Cost Control in a Parallel Universe:

Medicare Spending in the U.S. and Canada

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To the editor:

As the U.S. was implementing Medicare in 1966, Canada was phasing in its own Medicare program which covered all Canadians under provincially-administered plans. While these provincial plans varied, all incorporated significant payment reforms – global budgeting of hospitals and stringent capital expenditure controls – and ban copayments and deductibles.

Before the mid-1960s the two nations' health care financing systems were similar, and health costs were comparable [i]. Since then overall U.S. costs have grown more rapidly, but no study has compared spending for the elderly – the populations covered by Medicare in both nations.

Methods

We obtained official figures for Medicare spending for persons >64 in Canada and the U.S. for 1971 (when Canadian Medicare became fully operational) through 2009. Since available Canadian data for 1971-1979 are less detailed, we focus principally on changes since 1980.

We adjusted Canadian figures for minor changes in government accounting. To avoid distorting time trends, we excluded Medicare Part D (which began in 2006).

We calculated percentage changes in inflation-adjusted per elder spending and compared actual U.S. Medicare expenditures in each year since 1980 (and 1971) to the projected level of expenditure had U.S. Medicare spending increased at Canada's rate.

(See eMethods for further details).

Results

U.S. Medicare spending per elderly enrollee rose from $1,215 in 1980 to $9,446 in 2009 (an inflation-adjusted 198.7% increase). The comparable increase for Canada was 73.0% (from $2,141 to $9,292). Canada's higher base-year spending reflects its more comprehensive benefits, covering about 80% of senior's total health costs, vs. about 50% in U.S. Medicare.

Table 1 presents actual U.S. Medicare spending 1980-2009, and projected spending and savings had U.S. costs risen at the lower Canadian rate. Projected savings totaled $154.2 billion in 2009 and $2.156 trillion for 1980-2009.

Per-elder Medicare hospital spending grew 44.7% in Canada vs. 81.9% in the U.S. Physician spending grew 100.7% in Canada, vs. 274.3% in the U.S. Hospital's share of total Medicare spending fell from 49.6% to 41.5% in Canada and from 68.4% to 41.5% in the U.S. Spending for other services (e.g. home, hospice and skilled nursing facility care) rose from 3.9% to 23.6% of spending in the U.S. and from 39.7% to 44.3% in Canada.

For 1971-2009 (see eFigure), U.S. costs rose 374.1% vs. 126.3% for Canada, and estimated foregone savings were $2.9024 trillion.

Comment

Medicare spending has grown nearly three times faster in the U.S. than in Canada since 1980. Had U.S. Medicare costs risen at Canadian rates, rather than a deficit of $17.1 billion in 2009, the Medicare Hospital Trust Fund would have realized a $32.3 billion surplus. Savings on Medicare Part B would have been even larger. By 2009, the $2.156 trillion in excess spending attributable to U.S. Medicare's faster growth was equivalent to more than one-sixth of the national debt.

Several features of Canada's program help constrain costs. First, the single-payer system has simplified administration, holding administrative costs to 16.7% of overall spending vs. 31.0% in the U.S.[ii] Although U.S. Medicare's internal overhead costs are low, it remains one among many payers. Hence providers' administrative costs are inflated by having to deal with a multitude of payers, and track eligibility, attribute costs and bill for individual patients and services.

Second, Canadian hospitals receive prospectively-determined global operating budgets, removing incentives to provided unnecessary care while simplifying billing and administration. However, unlike ACO-payment schemes in the U.S., capital costs are not folded into the global budgets but distributed separately through an explicit health-planning process. Canadian hospitals cannot use operating surpluses to fund new buildings or equipment, but must request separate capital appropriations. Hence, they can't expand by over-providing lucrative services, gaming the payment system through upcoding, avoiding unprofitable patients or cost-shifting.

Third, 51% of Canada's doctors are primary care practitioners, vs. 32% in the U.S.[iii] Primary care-centered health systems are generally thriftier.[iv] Canada's outpatient fee schedules are also less technology-skewed than in the U.S.

Fourth, Canada's provincial plans have used their concentrated purchasing power to limit drug and device prices.

Finally, litigation and malpractice costs have remained relatively low in Canada.

Life expectancy at age 65 is longer and has grown faster in Canada than in the U.S. since 1980 (and 1971)[v], offering reassurance that cost control hasn't compromised quality. A meta-analysis suggests that clinical outcomes are, if anything, better in Canada than for insured Americans.[vi]

To some, U.S. Medicare's grim financial health suggests an even grimmer conclusion: it can no longer keep its promise of all needed care for the elderly[vii]. Some would replace it with vouchers that seniors could use to purchase private coverage. Others suggest upending the current payment system by inverting volume-based incentives, offering instead profits to organizations that limit utilization. Yet the efficacy of these drastic solutions remains unproven[viii]. Canada's road-tested cost containment methods offer an alternative.

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Table - Actual U.S. Medicare (Parts A and B) spending for the elderly, change in Medicare spending since 1980 for the U.S. and Canada, and projected spending and savings had U.S. Medicare costs risen at the lower Canadian rate, 1980-2009

Year	Actual U.S. Medicare Spending ($ billions)	Change Since 1980 in Real Per Capita Medicare Spending for persons >64, U.S. (%)	Change Since 1980 in Real Per Capita Medicare Spending for persons >64, Canada, (%)	Projected U.S. Medicare Spending if Costs Had Risen at Canadian Rate ($ billion)	Projected Savings for U.S. Medicare if Costs Had Risen at Canadian Rate ($ billions)
1980	31.0	-	-	31.0	
1981	37.7	8.3	4.2	34.4	3.4
1982	44.3	17.3	10.6	38.7	5.6
1983	50.0	25.6	12.7	38.9	11.1
1984	55.1	30.5	13.9	40.7	14.5
1985	62.0	38.7	17.5	43.1	18.9
1986	66.8	43.6	19.1	44.5	22.3
1987	71.0	44.2	21.9	50.2	20.8
1988	76.9	47.5	26.3	56.9	20.0
1989	87.3	57.0	28.3	59.7	27.6
1990	96.4	61.6	28.5	64.0	32.4
1991	105.5	66.9	31.0	69.8	35.7
1992	118.1	78.3	31.2	70.4	47.6

1993	130.1	88.0	27.0	67.4	62.7
1994	142.1	98.3	22.4	63.4	78.8
1995	158.6	112.9	19.6	60.8	97.7
1996	172.4	122.8	15.9	59.3	113.1
1997	183.9	131.0	17.6	63.2	120.7
1998	183.2	125.5	23.4	74.0	109.2
1999	181.9	118.3	26.9	83.9	98.0
2000	188.3	116.4	33.6	98.6	89.7
2001	207.7	130.7	39.3	108.1	99.6
2002	223.7	143.0	45.1	116.2	107.5
2003	234.7	146.9	48.2	125.4	109.4
2004	256.1	160.3	54.2	137.5	118.6
2005	277.3	169.2	56.1	149.3	128.0
2006	297.3	175.2	61.0	165.9	131.3
2007	314.8	178.6	63.0	179.7	135.1
2008	344.1	186.1	66.9	201.3	142.8
2009	366.2	198.7	73.0	212.0	154.2
Total - 1980-2009	**4,764.3**	**198.7**	**73.0**	**2,608.3**	**2,156.1**

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