)	5,458 (10.1)	0.25
Moderate health instability	714 (0.8)	1,761 (3.3)	0.18
Severe health instability	135 (0.1)	629 (1.2)	0.13
<b>InterRAI Scales (When RAI-HC completed)</b>			
Dependent on Activities of Daily Living	433 (0.5)	684 (1.3)	0.08
Minor-major depression	809 (0.9)	1,797 (3.3)	0.17
Moderate-severe cognitive impairment	869 (1.0)	764 (1.4)	0.04
Moderate-severe pain	606 (0.7)	1,457 (2.7)	0.16
Caregiver Present at Home	3528 (3.9)	6,970 (12.9)	0.33
<b>Variables within the Propensity Score</b>			
Lowest income quintile	18,686 (20.7)	10,682 (19.8)	0.02
Highest income quintile	17,154 (19.0)	10,492 (19.4)	0.01
Lives in Rural Community	13,597 (15.0)	7,813 (14.5)	0.02
Deyo-Charlson Comorbidity Score (>=1)	13,728 (15.2)	9,553 (17.7)	0.10
Had Radiation since diagnosis	43,298 (47.9)	34,226 (63.4)	0.32

Had Cancer Surgery since diagnosis	37,369 (41.4)	23,917 (44.3)	0.59
Prior hospital utilization (Mean no. of visits in year 2 to 1 before death $\pm$ SD)	0.71 $\pm$ 1.09	0.96 $\pm$ 1.23	0.22
Disease Duration (Diagnosis to death)			
0-5 years	66,375 (73.5)	43,930 (81.4)	0.19
6-11 years	13,907 (15.4)	6,467 (12.0)	0.10
12-17 years	5,848 (6.5)	2,249 (4.2)	0.10
18+ years	4,217 (4.7)	1,313 (2.4)	0.12
Health Region			
1	5,302 (5.9)	3,144 (5.8)	0.00
2	7,628 (8.4)	4,408 (8.2)	0.01
3	4,235 (4.7)	3,277 (6.1)	0.06
4	12,721 (14.1)	6,028 (11.2)	0.09
5	3,220 (3.6)	2,413 (4.5)	0.05
6	6,148 (6.8)	3,488 (6.5)	0.01
7	7,621 (8.4)	4,254 (7.9)	0.02
8	9,094 (10.1)	5,355 (9.9)	0.00
9	10,227 (11.3)	6,153 (11.4)	0.00
10	4,911 (5.4)	2,744 (5.1)	0.02
11	7,808 (8.6)	6,117 (11.3)	0.09
12	3,531 (3.9)	2,424 (4.5)	0.03
13	5,795 (6.4)	3,079 (5.7)	0.03
14	2,025 (2.2)	1,040 (1.9)	0.02

## Appendix S2. Aggressive Care Measures comparing Early vs. Late and Early vs. Never

	RAI NO				RAI YES			
	Early Palliative Care N = 28,285 (%)	Late Palliative Care N = 28,285 (%)	Absolute Risk Difference (%) (Early vs Late Palliative Care)	SD	Early Palliative Care N = 2,323 (%)	Late Palliative Care N = 2,323 (%)	Absolute Risk Difference (%) (Early vs Late Palliative Care)	SD
<b>Late PC vs. Early PC</b>								
Death in acute care hospital	10,788 (38.1)	13,109 (46.3)	-8.2	0.17	831 (35.8)	1,152 (49.6)	-13.8	0.28
Aggressive care (any one or combination of the following three)	14,763 (52.2)	17,379 (61.4)	-9.2	0.19	1,135 (48.9)	1,344 (57.9)	-9.0	0.18
At least 1 ED visits within last 30 days	12,232 (43.2)	14,552 (51.4)	-8.2	0.16	949 (40.9)	1,141 (49.1)	-8.2	0.17
Any hospital admission within last 30 days	12,750 (45.1)	15,492 (54.8)	-9.7	0.19	992 (42.7)	1,223 (52.6)	-9.9	0.20
Any ICU admission within last 30 days	1,022 (3.6)	1,379 (4.9)	-1.3	0.06	53 (2.3)	111 (4.8)	-2.5	0.14
<b>Never PC vs. Early PC</b>								
	Early Palliative Care N = 7,953 (%)	Never Palliative Care N = 7,953 (%)	Absolute Risk Difference (%) (Early vs Never Palliative Care)	SD	Early PC N = 1,263 (%)	Never Palliative Care N = 1,263 (%)	Absolute Risk Difference (%) (Early vs Never Palliative Care)	SD
Death in acute care hospital	3,035 (38.2)	4,325 (54.4)	-16.2	0.33	447 (35.4)	599 (47.4)	-12.0	0.25
Aggressive care (any one or combination of the following three)	4,059 (51.0)	5,207 (65.5)	-14.5	0.30	583 (46.2)	745 (59.0)	-12.8	0.26
At least 1 ED visits within last 30 days	3,318 (41.7)	4,523 (56.9)	-15.2	0.31	505 (40.0)	686 (54.3)	-14.3	0.29
Any hospital admission within last 30 days	3,536 (44.5)	4,426 (55.7)	-11.2	0.23	500 (39.6)	640 (50.7)	-11.1	0.22
Any ICU admission within last 30 days	277 (3.5)	1,510 (19.0)	-15.5	0.51	30 (2.4)	163 (12.9)	-10.5	0.40

\*McNemar's test was significant to &lt;0.0001 for all measures

**Appendix S3. Supportive Home Care Measures comparing Early vs. Late and Early vs. Never**

	RAI NO				RAI YES			
	Early Palliative Care N = 28,285 (%)	Late Palliative Care N = 28,285 (%)	Absolute Risk Difference (%) (Early vs Late Palliative Care)	SD	Early Palliative Care N = 2,323 (%)	Late Palliative Care N = 2,323 (%)	Absolute Risk Difference (%) (Early vs Late Palliative Care)	SD
<b>Late PC vs. Early PC</b>								
Supportive home care (any one or combination of the following three)	17,552 (62.1)	13,736 (48.6)	13.5	0.27	1,340 (57.7)	656 (28.2)	29.5	0.62
Physician house call in last 30 days	7,833 (27.7)	6,061 (21.4)	6.3	0.15	582 (25.1)	341 (14.7)	10.4	0.26
Palliative homecare nursing at home in last 30 days	16,083 (56.9)	12,320 (43.6)	13.3	0.27	1,213 (52.2)	494 (21.3)	30.9	0.68
Palliative personal support nursing at home in last 30 days	10,745 (38.0)	7,954 (28.1)	9.9	0.21	955 (41.4)	374 (16.1)	25.3	0.58
<b>Never PC vs. Early PC</b>								
Supportive home care (any one or combination of the following three)	4,639 (58.3)	0	-	-	672 (53.2)	0	-	-
Physician house call in last 30 days	1,921 (24.2)	0	-	-	277 (21.9)	0	-	-
Palliative homecare nursing at home in last 30 days	4,287 (53.9)	0	-	-	609 (48.2)	0	-	-
Palliative personal support nursing at home in last 30 days	2,983 (37.5)	0	-	-	494 (39.1)	0	-	-

\*McNemar's test was significant to &lt;0.0001 for all measures