



UnitedHealth Group®

Federal Health Care Cost Containment – How in Practice Can it be Done?

Options with a real world track record of success

UnitedHealth Center for Health Reform & Modernization

Working Paper 1

May 2009

Preface

This is the first in a series of Working Papers on the subject of health care modernization and reform from the new UnitedHealth Center for Health Reform & Modernization. Our aim is to suggest practical ways to unleash more value from the \$2.6 trillion the nation currently spends on health care, and to **offer constructive proposals for slowing future health care cost growth**. Only in that way will the current health care cost pressures on families, businesses and the taxpayer be overcome. And only in that way will universal coverage be attainable - and sustainable.

This Working Paper is modest in scope. It is deliberately not a compilation of the many ideas and proposals that UnitedHealth Group believes should be introduced to raise health care quality and affordability across the US health care system. Instead **it uses empirical data derived from some of our existing clinical and care management programs to answer the question: what might be saved if these proven techniques could be applied more widely?**

In doing so, it does not seek to model impacts on overall US health spending. Instead it focuses on possible savings in future federal spending, of the sort that could help fund health care reform legislation while improving the quality and efficiency of care. That means that in practice most of the savings estimates derive from applying inside the broader Medicare population approaches that we have found to work either in our own Medicare programs or in our commercially-insured populations.

Through the 15 options included in this paper we estimate potential federal savings of around \$540 billion over the next decade. None of them rely on provider unit price controls as the principal means of generating savings.

Our perspective derives from the fact that UnitedHealth Group funds and organizes care for 70 million Americans each year, arranging \$115 billion of health care from over 5,000 hospitals and 650,000 physicians nationwide, on behalf of individuals, employers and state and federal governments. It is that experience of the diversity of the US health care system – including employer-sponsored insurance, Medicaid and Medicare - allied with our 20 years of experimentation in managing care that has given rise to the data and insights we draw on in this document.

So how might these successful programs be deployed more widely and their results magnified? Policy design could range along a spectrum from purely voluntary uptake, to the use of financial or non-financial incentives for beneficiaries and providers, through to mandatory application of some of these techniques. We have suggested different approaches for the various options set out here. There are many alternative combinations that would yield more or fewer savings in proportion to their impact on adoption of these programs. In producing 10-year savings estimates we have also of necessity made assumptions about the possible multi-year phasing of each initiative, which could in practice occur faster or slower.

In most cases we have erred on the side of conservatism in describing likely obtainable savings; and the opportunity in every case is larger than represented here. However these savings estimates should be regarded as provisional. We will be further quantifying and refining these and other potential savings options.

Faced with the size of the challenge in slowing national health care cost growth – and the failed history of several previous attempts at doing so – it would be easy to feel despondent about the likelihood of success. But **our experience at UnitedHealth Group suggests that slowing cost growth is in fact achievable.** Indeed, as our ‘real world’ data suggest, the possibilities for savings are in some categories even larger, and opportunities to get at them even more extensive, than are currently being discussed.

Summary of selected savings options

A. Incentivizing Member / Beneficiary Use of High Quality Providers	2010-2019 Savings
Option 1: Member Incentives to Use Highest Quality Providers Assessment of quality and efficiency of providers using “episodes of care” analytics measured against evidence-based standards and efficiency benchmarks. Provides members with incentives to use highest quality physicians.	~\$37 billion
Option 2: Cancer Support Programs Voluntary guidance on cancer treatment best practices and patient options, including hospice care. Case management to prevent hospital readmissions between therapy sessions.	~\$5 billion
Option 3: Transplant Solutions Program Voluntary guidance for patients on selecting the best transplant centers in the nation for their condition.	~\$0.7 billion
B. Reducing Avoidable and Inappropriate Care	
Option 4: Institutional Preadmission Program Provision of onsite nurse practitioners at skilled nursing facilities to manage illnesses and prevent avoidable hospitalizations.	~\$166 billion
Option 5: Transitional Case Management Program Follow-up with patients after leaving the hospital to reduce readmissions by checking on recovery progress and supporting adherence to discharge plans and recommended medical care.	~\$55 billion
Option 6: Advanced Illness Program Provides information and guidance to patients and their families about both their condition and the benefits of further treatment options including palliative care at the end of life.	~\$18 billion
Option 7: Disease Management for Congestive Heart Failure Voluntary coaching for members with higher-acuity chronic illness to ensure treatment compliance.	~\$25 billion
Option 8: Gaps In Care Program Voluntary intervention for members with chronic illness, but relatively good health to ensure ongoing treatment compliance.	~\$1.4 billion
Option 9: Integrated Medical Management Application of clinical evidence-based care management tools with targeted preventative care and patient education tools to reduce admission rates.	~\$102 billion
C. Incentivizing Physicians to Encourage High Quality Care	
Option 10: Patient-Centered Medical Home Establish a primary care physician as the central ongoing coordinator of patient care. Reduces inappropriate or duplicative treatments while ensuring needed ‘anticipatory’ care is provided.	~\$20 billion
Option 11: Physician Additional Compensation Program Rewarding physicians for providing comprehensive medical care and utilizing resources appropriately.	~\$24 billion
Option 12: Specialist Data Sharing Sharing comparative quality and effectiveness data with physicians to induce behavioral change towards evidence-based clinical practice.	~\$15 billion
D. Applying Evidence-Based Standards to Reimbursement Policies	
Option 13: Radiology Benefit Management Application of clinical evidence to determine clinically appropriate diagnostic radiology studies.	~\$13 billion
Option 14: Radiology Therapy Management Application of clinical evidence to determine clinically appropriate usage of radiology therapies.	~\$5 billion
Option 15: Prospective Claims Review Analysis of claims before they are paid to detect upcoding, duplicate billing and billing for non-existent patients.	~\$57 billion

Potential savings to the federal government by applying these selected programs are provisionally estimated at \$540 billion during 2010-2019

Option 1 Member Incentives to Use Highest Quality Providers

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Member Incentive Program	0.0	0.3	0.6	1.3	2.3	4.4	37.0

Background: Academic research from Dartmouth, RAND and many other centers has consistently demonstrated that the use of evidence-based care is variable, as are the resulting clinical outcomes and efficiency. These variations are evident across geographies between hospitals, and within all specialist and primary care providers, and persist despite the availability of evidence-based standards covering many conditions and treatments.

Option Description: Analysis of physician outcome data, treatment data and cost data can inform the assessment of quality and efficiency for certain kinds of health episodes, which reflect all of the procedures, testing and drugs used to treat a health “episode” (e.g. cardiac bypass surgery). By developing a rating system that accounts for quality and efficiency, it is possible to bring better information into the process for patients and providers. Our ‘premium’ provider networks apply evidence-based science and specialty society guidance across 20 medical specialties in 39 states covering nearly 20 million of our members. We have been able, for example, to identify nearly 100,000 physicians who consistently produce superior clinical outcomes at up to 20percent lower costs, because of the quality and appropriateness of their work. However the performance curve is continuous so networks can be ‘tiered’ in many different ways.

To encourage members/beneficiaries to use the highest quality and most efficient physicians, network tiers can be developed and patient financial incentives can be applied. Patients pay lower copays for top-tier physicians than for bottom-tier physicians. In this way, patient choice helps drive higher savings. These incentives could be added to the FFS Medicare program. Health plans could use their performance data

and care management programs to create virtual network ‘overlays’ on fee-for-service Medicare. Participation in these programs would be entirely voluntary for seniors, who might however benefit from lower Part B premiums and lower cost sharing when they chose to use a premium-designated provider who scored better on quality and efficiency. The bulk of the remaining savings would accrue directly to Medicare. Medicare should also begin to contribute its data to a sector-wide effort combining public and private payer data to produce valid and relevant physician and hospital performance measures.

Basis of Savings Estimate: We estimated the savings from providing information to seniors on quality and efficiency variations to influence their choices, as well as from an optional program by which seniors who chose to use higher performing providers would benefit from a 10 percent cost advantage in their Medicare premiums. Savings are based on the results of current UnitedHealth Group programs using our quality and efficiency measurement system coupled with a member incentive program that promotes the highest quality and most cost effective physicians. However we have made conservative assumptions about the uptake of these programs inside original Medicare. Because the program is voluntary, we have modeled the potential effects of only a small proportion of the Medicare FFS population shifting to higher performing providers. This would still yield over \$37 billion in savings over a 10-year period, with a phase-in over five years. Stronger incentivization with more gain sharing with seniors would produce much more substantial savings, as well as likely stimulating stronger improvements in physician performance right across the delivery system.

Option 2 Cancer Support Programs

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Cancer Support Program	0.2	0.4	0.4	0.5	0.5	2.0	5.2

Background: Patients with cancer often are required to make a variety of complex treatment decisions. They also have to contend with rigorous follow-up care protocols during treatment programs. Given the complexity of the illness, multiple opportunities exist for sub-optimal care. Patients may not be fully aware of the range of treatment and palliative options. They also may not fully understand home care requirements to prevent readmissions between treatments.

Option Description: UnitedHealth’s Cancer Support Program is designed to educate and support cancer patients making treatment decisions and undergoing therapies. Education and interventions are targeted to prevent or reduce side effects and complications of treatments. The program also provides patients with

information on treatment options and hospice care and introduces earlier discussions of advance directives. Savings are generated by preventing readmissions during treatments and avoiding unnecessary and unwanted interventions.

Basis of Savings Estimate: This option envisions Medicare FFS beneficiaries having incentives and information to aid them in selecting lower cost providers. Savings are based on actual results of current cancer support program. Savings calculated using observed performance difference between managed and unmanaged populations. The 10-year savings score assumes a two-year phase in of this program which would then be deployed across original Medicare.

Option 3 Transplant Solutions Program

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Transplant Solutions	0.0	0.1	0.1	0.1	0.1	0.3	0.7

Background: Patients requiring transplants are faced with many options regarding where to seek care. Despite evidence-based standards for transplantation procedures, disparities in quality and efficiency exist across providers. Some providers offer higher quality care, generate superior outcomes and are very efficient. Other providers may deliver lower quality care resulting in worse outcomes for patients, the provision of unnecessary procedures and higher costs.

Option Description: UnitedHealth’s Transplant Solutions Program is designed to educate and support patients who may need transplants. Using rigorous statistical analysis, the highest quality

transplant centers are identified. This information is shared with patients to facilitate more informed decision making on where to seek transplant care. Savings are achieved through the provision of high-quality care and avoidance of unnecessary procedures.

Basis of Savings Estimate: We anticipate that the extension of this program into Medicare FFS would greatly increase the quality and efficiency of transplant services. Savings are based on actual results of current transplant solutions program. The 10-year savings score assumes a two-year phase in of this program which would then be deployed across original Medicare.

Option 4 Institutional Preadmission Program

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Institutional Preadmission Program	0.0	3.8	8.3	13.4	19.2	44.8	165.5

Background: Seniors in nursing homes and other long-term care facilities are typically frail with multiple chronic conditions, requiring complex interventions and social support if they are to avoid unnecessary hospitalization and ER visits and inappropriate utilization of prescription drugs with associated polypharmacy risks.

Option Description: As part of UnitedHealth Group’s Evercare program, nurse practitioners are deployed in nursing homes to assist in planning and coordinating care for patients in the long-term care setting. These nurses determine a member’s preferences, clinical needs, and social support system. Coordinating closely with their primary care physician and with nursing home

staff, family and caregivers, the Evercare nurses develop and implement an individualized care plan for the patient, including the provision of more intensive clinical support for individuals at times of heightened need in the nursing home. Well controlled research studies have shown this leads to significant reductions in avoidable hospitalizations and emergency room visits

Basis of Savings Estimate: Based on actual results of our Evercare institutional special needs plans, we estimate savings from the wider application of this model, based on a five year phase in period before all eligible institutionalized Medicare beneficiaries were in receipt of similar care coordination support.

Option 5 Transitional Case Management Program

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Case Management	2.0	4.3	4.6	5.0	5.4	21.3	55.1

Background: One of the biggest gaps in care takes place when patients leave the hospital. Patients can have difficulty remembering or following instructions from physicians. They may also have trouble arranging necessary follow-up visits and may not be aware of social and community support services available to them. In some cases, patients may be inappropriately discharged to a setting that does not provide a sufficient level of follow-up care. These care gaps often lead to expensive and avoidable hospital readmissions.

Option Description: Transitional case management programs serve as a bridge between the hospital inpatient admission and discharge to home for individuals and their caregivers. They help to facilitate a safe transition for those individuals who have a high risk of being readmitted. Special attention is given to those with chronic health conditions and complex discharge plans with a focus on ensuring the patient and caregiver has a discharge plan, understands their discharge plan, and has the necessary resources to execute the discharge plan. At the time of discharge, case managers assist in determining the most appropriate discharge setting (e.g. skilled nursing facility or home care). Case managers also ensure continuity of all discharge orders including medications, therapies and wound treatments. Case managers help patients schedule appropriate follow-up visits with a personal physician. They also connect patients with social and community service evaluations and referrals. The level of case manager interventions increases with the level of complexity of follow-up care for the patient.

Basis of Savings Estimate: We estimate that wider use of transitional case management for the Medicare FFS population could result in more appropriate use of care and savings for the Medicare program. Our estimate is partly based on 25 percent lower readmission rates for UnitedHealth Group’s Medicare Advantage population compared with the reported readmission rates for Medicare FFS. One way to improve the Medicare program’s ability to reduce care gaps is to provide incentives or disincentives for hospitals that have inappropriate levels of readmissions. Those hospitals might turn to case management as a way to improve their performance. To the extent that other reforms provide groups of primary care doctors with incentives for care coordination, requirements and accountability for post-discharge care management could result in an improved savings picture for Medicare. We estimate that this option would phase in over two years.

Option 6 Advanced Illness Program

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Advanced Illness Program	0.7	1.4	1.5	1.6	1.7	6.9	17.9

Background: An estimated 27 percent of the Medicare budget is spent on care for seniors during the last year of life. Patients are sometimes not fully apprised of their true health status and are unaware of the relative risks and benefits of additional treatment. The extra care given at the end of life may include tests and procedures that may reduce quality of life while not contributing to improvements in health.

Option Description: UnitedHealth’s Advanced Illness program provides coordinated care for patients with advanced illnesses, and provides resources to educate patients and their families about both their condition and the benefits and quality of life issues of treatment in the last twelve months of life. The model is based on palliative care principles that focus on reduction of suffering as the highest priority. The model engages the patient and their family to assure that

the health care system is aware of the patient’s values, goals and preferences of care. Patients are empowered to make decisions about their course of treatment and often choose to forgo inappropriate tests and procedures and opt for treatments that improve well-being.

Basis of Savings Estimate: These are based on results of an advanced illness program offered to our Medicare members. Wider incorporation of palliative care into the Medicare program could be accomplished in several ways, one of which is through a modification of the hospice program. A transitional palliative care program could serve as a way to improve use of quality and appropriate service earlier than through the currently defined hospice program. The 10-year savings score assumes a two-year phase in of this program which would then be deployed across original Medicare.

Option 7 Disease Management for Congestive Heart Failure

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Disease Management	0.9	1.9	2.1	2.2	2.4	9.6	24.8

Background: Advances in the treatment of chronic illness have significantly improved the lives of millions of patients. Diligent application of evidence-based protocols are proven to be effective at keeping patients healthy and avoiding the need for more serious interventions, including hospitalization. Problems may arise for some patients who have difficulty consistently following complex treatment regimens. These patients' health often deteriorates, requiring expensive, higher acuity interventions.

Option Description: Disease management programs use predictive modeling tools to identify high-risk patients within a larger population. These patients are then proactively engaged by telephone-based health coaches to assist them in getting healthy and staying healthy. There is a sound evidence

base suggesting that disease management programs for congestive heart failure cannot only improve member health but also produce net savings. Programs tailored for this condition reduce cost by avoiding higher acuity events and hospitalizations from poorly monitored and treated chronic diseases.

Basis of Savings Estimate: Based on results of current UnitedHealth Group Disease Management programs, we estimate that Medicare costs could be reduced through targeted initiatives, using population data from CMS to identify chronically ill patients and establishing a program within Medicare that employs case workers and nurses to follow-up with them. We estimate that this option would phase in over two years.

Option 8 Gaps In Care Reduction Programs

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Gaps in Care	0.1	0.1	0.1	0.1	0.1	0.5	1.4

Background: Patient care in the United States is often managed by multiple physicians across a range of specialties. Frequently, there is little coordination among clinicians, which creates opportunities for patients to miss important preventive interventions or inadvertently stray from prescribed courses of treatment. These unnoticed and unidentified gaps in care, can lead to sicker patient populations requiring significantly more intensive treatment, including hospitalization. Poor patient management from gaps in care also increases the cost of care for these patients.

Option Description: Gaps in care programs use predictive modeling tools and comprehensive patient encounter data to identify missed preventive care, gaps in prescribed courses of treatment and gaps in evidence-based

recommended interventions. When care gaps are identified, proactive communications are sent to both the patient and the relevant physician. These notifications result in savings by identifying and addressing gaps in care early, before serious problems develop. This tool keeps patients healthier and avoids higher acuity treatments and hospital admissions.

Basis of Savings Estimate: Based on results from UnitedHealth Group’s Gaps in Care program, we believe the Medicare program could also see savings. This patient notification process could be incorporated into the Medicare program in several ways, but we see it effectively done through a system that emphasizes the role of the primary care physician. The 10-year savings score assumes a two-year phase in of this program which would then be deployed across original Medicare.

Option 9 Integrated Medical Management

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Integrated Medical Management	2.0	4.3	7.0	10.3	10.8	34.0	101.5

Background: The seniors population has a significantly higher disease burden than the general population. This increased risk magnifies the impact of missed preventative care and inappropriate or delayed care. Financial and logistical barriers to care can result in missed opportunities to detect and treat ailments before they become more serious. In addition, insufficient application of evidence-based standards can result in unnecessary, inappropriate and expensive interventions.

Option Description: Integrated medical management programs combine a number of elements that ultimately result in lower avoidable hospital usage. These programs include annual preventative care assessments and interventions, as

well as benefit designs that lower member costs for appropriate care and reduce access barriers. They also include programs to apply evidence-based guidelines to hospital utilization, to reimburse providers differently, and to help patients make decisions appropriate for them. Combined, these programs result in significantly lower inpatient admissions and lengths of stay.

Basis of Savings Estimate: Based on hospital inpatient admits in UnitedHealth Group Medicare Advantage plans versus inpatient admits in the Medicare FFS program, standardized for geography and HCC (as a proxy for patients' health care needs), we estimate the potential savings to original Medicare of \$100 billion over 10 years, assuming a four-year phase in.

Option 10 Medical Home Care Delivery Model and Physician Incentives for Coordination

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Patient-Centered Medical Homes	0.0	0.4	0.8	1.3	1.9	4.5	19.7

Background: The prevalent care delivery model in the United States is both fragmented and complex. Patients are now largely responsible for gathering, organizing and communicating critical health care information to a variety of physicians across multiple clinical encounters. No single clinical professional is responsible for ensuring that care is coordinated, comprehensive and appropriate. This fragmented delivery model can lead to higher costs of care, driven by unnecessary hospitalization, duplicative tests and services, and non-compliance with treatments. In some cases, patients may even be harmed by disjointed and uncoordinated care.

Option Description: The medical home care delivery model effectively designates a single clinician or medical practice as the responsible entity for organizing patient information and coordinating care. This approach re-establishes the important patient-physician relationship by having patients receive long-term comprehensive care from a primary care physician, or “medical home”, instead of episodic care from multiple disconnected physician encounters.

Patients select a personal, primary care physician who will treat ailments, manage chronic conditions, incorporate preventive and wellness initiatives, and coordinate care as appropriate with other professionals. By providing appropriate

comprehensive care that reduces duplicative treatments and testing, decreases inpatient admissions and readmissions, and reduces inappropriate utilization of the emergency room and specialty care, this delivery model can help reduce system costs.

Physicians are incentivized to act as a patient’s “medical home” through the payment of a monthly fee on a per-member, per-month basis. Physicians are also eligible for additional retrospective bonus payments on a quarterly basis for achieving certain quality and cost targets. These incentives are critical to employ to make this model most effective.

Basis of Savings Calculation: Established physician incentive programs in Medicare Advantage, as well as projections for current UnitedHealth Group medical home pilot programs for our privately insured members contribute to our estimate of savings for the Medicare FFS population. Were a voluntary system for physicians and Medicare beneficiaries able to bring in two thirds of FFS beneficiaries, and depending on the design of the bonus incentives, savings could fall into a wide range. Savings would be higher if requirements were introduced for physicians to participate and Medicare beneficiaries to join. We estimate that this option would phase in over six years.

Option 11 Physician Additional Compensation Program

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Physician Additional Compensation	0.6	1.3	2.1	2.2	2.4	8.6	23.8

Background: Significant waste in the current health care delivery system is driven by a lack of care coordination and partial adherence to evidence-based care. The current fee-for-service model for provider reimbursement can exacerbate this problem, by providing incentives for more volume, as opposed to providing more appropriate and efficient care. Incentive systems do not currently exist within the Medicare program to lead primary care physicians to support comprehensive, cost-effective care to their patients.

Option Description: The physician additional compensation program rewards medical groups for providing comprehensive, high quality, and cost effective care for their patients. The program focuses on primary care physicians, but allows for the inclusion of specialists within multi-specialty groups. The financial structure of the program is simple: a portion of CMS revenue is placed into a pool every month. Medical costs incurred by the practice are withdrawn from the pool, and at the end of the year, any savings are shared between the physicians and the health plan, which is able over time to incorporate those savings into the prices incurred by employers and individuals. The physicians have no ‘downside’ risk if costs are higher than projected, but if there is no surplus,

the group gets no bonus. Unlike the medical home pilot, no monthly participation fees are paid. Cost savings are generated as physicians focus on providing appropriate levels of care, resulting in improved outcomes and a reduction in the number of unnecessary treatments and unplanned admissions to the emergency room.

Basis of Savings Calculation: Based on actual results observed over a 10-year period in ongoing UnitedHealth Group physician gainsharing programs, we estimate that a similar program serving the Medicare FFS population would lead to both higher quality care and lowered system costs. If a voluntary system for physicians and Medicare beneficiaries could eventually cover half of FFS beneficiaries, savings estimates could be as set out above. Depending on the design of the bonus incentives, and the health of the enrolled seniors, savings could fall into a range. Savings would be higher if requirements were introduced for physicians to participate and Medicare beneficiaries to join. The 10-year savings score assumes a three-year phase in of this program which would then be deployed across original Medicare.

Option 12 Specialist Data Sharing

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Specialist Data Sharing	0.2	0.5	0.8	1.2	1.6	4.4	14.5

Background: In many markets, significant outcome and efficiency variability exists across specialist practitioners. Typically, poorly performing physicians are not aware of their performance relative to their peers. Physicians generally receive very little regularly reported comparative performance data. In the absence of comparative data, physicians have little external guidance on opportunities for improvement, which allows performance disparities to persist. Ultimately, this results in poor outcomes and inefficient use of health care resources.

Option Description: Utilizing rigorous clinical and statistical evaluation techniques, quality and efficiency measures are calculated for specialist physicians. These scores are based on “episodes of care”, which reflect all of the procedures, testing and drugs used to treat a health “episode” (e.g. cardiac bypass surgery). Personalized scorecards are created and shared with individual physicians to demonstrate their performance relative to local, regional, and national averages. By leveraging the desire of physicians to perform at high levels,

this data sharing reduces costs and improves the quality of care by encouraging clinically proven practices for treatment of a variety of conditions. Under this particular program, no incentive payments are made to drive improvement.

Basis of Savings Calculation: Based on actual reductions in medical costs resulting from ongoing UnitedHealth Group data sharing programs, we expect that required data sharing with physicians in the Medicare program could have similar results. In future iterations, CMS “RAC” audits could be used as further incentive to drive increased adoption of best practices. Physicians could be required to view such a scorecard as part of initiatives to reform the physician payment system. The 10-year savings score is based on results in cardiology and assumes a five-year phase in of this program which would then be deployed across original Medicare. Savings from deploying the program across a wider range of specialties would be correspondingly greater.

Option 13 Radiology Benefit Management

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Radiology Benefit Management	0.3	0.7	1.2	1.2	1.3	4.8	13.2

Background: Advanced imaging technologies have been extremely useful in diagnosing and treating many life-threatening illnesses. In many cases, these technologies reduce the need for more invasive, risky and expensive diagnostic and interventional procedures. However, in some cases these technologies can be inappropriately used or used too often. Significant variations in the number of imaging services provided across the country have been reported. In addition, imaging procedures are increasingly moving from the more tightly monitored hospital setting, to physician offices where oversight of utilization is sometimes less rigorous. Partly as result, Medicare’s radiology spending rose from \$7 billion in 2000 to \$14 billion in 2006.

Option Description: Radiology benefit management approaches rely on evidence-based medicine guidelines to determine the conditions under which various advanced imaging procedures are appropriate. Physicians seeking to utilize certain

imaging tests are required to receive “prior authorization” by contacting a radiology benefit manager to ensure that the testing approach meets clinically proven guidelines. Those tests that do not meet guidelines are not covered under patient benefits. Cost savings are achieved through avoidance of inappropriate use of advanced diagnostic imaging, particularly CT, MRI and PET scans.

Basis of Savings Estimate: Based on comparison of actual UnitedHealth Group Medicare member populations with and without the application of radiology benefit management programs, we estimate that the inclusion of radiology benefits management in the Medicare FFS program would serve to lower costs without affecting the quality of care. The 10-year savings score assumes a three-year phase in of this program which would then be deployed across original Medicare.

Option 14 Radiology Therapy Management

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Radiology Therapy Management	0.1	0.3	0.5	0.5	0.5	1.9	5.3

Background: Radiation therapy is a proven treatment option for certain types of cancers and disease stages. Appropriate guidelines for the use of radiation therapy have been determined through the application of evidence-based medicine standards. However, in some cases, these guidelines are not applied, resulting in care variations that are wasteful and possibly harmful to patients.

Option Description: Radiology therapy management utilizes the disciplined application of evidence-based medicine guidelines to determine when radiation therapy is an appropriate treatment. Physicians seeking to use radiation therapy are required to receive “prior authorization”

by reviewing their treatment plan and clinical goals with expert radiation therapy managers. Treatment plans that do not meet evidence-based guidelines are not covered. Cost savings are achieved through avoidance of inappropriate use of radiation therapy treatments.

Basis of Savings Estimate: Based on analysis of studies with UnitedHealthcare’s radiology therapy management partner, we estimate that radiology therapy management could improve care quality and lower costs for the Medicare FFS program. The 10-year savings score assumes a three-year phase in of this program which would then be deployed across original Medicare.

Option 15 Prospective Claims Review Services

(Billions of Dollars)	2010	2011	2012	2013	2014	Total	
						2010-2014	2010-2019
Prospective Claims Review	0.0	2.4	5.2	5.6	6.1	19.3	57.3

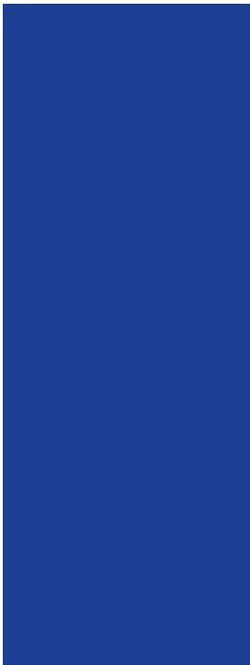
Background: Every year, substantial money is lost due to inappropriate and fraudulent payments. The claims payment systems for Medicare and Medicaid have tools in place to avoid payment errors, but many inappropriate payments are still made. Retrospective claim audits attempt to uncover billing and coding errors after payment has been made, and can help drive up payment accuracy rates. However, so called “quick hit” scams often shut down in a short time, before the initial aberrant billing pattern is discovered. Moreover, even in cases where retrospective audits do discover recoverable funds, the cost of recovery can often negate much of the savings.

Examples of inappropriate payments in health care include claims for services that are not rendered or for patients that do not exist, kickbacks, billing for more expensive services than were rendered, and duplicate billing.

Option Description: In contrast to traditional retrospective claims audit services that seek to identify inappropriate payments after they have

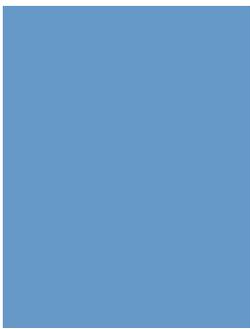
been made, our Automated Payment Self-Audit program prospectively reviews claims before they are paid. This process is highly accurate and, because it identifies aberrant billing patterns before the claim is paid, it is able to generate a significantly higher level of cost savings than retrospective audits alone.

Basis of Savings Calculation: Based on actual results from our commercial contracts, we see the potential to reduce Medicare costs through the use of these prospective claims audits. Our programs, which are widely bought in from us by competitor health plans, have saved them an average of 3 percent to 6 percent of amounts claimed to date and, if these results were reproduced across original Medicare, this program could save the Medicare program up to \$6 billion per year, or almost \$55 billion over a 10-year period, assuming a three-year phase in.



About the UnitedHealth Center for Health Reform & Modernization

UnitedHealth's new Center serves as a focal point for the company's work on health care modernization and national health reform. The Center assesses and develops innovative policies and practical solutions for the health care challenges facing the nation. Drawing on our internal expertise and extensive external partnerships, our initial work program falls into six priority areas:

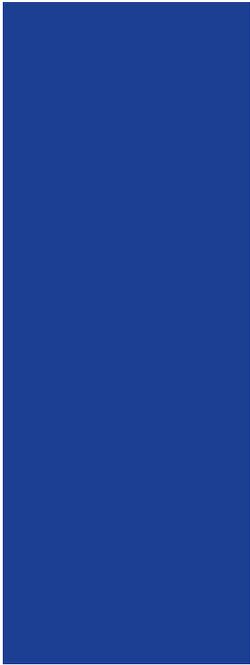
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1. Practical cost containment strategies to slow the growth of U.S. health care costs
 2. Payment reform strategies that better support physicians, hospitals and other providers deliver high quality patient-centered care
 3. Reducing health disparities, particularly in underserved communities
 4. Innovative approaches to universal coverage and health benefits, grounded in evidence-based care and consumer engagement
 5. Modernizing the care delivery system, including strengthening primary care
 6. Modernizing Medicare, including chronic disease management and end-of-life care



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About UnitedHealth Group

UnitedHealth Group serves 70 million Americans, funding and arranging health care on behalf of individuals, employers and government, in partnership with more than 5,000 hospitals and 650,000 physicians, nurses and other health professionals across the nation. Our core strengths are in care management, health information and technology. As America's most diversified health and well-being company, we not only serve many of the country's most respected employers, we are also the nation's largest Medicare health plan – serving one in five seniors nationwide – and the largest Medicaid health plan, serving underserved communities in 22 states and the District of Columbia.



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