



ROI Calculator for Partnerships to Address Social Needs: AVERAGE HEALTHCARE COST & UTILIZATION TABLES: 2023 ENHANCED EDITION

The Return-on-Investment (ROI) Calculator for Partnerships to Address Social Needs is designed to help healthcare and community-based organizations plan sustainable arrangements to finance the delivery of social services that can improve the health of high-need, high-cost patients. Average healthcare cost and utilization data from these tables (highlighted in yellow) were used to pre-populate baseline inputs required by the calculator. Additional socio-demographic data are provided in the tables in the event that users of the calculator wish to substitute different input values to reflect the characteristics of specific intervention populations.

Data Source and Methods

Tables 1-3 report healthcare utilization and cost data for adults age 18 and older from an analysis of the 2015–2017 [Medical Expenditure Panel Survey \(MEPS\) Household Component](#) conducted by Westat for the Commonwealth Fund. MEPS is nationally representative of the noninstitutionalized civilian U.S. population and includes all payers. Validation research finds that MEPS household respondents accurately report inpatient hospital use but underreport emergency department and office-based visits.

Table 1a reports healthcare utilization for a cohort of high-need adults, defined as those with three or more chronic conditions and one or more functional limitations. Functional limitations were defined as self-reported limitations in activities of daily living or instrumental activities of daily living. Twelve chronic conditions were identified from the MEPS self-reported priority condition variables including: angina, arthritis, asthma, cancer, coronary heart disease, diabetes, emphysema, other heart disease, high cholesterol, hypertension, obesity (BMI \Rightarrow 30), and a mental health composite indicative of depression.

Table 4 reports data on skilled nursing facility use and costs published by the Centers for Medicare and Medicaid Services for people covered by Original Medicare. This source was used because MEPS does not include people living in institutional settings. It was not possible to report on a high-need cohort using this source or to derive estimates for Medicaid or commercial/private payers.



What's New in This Edition

Tables 3 and 4 report healthcare spending adjusted for inflation by type of service using Personal Consumption Expenditure price indices published by the U.S. Bureau of Economic Analysis, in accordance with guidance from the Agency for Healthcare Research and Quality. Healthcare spending for high-need adults was removed from this edition of the tables due to uncertainty about reliability.

Data are displayed as follows:

Table 1a. Healthcare Utilization for the U.S. High-Need Adult Population <i>(Used to pre-populate baseline inputs for the Quick ROI Calculator)</i>
Table 1b. Healthcare Utilization for the U.S. General Adult Population
Table 2. Healthcare Spending Per Service for the U.S. General Adult Population (2015-2017 Nominal Dollars)
Table 3. Inflation-Adjusted Healthcare Spending Per Service for the U.S. General Adult Population <i>(Used to pre-populate baseline inputs for the Quick ROI Calculator)</i>
Table 4. Utilization and Payment for Skilled Nursing Facility (SNF) Care <i>(Used to pre-populate baseline inputs for the Quick ROI Calculator)</i>

Hospital Readmission Rates

Baseline inputs on 30-day hospital readmissions required by the calculator were derived from the [Commonwealth Fund Scorecard on Health System Performance](#) for Medicare beneficiaries age 65 and older in 2019: 32.0 per 1,000 Medicare only (non-dual eligible) beneficiaries and 82.3 per 1,000 dually eligible Medicare and Medicaid beneficiaries.

(Updated 10-1-23)



Table 1a. Healthcare Utilization for the U.S. High-Need Adult Population

Data represent adults ages 18 and older who live in the community and have three or more chronic conditions and one or more functional limitation(s)

DEMOGRAPHIC GROUP	AVERAGE NUMBER PER YEAR															
	Emergency Department Visits		Hospital Inpatient Admissions		Hospital Inpatient Days		Hospital Length of Stay	Hospital Outpatient Department Visits		Paid Home Health Provider Days		Physician Office Visits*		All Provider Office Visits		
	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Days Per Stay	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	
ALL HIGH-NEED ADULTS	0.8	829	0.6	606	4.0	3,952	6.5	2.0	1,991	39.0	39,041	10.1	10,096	16.8	16,752	
AGE																
18 - 64	0.9	907	0.5	545	3.6	3,582	6.6	2.4	2,412	26.1	26,056	10.8	10,779	18.6	18,553	
65 - 74	0.8	842	0.8	754	5.4	5,372	7.1	2.1	2,127	41.5	41,550	11.4	11,401	19.0	19,028	
75+	0.8	750	0.6	591	3.6	3,608	6.1	1.5	1,531	50.0	49,981	8.8	8,822	14.0	13,959	
INSURANCE																
Commercial (private) only	0.5	523	0.5	504	1.8	1,764	3.5	2.5	2,524	2.5	2,508	11.3	11,292	20.1	20,141	
Medicaid only	1.2	1,149	0.6	563	4.9	4,941	8.8	2.3	2,257	31.8	31,755	10.4	10,442	16.3	16,261	
Medicare only	0.8	802	0.7	651	4.1	4,069	6.3	2.1	2,104	25.2	25,152	9.9	9,910	16.1	16,109	
Dual (Medicare + Medicaid)	0.9	846	0.6	576	4.0	4,001	6.9	1.6	1,595	81.8	81,784	10.2	10,232	17.3	17,294	

Highlighted values are used to prepopulate baseline healthcare utilization rates in the Quick ROI Calculator.

*Physician Office Visits are used to prepopulate Outpatient Doctor Visits in the Quick ROI Calculator.



Table 1a. Healthcare Utilization for the U.S. High-Need Adult Population (continued)

	Emergency Department Visits		Hospital Inpatient Admissions		Hospital Inpatient Days		Hospital Length of Stay	Hospital Outpatient Department Visits		Paid Home Health Provider Days		Physician Office Visits*		All Provider Office Visits	
	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Days Per Stay	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons
RACE / ETHNICITY															
Black	0.8	777	0.5	535	4.8	4,788	8.9	1.7	1,747	49.4	49,375	8.3	8,259	13.8	13,815
Hispanic	0.8	763	0.6	561	4.0	3,966	7.1	1.8	1,783	58.8	58,757	12.2	12,162	19.5	19,500
Asian	0.4	403	0.3	308	2.4	2,406	7.8	1.1	1,078	44.1	44,123	7.0	7,006	11.2	11,227
Other	1.1	1,102	0.6	636	3.2	3,206	5.0	1.0	1,050	26.0	26,041	10.5	10,469	20.8	20,776
INCOME															
< 200% FPL	0.9	882	0.6	583	4.0	3,954	6.8	1.9	1,891	48.1	48,107	9.4	9,434	15.3	15,339
200%-399% FPL	0.9	933	0.7	708	4.2	4,207	5.9	2.0	2,014	28.4	28,357	10.4	10,400	17.6	17,647
400% + FPL	0.6	574	0.6	551	3.7	3,659	6.6	2.2	2,227	27.3	27,342	11.5	11,488	19.4	19,445
REGION															
Northeast	0.9	872	0.7	677	4.3	4,329	6.4	3.3	3,253	63.6	63,649	11.0	11,023	18.9	18,892
Midwest	0.9	874	0.6	626	3.3	3,334	5.3	2.5	2,497	34.4	34,397	9.9	9,879	17.4	17,376
South	0.8	788	0.6	609	4.5	4,529	7.4	1.2	1,189	33.9	33,869	9.8	9,819	15.0	15,041
West	0.8	822	0.5	510	3.1	3,125	6.1	1.9	1,900	32.3	32,326	10.1	10,061	17.6	17,588

Source: Analysis of 2015-2017 [Medical Expenditure Panel Survey \(MEPS\) Household Component](#) conducted by Westat for the Commonwealth Fund.

Notes: Data represent the U.S. noninstitutionalized civilian adult population ages 18 and older with three or more chronic conditions and one or more functional limitation(s). MEPS measures inpatient discharges (labeled as Inpatient Admissions) and nights in the hospital for discharges (labeled as Inpatient Days). Inpatient data include zero-night stays with the same admission and discharge dates, which made up less than 2 percent of all inpatient stays. All Provider Office Visits includes Physician Office Visits. Per Person values rounded to one decimal point. Per 1000 values rounded to nearest integer. Abbreviation: FPL = federal poverty level.



Table 1b. Healthcare Utilization for the U.S. General Adult Population

Data represent adults ages 18 and older who live in the community

DEMOGRAPHIC GROUP	AVERAGE NUMBER PER YEAR														
	Emergency Department Visits		Hospital Inpatient Admissions		Hospital Inpatient Days		Hospital Length of Stay	Hospital Outpatient Department Visits		Paid Home Health Provider Days		Physician Office Visits		All Provider Office Visits	
	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Days Per Stay	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons
ALL ADULTS	0.2	208	0.1	103	0.5	491	4.7	0.6	594	2.1	2,118	3.5	3,497	6.4	6,385
AGE															
18 - 64	0.2	180	0.1	71	0.3	311	4.4	0.4	435	0.8	831	2.7	2,663	5.1	5,091
65 - 74	0.3	259	0.2	193	1.0	968	5.0	1.2	1,213	3.4	3,359	6.4	6,367	11.1	11,147
75+	0.4	402	0.3	286	1.5	1,538	5.4	1.2	1,229	12.7	12,698	7.4	7,409	12.0	12,001
INSURANCE															
Commercial (private) only	0.1	124	0.1	52	0.2	165	3.2	0.4	375	0.1	67	2.6	2,555	5.0	5,009
Medicaid only	0.4	366	0.1	134	0.7	739	5.5	0.6	594	2.2	2,155	3.1	3,084	5.5	5,514
Medicare only	0.3	316	0.2	224	1.1	1,134	5.1	1.3	1,298	3.9	3,897	6.9	6,881	11.8	11,845
Dual (Medicare + Medicaid)	0.6	566	0.3	325	2.0	2,029	6.2	1.3	1,307	29.4	29,444	7.7	7,703	12.9	12,855



Table 1b. Healthcare Utilization for the U.S. General Adult Population (continued)

	Emergency Department Visits		Hospital Inpatient Admissions		Hospital Inpatient Days		Hospital Length of Stay	Hospital Outpatient Department Visits		Paid Home Health Provider Days		Physician Office Visits		All Provider Office Visits	
	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons		Days Per Stay	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person	Per 1000 Persons	Per Person
RACE / ETHNICITY															
Black	0.3	263	0.1	106	0.6	649	6.1	0.5	467	3.4	3,426	2.9	2,914	4.5	4,531
Hispanic	0.2	168	0.1	68	0.3	324	4.7	0.3	267	2.1	2,089	2.5	2,547	4.1	4,143
Asian	0.1	81	0.1	50	0.2	206	4.1	0.3	295	1.2	1,234	2.2	2,234	3.8	3,772
Other	0.3	320	0.1	121	0.6	557	4.6	0.7	714	1.3	1,279	3.2	3,218	6.1	6,130
INCOME															
< 200% FPL	0.3	326	0.2	151	0.8	834	5.5	0.7	664	5.0	5,043	3.6	3,592	6.2	6,188
200% - 399% FPL	0.2	196	0.1	97	0.5	459	4.7	0.5	529	1.4	1,431	3.2	3,203	5.7	5,720
400% + FPL	0.1	142	0.1	78	0.3	298	3.8	0.6	592	0.7	743	3.6	3,630	6.9	6,941
REGION															
Northeast	0.2	216	0.1	109	0.6	585	5.4	0.9	852	3.2	3,202	3.8	3,806	7.4	7,367
Midwest	0.2	233	0.1	112	0.5	473	4.2	0.9	869	1.9	1,935	3.4	3,377	6.8	6,753
South	0.2	214	0.1	111	0.6	555	5.0	0.4	409	2.1	2,109	3.5	3,528	5.7	5,676
West	0.2	171	0.1	80	0.3	334	4.2	0.4	449	1.5	1,478	3.3	3,323	6.4	6,442

Source: Analysis of 2015-2017 [Medical Expenditure Panel Survey \(MEPS\) Household Component](#) conducted by Westat for the Commonwealth Fund.
 Notes: Data represent the U.S. noninstitutionalized civilian adult population ages 18 and older with three or more chronic conditions and one or more functional limitation(s). MEPS measures inpatient discharges (labeled as Inpatient Admissions) and nights in the hospital for discharges (labeled as Inpatient Days). Inpatient data include zero-night stays with the same admission and discharge dates, which made up less than 2 percent of all inpatient stays. All Provider Office Visits includes Physician Office Visits. Per Person values rounded to one decimal point. Per 1000 values rounded to nearest integer. Abbreviation: FPL = federal poverty level.



Table 2. Healthcare Spending Per Service for the U.S. General Adult Population

Data represent adults ages 18 and older who live in the community

DEMOGRAPHIC GROUP	AVERAGE SPENDING PER SERVICE: NOMINAL 2015-2017 DOLLARS						
	Emergency Department Visit	Hospital Inpatient Stay	Hospital Inpatient Day	Hospital Outpatient Department Visit	Paid Home Health Day	Physician Office Visit	All Provider Office Visit
ALL ADULTS	\$ 1,095	\$ 14,391	\$ 3,033	\$ 900	\$ 144	\$ 271	\$ 228
AGE							
18 - 64	\$ 1,230	\$ 15,226	\$ 3,481	\$ 1,083	\$ 131	\$ 286	\$ 233
65 - 74	\$ 844	\$ 14,522	\$ 2,901	\$ 667	\$ 133	\$ 249	\$ 216
75+	\$ 740	\$ 12,273	\$ 2,282	\$ 605	\$ 157	\$ 249	\$ 222
INSURANCE							
Commercial (private) only	\$ 1,792	\$ 18,873	\$ 5,882	\$ 1,324	\$ 159	\$ 309	\$ 244
Medicaid only	\$ 666	\$ 10,294	\$ 1,870	\$ 641	\$ 113	\$ 212	\$ 189
Medicare only	\$ 807	\$ 13,652	\$ 2,695	\$ 649	\$ 175	\$ 260	\$ 223
Dual (Medicare + Medicaid)	\$ 707	\$ 13,030	\$ 2,087	\$ 678	\$ 130	\$ 223	\$ 214
RACE / ETHNICITY							
White	\$ 1,138	\$ 14,377	\$ 3,168	\$ 909	\$ 159	\$ 275	\$ 225
Black	\$ 955	\$ 14,119	\$ 2,297	\$ 835	\$ 121	\$ 259	\$ 237
Hispanic	\$ 1,063	\$ 13,653	\$ 2,877	\$ 922	\$ 113	\$ 256	\$ 234
Asian	\$ 1,353	\$ 18,150	\$ 4,401	\$ 888	\$ 169	\$ 264	\$ 239
Other	\$ 900	\$ 14,767	\$ 3,209	\$ 854	\$ 128	\$ 296	\$ 240



Table 2. Healthcare Spending Per Service for the U.S. General Adult Population (continued)

	Emergency Department Visit	Hospital Inpatient Stay	Hospital Inpatient Day	Hospital Outpatient Department Visit	Paid Home Health Day	Physician Office Visit	All Provider Office Visit
INCOME							
< 200% FPL	\$ 797	\$ 11,854	\$ 2,152	\$ 701	\$ 144	\$ 231	\$ 206
200% - 399% FPL	\$ 1,113	\$ 15,169	\$ 3,212	\$ 886	\$ 149	\$ 265	\$ 225
400% + FPL	\$ 1,499	\$ 16,843	\$ 4,391	\$ 1,048	\$ 140	\$ 300	\$ 241
REGION							
Northeast	\$ 1,022	\$ 15,542	\$ 2,884	\$ 902	\$ 171	\$ 271	\$ 222
Midwest	\$ 982	\$ 13,282	\$ 3,149	\$ 791	\$ 139	\$ 282	\$ 224
South	\$ 1,145	\$ 13,254	\$ 2,650	\$ 1,036	\$ 126	\$ 267	\$ 235
West	\$ 1,201	\$ 17,089	\$ 4,093	\$ 887	\$ 148	\$ 270	\$ 227

Source: Analysis of 2015-2017 [Medical Expenditure Panel Survey \(MEPS\) Household Component](#) conducted by Westat for the Commonwealth Fund.

Notes: Data represent the U.S. noninstitutionalized civilian adult population ages 18 and older. Hospital Inpatient and Outpatient includes facility and associated physician spending. Provider Office Visits includes Physician Office Visits. Values rounded to nearest dollar amount.

Abbreviation: FPL = federal poverty level.



Table 3. Inflation-Adjusted Healthcare Spending Per Service for the U.S. General Adult Population

Data represent adults ages 18 and older who live in the community

DEMOGRAPHIC GROUP	AVERAGE SPENDING PER SERVICE: ADJUSTED FOR INFLATION TO JUNE 2023 DOLLARS (ESTIMATED)						
	Emergency Department Visit	Hospital Inpatient Stay	Hospital Inpatient Day	Hospital Outpatient Department Visit	Paid Home Health Day	Physician Office Visit*	All Provider Office Visit
ALL ADULTS	\$ 1,306	\$ 17,170	\$ 3,619	\$ 1,074	\$ 167	\$ 293	\$ 254
AGE							
18 - 64	\$ 1,468	\$ 18,167	\$ 4,153	\$ 1,292	\$ 152	\$ 309	\$ 260
65 - 74	\$ 1,007	\$ 17,327	\$ 3,461	\$ 796	\$ 154	\$ 269	\$ 241
75+	\$ 883	\$ 14,643	\$ 2,723	\$ 722	\$ 182	\$ 269	\$ 247
INSURANCE							
Commercial (private) only	\$ 2,138	\$ 22,518	\$ 7,018	\$ 1,580	\$ 185	\$ 334	\$ 272
Medicaid only	\$ 795	\$ 12,282	\$ 2,231	\$ 765	\$ 131	\$ 229	\$ 211
Medicare only	\$ 963	\$ 16,289	\$ 3,215	\$ 774	\$ 203	\$ 281	\$ 248
Dual (Medicare + Medicaid)	\$ 844	\$ 15,547	\$ 2,490	\$ 809	\$ 151	\$ 241	\$ 238
RACE / ETHNICITY							
White	\$ 1,357	\$ 17,154	\$ 3,780	\$ 1,084	\$ 185	\$ 297	\$ 250
Black	\$ 1,140	\$ 16,845	\$ 2,741	\$ 996	\$ 141	\$ 280	\$ 264
Hispanic	\$ 1,269	\$ 16,289	\$ 3,432	\$ 1,100	\$ 132	\$ 277	\$ 260
Asian	\$ 1,615	\$ 21,656	\$ 5,250	\$ 1,059	\$ 196	\$ 286	\$ 266
Other	\$ 1,074	\$ 17,619	\$ 3,829	\$ 1,019	\$ 148	\$ 320	\$ 267

Highlighted values are used to prepopulate baseline healthcare utilization rates in the Quick ROI Calculator.

*Physician Office Visits are used to prepopulate Outpatient Doctor Visits in the Quick ROI Calculator.



Table 3. Inflation-Adjusted Healthcare Spending Per Service for the U.S. General Adult Population (continued)

	Emergency Department Visit	Hospital Inpatient Stay	Hospital Inpatient Day	Hospital Outpatient Department Visit	Paid Home Health Day	Physician Office Visit*	All Provider Office Visit
INCOME							
< 200% FPL	\$ 951	\$ 14,144	\$ 2,568	\$ 837	\$ 167	\$ 249	\$ 230
200% - 399% FPL	\$ 1,328	\$ 18,098	\$ 3,832	\$ 1,057	\$ 173	\$ 287	\$ 250
400% + FPL	\$ 1,788	\$ 20,095	\$ 5,239	\$ 1,250	\$ 162	\$ 324	\$ 268
REGION							
Northeast	\$ 1,219	\$ 18,544	\$ 3,441	\$ 1,076	\$ 199	\$ 293	\$ 247
Midwest	\$ 1,172	\$ 15,847	\$ 3,757	\$ 944	\$ 162	\$ 305	\$ 249
South	\$ 1,366	\$ 15,814	\$ 3,161	\$ 1,236	\$ 146	\$ 288	\$ 261
West	\$ 1,433	\$ 20,390	\$ 4,883	\$ 1,058	\$ 171	\$ 292	\$ 253

Source: Analysis of 2015-2017 [Medical Expenditure Panel Survey \(MEPS\) Household Component](#) conducted by Westat for the Commonwealth Fund.

Notes: Data represent the U.S. noninstitutionalized civilian adult population ages 18 and older with three or more chronic conditions and one or more functional limitation(s). Hospital Inpatient and Outpatient includes facility and associated physician spending. Provider Office Visits includes Physician Office Visits. Values rounded to nearest dollar amount.

Inflation Adjustment: Following guidance from the Agency for Healthcare Research and Quality, inflation adjustment was applied by type of service (from a 2016 midpoint baseline) using Personal Consumption Expenditures (PCE) price indices published by the U.S. Bureau of Economic Analysis (Table 2.4.4). The PCE Hospitals index was applied to ED Visits and Hospital Inpatient and Outpatient. The overall PCE Health index was applied to Home Health (this index tracks closely with the historical Home Health index, which was not available through 2023). The PCE Physician Services index was applied to Physician Office Visits; the PCE Outpatient Services index was applied to Provider Office Visits.

Abbreviation: FPL = federal poverty level.



Table 4. Utilization and Payment for Skilled Nursing Facility Care

Data represent Original (Fee-for-Service) Medicare Part A Enrollees

DEMOGRAPHIC GROUP	AVERAGE PER YEAR: 2016					INFLATION ADJUSTED (JUNE 2023 DOLLARS)	
	Covered SNF Admissions Per 1,000 Medicare Part A Enrollees	Covered Days of SNF Care Per SNF Admission (Length of Stay)	Covered Days of SNF Care Per 1,000 Medicare Part A Enrollees	Medicare Payments Per Covered SNF Admission	Medicare Payments Per Covered SNF Day	Medicare Payments Per Covered SNF Admission	Medicare Payments Per Covered SNF Day
TOTAL	64.8	25.7	1,665	\$ 11,450	\$ 446	\$ 14,423	\$ 562
AGE							
Under 65 Years	38.5	25.5	984	\$ 10,941	\$ 428	\$ 13,782	\$ 539
65 Years and Over	70.1	25.7	1,803	\$ 11,506	\$ 447	\$ 14,493	\$ 563
COVERAGE							
Medicare Only	49.0	23.5	1,151	\$ 10,931	\$ 465	\$ 13,769	\$ 586
Dual Medicare + Medicaid	139.0	29.3	4,078	\$ 12,308	\$ 419	\$ 15,504	\$ 528
RACE / ETHNICITY							
White (Non-Hispanic)	67.6	25.3	1,708	\$ 11,227	\$ 444	\$ 14,142	\$ 559
Black (or African American)	73.9	27.8	2,055	\$ 11,946	\$ 430	\$ 15,048	\$ 542
Hispanic	45.5	27.7	1,261	\$ 12,933	\$ 467	\$ 16,291	\$ 588
Asian/Pacific Islander	37.1	27.7	1,027	\$ 14,405	\$ 520	\$ 18,145	\$ 655
American Indian/Alaska Native	57.5	25.2	1,447	\$ 12,285	\$ 488	\$ 15,475	\$ 615
Other	38.4	25.7	987	\$ 12,391	\$ 482	\$ 15,608	\$ 607
Highlighted values are used to prepopulate baseline healthcare utilization rates and costs per event in the Quick ROI Calculator							



Table 4. Utilization and Payment for Skilled Nursing Facility Care (continued)

Source: Centers for Medicare and Medicaid Services, Medicare Skilled Nursing Facilities: Utilization, Program Payments, and Cost Sharing for Original Medicare Beneficiaries, by Demographic Characteristics and Medicare-Medicaid Enrollment Status, Calendar Year 2016 (Table MDCR SNF2).

Notes: SNF = skilled nursing facility. Inflation adjustment was made using the Personal Consumption Expenditures price index for Nursing Homes published by the U.S. Bureau of Economic Analysis (Tables 2.4.4 on 9/30/22 and 2.4.4.U on 6/30/23).