Senate Special Committee on Aging

Hearing On

Strengthening Medicare for Today and the Future

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Dirksen 106

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Good afternoon, Senators. Thank you for inviting me here today to discuss the urgent need to reform health care delivery in the United States and the pivotal role that primary care providers must play in a changed system. I am Ken Thorpe, chairman of the department of health policy and management at Emory University. I also lead the Partnership to Fight Chronic Disease, a national coalition of patients, providers, community organizations, business and labor groups, and health policy experts that is working with state partnerships to prevent chronic illness and reform how we deliver care to patients. In addition, I sit on the board of the Partnership for the Future of Medicare.

Crafting effective solutions to further reductions in the growth in entitlement programs requires a clear understanding of where the dollars are spent, and the factors driving the growth in spending. To date, simply cutting payments to providers and Medicare Advantage plans will achieve budget savings, but they do not reduce costs and over time may ultimately reduce access to care. Virtually all the spending in the Medicare program is associated with chronically ill patients. High and rising prevalence of chronic diseases such as diabetes are a key contributor to the growth in Medicare spending. Yet despite the central role that chronic disease plays in Medicare, the program does not cover lifestyle-related preventive benefits and currently does not provide comprehensive care coordination for most patients. A key direction for reforming Medicare needs to focus on reducing the rise in preventable chronic health care

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conditions, and introducing evidence-based elements of care coordination into traditional Medicare.

Fortunately, we have a substantial body of published research highlighting the impact that key elements of care coordination and prevention have on reducing spending and improving quality. Components of these data are derived from the experience of Medicare Advantage plans, an important part of the Medicare program, as well as other care coordination initiatives in the private sector.¹ Identifying the best practice techniques and adopting them into traditional Medicare should be a key focus of entitlement reform. These key prevention and care coordination initiatives that have proven clinically effective and cost reducing include transitional care, comprehensive medication management, health coaching, and team based, whole person focused, care. In addition to care coordination, making evidence-based programs like the diabetes prevention program, a program with established results that reduce the incidence of diabetes and related chronic conditions among adults (and seniors in particular) should be added to the Medicare program. Introduction of these preventive and care coordination initiatives into traditional Medicare will slow the growth in spending and improve the quality of care provided.

¹ Thorpe, KE, The Medicare Advantage Experience: Lessons for Reform to Original Medicare. manuscript., December 2012. Emory University.

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Virtually all the spending in the Medicare program is associated with patients with multiple largely unmanaged chronic conditions. Recent research examining the growth in spending in the Medicare program found that:

- About 95 percent of spending in the program is associated with patients with one or more chronic health care conditions;2
- Over 53 percent of Medicare patients were treated for five or more chronic conditions during the year. These patients accounted for nearly 78 of total Medicare expenditures.3 (See Appendix 1).
- Most of the rise in Medicare spending is traced to rising rates of treated disease prevalence and increased intensity of treatment;
- Nearly 85 percent of the growth in Medicare spending since the late 1980s is associated with patients treated for five or more medical conditions; (tabulations from Appendix 1).
- Rising rates of obesity among seniors accounts for approximately 10 percent of the increase in spending;4
- Twenty percent of hospitalized Medicare patients are readmitted to the hospital within a 30 day window. These readmissions are potentially preventable and could account for more than \$500 billion in spending over the next decade.5
- One-fourth of all adults went to an emergency room for a condition that could have been treated in a more cost-effective non-emergent setting.

Collectively, these data highlight the need for policy proposals that are designed to

reduce the rise in the incidence of preventable chronic disease, more effectively

² <u>http://www.fightchronicdisease.org/sites/fightchronicdisease.org/files/docs/Thorpe%20-%20Care%20Coord%20Savings%20-%20Final-1.pdf</u>

³ http://content.healthaffairs.org/content/25/5/w378.full.pdf+html

³<u>http://content.healthaffairs.org/content/28/5/w822.full</u>

⁵http://nyshealthfoundation.org/uploads/general/conversation-with-kenneth-thorpe-diabetes-prevention-program.pdf

manage and engage chronically ill patients, and reduce clinically unnecessary use of health care services.

The remaining part of my testimony will focus on three issues. First, what changes has CMS made to start introducing elements of care coordination into the traditional Medicare program. Second, how can we accelerate the adoption of team based care coordination in traditional Medicare? Along these lines, what do the published randomized trials plus the experience with the private sector tell us about the elements of care coordination that improve quality and health outcomes and reduce Medicare spending? Third, how can we replicate and scale these best practices into traditional Medicare over the next couple of years. The Medicare program needs to pivot quickly from a pilot mentality to the implementation of best practices program wide.

Progress to Date

Medicare currently covers several preventive services, including a wide range of clinical preventive services. In addition, the program also covers an initial prevention physical exam, and an annual wellness visit that could include a health risk appraisal and a personalized prevention care plan. However while the program is well suited to identifying at-risk seniors, it does not cover services that would allow seniors to address these risk factors. For instance, Medicare does not cover intensive lifestyle interventions like the diabetes prevention program or FDA approved obesity medications designed to assist obese seniors at risk for a range of chronic conditions. In short, Medicare will

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highlight the need for an action plan and identify at-risk seniors, but provides no coverage that would actually assist seniors in helping meet lifestyle goals personalized care plan. Moreover, Medicare has traditionally not covered any care coordination that would engage seniors with multiple chronic conditions to remain healthy and out of the hospital, ER or clinic.

The Center for Medicare and Medicaid Services (CMS) has started to introduce elements of care coordination, though in a way that may inhibit the ability to allow best practice team based approaches flourish in the program. As part of its 2013 Medicare Physician Fee Schedule, the Centers for Medicare and Medicaid Services (CMS) started to introduce elements of care coordination. The 2013 fee schedule now includes new codes (HCPCS G-code) that will allow physicians to receive a bundled payment (only about \$55 on average) to provide transitional care services to patients discharged from a hospital, nursing home or rehabilitation facility.⁶ While this is certainly an important first start toward introducing care coordination into traditional Medicare, transitional care management is likely best provided by trained nurse practitioner, or nurse coaches using evidence-based models that I will discuss further below. Moreover, using multiple billing codes may make the transition to team based care (nurses, nurse practitioners, mental health workers, pharmacists, social workers and others) that provide a broader range of care coordination functions difficult to achieve.

⁶ Bindman A, Blum J, Kronig R. Medicare's Transitional Care Payment-A Step toward the Medical Home. NEJM 2013; 368(8): 692-694.

Options for Including Evidence-Based Prevention and Care Coordination into Traditional Medicare

Designing evidenced-based prevention and care coordination approaches for traditional Medicare represents a major policy challenge. One place to start is to examine the experience with Medicare Advantage and see what evidence exists about best practice approaches for reducing costs, improving quality and ensuring patient satisfaction that could be made available to those beneficiaries who account for the largest segment of the Medicare population - those in traditional Medicare. In addition to Medicare Advantage, there is a considerable body of published research that has evaluated core elements of care coordination. Recent publications have demonstrated that innovative Medicare Advantage programs can reduce total Medicare spending and provide the same or better quality of care than traditional Medicare by up to 15 to 20 percent.7 How do these plans achieve these savings? They use predictive modeling, target interventions toward high-risk seniors, transitional care, high risk case management, medication therapy, management and adherence, health coaching, and team-based care, among others.8 The data also highlight the importance of close interaction and integration of care managers and physician practices. Health teams in Vermont and

⁷ Milstein A, Gilbertson E. American Medical Home Runs, Four real life examples of primary care practices that show a better way to substantial savings. Health Aff (Millwood) 2009; 28(3): 1317-1326, and Landon BE et al. Analysis of Medicare Advantage HMOs Compared with Traditional Medicare Shows Lower Use of Many Services During 2003-2009, Health Aff (Millwood). 2012; 31(12): 2609-2617 and Cohen R, et al. Medicare Advantage Special Needs Plans Boosted Primary Care, Reduced Hospital Use among Diabetic Patients. Health Aff(Millwood) 2012; 31(1): 100-119.

⁸ <u>http://content.healthaffairs.org/content/31/6/1156.full</u>

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North Carolina are good examples of this close interaction between care coordinators and providers practices. Large randomized trials have also evaluated the impact of comprehensive lifestyle modification interventions such as the Diabetes Prevention Program and the Stanford Chronic Disease Management Program.9

I have outlined several steps that would be needed to integrate evidence-based prevention and care coordination into the traditional Medicare program. Care coordination could be offered as an opt-out service for all patients in the traditional Medicare program. The services would be offered by health plans, home health agencies, managed care vendors, or others that could provide the range of services outlined below. Care coordinators would be selected through competitive bidding. Another option would be to give seniors of choice of staying in traditional Medicare (with no prevention and care coordination) or selecting a new version of traditional Medicare, "Medicare Plus" that would include the care coordination services.

Transforming traditional Medicare would require the following steps:

1. Transition Away from Fee-for-Service

A key to introducing care coordination into traditional Medicare is to transition away from fee-for-service payments and as a start replace it with more bundled payments. The incentives to increase the volume of services in fee-for-service run completely counter to the incentives to provide clinically effective care coordination. As fee-for-service is

⁹ <u>http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61457-4/fulltext</u> and <u>http://patienteducation.stanford.edu/programs/cdsmp.html</u>

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phased out over time, it would be replaced by bundled payments for (most) hospital admissions that include all covered post-acute care services 30 days after discharge. There is broad agreement that Medicare's fee-for-service (FFS) payment model is outdated, drives up additional volume of services and must be replaced to improve health care delivery. Our entire health care system is built around FFS and updating our current health care delivery structure will set the stage for an innovative, high-quality health care system. However, transitioning away from FFS will not be easy and will not happen overnight; reforming the Medicare system so that it pays for quality will require significant data collection and monitoring, updates to regulations, and testing and scaling of new and innovative payment models and incentives. Advancing these objectives and facilitating a gradual shift from FFS medicine will take time and will therefore likely occur in stages and lead to a number of new payment model reforms. As an interim step, broader use of bundled payments with quality controls focused on health improvement would provide a useful transitional step.

Physician practices that work with health teams to provide care coordination services (outlined below) should receive a bundled payment as part of their collaboration with the health teams.

2. Add Interventions that Avert Disease Among Overweight and Obese Adults into the Medicare program

Perhaps the best-known lifestyle modification program is the Diabetes Prevention Program (DPP). Randomized trials of other programs such as the Stanford Chronic Disease Management Program produce results similar to the DPP. The original DPP protocol was delivered to overweight, pre-diabetic adults on a one-on-one basis. The large scale randomized trial of the DPP found that lifestyle intervention reduced the prevalence of diabetes by 58 percent relative to placebo. The reduction in diabetes prevalence (as well as hypertension) was traced to a 7 percent reduction in weight among participants. The largest reductions in weight and diabetes prevalence occurred among participants aged 60 and older. Those 60 and older lost an average of 8.2 percent of their starting weight after 12 months compared to 7.5 percent for those aged 45 to 59 and 6.6 percent for adults under age 45.10 As a result, the prevalence of diabetes was 71 percent lower than placebo for those 60 and older compared to the overall average of 58 percent.11 . In other words, among every 100 overweight or obese adults who completed the intensive lifestyle intervention 19 out of an expected 33 failed to develop Type 2 diabetes. For those 19 individuals, the social and financial costs of a new diabetes diagnosis -for such necessities as additional tests, diabetes education, glucose meters, test strips, and more intensive management of other

¹⁰ <u>http://www.nejm.org/doi/pdf/10.1056/NEJMoa012512</u>

¹¹ http://diabetes.niddk.nih.gov/dm/pubs/preventionprogram/

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cardiovascular risk factors – were avoided. Moreover, for every 100 adults, 8 avoided the need for blood pressure and cholesterol medications.

Making the DPP a covered benefit under traditional Medicare would save the program money and improve health outcomes. This proposal would build on the foundation of the YMCA community based diabetes prevention programs in place, and currently under expansion. This proposal would allow pre-diabetic or other at risk seniors (based on the results of their wellness plan and as part of the personalized prevention plan developed by their physician) overweight and obese seniors would be eligible to enroll in the program. Depending on participating rates, just enrolling one cohort of overweight, pre-diabetic seniors into the program would generate a net savings to Medicare of about \$2 to \$4 Billion over 10 years and more than \$6 to 15 Billion during the lifetimes of those participating in the program. 12 Similar consideration should be given to including the recently approved FDA weight loss drugs as a covered Medicare benefit in light of the impact they have on weight loss (around 10 to 15 percent reductions).

¹² Thorpe KE and Yang Z. Enrolling people with prediabetes ages 60-64 in a proven weight loss program could save Medicare \$7 Billion or more. Health Aff (Millwood) 2011; 30(9): 1673-1679

3. Contract with health teams to provide care coordination for chronically ill Medicare patients.

Over half of the Medicare population is under treatment for 5 or more chronic health care conditions. These include mental health, behavioral health, and cardiovascular events among others (diabetes). Effective provision of team-based primary care has been shown to improve the quality of care at lower costs¹³. Therefore effective *comprehensive* clinical engagement requires multi-specialty teams of providers with the flexibility to use their resources based on the patient's needs. There is a growing body of evidence that has identified the key functions performed by health plans and successful comprehensive team-based care coordination models in managing chronically ill patients. Health (or chronic care) teams include a clinical leader (nurse, nurse practitioner) coordinating the care plan provided by the physician, nurses, nurse practitioners, pharmacists, social workers, behavioral health specialists and health coaches. These teams would provide the following evidence based functions when coordinating care I. 14 *Coordination of care for all covered Medicare services utilizing a team-based approach*

- Approaches that provide a "whole" person focus on preventing disease and managing acute, and mental health services
- > Medical advice from a care coordinator available 24/7
- Assessment of patient risk perhaps and development of an individualized care plan
- > Comprehensive Medication Management

¹³ Medicare Payment Advisory Commission. 2008. Report to the Congress: Reforming the delivery system. Washington DC: MedPAC.

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- > Transitional care and health coaching
- Regular contact with enrollee
- Close integration of the care coordinator nurse and primary care (and specialist) physicians
- Evidence-based health coaching to train patient self-management skills and facilitate behavior change.

These activities provide the foundation for cost savings moving forward and improved health outcomes when coordinating care for chronically ill patients. Each of the major functions outlined above (transitional care, medication adherence, health coaching) have several published randomized trials showing they individually result in improved health outcomes at lower levels of health care spending. Collectively they serve as a powerful, team-based approach to generate substantial proven savings and improved quality of care. A brief summary of some of the randomized trials highlighting the clinical effectiveness and cost savings associated with these care coordination functions is presented below.

Transitional Care.

Two of the best known models of transitional care have been developed by Eric Coleman at the University of Colorado and Mary Naylor at the University of Pennsylvania. The team at Penn defines transitional care as providing "comprehensive in-hospital planning and home follow-up for chronically ill high-risk older adults

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hospitalized for common medical and surgical conditions." The heart of the model is the Transitional Care Nurse (TCN), who follows patients from the hospital into their homes and provides services designed to streamline plans of care, interrupt patterns of frequent acute hospital and emergency department use, and prevent health status decline. While TCN is nurse-led, it is a multidisciplinary model that includes physicians, nurses, social workers, discharge planners, pharmacists, family caregivers, and other members of the health care team in the implementation of tested protocols with a unique focus on increasing patients' and family caregivers' ability to manage their care. For the millions of Americans who suffer from multiple chronic conditions and complex therapeutic regimens, TCM emphasizes coordination and continuity of care, prevention and avoidance of complications, and close clinical treatment and management - all accomplished with the active engagement of patients and their family and informal caregivers and in collaboration with the patient's physicians. More information is available at http://www.transitionalcare.info/.

A second model, developed by Eric Coleman uses transition coaches to train patients and family caregivers how to manage their care. Transition coaches are generally not physicians, but are nurse practitioners, nurses, or community health workers. To smooth transitions from hospital to home, the Care Transitions Intervention (CTI) uses coaching and home visits by trained care coordinators. The coach makes one home visit and several phone calls to the patient over a 30 day window. More information on this program is available at www.caretransitions.org.

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According to randomized trials, both programs reduce dramatically hospital readmission rates. Among Medicare patients, the TCI program reduced 30 day readmissions by 30 percent. and at 90 days hospital costs by 25 percent. 15 Randomized trials of the TCN model have demonstrated reductions in readmissions of 56 percent with similar reductions in total Medicare spending after one year. 16

Comprehensive Medication Management

Poor medication management adds substantially to the overall cost of health care , by some estimates adding over \$200 billion per year in additional hospital and other spending. 17 Comprehensive medication management provided as part of an integrated health team has shown to saving \$1.29 in health care spending for every \$1 spent to administer the program. ¹⁸ Moreover, a recently summary of the published research literature by the Congressional Budget Office (CBO) found that adherence and persistency in taking medications also reduces spending. Specifically the CBO found

¹⁵ Coleman EA, et al. The Care Transitions Intervention, Results of a Randomized Controlled Trial. Arch Intern Med. 2006; 166: 1822-1828

¹⁶ MD Naylor, DA Brooten, RL Campbell, G Maislin, KM McCauley, J.S. Schwartz. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. <u>Journal of the American Geriatrics Society</u>. May 2004; 52:675-84. See also: MD Naylor, D Brooten, R Jones, et al. Comprehensive discharge planning for the hospitalized elderly. <u>Annals of Internal Medicine</u> 1994; 120(June):999-1006.MD Naylor, DA Brooten, R Campbell, et al. Comprehensive discharge planning and home follow-up of hospitalized elders. <u>Journal of the American</u> <u>Medical Association</u> 1999; 281:613-20. MD Naylor. Transitional care of older adults. <u>Annual Review of Nursing</u> <u>Research</u>. 2003; 20:127-47.

¹⁷ Johnson JA, Bootman JL. Drug-related morbidity and mortality: a costof-illness model. *Arch Intern Med.* 1995;155:1949–1956

¹⁸ D. Ramalho de Oliveira, A. Brummel, and D. Miller, "Medication Therapy Management: 10 Years of Experience in a Large Integrated Health Care System," *Journal of Managed Care Pharmacy* 16, no. 3 (April 2010): 185–95.

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that every 1 percent increase in prescriptions filled would reduce Medicare spending by 0.25 percent. ¹⁹ Under the Part D program, drug plans must offer medication therapy management program (MTM). However, the criteria for targeting Medicare beneficiaries enrolled in Part D plans are those with multiple chronic conditions (maximum of 3) and with expected annual drug spending for 2013 of \$3,144.20 However, the current MTM program would not include patients with high Part A and B medical costs that may not be appropriately taking medications (non-adherent, etc) and would not hit the \$3,144 spending threshold. Indeed, poor medication management has been linked to 32 percent of all hospitalizations and a key cause of preventable adverse events among Medicare patients.21 Recent studies have demonstrated that team based medication management care, as part of an overall care coordination clinical strategy, reduced the growth in spending by 11 percent.22

As part of the new care coordination services in traditional Medicare, the current MTM program should be broadened and integrated into the overall set of care coordination services provided. A pharmacist working as part of the care coordination team would

¹⁹ Congressional Budget Office, Offsetting Effects of Prescription Drug Use on Medicare's Spending for Medical Services. CBO Washington DC November 2012.

²⁰ http://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/Downloads/Memo-Contract-Year-2013-Medication-Therapy-Management-MTM-Program-Submission-v041012.pdf

²¹ at <u>www.oig.hhs.gov/oei/reports/oei-06-09-00090pdf</u>, and Smith M, et al., Why pharmacists belong in the medical home. Health Aff (Millwood) 2010; 29(5): 906-913

²² Isetts B. et al. Managing drug-related morbidity and mortality in the patient centered medical home. Med Care 2012; 50:994-1001

work with patients that have high prior year **total** Medicare spending (not just those with high Part D spending) to resolve drug therapy issues (drug effectiveness, dosage, compliance and adherence). This broader approach would, as part of the overall care coordination team, link medication management and resolving drug therapy problems to clinical improvements in seniors. Substantial work has already been completed on the design of such a benefit from the Patient-Centered Primary Care Collaborative and the Agency for Healthcare Research and Quality Innovation Exchange Quality Toolkit.

Health Coaching and Patient Literacy

Coaching provides patients with one or more chronic conditions to understand their care plan, participate in shared decision making with their health care providers, and more effectively navigate the health care system. Understand the care plan, and working to consistently execute it is an important approach for reducing unnecessary utilization of health care services. The Health Effective coaching empowers individuals with a wide range of conditions including but not limited to chronic conditions, to participate in medical treatment decisions with their doctors. Coaching would be another key component of care coordination services provided in traditional Medicare. A large randomized trial conducted by Health Dialog and published in the New England Journal of Medicine utilized telephonic health coaching to work with a large population (more than 174,000—7,000 of whom were Medicare patients) of patients.23 This recent

²³ Wennberg DE et al. A randomized trial of a telephonic care –management strategy., NEJM 2010; 313(13): 1245-1255.

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randomized trial showed that total health care spending was 3.6 percent lower in the treatment group (yielding about a 3 percent net savings after accounting for the cost of the intervention). This single component of care coordination alone reduced hospitalizations in the trial by 10 percent and total spending by more than 3 percent.

Conclusion

A considerable body of published research, many from randomized controlled trials, has highlighted the clinical care coordination functions that improve patient quality and reduce costs in the Medicare program. Over time, entitlement reform will have to find quality enhancing approaches that also reduce costs. Adding intensive lifestyle programs like the DPP would conservatively reduce Medicare spending by \$4 billion over the next ten years, and over \$15 billion over the lifetime of overweight prediabetic Medicare patients. Rising rates of preventable chronic illness is a major driver of rising spending in the program, and adding effective programs like the DPP would address these long-term trends.

About 95 percent of total Medicare spending is associated with chronically ill patients. Yet, traditional Medicare does little today to engage these patients to keep them healthy and out of the hospital, emergency rooms and clinics. The team based approach to care coordination outlined above could be scaled and replicated quickly (within 2 years) throughout the Medicare program. This would provide rapid improvements in the quality of care provided to patients with substantial reductions in spending. Based on successful programs like Caremore, XL Health, and group practices like the Marshfield

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Clinic and Geisinger, over the next ten years Medicare could easily save close to \$300 billion over the next decade. These changes to the program really would constitute "health reforms", reforms that reduce the incidence of chronic disease and provide more effective management of patients with multiple chronic conditions.

Thank you again for the opportunity to discuss these vital reforms. I'm happy to take your questions.

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	Medicare Beneficiaries	د	** 2009 dollars **	
1987				
	Number of		Amount of Health	
	Beneficiaries Affected	Percent of	Spending	Percent of Total
Number of Conditions	(millions)	Beneficiaries Affected	(\$ millions)	Health Spending
0	2.8	9.5	653.7	0.4
1	4.1	14.1	13,389.9	7.4
2	4.6	16.1	18,284.6	10.1
3	4.6	15.8	26,326.6	14.5
4	3.9	13.5	27,895.5	15.4
5 or more	9.0	31.0	94,408.6	52.2
Total	29.0	100.0	180,959.0	100.0
1997				
	Number of		Amount of Health	
	Beneficiaries Affected	Percent of	Spending	Percent of Total
Number of Conditions	(millions)	Beneficiaries Affected	(\$ millions)	Health Spending
0	3.1	8.4	1,461.6	0.5
1	4.1	11.1	11,691.0	4.4
2	4.7	12.8	17,110.0	6.4
3	5.3	14.6	27,074.0	10.1
4	5.0	13.6	35,569.6	13.3
5 or more	14.4	39.5	175,190.0	65.3
Total	36.6	100.0	268,096.1	100.0
2002				
	Number of		Amount of Health	
	Beneficiaries Affected	Percent of	Spending	Percent of Total
Number of Conditions	(millions)	Beneficiaries Affected	(\$ millions)	Health Spending
0	2.5	6.3	605.1	0.2
1	3.0	7.5	9,414.7	2.6
2	4.5	11.5	15,351.5	4.2
3	4.6	11.8	26,776.0	7.4
4	5.0	12.7	33,391.3	9.2
5 or more	19.8	50.2	275,729.5	76.3
Total	39.4	100.0	361,268.1	100.0
2009				
	Number of		Amount of Health	
	Beneficiaries Affected	Percent of	Spending	Percent of Total
	(millions)	Beneficiaries Affected	(\$ millions)	Health Spending
Number of Conditions	2.8	6.4	1,798.3	0.4
Number of Conditions		6.7	6,665.2	1.4
	3.0	0.7		
0	3.0 4.2	9.5	20,843.2	4.5
0 1			,	
1 2	4.2 4.9	9.5 11.0	30,824.0	6.7
0 1 2 3	4.2	9.5	,	4.5 6.7 9.5 77.5

Table 1. Distribution of Health Care Spending Among Medicare Beneficiaries, By Number of Treated Medical Conditions, 1987, 1997, 2002, 2009

Source: Author's tabulations based on data from the 1987 National Medical Expenditure Survey (NMES) and to 1997 and 2002 Medical Expenditure Panel Survey (MEPS).

Note: Totals may not add to 100 because of rounding.