WHITE PAPER

A PATH TO ELIMINATING $3.6 TRILLION IN WASTEFUL HEALTHCARE SPENDING

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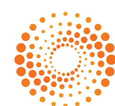
Please note this is the condensed version of this white paper. For a comprehensive treatise, we encourage you to visit **factsforhealthcare.com** and download the full version.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EXECUTIVE SUMMARY

Preface

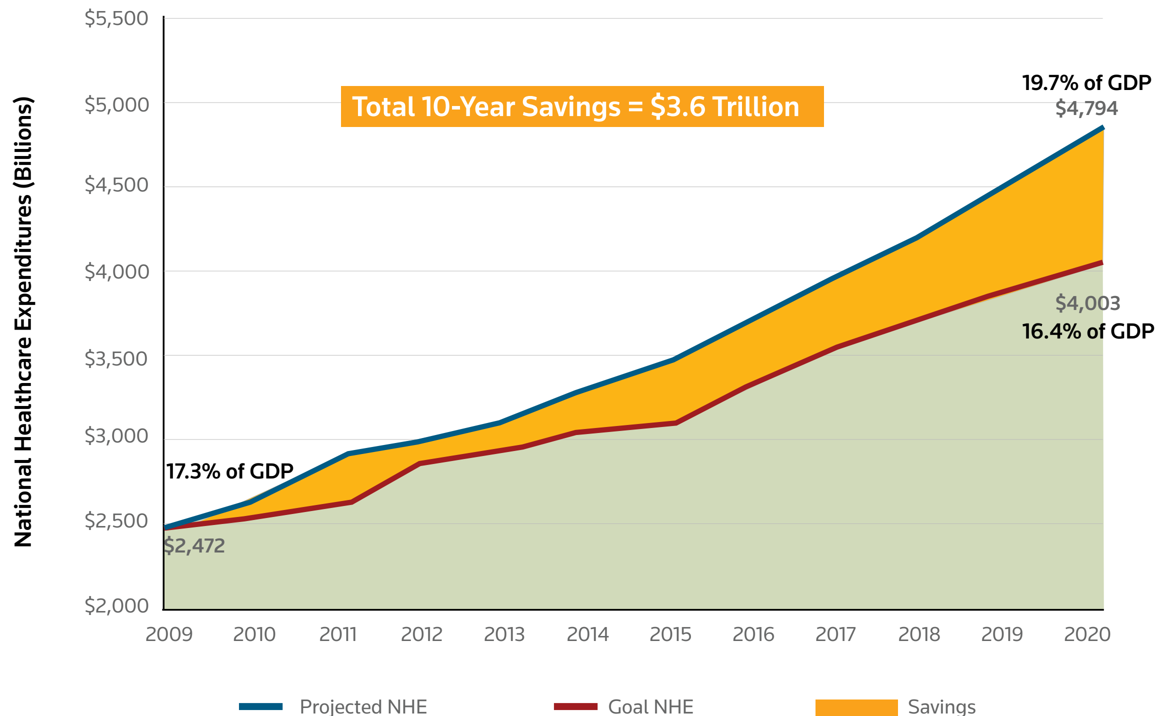
Following the release of the white paper "Where Can $700 Billion in Waste Be Cut Annually From the U.S. Healthcare System?", Thomson Reuters and the authors heard from many readers who wondered how much of the waste can be reasonably eliminated in the short term and in a longer time frame.

Others asked about the effect of health reform on the identified six categories of waste. In response, Thomson Reuters and the authors reviewed the literature, investigated our clients' successful initiatives, and estimated the possible impact of these initiatives if implemented at a national level. The result, presented in this paper, is a vision of one path for reducing wasteful spending in healthcare over the next five to ten years. Great effort was expended to provide a balanced and specifically apolitical viewpoint equally weighing the concerns of patients, providers, payers, and purchasers. The result proposes five successful strategies to mitigate the waste identified in the previous white paper. We hope this will contribute useful ideas to the ongoing dialogue about healthcare costs, encouraging more debate, and a call to action as the newly passed legislation is implemented.

Setting a Reasonable Goal for Waste Reduction

To test the impact of waste reduction against a reasonable goal, we adopted the goal established in an article in the New England Journal of Medicine, which suggested maintaining healthcare expenditures at the present level of 17 percent of GDP.[1] This document, therefore, outlines one approach to maintaining healthcare expenditure at this level of GDP over the next ten years, as opposed to current estimates of an increase in expenditures to almost 20 percent. If a phased-in reduction of waste – starting at five percent and increasing five percent every year until we have reduced 50 percent of the waste in ten years – can be accomplished, this goal is feasible. In the process, $3.6 trillion of wasteful spending would be saved, ten percent of projected healthcare expenditures over that time period.

The figure below represents data from a March 2010 Health Affairs article by the Office of the Actuary in the Centers for Medicare and Medicaid Services that projects healthcare spending and the GDP through 2019.[2] As represented by the solid gray line in the graph, their projection starts with National Healthcare Expenditures (NHE) in 2009 at 17.3 percent of GDP. By 2019, healthcare expenditures reach 19.4 percent of GDP. While the article projects through 2019 only, this paper continues the projection through 2020 to demonstrate the possible impact of a ten-year path.



It should be noted that without efforts to control its proportion of total healthcare expenditures, system-wide waste could reach $1.6 trillion dollars by 2020 – a doubling in just ten years. Even with the savings we propose, the NHE would still grow at the same rate as the general economy, an increase of over $1.4 trillion.

How Savings Were Estimated

Following the discussion for each category of waste, readers will find graphs of projected five-year and ten-year savings. Targets are set based on the relative challenges and opportunities in each category and are balanced across the six categories to achieve the overall goal of a 25 percent reduction in total waste within five years and a 50 percent reduction within ten years. The actual savings estimate is calculated as the difference between the projected waste in 2020 and the reduced level of waste if the target is achieved.

General Challenges and Barriers to Success

Many of the challenges relate to existing market forces, which have resulted in minimal standardization of billing, payment, care, or service. The complexity of supply and demand for healthcare services, the third party payment system with its fee-for-service payment model, and the fragmented network of independent providers complicate efforts to reduce wasteful spending.

These and other challenges are unlikely to be fully resolved and therefore constrain the system's ability to reduce waste meaningfully. However, it should still be possible to preserve consumer choice, independent enterprise, and insurance systems while reducing wasted expenditures.

It is difficult to imagine success for a healthcare system that is comprised of individual, independent players without a shared team goal of providing effective and efficient care. A successful team approach will require that some players improve their performance, others change their roles, and still others be recruited for new roles. In other words, meaningful waste reduction requires substantial changes in healthcare delivery.

Most of the examples described here depict individual players improving their performance without changing their roles. Other players have evolved or enhanced their roles by extending their responsibilities to remedy performance gaps. Still others have claimed new roles that remediate the process. In most of these cases, the individual players or small organizations have acted on a local or regional level. Adopting many of these best efforts on a broader scale would likely yield systemic improvements, reduce wasteful spending, and improve outcomes.

FIVE SUCCESSFUL STRATEGIES

Before considering specific opportunities for reducing waste, it is important to review several general strategies that have demonstrated success, can be reasonably implemented broadly, and can be supported by specific experience reported in the literature. Projects such as the National Priorities Partnership[3] and the Institute for Healthcare Improvement[4] support many of these efforts. Although each of the strategies may seem to be directed at a specific category of waste, it is likely that the positive effects would be realized in multiple categories. The matrix below identifies which categories of waste will likely be impacted in either a primary or a secondary way by the five successful strategies displayed across the top banner.

	Consumer Activism & Transparency	Systems Improvements & Care Coordination	The Medical Home & Culture of Health	Patient Safety & Quality Improvement	Payment Integrity: Ease reimbursement, reduce opportunites for fraud & abuse
Unwarranted Use	High Impact	High Impact	High Impact	High Impact	High Impact
Fraud & Abuse	High Impact	High Impact			High Impact
Admin System Inefficiencies	High Impact	High Impact	Moderate Impact		High Impact
Clinical Inefficiencies & Errors	Moderate Impact	Moderate Impact	Moderate Impact	High Impact	
Lack of Care Coordination	High Impact	High Impact	High Impact	Moderate Impact	
Preventable Conditions & Avoidable Care	High Impact	Moderate Impact	High Impact	High Impact	Moderate Impact

● High Impact ● Moderate Impact

Each strategy is designed to strengthen relationships among patients, providers, and payers; improve care; and reduce waste. The overriding goal is to create better coordination among participants by encouraging better communication with clearer roles and responsibilities.

1. Consumer Activism and Transparency

Educate and engage the public on the importance of understanding and discussing with their caregivers the value and risks of specific treatment options. Eliminate disincentives (even provide incentives) for providers to pursue more conservative treatment options whenever appropriate.

This strategy focuses on making patients better consumers of healthcare services. It strives to elevate individuals' interest and participation in healthcare decision-making to the same level as other important decisions they make about their lives. Active engagement by medical care consumers and greater transparency in the healthcare market are crucial.

2. Systems Improvements and Care Coordination

Reduce fragmentation in the delivery of care, addressing significant issues in care coordination, administrative overhead, and redundancy in diagnostic procedures and information collection.

This strategy attempts to better link providers in actual or virtual teams. The goal is to make all relevant information available at the point of care so the treatment plan can be shared and executed across multiple providers and settings.

This focus on care coordination creates an environment for systemic process improvement and new reimbursement methods beyond fee-for-service payments such as episodes of care, global compensation to Accountable Care Organizations, and rewarding providers for top performance.

3. The Medical Home and Culture of Health

Ensure that patients are actively engaged, along with their clinicians, in managing their own health through attention to personal behavior, disease prevention, early detection, and appropriate care for chronic diseases. Promote healthy workplaces and environments that make wellness a priority.

This strategy recognizes that patients must take responsibility for their own health. Primary care providers are accountable to their patients and should help them set goals, then provide the information and tools for success. Medical Home programs are designed to acknowledge the partnership and the specific roles of patients and physician-led care teams. Such programs encourage appropriate involvement of a variety of care professionals (including therapists, nurses, nutritionists, psychologists, and pharmacists), each with a skill set applied to the patient's specific issues and goals.

Employers who recognize the competitive advantage of a healthy workforce have been building "cultures of health" within their organizations to encourage, support, and reward employee wellness. They have coupled evidence-based benefit design with health promotion to elevate the health status of their employee population. These benchmark companies have also changed the workplace environment to encourage healthy habits such as regular exercise, eating right, and not smoking.

4. Patient Safety and Quality Improvement

Encourage and support local, regional, and national quality improvement initiatives to reduce healthcare treatment errors that result in patient harm and higher costs. Create a "culture of performance improvement" that promotes the quick dissemination and adoption of best practices.

Many professional organization-sponsored efforts to reduce waste and improve patient safety, operational efficiency, and outcomes have demonstrated significant success by setting an industry goal and developing a common performance enhancement program to support it. Payers and purchasers, who reap many of the rewards of improved provider performance, should encourage and fund such industry-sponsored initiatives.

5. Payment Integrity: Simplify Reimbursement and Reduce Opportunities for Fraud and Abuse

Engage the community, including patients and providers, in programs that make the billing process easier while eliminating opportunities for fraud and abuse.

Clearly, the vast majority of healthcare providers are committed to billing appropriately and to receiving compensation only for those services they have rendered. Many agree that part of the goal for improvement in this area includes simplifying and standardizing the process to submit claims, receive payment, and to recognize providers for high levels of payment integrity.

The goal is to change the culture of fraud. Both the public and the provider community need to be better educated about how fraudulent payments directly reduce resources available to patients for legitimate and necessary healthcare services.

SIX SPECIFIC TARGETS FOR REDUCING WASTE

1. ADMINISTRATIVE INEFFICIENCY

The short-term challenges to reducing administrative waste are significant. Many of the obstacles are related to the fragmentary nature of both the payer and provider systems. Without increased standardization, significant improvement will be difficult. Most waste occurs from complicated financial relationships between payers, providers, and consumers. Short-term efforts should focus on:

- Increasing standardization of payment systems
- Reducing regulatory complexities to facilitate administrative coordination among providers
- Simplifying and realigning payment systems – capitation, gain sharing, bundled or global payments, etc.
- Developing Accountable Care Organizations
- Integrating delivery systems across all sectors of healthcare
- Focusing utilization management – "gold carding" top providers
- Encouraging payers to better inform providers of administrative best practices

Long-term efforts will focus on large-scale reform to healthcare markets and continued standardization of administrative processes.

Significant Challenges

- The competitive, market-oriented system supporting broad purchaser choice of multiple third-party payers results in both payer and provider organizations experiencing complexity in claims-related systems.
- The Leadership role in defining and mandating standards is unclear.
- Employer-specific benefit programs result in a wide variety of nonstandard, and often complicated plans, including formularies and cost-sharing arrangements.
- Multiple providers during a single episode of care, requiring complex adjudication by payers.
- Payers negotiate different rates for identical services and, conversely, providers negotiate different rates for identical services with payers. This produces significant administrative burdens.
- Preferred providers or limited health plans may not meet consumers' expectation that all combinations of providers and health plans are accessible.

Developments Underway

- New Jersey's five largest health plans and five physician groups have created a pilot program allowing hospitals and physicians to communicate with health plans and address administrative tasks through a single Web portal.[5]
- A Towers Watson survey found that 22 percent of plan sponsors intend to eliminate paper-based communications in favor of electronic communications.[6]
- The Minnesota Department of Health estimates that when fully implemented, a law requiring the standard, electronic exchange of routine healthcare business transactions will save the state more than $60 million per year.[7]
- Several large self-insured employers have identified suspected duplicate claims ranging from 0.02 to 0.1 percent of paid claims.[8]
- A large, self-insured manufacturer eliminated the Pharmacy Benefit Manager intermediary in purchasing retail drugs by contracting directly with retail chains, reducing administrative complexity and saving 10-25 percent in costs. [8]

Small Steps Yield Significant Rewards

Humana introduced incentives to reduce paper Explanation of Benefits (EOBs). "For each person who goes paperless, the plan will save $3 to $6 per member per year… and as much as $10 to $12 per member per year for those who are high utilizers of medical care." [6]

Making reasonable assumptions for such factors as the number of EOBs processed annually, the current rate of electronic EOBs, and the likelihood that some patients will never accept, or be able to access, an electronic version, Thomson Reuters estimates the potential impact of applying this program to all employer-sponsored healthcare plans to be a reduction in waste of up to $800 million per year.

SUGGESTED TARGET REDUCTION
Five years: 10 percent reduction in waste
Ten years: 20 percent reduction in waste

2. PROVIDER ERRORS AND INEFFICIENCY

More ambitious goals seem appropriate for this category for two reasons. First, the real cost of errors in patient care is the impact on well-being, recovery, and quality of life. Second, many providers have demonstrated significant improvements in performance by applying standard process-improvement techniques such as Lean and Six Sigma as well as Clinical Decision Support tools to drive compliance with evidence-based guidelines. Longer-term enhancement may depend on integrated electronic platforms, delivery systems, or other forms of virtual organizations that enable broader system solutions such as those instituted by the airline and financial industries.

Significant Challenges

- The professional practice "craft" model, with broad networks of solo or small group practices adds great complexity to system-engineered process improvement. A "learning from mistakes" environment is often not the default. Consequently, the effort is under-resourced.
- Most hospitals have limited control over physicians' practices. The medical staff often prefers taking an individualized approach and may not support changes in clinical practice that could result in better coordination among providers.
- Silos of specialty care in the healthcare profession result in unclear roles and responsibilities, creating risks in handoffs and limited accountability.
- Systems designed for the individual clinical practice support unnecessary variation in care rather than efficiency and safety of operations.
- There are real and perceived operational barriers, as well as a lack of short-term payback from investment in Information Technology solutions that could improve long-term efficiency.
- Many providers will not realize a financial return for improvements in the effectiveness or efficiency of the care they provide. Some worry that if they become more efficient, the insurance company will simply reduce payments.
- Historically, the industry has established an acceptable level of errors and failures. A culture of individual accountability/blame for mistakes inhibits the group from sharing in the responsibility for preventing errors, for example, by learning from each mistake and creating systemic solutions.

Developments Underway

- In his address to the Senate Finance Committee, Glen Steele MD, CEO of Geisinger Health System, described the result of the system's bundled surgery program: "We have improved outcomes and have reduced costs. This is because we have systematically researched how best to deliver care, hardwired the process steps into our electronic health record to prompt us on what best practices are, decreased unjustified variation, and taken financial risk to decrease related complications."[9]
- The MHA Keystone Center for Patient Safety & Quality brings together hospitals, state and national patient safety experts, and evidence-based best practices to improve patient safety and reduce costs by improving the quality of bedside care. Early findings for the catheter-associated urinary tract infection initiative have demonstrated significant results. Other programs include stroke, ICU, surgery, obstetrics, and emergency room.[10]
- When Kaiser Permanente implemented its Electronic Health Record in 2004 for its 225,000 members in Hawaii, the total office visit rate decreased by 25.3 percent and specialty care office visits decreased by 21.5 percent. Scheduled telephone visits increased eightfold and secure e-mail messaging increased six fold.[11]
- A medical center's Rapid Response Team used an electronic patient surveillance system to decrease mortality by 30.8 percent, which equates to over 60 lives saved annually. Perhaps even more impressive, the center reduced its need for bedside emergency resuscitation outside of the Intensive Care Unit by three quarters.[8]

Small Steps Yield Significant Rewards

A Medicare demonstration project (1991-1996) bundled hospital and physician payments for CABG surgery and saved ten percent of the cost for these procedures among the participating hospitals over the five-year study period.[12] CMS-negotiated discounts on Part A and B inpatient expected costs were the reason for 86 percent of the savings. Another five percent came from lower-than-expected spending on post-discharge care (e.g., readmissions) and nine percent came in shifts in market share to the lower cost facilities. Savings varied by hospital. Three of the four original hospital participants made major changes in physician practice patterns and hospital operations to generate savings. The savings came in direct ICU, routine nursing expenses, and pharmacy costs. On a risk-adjusted basis, a negative trend in inpatient mortality was found and the participating hospitals had a significantly lower rate of inpatient deaths compared with Medicare's national averages.

Using its research databases, Thomson Reuters calculated the average cost per CABG for both Medicare and commercial patients and used national statistics on the CABG rate by age cohort to estimate the number of the procedures done annually. Applying the savings rate from the demonstration project to these figures suggests a possible national savings of over $1.4 billion annually for the CABG procedures.

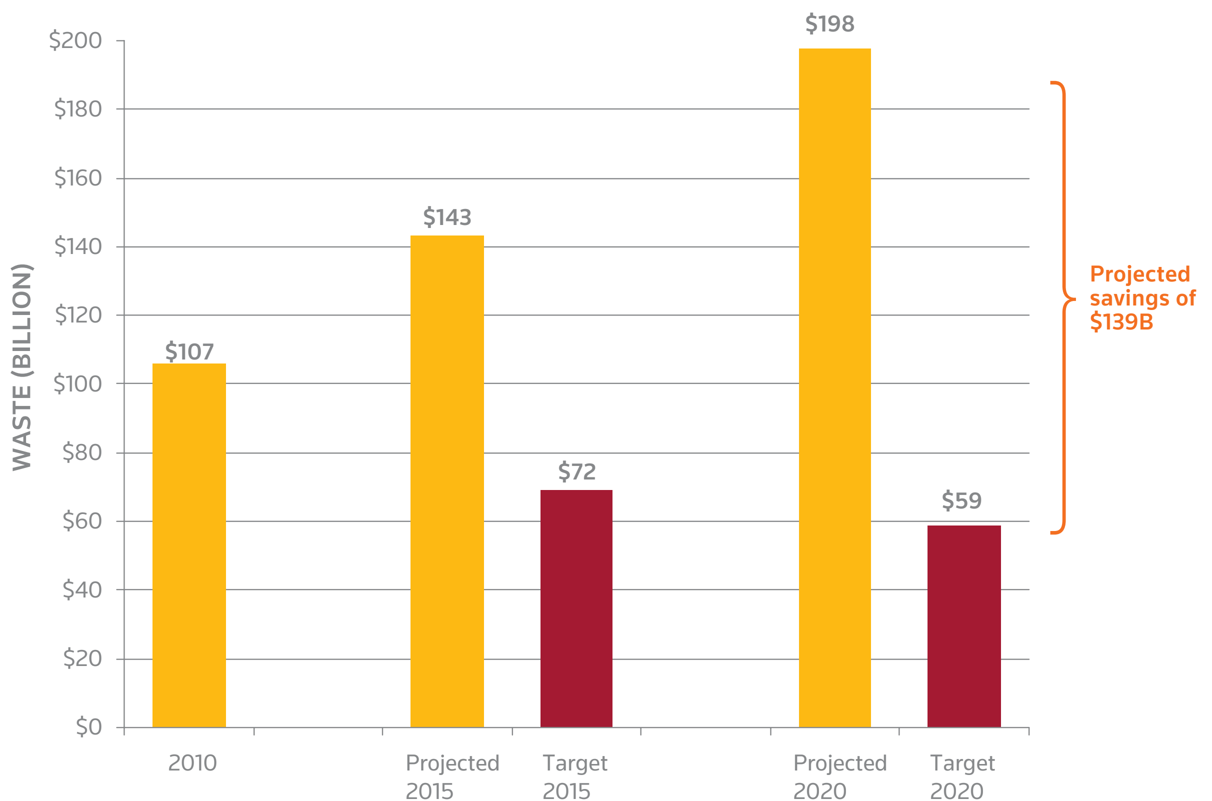
More Small Steps Yield Significant Rewards

Atul Gawande's *The Checklist Manifesto* includes the story of Dr. Peter Provonost at Johns Hopkins Medicine.[13] His checklist of the five things doctors needed to do to avoid infection when inserting a central line reduced infections from 11 percent to zero. He estimated that using the checklist had prevented 43 infections, avoided eight ICU deaths, and saved the hospital approximately $2 million. He and his colleagues have created similar checklists for other situations in the ICU. Dr. Gawande estimates that, "ICUs put five million lines into patients each year, and national statistics show that after ten days four percent of those lines become infected. Line infections occur in eighty thousand people a year in the United States and are fatal between five and 28 percent of the time, depending on how sick one is at the start. Those who survive line infections spend on average a week longer in intensive care."

The average hospital payment for a day in the ICU calculated from the Thomson Reuters MarketScan Research Database is $1,965. Applying this figure to Dr. Gawande's estimates and assuming that 15 percent of the patients die before the extra week in the ICU, suggests a possible savings of over $900 million each year by avoiding central line infections.

Reduce Waste Due to Provider Inefficiency and Errors

SUGGESTED TARGET REDUCTION
Five years: 50 percent reduction in waste
Ten years: 70 percent reduction in waste



3. LACK OF CARE COORDINATION

An aggressive goal seems warranted for this category because of the significant consequences it holds for the health and quality of life of our most vulnerable populations. As underscored by the challenges below, the most substantial change required to improve care for complex or chronically ill patients is to increase the communication and coordination among healthcare providers. This means advancing communication technology and identifying clear roles and responsibilities among providers in the care of a single patient.

Significant Challenges

- There is no effective infrastructure for routine and effective communication among providers. Although patients will ultimately benefit from investments in the infrastructure for sharing information among providers, most attempts to demonstrate a clear financial return to providers have been unsuccessful.
- Effective protocols for handoffs; agreement on roles and responsibilities; and incentives to coordinate care among hospitals, skilled-nursing facilities, and outpatient care are generally lacking or, if present, often insufficient to be effective.
- Patient concern over the privacy and confidentiality of data imposes limits on the sharing of their health information among providers.
- There are no easy, dynamic means of sharing information among providers and their patients to monitor the treatment of conditions and identify early warnings.
- Without a system's attention to ensuring a population's timely access to the most appropriate services and settings of service, some patients may only be able to access more costly alternatives (e.g., seeking treatment in the emergency room because no primary care practice is available on Saturday afternoon, or extending a hospital stay because no appropriate outpatient treatment is available).

Developments Underway

- North Shore Hospital System on Long Island recently announced that it will pay an incentive of up to $40,000 to each physician in its network who adopts its Electronic Health Records.[14] That is in addition to the $44,000 incentive available from CMS for complying with the meaningful use requirements. The hospital is also providing an incentive to share de-identified, anonymous, and aggregated data on the quality of care. By more closely aligning itself with its physicians, the hospital hopes to respond more effectively to future changes in reimbursement, such as penalties for readmission rates or bundled payments. A 2005 Health Affairs article by Richard Hillestad, et al estimated that effective EMR implementation and networking could eventually save more than $81 billion annually.[15]

- A transportation company provides 24-hour, toll-free nurse lines to employees so that they can obtain information about their conditions and treatment options, thereby reducing the number of unnecessary office and Emergency Room visits. Savings associated with one line reached $1.62 per member per year after all expenses.[8]
- A large multi-hospital system recognized a need to reduce unnecessary utilization of the ER. The effort focused on patients with frequent and non-urgent visits to ER, high risk for addiction to pain medication, and no primary care medical home. As a result of a program to refer those patients to community primary care physicians, to educate emergency room physicians on appropriate levels of narcotic prescriptions, and to undertake a targeted community communication campaign, improper ER use dropped by 72 percent and ordering of narcotics dropped by ten percent.[8]
- A medical center's Rapid Response Team used an electronic patient surveillance system to decrease mortality by 30.8 percent, which equates to over 60 lives saved annually. Perhaps even more impressive, the center reduced its need for bedside emergency resuscitation outside of the Intensive Care Unit by three quarters.[8]

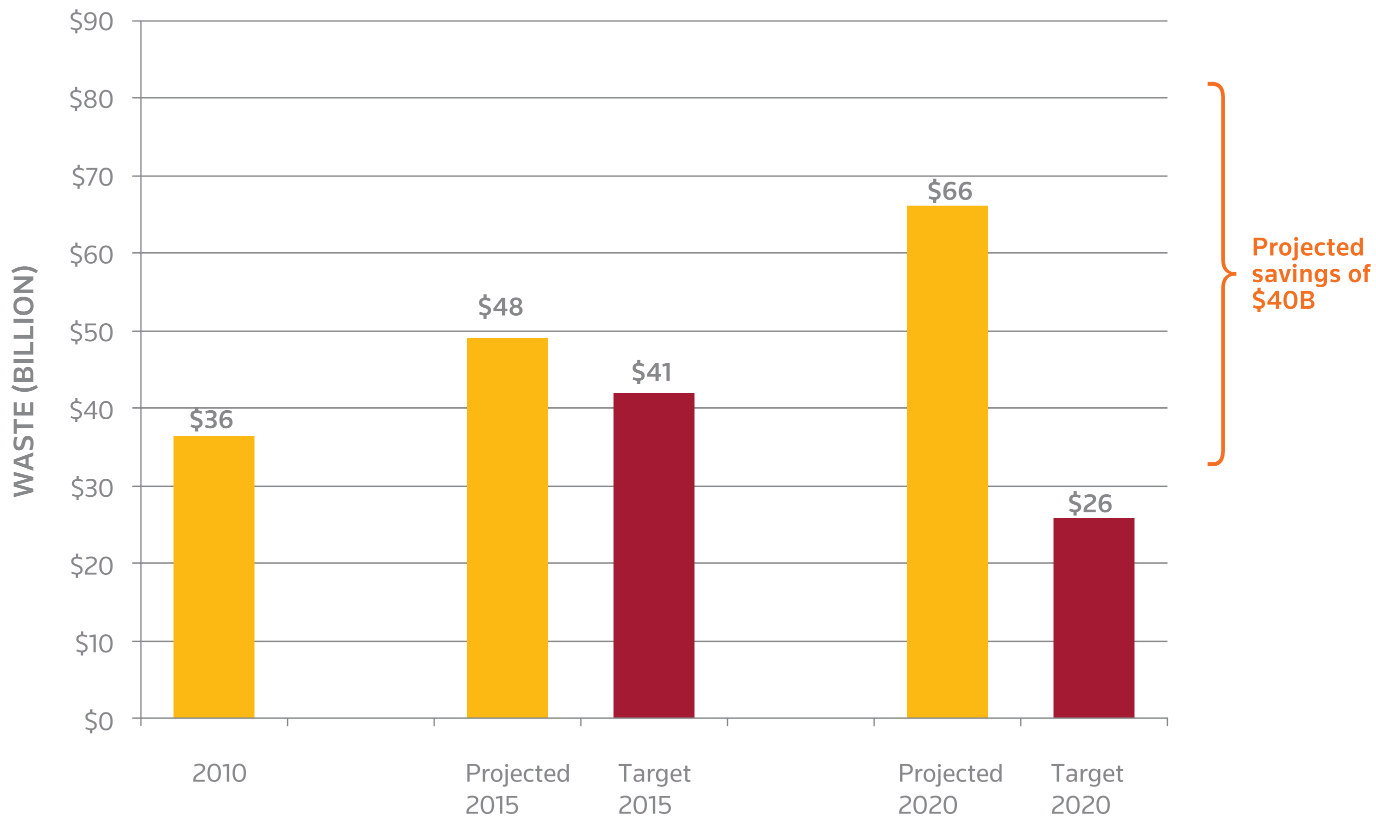
Small Steps Yield Significant Rewards

The Institute for Healthcare Improvement (IHI) is sponsoring a series of seminars to encourage the development of community coalitions to reduce inappropriate emergency room visits. The announcement for the series states, "Retrospective review identifies that as many as 50 percent of all Emergency Department (ED) visits could have been avoided by care in other settings. However, from the perspective of the individuals who present to the ED for care, their visits are unavoidable at the time as alternatives are not known, not available, or do not exist. Many efforts to reduce avoidable ED visits have typically focused on providing alternative options for medical care, for example, primary care clinics, nursing call-in centers, or expanded physician office hours. The most successful strategies identified during an IHI research phase involved the formation of coalitions that include community resources and support in addition to medical providers. IHI has been testing a framework to reduce avoidable ED visits using the formation of coalitions to design specific interventions which are both patient-centric and beneficial for organizations from a population approach." [16]

Thomson Reuters calculated a conservative estimate for the difference in the cost of care between a routine non-emergent emergency room visit and a visit to a primary care physician, derived from the Thomson Reuters MarketScan Research Database. Applying this estimate to the finding that 50 percent of emergency room visits, where the patient was not admitted to the hospital, could have been provided in a less intensive setting, researchers estimate a potential annual savings of $2 billion for employer-sponsored healthcare plans alone.

Reduce Waste Due to Lack of Care Coordination

SUGGESTED TARGET REDUCTION
Five years: 15 percent reduction in waste
Ten years: 60 percent reduction in waste



4. UNNECESSARY CARE

In her 2007 book, *Overtreated: Why Too Much Medicine Is Making Us Sicker and Poorer,* Shannon Brownlee makes clear what others in the healthcare system have long recognized as the many causes of overtreatment, including variations in care, economic drivers, redundant services, a belief that more is better, and the pursuit of end-of-life cures.[17] Dr. Howard Brody from the Institute for the Medical Humanities at the University of Texas asks the medical profession to step up to the issue in his New England Journal of Medicine article, "Medicine's Ethical Responsibility for Health Care Reform—The Top Five List": "I would propose that each specialty society commit itself immediately to appointing a blue-ribbon study panel to report, as soon as possible, that specialty's 'Top Five' list. The 'Top Five' list would consist of five diagnostic tests or treatments that are very commonly ordered by members of that specialty, that are among the most expensive services provided, and that have been shown by the currently available evidence not to provide meaningful benefit to [many] patients for whom they are commonly ordered."[18] A higher goal may seem appropriate for this effort, but Dr. Brody's approach is a reasonable "down-payment."

Significant Challenges

- There is a general lack of consensus on the effectiveness and efficiency of specific clinical care for many conditions. Increased investment in Comparative Effectiveness studies has been encouraged by the Obama administration.
- Professional liability pressures encourage physicians and other providers to order unwarranted diagnostic tests and treatment. Some studies suggest that between five and nine percent of medical expenditures can be tied to practicing "defensive medicine." [19]
- Even where accepted standards exist, there is a significant lack of consistent awareness, understanding, and application.
- Financial incentives encourage over-utilization by providers of same procedures; reducing volume reduces revenue and profit margins.
- Variation in the use of high-intensity, acute interventions at the end of life adds significant cost to care, but does little to delay death or to decrease the pain of dying.
- There is a lack of patient incentives to investigate treatment alternatives. Patients sometimes insist on inappropriate treatment because they lack the education to support informed choices.

Developments Underway

- Many experts propose a local community- and population-based approach to creating new systems of care to address cost and care coordination. Darrell Kirch recently supported the Healthcare Innovation Zone (HIZ) idea. This approach "… would create a program whereby willing groups [of providers and insurers] could design and test regionally specific, highly integrated care delivery systems and payment approaches that would promote quality and 'bend the curve' (i.e., participants would commit to cost containment below the rate of local healthcare cost inflation). "[19] The new Center for Medicare and Medicaid Innovation, established by the Patient Protection and Affordable Care Act, is expected to pursue HIZ principles.
- Authorities noted that a state's pharmaceutical costs were a key driver for healthcare budget increases. A complex study of antibiotics prescribed for children who had one visit for upper respiratory infection (URI) and subsequent prescriptions for antibiotics revealed $434,000 in unnecessary payments annually for URI antibiotics.[8]
- A randomized, controlled trial in 2005 concluded that a structured interview intended to identify nursing-home patients whose goals for palliative care made them candidates for hospice services increased the use of hospice care at end of life. The group was 20 times more likely to move to hospice care than the control group, had fewer acute-care admissions, spent fewer days in the acute-care setting, and their families rated care more highly.[20]

Small Steps Yield Significant Rewards

As reported in a Dartmouth Atlas Project Topic Brief, "In the early 1990s, the implementation of a decision aid to help patients choose between watchful waiting and surgery for their enlarged prostates was introduced in the urologic clinics in two pre-paid group practices, Kaiser Permanente in Denver and Group Health Cooperative in Seattle. … the population-based rates of prostatectomy fell 40 percent …"[21]

We used the Thomson Reuters MarketScan Research Database for analyzing the usage of five of the National Priorities Partners' "unwarranted procedures". The analysis suggests a conservative estimate for the reduction in the use of unwarranted procedures that could result from informed-patient decisions. We found that, if those states with higher than average use of these services reduced their use to the average, total savings would be $3.3 billion per year for employer-sponsored healthcare plans alone. This would require a reduction of only seven to nine percent, a much more conservative result than the 40 percent achieved in the Kaiser Permanente and Group Health program for prostatectomy.

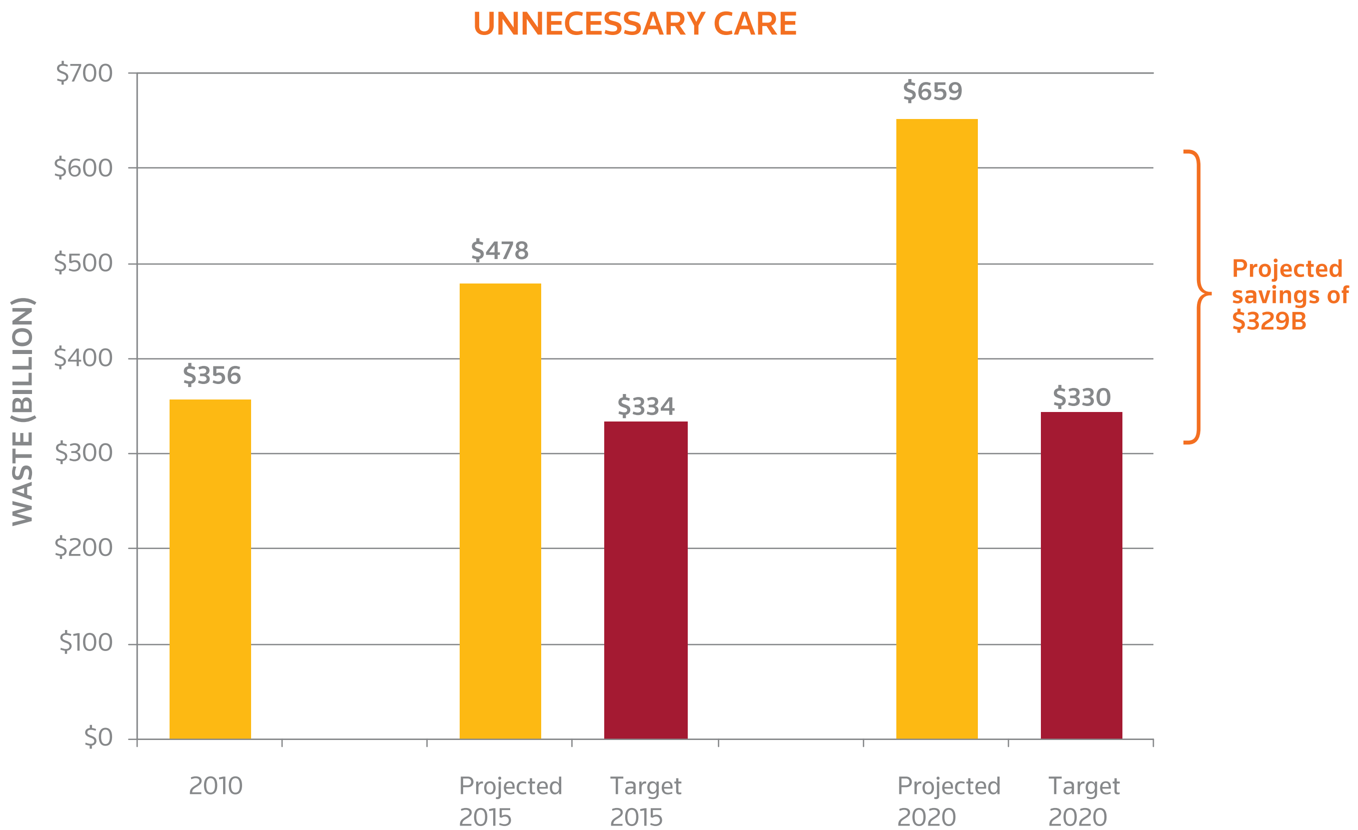
More Small Steps Lead to More Rewards

A study conducted by U.S. Oncology and Aetna demonstrated that treating non-small cell lung cancer patients with evidence-based care resulted in an average cost savings of 35 percent over 12 months without affecting health outcomes.[22]

Applying a 35 percent cost saving to the prevalence and cost of treating non-small cell lung cancer in the Thomson Reuters MarketScan Research Database, would result in an annual savings of $1.14 billion for the under 65 population alone.

Reduce Unnecessary Care

SUGGESTED TARGET REDUCTION
Five years: 30 percent reduction in waste
Ten years: 50 percent reduction in waste



5. PREVENTABLE CONDITIONS AND AVOIDABLE CARE

This problem is often referred to as one of under-use. Often certain simple maintenance procedures for preventing illness or the complications of a chronic condition are not received by the patient. The result is that patients develop unnecessary complications or experience an escalation in the severity of their illness, requiring expensive and often painful, acute-care services. The need for these services could have been avoided with proper, and usually less expensive, preventive care.

This is another category where we can set aggressive goals over the next five and ten years. Organizations such as NCQA and its HEDIS metric system have allowed large parts of the American population to receive preventive services and avoid the downstream care needs.

Significant Challenges

- The American lifestyle (overeating, sedentary habits, tobacco use, alcohol abuse) results in significant, costly, chronic disease; morbidity; and mortality.
- With sedentary work environments becoming the norm, opportunities to exercise are not available in the community. Many exercise facilities are too expensive or inconvenient. Many people lack access to facilities or even to safe, outdoor exercise areas.
- The most convenient and affordable food is unhealthy, such as that provided by vending machines and fast food restaurants. Underprivileged inner-city communities often lack access to fresh fruits and vegetables.
- Often high, out-of-pocket costs or financial barriers in an insurance plans' preventive-care or disease-management services provide a disincentive for patients to access necessary care.
- Many times there is an inadequate personal connection and established trust between the patient and caregivers, reducing compliance and adherence.
- There is often inadequate family and social support for the elderly and other vulnerable patients.
- The variation in care is well recognized. Reducing it could produce remarkable improvements in the efficiency and effectiveness of healthcare delivery. The lack of standardization leads to wide variations in care and outcomes.

Developments Underway

- A large employer and Thomson Reuters undertook the first long-term evaluation of the financial and health impact of a large-scale corporate health and wellness program on participating employees. The evaluation included a financial analysis of medical insurance claims for 18,331 domestic employees who participated in its Health and Wellness Program. Employee medical expenditures were evaluated for up to five years before and four years after the program began. Savings averaged $8.5 million annually for the four-year period after the program began, primarily due to lower administrative and medical utilization costs. Reduction in medical care costs amounted to a savings per employee of $225 annually. The savings came from reductions in hospital admissions, mental health visits, and outpatient service use. Savings grew over time, and most came in the third or fourth year after the program began.[8]
- A large employer changed plan design to provide a financial incentive for preventive care. Target populations included expectant mothers (for prenatal care) and the general population (for preventive screenings). As a result, 20 percent of expectant mothers enrolled in the Maternity Pre-Care program with an ROI of 2.4 to one, and general screening rates increased.[8]
- A Medicaid-managed care plan analyzed medical claims data and identified 4.8 percent of its high-risk members as candidates for care management. The plan offered financial incentives to primary care practices to participate in the program to manage the care for those patients. Annual savings of $7.8 million resulted from a decrease in hospitalizations and visits to medical specialists. [8]

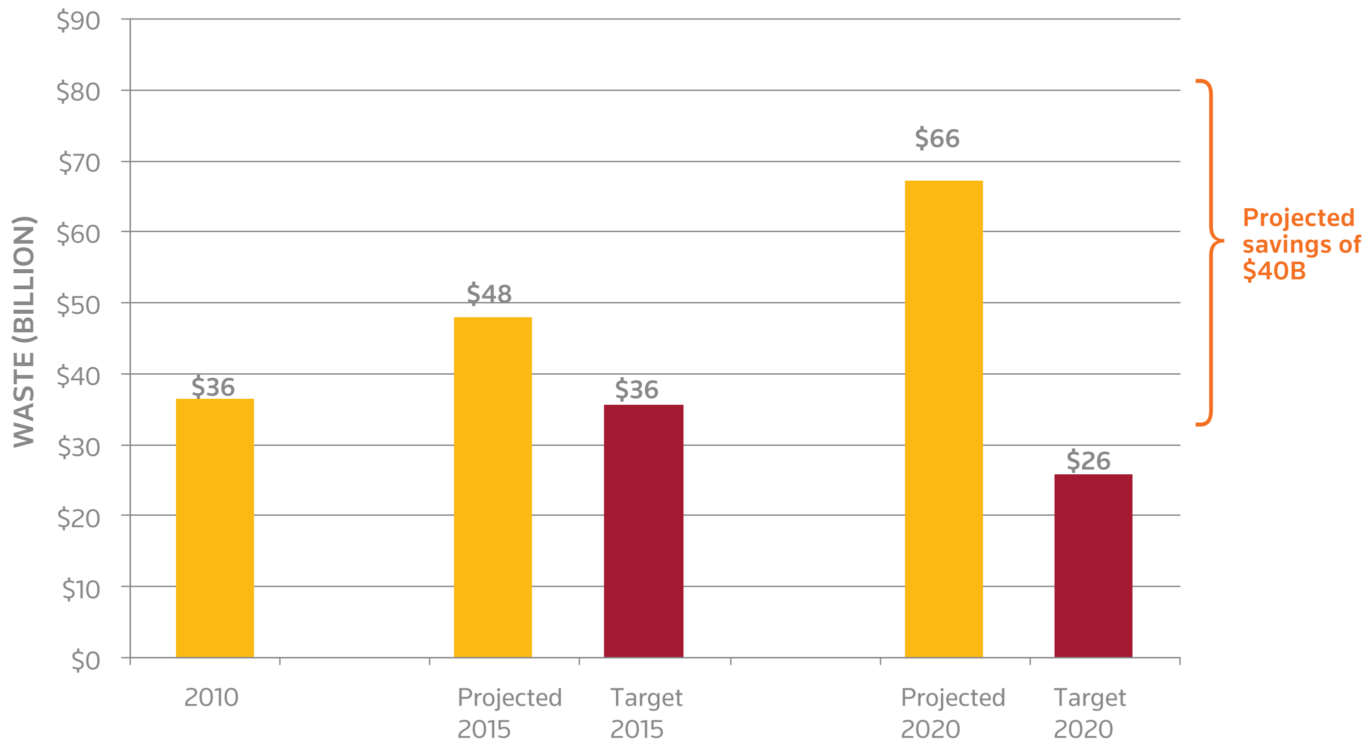
Small Steps Yield Significant Rewards

In response to the increasing cost of treating employees with diabetes, a large employer implemented a value-based drug benefit to address the problem of low-medication adherence. The new design shifted all drugs and devices for treating diabetes, asthma, and hypertension to tier one (same as for generics). After three years, medication possession rates increased significantly, use of fixed-combination drugs increased, and there was a 28 percent reduction in diabetes ER visits and a 62 percent decrease in avoidable admissions for asthma.[8]

Based on statistics for diabetes and asthma patients in the Thomson Reuters MarketScan Research Database, these actions would result in annual savings, nationally, of $29 million for diabetes ER visits and $404 million in asthma hospital admissions.

Reduce Waste Due to Preventable Conditions and Avoidable Care

SUGGESTED TARGET REDUCTION
Five years: 25 percent reduction in waste
Ten years: 60 percent reduction in waste



6. FRAUD AND ABUSE

The vast majority of providers are committed to appropriate billing and payment integrity. In addition, many providers, as they form larger organizations such as integrated delivery systems, are increasingly vested in the fight against fraud. Perhaps it is for these reasons that so few within the medical community have an appreciation of the magnitude of fraud. Only a small percentage of those submitting bills are intent on "gaming" the system by seeking payment for care not delivered or delivered at a grossly inappropriate level.

No one really knows the full extent of healthcare fraud and abuse and the true cost to payers and therefore to the community. Most payers of healthcare (health plans, government, employers) are satisfied that current expenditures for fraud detection and collection programs demonstrate an adequate Return on Investment (ROI) of $8 or even $12 for every dollar spent. In the short term, efforts will probably need to be gradual and begin to demonstrate returns before any more significant investments are made. It is also likely that returns on investment may decline as the medical community attempts to approach the larger long-term goal. Therefore, an immediate goal of reducing waste from fraud by a modest 15 percent seems reasonable, but a more aggressive, longer-term target is justified.

Significant Challenges

- Because the payer is separate from the recipient of healthcare services, there is no natural check on the actual provision of goods and services. The payer has no way of verifying that the service was provided, and the consumer has no way of knowing that the insurance provider has been billed for a service the consumer did not receive.
- Fraudulent operators have become very skilled at outwitting the system.
- Estimating the actual level of fraud is complicated, thus discouraging more significant investment in prevention.
- Healthcare professionals minimize the extent of fraud, insisting that the problem is less significant and mainly among nonprofessionals and therefore are less likely to work actively toward its reduction.
- It is extremely difficult and expensive to prove fraud and recover fraudulent payments.
- Payers do not want to jeopardize their positive relationships with providers by complicating and slowing the claims payment process to scrutinize bills submitted.
- Currently, the most common approach is to identify fraud retrospectively. The "pay and chase" method has been shown to be ineffective at preventing fraud, but is able to demonstrate a reasonable return on investment. Ideally, methods for detecting fraud could identify problems before payment is made. Information technology could be utilized for improved checks and balances.

- The public does not understand the substantial impact of this fraud on the affordability of healthcare and may consider "Big Government" and "Big Insurance" unsympathetic victims.
- Poor claims adjudication, data upload errors, and inconsistent application of contract terms can result in substantial over-payments, which are not considered fraud but which are clearly very wasteful.

Developments Underway

- In January 2010, Health and Human Services Secretary Kathleen Sebelius said, "Since 2007, the Strike Forces have charged more than 500 defendants for healthcare fraud crimes resulting in more than $1 billion in fraudulent billing. Over 200 defendants have been sentenced to prison, with sentences ranging from two months to 30 years. Added up, we've done more to fight healthcare fraud in 2009 than in any other year. But we're not done fighting. Building on the investments the President made in fraud fighting in last year's budget, he will request $1.7 billion in his budget to support programs to fight fraud."[23]
- The newly enacted Affordable Care Act is designed to lengthen prison sentences in criminal fraud cases, and the new law provides an additional $300 million over the next 10 years for stronger enforcement. It also gives the government new authority to step up oversight of companies participating in Medicare and Medicaid. Under the Act, providers could be subject to fingerprinting, site visits and criminal background checks before they begin billing Medicare and Medicaid. To combat fraud, the act allows Secretary Sebelius to bar providers from joining the programs and allows her to withhold payments from providers if an investigation is pending.[24]
- Blue Cross and Blue Shield companies' anti-fraud investigators collectively prevented $134 million in fraudulent or erroneous medical claims, while recouping nearly $115 million from fraudulent claims. Nationally, Blue Cross and Blue Shield anti-fraud investigators opened 13,424 cases.[25]
- A Medicaid program uses claims data to score ambulance providers' performance compared to the peer group benchmark. Among the findings were these red flags:[8]
    - Thousands of trips that lacked documentation or authorization by a medical professional's signature.
    - Documentation that was forged or copied.
    - Excessive utilization and high cost per patient. For example, the twelve most expensive patients transported by one company averaged $22,393 in payments and over 200 claims per patient.
    - Repeated use of ambulance-level transportation for patients going two or three times per week to outpatient dialysis, adult daycare, or mental health centers.

Small Steps Yield Significant Rewards

A new pilot program designed to curb prescription drug abuse in the South Carolina Medicaid program has saved the state more than $320,000 since it began in January 2009.[26] Through data analysis that revealed a pattern of uncoordinated care and drug-seeking behavior, such as visiting multiple physicians and hospitals for prescriptions, the Pharmacy Lock-In pilot program identified 48 Medicaid recipients who used numerous pharmacies to fill prescriptions for Schedule II narcotics, including powerful painkillers and amphetamines. Those individuals were notified of their placement in the Lock-In program and were required to select a primary pharmacy for services but their access to prescriptions was not limited.

"A comparison of the participants' Medicaid expenditures before and after lock-in showed substantial cost savings across most service categories, not just pharmacy:

- Medicaid expenditures for this group decreased by $321,541; an average cost savings of $6,699 per beneficiary;
- On average, a 40 percent decrease in the total number of prescriptions used, and a 43 percent decrease in Schedule II drugs;
- A 36 percent decrease in the number of claims for doctor visits and other medical professional services;
- A 21 percent decrease in the number of hospital and emergency room visits."

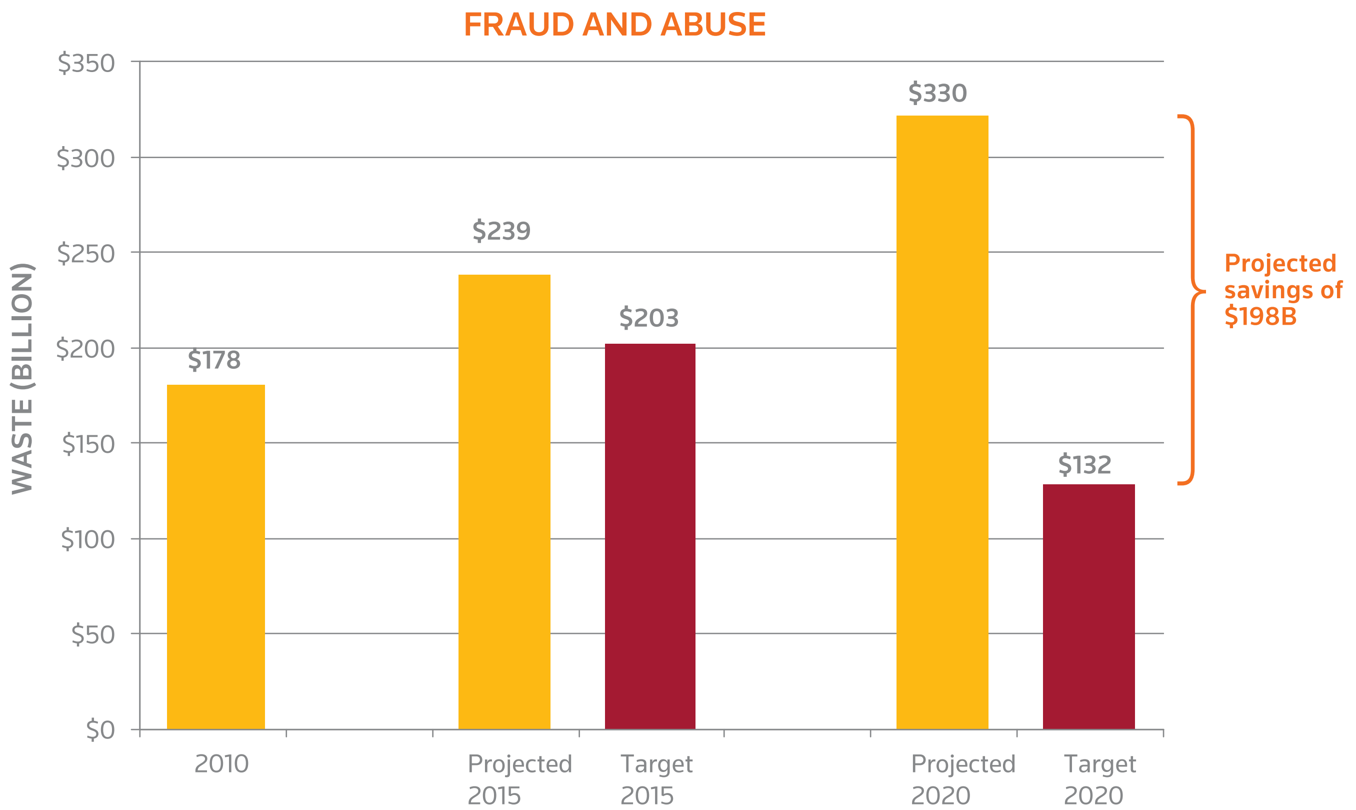
The program is now expanding to include up to 200 Medicaid recipients.

"We're very pleased with the results so far," said Sherry Ward, director of the SCDHHS Division of Program Integrity, which manages the Pharmacy Lock-In program. "We want to make sure we curtail drug-seeking behavior. At the same time, this is an opportunity to improve coordination of care and ensure beneficiaries still have access to needed medications."

Applying the South Carolina Medicaid results on a national level using an analysis from the Thomson Reuters MarketScan Research Database of the number of patients filling prescriptions for DEA Class II drugs at six or more pharmacies, Thomson Reuters estimates a national reduction in waste for just this single initiative of $455 million.

Reduce Waste Due to Fraud and Abuse

SUGGESTED TARGET REDUCTION
Five years: 15 percent reduction in waste
Ten years: 60 percent reduction in waste



CONCLUSION

Reducing Waste to Maintain Healthcare Expenditures at Less Than 17 Percent of GDP Can Save $3.6 Trillion

To reduce waste in the healthcare system, the medical community needs to set targets, identify strategies and initiatives, and implement them broadly. There are countless examples of benchmark efforts in both large and small organizations, but the path is strewn with obstacles. Some can be avoided while others may need to be removed. Removal of some can be accomplished at the level of the individual provider, health plan, employer, or patient. Many others require concerted changes to national practices and policies. Still others require significant national investments in infrastructure.

The targets proposed in this paper suggest a 25 percent reduction in waste within five years and a 50 percent reduction in ten years. The medical community may not be able to measure progress against the targets themselves, but it can measure many proxies. It should certainly be able to see evidence of progress by observing:

- Slower growth in overall healthcare spending
- Reduction in patient care error rates
- Accelerating adoption of Information Technology
- Improved recognition of potential fraud and reduction in estimated rates of its occurrence
- Reduction in the utilization of specific high-cost services where alternatives are available that are equally or more effective
- Reduction in the variability in use of high-cost procedures
- Reduction in avoidable care and complication rates

Members of the medical community may debate the feasibility of the specific targets suggested in this paper. There are certainly other paths worthy of consideration. Our five strategies and six categories of waste reduction are submitted not as the solution, but as a contribution to further discussions on the solution. Perhaps by identifying the challenges (as well as the efforts underway) toward reducing waste, this paper will accelerate individual and organizational contributions to improving the cost and delivery of healthcare.

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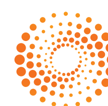

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