

Utilization Data

Utilization Measure	Population	Value(s)	Source
Average number of ED visits per patient, per year	Superutilizers: Those 2 standard deviations above the mean for ED visits	Medicare (aged 65+): 5.4 visits Medicare (aged 1-64): 10.2 visits Medicaid: 9.5 visits	Data: HCUP and State Emergency Department Databases from 13 States, 2014 Citation: Jiang, et al. Characteristics of Emergency Department Visits for Super-Utilizers by Payer , <i>Agency for Healthcare Research and Quality</i> , 2014.
Average number of medical office visits per patient, per year	High-need, high-cost patients: 3 or more chronic conditions + 1 or more functional limitations	All payers: 9.6 visits Medicare+Medicaid: 10.2 Medicare: 9.2 Medicaid: 9.5 Private insurance: 10.5	Data: 2009–2011 MEPS Citation: Hayes, et al. High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? <i>The Commonwealth Fund</i> , 2016.
Average length of stay per patient	Patients at U.S. community hospitals	Total: 4.6 Medicare: 5.3 Medicaid: 4.6 Private: 3.9 Uninsured: 4.1 Other: 4.6	Data: HCUP and National Inpatient Sample, 2016 Citation: Freeman, et al. Overview of U.S. Hospital Stays in 2016: Variation by Geographic Region , <i>Agency for Healthcare Research and Quality</i> , 2018.
Rate of ED visits per 1000 beneficiaries	High-need, high-cost patients: 3 or more chronic conditions + 1 or more functional limitations	All payers: 619 ED visits Medicare+Medicaid: 616 Medicare: 538 Medicaid: 890 Private insurance: 567	Data: 2009–2011 MEPS Citation: Hayes, et al. High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? <i>The Commonwealth Fund</i> , 2016.
Rate of inpatient hospital discharges per 1000 beneficiaries	High-need, high-cost patients: 3 or more chronic conditions + 1 or more functional limitations	All payers: 535 discharges Medicare+Medicaid: 510 Medicare: 543 Medicaid: 583 Private insurance: 515	Data: 2009–2011 MEPS Citation: Hayes, et al. High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? <i>The Commonwealth Fund</i> , 2016.

Abbreviations: ED=Emergency Department; HCUP=Healthcare Cost and Utilization Project; MEPS=Medical Expenditure Panel Survey

Cost Data

Cost Measure	Population	Value(s)	Source
Average cost per hospital inpatient day, per patient*	Patients at U.S. community hospitals	Total: \$2,543 Medicare: \$2,566 Medicaid: \$2,130 Private: \$2,795 Uninsured: \$2,268 Other: \$2,739	Citation: Freeman, et al. Overview of U.S. Hospital Stays in 2016: Variation by Geographic Region , Agency for Healthcare Research and Quality, 2018.
Average cost per hospital inpatient stay, per patient	Patients at U.S. community hospitals	Total: \$11,700 Medicare: 13,600 Medicaid: \$9,800 Private: \$10,900 Uninsured: \$9,300 Other: \$12,600	Citation: Freeman, et al. Overview of U.S. Hospital Stays in 2016: Variation by Geographic Region , Agency for Healthcare Research and Quality, 2018.
Average health expenditures per person, per year	High-need, high-cost patients: 3 or more chronic conditions + 1 or more functional limitations	\$21,021 on health care services and prescription medicine	Data: 2009–2011 MEPS Citation: Hayes, et al. High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? The Commonwealth Fund, 2016.
Average inpatient spending per Medicare FFS beneficiary, per year	Frail Elderly: 2 or more frail indicators Under-65 Disabled: ESRD or disabled Major Complex Chronic: 3 or more complex conditions OR 6 or more non-complex conditions Minor Complex Chronic: 1 or 2 complex conditions AND less than 6 non-complex conditions Simple Chronic: 0 complex conditions AND less than 6 non-complex conditions	Frail Elderly: \$23,704 Under-65, Disabled: \$15,947 Major Complex Chronic: \$12,704 Minor Complex Chronic: \$14,045 Simple Chronic: \$14,112	Data: 2011 and 2012 Medicare FFS claims Citation: Joynt, et al. Segmenting High-Cost Medicare Patients into Potentially Actionable Cohorts . Healthcare, 2017.
Average post-acute care spending per Medicare FFS beneficiary, per year	Frail Elderly: 2 or more frail indicators Under-65 Disabled: ESRD or disabled Major Complex Chronic: 3 or more complex conditions OR 6 or more non-complex conditions Minor Complex Chronic: 1 or 2 complex conditions AND less than 6 non-complex conditions Simple Chronic: 0 complex conditions AND less than 6 non-complex conditions	Frail Elderly: \$24,080 Under-65, Disabled: \$6,548 Major Complex Chronic: \$5,035 Minor Complex Chronic: \$3,696 Simple Chronic: \$3,192	Data: 2011 and 2012 Medicare FFS claims Citation: Joynt, et al. Segmenting High-Cost Medicare Patients into Potentially Actionable Cohorts . Healthcare, 2017.

* Note: Values were calculated by The Commonwealth Fund. Average cost per inpatient day, per patient is average cost per hospital inpatient stay, per patient divided by the average length of stay, per patient.

Cost Measure	Population	Value(s)	Source
Total preventable spend for acute hospital costs per Medicare FFS beneficiary, per year	Frail Elderly: 2 or more frail indicators	Frail Elderly: \$3,164	Data: 2012 Medicare FFS claims Citation: Figueroa, et al. Concentration of Potential Preventable Spending Among High-Cost Medicare Subpopulations: An Observational Study. <i>Annals of Internal Medicine</i>, 2017.
	Under-65 Disabled: ESRD or disabled	Under-65 Disabled: \$2,128	
	Major Complex Chronic: 3 or more complex conditions OR 6 or more non-complex conditions	Major Complex Chronic: \$1,960	
	Minor Complex Chronic: 1 or 2 complex conditions AND less than 6 non-complex conditions	Minor Complex Chronic: \$1,082	
	Simple Chronic: 0 complex conditions AND less than 6 non-complex conditions	Simple Chronic: \$446	
Total preventable spend for acute hospital costs per Medicare FFS beneficiary, per year	Frail Elderly: 2 or more frail indicators	Frail Elderly: \$2,708	Data: 2012 Medicare FFS claims Citation: Figueroa, et al. Concentration of Potential Preventable Spending Among High-Cost Medicare Subpopulations: An Observational Study. <i>Annals of Internal Medicine</i>, 2017.
	Under-65 Disabled: ESRD or disabled	Under-65 Disabled: \$1,856	
	Major Complex Chronic: 3 or more complex conditions OR 6 or more non-complex conditions	Major Complex Chronic: \$1,873	
	Minor Complex Chronic: 1 or 2 complex conditions AND less than 6 non-complex conditions	Minor Complex Chronic: \$1,021	
	Simple Chronic: 0 complex conditions AND less than 6 non-complex conditions	Simple Chronic: \$422	
Total preventable spend for long-term hospital costs per Medicare FFS beneficiary, per year	Frail Elderly: 2 or more frail indicators	Frail Elderly: \$221	Data: 2012 Medicare FFS claims Citation: Figueroa, et al. Concentration of Potential Preventable Spending Among High-Cost Medicare Subpopulations: An Observational Study. <i>Annals of Internal Medicine</i>, 2017.
	Under-65 Disabled: ESRD or disabled	Under-65 Disabled: \$183	
	Major Complex Chronic: 3 or more complex conditions OR 6 or more non-complex conditions	Major Complex Chronic: \$50	
	Minor Complex Chronic: 1 or 2 complex conditions AND less than 6 non-complex conditions	Minor Complex Chronic: \$33	
	Simple Chronic: 0 complex conditions AND less than 6 non-complex conditions	Simple Chronic: \$13	
Total preventable spend for skilled nursing facility costs per Medicare FFS beneficiary, per year	Frail Elderly: 2 or more frail indicators	Frail Elderly: \$1,917	Data: 2012 Medicare FFS claims Citation: Figueroa, et al. Concentration of Potential Preventable Spending Among High-Cost Medicare Subpopulations: An Observational Study. <i>Annals of Internal Medicine</i>, 2017.
	Under-65 Disabled: ESRD or disabled	Under-65 Disabled: \$279	
	Major Complex Chronic: 3 or more complex conditions OR 6 or more non-complex conditions	Major Complex Chronic: \$336	
	Minor Complex Chronic: 1 or 2 complex conditions AND less than 6 non-complex conditions	Minor Complex Chronic: \$199	
	Simple Chronic: 0 complex conditions AND less than 6 non-complex conditions	Simple Chronic: \$95	

Abbreviations: FFS=Fee-for-service; ESRD=End-stage renal disease; MEPS=Medical Expenditure Panel Survey

Other Resources:

- For state-specific average costs and utilization information, see [Centers for Medicare and Medicaid \(CMS\) Medicare Mapping Tool](#). Relevant to the ROI Calculator, the mapping includes measures such as average total cost, emergency department visit rates, hospitalization rates, and readmissions. User can look at utilization information for beneficiaries having up to 3+ claims-based conditions.
- MEPS has [a table](#) for mean expenses per person with care for selected conditions by type of service.