

BROOKE GROVE FOUNDATION, INC.

FINANCIAL REPORT

Years ended June 30, 2012 and 2011

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Harold L. Mohn, Jr.
Managing Partner

James G. Z. Allen
H. Mark Alexander, Jr.
R. Scott Handel
(1964-2008)

September 12, 2012

INDEPENDENT AUDITORS' REPORT

Board of Directors
Brooke Grove Foundation, Inc.
Sandy Spring, Maryland

B. Scott Oden
Consultant

We have audited the accompanying statements of financial position of Brooke Grove Foundation, Inc. (a not-for-profit corporation) as of June 30, 2012 and 2011, and the related statements of activities, changes in net assets and cash flows for the years then ended. These financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above, present fairly, in all material respects, the financial position of Brooke Grove Foundation, Inc. as of June 30, 2012 and 2011, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The schedules of Selected Assets and Debt by Division, Combined Statement of Activities by Division and Selected Charts are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

OAO Mohn and Allen P.C.

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF FINANCIAL POSITION
JUNE 30, 2012 and 2011

	2012	2011
CURRENT ASSETS		
Cash and cash equivalents	\$ 4,451,243	\$ 3,756,738
Cash and cash equivalents - restricted	1,337,894	4,304,078
Receivables, less allowances	2,916,229	2,543,587
Other current assets	331,169	173,596
TOTAL CURRENT ASSETS	9,036,535	10,777,999
 PROPERTY AND EQUIPMENT, net	 48,591,082	 45,874,127
 DEFERRED FINANCE CHARGES, net	 762,247	 715,783
TOTAL ASSETS	\$ 58,389,864	\$ 57,367,909
 CURRENT LIABILITIES		
Accounts payable and other accrued expenses	\$ 1,108,466	\$ 819,673
Accounts payable - construction	12,210	587,687
Accrued wages and payroll taxes	554,130	381,089
Accrued personal leave	1,255,014	1,054,626
Accrued health insurance	285,691	294,426
Deposits on unoccupied Independent Living Units	28,500	30,650
Deferred revenue	170,106	112,350
Current portion of long-term debt	1,110,224	1,087,858
TOTAL CURRENT LIABILITIES	4,524,341	4,368,359
 LONG TERM LIABILITIES		
Deferred revenue from advance fees	1,122,063	1,270,104
Refundable fees, net - Independent Living	11,210,062	10,168,364
Long-term debt, net of current portion	20,682,723	21,793,162
TOTAL LONG TERM LIABILITIES	33,014,848	33,231,630
 UNRESTRICTED NET ASSETS	 20,850,675	 19,767,920
TOTAL LIABILITIES AND NET ASSETS	\$ 58,389,864	\$ 57,367,909

See notes to financial statements.

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF ACTIVITIES
FOR THE YEARS ENDED JUNE 30, 2012 and 2011

	2012	2011
REVENUES		
Routine services, net of refunds	\$ 39,015,305	\$ 34,835,776
Ancillary services	911,053	907,131
	39,926,358	35,742,907
DIRECT COST OF PATIENT CARE		
Nursing services and supplies	12,735,153	12,085,815
Life enrichment and social services	1,123,271	1,087,648
Medical and physicians services	307,723	313,997
Contract services	2,530,785	1,701,850
Supplies	834,956	642,305
Resident personal care	190,403	192,804
Dietary supplies and expense	3,819,307	3,403,827
Pharmacy	837,691	655,006
	22,379,289	20,083,252
EXCESS OF REVENUES OVER DIRECT COSTS	17,547,069	15,659,655
OTHER OPERATING EXPENSES		
Laundry and linen	302,564	284,816
Housekeeping	1,238,523	1,141,004
Plant operations	2,826,444	2,630,635
Administrative and general	9,520,101	8,124,596
	13,887,632	12,181,051
EXCESS OF REVENUES OVER DIRECT COSTS AND OTHER OPERATING EXPENSES	3,659,437	3,478,604
DEPRECIATION EXPENSE	2,326,447	2,239,077
INTEREST EXPENSE , net of interest income	444,852	317,846
OTHER (REVENUE) , net of other expenses	(194,617)	(126,231)
	2,576,682	2,430,692
CHANGE IN UNRESTRICTED NET ASSETS	\$ 1,082,755	\$ 1,047,912

See notes to financial statements.

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF CHANGES IN NET ASSETS
FOR THE YEARS ENDED, JUNE 30, 2012 and 2011

	<u>2012</u>	<u>2011</u>
UNRESTRICTED NET ASSETS, beginning of the year	\$ 19,767,920	\$ 18,720,008
CHANGE IN UNRESTRICTED NET ASSETS	<u>1,082,755</u>	<u>1,047,912</u>
UNRESTRICTED NET ASSETS, end of the year	<u>\$ 20,850,675</u>	<u>\$ 19,767,920</u>

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED, JUNE 30, 2012 and 2011

	2012	2011
CASH FLOWS FROM OPERATING ACTIVITIES		
Change in unrestricted net assets	\$ 1,082,755	\$ 1,047,912
Adjustments to reconcile change in unrestricted net assets to net cash provided by operating activities:		
Increase (decrease) in allowance for doubtful accounts	242,808	(136,303)
Advance fees received (refunded) - Independent Living	1,051	(124,280)
Amortization of advance fees	(149,092)	(172,903)
Amortization of refundable fees	(300,782)	(305,811)
Amortization of deferred finance charges	227,249	124,931
Depreciation expense	2,326,447	2,239,077
(Increase) decrease in operating assets:		
Accounts receivable	(615,450)	120,211
Inventories	-	9,890
Other current assets	(157,573)	(55,553)
Increase (decrease) in operating liabilities:		
Accounts payable	288,793	124,565
Accounts payable - construction	(575,477)	369,938
Accrued wages	173,041	(482,361)
Accrued leave	200,388	126,683
Accrued health insurance reserve	(8,735)	(1,607)
Deferred revenue	57,756	46,909
NET CASH PROVIDED BY OPERATING ACTIVITIES	2,793,179	2,931,298
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of property and equipment	(5,043,402)	(7,385,553)
NET CASH USED BY INVESTING ACTIVITIES	(5,043,402)	(7,385,553)
CASH FLOWS FROM FINANCING ACTIVITIES		
Independent Living deposits (refunds)	1,342,480	(960,950)
Refunds (receipt) of deposits on unoccupied units	(2,150)	1,650
Proceeds from bond issue	-	10,500,000
Proceeds from bank loan	-	944,543
Deferred finance charges paid	(273,713)	(575,335)
Principal payments on long-term debt	(1,088,073)	(847,098)
NET CASH PROVIDED (USED) BY FINANCING ACTIVITIES	(21,456)	9,062,810
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(2,271,679)	4,608,555
CASH AND CASH EQUIVALENTS, beginning of the year	8,060,816	3,452,261
CASH AND CASH EQUIVALENTS, end of the year	\$ 5,789,137	\$ 8,060,816

See notes to financial statements.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 1 - NATURE OF OPERATIONS

Nature of Operations

Brooke Grove Foundation, Inc. (the Foundation) provides housing for seniors, and senior care on a continuum that includes independent living, assisted living, long-term skilled nursing, short-term rehabilitative, and respite care. The Foundation operates one skilled nursing facility "BGRNC," seven assisted living facilities "Sandy Spring Assisted Living" and "Sandy Spring Independent Living" on its Sandy Spring, Maryland campus. It operates one skilled nursing facility "Williamsport" and two assisted living facilities "Twin Oaks" on its Williamsport, Maryland campus, and one assisted living center "Rest Assured" in Meyersdale, Pennsylvania.

Ten Independent Living residences were completed and occupied in the fall of 2004. An additional twelve residences were completed by June of 2005 and were all subsequently occupied. The remaining eighteen planned units were completed by January 2009 and were subsequently occupied.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Foundation have been prepared on the accrual basis of accounting whereby, revenue is recognized when earned rather than when received, and expenses are recognized when the related liability is incurred rather than when paid.

Basis of Presentation

Financial statement presentation follows FASB Accounting Standards Codifications Topic 958 *Not-for-Profit Entities*. In accordance with the topic, the Foundation is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets. The Foundation had no temporarily or permanently restricted net assets for the years ended June 30, 2012 and 2011.

Use of Estimates

Management uses estimates and assumptions in preparing financial statements in accordance with accounting principles generally accepted in the United States of America. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Actual results could vary from the estimates that were assumed in preparing the financial statements.

Cash and Cash Equivalents

The Foundation considers cash equivalents to include money market funds, government securities, and short-term highly liquid investments with an original maturity date of three months or less.

Reclassifications

Certain accounts in the prior year financial statements have been reclassified for comparative purposes to conform to the presentation in the current-year financial statements.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue and Receivables

The Foundation's revenue comes primarily from private paying residents and patients; however, the Foundation participates in Medicaid and Medicare reimbursement programs. Revenues are recognized in the period in which they are earned. Unearned amounts are included in deferred revenue at the end of each accounting period. Management regularly reviews the net realizable value of receivables and adjusts the allowance for doubtful accounts as considered necessary.

Advance fees paid by a resident upon entering into a continuing care contract, net of the portion thereof that is refundable to the resident, are recorded as deferred revenue and are amortized to income using the straight line method over the estimated remaining life expectancy of the resident. In as much as the refundable portion of these fees will only be refunded once a new resident occupies the vacated unit, the fees are amortized to income on a straight-line basis over the life of the independent living facilities.

Revenue includes amortization of advance fees paid by independent living residents in the amount of \$149,092 and \$172,903 for the years ended June 30, 2012 and 2011, respectively. In accordance with generally accepted accounting principles, revenue also includes amortization of refundable entrance fees paid by independent living residents in the amount of \$300,782 and \$305,811 for the years ended June 30, 2012 and 2011, respectively.

Inventories

During the fiscal year June 30, 2011 the Foundation discontinued inventories and directly expensed linens and supplies purchases.

Capitalization and Depreciation

It was the Foundation's policy to record capital items or groups of items costing \$500 or more as additions to property and equipment during fiscal year ended June 30, 2010 and prior. During the fiscal year ended June 30, 2011, the Foundation increased the capital items limit to \$2,500. Property is recorded at cost if purchased, or at fair market value, if received from donors. The cost of property and equipment is depreciated over the estimated useful lives of the assets, using the straight-line method (See Note 4).

Deferred Revenue

The Foundation records advance deposits received from residents as deferred revenue. Revenue is recognized when the services are provided.

Advertising Costs

The Foundation conducts advertising for the purpose of building awareness of the Foundation and its services. It is the policy of the Foundation to expense the cost of advertising as it is incurred. Advertising and marketing expense is included in these financial statements as part of administrative and general expense and amounted to \$626,159 and \$465,963 for the years ending June 30, 2012 and 2011, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Tax Status

The Foundation qualifies as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code and is not considered to be a private foundation within the meaning of Section 509(a) of the Code. Contributions to the Foundation are tax deductible to donors under Section 170 of the Internal Revenue Code. The Foundation is required to report unrelated business income to the IRS and the Maryland taxing authority. The Foundation did not have any unrelated business income for the years ended June 30, 2012 and 2011.

The Foundation has adopted the accounting of uncertainty in income taxes as required by the Income Taxes topic (Topic 740) of the FASB Accounting Standards Codification. Topic 740 requires The Foundation to determine whether a tax position is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit to be recognized is measured as the largest amount of benefit that is more than fifty percent likely of being realized upon ultimate settlement, which could result in The Foundation recording a tax liability that would reduce The Foundation's net assets.

Management has analyzed the Foundation's tax positions, and has concluded that no liability for unrecognized tax benefits should be recorded related to uncertain tax positions taken on returns filed for open tax years (2008-2010), or expected to be taken in its 2011 tax return. The Foundation is not aware of any tax positions for which it believes that there is a reasonable possibility that the total amounts of unrecognized tax benefits will change materially in the next twelve months.

Impairment of long-lived assets

The Foundation accounts for the valuation of long-lived assets under FASB Accounting Standards Codifications Topic 360 *Accounting for the Impairment or Disposal of Long-Lived Assets*. Topic 360 requires that long-lived assets and certain identifiable intangible assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the long-lived asset is measured by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reportable at the lower of the carrying amount of fair value, less costs to sell.

NOTE 3 - RECEIVABLES

All amounts are due within one year:

	2012	2011
Amounts due from patients and residents	\$ 1,667,119	\$ 1,514,779
Amounts due from Medicare	977,040	761,350
Amounts due from Maryland State Medicaid	795,279	547,859
	<u>3,439,438</u>	<u>2,823,988</u>
Less allowance for doubtful accounts	(523,209)	(280,401)
	<u>\$ 2,916,229</u>	<u>\$ 2,543,587</u>

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 4 - PROPERTY AND EQUIPMENT

The Foundation's assets are pledged to bondholders as collateral - see Note 6 - LONG-TERM DEBT. Depreciation charged to operations for the years ending June 30, 2012 and 2011 was \$2,326,447 and \$2,239,077, respectively.

	Life	2012	2011
Land		\$ 3,871,692	\$ 3,871,692
Land improvements	10-15	1,615,959	1,377,419
Buildings and improvements	10-40	60,296,408	49,260,367
Fixtures and equipment	3-10	12,120,246	10,591,955
Construction-in-progress		526,329	8,290,875
		78,430,634	73,392,308
Accumulated depreciation		(29,839,552)	(27,518,181)
		<u>\$ 48,591,082</u>	<u>\$ 45,874,127</u>

NOTE 5 - ACCRUED PERSONAL LEAVE

The Foundation has recorded a liability for amounts due to employees for earned but unused personal leave. The accrued liability was \$1,255,014 and \$1,054,626 as of June 30, 2012 and 2011, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 6 - LONG-TERM DEBT

	2012	2011
<p>Economic Development Revenue Bonds (1993) secured by the assets of the Williamsport Nursing Home and Williamsport group homes, dated November 29, 1993, in the original amount of \$2,200,000, payable through December 2013, originally callable in 2000, with a modified call date of 2012, in monthly installments of \$11,129 plus interest at 90% of 30 day LIBOR. The 30 day LIBOR rate was 0.24% and 0.19% at June 30, 2012 and 2011, respectively.</p>	\$ 188,658	\$ 322,206
<p>Economic Development Revenue Bonds (1995) secured by the assets of the Sandy Spring group homes and guaranteed by a letter of credit, dated December 1, 1995, in the original amount of \$4,850,000, payable through January 2016 in increasing annual installments currently at \$365,000 plus interest at tax-exempt index plus .05%. See additional terms of bonds below.</p>	1,460,000	1,825,000
<p>Economic Development Revenue Bonds (1998) secured by the assets of the Foundation and guaranteed by a letter of credit, dated December 10, 1998, in the original amount of \$10,500,000, payable through January 2024 in increasing annual installments currently at \$405,000 plus interest at the tax exempt index rate plus swap rate currently at 1.00%. See additional terms of bonds below.</p>	6,725,000	7,110,000
<p>Variable Rate Demand Revenue Bonds (2010) secured by the assets of the Foundation and guaranteed by a letter of credit, dated November 18, 2010, in the original amount of \$10,500,000, payable through November 2037 in increasing annual installments starting at \$255,000 in November 2013 plus variable rate of interest, currently at 1.20%. See additional terms of bonds below.</p>	10,500,000	10,500,000

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 6 - LONG-TERM DEBT (CONTINUED)

Bank note dated October, 2009, with an original amount of \$2,500,000. Monthly principal payments of \$14,045 started March 2011 with interest at LIBOR plus 3.00% but not less than 4.50%. The loan matures October 2025. The 30 day LIBOR rate was 0.24% and .19% as of June 30, 2012 and 2011, respectively.

2,275,281 2,443,820

Bank loan amended May, 2008, with an original amount of \$750,000. Monthly principal payments of \$3,178 with interest at LIBOR plus 2.50%. The loan matures April 2029. The LIBOR rate was 0.24% and 0.19% as of June 30, 2012 and 2011, respectively

	644,008	679,994
	21,792,947	22,881,020
	(1,110,224)	(1,087,858)
	\$ 20,682,723	\$ 21,793,162

Less current portion

Long-term debt matures as follows:

Fiscal Year	Amount
2013	\$ 1,110,224
2014	1,316,786
2015	1,296,676
2016	1,331,676
2017	1,006,676
Thereafter	15,730,909
	\$ 21,792,947

The Foundation entered into covenants in exchange for bond proceeds that require the Foundation to maintain certain financial ratios. The Foundation maintained these ratios for the years ending June 30, 2012 and 2011, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 6 - LONG-TERM DEBT (CONTINUED)

Economic Development Revenue Bonds (1995)

The Economic Development Revenue Bonds (1995) require monthly sinking fund payments of \$30,417 plus interest equal to the tax-exempt (weekly) index plus 0.05%. These payments are held and invested in ARK US Government Money Market Fund by the trustee, M & T Trust Company, until annual payments are made to the bondholders. While the bonds have a twenty-year maturity, they are guaranteed by a five-year letter of credit from M & T. If the Foundation is unable to secure a letter of credit at the end of the five-year term January 15, 2016, the bondholders have the right to call the bonds. Management fully expects to obtain subsequent five-year letters of credit and therefore the twenty-year maturity date is used to present debt maturity in these statements.

Certain fees incurred as a result of issuing these bonds amounted to \$157,506 and have been recorded as deferred finance charges, which are being amortized over twenty years. Amortization expense for these fees was \$7,875 for each of the years ending June 30, 2012 and 2011. Additionally, the Foundation is required to pay an annual commission in order to keep the letter of credit in force, equal to 0.85% of the outstanding debt at the time the five-year letter of credit was issued. The annual commission paid in January, which is added to deferred finance charges, was \$26,332 and \$32,825 for the years ending June 30, 2012 and 2011, respectively. Amortization expense for these commissions was \$37,453 and \$35,002 for the years ending June 30, 2012 and 2011, respectively.

The tax-exempt index rate for the week ending June 30, 2012 and 2011 was 0.23% and 0.16%, respectively. The average tax-exempt index rate for the year ending June 30, 2012 and 2011 was 0.20% and 0.30%, respectively.

Economic Development Revenue Bonds (1998)

The Economic Development Revenue Bonds (1998) require monthly sinking fund payments of \$33,750 plus interest equal to the tax-exempt (weekly) index plus 0.05%. These payments are held and invested in ARK US Government Money Market Fund by the trustee, M & T Trust Company, until annual payments are made to the bondholders. While the bonds have twenty-five year maturity, they are guaranteed by a five-year letter of credit from M & T. If the Foundation is unable to secure a letter of credit at the end of the five-year term, January 15, 2014, the bondholders have the right to call the bonds. Management fully expects to obtain subsequent five-year letters of credit and therefore the twenty-five year maturity date is used to present debt maturity in these statements.

Certain fees incurred as a result of issuing these bonds amounted to \$195,400 and have been recorded as deferred finance charges and are being amortized over the maturity of the bonds. Amortization expense for these fees was \$10,770 for each of the years ended June 30, 2012 and 2011. Additionally, the Foundation is required to pay an annual commission in order to keep the letter of credit in force, equal to 0.85% of the outstanding debt at the time the five-year letter of credit was issued. The annual commission paid in January, which is added to deferred finance charges, was \$58,752 and \$61,946 for the years ending June 30, 2012 and 2011, respectively. Amortization expense for these commissions was \$60,349 and \$63,914 for the years ending June 30, 2012 and 2011, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 6 - LONG-TERM DEBT (CONTINUED)

The underlying interest rate is based on the floating tax-exempt index rate. See note on Economic Development Revenue Bonds (1995) above for details on the tax-exempt index rates. In addition, a swap rate agreement was agreed to during fiscal year ending June 30, 2011. This swap rate agreement calls for an additional calculation based on the difference between the floating rate and the swap rate currently at 1.00%. This swap rate agreement expires on January 15, 2014 and will then be renewed at the prevailing swap rate.

The bond proceeds were used entirely for the construction of a new Brooke Grove Rehabilitation and Nursing Center. Bond proceeds in excess of eligible construction expenses must be used to reduce the principal amount of outstanding debt. The excess amounted to \$215,000, which was applied to the principal balance in January of 2004.

Variable Rate Demand Revenue Bonds (2010)

The Variable Rate Demand Revenue Bonds (2010) require monthly bona fide debt service fund payments of \$21,250 plus interest. As of June 30, 2011 the variable rate of interest was 1.20%. These payments are held and invested in ARK US Government Money Market Fund by the trustee, M & T Trust Company, until payments are made to the bondholders annually. Monthly payments to the fund are not scheduled to begin until December 2012. While the bonds have twenty-five year maturity, they are guaranteed by a five-year letter of credit from M & T. If the Foundation is unable to secure a letter of credit at the end of the five-year term, January 15, 2014, the bondholders have the right to call the bonds. Management fully expects to obtain subsequent five-year letters of credit and therefore the twenty-five year maturity date is used to present debt maturity in these statements.

Certain fees incurred as a result of issuing these bonds amounted to \$480,564 and have been recorded as deferred finance charges and are being amortized over the maturity of the bonds. Amortization expense for these fees was \$17,799 and \$10,383 for the years ended June 30, 2012 and 2011, respectively.

The bond proceeds were used entirely for the construction of a new wing of the Williamsport Retirement Village. Bond proceeds in excess of eligible construction expenses must be used to reduce the principal amount of outstanding debt. As of June 30, 2011, construction is still in progress. The new wing of the Williamsport Retirement Village was placed in service in January 2012.

Bank Notes

The Foundation obtained a note payable from M & T Trust Company in the amount of \$2,500,000. The note payable matures October, 2025. The interest rate on this note payable is the floating 30-day LIBOR rate plus 3.0%, with a minimum rate of 4.5%.

The Foundation obtained a note payable from M & T Trust Company in the amount of \$750,000. The note payable matures April, 2029. The interest rate on this note payable is the floating 30-day LIBOR rate plus 2.5%.

Certain fees incurred as a result of this note payable amounted to \$88,258 and have been recorded as deferred finance charges and are being amortized over the life of the note payable. Amortization expense for these fees was \$5,787 and \$5,787 for the years ended June 30, 2012 and 2011, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 6 - LONG-TERM DEBT (CONTINUED)

Total cash held and restricted by M & T Trust Company for bond sinking funds at June 30, 2012 and 2011 amounted to \$385,025 and \$375,023, respectively.

Total cash held and restricted by M & T Trust Company for project and holdback purposes at June 30, 2012 and 2011 amounted to \$924,344 and \$3,906,037, respectively.

Interest costs

	<u>2012</u>	<u>2011</u>
Interest expense	\$ 446,623	\$ 319,402
Interest income	(1,771)	(1,556)
	<u>\$ 444,852</u>	<u>\$ 317,846</u>

NOTE 7 - OTHER REVENUE AND EXPENSE

Amounts classified as other revenue and (expense) are summarized as follows:

	<u>2012</u>	<u>2011</u>
Sale of meals to visitors and employees	\$ 25,652	\$ 27,677
Rental of housing units to employees, net	113,104	111,265
Discounts taken	239	335
Gain on sale of assets	2,500	700
Contributions received	65,281	5,847
Contributions given	(12,159)	(19,593)
	<u>\$ 194,617</u>	<u>\$ 126,231</u>

NOTE 8 - THIRD PARTY PAYERS AND DEFERRED REVENUE

The Foundation operates with Medicaid and Medicare Program patients. Included in revenues in these financial statements are amounts received from the Medicare program and from the Maryland Medicaid program.

Medicare is now billed on a prospective payment system, which means that the Foundation bills the program at the stated rate, which is not subject to change. However, the rates are dependent on the reported level of care, which is subject to audit and adjustment. Nevertheless, management does not expect any change, made as a result of an audit, to be material.

Medicaid revenues are based on billings at provisional rates, which differ from the Foundation's regular rates. Final reimbursement under this program is based on allowable costs, which must be reported and reviewed by the Maryland Medicaid representative.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 9 - PENSION PLAN

The Foundation sponsors a defined contribution pension plan covering substantially all of its employees at all divisions. Contributions are discretionary and currently determined as 2% of each covered employee's salary. The plan became effective on January 1, 1991. Contributions to the plan for the years ended June 30, 2012 and 2011 were \$302,212 and \$307,880, respectively, net of forfeitures applied. The pension plan operates on a calendar year so the contribution amount for June 30, 2012 covers half of the expense for the calendar year ended December 31, 2011 and an estimate of half of the expense for the calendar year ending December 31, 2012.

NOTE 10 - SUPPLEMENTARY CASH FLOW INFORMATION

	2012	2011
Cash paid for interest	\$ 446,623	\$ 319,402

NOTE 11 - RESTRICTED CASH

Cash - restricted included on these financial statements consists of sinking fund assets and project and holdback funds, held in trust (See NOTE 6 – Long -Term Debt), and long term deposits held in escrow for future Independent Living contracts.

	2012	2011
Bond sinking funds, held in trust	\$ 385,025	\$ 375,023
Bond project and holdback funds, held in trust	924,344	3,906,037
Deposits on unoccupied units	28,525	23,018
	\$ 1,337,894	\$ 4,304,078

NOTE 12 - CONCENTRATION OF CREDIT RISK

The Foundation maintains cash balances in bank deposit accounts, certificates of deposit and the ARK US Government Money Market Fund, which exceed federally insured limits. The Foundation has not experienced any losses in such accounts and believes it is not exposed to any significant risk.

A large portion of the receivables is due from Medicare and Medicaid. The Foundation does not believe that it is exposed to any significant risk on these receivables.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 13 - FAIR VALUES OF FINANCIAL INSTRUMENTS

The Foundation's financial instruments, none of which are held for trading purposes, include cash and cash equivalents, accounts receivable and long-term debt. The Foundation estimates that the fair value of all financial instruments at June 30, 2012 does not differ materially from the aggregate carrying values of its financial instruments recorded in the accompanying statement of financial position.

The estimated fair value amounts have been determined using available market information and appropriate valuation methodologies. The carrying amounts of cash and cash equivalents and the portion of accounts receivable due in less than one year approximate fair values because of the short maturities of those instruments. The carrying amount of long-term debt approximates fair values due to the variable interest rates.

NOTE 14 - ALLOCATION OF COSTS

Indirect expenses incurred by the Home (management) Office are allocated to the other divisions based on the applicable divisions' prior year expense. This policy is in accordance with the regulations of third party payers and management believes this allocation provides a fair representation of administrative expenses by division. Expenses shared by two or more divisions are allocated based on the number of beds in the applicable divisions.

NOTE 15 - DONATED SERVICES

Many volunteers have donated significant time to the Foundation. About 18,929 and 16,697 hours of donated services were received in fiscal year 2012 and 2011, respectively, but were not recognized in the financial statements because they did not meet the accounting criteria for recognition.

NOTE 16 - COMMITMENTS AND CONTINGENCIES

In September of 2008, the Foundation obtained a letter of credit from M&T Bank for the benefit of the State of Maryland, Department of Labor, Licensing, and Regulation in the amount of \$293,871. The letter of credit is good through September 30, 2013.

The Foundation participates in a private insurance company for liability coverage. To meet a condition of membership, the Foundation provided the company with a letter of credit in the amount of \$100,000 from M&T Bank. Management considers the reserves of the company to be adequate to provide for its existing risks, and therefore considers the letter of credit to be the only contingent liability associated with this arrangement. The letter of credit is good through September 30, 2012.

The Foundation is partially self-insured for the risks associated with employee health coverage. The Foundation uses a health insurance company to manage the program and also uses self-insurance consultants to provide estimates of exposure. An estimated liability of \$285,691 and \$294,426 is included in accrued liabilities as of June 30, 2012 and 2011, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

NOTE 17 - SUBSEQUENT EVENTS

As required by the Subsequent Events topic (Topic 855) of the FASB Accounting Standards Codification, the Foundation has evaluated the impact of its financial statements and disclosures of certain transactions occurring subsequent to its year-end through September 12, 2012, which is the date the Foundation's financial statements were available to be issued. Events occurring after that date have not been evaluated to determine whether a change in the financial statements would be required.

SUPPLEMENTARY INFORMATION

BROOKE GROVE FOUNDATION, INC.
SELECTED ASSETS AND DEBT BY DIVISION
JUNE 30, 2012

SCHEDULE 1A

	BGRNC	Sandy Spring Assisted Living	Independent Living	Williamsport	Twin Oaks	Rest Assured	Home Office	Total
RECEIVABLES								
Private pay	\$ 823,212	\$ 106,095	\$ 7,720	\$ 699,541	\$ 10,208	\$ 20,343	\$ -	\$ 1,667,119
Medicare	450,512	-	-	526,528	-	-	-	977,040
Medicaid	481,382	-	-	313,897	-	-	-	795,279
Allowance for doubtful accounts	(282,763)	(10,659)	-	(222,723)	-	(7,064)	-	(523,209)
TOTAL RECEIVABLES	\$ 1,472,343	\$ 95,436	\$ 7,720	\$ 1,317,243	\$ 10,208	\$ 13,279	\$ -	\$ 2,916,229
PROPERTY AND EQUIPMENT								
Land	\$ 1,505,946	\$ 893,301	\$ -	\$ 274,483	\$ 30,716	\$ 55,311	\$ 1,111,935	3,871,692
Land improvements	602,538	485,369	76,493	254,569	59,090	73,793	64,107	1,615,959
Buildings	14,135,434	10,200,025	16,158,211	15,283,447	2,711,638	1,700,675	106,978	60,296,408
Furniture and equipment	4,503,111	2,526,834	426,183	3,379,224	650,904	353,138	280,852	12,120,246
Construction-in-process	368,840	-	-	155,954	1,535	-	-	526,329
Less: Accumulated depreciation	(10,119,185)	(7,907,939)	(2,550,133)	(5,425,736)	(2,505,455)	(895,645)	(435,459)	(29,839,552)
TOTAL PROPERTY AND EQUIPMENT	\$ 10,996,684	\$ 6,197,590	\$ 14,110,754	\$ 13,921,941	\$ 948,428	\$ 1,287,272	\$ 1,128,413	\$ 48,591,082
LONG-TERM DEBT								
Economic Development Revenue Bonds (1993)	\$ -	\$ -	\$ -	\$ 64,945	\$ 123,713	\$ -	\$ -	\$ 188,658
Economic Development Revenue Bonds (1995)	-	1,460,000	-	-	-	-	-	1,460,000
Economic Development Revenue Bonds (1998)	6,725,000	-	-	-	-	-	-	6,725,000
Variable Rate Demand Revenue Bonds (2010)	-	-	-	10,500,000	-	-	-	10,500,000
M&T Loan	-	2,275,281	-	-	-	-	-	2,275,281
M&T Loan	-	-	-	-	-	644,008	-	644,008
Less current portion	(405,000)	(533,540)	-	(46,742)	(86,806)	(38,136)	-	(1,110,224)
TOTAL LONG-TERM DEBT	\$ 6,320,000	\$ 3,201,741	\$ -	\$ 10,518,203	\$ 36,907	\$ 605,872	\$ -	\$ 20,682,723

BROOKE GROVE FOUNDATION, INC.
SELECTED ASSETS AND DEBT BY DIVISION
JUNE 30, 2011

SCHEDULE 1B

	BGRNC	Sandy Spring Assisted Living	Independent Living	Williamsport	Twin Oaks	Rest Assured	Home Office	Total
RECEIVABLES								
Private pay	\$ 864,009	\$ 193,361	\$ 5,916	\$ 440,769	\$ 4,721	\$ 6,003	\$ -	\$ 1,514,779
Medicare	466,549	-	-	294,801	-	-	-	761,350
Medicaid	316,893	-	-	230,966	-	-	-	547,859
Allowance for doubtful accounts	(179,715)	-	-	(100,686)	-	-	-	(280,401)
TOTAL RECEIVABLES	\$ 1,467,736	\$ 193,361	\$ 5,916	\$ 865,850	\$ 4,721	\$ 6,003	\$ -	\$ 2,543,587
PROPERTY AND EQUIPMENT								
Land	\$ 1,505,946	\$ 893,301	\$ -	\$ 274,483	\$ 30,716	\$ 55,311	\$ 1,111,935	3,871,692
Land improvements	602,538	388,237	65,057	144,843	49,067	63,570	64,107	1,377,419
Buildings	13,977,142	10,119,109	16,147,676	4,535,403	2,673,384	1,700,675	106,978	49,260,367
Furniture and equipment	4,344,131	2,441,081	395,822	2,185,997	639,914	321,385	263,625	10,591,955
Construction-in-process	33,868	-	-	8,257,007	-	-	-	8,290,875
Less: Accumulated depreciation	(9,690,629)	(7,497,530)	(2,090,609)	(4,637,218)	(2,339,254)	(831,098)	(431,843)	(27,518,181)
TOTAL PROPERTY AND EQUIPMENT	\$ 10,772,996	\$ 6,344,198	\$ 14,517,946	\$ 10,760,515	\$ 1,053,827	\$ 1,309,843	\$ 1,114,802	\$ 45,874,127
LONG-TERM DEBT								
Economic Development Revenue Bonds (1993)	\$ -	\$ -	\$ -	\$ 111,085	\$ 211,121	\$ -	\$ -	\$ 322,206
Economic Development Revenue Bonds (1995)	-	1,825,000	-	-	-	-	-	1,825,000
Economic Development Revenue Bonds (1998)	7,110,000	-	-	-	-	-	-	7,110,000
Variable Rate Demand Revenue Bonds (2010)	-	-	-	10,500,000	-	-	-	10,500,000
M&T Loan	-	2,443,820	-	-	-	-	-	2,443,820
M&T Loan	-	-	-	-	-	679,994	-	679,994
Less current portion	7,110,000	4,268,820	-	10,611,085	211,121	679,994	-	22,881,020
	(385,000)	(533,539)	-	(46,742)	(86,806)	(35,771)	-	(1,087,858)
TOTAL LONG-TERM DEBT	\$ 6,725,000	\$ 3,735,281	\$ -	\$ 10,564,343	\$ 124,315	\$ 644,223	\$ -	\$ 21,793,162

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2012

SCHEDULE 2A (PART 1)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
REVENUES							
Routine services, net of refunds	\$ 16,875,290	\$ 8,328,661	\$ 1,492,333	\$ 9,941,136	\$ 1,611,737	\$ 766,148	\$ 39,015,305
Ancillary services	521,382	223,310	13,455	114,046	26,679	12,181	911,053
	17,396,672	8,551,971	1,505,788	10,055,182	1,638,416	778,329	39,926,358
DIRECT COST OF PATIENT CARE							
Nursing services and supplies	5,937,499	2,517,897	1,516	3,628,029	449,242	200,970	12,735,153
Life enrichment and social services	464,075	358,355	44,138	191,648	43,586	21,469	1,123,271
Medical and physicians service	157,935	60,801	-	79,943	9,044	-	307,723
Contract Services	1,406,746	33,612	34,795	1,009,227	45,910	495	2,530,785
Supplies	366,140	92,906	23,840	321,372	24,303	6,395	834,956
Resident personal care	66,181	69,070	960	33,730	12,868	7,594	190,403
Dietary supplies and expense	1,563,427	883,271	320,261	700,807	224,519	127,022	3,819,307
Pharmacy	471,179	10,346	-	356,075	91	-	837,691
	10,433,182	4,026,258	425,510	6,320,831	809,563	363,945	22,379,289
EXCESS OF REVENUES OVER DIRECT COSTS	6,963,490	4,525,713	1,080,278	3,734,351	828,853	414,384	17,547,069
OTHER OPERATING EXPENSES							
Laundry and linen	159,343	26,054	-	109,730	3,617	3,820	302,564
Housekeeping	532,990	277,849	125,371	244,243	37,837	20,233	1,238,523
Plant operations	1,130,611	651,382	201,256	581,131	150,130	111,934	2,826,444
General and administrative	3,855,371	1,955,222	521,193	2,456,873	431,391	300,051	9,520,101
TOTAL OTHER OPERATING EXPENSES	5,678,315	2,910,507	847,820	3,391,977	622,975	436,038	13,887,632
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,285,175	\$ 1,615,206	\$ 232,458	\$ 342,374	\$ 205,878	\$ (21,654)	\$ 3,659,437

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2012

SCHEDULE 2A (PART 2)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,285,175	\$ 1,615,206	\$ 232,458	\$ 342,374	\$ 205,878	\$ (21,654)	\$ 3,659,437
OTHER (REVENUE) EXPENSES							
Depreciation	536,714	583,199	459,524	516,263	166,200	64,547	2,326,447
Interest expense, net of income	144,694	153,810	899	123,223	371	21,855	444,852
Employee housing, net of expenses	(89,809)	(11,112)	12	(9,773)	(2,422)	-	(113,104)
Contributions income	(8,399)	(1,045)	(52)	(8,285)	(15,000)	(32,500)	(65,281)
Employee and guest meals/vending	(17,510)	(56)	(8)	(8,075)	(3)	-	(25,652)
Discounts taken	-	(217)	-	(22)	-	-	(239)
Gain (loss) on sale of assets	(2,500)	-	-	-	-	-	(2,500)
Contributions expense	6,108	3,633	1,276	822	25	295	12,159
TOTAL OTHER (REVENUE) EXPENSES	569,298	728,212	461,651	614,153	149,171	54,197	2,576,682
CHANGE IN UNRESTRICTED NET ASSETS	\$ 715,877	\$ 886,994	\$ (229,193)	\$ (271,779)	\$ 56,707	\$ (75,851)	\$ 1,082,755

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2011

SCHEDULE 2B (PART 1)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
REVENUES							
Routine services, net of refunds	\$ 16,215,684	\$ 7,849,443	\$ 1,530,741	\$ 6,905,003	\$ 1,426,884	\$ 908,021	\$ 34,835,776
Ancillary services	550,161	216,684	15,204	83,770	24,684	16,628	907,131
	16,765,845	8,066,127	1,545,945	6,988,773	1,451,568	924,649	35,742,907
DIRECT COST OF PATIENT CARE							
Nursing services and supplies	5,845,276	2,439,018	4,413	3,103,257	476,302	217,549	12,085,815
Life enrichment and social services	473,553	351,267	42,826	157,568	43,615	18,819	1,087,648
Medical and physicians service	166,218	59,463	-	79,505	8,811	-	313,997
Contract Services	1,104,132	41,352	44,263	472,224	39,043	836	1,701,850
Supplies	370,998	88,314	11,656	143,812	14,330	13,195	642,305
Resident personal care	73,400	64,302	929	31,632	14,595	7,946	192,804
Dietary supplies and expense	1,461,608	778,354	304,687	522,990	214,380	121,808	3,403,827
Pharmacy	461,985	8,204	-	184,635	7	175	655,006
	9,957,170	3,830,274	408,774	4,695,623	811,083	380,328	20,083,252
EXCESS OF REVENUES OVER DIRECT COSTS	6,808,675	4,235,853	1,137,171	2,293,150	640,485	544,321	15,659,655
OTHER OPERATING EXPENSES							
Laundry and linen	162,697	17,344	782	95,900	4,923	3,170	284,816
Housekeeping	511,982	273,100	121,932	177,996	33,844	22,150	1,141,004
Plant operations	1,063,523	622,860	189,870	510,748	159,907	83,727	2,630,635
General and administrative	3,384,608	1,643,048	466,497	1,959,882	390,974	279,587	8,124,596
TOTAL OTHER OPERATING EXPENSES	5,122,810	2,556,352	779,081	2,744,526	589,648	388,634	12,181,051
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,685,865	\$ 1,679,501	\$ 358,090	\$ (451,376)	\$ 50,837	\$ 155,687	\$ 3,478,604

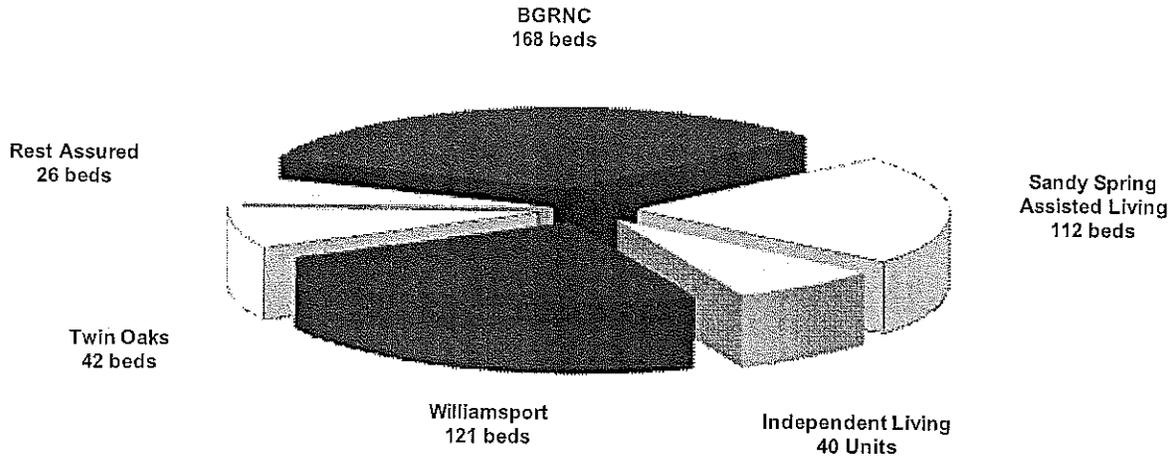
BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2011

SCHEDULE 2B (PART 2)

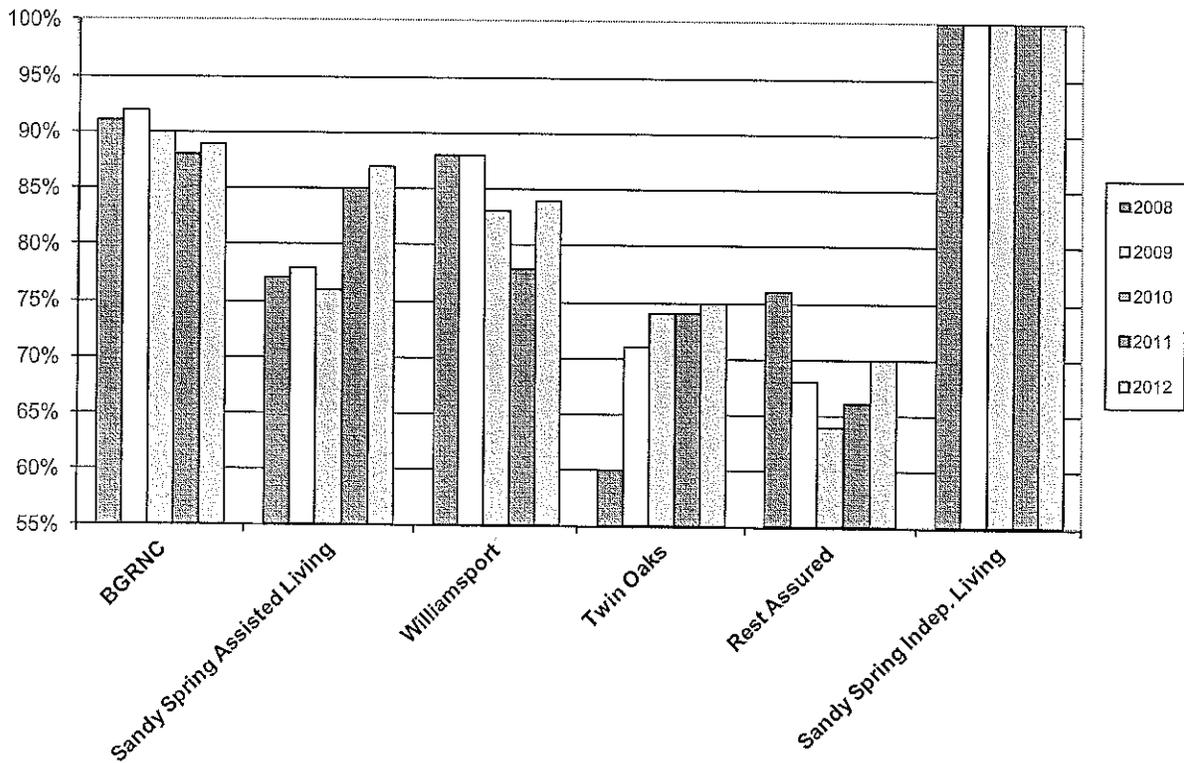
	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,685,865	\$ 1,679,501	\$ 358,090	\$ (451,376)	\$ 50,837	\$ 155,687	\$ 3,478,604
OTHER (REVENUE) EXPENSES							
Depreciation	542,605	666,873	468,272	304,099	195,242	61,986	2,239,077
Interest expense, net of income	134,231	149,896	(340)	8,905	1,290	23,864	317,846
Employee housing, net of expenses	(86,595)	(8,010)	-	(14,340)	(2,320)	-	(111,265)
Contributions income	(4,253)	(751)	(98)	(745)	-	-	(5,847)
Employee and guest meals/vending	(15,443)	18	(8)	(12,217)	(26)	-	(27,676)
Discounts taken	-	(228)	-	(107)	-	-	(335)
Gain (loss) on sale of assets	(700)	-	-	-	-	-	(700)
Contributions expense	9,750	5,883	2,060	1,128	296	475	19,592
TOTAL OTHER (REVENUE) EXPENSES	<u>579,595</u>	<u>813,681</u>	<u>469,886</u>	<u>286,723</u>	<u>194,482</u>	<u>86,325</u>	<u>2,430,692</u>
CHANGE IN UNRESTRICTED NET ASSETS	<u>\$ 1,106,270</u>	<u>\$ 865,820</u>	<u>\$ (111,796)</u>	<u>\$ (738,099)</u>	<u>\$ (143,645)</u>	<u>\$ 69,362</u>	<u>\$ 1,047,912</u>

BROOKE GROVE FOUNDATION
SUPPLEMENTAL CHARTS AND GRAPHS

Beds by Division

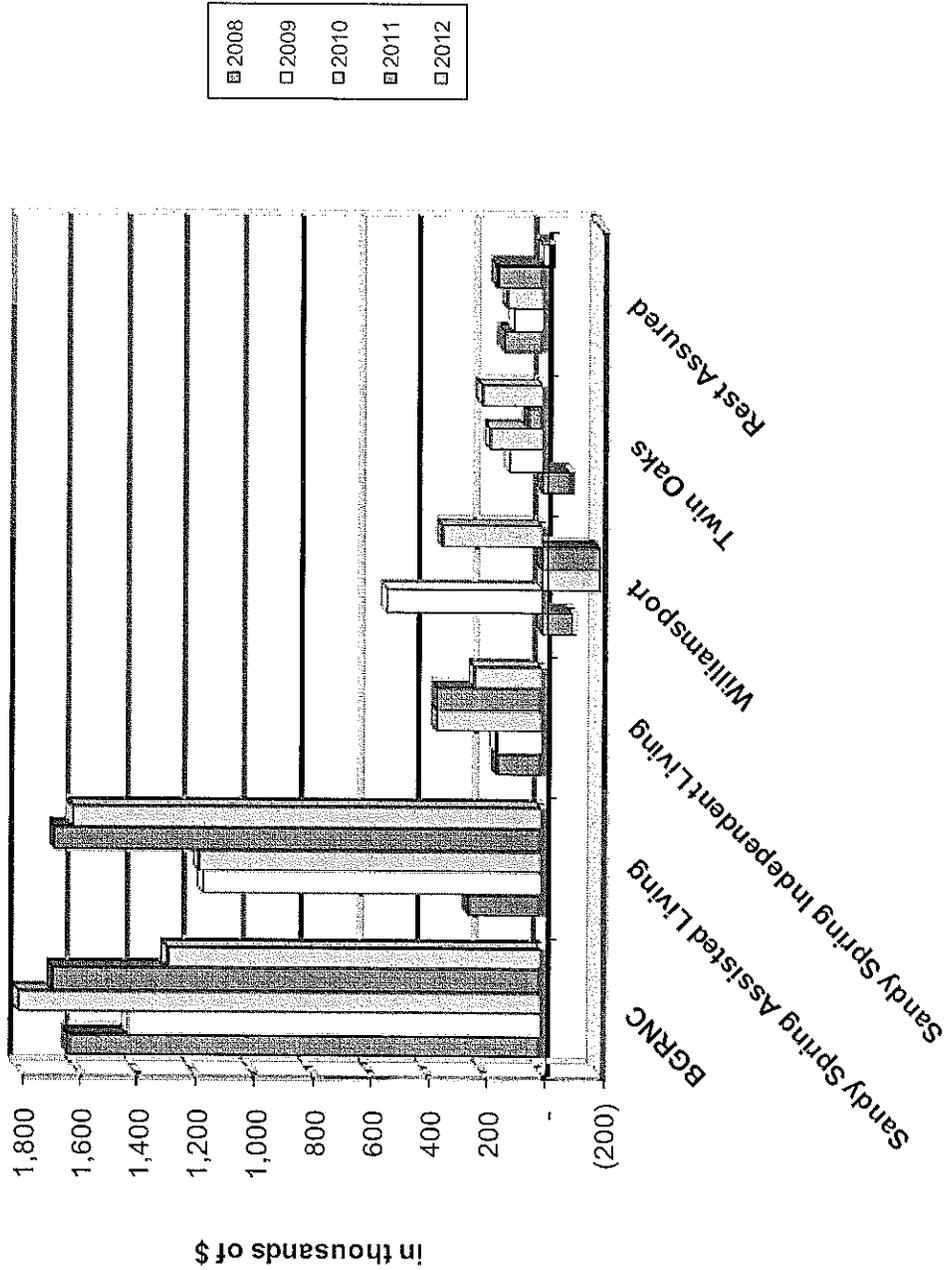


Census by Division



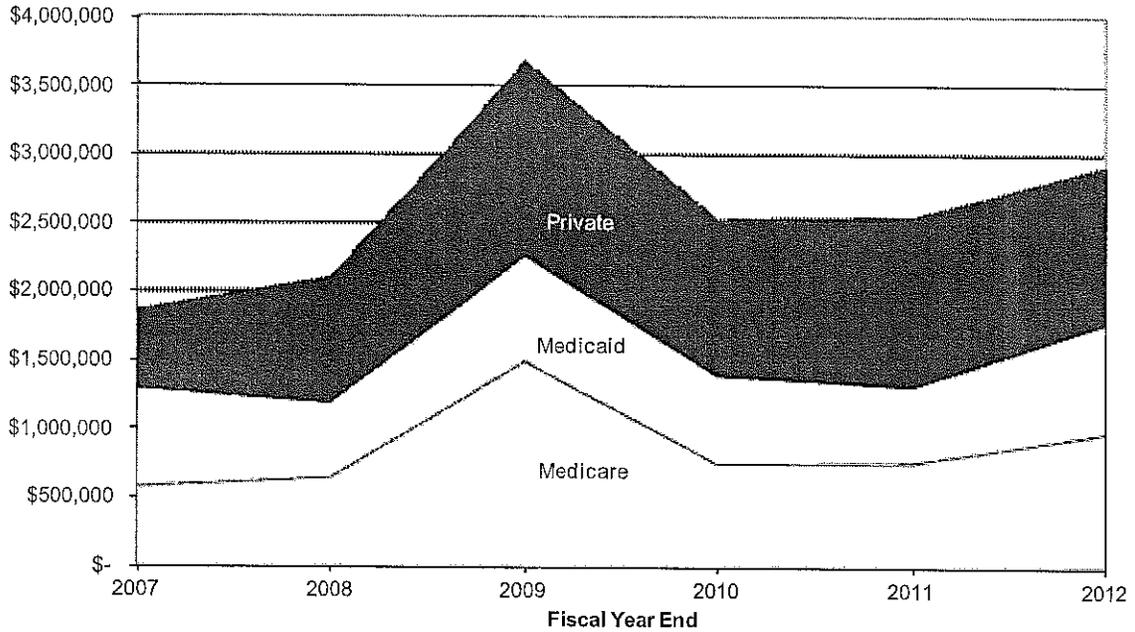
BROOKE GROVE FOUNDATION
 SUPPLEMENTAL CHARTS AND GRAPHS

Net Revenue (Expense) from Operations
 Note: Excluding interest and depreciation

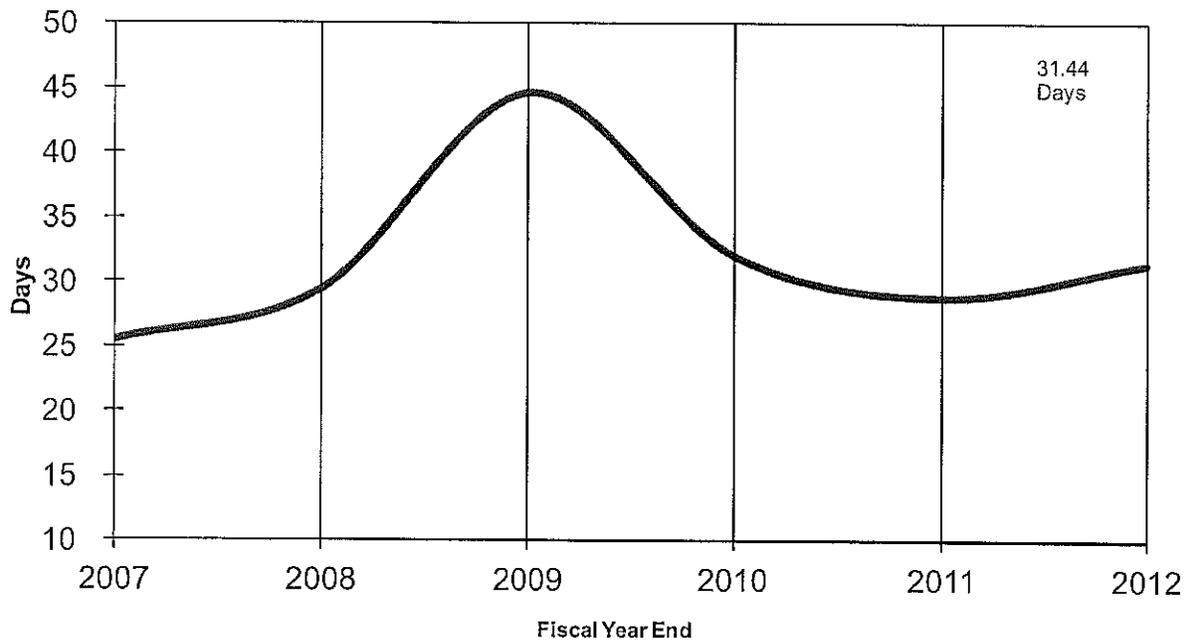


BROOKE GROVE FOUNDATION
 SUPPLEMENTAL CHARTS AND GRAPHS

Composition of Accounts Receivable



Collection Period as of the End of Fiscal Year



BROOKE GROVE FOUNDATION, INC.

FINANCIAL REPORT

Years ended June 30, 2013 and 2012

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Harold L. Mohn, Jr. CPA, MS
Managing Partner

James G. Z. Allen, CPA
Partner

H. Mark Alexander, Jr., CPA
(1942-2012)

R. Scott Handel, CPA, MBA
(1964-2008)

B. Scott Oden, CPA
Consultant

September 11, 2013

INDEPENDENT AUDITORS' REPORT

Board of Directors
Brooke Grove Foundation, Inc.
Sandy Spring, Maryland

Report on the Financial Statements

We have audited the financial statements of Brooke Grove Foundation, Inc. (a not-for-profit corporation), which comprises the statements of financial position as of June 30, 2013 and 2012, and the related statements of activities, changes in net assets and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of these financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to Brooke Grove Foundation, Inc.'s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Brooke Grove Foundation, Inc.'s internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the overall presentation of the financial statements. We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above, present fairly, in all material respects, the financial position of Brooke Grove Foundation, Inc. as of June 30, 2013 and 2012, and the changes in its net assets and cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The schedules of Combined Statements of Financial Position by Division, Combined Statements of Activities by Division, Combined Statement of Cash Flow by Division and Selected Charts and Graphs are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements taken as a whole.

CAO Mohn and Allen P.C.

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF FINANCIAL POSITION
JUNE 30, 2013 and 2012

	2013	2012
CURRENT ASSETS		
Cash and cash equivalents	\$ 5,252,524	\$ 4,451,243
Cash and cash equivalents - restricted	629,840	1,337,894
Receivables, less allowances	3,346,267	2,916,229
Entrance fee receivable	400,000	-
Other current assets	379,535	331,169
TOTAL CURRENT ASSETS	10,008,166	9,036,535
PROPERTY AND EQUIPMENT, net	48,816,349	48,591,082
DEFERRED FINANCE CHARGES, net	718,401	762,247
TOTAL ASSETS	\$ 59,542,916	\$ 58,389,864
 CURRENT LIABILITIES		
Accounts payable and other accrued expenses	\$ 1,061,559	\$ 1,108,466
Accounts payable - construction	101,296	12,210
Accrued wages and payroll taxes	612,350	554,130
Accrued personal leave	1,344,539	1,255,014
Accrued health insurance	310,867	285,691
Deposits on unoccupied Independent Living Units	38,500	28,500
Deferred revenue	81,858	170,106
Current portion of long-term debt	1,340,186	1,110,224
TOTAL CURRENT LIABILITIES	4,891,155	4,524,341
 LONG TERM LIABILITIES		
Deferred revenue from advance fees	923,128	1,122,063
Refundable fees, net - Independent Living	11,688,786	11,210,062
Long-term debt, net of current portion	19,336,687	20,682,723
TOTAL LONG TERM LIABILITIES	31,948,601	33,014,848
 UNRESTRICTED NET ASSETS	 22,703,160	 20,850,675
TOTAL LIABILITIES AND NET ASSETS	\$ 59,542,916	\$ 58,389,864

See notes to financial statements.

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF ACTIVITIES
FOR THE YEARS ENDED JUNE 30, 2013 and 2012

	2013	2012
REVENUES		
Routine services, net of refunds	\$ 41,576,181	\$ 39,015,305
Ancillary services	853,688	911,053
	42,429,869	39,926,358
DIRECT COST OF PATIENT CARE		
Nursing services and supplies	12,984,325	12,735,153
Life enrichment and social services	1,202,711	1,123,271
Medical and physicians services	331,566	307,723
Contract services	2,963,146	2,530,785
Supplies	822,385	834,956
Resident personal care	199,620	190,403
Dietary supplies and expense	3,952,162	3,819,307
Pharmacy	978,599	837,691
	23,434,514	22,379,289
EXCESS OF REVENUES OVER DIRECT COSTS	18,995,355	17,547,069
OTHER OPERATING EXPENSES		
Laundry and linen	288,104	302,564
Housekeeping	1,291,776	1,238,523
Plant operations	2,903,347	2,826,444
Administrative and general	9,714,614	9,520,101
	14,197,841	13,887,632
EXCESS OF REVENUES OVER DIRECT COSTS AND OTHER OPERATING EXPENSES	4,797,514	3,659,437
DEPRECIATION EXPENSE	2,514,730	2,326,447
INTEREST EXPENSE, net of interest income	576,067	444,852
OTHER (REVENUE), net of other expenses	(145,768)	(194,617)
	2,945,029	2,576,682
CHANGE IN UNRESTRICTED NET ASSETS	\$ 1,852,485	\$ 1,082,755

See notes to financial statements.

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF CHANGES IN NET ASSETS
FOR THE YEARS ENDED, JUNE 30, 2013 and 2012

	<u>2013</u>	<u>2012</u>
UNRESTRICTED NET ASSETS, beginning of the year	\$ 20,850,675	\$ 19,767,920
CHANGE IN UNRESTRICTED NET ASSETS	<u>1,852,485</u>	<u>1,082,755</u>
UNRESTRICTED NET ASSETS, end of the year	<u>\$ 22,703,160</u>	<u>\$ 20,850,675</u>

BROOKE GROVE FOUNDATION, INC.
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED, JUNE 30, 2013 and 2012

	2013	2012
CASH FLOWS FROM OPERATING ACTIVITIES		
Change in unrestricted net assets	\$ 1,852,485	\$ 1,082,755
Adjustments to reconcile change in unrestricted net assets to net cash provided by operating activities:		
Increase (decrease) in allowance for doubtful accounts	128,250	242,808
Advance fees received (refunded) - Independent Living	30,865	1,051
Amortization of advance fees	(229,800)	(149,092)
Amortization of refundable fees	(336,931)	(300,782)
Amortization of deferred finance charges	316,485	227,249
Depreciation expense	2,514,730	2,326,447
(Increase) decrease in operating assets:		
Accounts receivable	(558,288)	(615,450)
Entrance fee receivable	(400,000)	-
Other current assets	(48,366)	(157,573)
Increase (decrease) in operating liabilities:		
Accounts payable	(46,907)	288,793
Accounts payable - construction	89,086	(575,477)
Accrued wages	58,220	173,041
Accrued leave	89,525	200,388
Accrued health insurance reserve	25,176	(8,735)
Deferred revenue	(88,248)	57,756
NET CASH PROVIDED BY OPERATING ACTIVITIES	3,396,282	2,793,179
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of property and equipment	(2,739,997)	(5,043,402)
NET CASH USED BY INVESTING ACTIVITIES	(2,739,997)	(5,043,402)
CASH FLOWS FROM FINANCING ACTIVITIES		
Independent Living deposits (refunds)	815,655	1,342,480
Refunds (receipt) of deposits on unoccupied units	10,000	(2,150)
Deferred finance charges paid	(272,639)	(273,713)
Principal payments on long-term debt	(1,116,074)	(1,088,073)
NET CASH PROVIDED (USED) BY FINANCING ACTIVITIES	(563,058)	(21,456)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	93,227	(2,271,679)
CASH AND CASH EQUIVALENTS, beginning of the year	5,789,137	8,060,816
CASH AND CASH EQUIVALENTS, end of the year	\$ 5,882,364	\$ 5,789,137

See notes to financial statements.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 1 - NATURE OF OPERATIONS

Nature of Operations

Brooke Grove Foundation, Inc. (the Foundation) provides housing for seniors, and senior care on a continuum that includes independent living, assisted living, long-term skilled nursing, short-term rehabilitative, and respite care. The Foundation operates one skilled nursing facility "BGRNC," seven assisted living facilities "Sandy Spring Assisted Living" and "Sandy Spring Independent Living" on its Sandy Spring, Maryland campus. It operates one skilled nursing facility "Williamsport" and two assisted living facilities "Twin Oaks" on its Williamsport, Maryland campus, and one assisted living center "Rest Assured" in Meyersdale, Pennsylvania.

Ten Independent Living residences were completed and occupied in the fall of 2004. An additional twelve residences were completed by June of 2005 and were all subsequently occupied. The remaining eighteen planned units were completed by January 2009 and were subsequently occupied.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Foundation have been prepared on the accrual basis of accounting whereby, revenue is recognized when earned rather than when received, and expenses are recognized when the related liability is incurred rather than when paid.

Basis of Presentation

Financial statement presentation follows FASB Accounting Standards Codifications Topic 958 *Not-for-Profit Entities*. In accordance with the topic, the Foundation is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets. The Foundation had no temporarily or permanently restricted net assets for the years ended June 30, 2013 and 2012.

Use of Estimates

Management uses estimates and assumptions in preparing financial statements in accordance with accounting principles generally accepted in the United States of America. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Actual results could vary from the estimates that were assumed in preparing the financial statements.

Cash and Cash Equivalents

The Foundation considers cash equivalents to include money market funds, government securities, and short-term highly liquid investments with an original maturity date of three months or less.

Reclassifications

Certain accounts in the prior year financial statements have been reclassified for comparative purposes to conform to the presentation in the current-year financial statements.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue and Receivables

The Foundation's revenue comes primarily from private paying residents and patients; however, the Foundation participates in Medicaid and Medicare reimbursement programs. Revenues are recognized in the period in which they are earned. Unearned amounts are included in deferred revenue at the end of each accounting period. Management regularly reviews the net realizable value of receivables and adjusts the allowance for doubtful accounts as considered necessary.

Advance fees paid by a resident upon entering into a continuing care contract, net of the portion thereof that is refundable to the resident, are recorded as deferred revenue and are amortized to income using the straight line method over the estimated remaining life expectancy of the resident. In as much as the refundable portion of these fees will only be refunded once a new resident occupies the vacated unit, the fees are amortized to income on a straight-line basis over the life of the independent living facilities.

Residents may also choose the 72 month declining balance option where advance fees are recorded as deferred revenue and are amortized to revenue over 72 months. Any unamortized fees remaining at the time that the resident leaves the community are refunded according to the schedule provided in the continuing care agreement.

Revenue includes amortization of advance fees paid by independent living residents in the amount of \$229,800 and \$149,092 for the years ended June 30, 2013 and 2012, respectively. In accordance with generally accepted accounting principles, revenue also includes amortization of refundable entrance fees paid by independent living residents in the amount of \$336,931 and \$300,782 for the years ended June 30, 2013 and 2012, respectively.

Inventories

During the fiscal year June 30, 2011 the Foundation discontinued inventories and directly expensed linens and supplies purchases.

Capitalization and Depreciation

It was the Foundation's policy to record capital items or groups of items costing \$500 or more as additions to property and equipment during fiscal year ended June 30, 2010 and prior. During the fiscal year ended June 30, 2011, the Foundation increased the capital items limit to \$2,500. Property is recorded at cost if purchased, or at fair market value, if received from donors. The cost of property and equipment is depreciated over the estimated useful lives of the assets, using the straight-line method (See Note 5).

Deferred Revenue

The Foundation records advance deposits received from residents as deferred revenue. Revenue is recognized when the services are provided.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Advertising Costs

The Foundation conducts advertising for the purpose of building awareness of the Foundation and its services. It is the policy of the Foundation to expense the cost of advertising as it is incurred. Advertising and marketing expense is included in these financial statements as part of administrative and general expense and amounted to \$680,572 and \$626,159 for the years ending June 30, 2013 and 2012, respectively.

Tax Status

The Foundation qualifies as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code and is not considered to be a private foundation within the meaning of Section 509(a) of the Code. Contributions to the Foundation are tax deductible to donors under Section 170 of the Internal Revenue Code. The Foundation is required to report unrelated business income to the IRS and the Maryland taxing authority. The Foundation did not have any unrelated business income for the years ended June 30, 2013 and 2012.

The Foundation has adopted the accounting of uncertainty in income taxes as required by the Income Taxes topic (Topic 740) of the FASB Accounting Standards Codification. Topic 740 requires The Foundation to determine whether a tax position is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit to be recognized is measured as the largest amount of benefit that is more than fifty percent likely of being realized upon ultimate settlement, which could result in The Foundation recording a tax liability that would reduce The Foundation's net assets.

Management has analyzed the Foundation's tax positions, and has concluded that no liability for unrecognized tax benefits should be recorded related to uncertain tax positions taken on returns filed for open tax years (2009-2011), or expected to be taken in its 2012 tax return. The Foundation is not aware of any tax positions for which it believes that there is a reasonable possibility that the total amounts of unrecognized tax benefits will change materially in the next twelve months.

Impairment of long-lived assets

The Foundation accounts for the valuation of long-lived assets under FASB Accounting Standards Codifications Topic 360 *Accounting for the Impairment or Disposal of Long-Lived Assets*. Topic 360 requires that long-lived assets and certain identifiable intangible assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the long-lived asset is measured by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reportable at the lower of the carrying amount of fair value, less costs to sell.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 3 - RECEIVABLES

All amounts are due within one year:

	2013	2012
Amounts due from patients and residents	\$ 1,760,944	\$ 1,667,119
Amounts due from Medicare	1,283,529	977,040
Amounts due from Maryland State Medicaid	953,253	795,279
	3,997,726	3,439,438
Less allowance for doubtful accounts	(651,459)	(523,209)
	\$ 3,346,267	\$ 2,916,229

NOTE 4 - ENTRANCE FEE RECEIVABLE

The Foundation has provided a zero-interest promissory note for the entrance fee balance due of \$400,000 from a resident through December 31, 2013. The Foundation will extend the note, if needed, through June 30, 2014, at an interest rate of 3.5%

NOTE 5 - PROPERTY AND EQUIPMENT

The Foundation's assets are pledged to bondholders as collateral - see Note 6 - LONG-TERM DEBT. Depreciation charged to operations for the years ending June 30, 2013 and 2012 was \$2,514,730 and \$2,326,447, respectively.

	Life	2013	2012
Land		\$ 3,871,692	\$ 3,871,692
Land improvements	10-15	1,714,898	1,615,959
Buildings and improvements	10-40	61,601,750	60,296,408
Fixtures and equipment	3-10	12,812,436	12,120,246
Construction-in-progress		1,176,591	526,329
		81,177,367	78,430,634
Accumulated depreciation		(32,361,018)	(29,839,552)
		\$ 48,816,349	\$ 48,591,082

NOTE 6 - ACCRUED PERSONAL LEAVE

The Foundation has recorded a liability for amounts due to employees for earned but unused personal leave. The accrued liability was \$1,344,539 and \$1,255,014 as of June 30, 2013 and 2012, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 7 - LONG-TERM DEBT

	2013	2012
<p>Economic Development Revenue Bonds (1993) secured by the assets of the Williamsport Nursing Home and Williamsport group homes, dated November 29, 1993, in the original amount of \$2,200,000, payable through December 2013, originally callable in 2000, with a modified call date of 2013, in monthly installments of \$11,129 plus interest at 90% of 30 day LIBOR. The 30 day LIBOR rate was 0.19% and 0.24% at June 30, 2013 and 2012, respectively.</p>	\$ 55,110	\$ 188,658
<p>Economic Development Revenue Bonds (1995) secured by the assets of the Sandy Spring group homes and guaranteed by a letter of credit, dated December 1, 1995, in the original amount of \$4,850,000, payable through January 2016 in increasing annual installments currently at \$365,000 plus interest at tax-exempt index plus .05%. See additional terms of bonds below.</p>	1,095,000	1,460,000
<p>Economic Development Revenue Bonds (1998) secured by the assets of the Foundation and guaranteed by a letter of credit, dated December 10, 1998, in the original amount of \$10,500,000, payable through January 2024 in increasing annual installments currently at \$435,000 plus interest at the tax exempt index rate plus swap rate currently at 1.00%. See additional terms of bonds below.</p>	6,320,000	6,725,000
<p>Variable Rate Demand Revenue Bonds (2010) secured by the assets of the Foundation and guaranteed by a letter of credit, dated November 18, 2010, in the original amount of \$10,500,000, payable through November 2037 in increasing annual installments starting at \$255,000 in November 2013 plus variable rate of interest, currently at .11%. See additional terms of bonds below.</p>	10,500,000	10,500,000

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 7 - LONG-TERM DEBT (CONTINUED)

Bank note dated October, 2009, with an original amount of \$2,500,000. Monthly principal payments of \$14,045 started March 2011 with interest at LIBOR plus 3.00% but not less than 4.50%. The loan matures October 2025. The 30 day LIBOR rate was 0.19% and .24% as of June 30, 2013 and 2012, respectively.

2,106,742 2,275,281

Bank loan amended April, 2013, with an original amount of \$750,000. Monthly principal payments of \$5,128 with interest at LIBOR plus 2.50%. The loan matures May, 2018. The LIBOR rate was 0.19% and 0.24% as of June 30, 2013 and 2012, respectively

	<u>600,021</u>	<u>644,008</u>
	20,676,873	21,792,947
	<u>(1,340,186)</u>	<u>(1,110,224)</u>
	<u>\$ 19,336,687</u>	<u>\$ 20,682,723</u>

Less current portion

Long-term debt matures as follows:

<u>Fiscal Year</u>	<u>Amount</u>
2014	1,340,186
2015	1,320,076
2016	1,355,076
2017	1,030,076
2018	1,372,417
Thereafter	<u>14,259,042</u>
	<u>\$ 20,676,873</u>

The Foundation entered into covenants in exchange for bond proceeds that require the Foundation to maintain certain financial ratios. The Foundation maintained these ratios for the years ending June 30, 2013 and 2012, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 7 - LONG-TERM DEBT (CONTINUED)

Economic Development Revenue Bonds (1995)

The Economic Development Revenue Bonds (1995) require monthly sinking fund payments of \$30,417 plus interest equal to the tax-exempt (weekly) index plus 0.05%. These payments are held and invested in US Government Money Market Fund by the trustee, M & T Investment Group, until annual payments are made to the bondholders. While the bonds have a twenty-year maturity, they are guaranteed by a five-year letter of credit from M & T. If the Foundation is unable to secure a letter of credit at the end of the five-year term January 15, 2016, the bondholders have the right to call the bonds. Management fully expects to obtain subsequent five-year letters of credit and therefore the twenty-year maturity date is used to present debt maturity in these statements.

Certain fees incurred as a result of issuing these bonds amounted to \$157,506 and have been recorded as deferred finance charges, which are being amortized over twenty years. Amortization expense for these fees was \$7,875 for each of the years ending June 30, 2013 and 2012. Additionally, the Foundation is required to pay an annual commission in order to keep the letter of credit in force, equal to 1.75% of the outstanding debt at the time the five-year letter of credit was issued. The annual commission paid in January, which is added to deferred finance charges, was \$19,748 and \$26,332 for the years ending June 30, 2013 and 2012, respectively. Amortization expense for these commissions was \$23,040 and \$23,971 for the years ending June 30, 2013 and 2012, respectively.

The tax-exempt index rate for the week ending June 30, 2013 and 2012 was 0.11% and 0.23%, respectively. The average tax-exempt index rate for the years ending June 30, 2013 and 2012 was 0.19% and 0.20%, respectively.

Economic Development Revenue Bonds (1998)

The Economic Development Revenue Bonds (1998) require monthly sinking fund payments of \$36,250 plus interest equal to the tax-exempt (weekly) index plus 0.05%. These payments are held and invested in US Government Money Market Fund by the trustee, M & T Investment Group, until annual payments are made to the bondholders. While the bonds have twenty-five year maturity, they are guaranteed by a five-year letter of credit from M & T. If the Foundation is unable to secure a letter of credit at the end of the five-year term, January 15, 2014, the bondholders have the right to call the bonds. Management fully expects to obtain subsequent five-year letters of credit and therefore the twenty-five year maturity date is used to present debt maturity in these statements.

Certain fees incurred as a result of issuing these bonds amounted to \$195,400 and have been recorded as deferred finance charges and are being amortized over the maturity of the bonds. Amortization expense for these fees was \$10,770 for each of the years ended June 30, 2013 and 2012. Additionally, the Foundation is required to pay an annual commission in order to keep the letter of credit in force, equal to 1.00% of the outstanding debt at the time the five-year letter of credit was issued. The annual commission paid in January, which is added to deferred finance charges, was \$64,778 and \$58,752 for the years ending June 30, 2013 and 2012, respectively. Amortization expense for these commissions was \$61,765 and \$60,349 for the years ending June 30, 2013 and 2012, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 7 - LONG-TERM DEBT (CONTINUED)

The underlying interest rate is based on the floating tax-exempt index rate. See note on Economic Development Revenue Bonds (1995) above for details on the tax-exempt index rates. In addition, a swap rate agreement was agreed to during fiscal year ending June 30, 2011. This swap rate agreement calls for an additional calculation based on the difference between the floating rate and the swap rate currently at 1.00%. This swap rate agreement expires on January 15, 2014 and will then be renewed at the prevailing swap rate.

The bond proceeds were used entirely for the construction of a new Brooke Grove Rehabilitation and Nursing Center. Bond proceeds in excess of eligible construction expenses must be used to reduce the principal amount of outstanding debt. The excess amounted to \$215,000, which was applied to the principal balance in January of 2004.

Variable Rate Demand Revenue Bonds (2010)

The Variable Rate Demand Revenue Bonds (2010) require monthly bona fide debt service fund payments of \$21,250 plus interest. As of June 30, 2013 the variable rate of interest was .11%. These payments are held and invested in US Government Money Market Fund by the trustee, M & T Investment Group, until payments are made to the bondholders annually. Monthly payments to the fund began in December 2012. While the bonds have twenty-five year maturity, they are guaranteed by a five-year letter of credit from M & T. If the Foundation is unable to secure a letter of credit at the end of the five-year term, January 15, 2014, the bondholders have the right to call the bonds. Management fully expects to obtain subsequent five-year letters of credit and therefore the twenty-five year maturity date is used to present debt maturity in these statements.

Certain fees incurred as a result of issuing these bonds amounted to \$480,564 and have been recorded as deferred finance charges and are being amortized over the maturity of the bonds. Amortization expense for these fees was \$17,799 for each of the years ended June 30, 2013 and 2012, respectively. Additionally, the Foundation is required to pay an annual commission in order to keep the letter of credit in force, equal to 1.75% of the outstanding debt at the time the five-year letter of credit was issued. The annual commission paid in November, which is added to deferred finance charges, was \$188,114 and \$188,629 for the years ending June 30, 2013 and 2012, respectively. Amortization expense for these commissions was \$188,285 and \$94,314 for the years ending June 30, 2013 and 2012, respectively.

The bond proceeds were used entirely for the construction of a new wing of the Williamsport Retirement Village. The new wing of the Williamsport Retirement Village was placed in service in January 2012.

Bank Notes

The Foundation obtained a note payable from M & T Investment Group in the amount of \$2,500,000. The note payable matures October, 2025. The interest rate on this note payable is the floating 30-day LIBOR rate plus 3.0%, with a minimum rate of 4.5%.

The Foundation obtained a note payable from M & T Investment Group in the amount of \$750,000. The note payable matures April, 2029. The interest rate on this note payable is the floating 30-day LIBOR rate plus 2.5%.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 7 - LONG-TERM DEBT (CONTINUED)

Certain fees incurred as a result of this note payable amounted to \$88,258 and have been recorded as deferred finance charges and are being amortized over the life of the note payable. Amortization expense for these fees was \$5,787 for each of the years ended June 30, 2013 and 2012, respectively.

Total cash held and restricted by M & T Investment Group for bond sinking funds at June 30, 2013 and 2012 amounted to \$591,295 and \$385,025, respectively.

Total cash held and restricted by M & T Investment Group for project and holdback purposes at June 30, 2013 and 2012 amounted to \$11 and \$924,344, respectively.

Interest costs

	2013	2012
Interest expense	\$ 577,165	\$ 446,623
Interest income	(1,098)	(1,771)
	\$ 576,067	\$ 444,852

NOTE 8 - OTHER REVENUE AND EXPENSE

Amounts classified as other revenue and (expense) are summarized as follows:

	2013	2012
Sale of meals to visitors and employees	\$ 21,881	\$ 25,652
Rental of housing units to employees, net	114,829	113,104
Discounts taken	685	239
Gain on sale of assets	-	2,500
Contributions received	25,641	65,281
Contributions given	(17,268)	(12,159)
	\$ 145,768	\$ 194,617

NOTE 9 - THIRD PARTY PAYERS AND DEFERRED REVENUE

The Foundation operates with Medicaid and Medicare Program patients. Included in revenues in these financial statements are amounts received from the Medicare program and from the Maryland Medicaid program.

Medicare is now billed on a prospective payment system, which means that the Foundation bills the program at the stated rate, which is not subject to change. However, the rates are dependent on the reported level of care, which is subject to audit and adjustment. Nevertheless, management does not expect any change, made as a result of an audit, to be material.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 9 - THIRD PARTY PAYERS AND DEFERRED REVENUE (CONTINUED)

Medicaid revenues are based on billings at provisional rates, which differ from the Foundation's regular rates. Final reimbursement under this program is based on allowable costs, which must be reported and reviewed by the Maryland Medicaid representative.

NOTE 10 - PENSION PLAN

The Foundation sponsors a defined contribution pension plan covering substantially all of its employees at all divisions. Contributions are discretionary and currently determined as 2% of each covered employee's salary. The plan became effective on January 1, 1991. Contributions to the plan for the years ended June 30, 2013 and 2012 were \$302,052 and \$302,212, respectively, net of forfeitures applied. The pension plan operates on a calendar year so the contribution amount for June 30, 2013 covers half of the expense for the calendar year ended December 31, 2012 and an estimate of half of the expense for the calendar year ending December 31, 2013.

NOTE 11 - SUPPLEMENTARY CASH FLOW INFORMATION

	2013	2012
Cash paid for interest	\$ 577,165	\$ 446,623

NOTE 12 - RESTRICTED CASH

Cash - restricted included on these financial statements consists of sinking fund assets and project and holdback funds, held in trust (See NOTE 6 – Long -Term Debt), and long term deposits held in escrow for future Independent Living contracts.

	2013	2012
Bond sinking funds, held in trust	\$ 591,295	\$ 385,025
Bond project and holdback funds, held in trust	11	924,344
Deposits on unoccupied units	38,534	28,525
	\$ 629,840	\$ 1,337,894

NOTE 13 - CONCENTRATION OF CREDIT RISK

The Foundation maintains cash balances in bank deposit accounts, certificates of deposit and the US Government Money Market Fund, which exceed federally insured limits. The Foundation has not experienced any losses in such accounts and believes it is not exposed to any significant risk.

A large portion of the receivables is due from Medicare and Medicaid. The Foundation does not believe that it is exposed to any significant risk on these receivables.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 14 - FAIR VALUES OF FINANCIAL INSTRUMENTS

The Foundation's financial instruments, none of which are held for trading purposes, include cash and cash equivalents, accounts receivable and long-term debt. The Foundation estimates that the fair value of all financial instruments at June 30, 2013 and June 30, 2012 does not differ materially from the aggregate carrying values of its financial instruments recorded in the accompanying statement of financial position.

The estimated fair value amounts have been determined using available market information and appropriate valuation methodologies. The carrying amounts of cash and cash equivalents and the portion of accounts receivable due in less than one year approximate fair values because of the short maturities of those instruments. The carrying amount of long-term debt approximates fair values due to the variable interest rates.

NOTE 15 - ALLOCATION OF COSTS

Indirect expenses incurred by the Home (management) Office are allocated to the other divisions based on the applicable divisions' prior year expense. This policy is in accordance with the regulations of third party payers and management believes this allocation provides a fair representation of administrative expenses by division. Expenses shared by two or more divisions are allocated based on the number of beds in the applicable divisions.

NOTE 16 - DONATED SERVICES

Many volunteers have donated significant time to the Foundation. About 21,370 and 18,929 hours of donated services were received in fiscal year 2013 and 2012, respectively, but were not recognized in the financial statements because they did not meet the accounting criteria for recognition.

NOTE 17 - COMMITMENTS AND CONTINGENCIES

In September of 2008, the Foundation obtained a letter of credit from M&T Bank for the benefit of the State of Maryland, Department of Labor, Licensing, and Regulation in the amount of \$295,711. The letter of credit is good through September 30, 2014.

The Foundation participates in a private insurance company for liability coverage. To meet a condition of membership, the Foundation provided the company with a letter of credit in the amount of \$138,000 from M&T Bank. Management considers the reserves of the company to be adequate to provide for its existing risks, and therefore considers the letter of credit to be the only contingent liability associated with this arrangement. The letter of credit is good through September 30, 2013.

The Foundation is partially self-insured for the risks associated with employee health coverage. The Foundation uses a health insurance company to manage the program and also uses self-insurance consultants to provide estimates of exposure. An estimated liability of \$310,867 and \$285,691 is included in accrued liabilities as of June 30, 2013 and 2012, respectively.

BROOKE GROVE FOUNDATION, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2013 AND 2012

NOTE 18 - SUBSEQUENT EVENTS

As required by the Subsequent Events topic (Topic 855) of the FASB Accounting Standards Codification, the Foundation has evaluated the impact of its financial statements and disclosures of certain transactions occurring subsequent to its year-end through September 11, 2013, which is the date the Foundation's financial statements, were available to be issued. Events occurring after that date have not been evaluated to determine whether a change in the financial statements would be required.

NOTE 19 – CONSTRUCTION IN PROCESS

The Foundation has incurred Board approved construction in process costs which consist of developmental costs to date in connection with on-going renovations on its Sandy Spring, Maryland campus.

SUPPLEMENTARY INFORMATION

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF FINANCIAL POSITION BY DIVISION
 JUNE 30, 2013

SCHEDULE 1A (PART 1)

	BGRNC	Sandy Spring Assisted Living	Independent Living	Williamsport	Twin Oaks	Rest Assured	Home Office	Total
CURRENT ASSETS								
Cash and cash equivalents	\$ 900	\$ 3,824,436	\$ 246,930	\$ 878,608	\$ 400	\$ 750	\$ 300,500	5,252,524
Cash and cash equivalents - restricted	217,524	182,520	38,534	191,262	-	-	-	629,840
RECEIVABLES								
Private pay	763,818	132,758	10,898	834,479	16,506	2,485	-	1,760,944
Medicare	679,658	-	-	603,871	-	-	-	1,283,529
Medicaid	572,355	-	-	380,898	-	-	-	953,253
Allowance for doubtful accounts	(197,249)	(17,549)	-	(428,788)	(7,873)	-	-	(651,459)
TOTAL RECEIVABLES	1,818,582	115,209	10,898	1,390,460	8,633	2,485	-	3,346,267
Entrance fee receivable	-	-	400,000	-	-	-	-	400,000
Other current assets	125,715	74,585	23,065	114,067	19,120	15,624	7,359	379,535
TOTAL CURRENT ASSETS	2,162,721	4,196,750	719,427	2,574,397	28,153	18,859	307,859	10,008,166
PROPERTY AND EQUIPMENT								
Land	1,505,946	893,301	-	274,483	30,716	55,311	1,111,935	3,871,692
Land improvements	646,638	515,803	82,171	260,397	59,090	73,793	77,006	1,714,898
Buildings	14,318,970	10,239,327	16,228,358	16,264,508	2,722,726	1,720,883	106,978	61,601,750
Furniture and equipment	4,656,902	2,626,557	549,205	3,556,603	663,839	468,215	291,115	12,812,436
Construction-in-process	1,168,254	-	-	5,464	2,873	-	-	1,176,591
Less: Accumulated depreciation	(10,655,972)	(8,456,523)	(3,010,470)	(6,178,148)	(2,656,009)	(961,701)	(442,195)	(32,361,018)
TOTAL PROPERTY AND EQUIPMENT	11,640,738	5,818,465	13,849,264	14,183,307	823,235	1,356,501	1,144,839	48,816,349
DEFERRED FINANCE CHARGES, net								
	81,223	110,392	-	526,786	-	-	-	718,401
TOTAL ASSETS	\$ 13,884,682	\$ 10,125,607	\$ 14,568,691	\$ 17,284,490	\$ 851,388	\$ 1,375,360	\$ 1,452,698	\$ 59,542,916

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF FINANCIAL POSITION BY DIVISION
 JUNE 30, 2013

SCHEDULE 1A (PART 2)

	BGRNC	Sandy Spring Assisted Living	Independent Living	Williamsport	Twin Oaks	Rest Assured	Home Office	Total
CURRENT LIABILITIES								
Accounts payable and other accrued expenses	\$ 72,439	\$ 375,770	\$ 7,116	\$ 516,060	\$ 5,632	\$ 3,057	\$ 81,485	\$ 1,061,559
Accounts payable - construction	-	58,787	-	42,509	-	-	-	101,296
Accrued wages and payroll taxes	203,880	95,664	11,866	218,577	21,372	16,072	44,919	612,350
Accrued personal leave	450,228	260,115	37,547	143,282	12,975	13,463	427,129	1,344,539
Accrued health insurance	-	310,867	-	-	-	-	-	310,867
Deposits on unoccupied Independent Living Units	-	-	38,500	-	-	-	-	38,500
Deferred revenue	43,901	5,159	-	22,337	6,946	3,515	-	81,858
Current portion of long-term debt	435,000	533,540	-	273,805	36,305	61,536	-	1,340,186
TOTAL CURRENT LIABILITIES	1,205,448	1,639,902	94,829	1,216,570	83,230	97,643	553,533	4,891,155
LONG-TERM DEBT								
Economic Development Revenue								
Bonds (1993)	-	-	-	18,805	36,305	-	-	55,110
Economic Development Revenue								
Bonds (1995)	-	1,095,000	-	-	-	-	-	1,095,000
Economic Development Revenue								
Bonds (1998)	6,320,000	-	-	-	-	-	-	6,320,000
Variable Rate Demand Revenue								
Bonds (2010)	-	-	-	10,500,000	-	-	-	10,500,000
M&T Loan	-	2,106,742	-	-	-	-	-	2,106,742
M&T Loan	-	-	-	-	-	600,021	-	600,021
Less current portion	6,320,000	3,201,742	-	10,518,805	36,305	600,021	-	20,676,873
	(435,000)	(533,540)	-	(273,805)	(36,305)	(61,536)	-	(1,340,186)
TOTAL LONG-TERM DEBT	5,885,000	2,668,202	-	10,245,000	-	538,485	-	19,336,687
Deferred revenue from advance fees	-	-	923,128	-	-	-	-	923,128
Refundable fees, net - Independent Living	-	-	11,688,786	-	-	-	-	11,688,786
TOTAL LONG TERM LIABILITIES	5,885,000	2,668,202	12,611,914	10,245,000	-	538,485	-	31,948,601
UNRESTRICTED NET ASSETS	6,794,234	5,817,503	1,861,948	5,822,920	768,158	739,232	899,165	22,703,160
TOTAL LIABILITIES AND NET ASSETS	\$ 13,884,682	\$ 10,125,607	\$ 14,568,691	\$ 17,284,490	\$ 851,388	\$ 1,375,360	\$ 1,452,698	\$ 59,542,916

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF FINANCIAL POSITION BY DIVISION
 JUNE 30, 2012

SCHEDULE IB (PART 1)

	BGRNC	Sandy Spring Assisted Living	Independent Living	Williamsport	Twin Oaks	Rest Assured	Home Office	Total
CURRENT ASSETS								
Cash and cash equivalents	\$ 900	\$ 3,509,653	\$ 174,497	\$ 464,543	\$ 400	\$ 750	\$ 300,500	4,451,243
Cash and cash equivalents - restricted	202,514	182,512	28,525	924,343	-	-	-	1,337,894
RECEIVABLES								
Private pay	823,212	106,095	7,720	699,541	10,208	20,343	-	1,667,119
Medicare	450,512	-	-	526,528	-	-	-	977,040
Medicaid	481,382	-	-	313,897	-	-	-	795,279
Allowance for doubtful accounts	(282,763)	(10,659)	-	(222,723)	-	(7,064)	-	(523,209)
TOTAL RECEIVABLES	\$ 1,472,343	\$ 95,436	\$ 7,720	\$ 1,317,243	\$ 10,208	\$ 13,279	\$ -	\$ 2,916,229
Entrance fee receivable	-	-	-	-	-	-	-	-
Other current assets	108,487	62,257	17,920	113,585	9,131	13,543	6,246	331,169
TOTAL CURRENT ASSETS	1,784,244	3,849,858	228,662	2,819,714	19,739	27,572	306,746	9,036,535
PROPERTY AND EQUIPMENT								
Land	1,505,946	893,301	-	274,483	30,716	55,311	1,111,935	3,871,692
Land improvements	602,538	485,369	76,493	254,569	59,090	73,793	64,107	1,615,959
Buildings	14,135,434	10,200,025	16,158,211	15,283,447	2,711,638	1,700,675	106,978	60,296,408
Furniture and equipment	4,503,111	2,526,834	426,183	3,379,224	650,904	353,138	280,852	12,120,246
Construction-in-process	368,840	-	-	155,954	1,535	-	-	526,329
Less: Accumulated depreciation	(10,119,185)	(7,907,939)	(2,550,133)	(5,425,736)	(2,505,455)	(895,645)	(435,459)	(29,839,552)
TOTAL PROPERTY AND EQUIPMENT	\$ 10,996,684	\$ 6,197,590	\$ 14,110,754	\$ 13,921,941	\$ 948,428	\$ 1,287,272	\$ 1,128,413	\$ 48,591,082
DEFERRED FINANCE CHARGES, net								
	88,981	127,345	-	545,921	-	-	-	762,247
TOTAL ASSETS	\$ 12,869,909	\$ 10,174,793	\$ 14,339,416	\$ 17,287,576	\$ 968,167	\$ 1,314,844	\$ 1,435,159	\$ 58,389,864

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF FINANCIAL POSITION BY DIVISION
 JUNE 30, 2012

SCHEDULE 1B (PART 2)

CURRENT LIABILITIES	BGRNC	Sandy Spring				Independent Living			Home Office	Total
		Assisted Living	Living	Williamsport	Twin Oaks	Rest Assured				
Accounts payable and other accrued expenses	\$ 69,497	\$ 450,511	\$ 7,044	\$ 473,942	\$ 7,280	\$ 3,050	\$ 97,142	\$ 1,108,466		
Accounts payable - construction	-	8,743	-	3,467	-	-	-	12,210		
Accrued wages and payroll taxes	177,352	82,061	9,343	210,412	25,372	12,011	37,579	554,130		
Accrued personal leave	401,048	244,012	31,072	149,302	10,000	22,957	396,623	1,255,014		
Accrued health insurance	-	285,691	-	-	-	-	-	285,691		
Deposits on unoccupied Independent Living Units	-	-	28,500	-	-	-	-	28,500		
Deferred revenue	15,514	135,474	-	8,460	4,505	6,153	-	170,106		
Current portion of long-term debt	405,000	533,540	-	46,742	86,806	38,136	-	1,110,224		
TOTAL CURRENT LIABILITIES	1,068,411	1,740,032	75,959	892,325	133,963	82,307	531,344	4,524,341		
LONG-TERM DEBT										
Economic Development Revenue										
Bonds (1993)	-	-	-	64,945	123,713	-	-	188,658		
Economic Development Revenue										
Bonds (1995)	-	1,460,000	-	-	-	-	-	1,460,000		
Economic Development Revenue										
Bonds (1998)	6,725,000	-	-	-	-	-	-	6,725,000		
Variable Rate Demand Revenue										
Bonds (2010)	-	-	-	10,500,000	-	-	-	10,500,000		
M&T Loan	-	2,275,281	-	-	-	-	-	2,275,281		
M&T Loan	-	-	-	-	-	644,008	-	644,008		
Less current portion	6,725,000	3,735,281	-	10,564,945	123,713	644,008	-	21,792,947		
	(405,000)	(533,540)	-	(46,742)	(86,806)	(38,136)	-	(1,110,224)		
TOTAL LONG-TERM DEBT	6,320,000	3,201,741	-	10,518,203	36,907	605,872	-	20,682,723		
Deferred revenue from advance fees	-	-	1,122,063	-	-	-	-	1,122,063		
Refundable fees, net - Independent Living	-	-	11,210,062	-	-	-	-	11,210,062		
TOTAL LONG TERM LIABILITIES	6,320,000	3,201,741	12,332,125	10,518,203	36,907	605,872	-	33,014,848		
UNRESTRICTED NET ASSETS	5,481,498	5,233,020	1,931,332	5,877,048	797,297	626,665	903,815	20,850,675		
TOTAL LIABILITIES AND NET ASSETS	\$ 12,869,909	\$ 10,174,793	\$ 14,339,416	\$ 17,287,576	\$ 968,167	\$ 1,314,844	\$ 1,435,159	\$ 58,389,864		

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2013

SCHEDULE 2A (PART 1)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
REVENUES							
Routine services, net of refunds	\$ 17,499,551	\$ 8,760,489	\$ 1,641,158	\$ 11,167,232	\$ 1,528,579	\$ 979,172	\$ 41,576,181
Ancillary services	464,407	206,519	10,502	126,243	34,104	11,913	853,688
	17,963,958	8,967,008	1,651,660	11,293,475	1,562,683	991,085	42,429,869
DIRECT COST OF PATIENT CARE							
Nursing services and supplies	5,890,236	2,520,941	177	3,928,717	425,806	218,448	12,984,325
Life enrichment and social services	503,689	363,609	39,153	243,513	37,740	15,007	1,202,711
Medical and physicians service	157,975	48,816	-	118,093	6,682	-	331,566
Contract Services	1,531,213	37,637	15,154	1,354,227	22,751	2,164	2,963,146
Supplies	351,640	85,353	15,033	330,677	16,829	22,853	822,385
Resident personal care	67,772	71,857	959	36,463	11,275	11,294	199,620
Dietary supplies and expense	1,559,921	922,385	275,439	825,401	213,037	155,979	3,952,162
Pharmacy	549,834	3,876	-	424,093	780	16	978,599
	10,612,280	4,054,474	345,915	7,261,184	734,900	425,761	23,434,514
EXCESS OF REVENUES OVER DIRECT COSTS	7,351,678	4,912,534	1,305,745	4,032,291	827,783	565,324	18,995,355
OTHER OPERATING EXPENSES							
Laundry and linen	156,429	20,051	-	104,884	3,501	3,239	288,104
Housekeeping	549,976	279,527	125,999	265,656	48,846	21,772	1,291,776
Plant operations	1,103,298	657,618	212,226	663,314	157,243	109,648	2,903,347
General and administrative	3,926,518	2,063,264	586,766	2,502,437	376,193	259,436	9,714,614
TOTAL OTHER OPERATING EXPENSES	5,736,221	3,020,460	924,991	3,536,291	585,783	394,095	14,197,841
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,615,457	\$ 1,892,074	\$ 380,754	\$ 496,000	\$ 242,000	\$ 171,229	\$ 4,797,514

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2013

SCHEDULE 2A (PART 2)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,615,457	\$ 1,892,074	\$ 380,754	\$ 496,000	\$ 242,000	\$ 171,229	\$ 4,797,514
OTHER (REVENUE) EXPENSES							
Depreciation	536,787	548,584	460,338	752,411	150,554	66,056	2,514,730
Interest expense, net of income	188,511	141,078	(329)	226,220	184	20,403	576,067
Employee housing, net of expenses	(91,499)	(10,497)	-	(11,920)	(913)	-	(114,829)
Contributions income	(5,885)	(556)	(21)	(11,128)	(8,050)	-	(25,640)
Employee and guest meals/vending	(17,248)	(57)	(22)	(4,554)	(1)	-	(21,882)
Discounts taken	-	(643)	-	(42)	-	-	(685)
Gain (loss) on sale of assets	-	-	-	-	-	-	-
Contributions expense	6,863	7,504	1,551	1,150	50	150	17,268
TOTAL OTHER (REVENUE) EXPENSES	617,529	685,413	461,517	952,137	141,824	86,609	2,945,029
CHANGE IN UNRESTRICTED NET ASSETS	\$ 997,928	\$ 1,206,661	\$ (80,763)	\$ (456,137)	\$ 100,176	\$ 84,620	\$ 1,852,485

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2012

SCHEDULE 2B (PART 1)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
REVENUES							
Routine services, net of refunds	\$ 16,875,290	\$ 8,328,661	\$ 1,492,333	\$ 9,941,136	\$ 1,611,737	\$ 766,148	\$ 39,015,305
Ancillary services	521,382	223,310	13,455	114,046	26,679	12,181	911,053
	17,396,672	8,551,971	1,505,788	10,055,182	1,638,416	778,329	39,926,358
DIRECT COST OF PATIENT CARE							
Nursing services and supplies	5,937,499	2,517,897	1,516	3,628,029	449,242	200,970	12,735,153
Life enrichment and social services	464,075	358,355	44,138	191,648	43,586	21,469	1,123,271
Medical and physicians service	157,935	60,801	-	79,943	9,044	-	307,723
Contract Services	1,406,746	33,612	34,795	1,009,227	45,910	495	2,530,785
Supplies	366,140	92,906	23,840	321,372	24,303	6,395	834,956
Resident personal care	66,181	69,070	960	33,730	12,868	7,594	190,403
Dietary supplies and expense	1,563,427	883,271	320,261	700,807	224,519	127,022	3,819,307
Pharmacy	471,179	10,346	-	356,075	91	-	837,691
	10,433,182	4,026,258	425,510	6,320,831	809,563	363,945	22,379,289
EXCESS OF REVENUES OVER DIRECT COSTS	6,963,490	4,525,713	1,080,278	3,734,351	828,853	414,384	17,547,069
OTHER OPERATING EXPENSES							
Laundry and linen	159,343	26,054	-	109,730	3,617	3,820	302,564
Housekeeping	532,990	277,849	125,371	244,243	37,837	20,233	1,238,523
Plant operations	1,130,611	651,382	201,256	581,131	150,130	111,934	2,826,444
General and administrative	3,855,371	1,955,222	521,193	2,456,873	431,391	300,051	9,520,101
TOTAL OTHER OPERATING EXPENSES	5,678,315	2,910,507	847,820	3,391,977	622,975	436,038	13,887,632
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,285,175	\$ 1,615,206	\$ 232,458	\$ 342,374	\$ 205,878	\$ (21,654)	\$ 3,659,437

BROOKE GROVE FOUNDATION, INC.
 COMBINED STATEMENT OF ACTIVITIES BY DIVISION
 FOR THE YEAR ENDING JUNE 30, 2012

SCHEDULE 2B (PART 2)

	BGRNC	Sandy Spring Assisted Living	Sandy Spring Independent	Williamsport	Twin Oaks	Rest Assured	Total
EXCESS OF REVENUES OVER (UNDER) DIRECT COSTS AND OTHER OPERATING EXPENSES	\$ 1,285,175	\$ 1,615,206	\$ 232,458	\$ 342,374	\$ 205,878	\$ (21,654)	\$ 3,659,437
OTHER (REVENUE) EXPENSES							
Depreciation	536,714	583,199	459,524	516,263	166,200	64,547	2,326,447
Interest expense, net of income	144,694	153,810	899	123,223	371	21,855	444,852
Employee housing, net of expenses	(89,809)	(11,112)	12	(9,773)	(2,422)	-	(113,104)
Contributions income	(8,399)	(1,045)	(52)	(8,285)	(15,000)	(32,500)	(65,281)
Employee and guest meals/vending	(17,510)	(56)	(8)	(8,075)	(3)	-	(25,652)
Discounts taken	-	(217)	-	(22)	-	-	(239)
Gain (loss) on sale of assets	(2,500)	-	-	-	-	-	(2,500)
Contributions expense	6,108	3,633	1,276	822	25	295	12,159
TOTAL OTHER (REVENUE) EXPENSES	569,298	728,212	461,651	614,153	149,171	54,197	2,576,682
CHANGE IN UNRESTRICTED NET ASSETS	\$ 715,877	\$ 886,994	\$ (229,193)	\$ (271,779)	\$ 56,707	\$ (75,851)	\$ 1,082,755

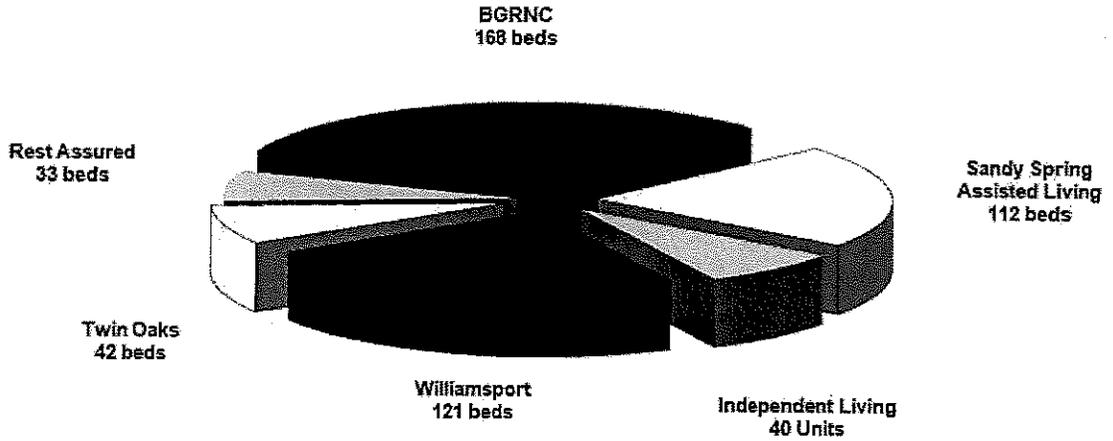
BROOKE GROVE FOUNDATION, INC.
COMBINED STATEMENT OF CASH FLOW BY DIVISION
FOR THE YEAR ENDING JUNE 30, 2013

SCHEDULE 3

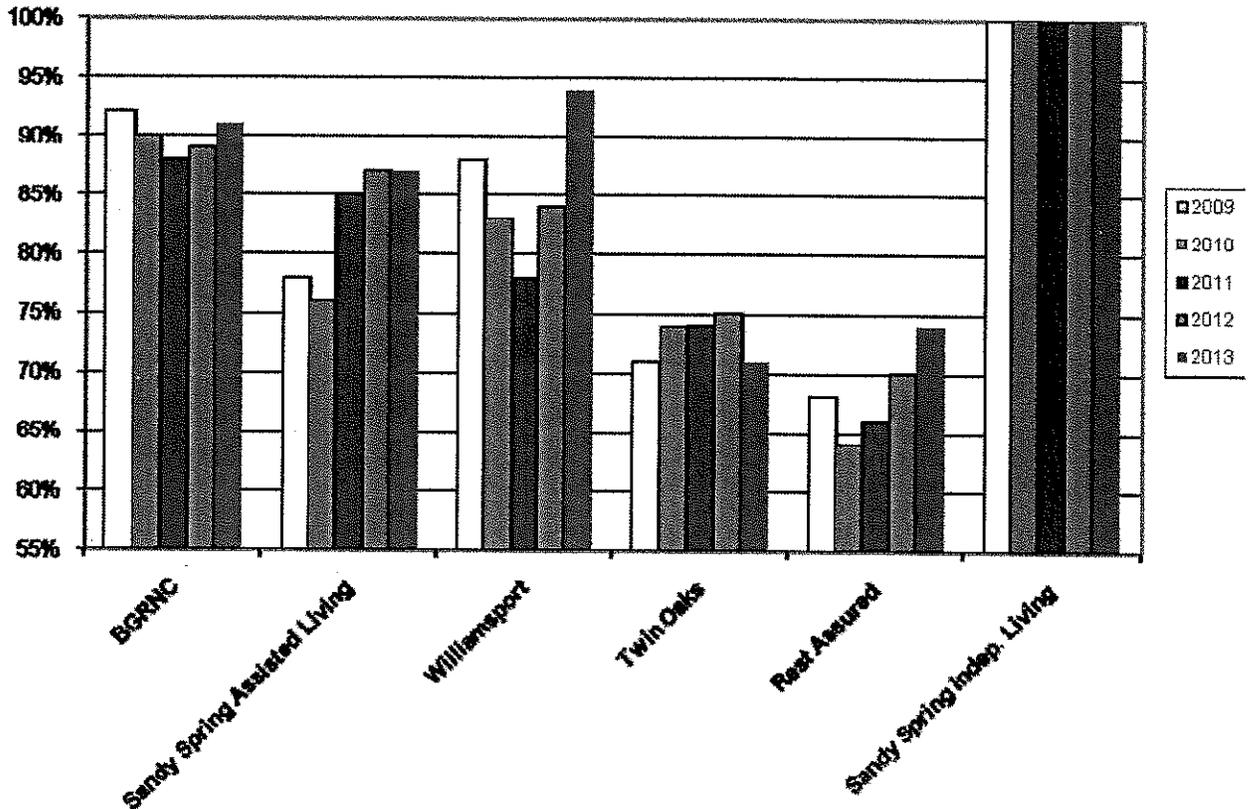
	BGRNC	Sandy Spring Assisted Living	Independent Living	Williamsport	Twin Oaks	Rest Assured	Home Office	Total
CASH FLOWS FROM OPERATING ACTIVITIES								
Change in unrestricted net assets	\$ 997,928	\$ 1,206,661	\$ (80,763)	\$ (456,137)	\$ 100,176	\$ 84,620	\$ -	\$ 1,852,485
Adjustments to reconcile change in unrestricted net assets to net cash provided by operating activities:								
Increase (decrease) in allowance for doubtful accounts	(85,514)	6,890	-	206,065	7,873	(7,064)	-	128,250
Advance fees received (refunded) - Independent Living	-	-	30,865	-	-	-	-	30,865
Amortization of advance fees	-	-	(229,800)	-	-	-	-	(229,800)
Amortization of refundable fees	-	-	(336,931)	-	-	-	-	(336,931)
Amortization of deferred finance charges	72,535	36,702	-	207,248	-	-	-	316,485
Depreciation expense	536,787	548,584	460,338	752,411	150,554	66,056	-	2,514,730
(Increase) decrease in operating assets:								
Accounts receivable	(260,725)	(26,663)	(3,178)	(279,282)	(6,298)	17,858	-	(558,288)
Entrance fee receivable	-	-	(400,000)	-	-	-	-	(400,000)
Other current assets	(17,228)	(12,328)	(5,145)	(482)	(9,989)	(2,081)	(1,113)	(48,366)
Increase (decrease) in operating liabilities:								
Accounts payable	2,942	(74,741)	72	42,118	(1,648)	7	(15,657)	(46,907)
Accounts payable - construction	-	50,044	-	39,042	-	-	-	89,086
Accrued wages	26,528	13,603	2,523	8,165	(4,000)	4,061	7,340	58,220
Accrued leave	49,180	16,103	6,275	(6,020)	2,975	(9,494)	30,506	89,525
Accrued health insurance reserve	-	25,176	-	-	-	-	-	25,176
Deferred revenue	28,387	(130,315)	-	13,877	2,441	(2,638)	-	(88,248)
NET CASH PROVIDED BY OPERATING ACTIVITIES	1,550,820	1,659,716	(555,744)	527,005	242,084	151,525	21,076	3,396,282
CASH FLOWS FROM INVESTING ACTIVITIES								
Acquisition of property and equipment	(1,180,841)	(169,459)	(198,847)	(1,013,778)	(25,361)	(135,285)	(16,426)	(2,739,997)
NET CASH USED BY INVESTING ACTIVITIES	(1,180,841)	(169,459)	(198,847)	(1,013,778)	(25,361)	(135,285)	(16,426)	(2,739,997)
CASH FLOWS FROM FINANCING ACTIVITIES								
Independent Living deposits (refunds)	-	-	815,655	-	-	-	-	815,655
Receipt (refund) of deposits on unoccupied units	-	-	10,000	-	-	-	-	10,000
Deferred finance charges paid	(64,778)	(19,748)	-	(188,113)	-	-	-	(272,639)
Principal payments on long-term debt	(405,000)	(533,539)	-	(46,140)	(87,408)	(43,987)	-	(1,116,074)
NET CASH PROVIDED (USED) BY FINANCING ACTIVITIES	(469,778)	(553,287)	825,655	(234,253)	(87,408)	(43,987)	-	(563,058)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(299,799)	936,970	71,064	(721,026)	129,315	(27,947)	4,650	93,227
Cash transfers between locations	314,809	(622,179)	11,378	402,010	(129,315)	27,947	(4,650)	-
CASH AND CASH EQUIVALENTS, beginning of the year	203,414	3,692,165	203,022	1,388,886	400	750	300,500	5,789,137
CASH AND CASH EQUIVALENTS, end of the year	\$ 218,424	\$ 4,006,956	\$ 285,464	\$ 1,069,870	\$ 400	\$ 750	\$ 300,500	\$ 5,882,364

BROOKE GROVE FOUNDATION, INC.
 SELECTED CHARTS AND GRAPHS
 FOR THE YEAR ENDING JUNE 30, 2013

Beds by Division

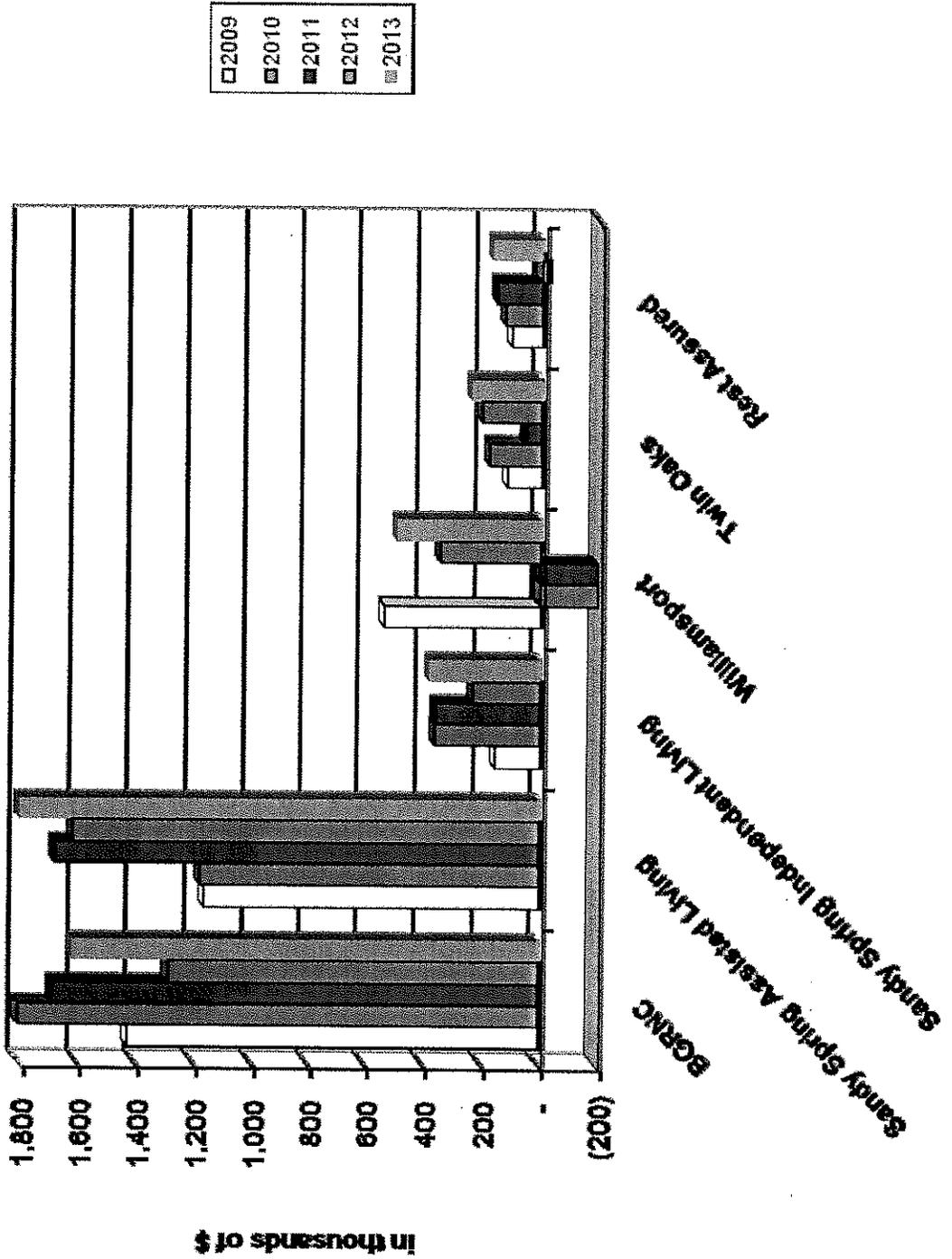


Census by Division



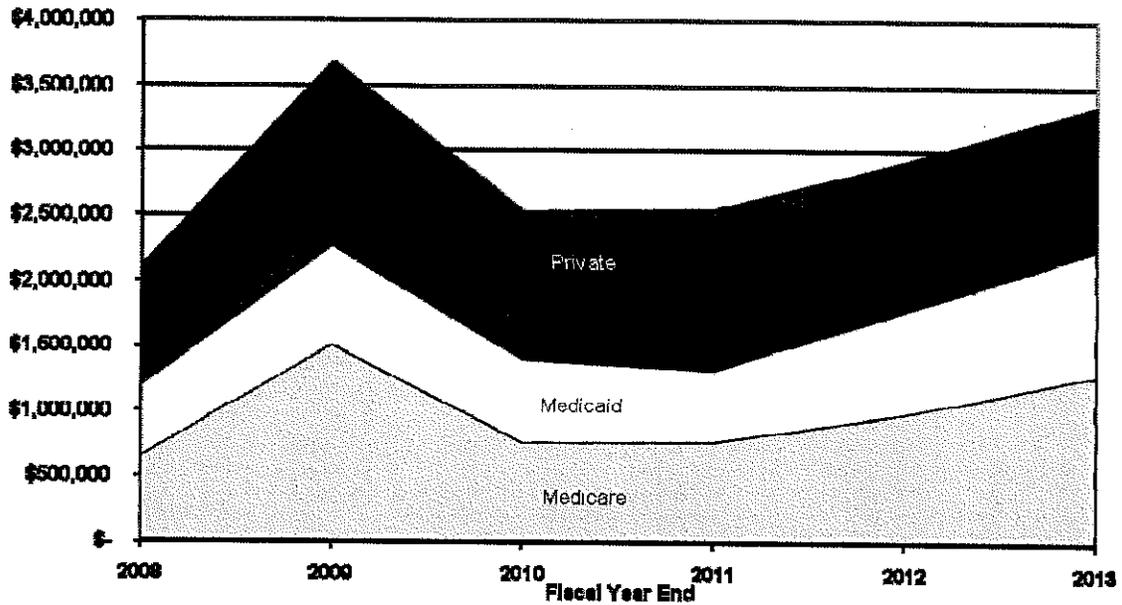
BROOKE GROVE FOUNDATION, INC.
 SELECTED CHARTS AND GRAPHS
 FOR THE YEAR ENDING JUNE 30, 2013

Net Revenue (Expense) from Operations
 Note: Excluding interest and depreciation

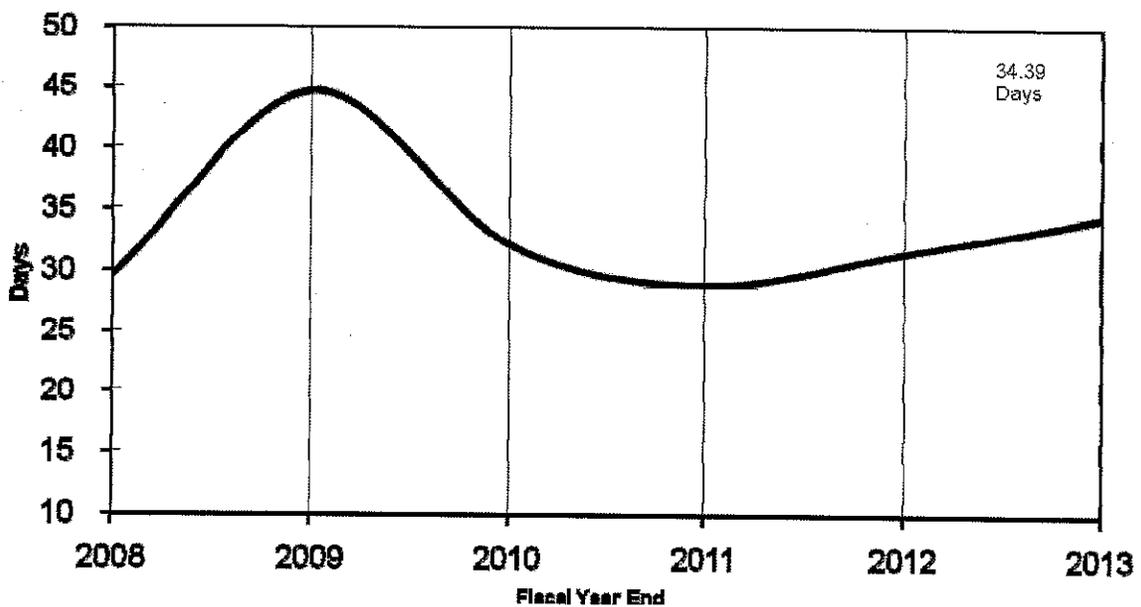


BROOKE GROVE FOUNDATION, INC.
 SELECTED CHARTS AND GRAPHS
 FOR THE YEAR ENDING JUNE 30, 2013

Composition of Accounts Receivable



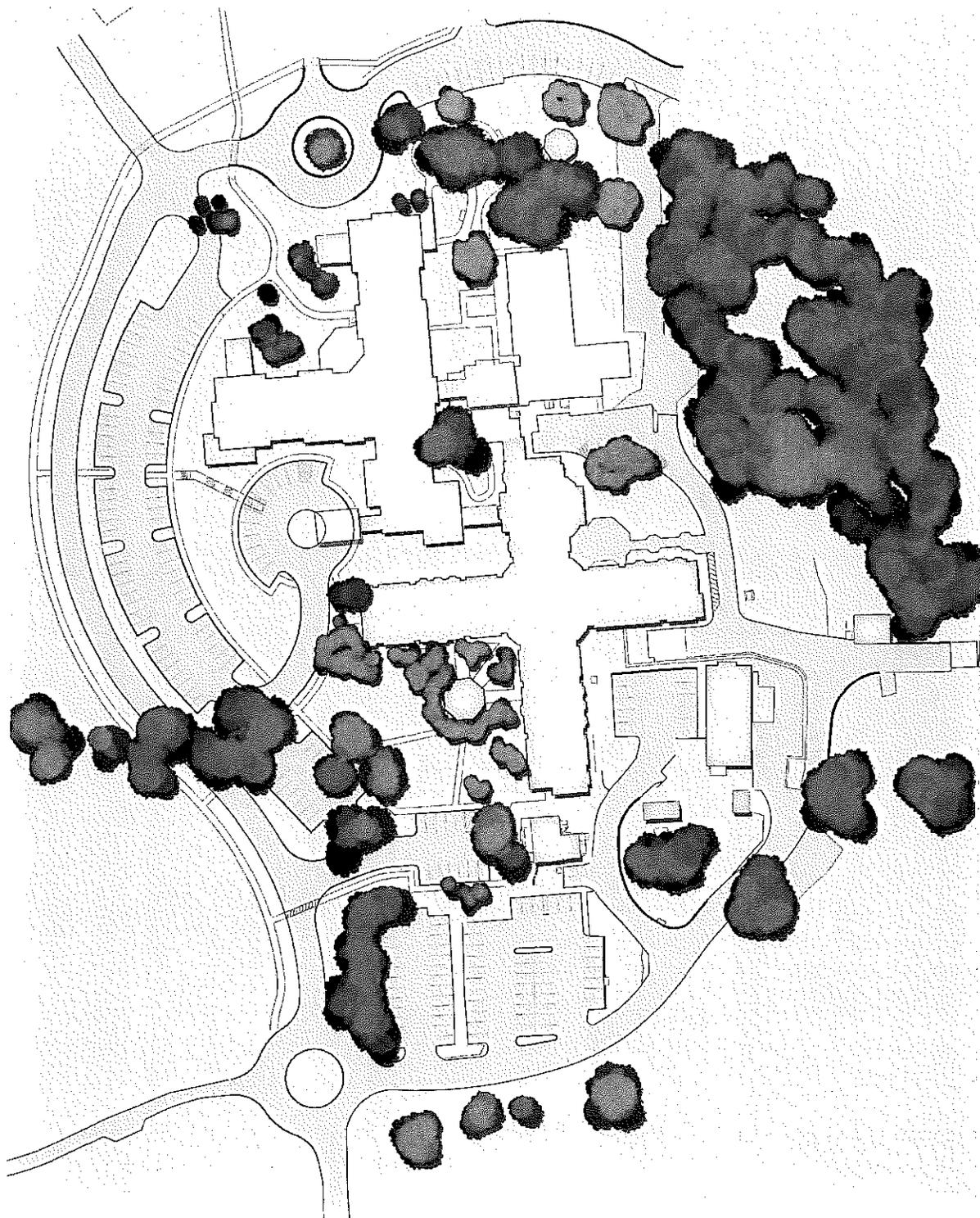
Collection Period as of the End of Fiscal Year

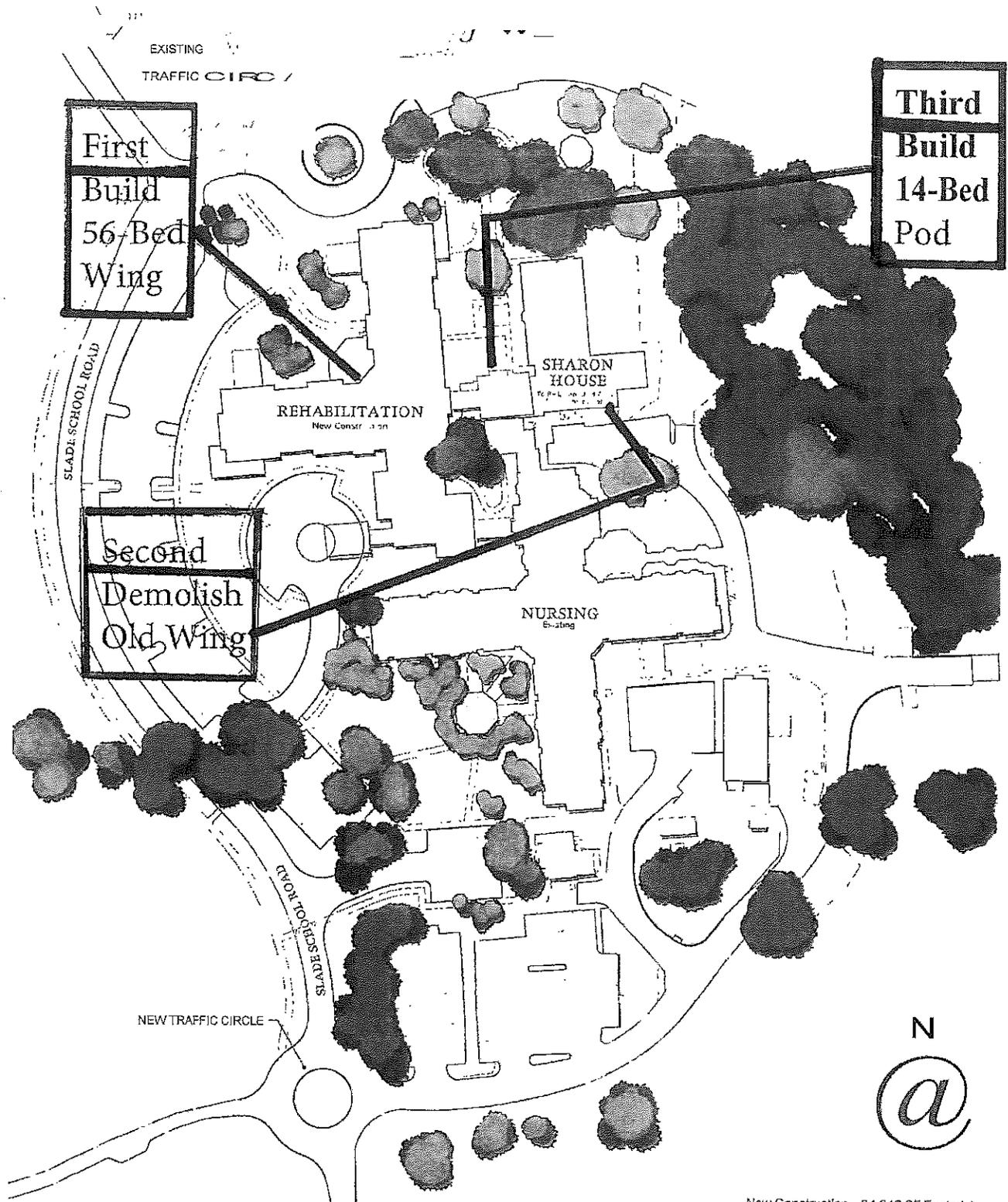


Brooke Grove Rehab and Nursing Center 70-Bed Replacement Facility



Brooke Grove Rehab and Nursing Center 70-Bed Replacement Facility





EXISTING
TRAFFIC CIRCLE

**First
Build
56-Bed
Wing**

**Third
Build
14-Bed
Pod**

**Second
Demolish
Old Wing**

REHABILITATION
New Construction

SHARON HOUSE
New Construction

NURSING
Existing

SLADE SCHOOL ROAD

SEAVEN SIDES ROAD

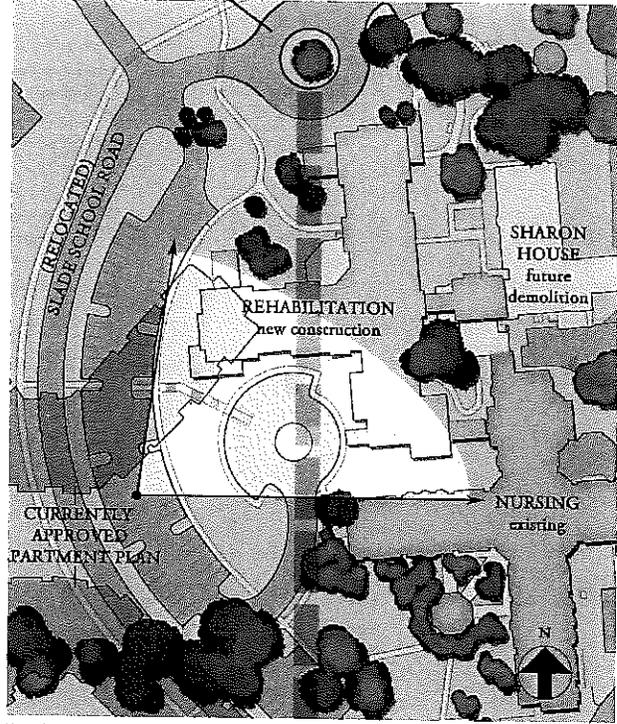
NEW TRAFFIC CIRCLE



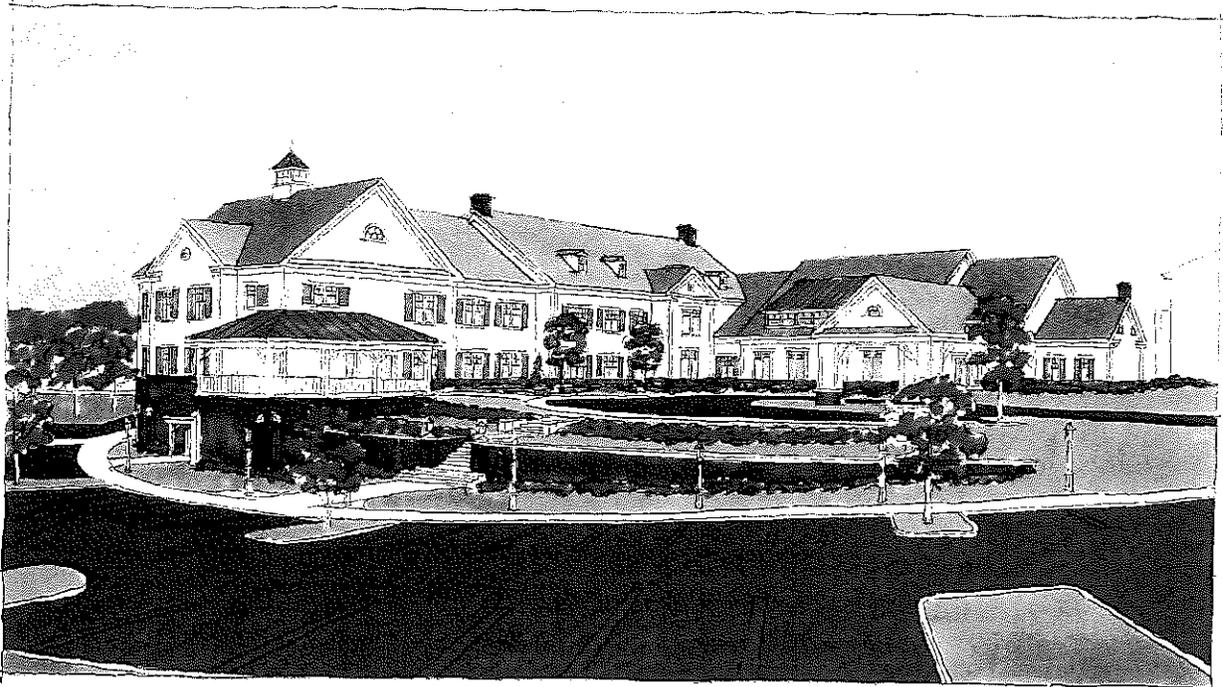
New Construction - 34,340 SF Footprint
Sharon House - 11,200 SF Footprint

**PROPOSED 70-BED
REPLACEMENT FACILITY**

Brooke Grove Foundation
Sandy Spring Campus



VANTAGE POINT FOR VIEW



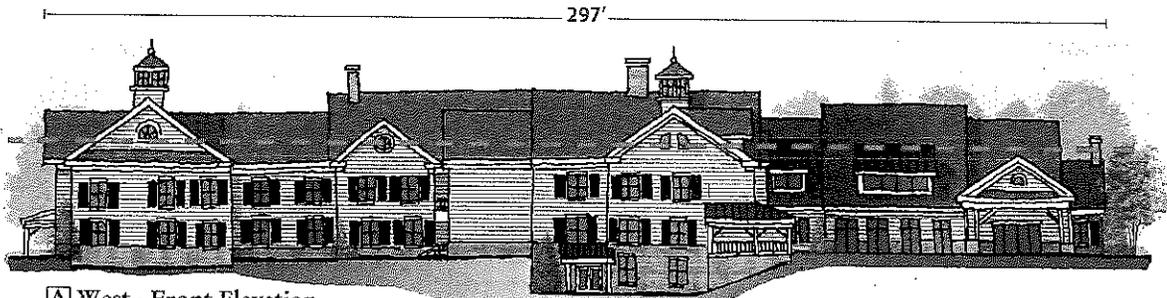
2013.0059



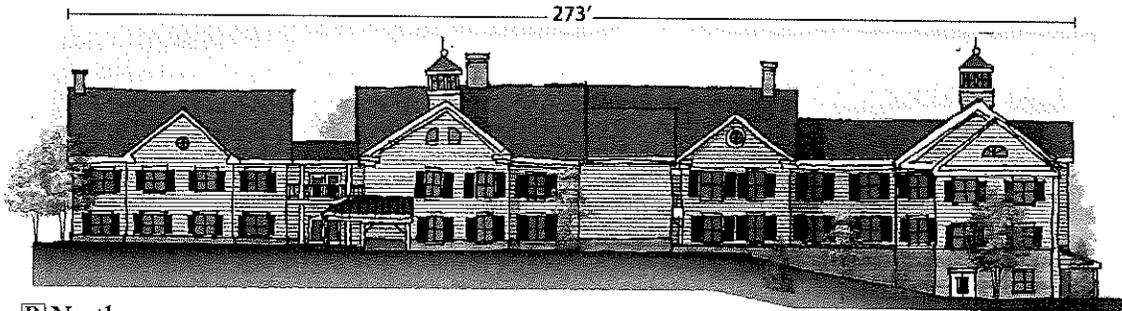
BROOKE GROVE FOUNDATION - SANDY SPRING CAMPUS
Proposed Rehabilitation Facility

March 26, 2013

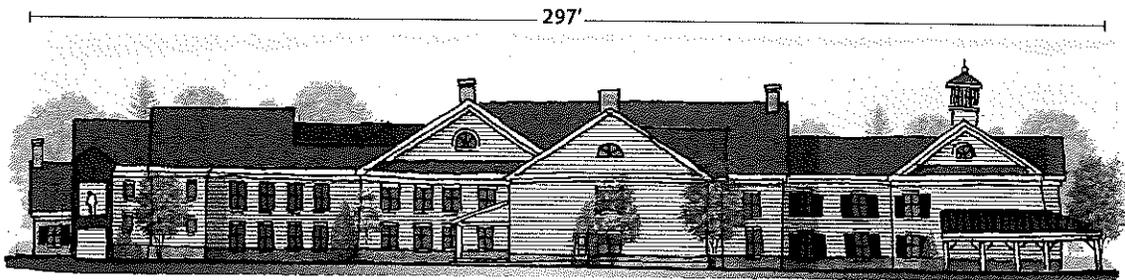




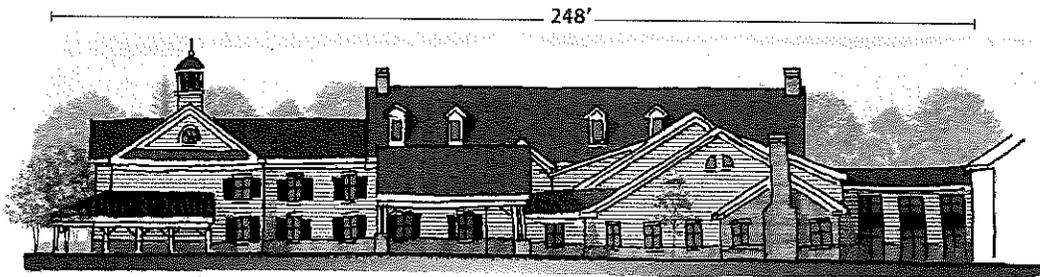
A West - Front Elevation
 Red Line Indicates Average Building Height of 33 Feet.



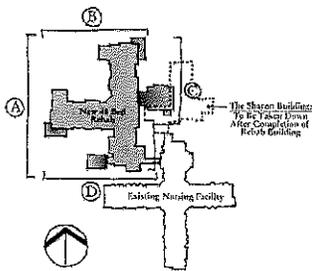
B North



C East



D South



2012059

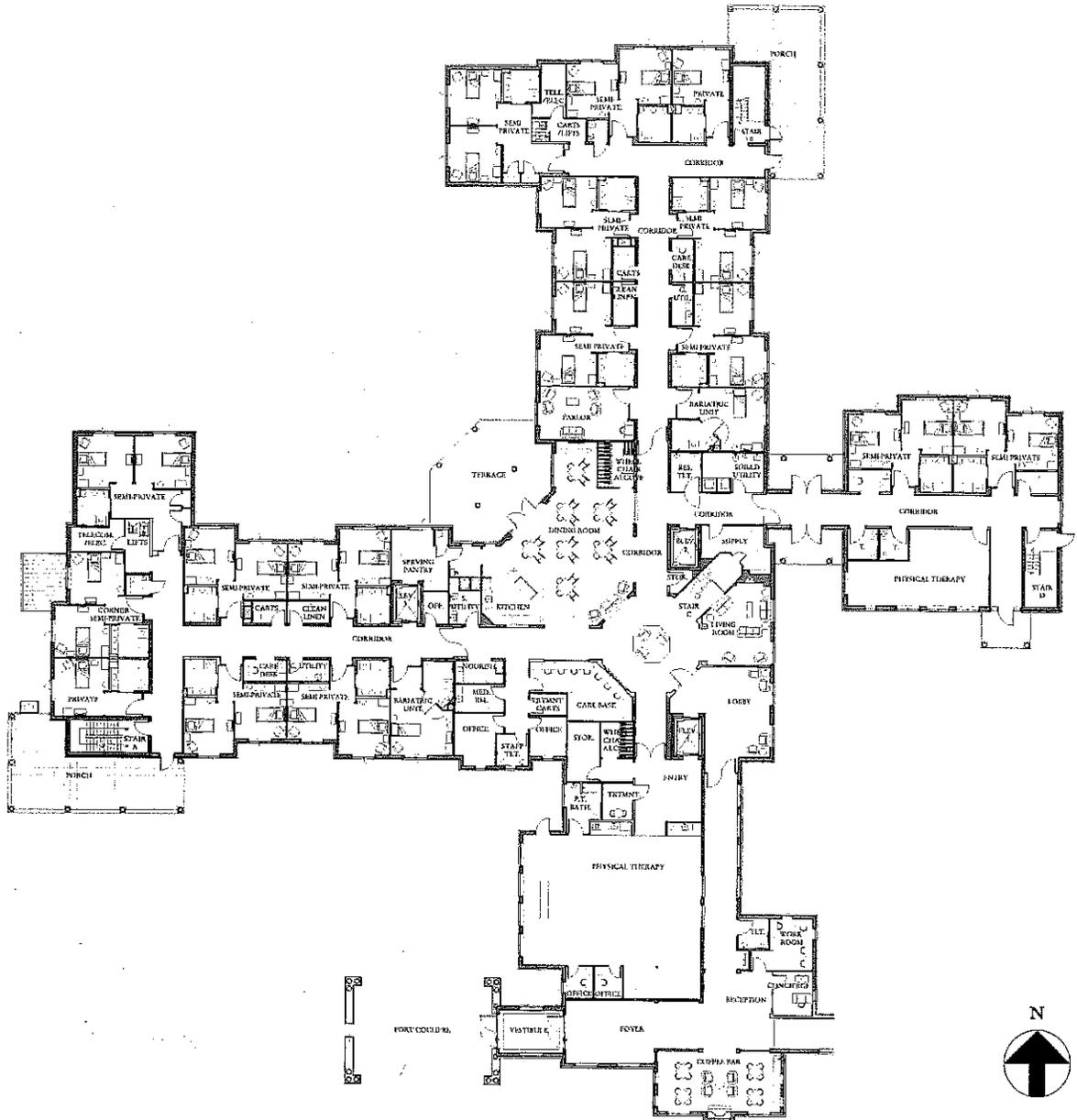


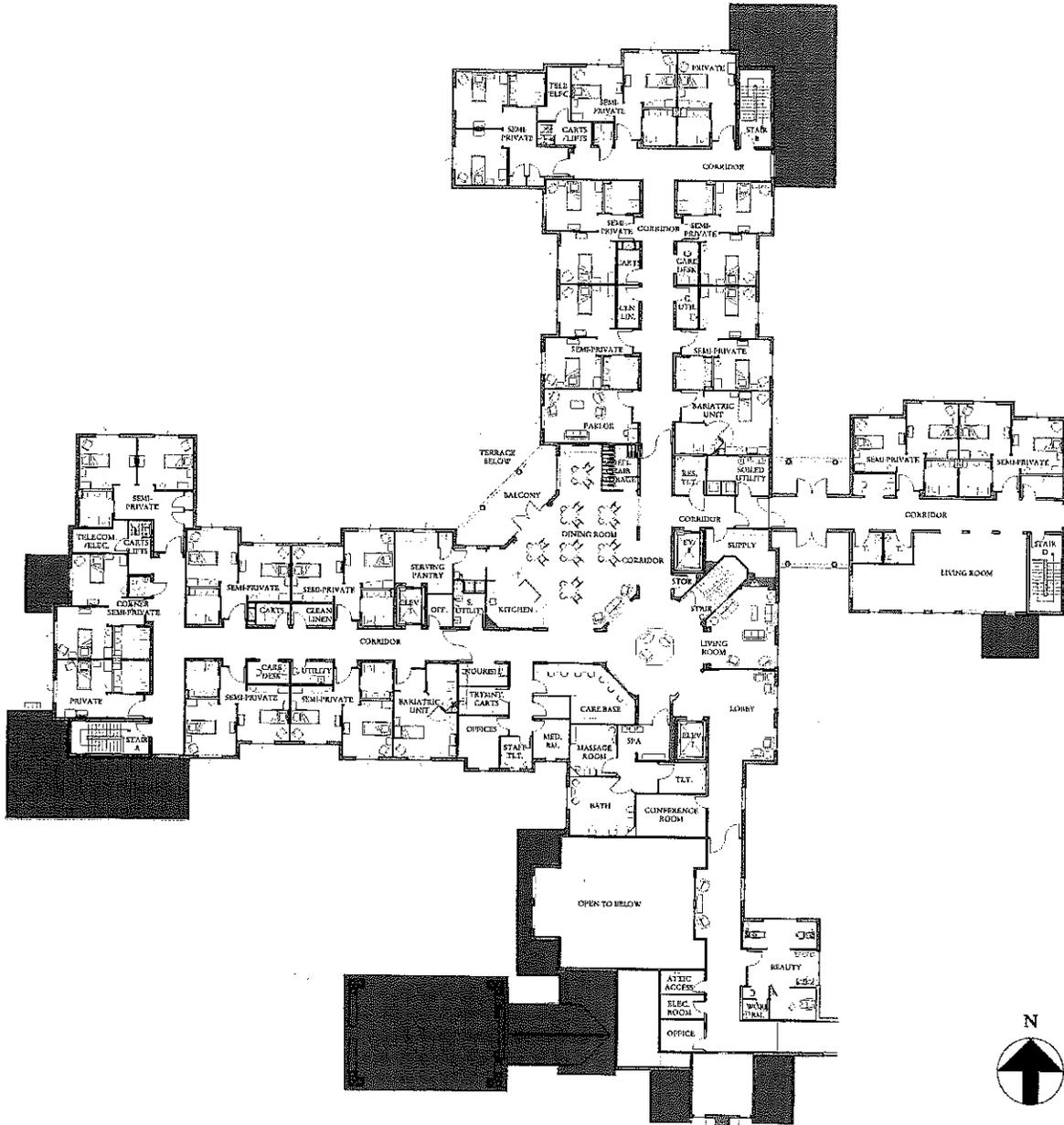
BROOKE GROVE FOUNDATION - SANDY SPRING CAMPUS
Rehabilitation Facility - Exterior Elevations

PETRA ENGINEERING LLC
 AN AFFILIATE OF THE PETRA GROUP



March 26, 2013





BROOKE GROVE FOUNDATION - SANDY SPRING CAMPUS
Rehabilitation Facility / Second Floor

Room Types and Sizes

Approximate Square Feet per Type of Room

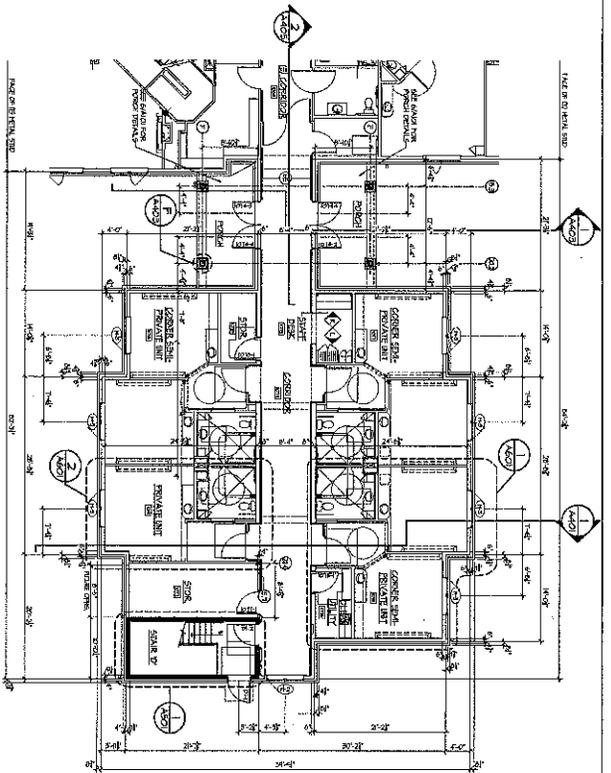
Companion Suite 1	547 Sq. Ft. Total
Bedroom A	193 Sq. Ft.
Bedroom B	195 Sq. Ft.
Bath	81 Sq. Ft.
Foyer	62 Sq. Ft.

Companion Suite 2	542 Sq. Ft. Total
Bedroom A	192 Sq. Ft.
Bedroom B	189 Sq. Ft.
Bath	81 Sq. Ft.
Foyer	65 Sq. Ft.

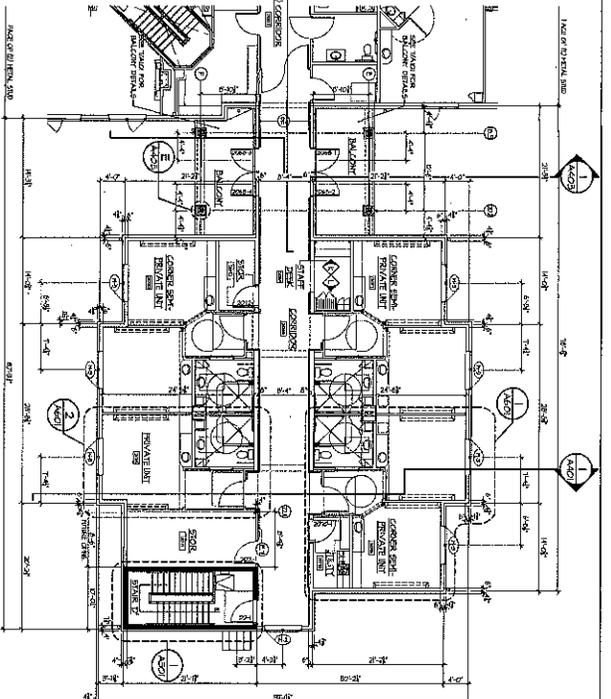
Companion Suite 3	734 Sq. Ft.
Bedroom A	194 Sq. Ft.
Bedroom B	196 Sq. Ft.
Bath	78 Sq. Ft.
Foyer	240 Sq. Ft.

Bariatric	395 Sq. Ft.
Bedroom	259 Sq. Ft.
Bath	86 Sq. Ft.
Foyer	40 Sq. Ft.

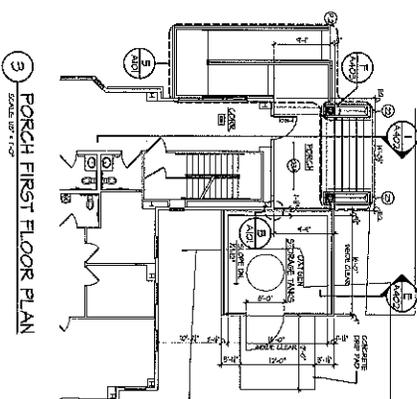
Private	364 Sq. Ft.
Bedroom	212 Sq. Ft.
Bath	81 Sq. Ft.
Foyer	61 Sq. St.



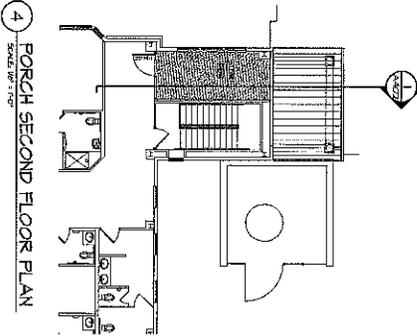
1 RESIDENT ROOM FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"



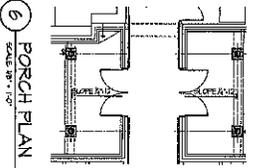
2 RESIDENT ROOM SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



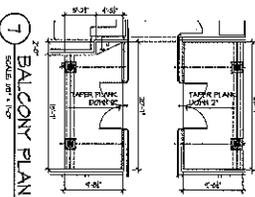
3 PORCH FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"



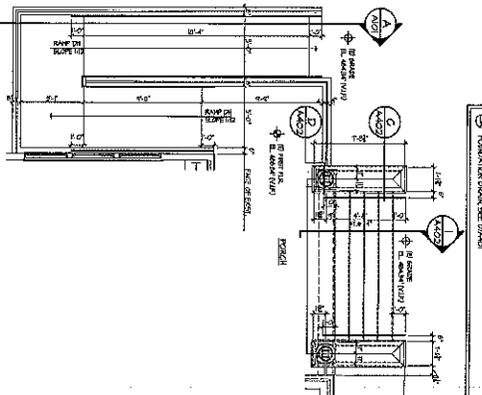
4 PORCH SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



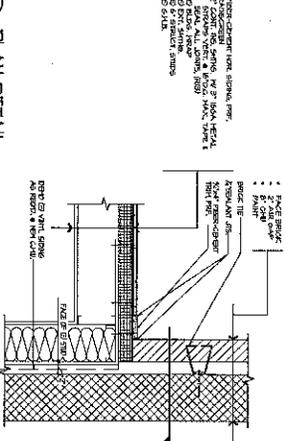
6 PORCH PLAN
SCALE 1/8" = 1'-0"



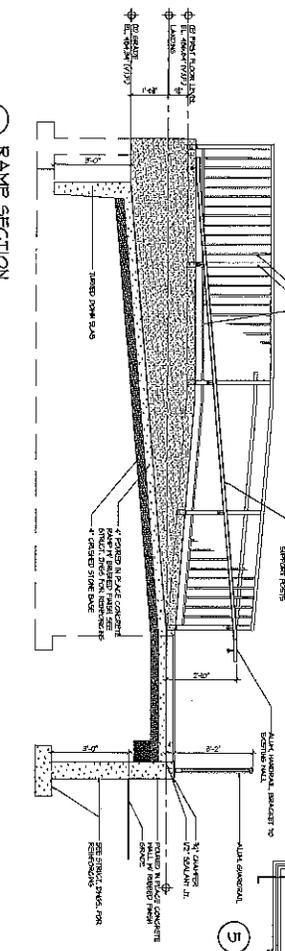
7 BALCONY PLAN
SCALE 1/8" = 1'-0"



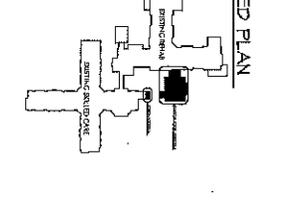
5 ENLARGED PLAN
SCALE 1/8" = 1'-0"



B PLAN DETAIL
SCALE 1/8" = 1'-0"

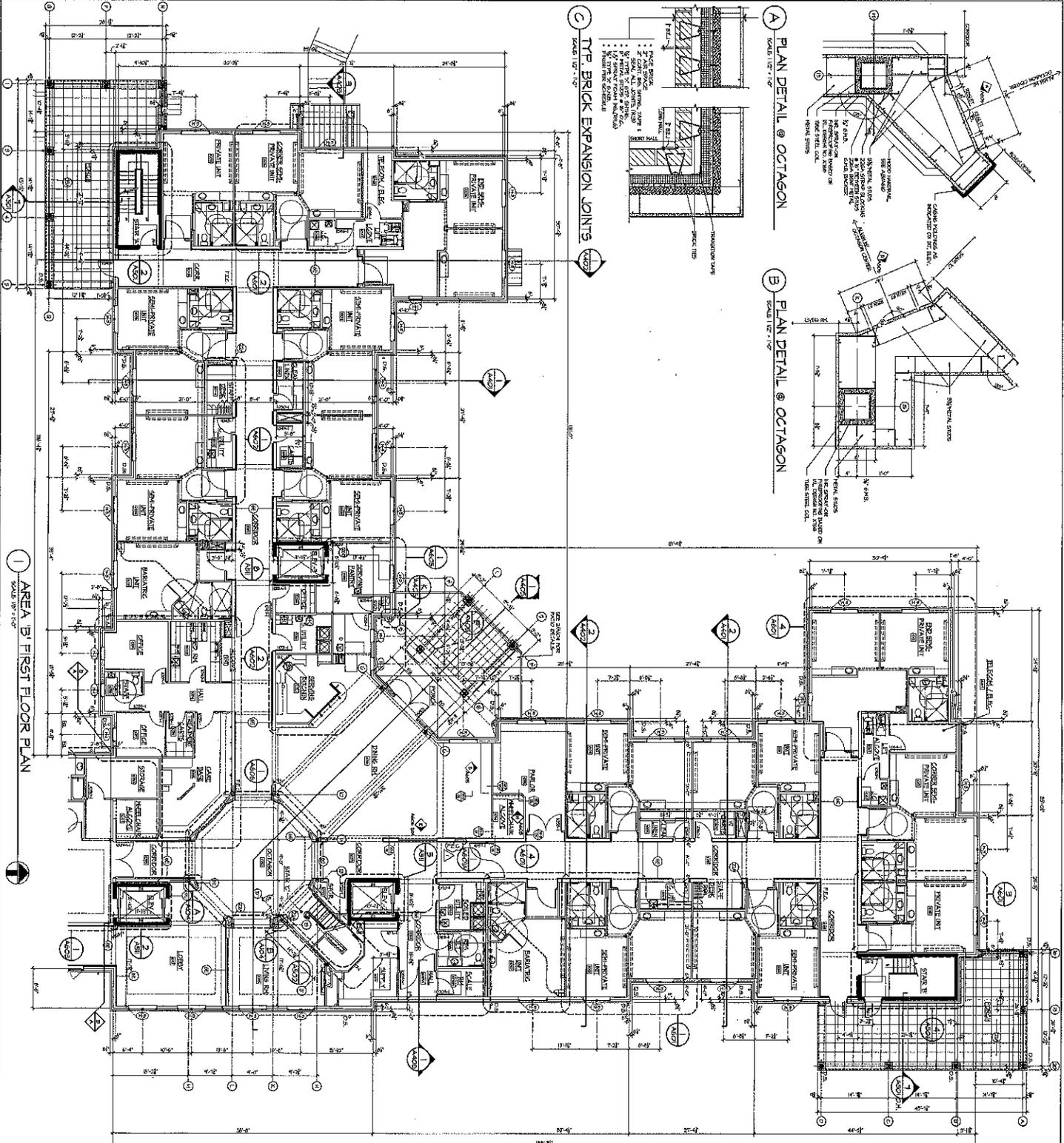


A RAMP SECTION
SCALE 1/8" = 1'-0"



KEY PLAN
SCALE 1/8" = 1'-0"

- GENERAL PLAN NOTES**
1. THE WORK SHOWN HEREIN IS THE RESULT OF A VISUAL SURVEY AND FIELD CHECKS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.
 2. WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
 3. ALL MATERIALS AND METHODS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO CONSTRUCTION.
 4. ALL MATERIALS SHALL BE TESTED AND REPORTS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.
 5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
- KEYED PLAN NOTES**
1. PROTECT EXISTING CONCRETE AND REINFORCEMENT FROM DAMAGE.
 2. REPAIR CONCRETE DAMAGE TO MATCH EXISTING SURFACE.
 3. PROVIDE PROTECTIVE CURBS AND EDGE FINISHES TO ALL EXPOSED CONCRETE SURFACES.
 4. PROVIDE PROTECTIVE CURBS AND EDGE FINISHES TO ALL EXPOSED CONCRETE SURFACES.
 5. PROVIDE PROTECTIVE CURBS AND EDGE FINISHES TO ALL EXPOSED CONCRETE SURFACES.
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 19. PROVIDE PROTECTIVE CURBS AND EDGE FINISHES TO ALL EXPOSED CONCRETE SURFACES.
 20. PROVIDE PROTECTIVE CURBS AND EDGE FINISHES TO ALL EXPOSED CONCRETE SURFACES.



1 AREA B' FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

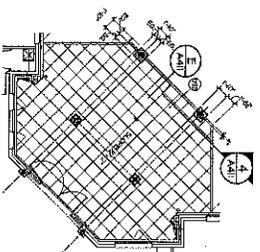
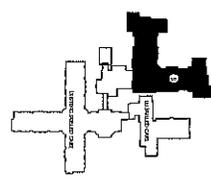
C TYP. BRICK EXPANSION JOINTS
SCALE 1/2" = 1'-0"

A PLAN DETAIL @ OCTAGON
SCALE 1/2" = 1'-0"

B PLAN DETAIL @ OCTAGON
SCALE 1/2" = 1'-0"

KEY PLAN
SCALE 1/8" = 1'-0"

2 PATIO PLAN
SCALE 1/8" = 1'-0"

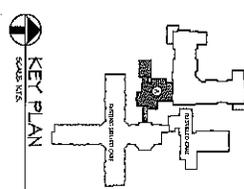
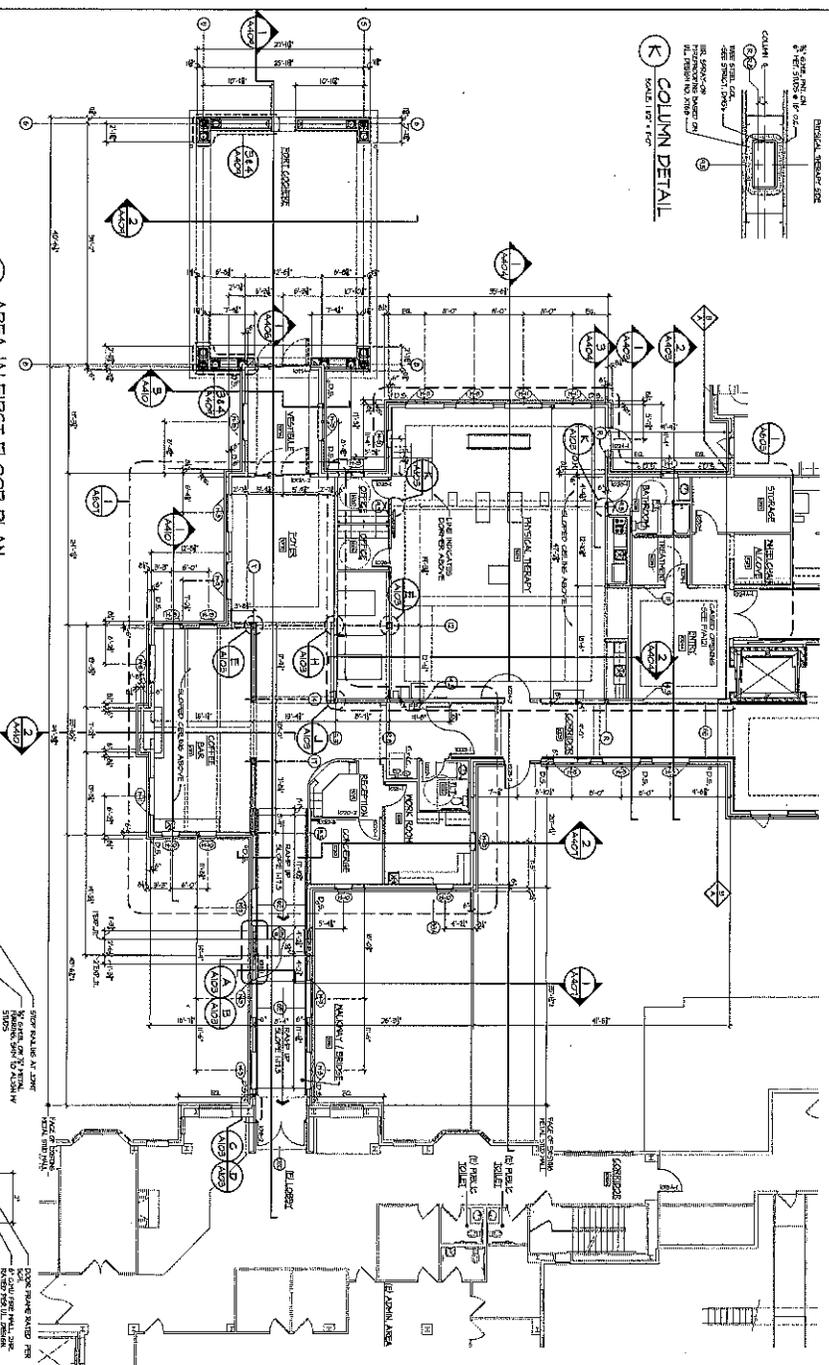
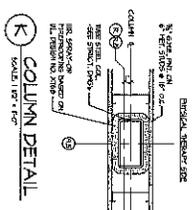


GENERAL PLAN NOTES

1. REFER TO THE GENERAL NOTES FOR ALL SPECIFICATIONS.
2. EXISTING CONDITIONS SHALL BE SHOWN AS DASHED LINES.
3. ALL WORK SHALL BE TO BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND ALL APPLICABLE REGULATIONS.
4. ALL MATERIALS SHALL BE OF THE HIGHEST QUALITY AVAILABLE.
5. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.

KEY PLAN NOTES

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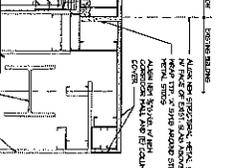
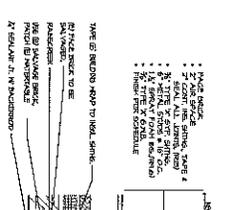
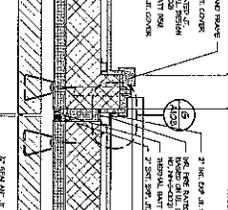
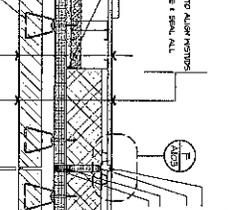
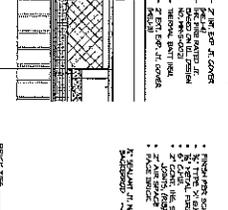
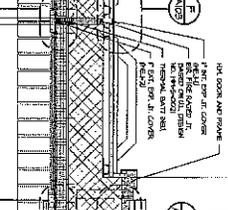
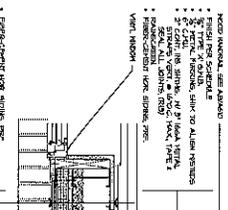
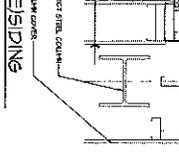
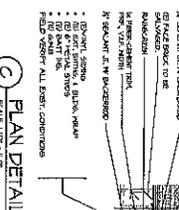
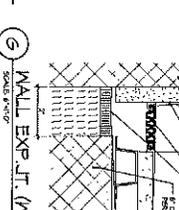
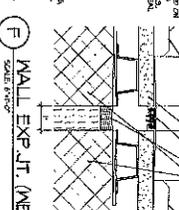
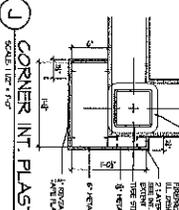
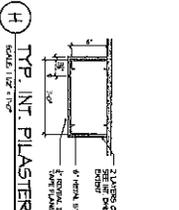
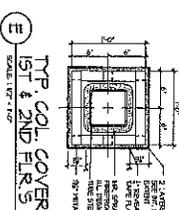


- ### GENERAL PLAN NOTES
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 2. REFER TO THE ARCHITECT'S GENERAL NOTES FOR FINISHES AND MATERIALS.
 3. REFER TO THE ARCHITECT'S GENERAL NOTES FOR MECHANICAL AND ELECTRICAL REQUIREMENTS.
 4. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
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- ### KEY PLAN NOTES
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19. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
20. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.

1 AREA 1A FIRST FLOOR PLAN
SCALE: 1/8"



A FIRE WALL DETAIL @ SIDING
SCALE: 1/2"

B FIRE WALL DETAIL @ BRICK
SCALE: 1/2"

D PLAN DETAIL @ (BRICK)
SCALE: 1/2"

- 1. REFER TO THE ARCHITECT'S GENERAL NOTES FOR STRUCTURAL REQUIREMENTS.
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- 20. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.

2014 Total Population Projections, Non-Hispanic White and All Other by Age, Sex and Race (7/8/14)
Prepared by Maryland Department of Planning

Age Projections for Montgomery County

	80-84	85+	Total	Increase
2010	17347	19431	36778	
2020	18341	22412	40753	1.108081
2030	30974	28536	59510	1.618087
2040	39778	42900	82678	2.248029

Rehab Utilization 4 Year History	2010	2011	2012	2013
	Medicare A caseload	678	703	805
Managed Care A caseload	0	2	6	7
Ultra High RUG Days	3676	4996	6445	7579
Very High RUG Days	3739	4277	4082	4566
High RUG Days	668	578	671	398
Medium RUG Days	870	224	193	110
Low RUG Days	0	0	7	7
Total RUG Days	8953	10075	11398	12660

Program aims to allow seniors to age in place

Free transportation service to begin in January

BY TERRI HOGAN
STAFF WRITER

Olney's senior population is expected to triple during the next 30 years, so several residents are forming an organization to help older residents stay in their homes longer.

Mike Greenhut first approached the Greater Olney Civic Association with the idea of creating an aging in place program in December. As he explained to the organization, the village model was sweeping across the country, and he wanted to explore the feasibility of creating a similar program.

"I've been aware of the village concept for several years, because I volunteer with county agencies," Greenhut said. "I did some research, and thought, why not here?"

Surveys across the nation show seniors overwhelmingly want to age in place, Greenhut said. The AARP

found 93 percent of people age 65 and older want to stay in their current homes as long as possible, and nearly 60 percent of Montgomery County seniors who were surveyed said they expected to be living in the same home 10 years later.

Following Greenhut's presentation, a committee was formed to establish Olney-Home for Life, a village concept featuring a volunteer-based, neighbor-to-neighbor support network. The board members for the group are Greenhut, Marlene Zaborsky, Barbara Berry and Tom Callahan.

The village idea originated in Beacon Hill, Mass., in 2001. That program, which is fee-based, was successful, and now the idea has spread across the country, including the Washington, D.C., area.

Ken Hartman, county regional director for Bethesda, Potomac and Rockville, has worked with several communities that have created villages,

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"We may even vet some other services and create a list of providers who will provide services at a discount," Zaborsky said.

For now, the program will be strictly volunteer, but that could change, Zaborsky said.

"People are more likely to ask for help if they are paying," she said.

Zaborsky said the group will partner with the Greater Olney Interfaith Ministerium to help identify the people that need help. The committee also plans to reach out to senior groups and senior living communities.

In addition to spreading the word, the group plans to have a fundraiser to help raise some seed money. It also has asked the county for \$8,000 to help with start-up costs.

Currently, the most urgent need is for volunteers willing to provide transportation.

"We are also hoping to recruit volunteers with expertise in finance and accounting, nonprofit and/or association law, fundraising and development, managing volunteers and/or experience working with aging and the elderly," Zaborsky said.

For more information or to volunteer, contact Olney Home for Life at 240-406-9209 or info@olneyhomeforlife.org, or visit the website www.olneyhomeforlife.org.

The county created a "how to" book on starting villages, and that there has been tremendous interest throughout the county, Hartman said. There already are several villages in place, and several others in the works.

Olney now is old enough for a village of its own, because many of the original homeowners now are retired and at an age where they could benefit from such a program, Hartman said.

Olney's senior population will grow by 259.6 percent from 2005 to 2040, while the overall county growth in the senior population will be 94.1 percent in the same time period, according to data provided by the Maryland-National Capital Park and Planning Commission for the Olney planning area.

The Olney-Home for Life committee plans to roll out the first phase of the program in January by offering free transportation to people who can't drive.

Members of the committee decided not to wait until the organization was a fully set up before starting to offer transportation services, because they found that to be the greatest need.

"It will be mostly seniors, but we will also include the disabled and military families," said Zaborsky. "We will take them to doctor's appointments, grocery shopping and serve their needs

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including Cabin John, Bannockburn and Burning Tree in Bethesda.

"The village is the essence of a community," he said "What a wonderful idea for neighborhood to organize themselves around helping each other. That provides a tremendous benefit to the community and the county."

Although all villages are set up differently, they all start with a basic concept: Neighbors getting to know each other, Hartman said.

In addition to providing transportation and handyman services, these organizations often offer lectures, coffees and other events to get seniors out of their homes to connect with each other, which encourages an active, healthier lifestyle.



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Meeting the Long-Term Care Needs of the Baby Boomers

How Changing Families Will Affect Paid Helpers and Institutions

RICHARD W. JOHNSON, DESMOND TOOHEY, JOSHUA M. WIENER

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Abstract

The demand for long-term care services will surge in coming decades when the baby boomers reach their 80s. Declining family sizes, increasing childlessness, and rising divorce rates will limit the number of family caregivers. Rising female employment rates may further reduce the availability of family care, increasing the future need for paid home care. This study projects to 2040 the number of people ages 65 and older with disabilities and their use of long-term care services. The simulations show that even under the most optimistic scenario long-term care burdens on families and institutions will increase substantially.

Executive Summary

Population aging, especially when the baby boomers reach ages 85 and older, signals a likely surge in the use of long-term care services. Long-term care is the help people need when physical or mental disabilities impair their capacity to perform everyday life's basic tasks. It is a leading cause of catastrophic out-of-pocket costs for families and involves substantial government spending, primarily through Medicaid and Medicare. Few people have insurance coverage against the high costs of long-term care. After impoverishing themselves, most people must turn to Medicaid, a means-tested welfare program, to pay for their long-term care services. The quality of long-term care is often problematic, and a growing shortage of long-term care workers will likely further threaten service delivery.

Social and demographic changes create additional challenges. Much of the care received by frail elders is provided informally by the family, and adult daughters often assume primary responsibility for their parents' care. The availability of family caregivers may fall over time because of rising divorce rates, increasing childlessness, and declining family sizes. The rising labor force participation of women may also reduce their ability to provide informal care, and it is unclear whether men will fill the gap.

The future demand for long-term care depends heavily on how old-age disability rates evolve over time. Although evidence points to recent health improvements at older ages, there is no guarantee that these trends will continue. Disability associated with the rising prevalence of diabetes and obesity in the younger population might offset the future decline in disability rates at older ages.

The analysis combines new results from models of current long-term care use with simulations of the size and characteristics of the future population. Population projections were based on *DYNASIM3*, the Urban Institute's dynamic microsimulation model of the older population. Models of current long-term care arrangements were estimated based on data from the 2002 Health and Retirement Study, a nationally representative survey of older Americans. The projections show how changes in disability levels, financial resources, children's availability, and other characteristics will affect the future demand for paid and unpaid long-term care services.

Given uncertainty about future disability rates, the report shows outcomes for three different disability projection scenarios. The intermediate disability scenario, which provides the "best guess" of the future size of the frail older population, does not assume any particular trend in disability rates. Instead, projected rates depend on changing mortality rates, educational attainment, income levels, and age and race distributions. The high disability projections assume that old-age disability rates will increase by 0.6 percent per year from 2000 to 2014 and remain constant thereafter, reflecting recent disability increases at younger ages. The low disability projections assume that overall old-age disability rates will decline by 1 percent per year indefinitely. The analysis defines disability as any difficulty with the activities of daily living (such as eating, bathing, and dressing) or the instrumental activities of daily living (such as housekeeping, using the telephone, and managing money).

- The intermediate disability growth scenario shows that disability rates at ages 65 and older will decline by a few percentage points between 2000 and 2020 but then rise somewhat through 2040 as the earliest boomers reach their 80s. Between 2000 and 2040, this scenario projects that old-age disability rates will fall from 30 to 28 percent.
- Because the overall size of the older population will increase rapidly, the number of disabled older Americans

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- will soar in coming decades. Between 2000 and 2040 the number of older adults with disabilities will more than double, increasing from about 10 million to about 21 million, according to the intermediate disability scenario.
- The disabled older population will grow faster than the younger population, likely raising the economic burden of long-term care. The intermediate disability scenario projects that in 2040 there will be only about 9 adults ages 25 to 64 to support each disabled older adult, down from about 15 younger adults in 2000.
 - Even under the most optimistic disability scenario, which assumes that disability rates fall by 1 percent per year, the size of the disabled older population will grow by more than 50 percent between 2000 and 2040, and the number of disabled older adults for every adult ages 25 to 64 will increase.
 - Between 2000 and 2040, the share of disabled older adults receiving paid help will increase from about 22 to 26 percent, while the share receiving unpaid help from children will fall from about 28 to 24 percent. These projections reflect declines in average family size and continued improvement in women's earnings prospects.
 - Rapid population growth will substantially boost the number of older people using paid long-term care services. If future disability rates follow the intermediate growth scenario, the number receiving paid home care will more than double between 2000 and 2040, increasing from 2.2 million to 5.3 million. The number of older nursing home residents will also more than double over the period, increasing from 1.2 million to 2.7 million.
 - The simulations show that even under the most optimistic scenario long-term care burdens on families and institutions will increase substantially in coming decades. If disability rates decrease steadily and substantially over time the number of older adults using paid home care will increase by three-fourths between 2000 and 2040 and the number in nursing homes will increase by two-thirds.
 - Between 2000 and 2040 the average number of paid hours of help hours per frail elder will increase by about 36 percent, from 163 hours per month to 221 hours.
 - The projected increase in the intensity of paid home care, combined with the increase in the size of the frail older population, will substantially boost the total number of paid home care hours received by older Americans. Under the intermediate disability growth scenario, total paid home care hours will more than triple between 2000 and 2040. Total paid home care hours would almost quadruple under the high disability scenario.

How long-term care arrangements actually evolve will depend heavily on future policy choices. Efforts to promote private long-term care insurance might add funding for future long-term care services and increase the use of paid care. Medicaid and Medicare expansions could also make paid services more affordable. However, problems recruiting and retaining long-term care workers could limit the availability of paid services and sharply raise costs. The financing and organization of long-term care is the third leg of retirement security for America's older adults as they age. It deserves more attention from policymakers to ensure that frail elders receive high quality care that is affordable to them and society.

The full report is available in PDF format.

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Long-Term Care Over an Uncertain Future: What Can Current Retirees Expect?

The leading edge of the baby boom generation is nearing retirement and facing uncertainty about its need for long-term care (LTC). Using a microsimulation model, this analysis projected that people currently turning age 65 will need LTC for three years on average. An important share of needed care will be covered by public programs and some private insurance, but much of the care will be an uninsured private responsibility of individuals and their families—a responsibility that will be distributed unequally. While over a third of those now turning 65 are projected to never receive family care, three out of 10 will rely on family care for more than two years. Similarly, half of people turning 65 will have no private out-of-pocket expenditures for LTC, while more than one in 20 are projected to spend \$100,000 or more of their own money (in present discounted value). Policy debate that focuses only on income security and acute care—and the corresponding Social Security and Medicare programs—misses the third, largely private, risk that retirees face: that of needing LTC.

In 2011, the leading edge of the baby boom generation turns 65, beginning a retirement boom that will extend over the next two decades. In the years before these people die, they will need retirement income to pay for living expenses and for expenditures for acute care not covered by Medicare. In addition, some will need long-term care (LTC)—that is, help with activities of daily living (ADLs) (personal care tasks such as bathing, dressing, or eating) that they cannot do for themselves because of a disability.

Currently, public programs and private insurance pay for only part of the cost of LTC. Medi-

care is not designed to cover long-term, supportive services. It does provide, however, some limited coverage of LTC through its skilled nursing facility and home health benefits, which focus on short-term, rehabilitative skilled nursing care and therapies. Although an active, private LTC insurance market exists, only a small proportion of people have private policies (Cornel 2004). Medicaid pays for LTC, but only for those with limited income and assets. This means individuals must have low income and savings, or must exhaust their financial resources, if they are to qualify for Medicaid coverage. Moreover,

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Medicaid covers institutional nursing home care to a much greater extent than it covers home and community-based care.

Whether an individual will need LTC and for how long is uncertain. Consequently, it is important to understand the LTC risks, particularly the uninsured risks, that retiring baby boomers face over the rest of their lives, and to understand how they will meet their need for LTC if current policy and behavior do not change. This understanding is important for policymakers considering changes in LTC financing policy. It is equally important to individuals and families planning for retirement and facing uncertainty about their need for LTC.

The purpose of this paper is to address three related questions:

- What remaining lifetime risk of needing LTC do retiring baby boomers face?
- For how long are they likely to use paid and unpaid LTC?
- Who will finance their LTC?

Our interest here is in risk; thus, in addressing these questions we focus particularly on the variation across individuals—that is, the distributions of lifetime need, use, and cost of LTC.

These questions are about the prospective lifetime LTC need, use, and costs of individuals *over the rest of their lives*. Much of the previous research, in contrast, has examined LTC need, use, and cost for a cross-section of the population *at a point in time* (for example, see Wiener, Illston, and Hanley 1994; Spector and Kemper 1994; Feder, Komisar, and Niefeld 2000). Cross-sectional estimates provide useful information for considering the implications of changes in policy and behavior for government budgets at a specific time. Prospective lifetime estimates, in contrast, take the perspective of the individual looking over the rest of his or her life. They aid in understanding the distribution of the risks of needing LTC for varying durations and of who bears the cost of providing or paying for the care.

Previous Research

While the published research taking the lifetime perspective is limited, some research has been done on each of the three questions. Most of the research looks at averages; very little is about

the distribution of need, use, or cost, which is the focus of this paper.

Most of the literature on lifetime disability estimates the average number of remaining years of life that will be free of disability (active life expectancy) and the remaining years with disability. Because studies differ in the population examined, in the definition of disability, and in methods, it is difficult to make direct comparisons among their findings.¹ At the low end of the range of estimates for people at age 65, Murtaugh, Spillman, and Warshawsky (2001) project that men will average 1.6 years of ADL disability or cognitive impairment over the rest of their lives, and women 2.6 years. Manton and Land's (2000) estimate of years of moderate or severe impairment or institutional care is lower for men (1.2 years), but higher for women (3.9 years). Among the higher estimates for people at age 65, Manton, Stallard, and Liu (1993) estimate 2.6 years of disability for men, on average, and 4.9 years for women, using a somewhat broader definition of disability. Several studies have estimated average remaining years of disability for people at age 70, and have yielded an even wider range of estimates (Crimmins, Hayward, and Saito 1994, 1996; Laditka and Wolf 1998; Lubitz et al. 2003). Lifetime disability studies have not examined variation among individuals except to the extent of estimating the proportion of individuals who ever experience disability.²

Previous research on lifetime service use has not addressed use of home and community-based services or informal care, but has addressed nursing home use (Kemper and Murtaugh 1991). Specifically, studies have estimated the risk at age 65 of using a nursing home some time before death, the expected number of years of use, or the risk of using more than five years of care. As Murtaugh et al. (1997) discuss, the studies used a variety of data and methodologies.³ Estimates of the risk of any use after turning age 65 are between 35% and 55%. Among those projected to use a nursing home, estimates of average total use after age 65 range from 1.8 to 2.8 years, and the risk of using more than five years ranges from 12% to 21%. Two studies estimate remaining lifetime nursing home use beginning at ages other than 65. While direct comparison is not possible, Lubitz et al.'s (2003) estimate of the number of years that will be spent in a nursing

home after age 70 is at the low end of the range of the estimates that start at age 65. Laditka's (1998) estimates of lifetime risk of nursing home use at age 75 appear to be substantially lower than the risk suggested by the estimates at age 65.

Finally, published research on lifetime LTC costs and their distribution is quite limited. Spillman and Lubitz (2000) estimated that lifetime LTC expenditures for nursing home care for people turning 65 in 2000 will total about \$44,000 (in 1996 dollars without discounting). Their retrospective estimates for a cross section of decedents suggest that home care expenditures will be about a third as great. Lubitz et al. (2003) estimated lifetime health and long-term care expenditures, but did not report LTC expenditures separately. None of the previous research has estimated lifetime LTC cost by payer or analyzed the distribution of costs, which is central to understanding the financial risks that retirees face.

Methods

Because our interest is in LTC risks—and hence in the variation in lifetime LTC need, use, and financing—we require predictions about the remaining life course for a large enough sample of individuals to estimate distributions of these outcomes. Predicting these lifetime outcomes depends upon assumptions about a great many events. For example, to predict how long an individual will spend in a nursing home and whether and how much Medicaid will pay for this care requires predictions of how long the person will live and, in each remaining year of the person's life, predictions of pension and other income, assets, marital status, whether the person will use nursing home services, and nursing home payment rates.

We used an existing dynamic microsimulation model to make projections of remaining lifetime need, service use, and financing of LTC for people turning age 65. Microsimulation has several advantages for making these predictions. It allows us to simulate all the variables that we wish to analyze, as well as the variables that are relevant to the LTC decision making that underlies the outcomes of interest. Since no single data source comes close to including all the variables needed for this analysis, another important benefit of microsimulation is that it enables us to base each parameter estimate on the best available

data, drawing on many sources. By simulating behavior for a large sample of *individuals*, we are able to analyze *distributions*—an advantage over life table methods, which project means and aggregates but not distributions.

The model originally was developed in the mid-1980s by Joshua Wiener, David Kennell, Alice Rivlin, and their colleagues. Since then its capabilities have been expanded and its assumptions updated based on newer data, most recently by Lisa Alecxih and her colleagues. Many of the simulations and analyses done previously using this model have been presented in unpublished reports prepared for use in the policy process. However, the model also has been the basis for published studies by Rivlin and Wiener (1988), Wiener, Illston, and Hanley (1994), Knickman and Snell (2002), and Knickman et al. (2003).

The Microsimulation Model

Overview of the model. The model is designed to estimate use of LTC and expenditures, as well as variables that affect them, through the year 2050 for people age 65 and older. The model draws upon data from numerous sources to set initial characteristics for the individuals in the model. It then uses probabilities to simulate events and transitions, year by year, to construct individual life histories. The types of variables that the model simulates over each person's life include:

- Family status (marriage, divorce, child bearing);
- Work history (earnings history for Social Security and pension accrual);
- Retirement income and assets (Social Security, pensions, asset income);
- Disability and mortality;
- Use of LTC services (nursing homes, assisted living, home care); and
- Financing of LTC (public programs, private LTC insurance, out of pocket).

The model uses a representative sample of the U.S. population based on individuals of all ages included in both the March 1993 and March 1994 Current Population Survey (CPS). These data provide information on demographic characteristics, employment, and education. While the model focuses on years after age 65, it relies on data for people at younger ages to project the characteristics (such as work history, marital status, in-

come, and assets) of people 65 and older. The model supplements the CPS data with earnings history information from the Panel Study of Income Dynamics, pension plan details from the Employee Benefits Survey from the Bureau of Labor Statistics, and non-pension retirement assets from the Health and Retirement Study.

Empirically estimated transition probability matrices and regression models simulate changes in these variables year by year for each person as he or she ages. Whether a particular person in the sample makes a transition depends on whether a randomly selected number between zero and one is below or above the estimated transition probability, where the transition probability is based on selected characteristics. For example, the probability of dying over the next year for a white 85-year-old woman with no disabilities living in the community is .03. Therefore, each woman in the model with these characteristics and a randomly drawn number of .03 or lower would be simulated to die during the year, while those with a random number higher than .03 would survive. This results in variation in the lifetime patterns across individuals that are consistent with empirically estimated transition probabilities.

Finally, the model ensures that key projections match important external estimates or “benchmarks.” For example, the probability of death is adjusted so that the total number of deaths by age and sex match Social Security projections. Similarly, disability transition probabilities are calibrated slightly from year to year so that the cross-sectional estimates of the number of individuals by functional status are consistent with aggregate trend assumptions. Also, the intercepts for equations to estimate use of LTC services based on historical data are increased or decreased to match more recent estimates of the number of users.

In general, the model projections assume that current policy and behavior continue into the future. For example, Medicaid benefits and income and asset eligibility requirements are assumed to continue unchanged. Similarly, most service use behavior is assumed to remain the same. While the model assumes most behavior continues unchanged, it does incorporate some assumptions about changes in disability and behavior that are based on current trends and are important to the results: age-specific disability rates are as-

sumed to continue to decline; the use of assisted living is assumed to grow relative to nursing home use; the cost of LTC services is assumed to grow faster than the rate of general inflation; and more people are assumed to be offered private LTC insurance through their employers.

Because the model’s assumptions are too numerous to detail fully here, we limit ourselves to summarizing those most important to this analysis. Detailed documentation for the model can be found in Alexih, Foreman, and Kennell (2004).

Mortality. In the simulation, a person dies or lives during the year based on a probability of dying, which depends upon the person’s age, sex, race, residence in a nursing home, and level of disability. These probability estimates are based on Social Security trustees’ intermediate assumptions of mortality rates by age and sex (Bell and Miller 2002); mortality rates disaggregated by nursing home use and disability level from the 1994 National Long-Term Care Survey; and Census Bureau projections of population by race. Mortality rates change annually to reflect estimated improvements in mortality based on projections made by the Social Security Office of the Actuary (Bell and Miller 2002).

Disability rates and transitions. The model measures disability in terms of limitations in activities of daily living (bathing, dressing, eating, using the toilet, and getting into and out of a bed or chair) and instrumental activities of daily living (IADLs—preparing meals, managing money, shopping for necessities, getting around outside the home, light housework, and using the telephone). Limitation in an ADL or IADL is defined as requiring hands-on or standby assistance from another person to perform the activity; the limitation must have lasted or be expected to last for at least three months.

A specific level of disability is added to each individual’s information at age 65 based on the probabilities of being in each of four different disability categories—no disability, limitations in IADLs only, limitation in one ADL, and limitations in two or more ADLs—where the probabilities depend on sex, marital status, and whether the person is receiving benefits under the Social Security disability insurance program. The probabilities are based on estimates of prevalence from the National Long-Term Care Survey. Once this information is added for each person at age 65,

disability status is simulated year by year based on the probability of transition among the four disability states. Individuals can become fully functioning as well as become more disabled, or they can stay at the same level. Separate transition probability matrices are estimated and applied by age and marital status, again based on data from the National Long-Term Care Survey.

Consistent with the majority of evidence about historical trends, the transition matrices are adjusted over time to incorporate a decline in age-specific disability rates (i.e., the percentage of people of a specified age who are disabled).⁴ Disability rates are assumed to fall at the same rate as mortality rates (on an age- and sex-specific basis). This assumption implies that the proportion of their remaining life during which people of a specific age can expect to live with a disability remains constant over the projection time period. As a result of this assumption (along with increased life expectancy), age-specific disability rates fall by an average of .6% per year over the modeling period.

People in the model are assigned more detailed levels of disability using person-level data from the Medicare Current Beneficiary Survey (MCBS) for the period 1992–1995. Individuals in the model are matched to individual profiles from the MCBS based on selected characteristics including their disability category (among the four broad categories described previously) and whether they live in a nursing home. This matching adds more detailed information about specific functional limitations—in particular, the number and type of ADL and IADL limitations—than the initial broad categories.

LTC service use. The model simulates days spent in a nursing home, days in an assisted living facility, and days at home receiving formal home and community-based services. It first simulates who enters a nursing home using probability models estimated with data from the MCBS. These probability equations, which have a greater probability of nursing home re-entry for those with a previous stay, are benchmarked to match data from the 1997 National Nursing Home Survey. Individuals selected to enter a nursing facility then are assigned a length of stay. Among those who do not have a nursing home stay during a year, the model estimates entry into an alternative residential (assisted living) facility; the model uses the non-Medicare nursing home entry

probabilities because of a lack of data on entry rates specific to assisted living. These probabilities are applied differentially by income and asset levels and benchmarked to results from the 1998 National Assisted Living Survey.

For people who are not residing in a nursing home or assisted living facility, the model estimates who uses home-based LTC services and, among users, the number of months during which the person receives services. The model divides home and community-based services into services paid for by Medicare and other (non-Medicare) services. Each of these categories is modeled in two parts: 1) an equation to estimate who will use services; and 2) an equation to estimate the level of expenditures for each user. In addition, the duration of use is determined by disability status and whether Medicare is the only payment source. Individuals with either Medicaid or private LTC insurance coverage have higher probabilities of using non-Medicare home care services, and use more services, than those without coverage. Specifically, the probability of any use of non-Medicare home care by people covered by private LTC insurance or Medicaid is estimated to be twice as great as that of people without either, and expenditures are estimated to be 2.4 times as great.

LTC financing. How LTC is financed reflects a person's coverage of LTC under public programs or private insurance, as well as the individual's use of LTC services. Everyone 65 and older in the model is assumed to have Medicare, which, as indicated, pays for some nursing facility services and home care. For Medicaid eligibility and benefits, the model applies uniform eligibility rules, reflecting average national criteria, rather than modeling the details of each state's Medicaid program. This is because the core population on which the model is based is not representative at the state level.

The model simulates who purchases private LTC insurance. The probability that an individual purchases insurance is based on an equation estimated with data from a California survey of purchasers and nonpurchasers of private LTC insurance.⁵ The model excludes from potential purchase people who would fail underwriting screens and anyone age 85 and older. The model assumes that some people will be offered LTC insurance through their employers. The model also projects the features of the LTC insurance con-

tracts that purchasers choose—in particular, the maximum length of benefits and whether purchasers opt for inflation protection. In addition, the model predicts lapses in policies, using estimated lapse rates that are higher in the early years after purchase and decline over the period during which a policy is held.

The model's initial estimates of the number of people with private LTC policies were adjusted to be consistent with two benchmarks: 1) estimates by the Health Insurance Association of America of the total number of policies sold annually (Coronel 2003); and 2) estimates by the Life Insurance Marketing Research Association (2000) of employer-sponsored policies in force. Over time, the number of purchasers increases because of changes in personal characteristics. In addition, the model assumes that an increasing proportion of people will have the opportunity to purchase LTC insurance through their employers, which also has the effect of increasing the number of people purchasing insurance.⁶

Financing differs among different types of care. For nursing home care, coverage under Medicare's skilled nursing facility benefit is assigned disproportionately to short stays. To determine Medicaid's role in nursing home care, the model simulates Medicaid eligibility, including the process of individuals using their income and drawing down their assets to pay for LTC, some to the level of Medicaid eligibility. We model assisted living facility care as being primarily paid for out of pocket, with a small percentage of low-income residents receiving Medicaid (to represent those states that cover this type of care) and another small percentage using private LTC insurance.

The financing of non-Medicare home care depends on the type of insurance (Medicaid or private LTC insurance) a person has, if any. Individuals with Medicaid coverage pay for their home care through a combination of Medicaid, other public programs, and out-of-pocket expenditures, depending on their circumstances. For those with private LTC insurance, the specific features of the policy are modeled to estimate insurance payments. Those without Medicaid or private LTC insurance pay primarily out of pocket, with other public programs paying for a small amount of care.

Application of the Model

We base the estimates of remaining lifetime LTC need, use, and expenditures presented in the results on the simulated experiences of individuals in the model who turn 65 in the period 2001 through 2010. The study used a 10-year period to provide a large enough sample to estimate distributions. The analysis is based on a total of 30,250 individuals with simulated need, use, and financing of LTC from age 65 until death.

Definition of LTC need. LTC need is intended to capture need for personal care and supportive services that arise from problems or disabilities, and is expected to extend over a long period of time. Years of LTC need are periods when a person has a moderate or greater level of disability defined as receiving or needing help with one or more ADLs or four or more IADLs because of health or disability. The IADL criterion is included as a rough proxy for serious cognitive impairment, a condition the model does not explicitly simulate. Because disability is not perfectly measured in the data, years of LTC need are defined to also include periods when a person uses LTC services (as defined subsequently), even if moderate disability is not indicated, under the assumption that people are not likely to use LTC services without at least moderate need. When an individual has more than one period of LTC need between age 65 and death, the periods are summed to obtain our estimates of cumulative years of LTC need.

Service use. Years of use of formal (i.e., paid) LTC include years spent in a nursing facility, years in an assisted living facility, and years at home receiving home and community-based services. Because we are interested in *long-term* care, not short-term, post-acute care, we exclude periods of nursing facility and home health use that are "strictly post-acute" care. We sought to exclude isolated skilled nursing facility stays that involve only Medicare payments and isolated periods of Medicare home health use when an individual did not have at least moderate disability. Specifically, a post-acute skilled nursing facility stay is defined as one that: 1) is paid for solely by Medicare, and 2) is not part of a longer nursing home episode that includes previous or subsequent nursing home use paid for privately or by Medicaid. Similarly excluded are periods of home health care paid for exclusively by Medi-

care when the person does not have a moderate long-term disability.⁷

The model does not explicitly simulate informal caregiving. However, we have designated the years at home with ADL disabilities but without formal home care as years of “informal care only” because we know from cross-sectional analyses that few people who need help with ADLs at home receive no assistance whatsoever (Liu, Manton, and Aragon 2000). In reality, of course, a small proportion will live at home without any help. Similarly, we assumed that formal home care is received in combination with informal care even though in reality a small proportion of recipients will rely on formal care alone. For these reasons, the projections of years of informal care are slightly over-estimated.

Prices and discounting. We present all estimates of lifetime LTC expenditures in real 2005 dollars. Nominal amounts are converted to real amounts using the Social Security trustees’ report (Board of Trustees 2003) assumption that the long-term general inflation rate will be 3% per year.

The rate of inflation of LTC services is assumed to be greater than this general inflation rate. Because LTC is a labor-intensive industry, the model assumes that LTC inflation will reflect inflation in wages and fringe benefits. Thus, the annual rate of inflation for LTC services is assumed to be 4.3%—3% general inflation plus projected inflation in wages (1.1%) and fringe benefits (.2%), based on the assumptions in the Social Security trustees’ report (Board of Trustees 2003).

Lifetime LTC expenditure estimates in 2005 dollars are discounted back to the year in which the individual turned 65 using a real rate of return of 3%. This present discounted value is the amount of money needed at age 65 to cover the person’s future LTC expenditures.

Uncertainty in the Model Projections

Like any predictions about the future, our micro-simulation model projections can be based only on data about the past, and are therefore subject to uncertainty from several sources. Major structural shifts that would affect assumptions in the model, such as a cure for Alzheimer’s disease, would, of course, change the model projections. However, such shifts are difficult to foresee with

any confidence, and we could only speculate on the potential magnitude of their effects.

Another important source of uncertainty surrounds changes in public policy and people’s behavioral responses to them. For example, during the past decade, state expansions of Medicaid home and community-based services waiver programs and federal legislation changing Medicare’s payment system for home health services affected the use of LTC services in important ways, but would have been difficult to foresee. Future policy changes are similarly difficult to foresee. For the present analysis, however, our purpose is to focus attention on the policy issues *assuming there will be no change in policy*, rather than to analyze the effect of policy that might be enacted.

The final source of uncertainty concerns the model assumptions about behavior and future trends based on past data. We are confident that the model’s assumptions have made good use of the best data currently available, and we are encouraged by the similarity, where comparisons are possible, of our projections to those of others using very different methods (as discussed later). However, future changes in behavior and trends inevitably mean that there will be errors in our projections. For example, a higher rate of growth in LTC prices than assumed would result both in higher LTC expenditures and a different payer mix (because individuals would spend down to Medicaid eligibility levels more quickly). Although changes in our assumptions about trends would affect the estimates of averages, changes in most assumptions would have less effect on the variation on which we focus.

Results

According to the model projections, people currently turning 65 on average will need LTC for several years and incur substantial costs, but the variation around the averages will be great. This variation is of particular interest because it poses risk for those retiring and a challenge for policymakers.

Risks of Needing LTC

Over the rest of their lives, the current cohort of 65-year-olds will need, on average, LTC (facility care, formal home care services, or informal care at home) for a total of three years, according to

Table 1. Projected LTC need for people turning 65 in 2005

	Average years lived after age 65	Average years of LTC need	Percent of people with any LTC need	Distribution by years of LTC need (% of people)				
				None	1 year or less	1–2 years	2–5 years	More than 5 years
All	17.8	3.0	69	31	17	12	20	20
Men	15.7	2.2	58	42	19	10	17	11
Women	19.8	3.7	79	21	16	13	22	28

Source: LTC financing model simulations.

Note: LTC need is defined as having one or more ADL limitations, four IADL limitations, or using formal LTC services other than strictly post-acute care under Medicare (see text). Because of rounding, components may not sum to totals.

the model simulations (see Table 1). Dramatic differences, although not surprising, exist between women and men. Women will need LTC for a longer time—for an average of 3.7 years, compared with 2.2 years for men.

These averages mask enormous variation in the need for LTC. While an estimated 31% of people currently turning 65 will not need any LTC before they die, 20% will need care for more than five years. Indeed, those in the top 10% with respect to years of care need will account for 37% of the total years of care needed by the cohort (not shown).

Women have a higher risk of ever needing LTC than men—an estimated 79% of women currently turning 65 will need LTC sometime before they die, compared with 58% of men. Women also face a greater risk of a lengthy period of LTC need—28% will need care for more than five years versus 11% of men.

The definition of LTC need used here, as indicated, is based on a moderate level of disability—one or more ADL limitations, or four IADL

limitations, or LTC service use. If we use a more restrictive definition of LTC need, the model, of course, projects less risk of needing LTC. For example, a projected 61% of the cohort will experience a severe level of disability (defined as a need for help with three or more ADLs or nursing home use) at some time in their lives (not shown). People in the cohort will experience this level of disability for an average of 2.2 years over the rest of their lives, compared with three years using the moderate disability definition. The model estimates of lifetime LTC need appear to be within the range of other published estimates of lifetime disability, although comparison with other studies is difficult because of differing time periods and definitions of disability.

Meeting LTC Needs

According to the model simulations, people currently turning 65 will spend about two-thirds of their years of moderate LTC need at home, assuming past policy and behavior continue largely

Table 2. Remaining lifetime use of LTC by people turning 65 in 2005

Type of care	Average years of care	Percent of people using type of care	Distribution by years of care (% of people)				
			None	1 year or less	1–2 years	2–5 years	More than 5 years
Any LTC need	3.0	69	31	17	12	20	20
At home							
Informal care only	1.4	59	41	22	13	17	6
Formal care	.5	42	58	27	8	5	1
Any care at home	1.9	65	35	21	14	19	11
In facilities							
Nursing facilities	.8	35	65	17	5	8	5
Assisted living facilities	.3	13	87	6	3	4	1
Any care in facilities	1.1	37	63	15	5	9	8

Source: LTC financing model simulations.

Note: Because of rounding, components may not sum to totals.

unchanged (see Table 2). Of their projected three years of LTC need, they will spend 1.9 years at home on average—1.4 years without receiving formal (paid) care and .5 years receiving formal home care.

The other 1.1 years of LTC need for people turning 65 will be spent in nursing or assisted living facilities, according to the model simulations. An average of .8 years will be spent in nursing facilities, and the other .3 years in assisted living facilities—although predicting the future reliance on assisted living presents a particular challenge given the rapid change in this industry.

More important than the averages, however, are results showing that individuals will have widely differing LTC experiences. The projections indicate substantial variation among individuals in the use of each type of care, reflecting differences among people in both their need for care and the ways in which they (and their families) will address their needs.

People currently turning 65 face a substantial risk of relying on their families for extended periods of caregiving. Sixty-five percent of all people in the cohort will spend some time at home with LTC need. Among the entire cohort, 30% will receive more than two years of care at home, and 11% will receive more than five years of care at home. Twenty-three percent of the cohort will rely solely on informal care for longer than two years, and 6% will do so for more than five years.

Individuals also differ widely in their projected use of facility care. While 63% of people in the cohort will not use any nursing home or assisted living care, 8% will spend more than five years in facilities. The model projects that 35% of the cohort will use nursing home care, with 5% spending more than five years in nursing facilities. Fewer people will use assisted living facilities. The model estimates that 13% of the cohort will use this type of care, 1% for more than five years.

These estimates of lifetime use of nursing homes are similar to those in other studies. The model's projection that 35% of retirees will use a nursing home is at the low end of the 35% to 55% range of other studies. This is consistent with the model's exclusion of strictly post-acute Medicare skilled nursing facility use (use that is not part of a longer nursing home stay), which is included in other studies. Also, the model relies

on more recent data, which show declines in nursing home use, than did other studies. (All of the previous research is based on data from the 1980s except for Spillman and Lubitz [2000], who use 1993 data.) The model estimates that average lifetime use among nursing home users is about 2.3 years (not shown), within the 1.8- to 2.8-year range of previous estimates. Among nursing home users, the risk of using more than five years of care is about 14% (not shown), again within the 12% to 21% range of other estimates.

Financing Formal Care

Projected expenditures for LTC services are substantial. The present discounted value of lifetime LTC expenditures is estimated to average \$47,000 in 2005 dollars (see Table 3). This is the average amount per person that would have to be set aside and invested for people at age 65 to pay for all their LTC expenditures over the rest of their lives. The amount a specific person will need varies widely among individuals. Government programs are projected to pay for 53% of total LTC expenditures of the cohort turning 65. Private LTC insurance is projected to cover only about 2% of the cohort's LTC expenditures. On average, the cohort faces out-of-pocket expenditures of \$21,100. Thus, 45% of the cohort's total LTC expenditures are projected to be an uninsured private expense.

Nursing and assisted living facility care will account for the lion's share of the cohort's LTC expenditures—an average of \$38,900. Over three-quarters of these expenditures will be for nursing facility care, based on the modeling assumptions about growth in assisted living. Public programs, primarily Medicaid, will pay for 46% of all facility care (not shown). The rest will be paid for privately, nearly all out of pocket. However, the mix of public and private funds will differ strikingly for nursing home and assisted living care—public sources will pay 57% of average lifetime nursing facility expenditures, while private sources (out-of-pocket spending and private LTC insurance) will pay 92% of the expenditures for care in assisted living facilities.

Even though, on average, the cohort will spend nearly twice as much time receiving formal or informal care at home as in nursing or assisted living facilities, home care expenditures account

Table 3. Average present discounted value of lifetime LTC expenditures projected for people turning 65 in 2005

Payer	Total expenditures		Type of care					
			Formal home care		Nursing facilities		Assisted living facilities	
	\$	%	\$	%	\$	%	\$	%
Total	47,000	100	8,200	100	30,200	100	8,700	100
Public								
Medicare	5,700	12	2,900	35	2,800	9	0	0
Medicaid	17,600	37	2,400	29	14,500	48	700	8
Other public ^a	1,500	3	1,500	18	0	0	0	0
Total public	24,700	53	6,700	82	17,300	57	700	8
Private								
Out of pocket	21,100	45	1,300	16	12,100	40	7,800	90
Private LTC insurance	1,200	2	200	2	900	3	100	1
Total private	22,300	47	1,400	18	12,900	43	7,900	92

Source: LTC financing model simulations.

Note: Medicare expenditures exclude those for strictly post-acute care (see text). Because of rounding, components may not sum to totals and percentages computed from rounded amounts may not equal percentages shown.

^a Other public expenditures consist of expenditures of the Department of Veterans Affairs, the Older Americans Act, and state and local governments for home care programs funded solely by them.

for only about a sixth of total projected LTC expenditures. This is primarily because, as seen, family members alone provide care for most of the time spent at home. Medicare (which in this paper excludes expenditures for strictly post-acute SNF and home health care), Medicaid, and other public programs will pay for most of the paid home care.

Again the averages hide great variation among

individuals (see Table 4). Fully 42% of this cohort of people turning 65 will have no LTC expenditures because either they will never need LTC or they will rely exclusively on informal care. Another 19% will incur less than \$10,000 in LTC costs. At the other end of the distribution, 16% of the cohort will incur expenditures with a present value of \$100,000 or more.

Private expenditures also will vary widely

Table 4. Distribution of present discounted value of lifetime LTC expenditures for people turning 65 in 2005

Payer	Average expenditures (\$)	Percent of people with expenditures	Distribution by LTC expenditures (% of people)					
			Zero	Less than \$10,000		\$10,000–\$250,000		\$250,000 or more
				\$10,000	\$25,000	\$100,000	\$250,000	
Total	47,000	58	42	19	8	14	11	5
Public								
Medicare	5,700	44	56	27	10	7	— ^a	— ^a
Medicaid	17,600	30	70	10	4	9	5	2
Other public ^b	1,500	29	71	25	3	2	— ^a	— ^a
Total public	24,700	53	47	25	8	12	6	2
Private								
Out of pocket	21,100	50	50	25	7	12	5	1
Private LTC insurance	1,200	3	97	1	1	1	— ^a	— ^a
Total private	22,300	50	50	25	7	11	6	2

Source: LTC financing model simulations.

Note: Medicare expenditures exclude those for strictly post-acute care (see text). Because of rounding, components may not sum to totals.

^a Less than .5%.

^b Other public expenditures consist of expenditures of the Department of Veterans Affairs, the Older Americans Act, and state and local governments for home care programs funded solely by them.

Table 5. Present discounted value of out-of-pocket LTC expenditures, by whether the person ever receives LTC services paid for by Medicaid

Subgroup	Percent of people	Out-of-pocket expenditures		Distribution by out-of-pocket expenditures (% of subgroup)				
		Average (\$)	% of subgroup with any	Zero	Less than \$10,000	\$10,000–\$25,000	\$25,000–\$100,000	\$100,000 or more
All people	100	21,100	50	50	25	7	12	6
Use formal LTC								
Some Medicaid LTC	30	35,000	95	5	47	14	23	10
No Medicaid LTC	27	38,600	80	20	40	11	17	13
Use informal care only	12	0	—	—	—	—	—	—
No LTC need	31	0	—	—	—	—	—	—

Source: LTC financing model simulations.

Note: Because of rounding, components may not sum to totals.

among individuals. Because only 3% of people in the cohort are projected to use services paid for by private LTC insurance, out-of-pocket spending dominates the private expenditure distribution. Fifty percent of the retiring cohort will have no out-of-pocket expenditures for LTC, but 6% will incur out-of-pocket expenditures with a present value of \$100,000 or more.

Public expenditures are similarly skewed. Just less than half the people in the cohort will incur no public costs according to the simulations, while 8% will incur a present value of \$100,000 or more in public costs. As indicated, Medicaid dominates government payments for LTC. Among the entire cohort, 30% will rely on Medicaid to pay for at least some of their LTC. For some, the Medicaid program will incur substantial costs—about 7% of people currently retiring will incur \$100,000 or more in Medicaid LTC expenditures.

Out-of-pocket expenditures will be incurred by those who rely on Medicaid as well as by those who do not. Among the 30% of people who will receive some LTC coverage under Medicaid during the rest of their lives, 95% will spend some money out of pocket for LTC (see Table 5). These expenditures include both assets that they “spend down” before becoming eligible for Medicaid and income, which Medicaid requires beneficiaries to contribute toward their care (except for a small personal-needs allowance). The amount spent out of pocket by those who rely on Medicaid for LTC will range widely. While 52% will have out-of-pocket expenses of less than \$10,000 (including those with none), about 10% will spend \$100,000 or more out of pocket in some combination of income and assets. Indeed, the av-

erage out-of-pocket expenditures for people who receive some Medicaid LTC will be an estimated \$35,000.

By comparison, the 27% of the cohort who use formal LTC services but never receive Medicaid coverage for LTC will incur out-of-pocket expenditures of \$38,600 on average. Sixty percent of this group will spend less than \$10,000, while 13% will spend at least \$100,000. (Note that this group does not include the 12% of the cohort who will live at home receiving only informal care for the entire time when they need LTC and hence have no LTC expenditures.)

Discussion

Using a microsimulation model to project individual-level LTC experience, we estimated that people now turning age 65 will need LTC for an average of three years before they die. Under current policy, much of the needed care will be an uninsured private responsibility of families, in the form of in-kind caregiving, and of retirees themselves, in the form of out-of-pocket payments for care. According to the simulations, families will provide informal care at home either exclusively or in combination with paid home care for about two-thirds of the cohort's total years of LTC need. The other one-third will be provided in nursing homes or assisted living facilities. Public programs and private insurance will pay for 55% of paid care received either at home or in facilities. The remaining 45% of LTC expenditures will be paid for out of pocket.

Needing LTC is not a certainty, however; LTC need will be distributed very unequally. While about three out of 10 people turning 65 are

projected never to need LTC, two out of 10 will need care for five or more years. Consistent with this variation in need, both family care and out-of-pocket expenditures also will be distributed unequally. While over a third of those now turning 65 are projected never to receive family care, three out of 10 people will rely on family care for more than two years. Similarly, half of people currently retiring will have no private out-of-pocket expenditures, while 6% will require more than \$100,000 of their own money at age 65 to be able to pay for their subsequent LTC expenses.

It is this wide variation in the projected need for LTC that poses a challenge for both individuals and policymakers. The challenge can be thought of usefully as an insurance problem. Indeed, given its wide variation and uncertainty, LTC need appears to be the archetypal insurable risk that could be spread by insurance, public or private. A private insurance market exists to do so, and government programs provide public insurance for some LTC. The simulations clearly show, however, that existing private and public insurance leaves substantial gaps in coverage of LTC risks—both risks of incurring out-of-pocket costs and risks to families of providing in-kind care.

Expanding both private and public insurance are options for better spreading the financial risk of incurring out-of-pocket expenses for LTC. However, the ability to spread the uninsured financial risk and the in-kind care risk by changing public policy is substantially constrained.

The role that private LTC insurance can play in spreading risk is relatively small for a number of reasons. First, not everyone can purchase insurance because insurers underwrite to protect against adverse selection (Murtaugh, Kemper, and Spillman 1995). Second, demand for private LTC insurance is limited. Premiums are high relative to the financial resources of many retirees. Many people consider the product expensive, in part because administrative costs such as marketing and underwriting expenses account for a substantial share of premiums (Lewis, Wilkin, and Merlis 2003; Brown and Finkelstein 2004a).⁸ People are also uncertain about whether the insurance benefits will cover enough care, and the right type of care, if they need it. In addition, Medicaid's safety-net coverage of LTC for people who exhaust their resources may provide a disincentive for some people to purchase private long-term care insurance.⁹ Finally, some ar-

gue that if private LTC insurance is to play an increased role in spreading risk, products need to be more heavily regulated to improve consumer protection. While regulatory changes and subsidies could increase the role of private insurance somewhat, underwriting and limited demand constrain its ability to spread remaining uninsured out-of-pocket expenses.

Public insurance could be enacted to spread the uninsured risk of incurring substantial out-of-pocket expenditures, and many proposals have been suggested to do so (Rivlin and Wiener 1988; Scanlon 1992; Wiener et al. 2001). The principal obstacle to doing so is political. For example, the Social Security Act could be amended to add a LTC benefit to Medicare, but this would require a dramatic change in public policy thinking concerning the role of Medicare, which, as indicated, is intended to insure acute care, not LTC. Public responsibility for insuring acute care of the elderly is accepted, but the extent of public responsibility for insuring LTC continues to be debated.

Incremental expansion of Medicaid coverage by raising financial eligibility limits or making home and community-based services or personal care mandatory benefits also could be enacted to improve access to LTC services. However, this would not insure against the risk of incurring out-of-pocket expenditures as would private or public insurance. Medicaid is designed to be a safety net for those who run out of money to protect against unmet need for LTC, not to limit out-of-pocket expenditures.¹⁰ Indeed, it is not insurance in the usual sense of the term: Medicaid insures the combined risk of needing LTC *and* being unable to pay for it. For those with moderate financial resources, it is contingent insurance for LTC—contingent on first spending nearly all their financial resources, often on LTC. It does not protect income and assets for other things such as living expenses or bequests, and it only partially protects financial resources for spouses.¹¹ On the contrary, it ensures that private financial resources are exhausted before benefits are provided. We saw that 10% of those who eventually qualify for Medicaid will have more than \$100,000 in out-of-pocket expenditures. While Medicaid plays an essential role as a LTC safety net for those with limited financial resources, it is limited as insurance against out-of-pocket spending.

The ability to spread the risk to families of providing informal care also is constrained. Spreading this risk encounters a practical problem that is unique to family care, namely that it is provided in kind. Informal care risk cannot be spread through insurance easily because it is not a financial risk, which is the type of risk that insurance is well-suited to spread. Individuals can pool their *financial assets* to insure the financial risks of LTC. Having family able and willing to provide care is a valuable in-kind resource, but families cannot easily pool these *in-kind assets* to insure against the risk of needing care for a long period of time. The inherent nonmonetary nature of informal care leaves policymakers with only limited options—options that can mitigate the impact of informal care risk but do not substantially redistribute it.

One option is providing insurance with home care benefits, which can relieve family members of some of the informal caregiving burden by supplementing or substituting for their care. State home and community-based service programs and home care coverage in private LTC insurance policies provide such insurance. Respite care programs, such as the Administration on Aging's National Family Caregiver Support Program and the Alzheimer's Disease Demonstration Grants Program, are directed specifically at relieving informal caregivers by tying limited home care benefits specifically to the provision of informal care.

Another option is paying family members for the care they provide. For example, "cash and

counseling" is a form of public insurance that provides a consumer-directed care benefit which includes the option of compensating nonspousal family caregivers for their in-kind contribution and thereby spreads the risk of uncompensated care (Foster et al. 2003). Some private insurance policies also permit payment to family members (other than spouses).

Still another approach is a cash disability benefit that is paid when a person meets defined disability criteria, such as the Social Security disability benefit or cash benefit private LTC insurance policies. Both insure the *need* for care as indicated by inability to perform ADLs; benefits are not tied to either use of paid services or provision of family care, but they provide maximum flexibility in addressing LTC needs and relieving caregiver burden.

In conclusion, while views will differ about appropriate public policy, all should recognize that retirees face a *triad* of potential needs: for income beyond Social Security, for acute health care not covered by Medicare, and for LTC (Smeeding 1986; Holden and Smeeding 1990; Knickman et al. 2003). Policy debate that focuses only on income security and acute care—and the corresponding Social Security and Medicare programs—misses the third risk that retirees face: that of needing LTC. That risk is substantial; under current Medicare and Medicaid policy much of it is the uninsured private responsibility of individuals and families. And the uninsured risk is not easy to spread.

Notes

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1 Three main methods have been applied. One applies life tables methods, which estimate people's movement among different functional states to produce population estimates of average expected years in different states (Crimmins, Hayward, and Saito 1994, 1996; Land, Guralnick, and Blazer 1994). Other studies use transition probabilities and microsimulation; they generally apply probabilities of transitions among functional states to simulate life histories for individuals in a specified population (Manton, Stallard, and Liu 1993;

Laditka and Wolf 1998; Manton and Land 2000; Lubitz et al. 2003). A third approach bases projections on a retrospective survey of the next-of-kin of a sample of decedents that contains information about the decedents' history of disability (Murtaugh, Spillman, and Warshawsky 2001).

2 For example, Murtaugh, Spillman, and Warshawsky (2001) estimate that of people who are not disabled at age 65, 31% would never become seriously disabled. Laditka and Wolf (1998) estimate that among people age 70 in the community, 54% of men and 42% of women would never experience a severe disability.

3 Methodologies used were: 1) life tables (Liu and Manton 1991; Liang and Tu 1986; and Crimmins, Saito, and Ingegneri 1989); 2) transition probab-

- ities and microsimulations (Liu, Manton, and Liu 1990; Dick, Garber, and MaCurdy 1992; Arling, Hagan, and Buhaug 1992; Laditka 1998; and Lubitz et al. 2003); 3) hazard models of nursing home admission cohorts (Gruenberg et al. 1989; Bice and Pattee 1990); and 4) retrospective surveys of next-of-kin of decedents (Kemper and Murtaugh 1991; Kemper, Spillman, and Murtaugh 1991; Murtaugh et al. 1997; Spillman and Lubitz 2002).
- 4 There is considerable uncertainty about future trends in disability—both about whether the decline will continue and if so at what rate, and about whether all levels of disability will change at the same rate (as the model assumes). The decline in disability rates in the model is somewhat lower than estimates of recent declines, reflecting an assumption that the decline will slow slightly. According to a recent survey of literature on disability trends among older people, estimates of the decline in disability rates range from .92% to 1.55% per year, based on analysis of data from the 1980s and 1990s (Freedman, Martin, and Schoeni 2002).
 - 5 These 1995–1996 data were collected for the Robert Wood Johnson Foundation LTC Insurance Partnership project; the probability equation is based on data for purchasers of non-Partnership LTC insurance and people who did not purchase LTC insurance.
 - 6 An increasing percentage of employees being offered long-term care insurance by their employers is consistent with the recent trends reported by the Association of Health Insurance Plans (Coronel 2004).
 - 7 Including strictly post-acute care (as we have defined it) would increase the estimated average years of lifetime nursing home use by about 6%, and of lifetime home care service use by about 30%.
 - 8 Brown and Finkelstein (2004a) estimate that the typical LTC insurance policy purchased by 65-year-olds and held over the rest of the person's life has a load of .18—that is, it will pay expected benefits of 82 cents in present discounted value for every dollar in present discounted value of premiums.
 - 9 The extent to which Medicaid is a significant factor in the low purchase rate of private LTC insurance is unknown. While theoretical arguments suggest that Medicaid reduces the incentive to purchase private LTC insurance (Pauly 1990), empirical evidence is scarce. Using a simulation model, Brown and Finkelstein (2004b) estimate that even if private LTC insurance were available at actuarially fair prices (rather than the higher prices that actually occur in the market for several reasons), Medicaid's coverage of nursing home care would substantially "crowd out" demand for private LTC insurance among the elderly. However, in the only study of which we are aware that analyzes actual behavior, Sloan and Norton (1997) used national survey data from the 1993 Asset and Health Dynamics of the Oldest Old and found that while more generous Medicaid benefits did have a small negative effect on private LTC insurance purchase among people age 70 and older, the effect was too small to explain their low rate of insurance purchase. Further, for people age 51 to 61, they found no evidence that Medicaid "crowds out" demand for private LTC insurance (using 1992–1994 data from the Health and Retirement Study).
 - 10 In addition, critics argue that Medicaid's benefit package is undesirable because its coverage is biased, even today, toward institutional care; it provides inadequate reimbursement, which constrains quality of care, and for some people it has stigma attached to it. As a consequence, it protects against unmet need only imperfectly.
 - 11 Some people may transfer assets (for example, to children or certain types of trusts) to qualify for Medicaid while "protecting" those assets from being spent on LTC; however, the extent to which this practice occurs is unknown, and existing research indicates that it is not widespread (see O'Brien 2005).

References

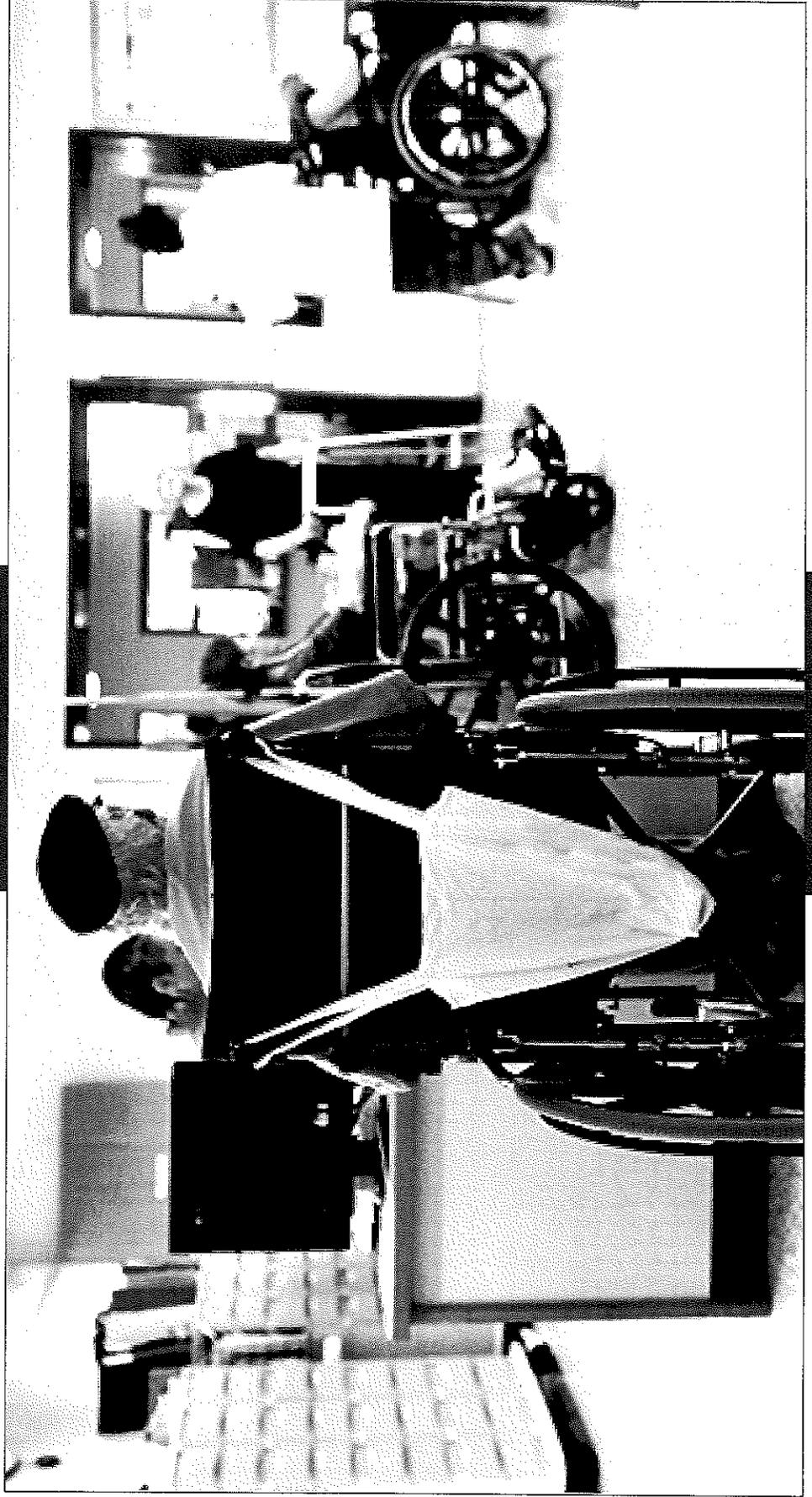
- Alecxi, L., R. Foreman, and D. Kennell. 2004. *Long Term Care Financing Model Key Assumptions*. Falls Church, Va.: The Lewin Group.
- Arling, G., S. Hagan, and H. Buhaug. 1992. The Feasibility of a Public-Private Long-Term Care Financing Plan. *Medical Care* 30:699–717.
- Bell, F.C., and M.L. Miller. 2002. Life Tables for the United States Social Security Area 1900–2100. *Social Security Actuarial Study* No. 116.
- Bice, T.W., and C. Pattee. 1990. Nursing Home Stays and Spend Down in the State of Connecticut: 1978–1983 Admission Cohorts. *Final Report*. Hartford: Connecticut Department of Health Services and U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.
- Board of Trustees, Federal Old-Age and Survivors Insurance Trust Funds. 2003. *The 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*. Washington, D.C.: Government Printing Office.
- Brown, J.R., and A. Finkelstein. 2004a. Supply or Demand: Why is the Market for Long-Term Care Insurance So Small? Working paper 10782. Cambridge, Mass.: National Bureau of Economic Research.
- . 2004b. The Interaction of Public and Private Insurance: Medicaid and the Long-Term Care

- Insurance Market. Working paper 10989. Cambridge, Mass.: National Bureau of Economic Research.
- Coronel, S. 2004. *Long-Term Care Insurance in 2002*. Washington, D.C.: America's Health Insurance Plans.
- . 2003. *Long-Term Care Insurance in 2000–2001*. Washington, D.C.: Health Insurance Association of America.
- Crimmins, E.M., M.D. Hayward, and Y. Saito. 1994. Changing Mortality and Morbidity Rates and the Health Status and Life Expectancy of the Older Population. *Demography* 31(1):159–175.
- . 1996. Differentials in Active Life Expectancy in the Older Population of the United States. *Journal of Gerontology* 51B (3):S111–S120.
- Crimmins, E.M., Y. Saito, and D. Ingegneri. 1989. Changes in Life Expectancy and Disability-Free Life Expectancy in the United States. *Population Development Review* 15:235.
- Dick, A., A.M. Garber, and T. MaCurdy. 1992. Forecasting Nursing Home Utilization of Elderly Americans. Working paper no. 4107. Cambridge, Mass.: National Bureau of Economic Research.
- Feder, J., H.L. Komisar, and M. Niefeld. 2000. Long-Term Care in the United States: An Overview. *Health Affairs* 19(3):40–56.
- Foster, L., R. Brown, B. Phillips, J. Schore, and B.L. Carlson. 2003. Improving the Quality of Medicaid Personal Assistance Through Consumer Direction. *Health Affairs Web Exclusives* Jan–Jun 2003:W3_162–W3_169.
- Freedman, V.A., L.G. Martin, and R.F. Schoeni. 2002. Recent Trends in Disability and Functioning Among Older Adults in the United States. *Journal of the American Medical Association* 288(24):3137–3146.
- Gruenberg, L., K. Farbstein, P. Hughes-Cromwick, C. Pattee, and K. Mahoney. 1989. *An Analysis of the Spenddown Patterns of Individuals Admitted to Nursing Homes in the State of Connecticut* (DP-1). Waltham, Mass.: The Long Term Care Data Institute.
- Holden, K.C., and T.M. Smeeding. 1990. The Poor, the Rich, and the Insecure Elderly Caught in Between. *Milbank Quarterly* 68(2): 191–219.
- Kemper, P., and C.M. Murtaugh. 1991. Lifetime Nursing Home Use. *New England Journal of Medicine* 324(9):595–600.
- Kemper, P., B.C. Spillman, and C.M. Murtaugh. 1991. A Lifetime Perspective on Proposals for Financing Nursing Home Care. *Inquiry* 28(4): 333–344.
- Knickman, J.R., K.A. Hunt, E.K. Snell, L.M.B. Alecxih, and D.L. Kennell. 2003. Wealth Patterns Among Elderly Americans: Implications for Health Care Affordability. *Health Affairs* 22(3): 168–174.
- Knickman, J.R., and E.K. Snell. 2002. The 2030 Problem: Caring for Aging Baby Boomers. *Health Services Research* 37(4):849–884.
- Laditka, S.B. 1998. Modeling Lifetime Nursing Home Use Under Assumptions of Better Health. *Journals of Gerontology* 53B(4):S177–S187.
- Laditka, S.B., and D.A. Wolf. 1998. New Methods for Analyzing Active Life Expectancy. *Journal of Aging and Health* 10(2):214–241.
- Land, K.C., J.M. Guralnik, and D.G. Blazer. 1994. Estimating Increment-Decrement Life Tables with Multiple Covariates from Panel Data: The Case of Active Life Expectancy. *Demography* 31(2): 297–319.
- Lewis, S., J. Wilkin, and M. Merlis. 2003. *Regulation of Private Long-Term Care Insurance: Implementation Experience and Key Issues*. Washington, D.C.: The Kaiser Family Foundation.
- Liang, J., and E.J.C. Tu. 1986. Estimating Lifetime Risk of Nursing Home Residency: A Further Note. *The Gerontologist* 26:560–563.
- Life Insurance Marketing Research Association. 2000. *U.S. Group Long-Term Care Insurance: Sales and In Force*. Hartford, Conn.: Life Insurance Marketing Research Association.
- Liu, K., and K. Manton. 1991. Nursing Home Length of Stay and Spenddown in Connecticut 1977–1986. *The Gerontologist* 31:165.
- Liu, K., K.G. Manton, and C. Aragon. 2000. Changes in Home Care Use by Disabled Elderly Persons. *Journals of Gerontology* 55:S245–S253.
- Liu, K., K.G. Manton, and B.M. Liu. 1990. Morbidity, Disability, and Long-Term Care of the Elderly: Implications for Insurance Financing. *Milbank Quarterly* 68:445.
- Lubitz, J., L. Cai, E. Kramarow, and H. Lentzner. 2003. Health, Life Expectancy, and Health Care Spending Among the Elderly. *New England Journal of Medicine* 349(11):1048–1049.
- Manton, K.G., and K.C. Land. 2000. Active Life Expectancy Estimates for the U.S. Elderly Population: A Multidimensional Continuous-Mixture Model of Functional Change Applied to Completed Cohorts, 1982–1996. *Demography* 37(3):253–265.
- Manton, K.G., E. Stallard, and K. Liu. 1993. Forecasts of Active Life Expectancy: Policy and Fiscal Implications. *Journals of Gerontology* 48(Special Issue):11–26.
- Murtaugh, C.M., P. Kemper, B.C. Spillman, and B.L. Carlson. 1997. The Amount, Distribution, and Timing of Lifetime Nursing Home Use. *Medical Care* 35(3):204–218.
- Murtaugh, C.M., P. Kemper, and B.C. Spillman. 1995. Lifetime Patterns of Payment for Nursing Home Care. *Medical Care* 33(3):280–296.
- Murtaugh, C.M., B.C. Spillman, and M.J. Warshawsky. 2001. In Sickness and In Health: An Annuity Approach to Financing Long-Term Care and Retirement Income. *Journal of Risk and Insurance* 68(2):225–254.
- O'Brien, E. 2005. *Medicaid's Coverage of Nursing Home Costs: Asset Shelter for the Wealthy or Essential Safety Net?* Issue Brief. Washington, D.C.: Georgetown University Long-Term Care Financing Project. Available at: <http://ltc.georgetown.edu/pdfs/nursinghomecosts.pdf>.
- Pauly, M. 1990. The Rational Nonpurchase of Long-Term Care Insurance. *Journal of Political Economy* 98(1):153–168.

- Rivlin, A.M., and J.M. Wiener. 1988. Who Should Pay for Long-Term Care for the Elderly? *Brookings Review* 6(3):3-10.
- Scanlon, W.J. 1992. Possible Reforms for Financing Long-Term Care. *Journal of Economic Perspectives* 6(3):43-58.
- Sloan, F.A., and E.C. Norton. 1997. Adverse Selection, Bequests, Crowding Out, and Private Demand for Insurance: Evidence from the Long-Term Care Insurance Market. *Journal of Risk and Uncertainty* 15:201-219.
- Smeeding, T. 1986. Nonmoney Income and the Elderly: The Case of the "Tweeners." *Journal of Policy Analysis and Management* 5(4): 707-724.
- Spector, W.D., and P. Kemper. 1994. Disability and Cognitive Impairment Criteria: Targeting Those Who Need the Most Home Care. *The Gerontologist* 34(5): 640-652.
- Spillman, B.C., and J. Lubitz. 2000. The Effect of Longevity on Spending for Acute and Long-Term Care. *New England Journal of Medicine* 342(19): 1409-1415.
- . 2002. New Estimates of Lifetime Nursing Home Use: Have Patterns Changed? *Medical Care* 40(10): 965-975.
- Wiener, J.M., C.L. Estes, S.M. Goldenson, and S.C. Goldberg. 2001. What Happened to Long-Term Care in the Health Reform Debate of 1993-1994? Lessons for the Future. *Milbank Quarterly* 79(2): 207-252.
- Wiener, J.M., L.H. Illston, and R.J. Hanley. 1994. *Sharing the Burden: Strategies for Public and Private Long-Term Care Insurance*. Washington, D.C.: The Brookings Institution.

CBO

**Rising Demand for
Long-Term Services
and Supports for
Elderly People**



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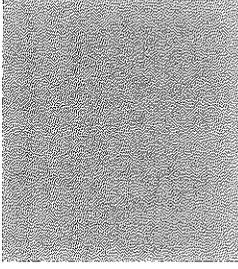
Notes

Numbers in the exhibits and text of this document may not add up to totals because of rounding.

Unless otherwise indicated, the years referred to in this document are calendar years.

In this document, “elderly” people are those 65 and above.

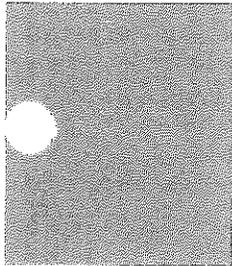
Definitions of the terms used in this report are provided in a glossary. The source for many of those definitions is the glossary of terms compiled by the Office of the Assistant Secretary for Planning and Evaluation at the Department of Health and Human Services, available at <http://aspe.hhs.gov/daltcp/diction.shtml>. Also, details on the data sources and methods underlying the exhibits in this report are provided in supplemental material posted along with this report on CBO’s website (www.cbo.gov).



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Rising Demand for Long-Term Services and Supports for Elderly People

By 2050, one-fifth of the total U.S. population will be elderly (that is, 65 or older), up from 12 percent in 2000 and 8 percent in 1950. The number of people age 85 or older will grow the fastest over the next few decades, constituting 4 percent of the population by 2050, or 10 times its share in 1950. That growth in the elderly population will bring a corresponding surge in the number of elderly people with functional and cognitive limitations. Functional limitations are physical problems that limit a person's ability to perform routine daily activities, such as eating, bathing, dressing, paying bills, and preparing meals. Cognitive limitations are losses in mental acuity that may also restrict a person's ability to perform such activities.¹ On average, about one-third of people age 65 or older report functional limitations of one kind or

another; among people age 85 or older, about two-thirds report functional limitations.² One study estimates that more than two-thirds of 65-year-olds will need assistance to deal with a loss in functioning at some point during their remaining years of life.³ If those rates of prevalence continue, the number of elderly people with functional or cognitive limitations, and thus the need for assistance, will increase sharply in coming decades.

What Are Long-Term Services and Supports and Where Do People Receive Them?

The term long-term services and supports (LTSS) refers to the types of assistance provided to people with functional or cognitive limitations to help them perform routine daily activities.⁴

That assistance is provided in several different forms and venues. About 80 percent of elderly people receiving such care live in the community; the remaining 20 percent obtain assistance in institutional settings. Of those living in the community, a small number live in residential communities catering to the needs of elderly people, but most, including many reporting three or

1. For definitions of the terms used throughout this report, refer to the glossary. For details on the data and methods used, see Congressional Budget Office, "Methods for Analysis of the Financing and Use of Long-Term Services and Supports," supplemental material for *Rising Demand for Long-Term Services and Supports for Elderly People* (June 2013), www.cbo.gov/publication/44370.

2. Those estimates are based on data from 2000 to 2010 in the Health and Retirement Study (for people living in the community) and on data from 2010 in the Medicare Current Beneficiary Survey (for people living in institutions).

3. Peter Kemper, Harriet L. Komisar, and Lisa Alecxih, "Long-Term Care Over an Uncertain Future: What Can Current Retirees Expect?" *Inquiry*, vol. 42, no. 4 (December 2005), pp. 335–350, <http://tinyurl.com/l9m14a9>.

4. The terminology referring to the services and infrastructure to help elderly people with impairments has changed in recent years from "long-term care" to "long-term services and supports." This document uses the new term except when the term "long-term care" is appropriate, such as in "long-term care insurance," the term used by private insurance carriers to identify insurance that covers long-term services and supports.

more functional limitations, live in private homes. In the community, elderly people with functional limitations receive assistance primarily from family members and friends (generally unpaid and referred to as informal care); they may also pay for assistance (so-called formal care) from long-term care workers, such as home health aides. In contrast, elderly people with severe functional and cognitive limitations, who may require around-the-clock assistance, often live in institutional settings.

Categorizing residential settings is difficult and often confusing because there is no commonly accepted terminology. This report identifies four different categories of residence. The first two categories are considered to be settings for institutional care and the latter two are for care provided in the community.

- **Nursing homes** (including nursing facilities and skilled nursing facilities)—facilities licensed by the state to provide personal care and skilled nursing care on a 24-hour-a-day basis to residents.
- **Other types of institutions**—all other facilities, primarily residential care facilities (RCFs) that provide institutional care but are not licensed as nursing homes. In general, an RCF is similar to a nursing home in that it provides assistance on a 24-hour-a-day basis, except it is not licensed to provide skilled care. In addition to RCFs, this second category of residence includes other facilities that provide assistance for people with functional limitations, or supervision of medications, but not on a 24-hour-a-day basis.

- **Community-based residences that offer supportive services for elderly people**—residences that offer basic services (such as meals, housekeeping, and laundry) as well as some health-related services (such as help with medications). Although this type of residence offers services designed to assist elderly people, residents are considered to be living in the community.

- **Private homes.**

According to data from the Medicare Current Beneficiary Survey, or MCBS, the elderly nursing home population has declined over the past 10 years; more elderly people are living in residential care facilities and other types of care facilities, in community-based housing with supportive services, and in houses in a regular community with no supportive services. That trend is especially pronounced for people 85 or older.

The MCBS and other surveys use different definitions to categorize residential settings. The MCBS identifies people as living in a facility—similar to being institutionalized—if they live in either of the first two categories of residence defined above (a nursing home or an RCF or other type of residence providing institutional care). By contrast, the American Community Survey (ACS), which is administered by the Census Bureau, identifies people as institutionalized if they live in nursing homes or in nursing facilities located on-site at a larger residential complex. Despite the surveys' differences in terminology, however, their estimates are similar: According to the MCBS, about 4.2 percent of elderly people lived in institutional

settings in 2009; the comparable figure based on ACS data was 3.9 percent.

How Are Long-Term Services and Supports Financed?

Long-term services and supports are provided and paid for both privately and publicly. More than half of that care is donated—as informal care—by family members and friends, most commonly by spouses and adult daughters. Providing care imposes costs on informal caregivers in the form of time, effort, forgone wages, and other economic costs.⁵ Assuming that informal caregivers provide care similar in value to that provided by home health aides, the Congressional Budget Office (CBO) estimates that the value of that care totaled approximately \$2.4 billion in 2011.⁶ Because many informal caregivers must sacrifice time that might otherwise be spent earning a wage, the value

5. Meredith B. Lilly, Audrey Laporte, and Peter C. Coyte, "Labor Market Work and Home Care's Unpaid Caregivers: A Systematic Review of Labor Force Participation Rates, Predictors of Labor Market Withdrawal, and Hours of Work," *Milbank Quarterly*, vol. 85, no. 4 (December 2007), pp. 641–690, <http://tinyurl.com/m2djo97>.
6. CBO calculated that value by multiplying \$21 per hour (the average wage of a home health aide in 2011) by approximately 11.2 billion hours of donated care (based on data from the Health and Retirement Study). For more information, see Congressional Budget Office, "Methods for Analysis of the Financing and Use of Long-Term Services and Supports," supplemental material for *Rising Demand for Long-Term Services and Supports for Elderly People* (June 2013), www.cbo.gov/publication/44370.

of that care in terms of forgone wages could be even higher.

The economic value of informal care is substantially higher than total payments for LTSS, which reached about \$192 billion in 2011 (see Exhibits 3 and 4).⁷ The largest payers for LTSS, accounting for about two-thirds of total spending, are the major government health care programs, Medicaid and Medicare.⁸ Out-of-pocket spending is the biggest source of private spending for LTSS and is particularly large for institutional care. Private insurance pays for only a small share of total spending on LTSS, although the number of people with private long-term care (LTC) insurance is growing slowly. Other sources of payment include various federal and state programs for elderly people and private charitable donations.

Private health insurance, Medicare, Medicaid, and private LTC insurance all cover stays in nursing homes as well as visits by home health agencies, but in different circumstances and for different lengths of time. Those multiple funding streams make it difficult to disentangle who pays for which services. Medicare and private health insurance cover

LTSS as part of a postacute care benefit that covers rehabilitative care—short-term stays in skilled nursing facilities and home health visits—for people who need skilled care. The coverage is generally short term in nature (lasting about three months or less) and is intended to help beneficiaries recover from acute conditions for which they are also receiving medical care. In contrast, Medicaid and private LTC insurance cover LTSS for an extended period (typically three to five years in the case of private LTC insurance and indefinitely in the case of Medicaid), and they do not require that the need for assistance be connected with an acute health care episode.

The services reimbursed by different payers can be similar; although the purposes for covering the services may differ, the setting and many of the services are the same. Medicare beneficiaries may begin a nursing home stay following a hospitalization for an ailment that leaves them with functional or cognitive limitations. If that loss in functioning persists, they may eventually exhaust their Medicare benefit. At that point, many nursing home residents turn to Medicaid or private long-term care insurance to finance their stay.

Likewise, the nonskilled home health services covered by Medicare and the home health aide and personal care services covered by Medicaid are often interchangeable. In addition, determining the point at which a beneficiary no longer requires postacute care is subjective and often decided in arbitrary ways, such as when Medicare's 100-day benefit for care in a skilled nursing facility is exhausted. That substitutability of services and payers, coupled with the difficulty in distinguishing between postacute care and LTSS, make it

difficult to draw clear distinctions between spending for postacute care and for LTSS. Thus, estimates of total spending for LTSS frequently include expenditures for postacute care covered by Medicare and private health insurance, an approach adopted in this report.⁹

Many, if not most, people do not make private financial preparations for their future LTSS needs. They may not have the personal financial resources necessary to purchase private LTC insurance, their health history may preclude the possibility of obtaining such insurance, or they may have concerns about the value of private coverage, including uncertainty about the stability of premiums in the future and the ability of insurance carriers to pay for care that might not be needed for several more decades. Other people may prefer to spend their money on activities while they are still healthy, expecting that their quality of life if they are severely impaired would not be much better even if they had more money to spend on assistive services.¹⁰ Some people may mistakenly expect that

9. For an example of an estimate that includes care covered by Medicare, see Kirsten J. Colello and others, *Long-Term Services and Supports: Overview and Financing*, CRS Report for Congress R42345 (Congressional Research Service, April 4, 2013). For an example of an estimate that excludes care covered by Medicare, see Carol O'Shaughnessy, "National Spending for Long-Term Services and Supports (LTSS), 2011," *National Health Policy Forum* (February 1, 2013), www.nhpf.org/library/details.cfm/2783.

10. Jeffrey R. Brown and Amy Finkelstein, "Insuring Long-Term Care in the United States," *Journal of Economic Perspectives*, vol. 25, no. 4 (Fall 2011), pp. 119–142, <http://tinyurl.com/l997ekg>.

7. CBO's calculations are based on data from the Centers for Medicare & Medicaid Services. They are adjusted to include only expenditures for elderly people.

8. About 5.4 million elderly people are enrolled in both Medicaid and Medicare. For information on the challenges of coordinating the financing of medical care and of long-term services and supports for people with both sources of coverage, see Congressional Budget Office, *Dual-Eligible Beneficiaries of Medicare and Medicaid: Characteristics, Health Care Spending, and Evolving Policies* (June 2013), www.cbo.gov/publication/44308.

their private health insurance (not long-term care insurance) or Medicare will provide for their needs or that they will be able to easily obtain Medicaid coverage. Some research finds that the availability of Medicaid deters some people from purchasing private coverage, even though Medicaid is an imperfect substitute for private insurance.¹¹ Other people may believe that their income and savings will be sufficient or that they will be able to obtain the assistance they need from family members and close friends.

How Might Expenditures on Long-Term Services and Supports Change Over Time?

LTSS expenditures for elderly people now account for an estimated 1.3 percent of gross domestic product (GDP).¹² That share is likely to rise in the future as the population ages. To explore the potential implications of the growing elderly population, CBO developed three alternative scenarios regarding the future prevalence of functional limitations among the elderly, holding constant other factors affecting those expenditures, such as growth in prices for LTSS, changes in family structure that could affect the provision of informal care, and changes in how services and supports are delivered. In those scenarios, LTSS expenditures were projected to range from 1.9 percent of GDP to 3.3 percent of GDP by 2050. (The combination

of actual future prevalence of functional limitations and changes in those other factors could result in LTSS spending that was less than 1.9 percent of GDP or more than 3.3 percent of GDP by 2050. Spending could be higher, for example, if the provision of informal care fell relative to the average family size.)

Projections of LTSS expenditures are subject to considerable uncertainty. In addition to estimates of the prevalence of functional limitations, they require judgments about future innovations in the delivery of care, changes in the use of services, and future rates of growth in the costs of labor and other inputs to long-term care.

Uncertainty About the Prevalence of Functional Limitations

Over several decades leading up to the beginning of the 21st century, the general health and functioning of elderly people steadily improved.¹³ Many factors—improvements in public health (including vaccinations), plentiful food, better living conditions, higher educational attainment, and safer work environments—contributed to a reduced prevalence of functional limitations (as well as greater life expectancy).

From 2000 to 2010, however, the prevalence of functional limitations among elderly people had no discernible trend and, looking ahead, the

sources of further improvement are less evident. For example, educational attainment, a significant factor affecting the prevalence of functional and cognitive limitations, is expected to continue to improve in the future, but at a much slower rate.¹⁴ The risk of workplace injuries has fallen as fewer jobs require physical labor, but workers may face higher longer-term risks as a result of more sedentary lifestyles. An increase in the prevalence of obesity, for example, is expected to increase the prevalence of functional limitations, all else being equal.¹⁵ However, other trends in behavior (such as a decline in smoking) could offset some of that effect.

Uncertainty About Future Costs of LTSS Inputs

Many factors can affect future prices for LTSS inputs, including, for example, changes in the size and characteristics of the workforce and changes in how LTSS is delivered. The difficulty in forecasting changes in those factors and in understanding how those factors contribute to changes in the prices of

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14. Linda G. Martin, Robert F. Schoeni, and Patricia M. Andreski, "Trends in Health of Older Adults in the United States: Past, Present, Future," *Demography*, vol. 47, no. 1 supplement (March 2010), pp. S17–S40, <http://tinyurl.com/kmddemo>.
 15. Soham Al Snih and others, "The Effect of Obesity on Disability vs. Mortality in Older Americans," *Archives of Internal Medicine*, vol. 167, no. 8 (April 2007), pp. 774–780, <http://tinyurl.com/kbutfp7>; and Honglei Chen and Xuguang Guo, "Obesity and Functional Disability in Elderly Americans," *Journal of the American Geriatrics Society*, vol. 56, no. 4 (April 2008), pp. 689–694, <http://tinyurl.com/mk5gcg5>.

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13. Dora L. Costra, "Changing Chronic Disease Rates and Longterm Declines in Functional Limitation Among Older Men," *Demography*, vol. 39, no. 1 (February 2002), pp. 119–137, <http://tinyurl.com/lqzxdj>.

11. *Ibid.*, p. 129.

12. Calculated using total LTSS expenditures of \$192 billion in 2011 divided by GDP for that year.

LTSS inputs means that predictions of future prices of LTSS inputs are highly uncertain. For this analysis, CBO assumed that prices for community-based care would grow at the rate of growth of average wages for long-term care workers over the 2010–2050 period (because community-based care is labor-intensive). CBO further assumed that prices for institutional care would initially grow at a rate consistent with historical growth in nursing home prices but then grow at a progressively slower rate, consistent with the underlying assumptions about growth in health care costs in CBO's *The 2012 Long-Term Budget Outlook*.

Uncertainty About How Care Will Be Delivered

Government programs that assist frail elderly people, such as Medicaid, have experimented with

several different models of health care financing and delivery. One major change has been the gradual shift to providing care to people as they continue to live in private homes rather than in institutional settings. The projected growth in programs that devote many of their resources to addressing the needs of elderly people—through Social Security payments and spending for Medicare and Medicaid—will generate pressure on federal and state budgets, suggesting that various forms of experimentation will probably occur in the future as part of attempts to reduce costs.¹⁶

Economic and technological changes may also complicate the efforts of policymakers to accurately estimate future resource needs for home- and community-based LTSS. For example, labor force participation might change as more people age

but remain healthy. Average family size also could change. Both of those factors could affect the availability of informal care.

-
16. Total federal spending for Social Security, Medicaid, Medicare (net of premiums), and the Children's Health Insurance Program amounted to 9.6 percent of GDP in 2012; along with future subsidies for the purchase of health insurance through exchanges, they will total 13.5 percent of GDP in 2030 and 16.2 percent of GDP in 2050, CBO estimates, if the programs continue to operate as specified in current law. See Congressional Budget Office, *The 2012 Long-Term Budget Outlook*, supplemental data (June 2012), www.cbo.gov/publication/43288. The estimates include spending for people under age 65, such as Social Security Disability Insurance payments and Medicaid spending for the nonelderly population.

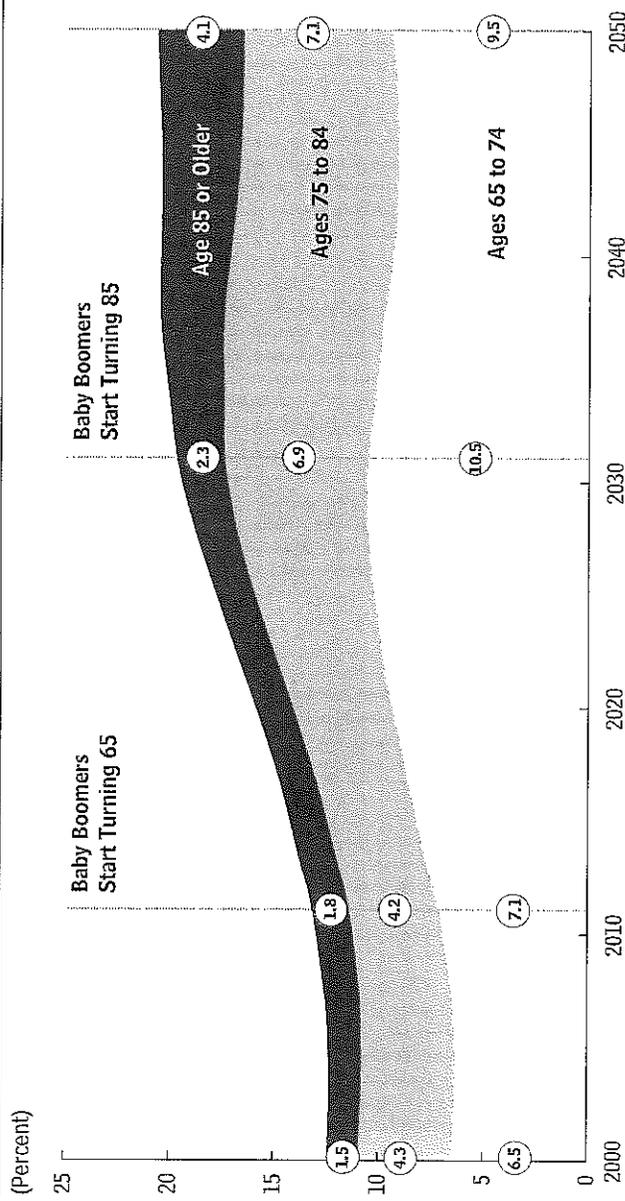


Financing Long-Term Services and Supports for an Aging Population in the United States



Relative to the total U.S. population, the number of elderly people in the United States will grow rapidly over the next four decades because of the post-World War II baby boom, the subsequent slowing of the birth rate, and a declining overall mortality rate, among other factors. The aging of the population has implications for government programs that serve elderly people—in particular, Social Security, Medicare, and Medicaid—and will affect government budgets at the federal, state, and local levels. In addition to drawing on informal care donated by family and friends, elderly people with functional limitations rely heavily on Medicare and Medicaid to help finance their use of long-term services and supports.

Exhibit 1.
Elderly Adults As a Share of the U.S. Population, 2000 to 2050



Source: Congressional Budget Office tabulations based on population projections reported in *The 2012 Long-Term Budget Outlook* (June 2012), www.cbo.gov/publication/43288.

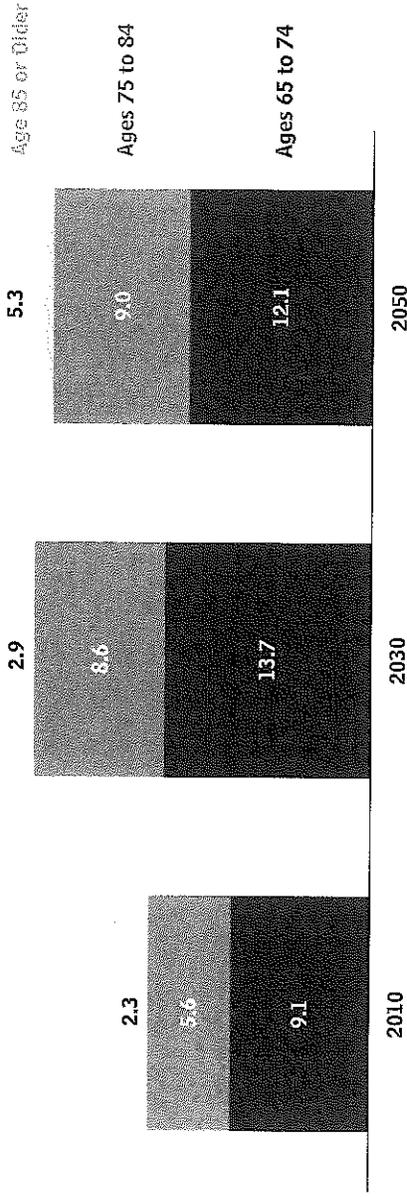
Note: Members of the baby-boom generation (people born between 1946 and 1964) started turning 65 in 2011 and will turn 85 beginning in 2031.

Between 1946 and 1964, more than 75 million babies were born in the United States, forming a cohort that has come to be known as the baby-boom generation. The oldest people in the group turned 65 in 2011. The aging of that generation, in combination with increases in longevity and other factors, will cause the share of the population age 65 or older to grow rapidly from 2010 to 2030. The share of the population age 85 or older will grow rapidly beginning around 2030 and continuing until at least 2050. ♦

Exhibit 2.

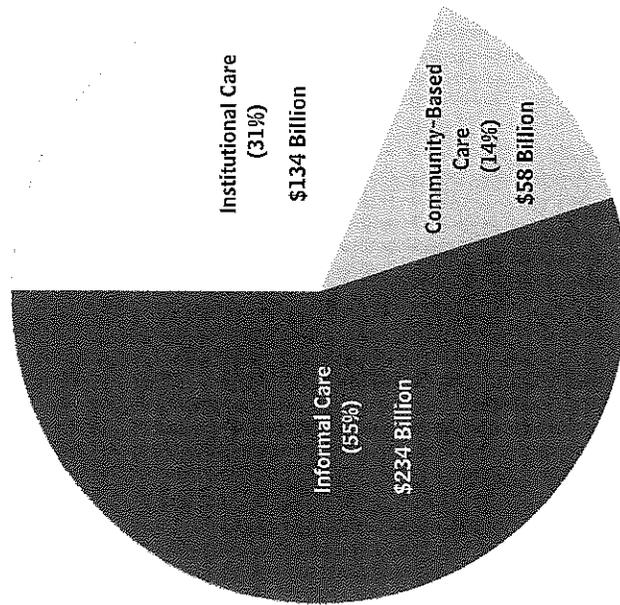
Elderly Adults As a Share of All Adults Age 18 or Older, 2010 to 2050

(Percent)



The caregiving burden on families and social networks will grow over the coming decades as the U.S. population ages. In 2010, people over 65 accounted for about one-sixth of the adult U.S. population (people age 18 or older); the share of people age 85 or older, who are most in need of care, was very small in 2010 relative to the overall adult population. Those shares, however, will rise significantly over the coming decades, the Congressional Budget Office projects. By 2030, about one-fourth of adults in the United States will be age 65 or older; the biggest increases—roughly 50 percent higher than their shares in 2010—will be among adults ages 65 to 74 and ages 75 to 84. From 2030 to 2050, the share of adults age 85 or older will nearly double, climbing from almost 3 percent to more than 5 percent. ♦

Source: Congressional Budget Office tabulations based on population projections reported in *The 2012 Long-Term Budget Outlook* (June 2012), www.cbo.gov/publication/43288.

Exhibit 3.**Estimated Economic Value of Formal and Informal Long-Term Services and Supports for Elderly People in the United States, 2011**

Source: Congressional Budget Office based on information from the Centers for Medicare & Medicaid Services, Office of the Actuary (for estimates of spending for formal care); data from the Health and Retirement Study; and data on average hourly wages of home health aides as reported by MetLife Mature Market Institute. For more information, see the supplemental material for this report.

Notes: In this exhibit, expenditures for institutional care include the cost of stays, including room and board as well as assistive services, in skilled nursing facilities, nursing homes, and nursing facilities housed inside continuing care retirement communities. Expenditures for community-based services include the cost of assistive services provided in all other settings, including private homes, adult day care facilities, and residential facilities that are not nursing homes.

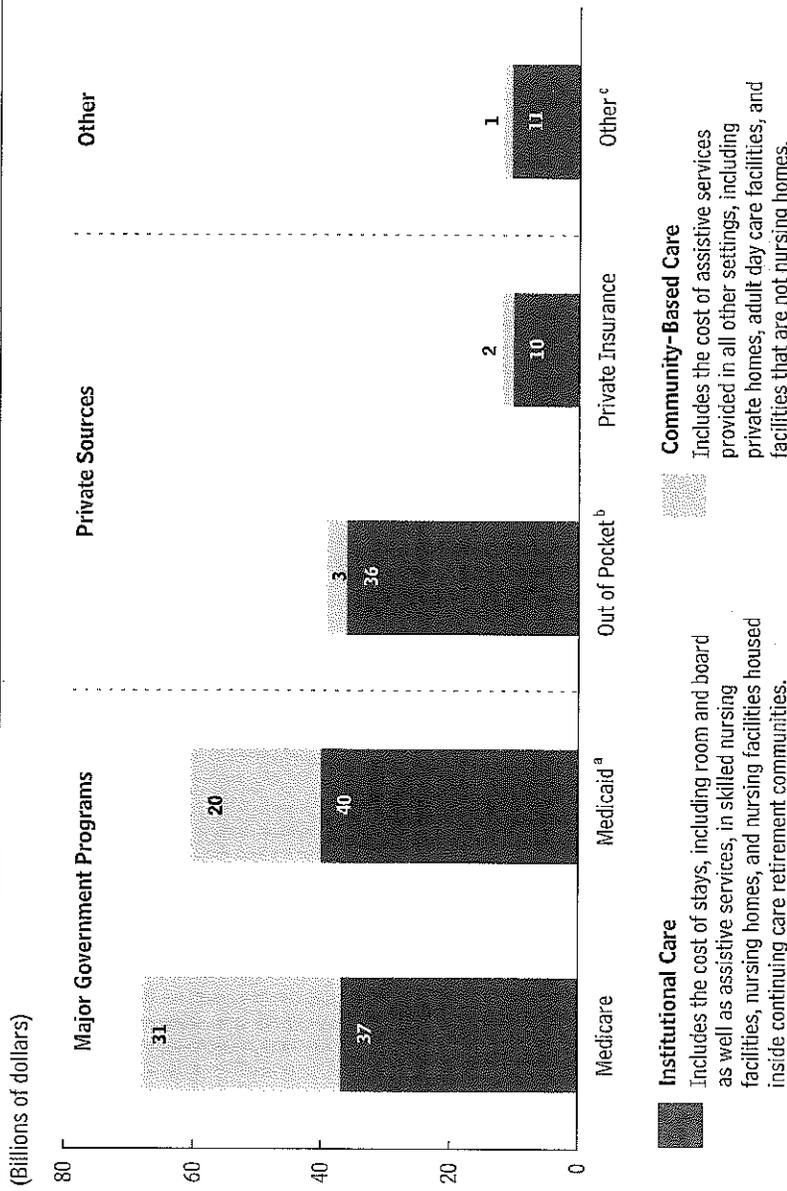
The economic value of informal care is estimated on the basis of the number of donated hours of care reported in the Health and Retirement Study and the average hourly wage of a home health aide (a typical long-term care worker). In this estimate, the value of an hour of informal care is assumed to equal the cost of hiring someone to provide the care (about \$21 per hour in 2011).

The total value of long-term services and supports for elderly people, including the estimated economic value of informal (or donated) care, exceeded \$400 billion in 2011, the Congressional Budget Office estimates. Expenditures for institutional care—provided in skilled nursing facilities, nursing homes, and nursing facilities located in continuing care retirement communities—totaled \$134 billion in 2011, or about 31 percent of LTSS expenditures.¹⁷ Expenditures for home- and community-based service providers, such as home health and personal care agencies and adult day care providers, totaled \$58 billion, or less than half of the amount spent for institutional care. Informal care, which is usually provided by family members and close friends, accounts for more than half of the total economic value of long-term services and supports. The economic value of informal care in 2011 was about \$234 billion, CBO estimates. Choosing to provide informal assistance to a frail elderly person may entail a substantial sacrifice of free time on the part of a caregiver; more than half of all informal caregivers work full time in addition to providing such care, and the burdens for caregivers who do not work full time may also be substantial.¹⁸

17. This definition of institutional care, used by the Centers for Medicare & Medicaid Services in its estimates of national health expenditures, is similar to but not the same as the definition of institutional care used in Exhibits 11 through 14.

18. Richard W. Johnson and Joshua M. Wiener, *A Profile of Frail Older Americans and Their Caregivers*, Retirement Project Occasional Paper 8 (Urban Institute, February 2006), p. 33, www.urban.org/publications/311284.html.

Exhibit 4.
Expenditures for Long-Term Services and Supports for Elderly People, 2011
(Billions of dollars)



Source: Congressional Budget Office based on information from the Centers for Medicare & Medicaid Services, Office of the Actuary.

- Notes: This exhibit does not include the economic value of informal care. Medicare expenditures for postacute care are included because it is difficult to distinguish between spending for long-term services and supports and spending for postacute care (the providers are usually the same for both kinds of care).
- a. Includes both federal and state expenditures.
 - b. Includes beneficiaries' cost sharing for Medicare and Medicaid.
 - c. Includes expenditures by the Department of Defense, the Department of Veterans Affairs, other private funding (including, for example, charitable donations), general assistance, and other state and local programs.

Spending for long-term services and supports comes from public and private payers, but about two-thirds of formal services are paid for by the two major government health care programs, Medicaid and Medicare. Medicaid, an insurance program for low-income people that is funded jointly by the federal and state governments, pays for long-term services and supports for people with functional losses who meet the financial requirements to qualify for coverage. Medicare covers health care expenses for nearly all people 65 or older, as well as younger people who are disabled. Most LTSS spending from private sources is from out-of-pocket payments for institutional care, reflecting relatively low rates of private long-term care insurance coverage.¹⁹ According to the Health and Retirement Study, about 13 percent of people age 65 or older have private LTC insurance; among those receiving assistance, coverage is even lower (see Exhibit 18). Payments by private insurance may also be low because many private policies do not cover the full cost of care.²⁰ The small share of private spending for community-based care is probably because such care is often provided informally by family members and friends, without any payment. ♦

19. As in Exhibit 3, the definition of institutional care for purposes of reporting expenditures differs somewhat from the definition used in later exhibits.

20. Payments by private insurance may be underreported. At least some of the spending may be reported as out of pocket even though it is eventually reimbursed by insurance, because some policies reimburse policyholders after they pay the health care provider. See America's Health Insurance Plans, *Guide to Long-Term Care Insurance: 2012 Update*, p. 5, <http://trinyul.com/llGoaom>.

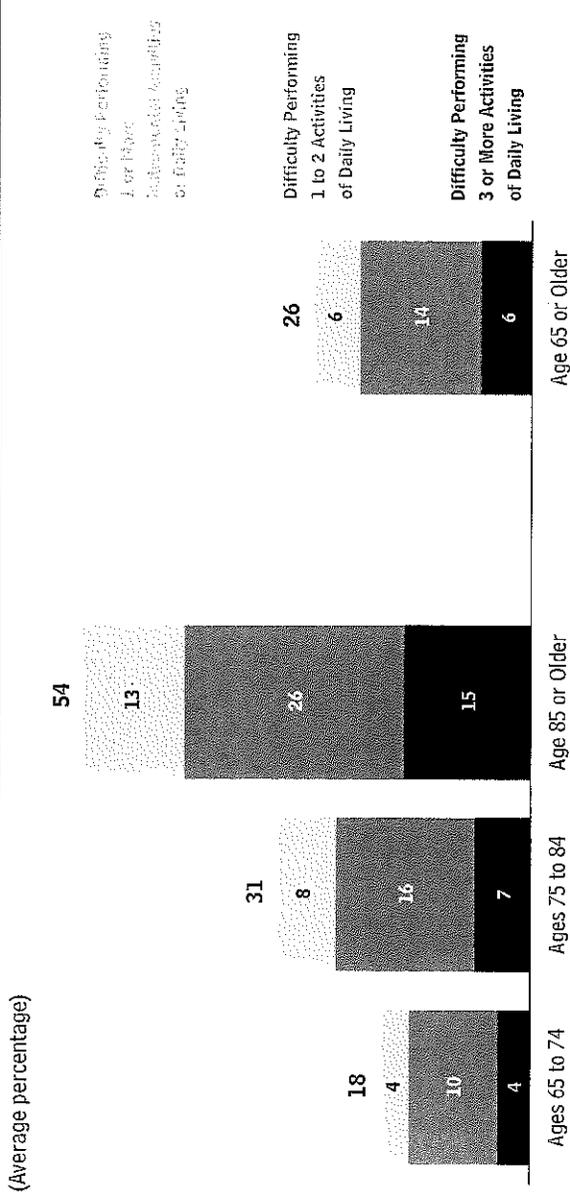


Functional and Cognitive Limitations Among Elderly People Living in the Community



People receiving long-term services and supports typically report difficulty in performing one or more activities of daily living (ADLs), which include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet, and instrumental activities of daily living (IADLs), which include preparing meals, shopping, using the telephone, managing money, and taking medications. In addition to those functional limitations, they may have cognitive limitations, such as memory loss and confusion. Some people who report difficulty with ADLs and IADLs live independently without any assistance, but a majority of such people—especially those with cognitive limitations—receive assistance, which is mostly provided informally.

Exhibit 5.
Functional Limitations Among Elderly People Living in the Community, 2000 to 2010



Activities of Daily Living (ADLs)
Include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet.

Instrumental Activities of Daily Living (IADLs)
Include preparing meals, shopping, using the telephone, managing money, and taking medications.

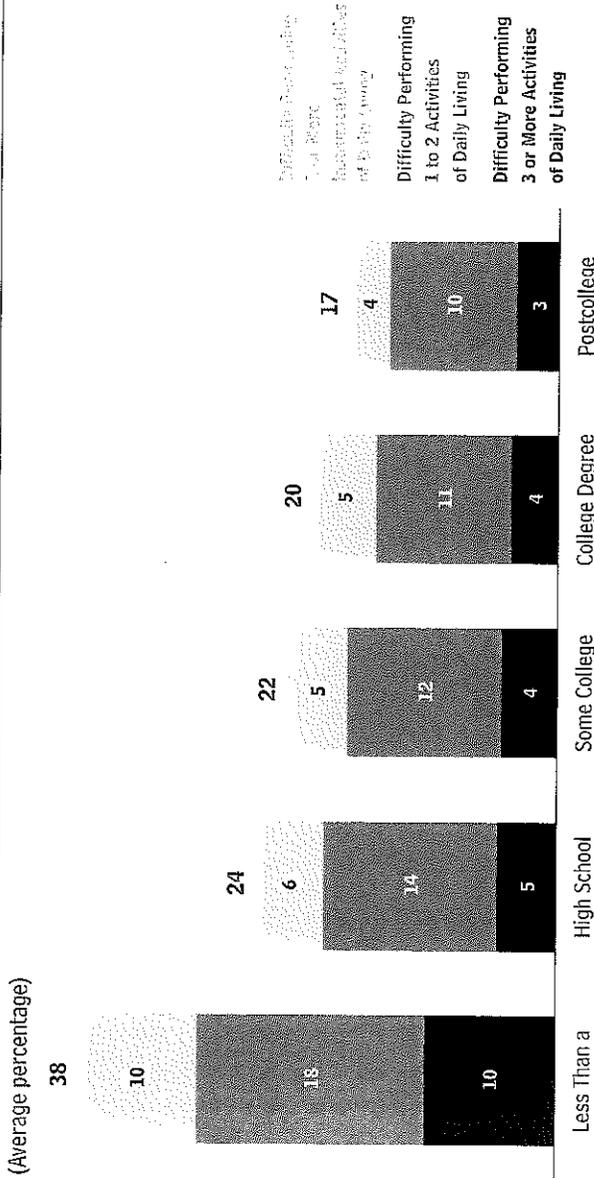
Source: Congressional Budget Office tabulations of data from the Health and Retirement Study, including the 2000, 2002, 2004, 2006, 2008, and 2010 waves. See the supplemental material for additional information.

Note: Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

The probability of having functional limitations increases significantly with age. Less than 20 percent of people ages 65 to 74 who are living in the community report difficulty with functional limitations, but by age 85 or older, the share of people living in the community reporting functional limitations almost triples. Almost a third of people ages 75 to 84 and more than half of those age 85 or older report functional limitations. More than 40 percent of people age 85 or older have difficulty performing one or more activities of daily living, compared with 14 percent of those ages 65 to 74.

In this exhibit, as well as other exhibits reporting the prevalence of functional limitations, the reported rates are an average of the rates observed over the 2000–2010 period (weighted by the population in each year). The Congressional Budget Office selected that approach because rates for specific years within that period did not show any particular trend, and pooling observations over several different survey years improved the precision of reported statistics.

Exhibit 6.
Functional Limitations Among Elderly People Living in the Community, by Educational Attainment, 2000 to 2010



Activities of Daily Living (ADLs)

Include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet.

Instrumental Activities of Daily Living (IADLs)

Include preparing meals, shopping, using the telephone, managing money, and taking medications.

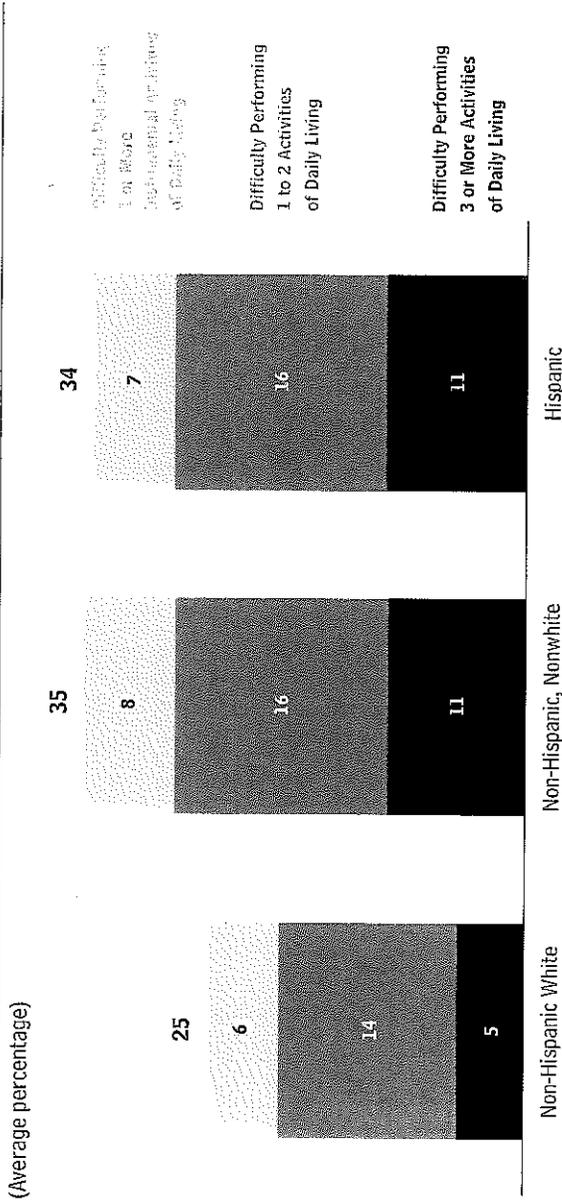
Source: Congressional Budget Office tabulations of data from the Health and Retirement Study, including the 2000, 2002, 2004, 2006, 2008, and 2010 waves. See the supplemental material for additional information.

Note: Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

Functional limitations are much more common among people with little education because they tend to work in occupations that expose them to greater risk of injuries that can lead to impairment. They are also more likely than others to engage in risky health behaviors, such as smoking, which increase the risk of eventual impairment.²¹ On average, over the 2000–2010 period, elderly people with less than a high school education living in the community were more than twice as likely as those with at least a high school diploma to have difficulty performing three or more activities of daily living. The relationship between educational attainment and functional loss persists across all major age groups among elderly people, but it is less pronounced among people who are 85 or older (the data for particular age groupings are not shown in the exhibit). ♦

21. Larkin L. Strong and Frederick J. Zimmerman, "Occupational Injury and Absence From Work Among African American, Hispanic, and Non-Hispanic White Workers in the National Longitudinal Survey of Youth," *American Journal of Public Health*, vol. 95, no. 7 (July 2005), pp. 1226–1232, <http://tinyurl.com/kymug52>; and Zachary Zimmer and James S. House, "Education, Income, and Functional Limitation Transitions Among American Adults: Contrasting Onset and Progression," *International Journal of Epidemiology*, vol. 32, no. 6 (2003), pp. 1089–1097, <http://tinyurl.com/k5lbpk>.

Exhibit 7. Functional Limitations Among Elderly People Living in the Community, by Race and Ethnicity, 2000 to 2010



Activities of Daily Living (ADLs)

Include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet.

Instrumental Activities of Daily Living (IADLs)

Include preparing meals, shopping, using the telephone, managing money, and taking medications.

Source: Congressional Budget Office tabulations of data from the Health and Retirement Study, including the 2000, 2002, 2004, 2006, 2008, and 2010 waves. See the supplemental material for additional information.

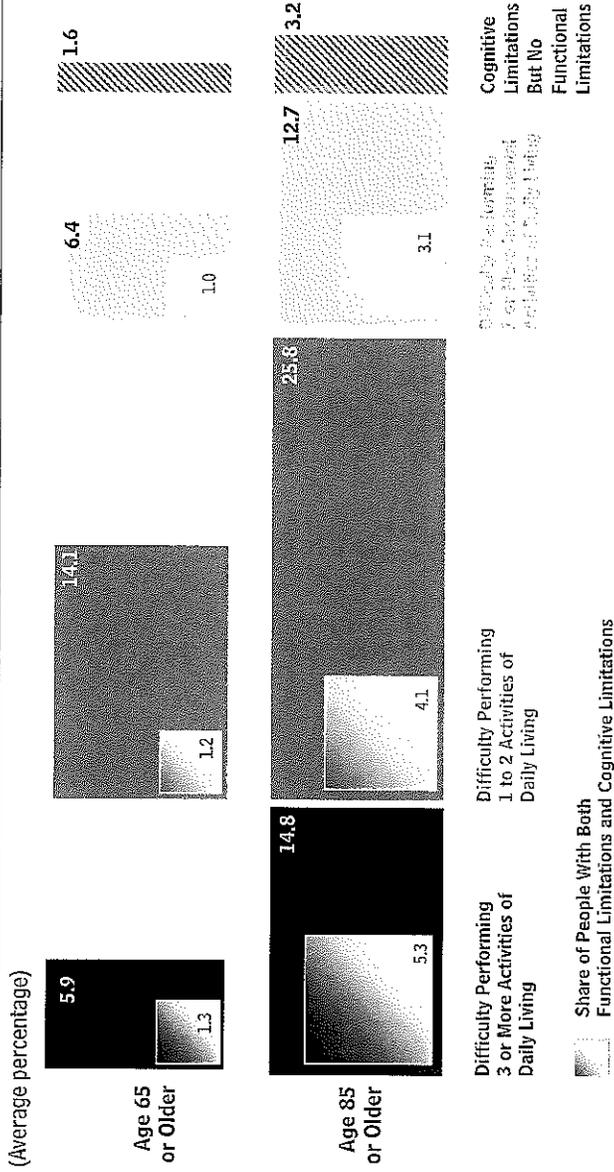
Note: Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

The prevalence of impairment varies significantly between elderly non-Hispanic white people and elderly people in other racial and ethnic groups. Only 25 percent of non-Hispanic white people age 65 or older living in the community report some degree of functional impairment, compared with roughly 35 percent of other elderly people. The biggest difference among groups is in the percentage of people with multiple impairments; non-Hispanic white elderly people are considerably less likely than other elderly people to report three or more functional impairments. Even after controlling for educational attainment, the differences (although smaller) generally persist.²² As is the case with educational attainment, the differences by race and ethnicity are generally consistent across all age groups among elderly people, but the differences are smaller for people 85 or older.

22. That finding is based on CBO's tabulations of data from the Health and Retirement Study, but it is not reported in the exhibit.

Exhibit 8.

Functional and Cognitive Limitations Among Elderly People Living in the Community, by Age, 2000 to 2010



Activities of Daily Living (ADLs)

Include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet.

Instrumental Activities of Daily Living (IADLs)

Include preparing meals, shopping, using the telephone, managing money, and taking medications.

Source: Congressional Budget Office tabulations of data from the Health and Retirement Study, including the 2000, 2002, 2004, 2006, 2008, and 2010 waves. For more information, see the supplemental material.

Note: Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

As with functional loss, cognitive limitations are more common at advanced ages.²³ About one of every six people age 85 or older living in the community report cognitive limitations, compared with one of 20 for all people age 65 or older. Loss in cognitive functioning places significant strain on caregivers; many people with impaired cognition eventually enter nursing homes. About one of every five elderly people with three or more functional limitations who are living in the community also have cognitive limitations, but a much smaller proportion of people with one or two functional limitations also have cognitive limitations.

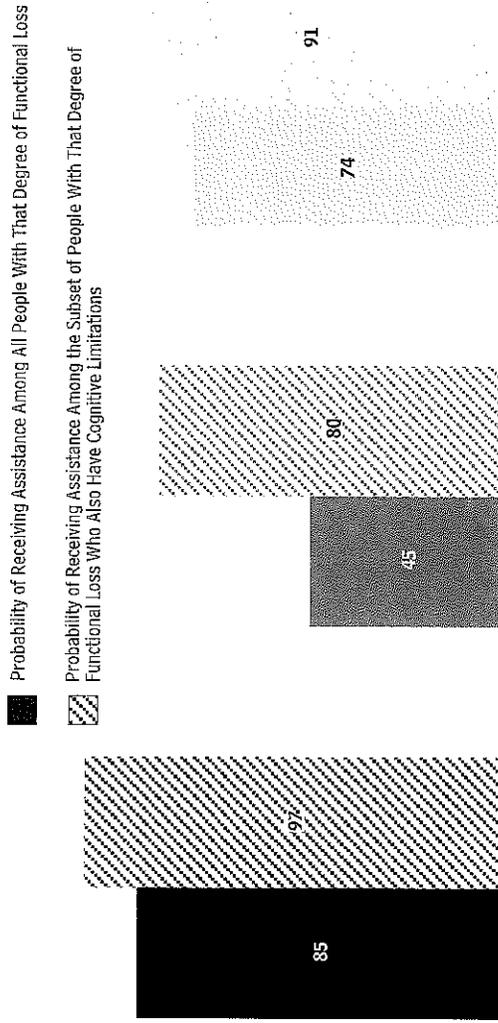
Interestingly, the proportion of people with losses in only the instrumental activities of daily living who also have cognitive limitations is higher than that of people with one or two ADL limitations. That may be because IADLs require more cognitive ability to perform than do activities of daily living; some people who have good physical health but cognitive loss may be able to perform ADLs but not IADLs. ♦

23. For more information on how people were identified as having cognitive limitations, see Congressional Budget Office, "Methods for Analysis of the Financing and Use of Long-Term Services and Supports," supplemental material for *Rising Demand for Long-Term Services and Supports for Elderly People* (June 2013), www.cbo.gov/publication/44370.

Exhibit 9.

Probability of Receiving Assistance, by Functional and Cognitive Limitations, Among Elderly People Living in the Community, 2000 to 2010

(Average percentage)



Difficulty Performing 3 or More Activities of Daily Living

Difficulty Performing 1 to 2 Activities of Daily Living

Difficulty Performing 1 or More Instrumental Activities of Daily Living

Activities of Daily Living (ADLs)

Include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet.

Instrumental Activities of Daily Living (IADLs)

Include preparing meals, shopping, using the telephone, managing money, and taking medications.

Source: Congressional Budget Office tabulations of data from the Health and Retirement Study, including the 2000, 2002, 2004, 2006, 2008, and 2010 waves. For more information, see the supplemental material.

Notes: As presented in Exhibit 8, a small percentage of people have losses in cognitive functioning but no losses in physical functioning. However, none of those people reported receiving assistance in the HRS. Thus, they are not represented in this exhibit.

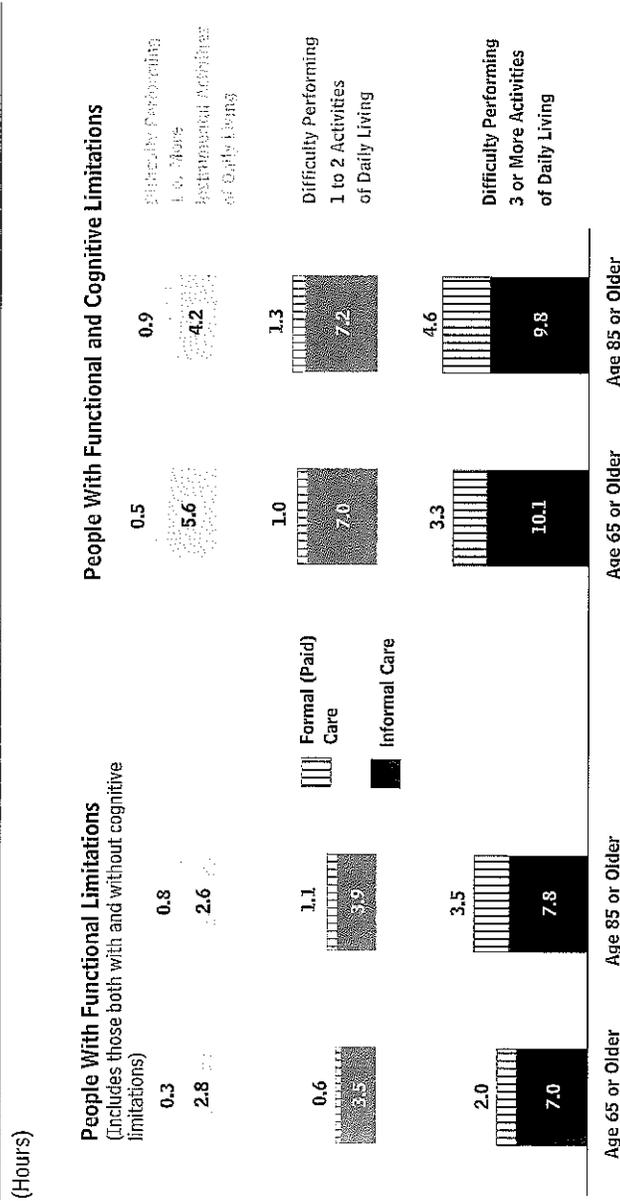
Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

People with functional limitations may need assistance to help them perform routine daily activities or to do chores or other necessary tasks. Not every person with one or more impairments requires personal assistance; many rely instead on special equipment, such as canes, wheelchairs, and grab bars. Others who report difficulty may still perform the activities themselves, but not without great effort.

Not surprisingly, people with multiple functional losses are more likely to receive assistance than people with fewer impairments. On average over the 2000–2010 period, for example, about 85 percent of elderly people living in the community who reported difficulty with three or more ADLs received assistance, as compared with about 45 percent of those reporting difficulty with one or two ADLs. People with both functional and cognitive limitations were more likely to receive assistance than those with functional limitations only. For example, 80 percent of those reporting difficulty with one or two ADLs who also had cognitive limitations received assistance. ♦

Exhibit 10.

Average Caregiver Hours per Day for Elderly People Living in the Community Who Are Receiving Any Care, by Age and Limitations, 2000 to 2010



People with functional limitations who receive assistance from others primarily rely on informal care to obtain the assistance they need. The number of hours of paid care is highest for people who have difficulty with three or more activities of daily living and who are 85 or older. (In many cases, very elderly people are widowed and thus without a spouse to care for them.) Assistance may be extensive; elderly people with limitations in three or more ADLs who live in the community receive an average of 9 hours of assistance per day (counting both formal and informal sources of care), and people age 85 or older with that degree of impairment typically receive about 11 hours of assistance per day, mostly informal.

People with both functional and cognitive limitations receive significantly more hours of assistance than do people with functional limitations only. For example, people age 85 or older with three or more functional limitations who also have cognitive limitations and who live in the community receive more than 14 hours of care per day (both formal and informal), on average.

Source: Congressional Budget Office tabulations of data from the Health and Retirement Study, including the 2000, 2002, 2004, 2006, 2008, and 2010 waves. For more information, see the supplemental material.

Notes: Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

The caregiver hours are not necessarily exclusive. That is, two hours of assistance might be two hours provided by a single helper or one hour with two helpers present.

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Providing Long-Term Services and Supports

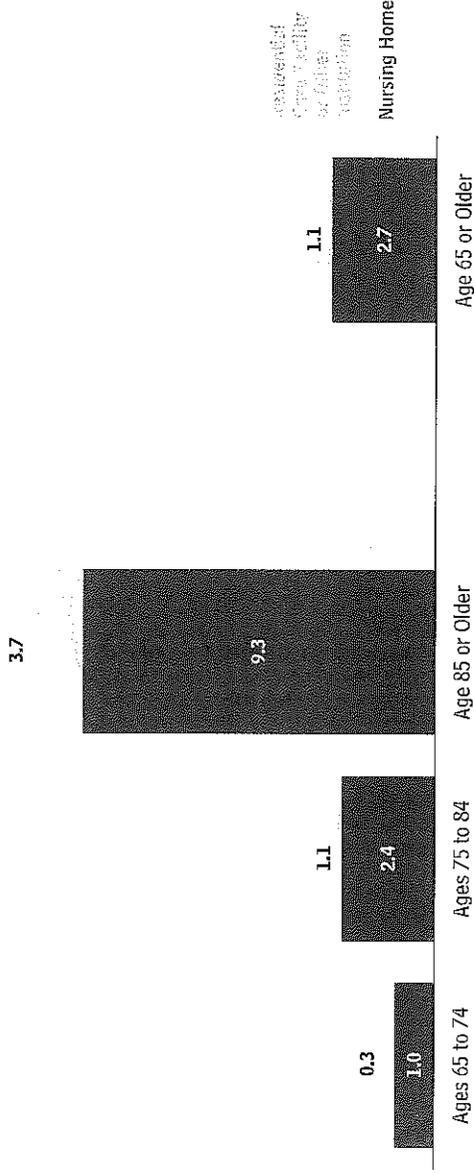


The provision of long-term services and supports takes many forms and occurs in various settings. Those services, often provided by friends and family without any formal training, primarily address recipients' need for assistance with routine daily activities, and the types of assistance have not changed much over time. This section of the report describes the settings in which LTSS are provided.

Exhibit 11.

Rates of Institutionalization Among Elderly People, by Age, 2010

(Percentage of age group)



Source: Congressional Budget Office based on data from Medicare Current Beneficiary Survey, Access to Care files, 2010. For more information, see the supplemental material.

Note: A person is considered to live in an institution if he or she resides in a nursing home (or skilled nursing facility) or a long-term care facility that provides 24-hour-a-day caregiver supervision, assistance for people with functional or cognitive limitations, or supervision of medications. That definition is consistent with the MCBS's definition.

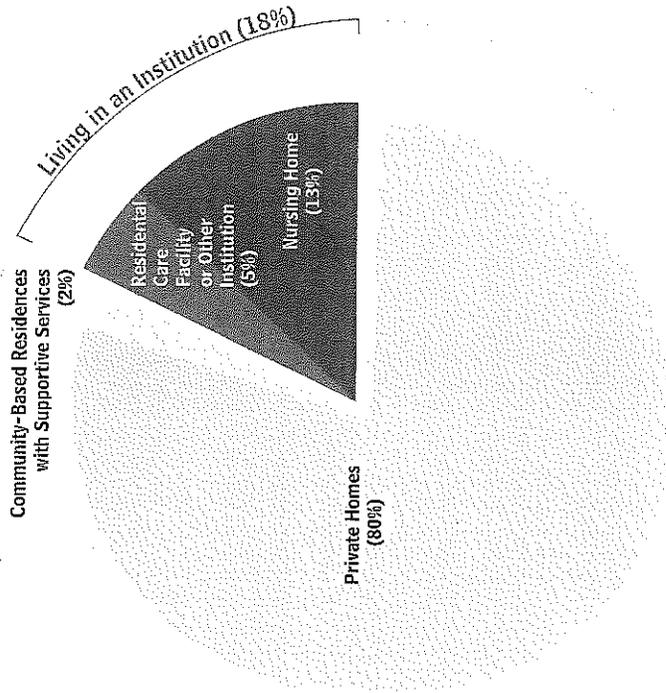
Institutionalization is much more common at older ages; in 2010, about one in eight people age 85 or older (13 percent) resided in institutions, compared with 1 percent of people ages 65 to 74. The share of elderly people living in institutional settings has fallen over the past 10 years; more opt to live either in private residences or in residential communities offering supportive services for people with functional limitations.²⁴ Individuals at advanced ages (85 and older) are much more likely to be institutionalized than are younger elderly people (ages 65 to 84) because frailty is more common at advanced ages and also because they are more likely to be widowed and thus not have someone who can care for them if they live in the community.

For purposes of this exhibit, people are considered to be institutionalized if they live in a nursing home (a facility licensed to provide skilled nursing care as well as personal care), in a long-term care facility that provides 24-hour-a-day supervision (such as a residential care facility), or in a facility that offers assistance for people with functional or cognitive limitations or offers supervision of medications. ♦

24. That finding is based on CBO's analysis of data from the Medicare Current Beneficiary Surveys from 2001 through 2010; and David C. Grabowski, David G. Stevenson, and Portia Y. Cornell, "Assisted Living Expansion and the Market for Nursing Home Care," *Health Services Research*, vol. 47, no. 6 (December 2012), pp. 2296–2315, <http://tinyurl.com/nxalkqs>.

Exhibit 12.

Living Arrangements for Elderly People Receiving Long-Term Services and Supports, 2010



Living in the Community (82%)

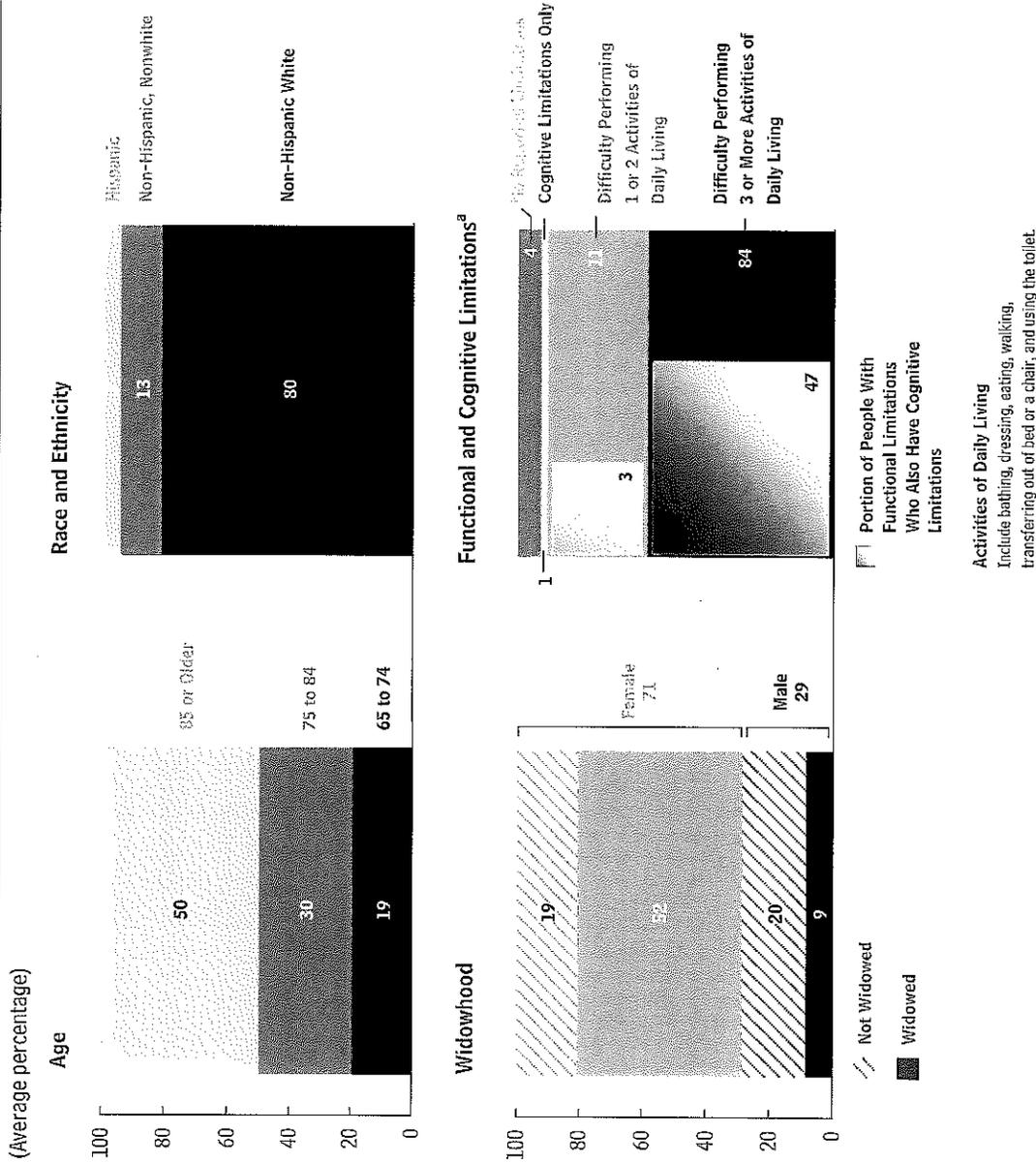
Source: Congressional Budget Office based on data from Medicare Current Beneficiary Survey, Access to Care files, 2010.
 Note: A person is considered to live in an institution if he or she resides in a nursing home (or skilled nursing facility) or a long-term care facility that provides 24-hour-a-day caregiver supervision, assistance for people with functional or cognitive limitations, or supervision of medications. That definition is consistent with the MCBS's definition.

Long-term services and supports are provided in several different settings. Almost one in five elderly people receiving LTSS (18 percent) live in institutional settings. Individuals who have the most severe limitations or who have relatively little family or social support generally live in nursing homes, although some may choose to live in residential care facilities or other facilities that are capable of providing the necessary care and support. For purposes of this exhibit, people are defined as institutionalized if they live in a nursing home, a residential care facility, or other type of long-term care facility that provides 24-hour caregiver supervision, assistance for functional limitations, or supervision of medications.

Elderly people living in the community, in contrast, may reside in community-based residences that offer basic services (such as meals, housekeeping, and laundry) as well as some health-related services (such as help with medications), but only about 2 percent live in such residences.

The vast majority—80 percent—of elderly people receiving assistance, including many with several functional limitations, live in private homes. They may receive assistance during the day at adult day care centers or in their own home. The care they receive is usually donated or informal. Formal care is paid for out of their own funds, through private insurance, or through public programs (such as Medicaid).

Exhibit 13.
Characteristics of Elderly People Living in Nursing Homes, 2010



Elderly people who have multiple limitations are more likely to reside in institutional settings (nursing homes, residential care facilities, or other institutional settings) than are people with fewer limitations. In general, nursing home residents are somewhat older and more frail than residents in other institutional settings. About 80 percent of elderly nursing home residents are age 75 or older.

About 84 percent of elderly nursing home residents have three or more functional limitations; of that 84 percent, about half also have cognitive limitations.

Nearly three-fourths of elderly nursing home residents are women, though only 58 percent of people 65 or older are women. The majority of the female nursing home residents are widowed. Women's longer life expectancy may be a reason that more women than men live in an institutional setting. Also, because they are often widowed, those women cannot depend on a spouse to provide assistance.

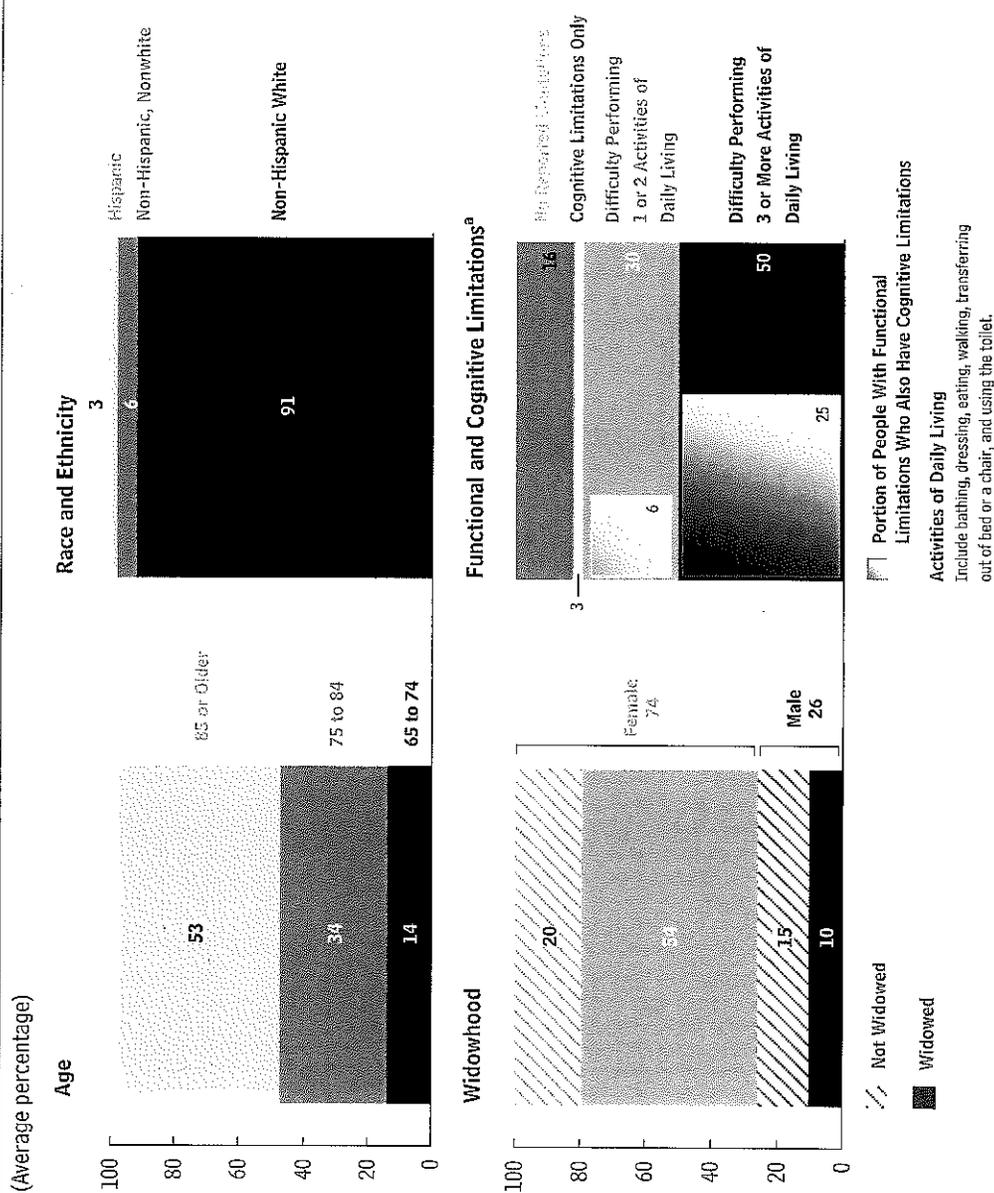
About four out of every five nursing home residents are non-Hispanic white; roughly that same proportion of elderly people is non-Hispanic white.

Source: Congressional Budget office based on data from Medicare Current Beneficiary Survey, Access to Care files, 2010. For more information, see the supplemental material.

a. The share of people with limitations in instrumental activities of daily living (preparing meals, shopping, and managing money, for example) was 0.3 percent (not shown in this exhibit).

Exhibit 14.

Characteristics of Elderly People Living in Residential Care Facilities and Other Institutions, 2001 to 2010



Source: Congressional Budget office based on data from Medicare Current Beneficiary Survey, Access to Care files, 2001 to 2010. For more information, see the supplemental material.

a. The share of people with limitations in instrumental activities of daily living (preparing meals, shopping, and managing money, for example) was 2 percent (not shown in this exhibit).

Residential care facilities and other non-nursing home facilities are becoming a more popular source of institutional care for elderly people.²⁵ Since the 1990s, the number of elderly people living in RCFs has grown, whereas the population living in nursing homes has fallen.²⁶ Residents of RCFs have demographic characteristics that are very similar to those of elderly people living in nursing homes. About the same percentage of residents are 85 or older—50 percent in nursing homes and 53 percent in RCFs and other institutional settings. Similarly, nearly three-fourths of the residents at both types of institutional settings are female. But nursing home residents have more functional and cognitive limitations, on average, than residents of other institutional settings. About 84 percent of nursing home residents have three or more functional limitations, whereas only about half of residents of RCFs and other facilities have that many functional limitations. About 50 percent of elderly nursing home residents have cognitive limitations, compared with 34 percent of elderly residents of RCFs and other facilities. Nine out of every ten residents of RCFs and other institutional settings are non-Hispanic white; non-Hispanic whites are more likely than other elderly people to live in those settings. ♦

25. For definitions of residential care facilities and institutional care, see the glossary at the end of this report.

26. Brenda C. Spillman and Kirsten J. Black, *The Size and Characteristics of the Residential Care Population: Evidence from Three National Surveys* (Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy, January 2006), <http://aspc.hhs.gov/daltcp/reports/2006/3natsur.pdf>.

Paying for Long-Term Services and Supports

As elderly people age and become more frail, the cost of providing long-term services and supports grows for them and their families, and it can eventually deplete their income and savings. The high cost of paying for care may be one reason that most people with functional and cognitive losses use only informal care; even people who pay for some formal care usually supplement it with informal care.

The cost of institutional care can have a catastrophic impact on an elderly person's finances. In 2011, the annual cost of care for a resident paying either out of pocket or with private insurance in a semiprivate room in a nursing home averaged nearly \$80,000. Prices vary substantially; according to the MetLife Mature Market Institute, Alaska had the highest average annual nursing home cost—nearly \$250,000—but that state has a significantly higher cost of living. Among all other

states, Oklahoma had the lowest average price (at just over \$50,000), and Connecticut had the highest (at about \$135,000).²⁷ Although many nursing home residents enter nursing homes relying on coverage from Medicare or private health insurance, they eventually exhaust those benefits—which are short term and intended to cover episodes of acute care—as well as other financial resources and turn to Medicaid (the most common payer for nursing home care) to continue to finance their stay. According to the 2004 National Nursing Home Survey, 58 percent of elderly nursing home residents were covered by Medicaid. But only about half of those people were covered by Medicaid when they first entered the nursing home. Among private sources of payment, the

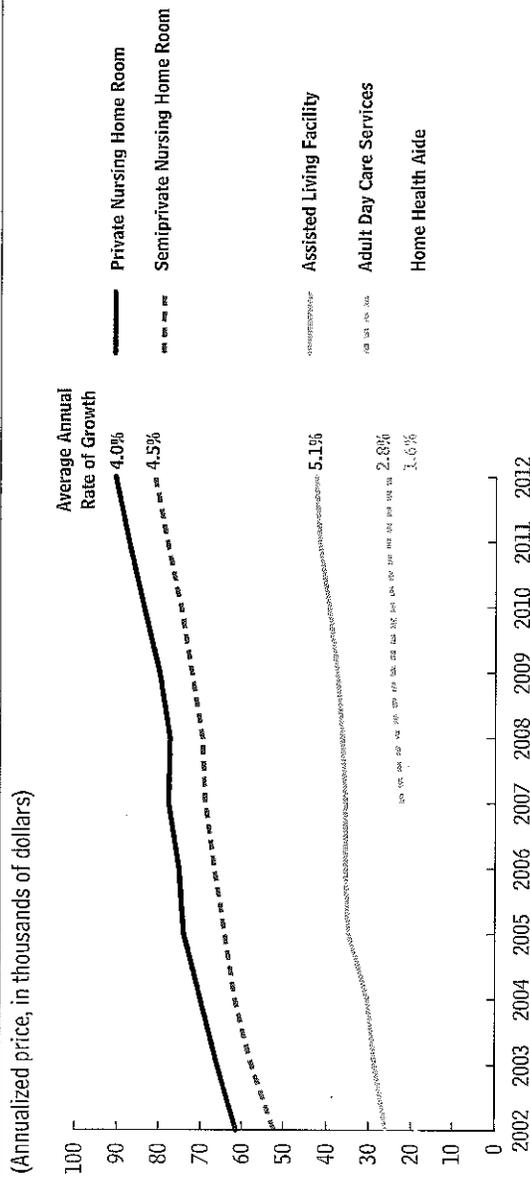
most common form is out-of-pocket spending (because most people with LTSS needs do not have private long-term care insurance).

Even though Medicare appears to account for the largest share of spending on services and supports received in the community (see Exhibit 4), the bulk of those payments are probably for short-term postacute care services relating to an acute illness. Medicaid pays for a significant amount of community-based LTSS. Private insurance and other private sources of payment cover relatively little community-based care, especially when compared with private sources of payment for institutional care. That discrepancy may largely result from the availability of informal care as a substitute for formal care provided in the community and the fact that many people lack coverage or other financial resources to pay for formal care.

27. See MetLife Mature Market Institute, *The 2012 MetLife Market Survey of Nursing Home, Assisted Living, Adult Day Services, and Home Care Costs* (2012).

Exhibit 15.

Prices of Long-Term Services and Supports for People Paying Out of Pocket or With Private Insurance, 2002 to 2012



Source: Congressional Budget Office based on MetLife Mature Market Institute, *Market Survey of Long-Term Care Costs, 2002 to 2012*.

Note: All prices are annualized. For facilities (including adult day care services), annual usage is assumed to be 365 days. For a home health aide, the annual cost is estimated on the basis of 4 hours of personal care per day, 5 days per week, 52 weeks per year.

Growth in the prices for LTSS for people paying out of pocket or with private insurance (private pay) has been faster for institutional care than for community-based care.²⁸

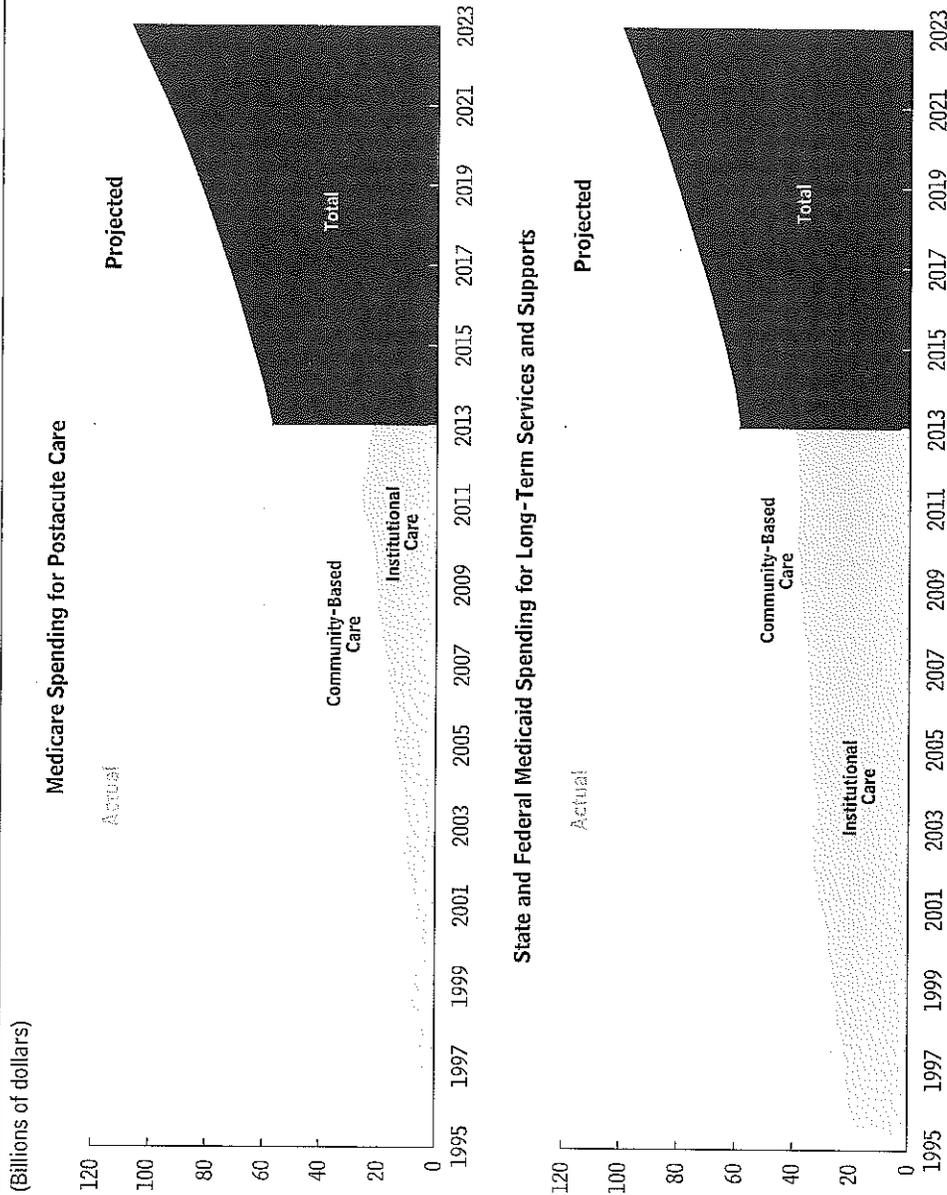
Between 2002 and 2012, private-pay prices for a private or semiprivate room in a nursing home grew by an average of 4.0 percent and 4.5 percent, respectively, per year. By comparison, growth in the average wage of a home health aide—a proxy for the price of community-based care—grew by less than 2 percent per year.

The average price of adult day care (community-based care, but generally in a daytime setting similar to that for institutional care) grew at a rate between that of institutional care and home health aide services (community-based care). By comparison, over the 2002–2012 period, the consumer price index grew by an average of 2.5 percent per year, and the employment cost index grew by an average of 2.7 percent per year. The comparatively slow rate of growth in the cost of community-based care may have contributed to the declining rate of institutionalization in recent years. ♦

28. The price data in the exhibit are annualized on the basis of reported unit prices (price per day or hour of service). Thus, the comparison is limited solely to movements in price over time. This exhibit does not include prices paid by Medicare or Medicaid.

Exhibit 16.

Medicare Spending for Postacute Care and Medicaid Spending for Long-Term Services and Supports, for Beneficiaries Age 65 or Older, Fiscal Years 1995 to 2023



Sources: Congressional Budget Office; Centers for Medicare & Medicaid Services.

Note: The spending amounts reported for 2011 differ from those reported in Exhibit 4 because this exhibit includes estimates of fee-for-service spending only, while Exhibit 4 includes CMS estimates of spending by managed care entities for long-term care services and postacute care. The expenditure projections are for people age 65 or older. In addition, the Medicare projections incorporate the assumption that Medicare Advantage enrollment remains constant as a share of total Medicare enrollment.

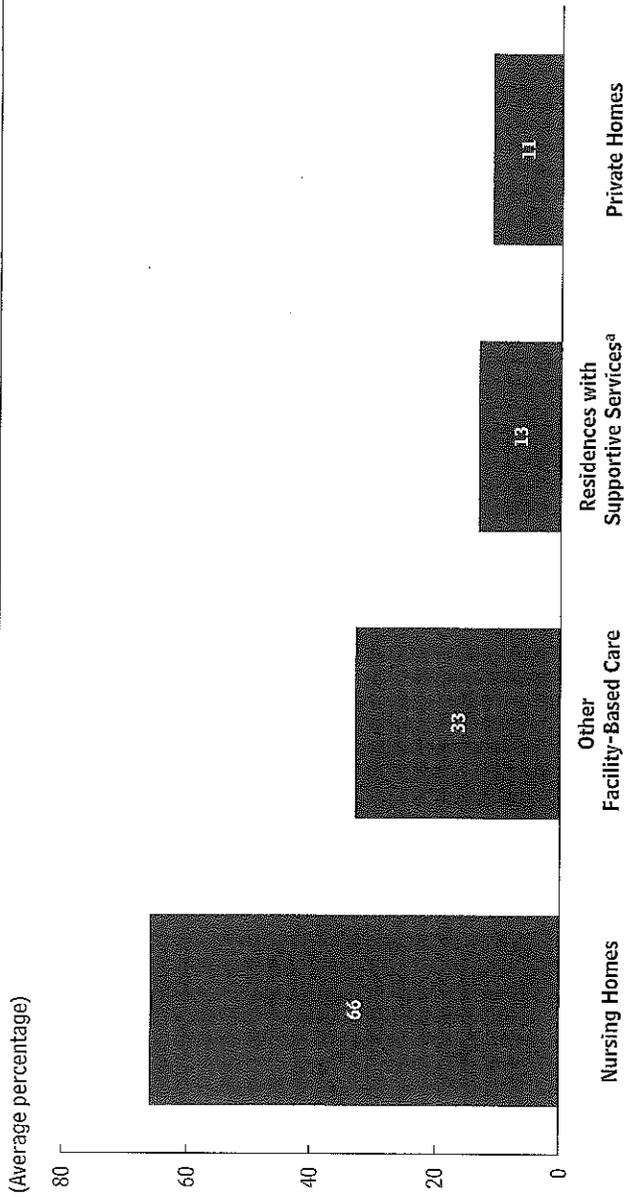
Medicaid and Medicare pay for a greater share of long-term services and supports and LTSS-like services than all other sources of payment (excluding informal care) combined. Although Medicaid spending for institutional care for elderly people still dwarfs spending on community-based care, the latter category is growing more quickly. From 2002 to 2012, Medicaid spending for institutional care grew by an average of about 1 percent per year, whereas spending for community-based care grew by an average of about 8 percent per year. From 2013 to 2023, CBO expects Medicaid spending on LTSS to grow by an average of about 5.5 percent per year.²⁹

Medicare does not cover long-term services and supports; however, through its postacute care benefit (covering stays in skilled nursing facilities and visits from home health care providers), Medicare pays for care provided in the same venues and by the same providers, although for a limited period and only if the beneficiary requires care provided by a licensed home health provider or certified skilled nursing facilities. Medicare expenditures for institutional care grew faster than those of Medicaid from 2002 to 2012: Spending for care in skilled nursing facilities grew by an average of about 6 percent per year. Medicare spending for home health care services rose by an average of about 8 percent per year. From 2013 to 2023, CBO expects, Medicare spending on postacute care will grow by an average of about 6.5 percent per year. ♦

29. For information on the calculations, see Congressional Budget Office, "Methods for Analysis of the Financing and Use of Long-Term Services and Supports," supplemental material for *Rising Demand for Long-Term Services and Supports for Elderly People* (June 2013), www.cbo.gov/publication/44370.

Exhibit 17.

Share of Elderly People Enrolled in Medicaid, by Type of Residence, 2001 to 2010



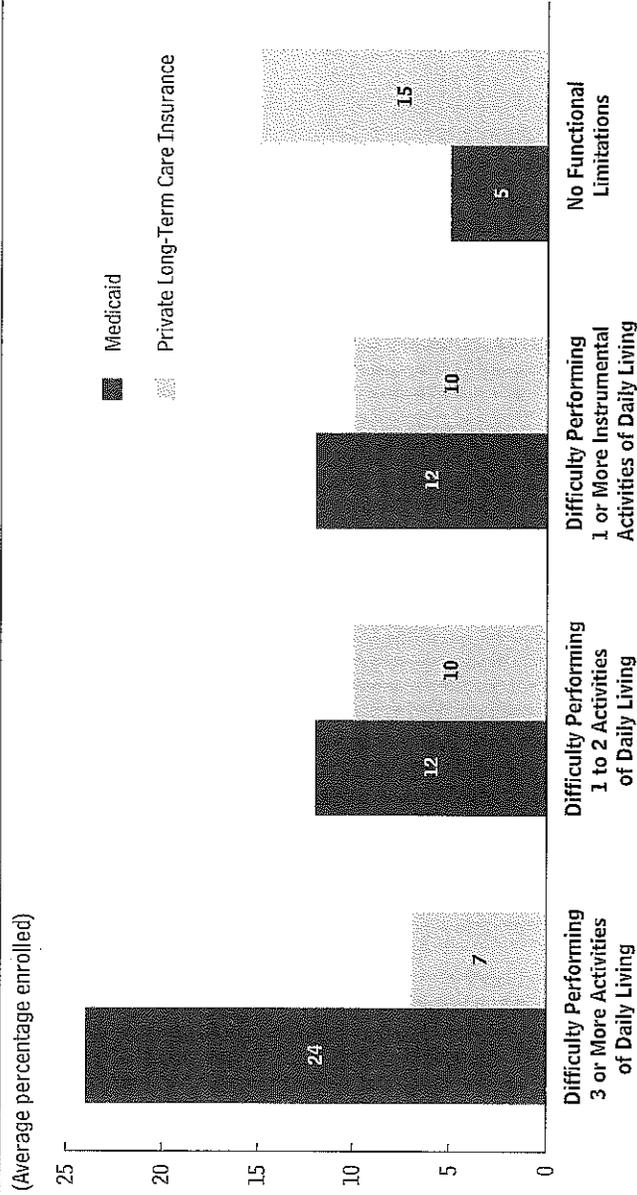
Source: Congressional Budget Office based on data from Medicare Current Beneficiary Survey, 2001 to 2010. For more information, see the supplemental material.

a. Residences with supportive services offer basic services (such as meals, housekeeping, and laundry) as well as some health-related services (such as help with medications).

Because the high cost of institutionalization quickly drains the finances of many people who live in nursing homes, about two-thirds of elderly nursing home residents are enrolled in Medicaid. The percentage of Medicaid enrollees is much lower among people who live in other types of facilities that furnish long-term services and supports, in part because Medicaid does not cover room and board in facilities that are not nursing homes certified for Medicaid beneficiaries. Among Medicaid beneficiaries living in institutional settings, more are likely to live in nursing homes than in other types of facilities. ♦

Exhibit 18.

Coverage by Medicaid and Private Long-Term Care Insurance Among Elderly People Living in the Community, by Functional Limitations, 2000 to 2010



Activities of Daily Living (ADLs)

Include bathing, dressing, eating, walking, transferring out of bed or a chair, and using the toilet.

Instrumental Activities of Daily Living (IADLs)

Include preparing meals, shopping, using the telephone, managing money, and taking medications.

Source: Congressional Budget Office tabulations of data from the 2000, 2002, 2004, 2006, 2008, and 2010 waves of the Health and Retirement Study. For more information, see the supplemental material.

Notes: People are considered to be covered by Medicaid or private long-term care insurance if they reported in the survey that they were covered by that insurance. Regardless of whether they had functional limitations, they may or may not have used the coverage to pay for long-term services and supports.

Individuals are grouped into four mutually exclusive categories in order of increasing functional loss: no impairments (no difficulty in any ADL or IADL, not reported in this exhibit); difficulties with 1 or more IADLs but no difficulty with any ADL; difficulties with 1 or 2 ADLs; and difficulties with 3 or more ADLs. People reporting difficulty performing ADLs may also have functional limitations for one or more IADLs.

Medicaid and private long-term care insurance show very different patterns in their coverage of long-term services and supports and in the characteristics of their enrollees. Elderly people with three or more functional limitations who live in the community are nearly five times as likely to be Medicaid beneficiaries (24 percent, on average, from 2000 to 2010) as are people with no functional impairments (5 percent); in contrast, elderly people with no functional limitations are twice as likely to hold private long-term care insurance as are people with three or more limitations. People with three or more functional limitations are generally older, are less likely to have worked recently, and have higher medical and LTSS expenses, which could have required use of income and assets that hastened their eligibility for, and subsequent enrollment in, Medicaid.³⁰

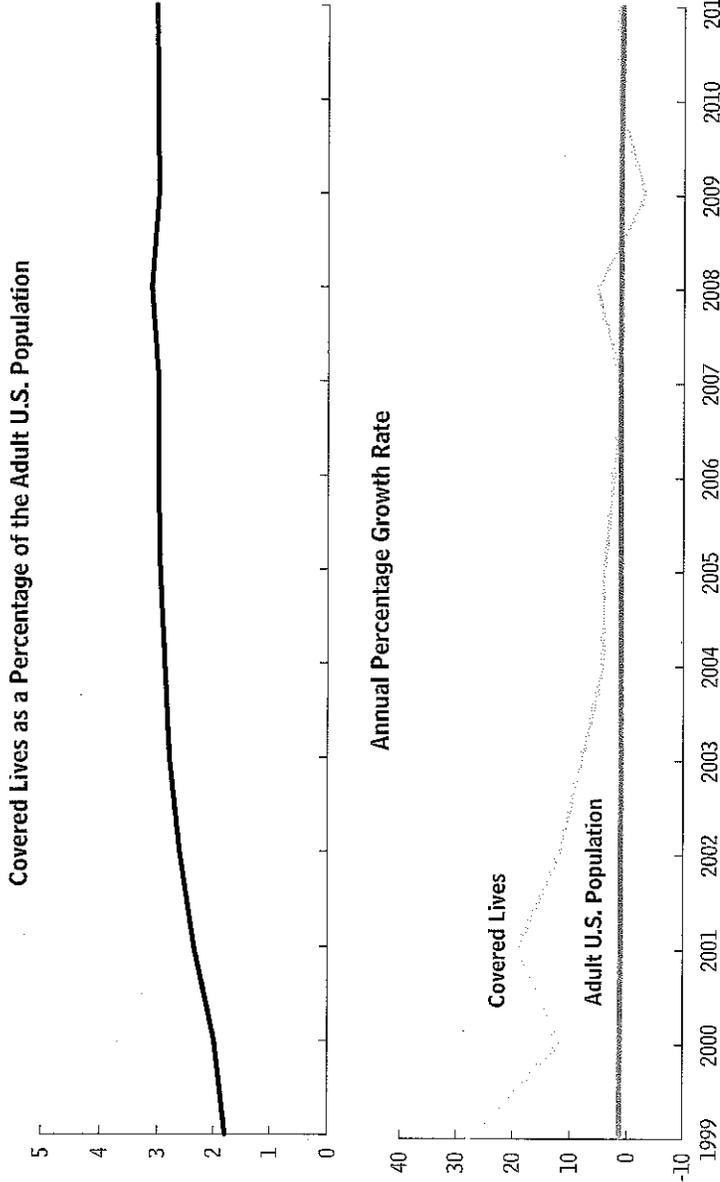
Elderly people without any functional limitations generally have higher income and may have purchased LTC insurance to avoid having to use their savings to pay for care if they need assistance later in life. Moreover, because premiums for LTC insurance are usually based on an applicant's likelihood of suffering functional or cognitive limitations in the future, coverage is generally more expensive or even unavailable for people in poor health or with a family history of certain diseases.³¹

30. Kirsten J. Colello and Scott R. Talaga, *Medicaid Eligibility for Persons Age 65+ and Individuals with Disabilities: 2009 State Profiles*, CRS Report for Congress R41899 (Congressional Research Service, June 28, 2011).

31. Kirsten J. Colello and others, *Long-Term Services and Supports: Overview and Financing*, CRS Report for Congress R42345 (Congressional Research Service, April 4, 2013).

Exhibit 19.

Enrollment in Private Long-Term Care Insurance, 1999 to 2011



Source: Congressional Budget Office based on National Association of Insurance Commissioners, *Long-Term Care Insurance Experience Reports for 2009*, and *Long-Term Care Insurance Experience Reports for 2010* (for data on policies in force).

Note: The data represent all covered lives, not just those of elderly people.

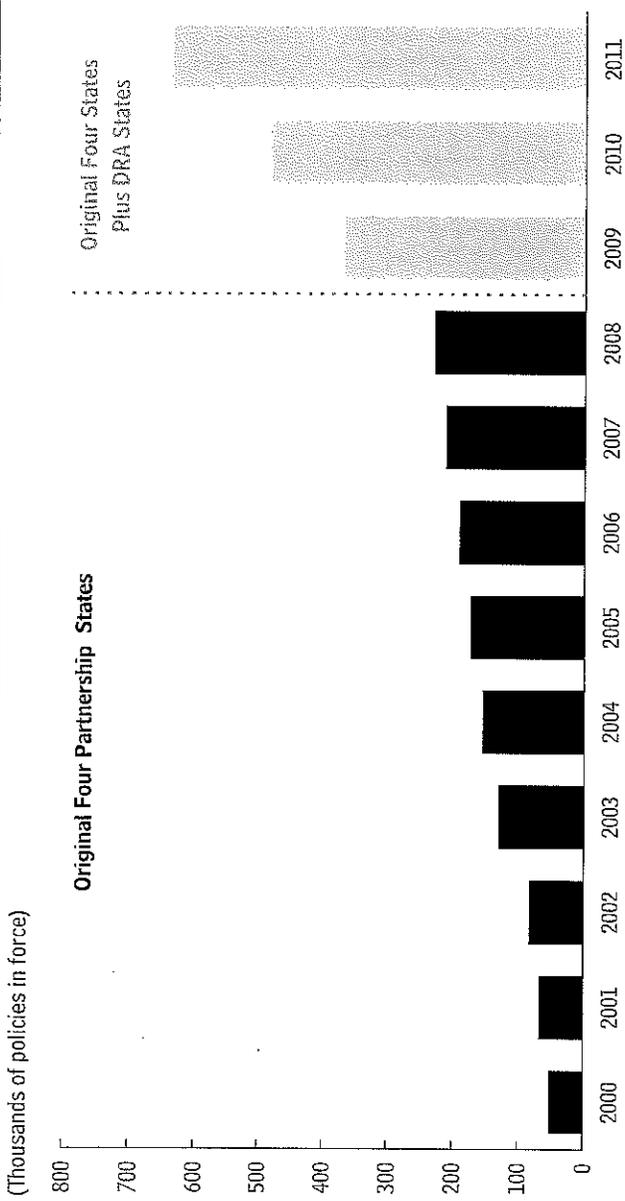
Private long-term care insurance coverage is uncommon among elderly people receiving long-term services and supports—an estimated 11 percent had such coverage in 2010.³² Coverage among the adult U.S. population is lower; only about 3 percent had LTC insurance in 2011. Private insurance (including both health insurance and LTC insurance) paid for less than one-tenth of LTSS spending for the elderly in 2011. The number of people covered by private LTC insurance grew, on average, by 12 percent per year from 1998 to 2005, but the rate of growth slowed over that period. From 2005 to 2011, the average annual rate of growth in enrollment was about 1.5 percent, only slightly faster than the average annual rate of growth in the U.S. adult population (1.1 percent). That slower growth is attributable to premium increases for existing policyholders (as a result of lower investment returns and inaccurate assumptions used in pricing products) and the exit of some carriers from the market, as well as the recent economic downturn.³³ The slower growth is coming at the same time that the age group most likely to purchase LTC insurance—people ages 55 to 64—is reaching its peak as a share of the U.S. population. According to a survey sponsored by America’s Health Insurance Plans, people who chose not to buy an LTC policy were more likely than buyers to underestimate the costs of LTSS and their risk of needing LTC benefits and to believe that public programs would pay for necessary care.³⁴ ♦

32. That information comes from CBO’s tabulations of data from the 2010 Health and Retirement Study.

33. A.M. Best, “Past Sins, Weak Economy Extend Long-Term Care Writers’ Struggle,” *Best’s Special Report* (March 29, 2010).

34. America’s Health Insurance Plans, *Who Buys Long-Term Care Insurance in 2010–2011?* (report prepared by LifePlans, March 2012), www.ahip.org/WhoBuysLTCInsurance2010-2011/.

Exhibit 20.
Coverage Through the Partnership for Long-Term Care, 2000 to 2011



Source: Congressional Budget Office based on data from individual states' websites (for the original partnership states) and from Truven Health Analytics, Long-Term Care Partnership Program, "DRA Partnership Reports," <http://w2.dehpg.net/LTCPartnership/Reports.aspx> (for the remaining states).

Notes: Estimates are for all policyholders, not just elderly people.

The sharp increase in sales of partnership policies beginning in 2009 reflects the data from the additional 30 state programs established following enactment of the Deficit Reduction Act of 2005 (DRA). Policy sales for those new DRA state programs were not systematically reported until 2009.

The Partnership for Long-Term Care is an arrangement between states and private insurers intended to reduce dependence on Medicaid for financing long-term services and supports. Long-term care insurance offered through a state's partnership program enables policyholders to maintain larger amounts of countable assets and still qualify for long-term care under Medicaid once the private policy is exhausted.

Although the program was originally limited to four states (California, Connecticut, Indiana, and New York), all states are now permitted to establish Partnerships for Long-Term Care. Each state establishes and administers its own program; reciprocity rules included in the Deficit Reduction Act of 2005 (or DRA, which expanded eligibility to all states) make it possible for most policyholders who purchase a partnership policy and then move from the state to continue to qualify for partnership benefits in their new state of residence.

Although total policy sales (both partnership and conventional) have grown more slowly over the past few years, the number of partnership policies has grown rapidly as states have established their own programs in response to the DRA. By 2009, 30 additional states had established programs. (Although some policy sales took place before 2009, the collection of data on sales did not begin until 2009.) Partnership policies accounted for about 10 percent of all LTC policies in 2011, up from 3 percent in 2007. (Some growth in partnership policy sales is because individuals converted their existing conventional policies to partnership policies; those conversions did not contribute to an increase in total sales.)

Three Possible Scenarios of Trends in Functional Limitations and the Demand for Long-Term Services and Supports

To assess future needs for LTSS, the Congressional Budget Office prepared projections through 2050 of the prevalence of functional limitations among elderly people living in the community, the demand for caregivers for those people, and spending on LTSS for the elderly. Those projections reflect three different scenarios regarding the future prevalence of functional limitations.

Scenario 1 incorporates the assumption that the prevalence rates of functional impairments among people of different ages and sexes will remain constant over time, reflecting averages calculated from the 2000–2010 waves of the Health and Retirement Study. That scenario is only hypothetical, however, because relationships between impairment, age, and sex observed today might not continue into the future. The prevalence of functional limitations observed over the 2000–2010 period reflects a combination of factors, including the prevalence of certain health conditions and the effectiveness of medical treatments in combating the loss in functioning associated with those conditions, all of which might change in the future.

To illustrate the range of uncertainty surrounding the future demand for long-term services and supports, CBO constructed two alternative projections of the prevalence of functional limitations. Although many health-related factors affect functioning (for example, obesity, smoking, diabetes, dementia, and heart disease), Scenarios 2 and 3 present hypothetical projections of the prevalence of functional limitations under the assumption of two different trends in the prevalence of obesity (and with all other factors held constant for simplicity). According to CBO's tabulations of data from the Health and Retirement Study, elderly people who are obese have a higher prevalence of functional limitations than elderly people who are not obese. In addition, obesity at younger ages has been shown to increase the probability that a person will have functional limitations at later ages.³⁵ CBO's projections reflect the assumption that the relationship between obesity and functional loss remains constant over the 2010–2050 period.

Scenario 2 incorporates projections of a decline in the prevalence of functional limitations (using the RAND Corporation's Future Elderly Model) under the assumption that, by 2050, the prevalence of

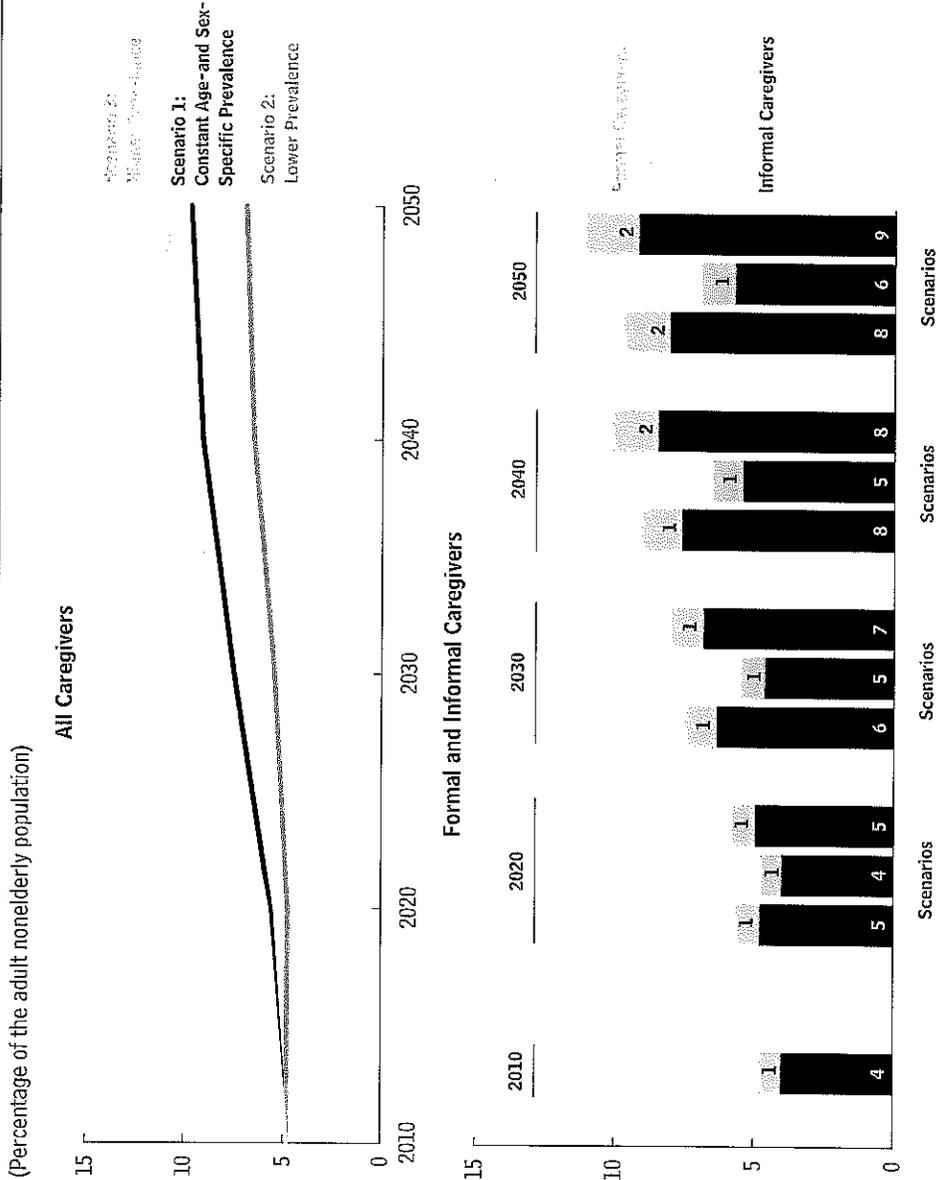
obesity will decline to the level observed in 1978.³⁶ **Scenario 3** presents the opposite situation—a rise in the prevalence of functional limitations—under the assumption that the prevalence of obesity increases at the same rate over the next four decades as that observed in the Health and Retirement Study from 2000 to 2010.

35. Soham Al Snih and others, "The Effect of Obesity on Disability vs. Mortality in Older Americans," *Archives of Internal Medicine*, vol. 167, no. 8 (April 2007), pp. 774–780, <http://tinyurl.com/kbtfp7>; and Honglei Chen and Xuguang Guo, "Obesity and Functional Disability in Elder Americans," *Journal of the American Geriatrics Society*, vol. 56, no. 4 (April 2008), pp. 689–694, <http://tinyurl.com/mk5gq5>.

36. For a description of the model, see RAND Corporation, *Modeling the Health and Medical Care Spending of the Future Elderly*, Research Brief RB-9324 (RAND Corp., 2008), www.rand.org/content/dam/rand/pubs/research_briefs/2008/RAND_RB9324.pdf. Projections of the prevalence of impairment used in Scenario 2 are based on projections in Dana Goldman and others, "The Fiscal Consequences of Trends in Population Health," *National Tax Journal*, vol. 63, no. 2 (June 2010), pp. 307–330, <http://nrxj-tax.org/>.

Exhibit 21.

Projected Demand for Caregivers for Elderly People Living in the Community: Three Possible Scenarios, 2010 to 2050



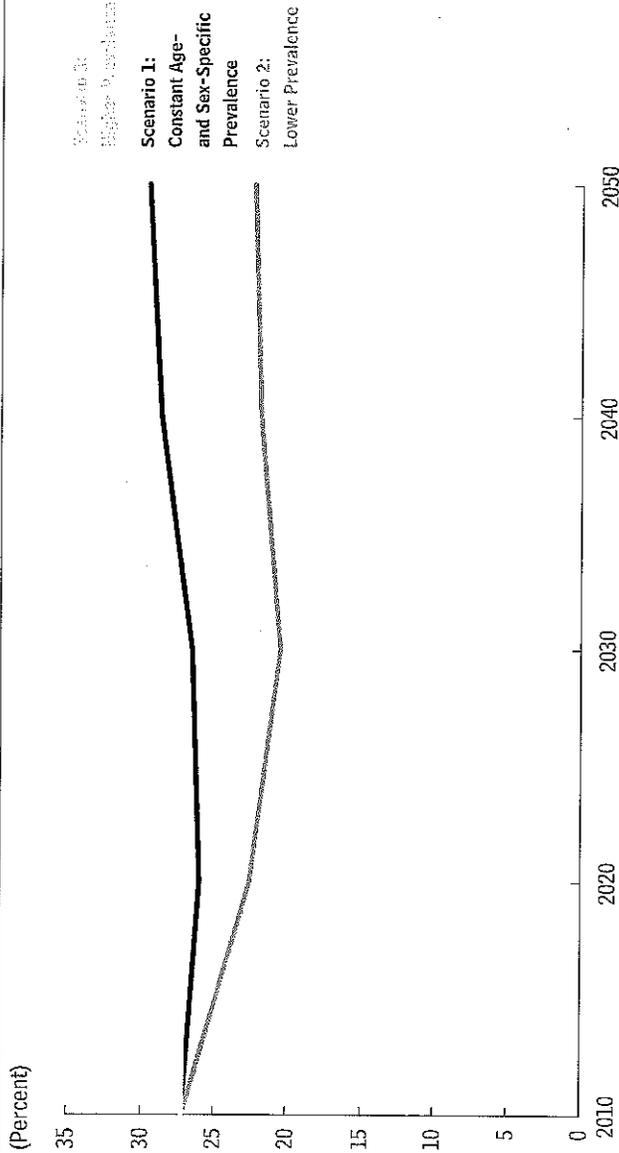
Source: Congressional Budget Office tabulations of data from the Health and Retirement Study. Projections are consistent with projections of the prevalence of functional limitations presented in Exhibit 22.

Notes: The percentages are based on the number of caregivers, regardless of the number of hours they work. For additional notes, see Exhibit 22.

In 2010, 4.0 percent of nonelderly adults provided informal long-term care to elderly people living in the community, and 0.8 percent were employed providing formal care.

The increase in the number of people who are elderly (as described in Exhibits 1 and 2) will generate substantial increases in the number of people with functional limitations, and those increases will contribute to a much greater demand for caregivers. The demand for long-term care workers, measured in terms of the share of the nonelderly adult population ages 19 to 64, will increase over the coming decades as the need for services grows. At the same time, the caregiving population will shrink relative to that of the elderly. (In these projections, the Congressional Budget Office assumes that patterns of use of long-term care workers would remain the same under all three scenarios.)

Under Scenario 1, demand for caregivers would more than double, to about 10 percent of the nonelderly adult population by 2050. (The percentages are based on the number of workers, not the number of hours worked.) Under Scenario 2, in which the prevalence of functional limitations declines, demand for workers (as a share of the total workforce) would still increase significantly by 2050, to about 7 percent. Under Scenario 3, in which the prevalence of functional limitations increases, about 11 percent of nonelderly adults would be needed to provide formal and informal care by 2050.

Exhibit 22.**Future Prevalence of Functional Limitations Among Elderly People Living in the Community: Three Possible Scenarios, 2010 to 2050**

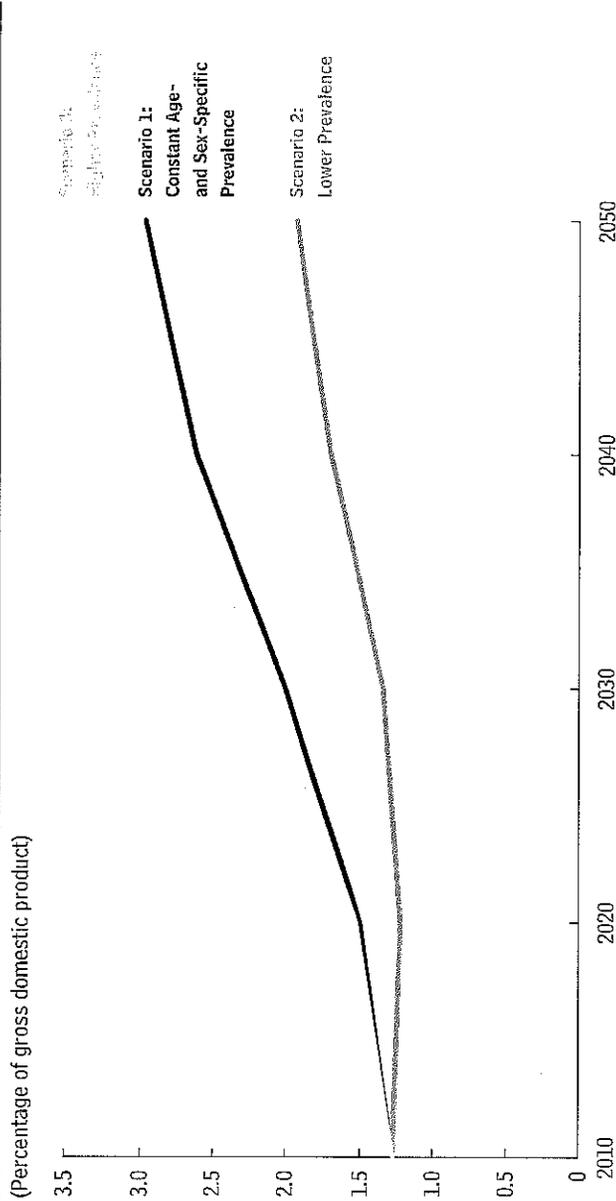
Source: Congressional Budget Office tabulations of data from the Health and Retirement Study (2000–2010 average).

Notes: Scenario 1 incorporates the assumption that the prevalence of functional impairments among people of different ages and sexes remains constant through 2050. Scenario 2 incorporates the assumption that the prevalence of obesity falls back to levels observed in 1978 and that all other factors that could influence trends in functional limitations remain constant. Scenario 3—as opposed to Scenario 2—incorporates the assumption that the prevalence of obesity rises (and holds all other factors constant).

Reported rates of prevalence reflect limitations in one or more activities of daily living or instrumental activities of daily living. For 2010, the prevalence is an average of rates (by age and sex) observed in the 2000–2010 waves of the Health and Retirement Study, weighted by the 2010 population. For more information, see the supplemental material.

The increase in the number of elderly people will have a substantial impact on the need for caregivers under various assumptions about the future prevalence of functional limitations; in fact, future prevalence rates by themselves are unlikely to significantly affect future demand for LTSS or expenditures associated with it.

If the prevalence of functional limitations among people of different ages and sexes remained constant (Scenario 1), the prevalence of functional loss (difficulty performing one or more ADLs or IADLs) among elderly people living in the community would be slightly lower in 2030 (26.5 percent) than it was in 2010 (27.2 percent), because the influx of the baby-boom generation will reduce the average age of the elderly. By 2040 and 2050, however, baby boomers will have reached advanced ages, so the overall prevalence of functional loss among the elderly would be higher—climbing to about 29 percent in 2040 and about 30 percent in 2050. Under Scenario 2, the prevalence of functional loss among elderly people would fall by an average of 0.12 percentage points per year from 2010 to 2050, reaching 22 percent by 2050. (In spite of the projected decline in obesity from 2010 to 2050 under that scenario, the total prevalence of functional limitations would still rise in 2040 and 2050 from the 2030 projection because of the baby-boomer effect, which will boost the number of people age 85 or older.) Under Scenario 3, the prevalence of functional limitations would increase to about 34 percent by 2050. ♦

Exhibit 23.**Future Spending for Long-Term Services and Supports for Elderly People: Three Possible Scenarios, 2010 to 2050**

Sources: Congressional Budget Office based on information from the Centers for Medicare & Medicaid Services, Office of the Actuary. The projections for 2020, 2030, 2040, and 2050 are consistent with the projected increases in impairment reported in Exhibit 21. Projections of GDP are from Congressional Budget Office, *The 2012 Long-Term Budget Outlook* (June 2012), www.cbo.gov/publication/43288. In that report, expenditures for long-term services and supports were included as part of total health care spending, but they were not explicitly identified. For more information, see the supplemental material.

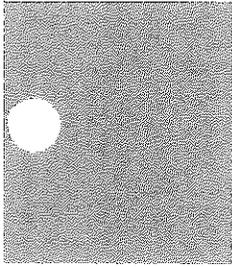
Notes: Scenario 1 incorporates the assumption that the prevalence of functional impairments among people of different ages and sexes remains constant through 2050. Scenario 2 incorporates the assumption that the prevalence of obesity falls back to levels observed in 1978 and that all other factors that could influence trends in functional limitations remain constant. Scenario 3—as opposed to Scenario 2—incorporates the assumption that the prevalence of obesity rises (and holds all other factors constant).

Reported rates of prevalence reflect limitations in one or more activities of daily living or instrumental activities of daily living. For 2010, the prevalence is an average of rates (by age and sex) observed in the 2000–2010 waves of the Health and Retirement Study, weighted by the 2010 population. For more information, see the supplemental material.

By 2050 under all three scenarios, the Congressional Budget Office projects, spending for formal long-term services and supports (not including the economic value of informal care) will rise to a significantly higher share of gross domestic product than it is today, primarily because of the aging of the population. Under the assumption that the prevalence of functional limitations among elderly people of different ages and sexes will remain constant (Scenario 1), spending as a share of GDP will more than double, climbing from 1.3 percent in 2010 to 3.0 percent in 2050. Under Scenario 2's more optimistic projection, spending would still reach 1.9 percent of GDP in 2050. Scenario 3 indicates that if the prevalence of impairment rises rather than falls, even by a relatively modest amount, spending as a percentage of GDP could reach 3.3 percent, two-and-a-half times what it was in 2010, all other things being equal.

The spending estimates vary according to the projections of the prevalence of functional limitations and of the prevalence of institutionalization embodied in the three possible scenarios; all other factors that affect LTSS spending (such as the rate of growth in prices for LTSS, changes in family structure that could affect the provision of informal care, and changes in how services and supports are delivered) are held constant across the scenarios.³⁷

37. Although not reported in Exhibit 22, projections of the prevalence of institutionalization among elderly people are calculated in the same manner as the prevalence of functional limitations for elderly people living in the community. For more information, see Congressional Budget Office, "Methods for Analysis of the Financing and Use of Long-Term Services and Supports," supplemental material for *Rising Demand for Long-Term Services and Supports for Elderly People* (June 2013).



About This Document

This Congressional Budget Office (CBO) report was prepared at the request of the Chairman of the Senate Committee on Finance. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

Stuart Hagen of CBO's Health, Retirement, and Long-Term Analysis Division wrote the report with guidance from Linda Bilheimer and Melinda Buntin. Jim Baumgardner, Tom Bradley, Stephanie Cameron, Holly Harvey, Jean Hearne, Michael Levine, and Andrea Noda, all of CBO, provided useful comments, as did Harriet Komisar of Georgetown University, David Grabowski of Harvard University, and Tamara Konetzka of the University of Chicago. (The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.)

Christine Bogusz edited the report, and Maureen Costantino and Jeanine Rees prepared it for publication. An electronic version is available on CBO's website (www.cbo.gov).

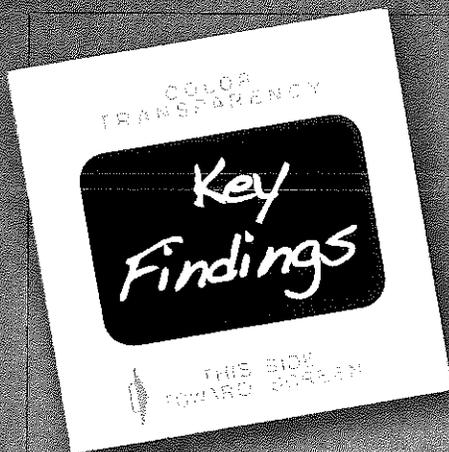
Douglas W. Elmendorf
Director

June 2013

When I'm 64

How Boomers Will Change Health Care





The wave of aging Baby Boomers will reshape the health care system forever. There will be more people enjoying their later years, but they'll be managing more chronic conditions and therefore utilizing more health care services. By 2030:

- The over 65 population will nearly triple as a result of the aging Boomers.
- More than six of every 10 Boomers will be managing more than one chronic condition.
- More than one out of every three Boomers – over 21 million – will be considered obese.
- One of every four Boomers – 14 million – will be living with diabetes.
- Nearly one out of every two Boomers – more than 26 million – will be living with arthritis.
- Eight times more knee replacements will be performed than today.

Meeting these future health care challenges will require more resources, new approaches to care delivery and a greater focus on wellness and prevention.

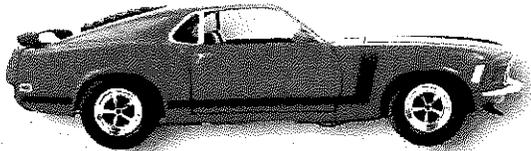
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When I'm 64

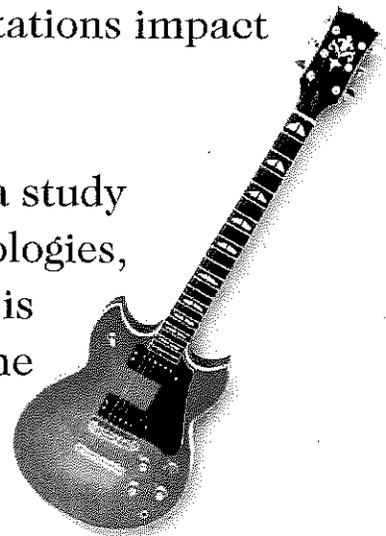
How Boomers Will Change Health Care



They grew up on the Beatles and Elvis, drove the first Ford Mustangs and made political and social protests the norm. Born between 1946 and 1964, the 78 million U.S. “Baby Boomers” drive the labor and housing markets, influence cultural trends and introduce lifestyle changes that have lasting impact. Every day, almost 11,000 Boomers turn 50 – that’s one every eight seconds¹. The first of them will turn 64 in 2010, while the last will not reach this milestone for 21 years. Thanks to many medical advances over their lifetime – from polio and measles vaccines to radical heart surgeries – more Boomers are living longer.

As this dynamic population ages, how will Baby Boomers’ demographic makeup, health status and expectations impact America’s health care system?

By combining new research and analysis with a study of emerging health care approaches and technologies, this report illustrates how the health care field is anticipating the Boomer revolution, and how the Boomers will leave their mark on American health care for generations to come.



Part 1:

When I'm 64...

The convergence of four key factors drives how Boomers will impact U.S. health care:

1. There are significantly more of them and, as they age, they will require more health care services than any other generation of Americans.
2. The prevalence of chronic diseases is increasing among Boomers.
3. They have different needs and expectations than past generations.
4. More medical services and technologies are available to them than ever before.

As Boomers Grow in Numbers, Health Care Needs Will Increase

The Baby Boomers make up a significant portion of the U.S. population, and, as the Boomers age, the percentage of Americans over 65 – those that utilize the bulk of health care resources – will shift significantly.

When the last of the Boomers reach retirement age, almost 20 percent of the U.S. population will be 65 or older compared to less than 13 percent today.² By 2030, there will be more than 70 million Americans over age 65.³

The dramatic increase in births between 1946 and 1964, dubbed the “baby boom,” drove many

public services – particularly schools – to add capacity that wasn’t needed in the years immediately following. However, for health care, the situation is different. While this population will create a notable rise in demand for services, the demand will continue rather than drop off because *everyone* – including Boomers and the members of Generations X and Y that follow – is living longer and with more chronic disease.

At the turn of the 20th century, just before Boomers’ parents were born, U.S. life expectancy was 47 years of age. In 2002 (the last year for which data are available), it was 77 – an additional 30 years of life.⁴ Half of all the people who have ever lived to age 65 are alive today.⁵

Aging of the Boomers

2000	2010	2020	2030
Age 36-54	Age 46-64	Age 56-74	Age 66-84
78 Million	75 Million	70 Million	58 Million

People are living longer because of both lifestyle changes and advances in health care. For example, fewer people smoke today than in the past. In the 1950's more than half of men and a third of women smoked cigarettes. By 2005, those numbers were down to 23 percent of men and 19 percent of women.⁶ Thanks to major advances in medicine, fewer people die at an early age from heart disease and cancer. For example, the five-year cancer survival rate improved from 50 percent in the mid '70s (1975-1977) to 66 percent at the turn of the 21st century (1996-2002).⁷

Health Care Implication: With increased longevity, Boomers will reach retirement age, have more years to enjoy it and, in turn, more years in need of health care services.



When the last of the Boomers reach retirement age, almost 20 percent of the U.S. population will be 65 or older compared to less than 13 percent today.

The Prevalence of Chronic Conditions is Growing among Boomers

Sixty-two percent of 50-to-64 year olds reported they had at least one of six chronic conditions (hypertension, high cholesterol, arthritis, diabetes, heart disease and cancer).⁸ Of Americans 65 and older, 80 percent have at least one chronic disease that requires ongoing care and management.⁹

As Boomers age, the number with multiple chronic conditions is expected to grow from almost 8.6 million today (about one of every 10

Boomers) to almost 37 million in 2030. By 2030, more than six of every 10 Boomers will be managing more than one chronic condition.¹⁰ And Boomers are not alone. The overall incidence of chronic conditions like diabetes and hypertension is growing, and will continue to increase as future generations reach 65. Since the biggest factors influencing medical spending are chronic illness and a patient's level of disability,¹¹ the growing incidence of multiple chronic conditions will put increasing demands on our health care system.

Diabetes

The number of Americans with diabetes is expected to rise from 30 million today to 46 million by 2030, when one of every four Boomers – 14 million – will be living with this chronic disease.¹²

Health Care Implication: These diabetic Boomers will require continuous medical management in both inpatient and outpatient settings.

Arthritis

The number of Americans with arthritis is expected to rise from 46 million today to 67 million by 2030. At that point, nearly one out of every two Boomers – or over 26 million – will be living with the condition.¹³

Health Care Implication: While the health risks of arthritis are not as great as other chronic illnesses, the decreased mobility arthritis can trigger will cause many Boomers to seek new alternative therapies, pain control treatments, exercise regimens and joint replacements.

Obesity

The incidence of obesity, a major risk factor for many diseases, also is on the rise and will further challenge the health care system. Obese patients cost Medicare about 34 percent more than those of normal weight.¹⁴ Obesity rates among Boomers will continue to grow over time. By 2030, more than one out of every three Boomers – over 21

million – will be considered obese, and obesity in the overall population will reach over 93 million.

Health Care Implication: Boomers will require new weight-management techniques to help them manage the chronic health conditions associated with obesity as well as health care settings designed to meet the needs of obese patients.



By 2030, more than one out of every three Boomers – over 21 million – will be considered obese.

Falls

Falls are the most common cause of injury to older adults. As Boomers live longer, remain more active and take multiple medications, the probability of trauma caused by falls inside and outside of the home will increase. More than one-third of adults 65 or older fall each year. Of those who fall, 20 to 30 percent suffer moderate to severe injuries (such as hip fractures) that decrease

mobility and independence.¹⁵ Almost 350,000 hip fractures occurred in 2000, a figure that is expected to double by the year 2050.¹⁶

Health Care Implication: The increasing incidence of falls means more emergency department (ED) visits and hospitalizations. Preventing and treating falls will become a bigger challenge for health care providers.

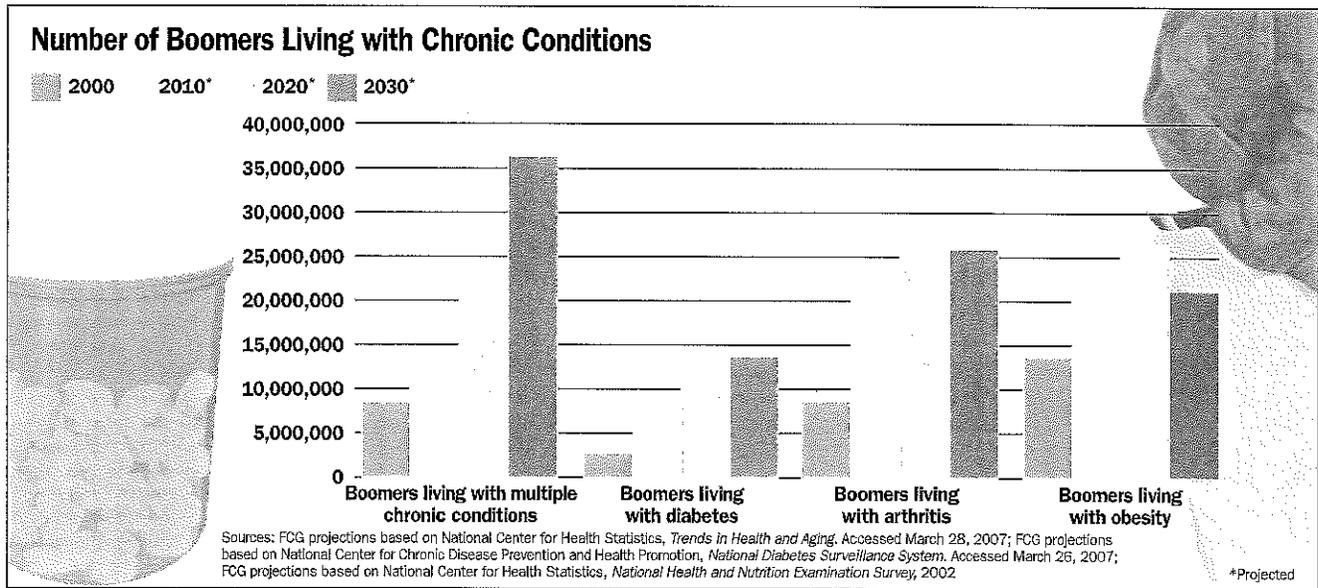
The large number of Boomers with acute and chronic care needs will clearly challenge the nation’s health care system. In general, Boomers between the ages of 54 and 59 report having more chronic health conditions, pain, problems with alcohol and psychiatric problems than their parents reported having when they were the same age.¹⁷ Boomers will require more care, different types of care and better coordination of care.

No One Size Fits All: Diverse Boomers Demand Different Health Care

Diversity

Boomers are more racially and ethnically diverse than previous generations. Almost 20 percent of today’s Boomers are members of minority

37 million Boomers will be managing more than one chronic condition.



groups.¹⁸ That percentage will grow as the population expands to include larger immigrant families and the lifespan gap between minorities and non-Hispanic whites continues to shrink.

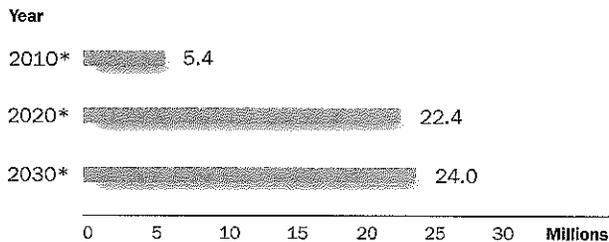
Health Care Implication: A Boomer population that's more ethnically and racially diverse will require delivery systems and caregivers that are sensitive to cultural differences and how those differences impact care.

Education

Boomers have higher levels of educational attainment than previous generations and, in general, are more engaged in their care. Almost 90 percent of Boomers graduated from high school versus only 68 percent of their parents.¹⁹

More Boomers will experience falls as they age...

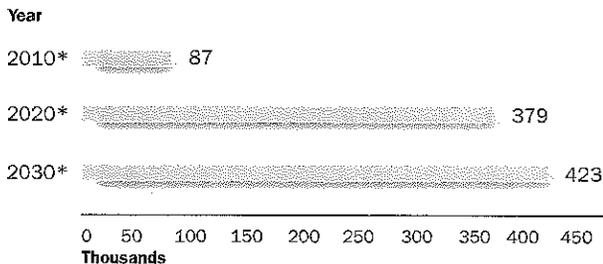
Projected Number of Nonfatal Falls per Year Among Boomers



* Projected.
Source: FCG projections based on CDC National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS), 2005

...contributing to a growing number of hip fractures.

Projected Number of Hip Fractures per Year Among Boomers



* Projected.
Source: FCG projections based on National Center for Health Statistics, National Hospital Discharge Survey (1993-2003)

While conducting health research online has become a mainstream activity,²⁰ it is only one indicator of their high level of engagement.

Health Care Implication: Boomers will likely be more involved in their care and seek health care delivery options that center on their wishes.

Money

Many Boomers will have more disposable income than their parents. They currently possess three-quarters of the nation's financial assets and an estimated \$1 trillion in annual disposable income.²¹ Yet many of them worry about their ability to pay for health care during their retirement and still live comfortably. Forty-four percent of older Boomers (ages 55-59) lack the confidence that they will have enough money to live comfortably past age 85.²²

Health Care Implication: Aging Boomers will likely purchase health care services judiciously.

Geography

Boomers are likely to change U.S. demographic geography with their retirement choices. The most preferred states for retirees including Boomers are Florida (14 percent), Arizona (12 percent), North Carolina (10 percent), California (8 percent) and Texas (5 percent).²³ By 2020, Florida will replace New York as the third most populous state, while by 2030, Georgia will climb into fifth place – bumping Illinois – and Nevada will jump from 29th to 16th.²⁴

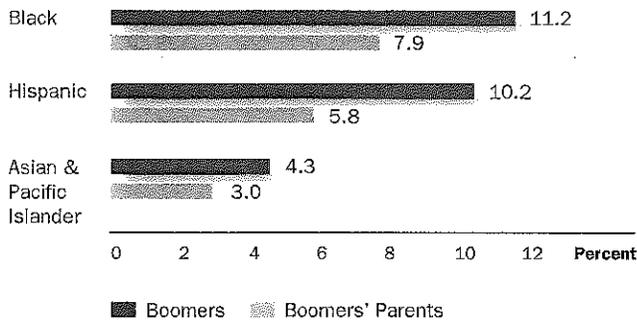
Health Care Implication: This population shift also will shift demand for health care services.

Lifestyle

Boomers also are more active than previous generations. Health care innovations from joint replacements to new pain medications have helped them live more active lives than their parents did at the same age. These innovations have translated into a decreasing percentage of Americans who are considered chronically

The Boomer generation is more racially and ethnically diverse.

Percent of Population by Race and Ethnicity, Boomers Versus Their Parents as they Turn 65¹



1 Compares the U.S. Census-projected Boomer demographic in 2010 with the previous generation as they turned 65 in 1990. Source: FCG estimates and projections based on U.S. Census Bureau data 2000 and 2004 Update

disabled (from 26.2 percent in 1982 to 19.7 percent in 1999 when the most recent data were available²⁵).

Health Care Implication: As aging Boomers remain active longer, they will seek health care services that emphasize mobility and independence.

Complementary Medicine

Seventy percent of Boomers have used some form of complementary or alternative medicine.²⁶ The most popular treatments include massage therapy, chiropractic services and other types of body treatments; however, more than 10 percent of Boomers and current seniors also have tried mind-body practices such as meditation, hypnosis and acupuncture. Complementary and alternative medicine is being used equally to treat specific health conditions and to improve overall wellness.

Health Care Implication: Aging Boomers with higher expectations of service will demand more innovative, personalized health care programs that cater to their needs.

Palliative and End-of-Life Care

More than 25 percent of total health care spending occurs in the last year of life. Yet that does not necessarily mean that individuals get the end-of-life care they had hoped for. Seventy-five percent of people in the U.S. would like to die at home, yet only 15 percent do. Eighty-one percent do not want to be a burden to their family, yet only 45 percent achieve this objective.²⁷ Over 70 percent of Boomers have at least one living parent; 25 percent live with an aging parent and 13 million Boomers were already participating in a parent's care in 2005.²⁸ Forty-six percent of people who have made decisions about a terminally ill loved one have their own end-of-life wishes written down, versus only 24 percent of people who have not had that experience.²⁹ Boomers will also require palliative care to manage pain, control symptoms, and improve quality of life for as long as life remains.

Health Care Implication: Boomers who have participated in providing care for a loved one will be more likely to plan for and discuss with their family their wishes for their own end-of-life care. More and more people will be in need of and use palliative care.

Advances in Treatments Produce More Options

Technological advances will increase the health care options available to Boomers – both on their own and under the care of a physician – and medical advances will continue emerging at the same rapid pace seen over the last two decades. Boomers will constitute the largest group of patients with chronic conditions, and will benefit from new medicines, advances in monitoring equipment, innovations in surgical techniques and new drug delivery systems. Technology also will make it possible to provide care remotely. Boomers will be able to monitor their own conditions and communicate with their physicians from home.

This will extend the reach of specialty physicians to cover rural areas and the ability of Boomers who live in these regions to receive care in their homes.

Boomers will live through a dramatic rise in the incidence of diabetes. However, there will be a concurrent improvement in the monitoring tools and treatments available to control glucose levels. For example, individuals with diabetes currently control their condition with glucose testing combined with insulin shots or oral medications, yet only 37 percent of patients achieve good control of their blood sugar. Continuous blood sugar monitors are expected to be accurate enough to be used by 40 percent of patients by 2010,³⁰ and insulin pumps and insulin pens will make administration of insulin more convenient for patients. The ability to use an asthma-like inhaler to deliver insulin also is expected to make insulin treatment more acceptable for many patients.

Remote Care Technologies

Technology will make care more accessible to Boomers, who will be early participants in an era of “virtual caregivers.” Health technology will move into the home at a steady pace. Remote monitoring and other technologies will help keep many patients out of the hospital, and will provide communication links with caregivers who will need new processes for monitoring the stream of information and responding appropriately.

Monitoring

Wearable devices will allow continuous monitoring of a patient’s condition while he or she goes about daily activities. Monitors also can detect unusual patterns of activity in the home and send alerts to caregivers or relatives. As Boomers age they will be taking multiple medications; smart pill bottles will be able to detect when they have missed a medication and remind them or alert someone else.



With new technologies eliminating barriers to effective treatment, Boomers will be receiving more care than past generations.

Less Invasive Surgical Options

As the availability of minimally invasive procedures increases, the number of Boomers who can receive such treatment also will continue to expand. Miniaturized surgical devices and cameras allow surgeons to perform procedures using a very small incision, while advances in imaging allow surgeons to “see” through the skin, and lasers can be used to perform some surgery using no incision at all. Less invasive surgeries will offer quicker procedures, shorter recovery times, shorter hospital stays (or none at all) and decreased impact on work/lifestyle. Minimally invasive procedures will increase the number of patients that can be treated. These techniques are expected to increase obesity-related surgeries by 25 percent.³¹ Studies have suggested that minimally invasive surgery for lung cancer can be performed safely on patients over 80.³² They also will lead to the need for new types of procedure rooms. This new demand will be balanced by shorter hospital stays.

Health Care Implication: With new technologies eliminating barriers to effective treatment, Boomers will be receiving more care than past generations.

The health care system has gone through significant transformational change over the past 25 to 50 years, but more dramatic change lies ahead. Tomorrow’s patients, and the tools and treatments offered to them, will be very different from the patients we treat today. These differences present both opportunities and challenges for our system and being prepared for what lies ahead will be critical.

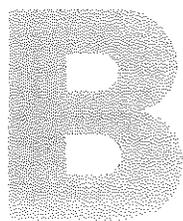
Part 2:

Boomers Will Challenge the Health Care System Now and Into the Future...

The confluence of the large Boomer population, increase in chronic conditions and rise of available medical treatments will begin to impact health care in 2010, when the oldest Boomers turn 65 – when more health services typically begin to be used. As a result, the need for health care resources will increase in hospitals, ambulatory care settings, long-term care facilities and the home.

Boomers, in particular, are likely to use more health care resources per person than past generations because they are living longer and managing more complex conditions. As mentioned earlier, the number of Boomers with multiple chronic conditions will quadruple by 2030.³³ Health care resource requirements increase in proportion to the number of chronic diseases. On average, the cost of health care for an individual with more than five chronic conditions is nearly 15 times that of an individual with no chronic conditions.³⁴

Resource Needs Will Increase Across Care Settings



By 2030, Boomers will account for more than twice as many hospital admissions as they do today.³⁵

While length of stay may continue to decrease, the intensity of the care provided for each patient day

will likely increase as the proportion of inpatient admissions of patients over 65 rises. Services elsewhere in the hospital also will increase – including four million more ED visits than occur today.³⁶

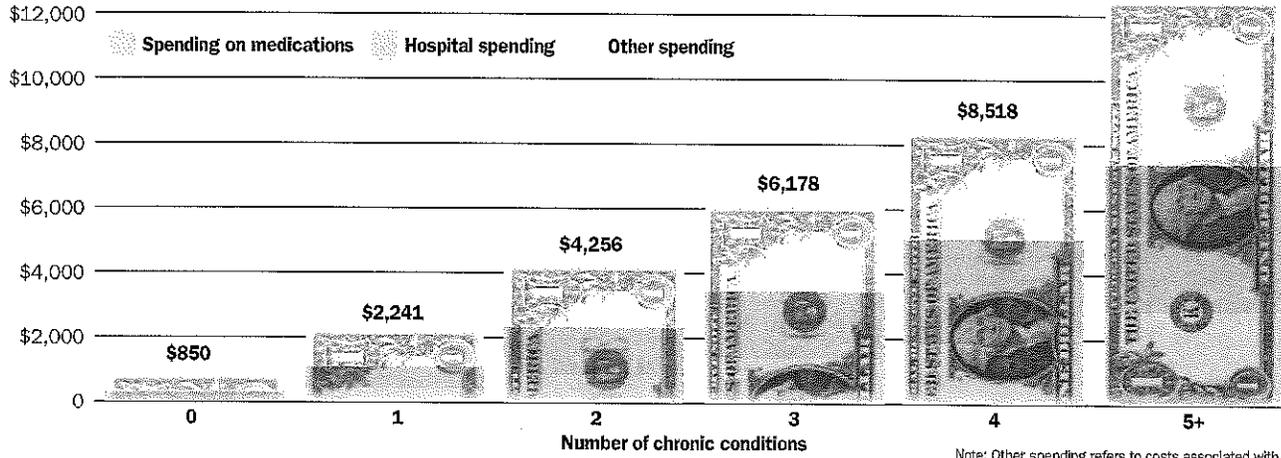
The number of physician visits has been increasing for all populations – by 34 percent over the last decade.³⁷ By 2030, there will be nearly twice

as many adult physician visits as there were in 2004, and Boomers will account for more than four of every 10 of these visits.³⁸

The high levels of chronic disease in the Boomer population will increase the need for tests and

procedures. For example, in 2030, if all Boomers with diabetes receive recommended care, they will need 55 million laboratory tests per year – 44 million more than today.³⁹ These projections don't account for key unknowns. First, recent advances in medicine have helped the Boomer

Annual Health Care Costs Per Person by Number of Chronic Conditions (Boomer and non-Boomer)



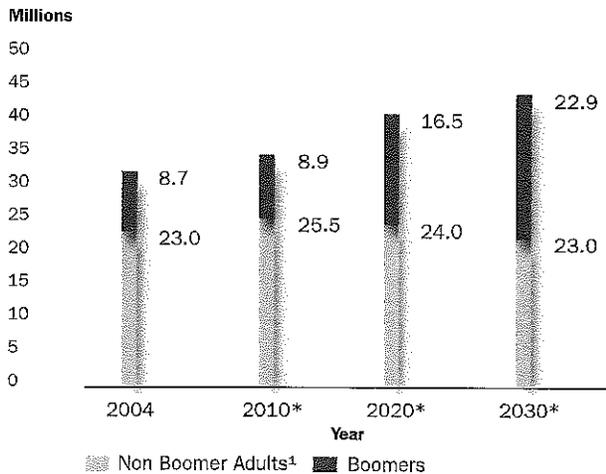
Source: Johns Hopkins and Partnership for Solutions, *Chronic Conditions: Making the Case for Ongoing Care*, September 2004

Note: Other spending refers to costs associated with physician office visits, home care visits and tests.

Hospital admissions of Boomers will more than double...

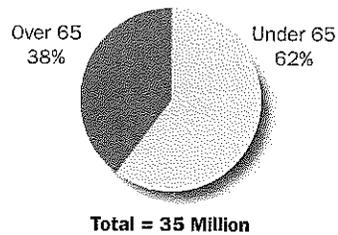
...leading to a majority of hospital patients being over 65.

Number of Hospital Admissions

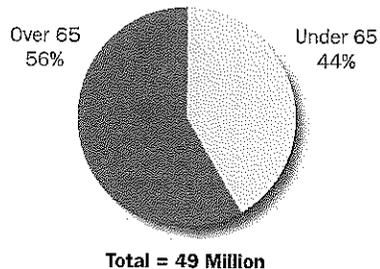


* Projected.
 1 Non-Boomer adults indicates non-Boomers over the age of 15.
 Source: FCG projections based on National Center for Health Statistics, *National Hospital Discharge Survey 2004*, May 2006

Total Hospital Admissions (2004 estimate)



Total Hospital Admissions in 2030*



* Projected.
 Source: FCG projections based on National Center for Health Statistics, *National Hospital Discharge Survey 2004*, May 2006

generation survive illnesses and injuries that led to early death in past generations, including many forms of cancer, heart attacks and even trauma. The kinds of care these patients will require as they age is still largely unknown. Second, new treatments will likely further increase the number of conditions that can be treated, turning even more previously terminal diseases into chronic illnesses and further increasing longevity. These factors could lead to even greater demand for health care services.

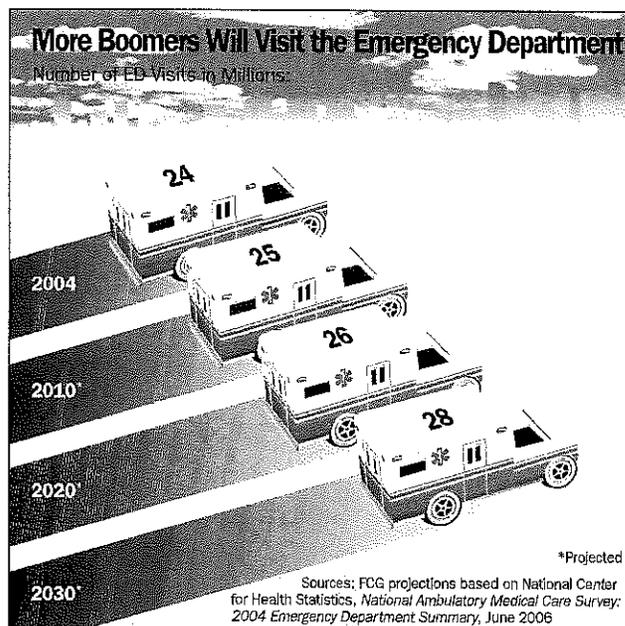
Increasing the use of preventive services is a national goal. Because the Baby Boom represented twelve million more births than the prior generation, prevention programs will need to expand their capacity to respond to these increased requirements.

Demand Will Exceed Supply for Caregivers

The severe workforce shortage will challenge the health care system's ability to meet this Boomer demand. In 2005, there was a U.S. shortage of about 220,000 registered nurses; by 2020 that gap will be over one million.⁴⁰ The nursing shortage is caused by both increased demand and by the aging of the nursing workforce – nurses are Boomers too. With fewer individuals entering the profession, or entering at an older age, the average age of the nursing workforce has increased every year. To meet future demand, it is estimated that the number of new nursing graduates would have to increase by 90 percent every year.⁴¹ More recent studies have indicated that the nursing shortage may be only half of what was originally projected, or occur later than predicted due to nurses staying in the workforce longer and more people entering nursing in their late twenties.⁴² But under either scenario, a huge need remains.

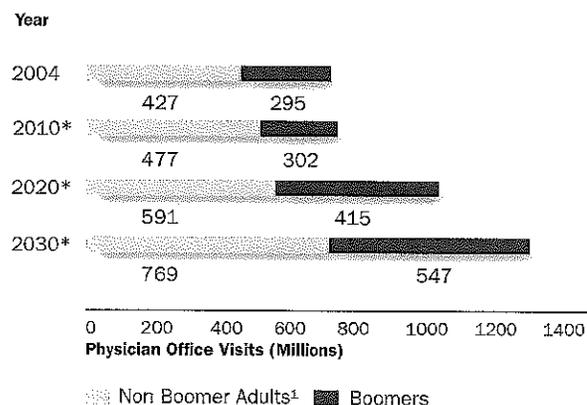
Foreign nurses are unlikely to meet the demand. Only about 3.5 percent of nurses in practice in

the U.S. received their nursing training elsewhere, and that percentage is expected to decrease as the demand for nurses increases worldwide.⁴³ This shortage will severely affect hospitals, where over 50 percent of nurses currently work (though the share of nurses employed in other care settings also is growing each year).



Physician office visits for adults will number more than one billion by 2020. Four out of 10 will be Boomers.

Number of Physician Office Visits



* Projected.
1. Non-Boomer adults indicates non-Boomers over the age of 15.
Source: FCG projections based on National Center for Health Statistics, National Ambulatory Care Survey 2004, June 2006

While the nursing shortage receives the most attention, other patient care positions are also experiencing shortages. As of December 2006, while over 8 percent of nursing positions were vacant, 8 percent of pharmacist positions also were vacant and nearly 6 percent of laboratory and imaging technician jobs were not filled.⁴⁴

The physician shortage is projected to steadily increase as the Boomers age, with a gap of 130,000 specialists⁴⁵ and over 60,000 primary care providers⁴⁶ predicted by 2020. This gap has led the Association of American Medical Colleges (AAMC) to call for a 30 percent increase in medical school enrollments.⁴⁷

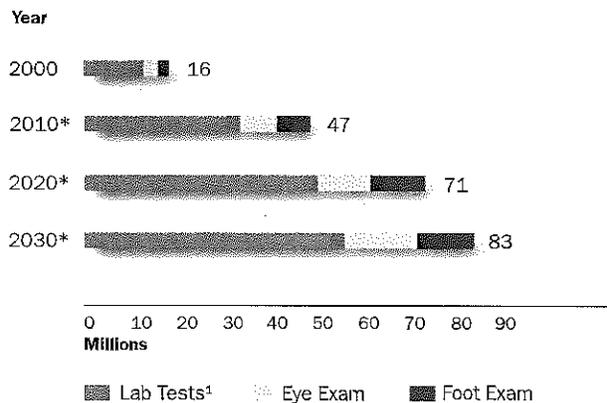
Physician shortages are projected to be most severe in the specialties that older Boomers need the most. There is already a shortage of geriatricians, who are trained specifically to provide primary care for older people, and the supply is actually declining. One-third of current training

program positions for geriatricians are not filled.⁴⁸ Even if the number of geriatric specialists remains stable, there will be a shortage of almost 20,000 by 2015. As our population ages, training to serve an increasingly geriatric population will be critical for most physicians.

The growing level of chronic disease will increase the demand for medical sub-specialists. More endocrinologists will be needed to treat patients with diabetes and more rheumatologists to treat patients with arthritis. Heart disease is now one of the top three diagnoses at physician office visits among people over 75.⁴⁹ The increase in longevity of Boomers – on top of advances in medications, less invasive treatments and diagnostic testing – will greatly increase demand for cardiology services. However, between 2000 and 2020, the supply of cardiologists will increase by only 5 percent while demand will increase by 33 percent.⁵⁰

Boomers with diabetes will drive an increased need for services assuming care guidelines are followed.

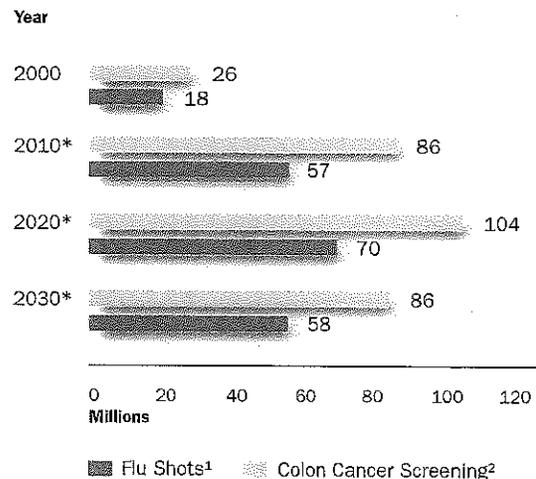
Tests and Procedures to Manage Diabetes Among Boomers



* Projected.
 1 Lab tests include protein screening, lipid profile, and Hemoglobin A1c.
 Source: FCG projections based on AMA and CDC recommendations for managing diabetes (2006)

Boomers will increase the need for preventive screening tests and immunizations.

Annual Number of Selected Screening Tests and Immunizations for Boomers



* Projected.
 1 Assumes compliance with AMA Physician Consortium Measures for annual flu shot for people over 50.
 2 Assumes compliance with AMA Physician Consortium Measures for Colorectal Cancer Screening for fecal occult blood test, flexible sigmoidoscopy, and barium enema every five years, and colonoscopy every 10 years.
 Source: FCG estimates and projections based on U.S. Census Bureau data, 2004 and 2004 update



In 2005, there was a U.S. shortage of about 220,000 registered nurses; by 2020 that gap will be over one million.

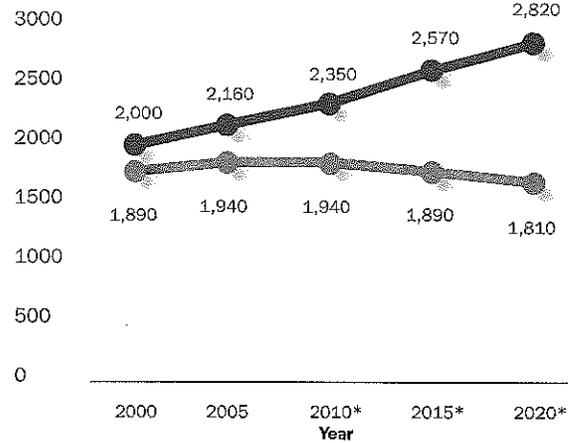
Orthopedic surgeons also will be in high demand. An aging population and advances in treatment will increase demand for the two most common orthopedic procedures, hip and knee replacements. However, between 2000 and 2020 the supply of orthopedic surgeons will increase by only 2 percent while the demand will increase by 23 percent.⁵¹

During the last 10 years, the number of people over 65 receiving hip replacements increased by over 35 percent, while the number receiving knee replacements increased by more than 70 percent.⁵² By 2030, eight times as many knee replacements as today will be performed.⁵³ The availability of improved joints is one key factor increasing demand. Knee replacements designed especially for women (who undergo about two-thirds of these procedures) were introduced in 2006 and are expected to produce better results.

Improvements in care and lifestyle are also driving demand. New knee replacement techniques that use imaging technology require a smaller incision and allow knee implants to be perfectly aligned without use of a steel rod in the leg, resulting in quicker recovery. Boomers exercise more than their parents did, and this has led to a 33 percent increase in sports injuries.⁵⁴ As a result, Boomers will need more orthopedic treatments, and they will want to quickly return to their active lifestyle.

The need for registered nurses is outpacing the supply.

Registered Nurses¹ Supply vs. Demand (Thousands)

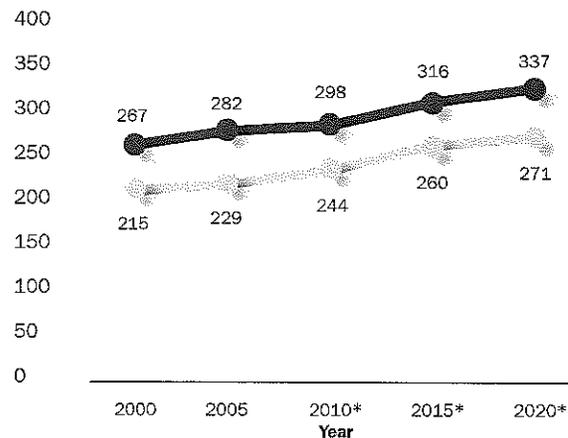


■ Demand for Registered Nurses
 ■ Supply for Registered Nurses

* Projected.
 1 Full-time equivalent nurses.
 Source: FCG projections based on HRSA, *What Is Behind HRSA's Projected Supply, Demand, and Shortage of Registered Nurses*, September 2004

The projected gap for primary care physicians will increase as Boomers age.

Primary Care Physician¹ Supply vs. Demand (Thousands)

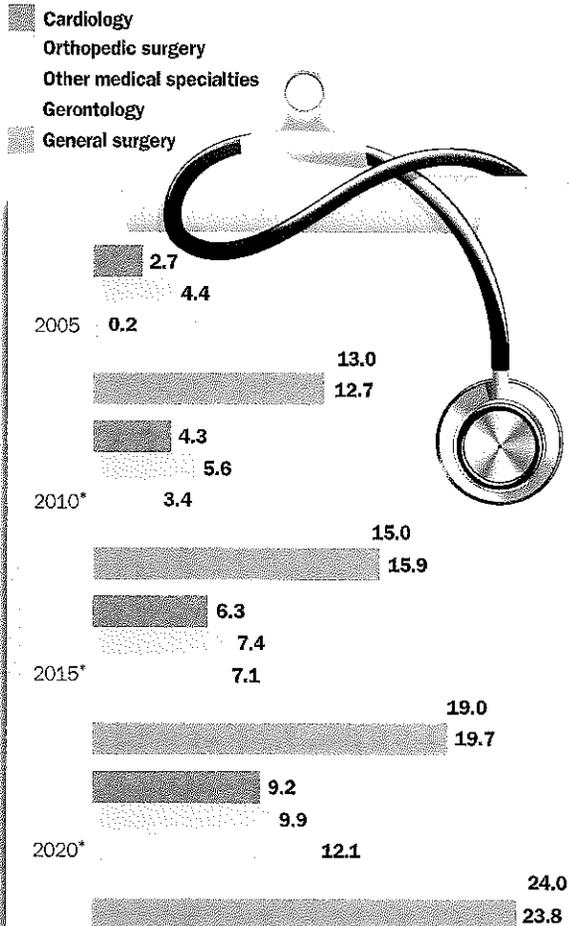


■ Demand for Primary Care Physicians
 ■ Supply for Primary Care Physicians

* Projected.
 1 Full-time equivalent physicians.
 Source: FCG based on HRSA, *Physician Supply and Demand: Projections to 2020*, October 2006

Physician Shortage Will be Greatest for Specialties Most Used by Boomers

Physician Shortage for Select Specialties (in Thousands)



Sources: *Physician Supply and Demand: Projections to 2020*, HRSA, October 2006. *Research Shows Rapid Decline in Geriatric Medicine Students*, Press Release, University of Cincinnati, April 4, 2007. *Aging Boomers Face a Doctor Shortage*, CBS News, March 4, 2003. *Projected

By 2030, eight times as many knee replacements as today will be performed.

Diversity of Caregivers Lags Growing Diversity of Patients

If current trends continue, the diversity of the provider population will not match the diversity of the patient population. Research has shown that when patients and physicians share the same background, access to care improves and patients are more satisfied.⁵⁵ Today, while 25 percent of the population is of African American, Hispanic or Native American origin, only 6 percent of physicians come from these groups. Hispanics and African Americans are the fastest growing segments of the population, but the percentage of medical school students from these groups is not increasing as rapidly.⁵⁶

The diversity of the nursing profession also is not keeping pace. Currently less than 2 percent of nurses list their ethnic origin as Hispanic, while 14 percent of the U.S. population is Hispanic.⁵⁷

Anticipating the Boomerism of health care, efforts are underway to close the gap between supply and demand for care as well as meet the differing expectations and demographics of this population. Hospitals are engaging in efforts on multiple fronts and are gearing up their facilities and staff to meet the increased and changing care needs. At the same time, they are working to develop new models for care delivery that can better utilize scarce resources and better manage chronic disease to reduce the need for hospital-based care.

Part 3:

America's Hospitals Are Responding

The combination of more chronically-ill patients, more diverse and demanding patients, and new technologies is challenging the health care system as the Boomer generation ages. But Boomers represent the beginning of a sustained trend toward more complex and demanding patients that will require substantial changes to the health care system. Hospitals, a critical player, have begun to take on these challenges, but there is still more to be done.

More Demand Requires New Approaches to Care Delivery

Many hospitals across the country are at or near capacity, and while construction of new facilities to treat a growing population is one response, hospitals are undertaking initiatives to improve patient care flow. Hospitals are streamlining how patients are triaged in the ED, transferred to the hospital floors and discharged to their homes or other settings. Improvements in patient flow can free up hospital beds – effectively increasing a hospital's capacity to treat patients – and lead to more timely care and increased patient satisfaction.

Investments in technology can play an integral role in supporting staff involved in admitting, transporting and discharging patients. Computerized bed-tracking systems are now being used in some facilities to capture and maintain detailed, real-time information about the status of a hospital's beds, minimizing patient wait time and

allowing resources to be used more efficiently. Some hospitals have implemented portable, wireless communication systems linking clinicians instantly to speed up the coordination of vital clinical services for hospitalized patients.

Health Care Response: Improvements in patient flow help hospitals prepare for an influx of new patients by better using existing capacity.

Nurturing the Caregiver Workforce

The nursing shortage is prompting many hospitals to investigate how to use nurses' time more effectively. One national, hospital-focused initiative has been identifying new ways to more effectively deliver care to patients.⁵⁸ Frontline staff at hospitals participating in this program created, tested and measured ideas for improving bedside care, from reducing non-clinical tasks so nurses can spend more time at the bedside to reorganizing how nursing stations are positioned. Other benefits included happier patients, increased staff satisfaction and

decreased staff turnover. The American Organization of Nurse Executives (AONE), a subsidiary of the AHA, will disseminate concepts of this project to 50 hospitals nationwide.

Individually, hospitals have implemented many programs to address current and projected staffing shortages. From community scholarships and educational loans, to hospital internships and programs that develop internal staff for key positions, hospitals are using creative approaches to fill critical vacancies, ensuring that well-trained nurses and other skilled staff are available to meet demand. Additionally, hospitals have partnered with nursing schools to ensure both nursing candidates and nursing instruction are available to meet the needs of future patients. One North Carolina program projects 230 nursing graduates over four years; another in New York has graduated 2,500 nurses over its lifetime.⁵⁹

Hospitals also are accelerating their recruitment of minority clinicians to reflect the expanding diversity of their local patient populations through scholarships and fellowship programs for minorities, and assisting in the licensing process for foreign-trained nurses.⁶⁰ The AAMC – working in conjunction with over 400 teaching hospitals and 125 medical schools – has developed the AspiringDocs campaign to raise awareness of the need for more diverse physicians and medical school applicants through online activities, media outreach, peer-to-peer communication and special campus events.⁶¹

Health Care Response: Attracting and retaining caregivers is critical to meeting increased Boomer demand. Recruitment and retention efforts can also produce a hospital staff more reflective of and responsive to the patient population it serves.

Planning for New Technology

The rapid pace of technology change is a challenge for health care providers. New technology can enhance care but it is also expensive and can impact hospital design, staffing requirements, and infrastructure needs. Forty hospital systems across the country have joined HealthTech, an organization that provides technology forecasts and helps hospitals prepare for implementing new technology and also anticipate how technology will help create the hospital of the future. The Massachusetts Technology Collaborative is assisting hospitals with implementation of Computerized Physician Order Entry systems by providing assessments of readiness, educational programming, and studies to document benefits.

Health Care Response: Hospitals are anticipating the next wave of technology advances and integrating technology into future planning.

Anticipating and Preparing for the Wave of Chronic Disease

Addressing the growing needs of aging Boomers with one or more chronic diseases requires a multi-disciplinary approach involving hospitals and others in the community. Hospital initiatives underway provide models for better case management for patients with chronic diseases. Components include:

- Documenting a comprehensive care plan for patients being discharged from the hospital that reflects all of the patient's active medications; an assessment of the patient's home situation, support mechanisms and risks; and concrete action steps to which the patient has agreed;
- Leveraging a computerized tracking system to identify and track patients with chronic illnesses who require follow-up care on a regular basis;

- Recruiting a team of case managers, home care nurses and health coaches to proactively reach out to at-risk patients being discharged from the hospital and those with chronic disease who haven't been seen at the required intervals; and
- Actively and remotely monitoring patients at risk for deteriorating health, often avoiding their having to be readmitted to the hospital – or admitted in the first place.

Broader efforts involving hospitals and other community partners can reduce the demand for health care services by keeping older residents independent and healthy.

- *Aging in Place*, an initiative adopted by a number of hospitals, keeps seniors independent longer by helping them manage their chronic conditions and coordinating their care while at home. The initiative has resulted in improved blood pressure, diet, exercise and medication compliance for those involved, as well as community support and trust. One particular collaboration among a health system, local government and non-profit organizations has allowed more than 1,000 seniors to age in place.⁶²
- Three hospitals in rural Idaho use volunteer postal workers, meter readers and store check-out clerks who are regularly in contact with seniors to help them access needed services and identify early-on those having difficulty living at home.⁶³

Technology can play a critical role supporting chronic disease management by closely tracking patient health status. Personal health records (PHRs) allow patients to track their conditions, access their medical records and communicate with their physicians or case managers – thereby allowing patients to become more closely engaged in their own health care. Two-thirds of Americans believe that online access to health and medical information gives people more control over their health care.⁶⁴ One community initiative in



Two-thirds of Americans believe that online access to health and medical information gives people more control over their health care.

Washington that implemented a team of clinical care specialists in conjunction with a shared patient care plan and PHRs reported improved or stabilized health status while reducing overall costs by \$3,000 per patient.⁶⁵

Health Care Response: People are living longer but may have more health conditions. By better coordinating care and engaging patients, hospitals and other providers can improve patients' quality of life, reduce health care costs and better target health care resources to those most in need.

Addressing Obesity

Hospitals are creating initiatives and programs to address the obesity epidemic in their communities and create an environment that is welcoming for obese patients. These initiatives include patient rooms fitted with wider beds, larger blood pressure cuffs and mechanical patient lifts to assist caregivers – as well as sponsoring community fitness and nutrition programs in local schools and promoting workplace wellness. A Virginia hospital program involves community organizations to connect residents with local fitness and nutrition programs, events, classes and regular wellness screenings for 25 week sessions. A community Web site is the source for program updates and free registration.⁶⁶ These initiatives are intended to make hospital stays more comfortable for obese patients, raise community awareness and reduce the overall incidence of obesity.

Health Care Response: Hospitals are fighting the increase in obesity among patients as well as adapting their internal programs to compassionately care for those who have obesity-related conditions.

Initiatives to Prevent Falls

Hospitals have implemented programs that reduce the incidence of falls *within* the hospital, including the installation of safety bars and wider doors that allow caregivers to safely accompany patients to the bathroom, and completing intake assessments to identify and track patients at risk for falling. Hospitals also are focusing on preventing falls in patients' homes and the broader community. Hospitals in California, Michigan, New Hampshire and Wisconsin are participating in statewide fall prevention initiatives.⁶⁷ In rural Nebraska, a hospital introduced free T'ai Chi workshops to help seniors with balance and fall prevention,⁶⁸ and a rural Wisconsin program educates the public about medications and other unsuspected causes of falls.⁶⁹ These programs enable seniors to live safely and independently.

Health Care Response: The first component of fall prevention is identifying patients at risk and educating the community – and hospitals can play a lead role.

Understanding Health Care Needs through the Eyes and Ears of the “New Patient”

The aging Boomer generation will be more diverse and more demanding than the current senior population, prompting hospitals to look at new ways to address their needs. Hospitals are taking steps to address language and cultural barriers.

Many of these efforts have focused on identifying promising practices for hospitals to ensure effective communication with their patients and families, especially as the limited English proficiency (LEP) population expands and its needs become more complex. For example, The Health Research and Educational Trust, an AHA affiliate, in conjunction with The Commonwealth Fund, released two studies in 2006 outlining some of the leading approaches for patient-centered communication with vulnerable populations, as collected from eight participating hospital sites.⁷⁰ These include:

- Language, race and ethnicity – and the patient's associated needs and preferences – recorded in hospital-wide systems;
- Interpreters and outreach workers integrated on committees throughout the hospital to ensure patients' cultural needs are incorporated into hospital programs; and
- Cultural awareness and sensitivity training for all employees.

Health Care Response: Effectively communicating and reaching out to diverse communities will ensure the health needs of these populations are met.

Supporting Patients and Their Families at the End of Their Lives

Providing palliative and end-of-life care is not new for hospitals. Hospitals are accustomed to involving family members in the care of the patient, particularly as they address difficult end-of-life decisions. Educational brochures and diligence in capturing advanced directives also help support this patient population. And with more patients desiring end-of-life care at home or in alternative settings, hospitals are developing or partnering with special palliative care teams, hospice programs, home care services and spiritual resources

to meet patients' wishes. One award-winning health system uses a team approach to treat illness, manage symptoms and address anxiety and the spiritual needs of each patient as they approach the end of life.⁷¹ Patients and families receive help in resolving difficult end-of-life decisions. The health system is working to create a culture where looking at the end of life is not seen as giving up hope but, instead, redefining hope.

Health Care Response: Hospitals are working with patients and families to identify and support end of life wishes.

Going Beyond the Medical Model of Care

Finally, hospitals are undertaking initiatives to offer the more personalized care, comfort, service and convenience that Boomers have come to expect. From accommodating family caregivers and reducing sound, to complementary and alternative medicine programs (including massage and acupuncture) and a broad range of fitness programs, the focus is on wellness not simply restoring health.

For example, newer hospitals are incorporating soothing elements like natural lighting, landscaped courtyards and sound-reduction materials. In a few cases, patients can even adjust the room temperature and lighting. Some changes address patient privacy like single-occupancy rooms. Others accommodate family caregivers by providing an in-room family area – including chairs that convert to beds – and Web sites that allow caregivers to communicate with hospitalized patients remotely. Technology-related service enhancements have brought online pre-registration, portable registration tablets, electronic appointment requests and in-hospital patient kiosks to some hospitals.

Some of these design and service enhancements have emerged through the work of *Transforming Care at the Bedside*, a project coordinated by the Institute for Healthcare Improvement and funded by the Robert Wood Johnson Foundation.⁷² Others are being developed, studied and implemented through The Pebble Project, a research-based collaboration between the Center for Health Design and several health care organizations (most of which are hospitals).⁷³

Health Care Response: Innovative new approaches to meeting patient needs reflect a broader care focus that encompasses acute-care needs and enhances the overall patient experience.

Part 4:

Conclusion

Health care delivery in the future will be markedly different. Patients want more control over their care, and new ways of delivering care will be essential if we are to meet the increased demand and growing incidence of chronic disease. Technologies are emerging that will make it easier to deliver care remotely and to more actively engage patients and their families in the care delivery process. Hospitals are leveraging these technologies and broadening programs in ways that will dramatically change the face of health care for generations to come.

Despite these advances, this wave of aging Baby Boomers will reshape the health care system forever. Hospitals play an important role in preparing for that challenge and are taking steps today to prepare for tomorrow. But hospitals cannot do it alone. Not only will it take cooperation from all parts of the health care sector, it also will require societal intervention to promote wellness and improve the health of Americans. This larger effort is needed if we are to meet the growing health needs of our citizens.

References

- ¹ M.Thornhill, The Boomer Project, 2006.
- ² U.S. Census, 2006 estimate from 2000 census.
- ³ BoomerMarketingNews, October 2006.
- ⁴ National Vital Statistics Reports, 53:6 (Table 12: Estimated life expectancy at birth in years, by race, and sex: Death-registration State, 1900-28, and United States, 1929-2002) Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. November 10, 2004.
- ⁵ M.Freedman. Prime Time: How Baby Boomers Will Revolutionize Retirement and Transform America, 1999.
- ⁶ Chartbook on Trends in the Health of Americans, CDC, 2006.
- ⁷ American Cancer Society, Cancer Facts & Figures 2007.
- ⁸ S.R.Collins, et al. "Health Coverage for Aging Baby Boomers: Findings from the Commonwealth Fund Survey of Older Adults," The Commonwealth Fund, January 2006.
- ⁹ "The State of Aging and Health in America 2007," Centers for Disease Control and Merck Company Foundation. www.cdc.gov/aging/saha.htm
- ¹⁰ FCG projections based on J. Wolff, et al. "Prevalence, Expenditures, and Complications of Multiple Chronic Conditions in the Elderly," Archives of Internal Medicine, 2002: 162:2269-2276.
- ¹¹ Joyce, et al, "The lifetime burden of chronic disease among the elderly," *Health Affairs*, Sep. 2005.
- ¹² FCG projections based on National Center for Chronic Disease Prevention and Health Promotion, *National Diabetes Surveillance System*. Accessed March 26, 2007.
- ¹³ FCG projections based on National Center for Health Statistics, *Trends in Health and Aging*. Accessed March 28, 2007.
- ¹⁴ D.N.Lakdawalla et al. "The Health and Cost Consequences of Obesity Among the Future Elderly," *Health Affairs*, September 26, 2005.
- ¹⁵ "Healthy Aging: Preventing Disease and Improving Quality of Life Among Older Americans, 2007," Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. January 2007.
- ¹⁶ G.Fuller, "Falls in the Elderly," *American Family Physician*, 2000.
- ¹⁷ "Could Baby Boomers Be Approaching Retirement in Worse Shape than their Predecessor," NIH News, March 5, 2007.
- ¹⁸ "Boomers: The Next 20 Years," Institute for the Future, 2006.
- ¹⁹ U.S. Census Bureau, Current Population Survey, 2005 Annual Social and Economic Supplement. (Table 1: Educational Attainment of the Population 15 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2005). Internet release date: October 26, 2006; and U.S. Census Bureau, Current Population Survey, 1985 Social and Economic Supplement. (Table 1: Years of School Completed by Persons 15 Years Old and Over, by Age, Sex, Race, and Spanish Origin: March 1985, 1984, 1983, and 1982).
- ²⁰ S.Schadler. and C.S. Golvin, "The State of Consumers and Technology: Benchmark 2006" Forrester Research, July 27 2006. And Williamson, DA, "Here Come the Aging Boomers" (Table 2: Older Adults and Seniors Online in the US, 2003-2008), *eMarketer*, May 2005.
- ²¹ K. Davis. "Oldie but Goodies," U.S. News and World Report, March 6, 2005.
- ²² "Living Longer, Working Longer: The Changing Landscape of the Aging Workforce – A MetLife Study," MetLife Mature Market Institute, April 2006.
- ²³ The 2005 Del Webb Baby Boomer Survey, conducted by Harris Interactive, April 2005.
- ²⁴ FCG projections based on "65+ in the United States: 2005," U.S. Census Bureau 2005.
- ²⁵ K.G.Manton, and X Gu. "Changes in the prevalence of chronic disability in the United States black and nonblack population above age 65 from 1982 to 1999," Proceedings of the National Academy of Sciences 98(11):6354-6359. May 22, 2001.
- ²⁶ "Complementary and Alternative Medicine: What People 50 and Older Are Using and Discussing with Their Physicians," data collected by ICR, report by AARP/NCCAM, Washington, D.C., January 2007.
- ²⁷ Citizens Health Care Working Group presentation by Nicholas Christakis, August 17, 2005.
- ²⁸ "Thirteen Million Baby Boomers Care for Ailing Parents, 25% Live with Parents," www.seniorjournal.com/NEWS/Boomers/5-10-19BoomersCare4Parents.htm, October 19, 2005.
- ²⁹ "Strong Public Support for Right to Die," The Pew research Center, January 5, 2006.
- ³⁰ "Executive Summary: Continuous Glucose Monitoring: Innovation in the Management of Diabetes," New England Healthcare Institute, NEHI Innovation Series, March 2005.
- ³¹ "The Future of Minimally Invasive Surgery," Technology Forecast Report, Health Technology Center, August 2004.
- ³² "Minimally Invasive Surgery May Increase Options for Octogenarians with Some Lung Cancers," www.medicalnewstoday.com/medicalnews.php?newsid=33359, November 11, 2005.
- ³³ FCG projections based on J. Wolff, et al. "Prevalence, Expenditures, and Complications of Multiple Chronic Conditions in the Elderly," Archives of Internal Medicine, 2002: 162:2269-2276.
- ³⁴ FCG projection based on "Chronic Conditions: Making the Case for Ongoing Care," Partnership for Solutions, December 2002.
- ³⁵ FCG projections based on National Center for Health Statistics, *National Hospital Discharge Survey 2004*, May 2006.
- ³⁶ FCG projections based on National Center for Health Statistics, *National Ambulatory Medical Care Survey: 2004 Emergency Department Summary*, June 2006.
- ³⁷ E. Hing, D.K.Cherry, D.A.Woodwell. 2004 Summary: National Ambulatory Medical Care Survey. Advance Data from Vital and Health Statistics, no. 374. Hyattsville, Maryland. National Center for Health Statistics, 2006; and S.M. Schappert. 1994 Summary: National Ambulatory Medical Care Survey. Advance Data from Vital and Health Statistics, no. 273. Hyattsville, Maryland. National Center for Health Statistics, 1996.
- ³⁸ FCG projections based on National Center for Health Statistics, *National Ambulatory Care Survey 2004*, June 2006.
- ³⁹ FCG projections based on AMA and CDC recommendations for managing diabetes, 2006.
- ⁴⁰ FCG projections based on HIRSA, *What Is Behind HRSA's Projected Supply, Demand, and Shortage of Registered Nurses*, September 2004.

- ⁴¹ "What Is Behind HRSA's Projected Supply, Demand, and Shortage of Registered Nurses?" HRSA, September 2004.
- ⁴² D.Auerbach, et. al. "Better Late than Never: Workforce Supply Implications of Later Entry into Nursing," *Health Affairs*; January/February 2007.
- ⁴³ The Registered Nurse Population: National Sample Survey of Registered Nurses, Preliminary Findings, HRSA, March 2006.
- ⁴⁴ 2007 AHA survey of hospital leaders, May 2007.
- ⁴⁵ *Physician Supply and Demand: Projections to 2020*, HRSA, October 2006; "Research Shows Rapid Decline in Geriatric Medicine Students," Press Release, University of Cincinnati, April 4, 2007; and "Aging Boomers Face a Doctor Shortage," CBS News, March 4, 2003.
- ⁴⁶ FCG projections based on HRSA, *Physician Supply and Demand: Projections to 2020*, October 2006.
- ⁴⁷ AAMC Statement on the Physician Workforce, Association of American Medical Colleges, June 2006.
- ⁴⁸ "Research Shows Rapid Decline in Geriatric Medicine Studies," Health News, University of Cincinnati, April 4, 2007.
- ⁴⁹ National Ambulatory Medical Care Survey 2004, National Center for Health Statistics, June 23, 2006.
- ⁵⁰ "Physician Supply and Demand: Projections to 2020," HRSA, October 2006.
- ⁵¹ "Physician Supply and Demand: Projections to 2020," HRSA, October 2006.
- ⁵² Falls Among Older Adults: Figures and Maps, CDG Injury Center, August 2006.
- ⁵³ Boomer Seniors News Conference Keynote Speech Summaries, American Academy of Orthopaedic Surgeons, December 20, 2006.
- ⁵⁴ Boomer Seniors News Conference Keynote Speech Summaries, American Academy of Orthopaedic Surgeons, December 20, 2006.
- ⁵⁵ Garrison, G., "Closing the Gaps in the Medical School Application Pool – Research in Support of Aspiring Docs.org," AAMC, date unknown.
- ⁵⁶ Diversity in the Physician Workforce: Facts and Figures 2006, Association of American Medical Colleges, August 2006.
- ⁵⁷ The Registered Nurse Population: National Sample survey of Registered Nurses, Preliminary Findings, HRSA, March 2006.
- ⁵⁸ P.Rutherford et al. "Transforming Care at the Bedside," Institute for Healthcare Improvement, 2004.
- ⁵⁹ Southeastern Regional Medical Center, Lumberton, NC and St. John's Riverside Hospital, Yonkers, NY, from "Health Care Workforce Ideas in Action," American Hospital Association. www.healthcareworkforce.org/healthcareworkforce_app/jsp/ceclist.jsp?programfocus=13. Accessed March 2007.
- ⁶⁰ From the AHA/HospitalConnect website: www.healthcareworkforce.org/healthcareworkforce_app/jsp/ceclist.jsp?programfocus=10. Accessed March 2007.
- ⁶¹ See www.aspiringdocs.org/site/c.luUL9MUJtE/b.2010925/k.C837/About_Us.htm for more information.
- ⁶² North Shore-LIJ Health System, Great Neck, NY, from the AHA/HospitalConnect website: www.caringforcommunities.org/caringforcommunities/hospitalsaction/caseexamples.html. Accessed March 2007.
- ⁶³ Gritman Medical Center, Moscow, ID, from the AHA/Hospital-Connect website: www.caringforcommunities.org/caringforcommunities/hospitalsaction/caseexamples.html. Accessed March 2007.
- ⁶⁴ "Survey Finds Americans Want Electronic Personal Health Information to Improve Own Health Care," press release December 7, 2006 from Lake Research Partners, American Viewpoint and the Markle Foundation.
- ⁶⁵ Whatcom County, WA, from the IHI website: www.ihl.org/IHI/Topics/PatientCenteredCare/PatientCenteredCareGeneral/ImprovementStories/PursuingPerfectionReportfromWhatcomCountyWashingtononPatientCenteredCare.htm. Accessed March 2007.
- ⁶⁶ Reston Hospital Center, Reston, VA, from the AHA/Hospital Connect website: www.caringforcommunities.org/caringforcommunities/hospitalsaction/caseexamples.html Accessed March 2007.
- ⁶⁷ "The State of Aging and Health in America 2007," Centers for Disease Control and Merck Company Foundation. www.cdc.gov/aging/saha.htm.
- ⁶⁸ Good Samaritan Hospital, Kearney, NE, from AHA/Hospital-Connect website: www.caringforcommunities.org/caringforcommunities/hospitalsaction/caseexamples.html. Accessed March 2007.
- ⁶⁹ Lakeview Medical Center, Rice Lake, WI, from AHA/Hospital-Connect website: www.caringforcommunities.org/caringforcommunities/hospitalsaction/caseexamples.html. Accessed March 2007.
- ⁷⁰ M. Wynia and J. Matiassek "Promising Practices for Patient-Centered Communication with Vulnerable Populations: Examples from Eight Hospitals," The Commonwealth Fund, August 2006; and Q. Ngo-Metzger, et al. "Cultural Competency and Quality of Care: Obtaining the Patient's Perspective," The Commonwealth Fund, October 2006.
- ⁷¹ J.Greene. "2005 Circle of Life Awards." Hospitals & Health Networks August, 2005: 44.
- ⁷² See www.ihl.org/IHI/Programs/StrategicInitiatives/TransformingCareAtTheBedside.htm for more information.
- ⁷³ See www.healthdesign.org/research/pebble for more information.



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Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**MEDICARE NURSING HOME
RESIDENT HOSPITALIZATION
RATES MERIT ADDITIONAL
MONITORING**



**Daniel R. Levinson
Inspector General**

**November 2013
OEI-06-11-00040**

**EXECUTIVE SUMMARY: MEDICARE NURSING HOME RESIDENT
HOSPITALIZATION RATES MERIT ADDITIONAL MONITORING
OEI-06-11-00040**

WHY WE DID THIS STUDY

Nursing homes hospitalize residents when physicians and nursing staff determine that residents require acute-level care. Such transfers to hospitals provide residents with access to needed acute-care services. However, hospitalizations are costly to Medicare, and research indicates that transfers between settings increase the risk of residents' experiencing harm and other negative care outcomes. High rates of hospitalizations by individual nursing homes could signal quality problems within those homes.

HOW WE DID THIS STUDY

We used administrative and billing data both for nursing homes and hospitals to identify all Medicare residents in Medicare- or Medicaid-certified nursing homes who experienced hospitalizations—i.e., transfers to hospitals for inpatient stays—in fiscal year (FY) 2011. We included all Medicare nursing home residents—those in Medicare-paid skilled nursing and rehabilitative (referred to as “SNF”) stays and those in nursing home stays not paid for by Medicare, which include long-term care (LTC) stays)—in our analysis. We calculated the percentage of Medicare nursing home residents that each nursing home hospitalized. We identified the diagnoses associated with these hospitalizations, calculated Medicare reimbursements for the hospital stays, and calculated the rates and costs of hospitalizations of nursing home residents. We also examined the extent to which annual rates of resident hospitalizations varied among individual nursing homes.

WHAT WE FOUND

In FY 2011, nursing homes transferred one quarter of their Medicare residents to hospitals for inpatient admissions, and Medicare spent \$14.3 billion on these hospitalizations. Nursing home residents went to hospitals for a wide range of conditions, with septicemia the most common. Annual rates of Medicare resident hospitalizations varied widely across nursing homes. Nursing homes with the following characteristics had the highest annual rates of resident hospitalizations: homes located in Arkansas, Louisiana, Mississippi, or Oklahoma and homes with one, two, or three stars in the Centers for Medicare & Medicaid Services' (CMS) Five-Star Quality Rating System.

WHAT WE RECOMMEND

In its comments on the draft report, CMS concurred with both of our recommendations to: (1) develop a quality measure that describes nursing home resident hospitalization rates and (2) instruct State survey agencies to review the proposed quality measure as part of the survey and certification process.

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OBJECTIVES

1. To determine the percentage of Medicare nursing home residents hospitalized in fiscal year (FY) 2011 and the associated costs to Medicare.
2. To identify the medical conditions most commonly associated with these hospitalizations.
3. To determine the extent to which these hospitalization rates varied across nursing homes.
4. To determine the extent to which these hospitalization rates varied according to select nursing home characteristics.

BACKGROUND

Nursing homes send residents to hospitals when physicians or nursing staff determine that residents require acute-level care. These transfers to hospitals provide residents with access to needed acute-care services.¹

However, research indicates that transfers between health care facilities increase the risk of residents' experiencing harm and other negative care outcomes and that these hospitalizations are costly to Medicare.² The harm that residents experience during hospitalizations can include disruption of their care plans, disorientation, stress, and iatrogenic illness (e.g., adverse events).^{3,4,5} The Centers for Medicare & Medicaid Services (CMS), in its *2012 Nursing Home Action Plan*, suggests that negative outcomes associated with hospitalizations are further complicated because health care providers often do not communicate critical information when transferring the residents.⁶ Financial costs associated with hospitalizations of nursing home residents include, but are not limited to, Medicare

¹ D. Saliba, "Appropriateness of the Decision to Transfer Nursing Facility Residents to the Hospital," *Journal of the American Geriatrics Society*, 48, 2, 2000, p. 155.

² Assistant Secretary for Planning and Evaluation (ASPE), *Hospitalizations of Nursing Home Residents: Background and Options*, June 2011, p. 1.

³ D. Saliba, op. cit., pp. 154–155.

⁴ J.G. Ouslander, "Reducing Potentially Avoidable Hospitalizations of Nursing Home Residents: Results of a Pilot Quality Improvement Project," *Journal of the American Medical Directors Association*, 2009, p. 645.

⁵ E. Hutt, "Precipitants of Emergency Room Visits and Acute Hospitalization in Short-Stay Medicare Nursing Home Residents," *Journal of the American Geriatrics Society*, 50, 2, 2002, pp. 223–224.

⁶ CMS, *2012 Nursing Home Action Plan*, 2012. Accessed at <http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/2012-Nursing-Home-Action-Plan.pdf> on February 5, 2013.

reimbursements for hospital stays, physician services during these stays, and applicable copayments.

Although nursing homes may hospitalize residents primarily for clinical reasons, research indicates that several nonclinical factors can also influence homes' decisions to hospitalize residents. These factors include the availability and training of nursing staff in the home, resident and family member preferences, and physician availability and preferences.⁷ Additionally, research suggests that aspects of Medicare payment policies and other economic factors can influence hospitalization rates.^{8,9}

Payment for Hospitalizations. Medicare pays for hospitalizations of nursing home residents primarily by reimbursing acute-care hospitals according to the Inpatient Prospective Payment System (IPPS).¹⁰ Under IPPS, hospitals may submit Medicare claims with codes from the Internal Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM codes) representing resident conditions and procedures for each hospital stay.¹¹ Payment for most Medicare resident hospitalizations is determined largely by grouping the diagnosis and procedure codes into Diagnosis-Related Groups based on the average cost of care for residents with similar conditions.

Nursing Homes

There are two primary types of care for Medicare beneficiaries in nursing homes: skilled nursing and rehabilitative care (referred to as “SNF”)¹² and long-term care (LTC). Over 90 percent of nursing homes can admit residents into either type of care, depending on their clinical needs.¹³

⁷ ASPE, *Hospitalizations of Nursing Home Residents: Background and Options*, June 2011, pp. 6–7.

⁸ *Ibid.*, pp. 8–14.

⁹ Congressional Research Service (CRS), *Medicare Hospital Readmissions: Issues, Policy Options and PPACA [the Patient Protection and Affordable Care Act]*, September 21, 2010, pp. 11–17.

¹⁰ CMS does not pay all hospitals for resident stays through the IPPS. CMS pays several types of hospitals (e.g., critical access hospitals, inpatient psychiatric hospitals) and most hospitals in Maryland through alternate payment methodologies. CMS, *Pub. No. 100-04 Medicare Claims Processing*, April 2004. Accessed at <http://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R156CP.pdf> on March 18, 2013.

¹¹ The ICD-9-CM system assigns diagnoses and procedure codes associated with hospital stays and is maintained jointly by CMS and the National Center for Health Statistics. CMS, *Acute Inpatient PPS Overview*, last modified February 22, 2010. Accessed at http://www.cms.gov/AcuteInpatientPPS/01_overview.asp on March 18, 2013.

¹² In this report, we use the commonly used acronym for skilled nursing facility (“SNF”) to describe residents in skilled nursing and rehabilitative stays covered under Medicare Part A (i.e., “SNF residents”).

¹³ Medicare Payment Advisory Committee (MedPAC), *Report to the Congress: Medicare Payment Policy, Skilled Nursing Facility Services*, March 2013, p. 161.

Federal law requires all nursing homes to provide residents with care that enables them to attain or maintain the highest practicable physical, mental, and psychosocial well-being.¹⁴ (In this report, we refer to all Medicare beneficiaries in nursing homes as “residents” or “nursing home residents.”)

SNF Care in Nursing Homes. In 2011, about 20 percent of all hospitalized Medicare beneficiaries went to 1 of the 15,207 nursing homes for SNF care following their hospital stays.¹⁵ Examples of nursing home residents in SNF stays include those recovering from surgical procedures performed in hospitals (e.g., hip or knee replacements) or recovering from acute medical conditions (e.g., septicemia, urinary tract infection, heart failure).¹⁶ In 2009, the Medicare Standard Analytical Files (SAF) categorized over 50 percent of residents in Medicare Part A SNF care as having illnesses of major or extreme severity.¹⁷

Medicare beneficiaries have access to SNF care benefits through Medicare Part A. Medicare coverage of SNF care is typically limited to 100 days per benefit period.¹⁸ Examples of services provided to SNF residents include the development, management, and evaluation of resident care plans; physical therapy; administration of intravenous feedings; insertion of suprapubic catheters; medication management; and wound care. CMS pays for SNF care when residents have preceding hospital stays of at least 3 days and a medical professional verifies the need for nursing and rehabilitative care related to the hospitalizations.¹⁹ In 2011, Medicare Part A paid \$32 billion for SNF stays for Medicare beneficiaries.²⁰

LTC in Nursing Homes. Nursing home residents in LTC stays typically need assistance accomplishing two or more activities of daily living (e.g., eating, bathing, dressing, walking). This group includes, but is not limited to, Medicare beneficiaries who are also enrolled in a State Medicaid program (known as dual eligibles).

State Medicaid requirements specify that nursing home residents in LTC stays must have access to several services including basic nursing care,

¹⁴ Social Security Act § 1819 (b)(2) and §1919 (b)(2).

¹⁵ MedPAC, *Report to the Congress: Medicare Payment Policy, Skilled Nursing Facility Services*, March 2013, p. 161.

¹⁶ Ibid.

¹⁷ Avalere Publishing, *Medicare SAF Data Book*, 2009, p. 27.

¹⁸ CMS, *Medicare Benefit Policy Manual: Duration of Covered Inpatient Services, Chapter 3*, October 1, 2003.

¹⁹ CMS, *Medicare Benefit Policy Manual: Coverage of Extended Care (SNF) Services Under Hospital Insurance*, Chapter 8, April 4, 2012.

²⁰ MedPAC, *Report to the Congress: Medicare Payment Policy, Skilled Nursing Facility Services*, March 2012, p. 171.

medical-related social services, pharmaceutical services, specialized rehabilitative services, individualized dietary services, emergency dental services, and other quality-of-life services.²¹ Medicare Part A does not pay for LTC stays in nursing homes, but Medicare Part B may pay for certain LTC services (e.g., enteral nutrition) for these nursing home residents.^{22, 23} Payment for Medicare beneficiaries' nursing home LTC comes from sources other than Medicaid, including personal resources, LTC insurance, or (if beneficiaries are dual eligibles) Medicaid.

Medicare Oversight of Nursing Homes

CMS verifies that Medicare- and Medicaid-certified nursing homes comply with Federal requirements.²⁴ It enters into agreements with State survey agencies to conduct onsite reviews of each nursing home to certify compliance with Federal requirements.²⁵ When surveyors identify noncompliance, CMS requires nursing homes to submit plans of correction and to correct the problems. If nursing homes do not correct the problems, CMS may take enforcement actions. These actions include imposing civil monetary penalties, denying payment for new admissions of Medicare residents, or terminating the nursing home from participation in Medicare and Medicaid.²⁶

Nursing Home Quality Measures. Nursing homes routinely collect resident assessment data at specific intervals during a nursing home stay, and CMS stores the assessment results in the Minimum Data Set (MDS).²⁷ CMS converts MDS data into 18 Quality Measures (QM).^{28, 29} The QMs

²¹ CMS, *Nursing Facilities*. Accessed at <http://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Delivery-Systems/Institutional-Care/Nursing-Facilities-NE.html> on January 22, 2013.

²² CMS. *What is Long-Term Care?*, August 3, 2012. Accessed at <http://www.medicare.gov/longtermcare/static/home.asp> on May 15, 2013

²³ Office of Inspector General (OIG), *Medicare Part B Services During Non-Part A Nursing Home Stays: Enteral Nutrient Pricing*, January 2010, pp. 2-4.

²⁴ Nursing Home Reform Act as part of the Omnibus Budget Reconciliation Act of 1987; 42 CFR Part 483.

²⁵ 42 CFR §§ 488.308(a), 488.330(a)(1)(i), and CMS, *Survey and Certification: General Information*, April, 11, 2013. Accessed at <http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/index.html?redirect=/surveycertificationgeninfo/> on May 15, 2013.

²⁶ 42 CFR §§ 488.402(d), 488.408, and 488.456.

²⁷ CMS, *MDS 3.0 for Nursing Homes and Swing Bed Providers*. Accessed at <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIMDS30.html> on March 4, 2013.

²⁸ CMS, *Nursing Home Quality Initiative: Quality Measures*. Accessed at <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIQualityMeasures.html> on April 16, 2013.

²⁹ See Appendix A for a complete listing of the 18 QMs.

indicate how well a nursing home provides care to its residents. Examples of QMs include the percentage of residents who report moderate to severe pain, the percentage of residents who were appropriately given the seasonal influenza vaccine, and the percentage of residents who have lost significant amounts of weight.³⁰ CMS provides QMs to nursing homes for them to use in quality improvement efforts. Currently, the QMs do not include a measure of how often nursing homes hospitalize residents.

Public Reporting of QMs and Other Data Through the Five-Star Quality Rating System. CMS publicly reports nursing home QMs through the Five-Star Quality Rating System. CMS gives each Medicare- and Medicaid-certified nursing home an overall rating between one and five stars. A rating of one star indicates that a nursing home is “much below average” in terms of quality, and a rating of five stars indicates that a nursing home is “much above average.”³¹

CMS bases the overall five-star rating on the nursing homes’ ratings in three areas: performance on inspection surveys (survey metric), QMs (quality metric), and staffing (staffing metric). CMS calculates these three metrics as follows:

- The survey metric is based on points assigned to the results of nursing home surveys, complaint surveys, and survey revisits conducted within the last 3 years.
- The quality metric is based on nursing homes’ performance on 10 QMs. Seven of the QMs relate to LTC residents (e.g., mobility decline, use of physical restraints), and the three remaining QMs relate to SNF residents (e.g., delirium, level of pain).
- The staffing metric is based on registered nurse (RN) hours per resident day and total staffing hours (hours by RNs, licensed practical nurses, and nurse aides).

Efforts To Monitor and Reduce Rates of Hospitalization and Other Types of Transfers

Rates of hospitalizations and other types of resident transfers have received increased attention from government agencies and key stakeholders because of the resident risk and high associated cost.

³⁰RTI [Research Triangle Institute] International, *MDS 3.0 Quality Measures User’s Manual*. Accessed at <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V60.pdf> on February 19, 2013.

³¹ CMS, *Consumer Fact Sheet*, December 2008. Accessed at <http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/consumerfactsheet.pdf> on October 4, 2013.

Congress, through the Affordable Care Act, established several initiatives designed to reduce hospital resident readmissions.^{32,33} CMS publicly reports hospital readmission rates, has requested that Quality Improvement Organizations examine resident transfers, and is developing nursing home surveyor guidance related to the evaluation of hospitalizations of nursing home residents.^{34,35,36} The National Quality Forum (NQF) adopted measures of hospital performance based on hospital resident readmission rates.³⁷ MedPAC made recommendations to CMS to limit payment policies that incentivize unnecessary hospitalizations of nursing home residents.³⁸ Researchers have suggested changes to Medicare payment policies that can reduce hospitalization rates for the benefit of both the program and beneficiaries.^{39,40} The provider community has also focused attention on developing best practices to reduce hospitalizations of nursing home residents.⁴¹

METHODOLOGY

To determine the percentage of Medicare residents transferred to hospitals for acute inpatient stays in FY 2011, we collected nursing home resident assessment data from the MDS, beneficiary information from the Enrollment Database (EDB), and hospital claims data from the National Claims History (NCH). We combined these data sources to identify all transfers of Medicare nursing home residents to hospitals for inpatient stays. For this report, we defined a Medicare nursing home resident as any Medicare beneficiary who stayed in a Medicare- or Medicaid-certified

³² Patient Protection and Affordable Care Act of 2010, P.L. 111-148 § 3025.

³³ CMS, *Community-Based Care Transitions Program Fact Sheet*. Accessed at <http://innovations.cms.gov/Files/fact-sheet/Community-based-Care-Transitions-Program-Fact-Sheet-.pdf> on February 5, 2013.

³⁴ CMS, *Hospital Quality Initiatives: Outcome Measures*. Accessed at https://www.cms.gov/HospitalQualityInits/20_OutcomeMeasures.asp on January 12, 2012.

³⁵ CMS, *Medicare Quality Improvement Organization 9th Scope of Work*, p. 69. Accessed at http://www.cms.gov/QualityImprovementOrgs/Downloads/9thSOWBaseContract_C_08-01-2008_2_.pdf on September 13, 2011.

³⁶ CMS, *2012 Nursing Home Action Plan*, 2012, pp. 25–26 and 37–39.

³⁷ NQF, *Candidate Hospital Care Additional Priorities: 2007 Performance Measure*. Washington, DC, 2007.

³⁸ MedPAC, *Report to the Congress: Reforming the Delivery System*, June 2008, p. 87.

³⁹ ASPE, *Hospitalizations of Nursing Home Residents: Background and Options*, June 2011, pp. 15–23.

⁴⁰ CRS, *Medicare Hospital Readmissions: Issues, Policy Options and PPACA*, September 21, 2010, pp. 18–36.

⁴¹ National Transitions of Care Coalition, 2011. Accessed at <http://www.ntocc.org/> on September 13, 2011.

nursing home for at least 1 day in FY 2011. We defined a hospitalization as an instance when a Medicare nursing home resident went to a hospital for a Medicare-reimbursed inpatient stay within 1 day of discharge from a nursing home.

Identifying Hospitalizations of Medicare Nursing Home Residents

We identified hospitalizations of Medicare nursing home residents using data from the MDS, the EDB, and the NCH. To identify all Medicare beneficiaries who were nursing home residents in FY 2011, we used the MDS and the EDB. The MDS contains resident Social Security Numbers (SSN), admission and discharge dates, and the related nursing home identification numbers. We matched SSNs in the MDS to those in the EDB to identify Medicare beneficiaries and their associated Medicare Health Insurance Claim Numbers. We excluded from this analysis the small number of beneficiaries in the MDS who had SSNs that did not match their SSNs as listed in the EDB. We used the Medicare Part A claims data in the NCH to determine whether nursing home residents entered hospitals following their nursing home stays and to determine whether the nursing home stays were reimbursed through Medicare Part A.⁴²

The resulting data set enabled us to determine when beneficiaries were admitted to nursing homes, whether they were discharged from nursing homes, and whether they were hospitalized following discharge from nursing homes.

Analysis

Using the data set described above, we determined the percentage of Medicare nursing home residents hospitalized in FY 2011, the Medicare costs associated with hospitalizations of nursing home residents, the medical conditions associated with the hospitalizations, each nursing home's rate of resident hospitalization (which we refer to as the "annual hospitalization rate"), and the extent to which annual hospitalization rates varied according to select characteristics. For analysis, we combined all Medicare nursing home residents—those in Medicare-paid SNF stays and

⁴² We excluded nursing home stays that occurred in "swing bed" units within hospitals from our analysis. (A swing-bed unit is a hospital unit in which residents receive skilled nursing services.) We excluded these stays because the associated facilities differ substantially from the freestanding nursing homes that are the focus of this report. Excluding these stays removed 111,298 stays and 1,149 hospital swing-bed facilities from our analysis. CMS, *Swing Bed Services*, January 2013. Accessed at <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/SwingBedFactsheet.pdf> on March 18, 2013.

those in nursing home stays not paid by Medicare—and refer to them as “Medicare nursing home residents” or “nursing home residents.”

Calculating the Percentage of Hospitalized Nursing Home Residents. To calculate the percentage of nursing home residents hospitalized, we divided the total number of Medicare nursing home residents hospitalized at least once in FY 2011 by the total number of residents who had nursing home stays of at least 1 day in FY 2011.

Calculating the Medicare Costs Associated With Resident Hospitalizations. We calculated the amount Medicare spent on hospitalizations of nursing home residents by summing the Medicare reimbursements for each hospital stay that we identified as a hospitalization of a Medicare nursing home resident. These costs represent only the amounts that Medicare paid hospitals for the residents’ acute-care hospital stays. Our analysis included payments made to IPPS and non-IPPS hospitals. When hospitalized residents were transferred from their initial hospitals to other hospitals, we combined the reimbursements paid by Medicare to each hospital.⁴³

We calculated the amount Medicare spent on all hospitalizations of Medicare beneficiaries by summing Part A reimbursements for all hospital stays with admission dates in FY 2011.

Identification of Medical Conditions Associated With Hospitalization. To identify the medical conditions associated with hospitalizations of nursing home residents, we reviewed the primary ICD-9-CM diagnosis codes on the Medicare claims submitted for the hospital stays. To categorize the diagnosis codes, we used the clinical classification system (CCS) of the Agency for Healthcare Research and Quality’s (AHRQ) Healthcare Cost and Utilization Project (HCUP). The CCS enables researchers to collapse ICD-9-CM codes into clinically meaningful categories for analysis and comparison between studies.⁴⁴

Calculating Annual Hospitalization Rates for Nursing Homes. To calculate the annual hospitalization rate for each nursing home in FY 2011, we divided the number of nursing home stays that ended in hospitalization in a given home by the total number of nursing home stays

⁴³ Under CMS’s transfer policy, CMS reduces reimbursements for hospitalizations under several scenarios, including instances when residents are transferred to other hospitals covered by the IPPS. CMS, *Acute Care Hospital Inpatient Prospective Payment System*, February 2012. Accessed at <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/AcutePaymtSysfctsh.pdf> on March 18, 2013.

⁴⁴ See Appendix B for a detailed description of the methodology we used to describe the ICD-9-CM codes on the hospital claims using the HCUP CCS.

of at least 1 day in the home. We calculated annual hospitalization rates only for homes that provided care to 30 or more Medicare residents in FY 2011.

Analysis of Characteristics Associated With Variation in Annual Hospitalization Rates. To determine whether annual hospitalization rates varied according to select nursing characteristics, we divided homes into subgroups based on characteristics and then calculated average annual hospitalization rates for the subgroups. To determine how much annual hospitalization rates varied by geographic location, we divided homes into groups by the State code in their billing addresses and then calculated the average annual hospitalization rate for nursing homes in each State and the District of Columbia. To determine how much annual hospitalization rates varied by scores on the four CMS Five-Star Quality Rating System metrics, we divided nursing homes into two groups—one group consisting of those with one, two, or three stars and the other consisting of those with four or five stars—for each metric and calculated the rates for each group. To determine how much annual hospitalization rates varied by nursing home size, we divided nursing homes into three categories based on the number of beds within each home and then calculated the rate for each group. To determine how much annual hospitalization rates varied by ownership type, we divided nursing homes into three groups based on ownership type and then calculated the rate for each group.

We collected information on nursing homes' locations, bed counts, and ownership categories from CMS's Certification and Survey Provider Enhanced Reports (CASPER) database. CMS provided five-star ratings data applicable to our observation period.

Limitations. The annual hospitalization rates are not adjusted to account for "case mix"—in this instance, the physical and mental health of residents in a given nursing home—or other factors. Additionally, the cost figures associated with the hospitalizations of nursing home residents do not include copayments for the hospital stays, physician reimbursements for the hospital stays, or payments made by the Medicare program or other payers for post-hospitalization services (e.g., followup physician office visits). Therefore, we likely underestimate the costs associated with hospitalizations of nursing home residents to the Medicare program and beneficiaries.

Standards

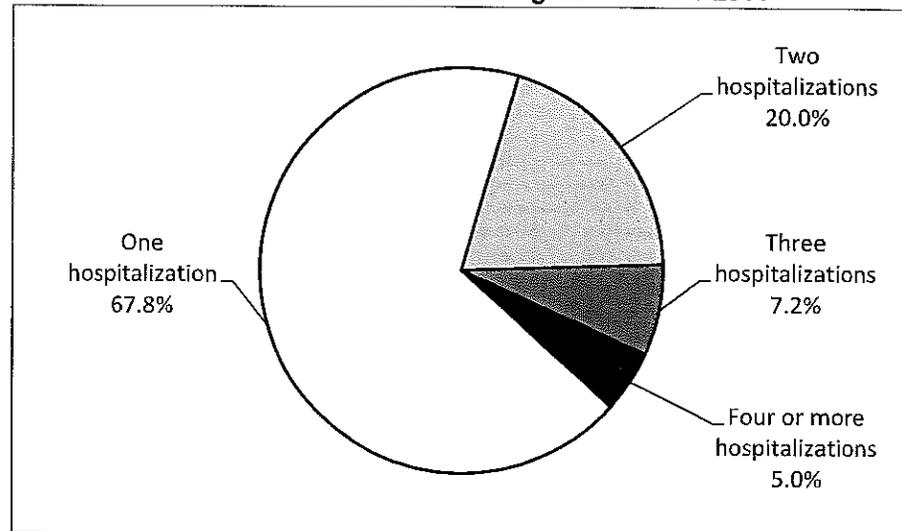
This study was conducted in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

FINDINGS

One-quarter of Medicare nursing home residents experienced hospitalizations in FY 2011, and Medicare spent \$14.3 billion on these hospitalizations

Of the 3.3 million Medicare residents who stayed in nursing homes for at least 1 day in FY 2011, 825,765 (24.8 percent) experienced hospitalizations. The majority of hospitalized residents (67.8 percent) transferred from nursing homes to hospitals only once. Twenty percent transferred two times, 7.2 percent transferred three times, and the remaining 5 percent transferred four or more times (see Figure 1).

Figure 1: Number of Hospitalizations Experienced by Hospitalized Medicare Residents Who Resided in Nursing Homes in FY 2011



Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

Medicare spent \$14.3 billion in FY 2011 on hospital stays for nursing home residents, spending 33 percent more per stay than for the average Medicare hospitalization

Medicare spent \$14.3 billion on 1.3 million hospital stays associated with hospitalizations of nursing home residents. These costs represent 11.4 percent of Medicare Part A spending on all hospital admissions (\$126 billion) in the same year.⁴⁵ Medicare spent an average of \$11,255 on each hospitalization of a nursing home resident, which was 33.2 percent above the average cost (\$8,447) of hospitalizations for all Medicare residents.

⁴⁵ Cost estimates presented in this report are based only on reimbursements paid by Medicare Part A for the initial hospitalizations. They do not include any other costs paid by Medicare or by other payers for further medical care—such as physician office visits or additional nursing home stays—needed as a result of the hospitalizations.

Nursing home residents went to hospitals most commonly for septicemia, pneumonia, and congestive heart failure

Medicare nursing home residents went to hospitals for a wide range of conditions—236 of the possible 285 primary diagnosis categories described in the HCUP CCS. The primary diagnosis describes the most significant medical condition found during an inpatient admission.⁴⁶ The 15 most frequent CCS diagnosis categories accounted for 60.9 percent of all resident hospitalizations (see Table 1).

Table 1: Primary Diagnoses on Claims of All Hospitalized Medicare Nursing Home Residents in FY 2011

CCS Primary Diagnosis Category	Percentage of Hospitalizations
Fifteen Most Frequent CCS Categories	60.9%
Septicemia	13.4%
Pneumonia	7.0%
Congestive heart failure, nonhypertensive	5.8%
Urinary tract infections	5.3%
Aspiration pneumonitis, food/vomitus	4.0%
Acute renal failure	3.9%
Complication of device, implant, or graft	3.3%
Respiratory failure, insufficiency, or arrest	2.7%
Gastrointestinal hemorrhage	2.4%
Complications of surgical procedures or medical care	2.4%
Chronic obstructive pulmonary disease (COPD) and bronchiectasis	2.4%
Delirium, dementia, and amnesic and other cognitive disorders	2.2%
Acute cerebrovascular disease	2.1%
Fluid and electrolyte disorders	2.0%
Fracture of neck of femur (hip)	2.0%
Remaining 221 CCS Categories on Nursing Home Claims	39.1%
All CCS Diagnosis Categories on Nursing Home Claims	100%

Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

Hospitalizations for septicemia accounted for 21 percent of Medicare spending on nursing home resident hospitalizations

Septicemia led to the most hospitalizations among all CCS categories (13.4 percent). Septicemia and sepsis (a related condition) are serious bloodstream infections that can rapidly become life threatening.⁴⁷

⁴⁶ CMS, *Medicare Claims Processing Manual*, Chapter 23, “Fee Schedule Administration and Coding Requirements.”

⁴⁷ Centers for Disease Control and Prevention (CDC), *Inpatient Care of Septicemia or Sepsis: A Challenge for Patients and Hospitals*, National Center for Health Statistics Data Brief, 2011. In the data brief, CDC found that the rate of nursing home resident hospitalizations for septicemia more than doubled from 2000 to 2008 and that hospitalizations for septicemia ended in death much more often than hospitalizations for all other conditions.

Medicare spent almost \$3 billion on nursing home resident hospitalizations associated with septicemia, more than the next three most expensive conditions combined. The high total reimbursement amount for septicemia is the result of both its frequency as a primary diagnosis on hospital claims and its above-average reimbursement rate. Table 2 shows the costs associated with the 15 most costly CCS diagnosis categories.

Table 2: Medicare Costs Associated With Medicare Nursing Home Resident Hospitalizations in FY 2011 by Sum of Reimbursement

CCS Primary Diagnosis Category	Sum of All Hospital Reimbursements	Percentage of All Hospital Reimbursements	Average Reimbursement
Fifteen Most Costly CCS Categories	\$9,268,066,011	65.2%	\$11,554
Septicemia	\$2,963,329,522	20.8%	\$17,430
Pneumonia	\$844,817,051	5.9%	\$9,464
Congestive heart failure, nonhypertensive	\$643,386,174	4.5%	\$8,731
Respiratory failure, insufficiency, or arrest	\$637,201,272	4.5%	\$18,438
Complication of device, implant, or graft	\$619,241,745	4.3%	\$14,629
Aspiration pneumonitis, food/vomitus	\$618,310,799	4.3%	\$12,223
Complications of surgical procedures or medical care	\$449,236,625	3.2%	\$14,731
Acute renal failure	\$425,965,874	3.0%	\$8,679
Urinary tract infections	\$422,251,024	3.0%	\$6,296
Delirium, dementia, and amnesic and other cognitive disorders	\$321,003,626	2.3%	\$11,515
Fracture of neck of femur (hip)	\$311,417,099	2.2%	\$12,578
Acute cerebrovascular disease	\$285,667,898	2.0%	\$10,847
Gastrointestinal hemorrhage	\$264,867,028	1.9%	\$8,544
COPD and bronchiectasis	\$238,845,320	1.7%	\$7,727
Acute myocardial infarction	\$222,524,954	1.6%	\$11,475
Remaining 221 CCS Categories	\$4,991,830,494	34.4%	\$11,188
All CCS Diagnosis Categories on Nursing Home Claims	\$14,259,896,509	100%	\$11,211

Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

Nursing homes' annual rate of resident hospitalization varied according to select characteristics, including geographic location and rating on CMS's Five-Star Quality Rating System

Nursing homes' individual annual hospitalization rates varied widely, ranging from less than 1 percent to 69.7 percent. The annual hospitalization rate averaged 25 percent. Additionally, 1,059 nursing homes (7 percent) had annual hospitalization rates greater than 40 percent. Table 5 shows the distribution of annual hospitalization rates among Medicare- and Medicaid-certified nursing homes.

Table 5: Percentages of Nursing Homes by Annual Hospitalization Rate in FY 2011

Annual Hospitalization Rate	Percentage of Homes
Above 50 percent	0.6%
40 percent to 49.9 percent	6.2%
30 percent to 39.9 percent	22.1%
20 percent to 29.9 percent	39.9%
10 percent to 19.9 percent	26.9%
Less than 9.9 percent	4.3%
All Homes	100.0%

Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

Nursing homes' annual hospitalization rates varied by the four characteristics that we examined: the nursing home's geographic location, its size, its rating on CMS' Five-Star Quality Rating System, and the category of its ownership.⁴⁸

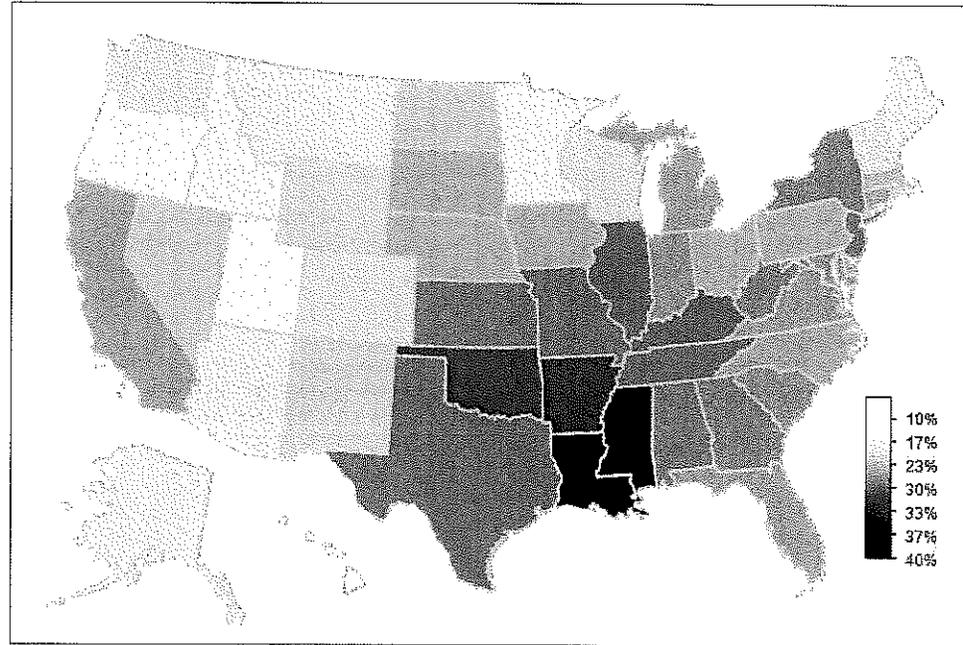
Homes with high annual hospitalization rates were not evenly distributed across the country

Nursing homes in Arkansas, Louisiana, Mississippi, and Oklahoma had the highest annual hospitalization rates when averaged at the State level. The average hospitalization rate for nursing homes in Louisiana (38.3 percent) was 14 percentage points higher than the national average (24.3 percent). Generally, nursing homes in States in the upper Pacific West, Mountain West, upper North Central Midwest, and New England

⁴⁸ The extent of identified variations suggests that average annual rates of hospitalization differed by the reviewed characteristics, but we do not try to explain these variations. Other factors—such as State bed hold policies—have been shown to influence hospitalization rates. D.C. Grabowski, "Medicaid bed-hold policy and Medicare skilled nursing facility rehospitalizations," *Health Services Research*, 45, 6, 2010, pp. 1963–1980.

regions had the lowest average annual hospitalization rates (see Figure 2).⁴⁹

Figure 2: Geographic Distribution of Average Annual Hospitalization Rate in FY 2011



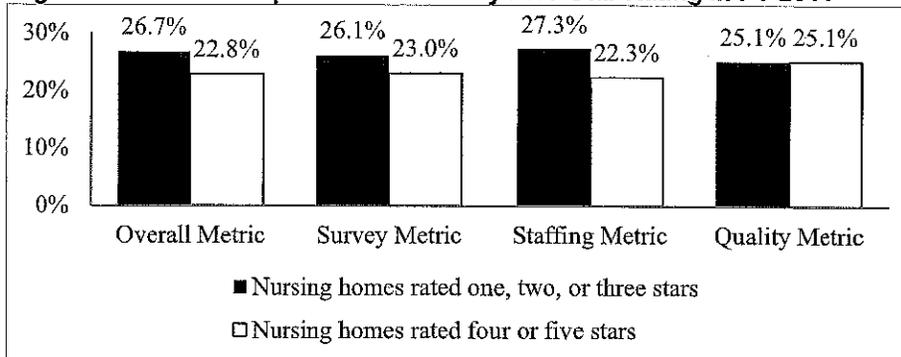
Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

In general, nursing homes rated one, two, or three stars on the Nursing Home Compare Five-Star Quality Rating System had higher annual hospitalization rates than those rated as four or five stars

Nursing homes rated one, two, or three stars (the lowest five-star ratings) on three of the four metrics (the overall, survey, and staffing metrics) had higher annual hospitalization rates than those rated four or five stars (the highest five-star ratings). The biggest difference between annual hospitalization rates appears in the staffing metric, where nursing homes rated one, two, or three stars had hospitalization rates that were 5 percentage points higher than that of those rated four or five stars. The exception is the quality metric, where nursing homes rated one, two, or three stars had the same hospitalization rate as those rated four or five stars (see Figure 3).

⁴⁹ Appendix C lists the average annual hospitalization rates for nursing homes in all States. Regions are defined by the Census Bureau.

Figure 3: Annual Hospitalization Rate by Five-Star Rating in FY 2011



Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

Large and medium-sized nursing homes had higher annual hospitalization rates than small nursing homes

Small nursing homes had annual hospitalization rates 2.4 percentage points lower than the national average. Large and medium-sized nursing homes had annual hospitalization rates 1.6 and 0.9 percentage points higher than the national average, respectively (see Table 6).

Table 6: Annual Hospitalization Rate by Nursing Home Size in FY 2011

Size of Home	Number of Homes	Average Annual Hospitalization Rate	Percentage Point Difference From National Rate
Nationwide	15,497*	25.0%	n/a
<ul style="list-style-type: none"> • Large nursing homes (more than 120 beds) • Medium-sized nursing homes (80–120 beds) • Small nursing homes (fewer than 80 beds) 	<p>4,749</p> <p>5,539</p> <p>5,209</p>	<p>26.6%</p> <p>25.9%</p> <p>22.6%</p>	<p>1.6%</p> <p>0.9%</p> <p>-2.4%</p>

Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.
 *CASPER did not contain bed count information for one home.

As a group, for-profit nursing homes had the highest annual hospitalization rate compared to the rate for government-owned and nonprofit nursing homes

As shown in Table 7, for-profit homes had an annual hospitalization rate 1.5 percentage points higher than the national average. Government-owned and nonprofit homes had annual hospitalization rates about 1.5 and 3.8 percentage points lower than the national average, respectively.

Table 7: Average Annual Hospitalization Rate by Ownership Category in FY 2011

Ownership Category	Number of Homes	Percentage of Medicare Population Served Annually	Average Annual Hospitalization Rate	Percentage Point Difference From National Rate
Nationwide	15,497*	109.0%**	25.0%	n/a
<ul style="list-style-type: none"> • For-profit nursing homes • Government-owned public nursing homes • Nonprofit nursing homes 	<p>10,761</p> <p>850</p> <p>3,886</p>	<p>76.4%</p> <p>4.8%</p> <p>27.8%</p>	<p>26.5%</p> <p>23.5%</p> <p>21.2%</p>	<p>1.5%</p> <p>-1.5%</p> <p>-3.8%</p>

Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents.

*CASPER did not contain ownership information for one home.

**Percentage exceeds 100 percent because some residents received care in multiple nursing homes.

CONCLUSION AND RECOMMENDATIONS

We found that nursing homes hospitalized one-quarter of nursing home residents in FY 2011, that these hospitalizations cost Medicare \$14.3 billion, and that a small number of medical conditions (e.g., septicemia) accounted for the majority of hospitalizations and costs. We also identified wide variation in rates of hospitalization among individual nursing homes. Among 1,059 nursing homes, more than 40 percent of stays ended in hospitalization. Nursing homes in certain States (Arkansas, Louisiana, Mississippi, and Oklahoma) and nursing homes rated as one, two, or three stars on CMS's Five-Star Quality Rating System had the highest average annual hospitalization rates.

Hospitalizations of nursing home residents are necessary when physicians and nursing staff determine that residents require acute-level care. However, the higher-than-average resident hospitalization rates of some nursing homes in FY 2011 suggest that some hospitalizations could have been avoided through better nursing home care.

We recommend that CMS:

Develop a QM That Describes Nursing Home Rates of Resident Hospitalization

CMS should develop a QM of nursing home rates of resident hospitalization and consider publicly reporting this measure on the Nursing Home Compare Web site. One possible QM could be a measure of each home's overall hospitalization rate. Alternatively, CMS could develop more discrete measures that would identify nursing homes that hospitalize residents more frequently than other homes for certain conditions. Adding a measure of hospitalization rates to the existing QMs not only would enable nursing homes and the public to compare these rates across nursing homes, but also would provide greater incentive for nursing homes to reduce avoidable hospitalizations.

Instruct State Agency Surveyors To Review Nursing Home Rates of Resident Hospitalization as Part of the Survey and Certification Process

After developing the QM recommended above, CMS should instruct State survey agencies to use the QM in preparing to survey homes and provide the agencies with guidance for interpreting and using the QM. Examining these data could help surveyors identify areas of concern—such as infection control practices in homes with high rates of hospitalizations for septicemia—within individual nursing homes.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

In its comments on the draft report, CMS concurred with both of our recommendations.

CMS concurred with the recommendation to develop a QM that describes nursing home rates of resident hospitalization. CMS stated that it is taking steps to develop and implement a nursing home hospitalization QM in accordance with the rulemaking process. Further, CMS indicated that it is developing a skilled nursing facility readmission measure, which it intends to submit to the National Quality Forum for endorsement in late 2013.

CMS also concurred with the recommendation to instruct State survey agency surveyors to review rates of hospitalization for nursing home residents as part of the survey and certification process. CMS indicated that surveyors should consider measures of hospitalization during their nursing home reviews. CMS stated that reducing hospitalizations is a major public health goal and that hospitalization measures can be used to assess the quality of care that nursing home residents receive.

For the full text of the CMS's comments, see Appendix D. We made minor changes to the report based on technical comments.

APPENDIX A

Nursing Home Quality Measures

Nursing homes routinely collect resident assessment data at specific intervals during a nursing home stay, and CMS stores the assessment results in the MDS. CMS converts MDS data into the 18 QMs described in Table A-1.⁵⁰

Table A-1: Nursing Home Quality Measures

Short Stay Quality Measures
1. Percent of Residents Who Self-Report Moderate to Severe Pain
2. Percent of Residents With Pressure Ulcers That Are New or Worsened
3. Percent of Residents Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine
4. Percent of Residents Who Were Assessed and Appropriately Given the Pneumococcal Vaccine
5. Percent of Short-Stay Residents Who Newly Received Antipsychotic Medications
Long-Stay Quality Measures
6. Percent of Residents Experiencing One or More Falls With Major Injury
7. Percent of Residents Who Self-Report Moderate to Severe Pain
8. Percent of High-Risk Residents With Pressure Ulcers
9. Percent of Residents Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine
10. Percent of Residents Who Were Assessed and Appropriately Given the Pneumococcal Vaccine
11. Percent of Residents With Urinary Tract Infections
12. Percent of Low-Risk Residents Who Lose Control of Their Bowels or Bladder
13. Percent of Residents Who Have/Had Catheters Inserted and Left in Their Bladders
14. Percent of Residents Who Were Physically Restrained
15. Percent of Residents Whose Need for Help With Activities of Daily Living Has Increased
16. Percent of Residents Who Lose Too Much Weight
17. Percent of Residents Who Have Depressive Symptoms
18. Percent of Long-Stay Residents Who Received Antipsychotic Medications

Source: CMS, *MDS 3.0 QM User's Manual V8.0*.

⁵⁰ CMS, *Nursing Home Quality Initiative: Quality Measures*. Accessed at <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHOIQualityMeasures.html> on April 16, 2013.

APPENDIX B

Detailed Methodology for Categorizing the Primary Diagnosis Codes on Hospital Claims

To describe the ICD-9-CM codes on the hospitalized residents' inpatient claims, we used the CCS established by AHRQ's HCUP.⁵¹ The HCUP CCS enables researchers to identify patterns of diagnosis and procedure codes. Researchers use the CCS to collapse the ICD-9-CM system's 14,000 diagnosis codes and 3,900 procedure codes into a smaller number of clinically meaningful categories for presentation and analysis. AHRQ used the CCS in its 2012 review of data on hospitalizations of nursing home residents.⁵²

For this review, we used the CCS "single-level" categorization. The single-level categorization system is designed for ranking diagnoses and procedures. We matched the primary diagnosis codes on the hospital claims associated with the hospitalizations to the appropriate CCS single-level category. See Table B-1 for an example of how the CCS collapses individual ICD-9-CM codes into clinically meaningful groups.

Table B-1: Examples of Single-Level CCS Matching

General Description of Condition	ICD-9-CM Diagnosis Codes Used	CCS Category
Septicemia	0031 0202 0223 0362 0380 0381 03810 03811 03812 03819 0382 0383 03840 03841 03842 03843 03844 03849 0388 0389 0545 449 77181 7907	2
Pneumonia	00322 0203 0204 0205 0212 0221 0310 0391 0521 0551 0730 0830 1124 1140 1144 1145 11505 11515 11595 1304 1363 4800 4801 4802 4803 4808 4809 481 4820 4821 4822 4823 48230 48231 48232 48239 4824 48240 48241 48242 48249 4828 48281 48282 48283 48284 48289 4829 483 4830 4831 4838 4841 4843 4845 4846 4847 4848 485 486 5130 5171	122
Congestive heart failure, nonhypertensive	39891 4280 4281 42820 42821 42822 42823 42830 42831 42832 42833 42840 42841 42842 42843 4289	108

Source: HCUP, *Clinical Classifications Software (CCS) 2013 User Guide*.

⁵¹ A. Elixhauser, C. Steiner, and L. Palmer, *Clinical Classifications Software (CCS)*, AHRQ, 2013. Accessed at <http://www.hcup-us.ahrq.gov/toolsoftware/ccs/ccs.jsp> on February 5, 2013.

⁵² AHRQ, *Transitions between Nursing Homes and Hospitals in the Elderly Population, 2009*, September 2012. Accessed at <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb141.pdf> on February 5, 2013.

APPENDIX C

Average Annual Rate of Hospitalization of Nursing Home Residents by State

Table C-1 reports the average annual rates of resident hospitalization in FY 2011 for nursing homes in all States. We did not include in this analysis homes with fewer than 30 admissions in FY 2011 or facilities designated as “swing bed” providers.

Table C-1: Average Annual Hospitalization Rates by State in FY 2011

State	Rate	State	Rate	State	Rate
Louisiana	38.3%	Maryland	25.3%	Nevada	20.9%
Mississippi	35.7%	Indiana	24.9%	New Mexico	19.5%
Arkansas	31.7%	Florida	24.9%	Wyoming	19.1%
Oklahoma	31.6%	Michigan	24.8%	New Hampshire	19.0%
Kentucky	29.2%	Virginia	24.8%	Washington	18.6%
Illinois	29.0%	Connecticut	24.7%	Wisconsin	18.3%
Tennessee	28.4%	California	24.2%	Vermont	17.9%
New Jersey	28.2%	North Carolina	24.2%	Colorado	17.8%
Texas	28.2%	Delaware	24.2%	Maine	17.2%
Missouri	27.9%	Pennsylvania	23.4%	Montana	17.0%
Kansas	27.5%	South Dakota	23.4%	Alaska	16.9%
New York	27.4%	Ohio	23.0%	Arizona	16.7%
Alabama	26.9%	Iowa	22.9%	Minnesota	16.0%
West Virginia	26.5%	Nebraska	22.7%	Idaho	15.9%
District Of Columbia	26.5%	Massachusetts	22.5%	Oregon	14.9%
Georgia	26.3%	Rhode Island	21.6%	Utah	14.2%
South Carolina	25.3%	North Dakota	21.4%	Hawaii	10.6%

Source: Office of Inspector General analysis of data on FY 2011 hospitalizations of nursing home residents.

APPENDIX D

Agency Comments



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: SEP 19 2013

TO: Daniel R. Levinson
Inspector General

FROM: Marilyn Tavenner /S/
Administrator

SUBJECT: Office of Inspector General (OIG) Draft Report: Medicare Nursing Home Resident Hospitalization Rates Merit Additional Monitoring (OEI-06-11-00040)

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the above subject OIG draft report. Nursing home quality measurement and oversight is of critical importance to us, including addressing unnecessary hospital admissions and readmissions. One example, focusing on dual eligible beneficiaries, is the CMS Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents. In this initiative, which was launched in 2012, CMS selected organizations to partner with nursing facilities and deploy interventions aimed at reducing avoidable hospitalizations, improving transitions and outcomes, and reducing costs among Medicare-Medicaid enrollees. Lessons learned from this initiative will help inform future policy decisions.¹

In addition, the Fiscal Year (FY) 2014 President's Budget includes a proposal addressing high rates of hospital readmissions in skilled nursing facilities (SNFs). Currently, there is a Hospital Readmission Reduction program that reduces payments for hospitals with high rates of readmission, many of which could have been avoided with better care. To promote similar high-quality care in SNFs, the President's Budget proposal would reduce payments by up to three percent for SNFs with high rates of care-sensitive, preventable hospital readmissions.

The purpose of this OIG study was to (1) Determine the proportion of Medicare nursing home residents hospitalized in FY 2011 and the associated costs to Medicare; (2) Identify the medical conditions most commonly associated with these hospitalizations; (3) Describe the extent to which these hospitalization rates varied across nursing homes; and (4) Describe the extent to which these hospitalization rates varied according to select nursing home characteristics.

The OIG recommendations and CMS's responses to those recommendations are discussed below.

OIG Recommendation

The OIG recommends that CMS develop a quality measure that describes hospitalization rates for residents of nursing homes.

¹ Additional information on this initiative is available at <http://innovation.cms.gov/initiatives/rabnfr>

CMS Response

The CMS concurs. The rate of nursing home resident hospitalization measure concept was included in CMS's Measures under Consideration (MUC) list that we made public on December 1, 2012, in accordance with the pre-rulemaking process established by section 1890A(a)(2) of the Affordable Care Act. This MUC list was posted for CMS on the website of the National Quality Forum (NQF), and NQF's stakeholder group, the Measure Applications Partnership supported this measure concept for future development. Making this list public is one step in CMS's obligation to establish a pre-rulemaking process prior to adopting certain categories of measures. CMS must include potential measures on the MUC list if it is considering adopting them through rulemaking at any time in the future. Development of this proposed hospitalization outcome measure is commencing later this year and is intended to measure the percent of long-stay residents who are hospitalized during a specific reporting period.

In addition, CMS is developing a Skilled Nursing Facility 30-Day All-Cause Readmission Measure and intends to submit this measure to the NQF for endorsement in late 2013. The specifications for this measure will be designed to harmonize, to the extent possible, with CMS's hospital-wide all-cause unplanned readmission measure endorsed by the NQF for the Hospital Readmission Reduction Program.

OIG Recommendation

The OIG recommends that CMS instruct state agency surveyors to review rates of hospitalization for nursing home residents as part of the survey and certification process.

CMS Response

The CMS concurs. Reducing re-hospitalizations is a major public health goal of CMS and the Department of Health and Human Services, as well as a goal that has been widely embraced by health care providers. As noted above, CMS is actively developing a hospitalization measure for all nursing home residents and a re-hospitalization measure for Medicare SNF residents. We concur that evidence suggests these types of measures are important to assess the quality of care that residents receive. We concur that adding measures of hospitalization and/or re-hospitalization to the list of quality measures that nursing home surveyors review is a logical and useful outcome of CMS's quality measure development efforts.

The CMS thanks OIG for their efforts on this issue and looks forward to working with OIG on this and other issues in the future.

ACKNOWLEDGMENTS

This report was prepared under the direction of Kevin K. Golladay, Regional Inspector General for Evaluation and Inspections in the Dallas regional office; Blaine Collins, Deputy Regional Inspector General; and Ruth Ann Dorrill, Deputy Regional Inspector General.

Jeremy Moore served as the team leader for this study. Other principal Office of Evaluation and Inspections staff from the Dallas regional office who contributed to the report include Maria Balderas, Nathan Dong, and Chetra Yean. Central office staff who provided support include Kevin Farber, Heather Barton, Sandy Khoury, Starr Kidada, and Christine Moritz.

Office of Inspector General

<http://oig.hhs.gov>

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Office of Audit Services

The Office of Audit Services (OAS) provides auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations. These assessments help reduce waste, abuse, and mismanagement and promote economy and efficiency throughout HHS.

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The Office of Evaluation and Inspections (OEI) conducts national evaluations to provide HHS, Congress, and the public with timely, useful, and reliable information on significant issues. These evaluations focus on preventing fraud, waste, or abuse and promoting economy, efficiency, and effectiveness of departmental programs. To promote impact, OEI reports also present practical recommendations for improving program operations.

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The Office of Investigations (OI) conducts criminal, civil, and administrative investigations of fraud and misconduct related to HHS programs, operations, and beneficiaries. With investigators working in all 50 States and the District of Columbia, OI utilizes its resources by actively coordinating with the Department of Justice and other Federal, State, and local law enforcement authorities. The investigative efforts of OI often lead to criminal convictions, administrative sanctions, and/or civil monetary penalties.

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The Office of Counsel to the Inspector General (OCIG) provides general legal services to OIG, rendering advice and opinions on HHS programs and operations and providing all legal support for OIG's internal operations. OCIG represents OIG in all civil and administrative fraud and abuse cases involving HHS programs, including False Claims Act, program exclusion, and civil monetary penalty cases. In connection with these cases, OCIG also negotiates and monitors corporate integrity agreements. OCIG renders advisory opinions, issues compliance program guidance, publishes fraud alerts, and provides other guidance to the health care industry concerning the anti-kickback statute and other OIG enforcement authorities.

GOVERNMENT

AMA seeks changes to Medicare hospital observation policy

■ The coverage rule leaves some patients with hefty bills for nursing facility care after long hospital stays during which they were never technically admitted.

By CHARLES FIEGL ([HTTP://WWW.AMEDNEWS.COM/APPS/PBCS.DLL/PERSONALIA?ID=CFIEGL](http://www.amednews.com/apps/pbcs.dll/personalia?id=cfiegl)) — Posted April 16, 2012

Washington Medicare coverage requirements for post-hospital extended care services have created serious access issues for patients, the American Medical Association said in a March 30 letter to the Centers for Medicare & Medicaid Services.

CMS requires Medicare beneficiaries to spend at least 72 hours as hospital inpatients to qualify for skilled nursing facility care, which can provide patients with therapy and other services needed to recover from injury. But patients who remain in observation for that time, an outpatient status that does not require admission to a hospital, do not qualify for subsequent facility care.

“This policy is of great concern to the physician community, because it has created significant confusion and tremendous, unanticipated financial burden for Medicare patients,” AMA Executive Vice President and CEO James L. Madara, MD, wrote in the letter. “The AMA supports rescinding the three-day stay policy, as well as counting observation care toward the three-day inpatient stay requirement for as long as this requirement remains in place.”

Patient advocacy groups also have fought to overturn the policy. In November 2011, the Center for Medicare Advocacy and the National Senior Citizen Law Center sued the Dept. of Health and Human Services over the policy, claiming that patients have been harmed by the agency rules. Patients and their families often are unaware of the policy and their admission status, and are left with large bills for subsequent nursing facility care. HHS since has filed motions to dismiss the case.

Medicare should change the coverage requirement, said beneficiary Joan Crozier, 84, of Bloomington, Ind. In May 2011, Crozier was brought to an emergency department after a stroke. She arrived on a Tuesday and was dismissed on a Friday with instructions that she receive around-the-clock care and therapy twice a day, she said. “I couldn’t drive, I needed people to take care of me.”

Crozier did not know that the hospital had classified her as an outpatient under observation. She later had her physician write a letter stating that she was an inpatient, but the hospital told her it would not change her status retroactively.

Her therapy services at a nearby nursing facility were covered by the Medicare Part B benefit. But she paid out of pocket for 22 days of nursing facility care upfront. She is appealing the coverage decision and hopes to recover the \$7,000 she paid.

“I feel like I got a runaround,” Crozier said in an interview. “It has been a long process and I’m tired of it, but I will stick with it because it’s wrong.”

If the policy remains in effect, those who need nursing facility care may be forced to forgo services, placing them at high risk for costly rehospitalization, the AMA said. Some hospitals also make retroactive status changes from inpatient to observation to avoid audits, forcing patients to pay for drugs and other hospital services as if they had been outpatients rather than inpatients.

“Retroactive status changes by hospitals have also generated tremendous confusion for physicians billing for services to hospital inpatients, such as initial, subsequent, and discharge day hospital visits, as there is no inpatient admission on record once the change has been made,” Dr. Madara wrote. “This means that physician claims can be denied and/or subject to future audits because their Part B place of service does not match that claimed by the hospital (and where the hospital opts not to bill Medicare at all, there is simply no link with any Part A service).”

The Association said these problems for patients and physicians will only get worse once the program begins penalizing hospitals for inappropriate readmissions, and as government contractors increase efforts to audit hospital admissions.

The AMA requested that CMS revise its coverage rules before that happens. The Association suggested that:

- Hospitals be required to obtain the approval of the admitting physician before making any changes to a patient’s inpatient admission status.
- Medicare-participating hospitals and Medicare contractors be required to use open and transparent claims edits in evaluating the appropriateness of admissions. These edits also must be made public for physician comment before their use.
- Before making automatic claims denials or recovery audit demands, Medicare require the concurrence of a practicing physician in the same specialty as the admitting physician.
- CMS review the Medicare three-day stay policy and make recommendations for a new policy.
- Medicare recovery audit contractors be prohibited from reviewing whether inpatient hospital services are medically necessary until CMS reviews and revises the three-day stay requirement.

Lawmakers also have introduced legislation that would eliminate the distinction between inpatient and observation care when applying the three-day rule.

BACK TO TOP

ADDITIONAL INFORMATION

What the 3-day hospital rule involves

The Medicare agency’s policy manual requires that:

- A beneficiary is “an inpatient of a hospital for a medically necessary stay of at least three consecutive calendar days” to qualify for post-hospital extended care services.
- The day of admission, but not the day of discharge, is counted as a hospital inpatient day.
- Time spent in observation status or in the emergency department prior to, or in lieu of, an inpatient hospital admission does not count toward the three-day minimum.

Source: Centers for Medicare & Medicaid Services Medicare Benefit Policy Manual ([link](#))

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PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (the "**Agreement**") is entered into this 7th day of July, 2014, by and between NATIONAL LUTHERAN HOME & VILLAGE AT ROCKVILLE, INC., a District of Columbia corporation (the "**Seller**") and BROOKE GROVE FOUNDATION, INCORPORATED, a Maryland corporation (the "**Buyer**").

RECITALS

WHEREAS, Seller is the owner of certain delicensed skilled nursing beds; and

WHEREAS Seller desires to sell to Buyer, and Buyer wishes to purchase from Seller, certain of such skilled nursing beds, subject to the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE I

PURCHASE AND SALE

Section 1.01 Purchase and Sale of Beds. Subject to the terms and conditions set forth herein, Seller shall sell, transfer and convey to Buyer, and Buyer shall purchase from Seller, all of Seller's right, title and interest in twenty-two (22) of Seller's delicensed skilled nursing beds (the "**Beds**"), free and clear of any, pledge, lien or other encumbrance.

Section 1.02 Purchase Price. The aggregate purchase price for the Beds shall be One Hundred and Ten Thousand and No/100 Dollars (\$110,000.00) (the "**Purchase Price**"). The Buyer shall pay the Purchase Price to Seller at the Closing (as defined herein) in cash, by wire transfer of immediately available funds.

Section 1.03 Closing. The closing of the transactions contemplated by this Agreement (the "**Closing**") shall take place within fifteen (15) days following the satisfaction of all conditions to Closing set forth in Article VI below, but no later than APRIL 1, 2015. In the event Closing has not occurred by APRIL 1, 2015 due to the failure to satisfy all conditions to Closing, then either party may terminate this Agreement

by notifying the other party in writing, in which event this Agreement shall terminate as of the date specified in the notice.

Section 1.04 Closing Deliverables.

(a) At the Closing, Seller shall deliver to Buyer the following:

(i) a bill of sale or other transfer document in form and substance reasonably satisfactory to Buyer (the "**Bill of Sale**") and duly executed by Seller, transferring the Beds to Buyer; and

(ii) such other customary instruments of transfer, assumption, filings or documents, in form and substance reasonably satisfactory to Buyer, as may be required to give effect to this Agreement.

(b) At the Closing, Buyer shall deliver to Seller the following:

(i) the Purchase Price; and

(ii) such other customary instruments of transfer, assumption, filings or documents, in form and substance reasonably satisfactory to Seller, as may be required to give effect to this Agreement.

ARTICLE II

REPRESENTATIONS AND WARRANTIES OF SELLER

Seller represents and warrants to Buyer that the statements contained in this Article are true and correct as of the date hereof.

Section 2.01 Organization and Authority of Seller. Seller is a corporation duly organized, validly existing and in good standing under the laws of the District of Columbia. Seller has full corporate power and authority to enter into this Agreement and the documents to be delivered hereunder, to carry out its obligations hereunder and to consummate the transactions contemplated hereby. The execution, delivery and performance by Seller of this Agreement and the documents to be delivered hereunder and the consummation of the transactions contemplated hereby have been duly authorized by all requisite corporate action on the part of Seller.

Section 2.02 Title to the Beds. Seller owns and has good title to the Beds, and shall deliver title to the Beds free and clear of all encumbrances.

**ARTICLE III
REPRESENTATIONS AND WARRANTIES OF BUYER**

Buyer represents and warrants to Seller that Buyer is a corporation duly organized, validly existing and in good standing under the laws of the state of Maryland. Buyer has full corporate power and authority to enter into this Agreement and the documents to be delivered hereunder, to carry out its obligations hereunder and to consummate the transactions contemplated hereby. The execution, delivery and performance by Buyer of this Agreement and the documents to be delivered hereunder and the consummation of the transactions contemplated hereby have been duly authorized by all requisite corporate action on the part of Buyer.

**ARTICLE IV
FURTHER ASSURANCES**

Following the Closing, each of the parties hereto shall execute and deliver such additional documents, instruments, conveyances and assurances and take such further actions as may be reasonably required to carry out the provisions hereof and give effect to the transactions contemplated by this Agreement and the documents to be delivered hereunder.

**ARTICLE V
CONDITIONS TO CLOSING**

Section 5.01 Certificate of Need. Buyer's obligation to proceed to Closing hereunder is conditioned upon Buyer obtaining a certificate of need (the "CON") from the Maryland Health Care Commission. Buyer shall promptly apply for and diligently pursue obtaining the CON. Seller shall cooperate with Buyer, at no cost to Seller, in Buyer's efforts to procure the CON. Buyer shall reimburse Seller for all costs incurred in connection with the sale and transfer of the Beds and the procurement of the CON, including the costs and expenses incurred by Seller in preparing this Agreement. Buyer shall notify Seller in writing within five (5) business days of Buyer's satisfaction of this condition or any denial of the CON by the Maryland Health Care Commission.

Section 5.02 Approval of Master Bond Trustee. Seller's obligation to proceed to Closing hereunder is conditioned upon Seller obtaining any required consents or releases from the Master Trustee under Seller's existing bond financing. Seller shall diligently pursue procuring such consents or releases. Seller shall notify Buyer in writing within five (5) business days of Seller's satisfaction of this condition, Seller's determination that no consents or releases are required, or any denial of consent by the Master Trustee.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first written above by their respective officers thereunto duly authorized.

WITNESS/ATTEST:

SELLER:

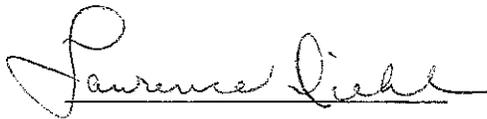
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VILLAGE AT ROCKVILLE, INC.

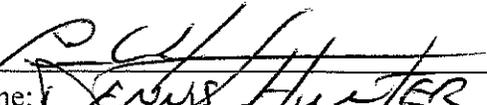


By: 
Name: LAWRENCE R. BRASSMAN
Title: PRESIDENT/CEO

BUYER:

BROOKE GROVE FOUNDATION,
INCORPORATED



By: 
Name: DENNIS HUNTER
Title: VICE PRESIDENT