US HEALTHCARE®
EFFICIENCY INDEX

NATIONAL PROGRESS REPORT ON HEALTHCARE EFFICIENCY 2010

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Foreword

Waste Not, Want Not:
Improving Efficiency as Health Reform

By Jane Sarasohn-Kahn, MA, MHSA
***THINK-Health and Health Populi* blog**

"We're talking about

$30 billion wasted on paper in American health care."

Paper costs, and as Newt Gingrich has written, "Paper kills."

We're talking about $30 billion wasted on paper in American health care. Two-thirds of this is bound up in paper-based health claims, billing, and payments by check to doctors and hospitals. $30 billion of waste on inefficiency is a statistic that can concentrate the minds of Democrats, Independents and Republicans alike—all health citizens.

Most Americans might be shocked to learn that only 10% of payments to health providers in the U.S. are made electronically. 9 in 10 providers still receive a paper check. If providers received payments electronically, we'd save $11 billion alone.

The Pew Internet & American Life Project found that 74% of Americans use the Internet and, of those, 71% shop online and 55% bank online.[1] Among Americans online, about three-fourths pay bills online rather than write paper checks.[2]

What a disconnect! And what waste.

"What would you do with $30 billion?" Emdeon asked me about eighteen months ago when they kicked off the U.S. Healthcare Efficiency Index® project. While most Americans go online to shop, pay bills, communicate, share opinions, and even help each other get healthy through social networks, health providers—with innumerable PET scanners, robotic surgery platforms, and more MRI's per capita than any nation in the world—U.S. health care is operating in an Old World model, administratively speaking.

So what *could* we do with $30 billion?
In a blank-check writing world, we could…

- Fund more research devoted to curing cancers and HIV/AIDS.
- Cover uninsured Americans with a primary care medical home.
- Launch a national campaign to combat obesity.

The priorities funded in your $30 billion check might look different than mine, but we can all agree with the fact that dollars conserved from inefficiencies in health care are precious and needed for a host of challenges facing the American health system.

The Advisory Board for the Index represents the broad range of health stakeholders: payers, plans, providers, technology vendors, non-profit

“...Working across stakeholder groups

...focused on ***One Big Goal***.”

organizations, politicos, government agencies, actuaries, statisticians, and patients.

We’ve come together to first benchmark the metrics of the inefficiency challenge, then measure progress against the $30 billion as we gather data from our stakeholder organizations and others who want to join in the effort.

We recognize that the health reform plans coming out of Capitol Hill in and beyond 2010 won’t increase productivity in health enough to bend the cost curve as far and as soon as it needs to bend. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) was passed, in part, to reduce the costs of waste and fraud in the U.S. health system. But after 14 years, we have not achieved what that law set out to accomplish with respect to administrative simplification.

This Progress Report will show you how we are working across stakeholder groups as one interdisciplinary team focused on One Big Goal. Along the journey toward efficiency, Americans will realize improved convenience, quality, and cost-savings. And they’ll get the sort of health system they expect as modern, online tax-paying, bill-paying, health care consumers.

Now *that’s* one way to reform health care.

Jane Sarasohn-Kahn, MA, MHSA
THINK-Health and Health Populi blog
March 2010

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[1]Pew Internet & American Life Project, Generations Online, January 2009.
[2]CheckFree/Fiserv 2008 Consumer Banking and Bill Payment Survey.

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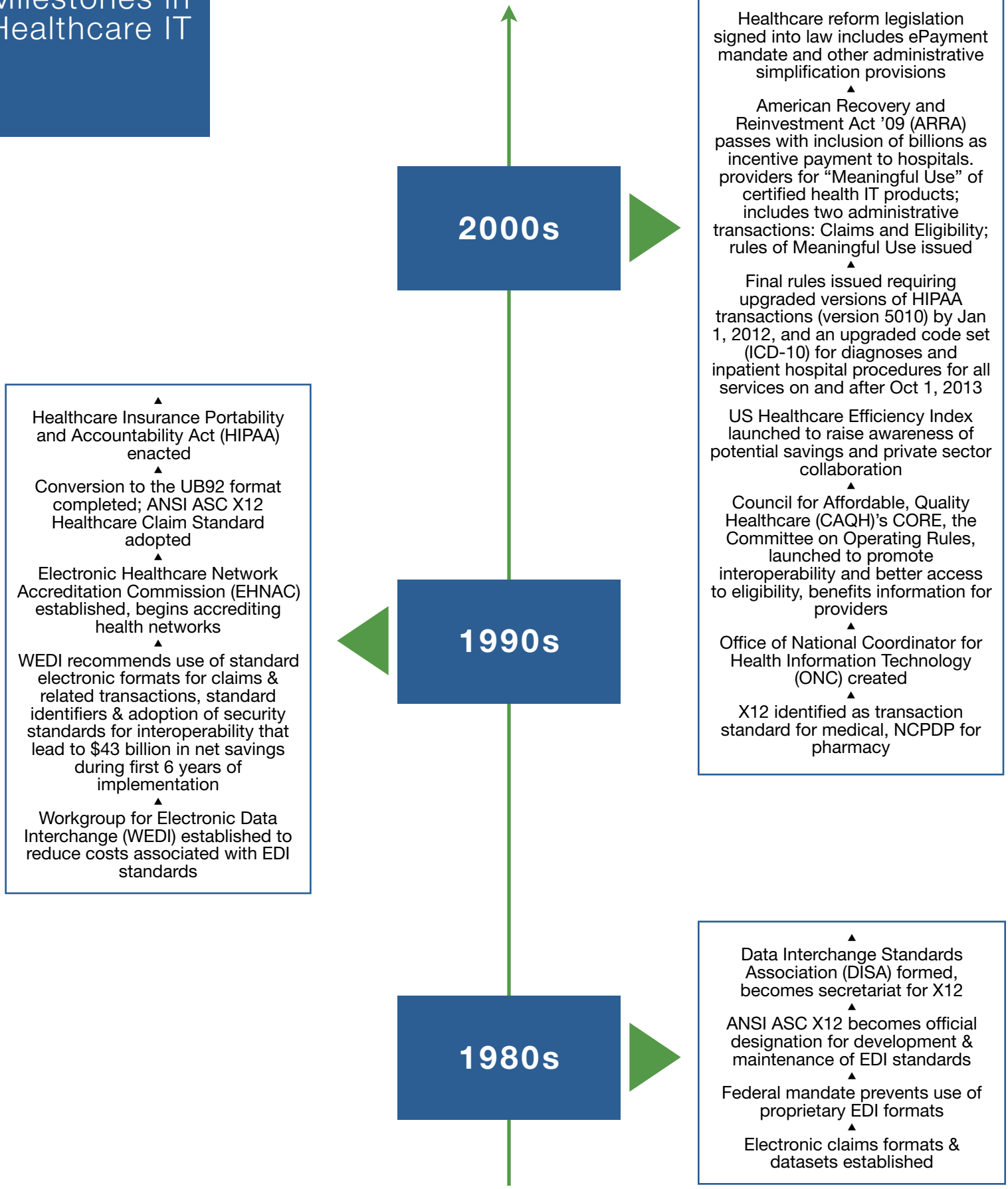
Milestones in Healthcare IT



National Progress Report on Healthcare Efficiency:
Introduction/Executive Summary

The *National Progress Report on Healthcare Efficiency* is the first annual report on the findings from the primary research phase of the U.S. Healthcare Efficiency Index® (USHEI). The USHEI was launched in 2008 to raise awareness of the potential cost savings associated with adoption of basic electronic transactions in healthcare. In its first year, several important milestones were achieved, including successful engagement with policy makers on the practical benefits of administrative simplification. The initial findings announced during the launch of the USHEI were based on a thorough analysis of available industry data. Phase 1 of the Index estimated total potential savings to be nearly $30 billion per year for medical claims-related transactions.

"...to raise awareness of potential

cost savings..."

Over the course of the year that followed, the Advisory Council for the USHEI oversaw the development of a detailed methodology, a secure data collection infrastructure and a formal data collection process that is now yielding an initial set of data. This report places the findings in the context of the recently enacted healthcare reform legislation, as well as the HITECH Act, passed as part of the American Reinvestment and Recovery Act (ARRA). It assesses the landscape and suggests a set of trends likely to impact the healthcare industry in the months and years to come. Here is a summary of the key findings that will be discussed in this report:

1. The industry is making progress on adoption of electronic claims. The data shows a current rate of 85%, which represents a 10% increase over the Phase 1 findings.

2. Adoption of electronic remittance advice transactions is also higher. Data shows a current rate of 46% as compared to 26% in Phase 1.

3. Calculating the costs and potential savings associated with automation in healthcare has become increasingly complex, particularly as the lines get blurred between electronic and paper-driven offices.

4. Cost savings must be addressed at the system level. Approaching the problem as a systemic issue is critical to help avoid the continual cost shift that has plagued healthcare for so long.

5. Meaningful Use requirements are expected to drive further adoption of claims and eligibility transactions, assuming the requirements remain intact in the final rules. In general, the inclusion of revenue cycle transactions as a part of Meaningful Use illustrates the convergence of clinical and financial information which is an important trend in health information exchange.

6. The recent passage of landmark healthcare reform legislation brings significant gains in the area of administrative simplification by adding covered transactions like e-payment and requiring greater standardization and operating rules. This new policy will play an important role in eliminating many of the old barriers to adoption.

7. Implementation of healthcare reform will be a long and complex process. It will be important for all stakeholders to stay involved and ensure that their needs and concerns are reflected in the rules and regulations to be written in coming years.

8. Change is hard, but for the nation's healthcare system, not changing will be much harder. With Medicare Trust Fund Reserves expected to be exhausted in less than 10 years (2017), and 41 states facing mid-year budget shortfalls, it is critical to capture tangible savings today wherever possible.

Why failure ***is not*** an option:

Medicare

Based on its most recent report in 2009, Medicare's Hospital Insurance (HI) Trust Fund is expected to pay out more in hospital benefits and other expenditures than it received in taxes and other dedicated revenues. Growing annual deficits are projected to exhaust reserves in 2017. (From the *SUMMARY OF THE 2009 ANNUAL REPORTS*, Social Security and Medicare Boards of Trustees)

Medicaid

Mid-way through state fiscal year 2010, the effects of the economic recession (rising unemployment, sharp declines in revenues, higher demands for public programs, including Medicaid) continue to plague states… 41 states are facing mid-year budget shortfalls for fiscal year 2010 that could total $35 billion. Looking to 2011, states estimate a budget gap of $102 billion but could grow to $180 billion as revenues continue to decline. (From the Kaiser Commission on Medicaid & the Uninsured, Feb. 2010)

The U.S. Healthcare Efficiency Index:
Measuring the Value of Change

Good business does not tolerate billions of dollars in waste each year. No successful company ignores tens of billions in unrealized cost savings. Yet every year, the U.S. healthcare system throws away an estimated $30 billion due to inefficient paper and manual processes that affect us all – whether we are healthcare providers, health insurers, employers, consumers or simply citizens who pay taxes.

"...moving to electronic funds transfer could save

While consumers receive paychecks through direct deposit, pay bills online and download movies on laptops, our healthcare system struggles to automate even the most basic business functions – like making payments to providers. Just eliminating paper checks in healthcare and moving to electronic funds transfer (EFT) could save $11 billion a year.

Over the past year, the USHEI has helped raise awareness and facilitate dialogue on billions of dollars in unrealized savings from five of the most basic business transactions in healthcare: eligibility, claim submission, claim status, payment and remittance advice. The dialogue could not have been more timely. Shortly after the launch of the USHEI, Congress enacted the American Reinvestment and Recovery Act (ARRA) of 2009 with a $20 billion provision to "modernize health information technology systems."

Soon, five different Congressional Committees began drafting healthcare reform bills. These eventually merged into the Senate and House bills which ultimately led to the historic passage of H.R. 3590, the Patient Protection and Affordable Health Care Act and H.R. 4872, the Health Care & Education Affordability Reconciliation Act of 2010. Data from the USHEI helped inform policy makers who crafted the administrative simplification provisions that were included in all five of the original bills and the final legislation that is now signed into law. These provisions enjoy broad bipartisan support and were scored favorably the Congressional Budget Office (CBO) as measurable cost savings for the Medicare and Medicaid programs over the next 10 years.

The USHEI was convened as an industry forum under the guidance of an Advisory Council made up of a cross-section of healthcare thought leaders. They represent a broad range of disciplines and ensure the data from the USHEI continues to inform the broader healthcare debate. In particular, Council members have emphasized the value of creating and maintaining a central repository to inform policy development and track the impact of new policies on electronic adoption and cost savings.

Why is Healthcare So Far Behind?
When Simplification Is Not So Simple

Aren't billing and payment transactions already electronic? Didn't HIPAA simplify administrative aspects of healthcare years ago?

These are common misperceptions about the business side of healthcare. Efforts to eliminate paper transactions and employ automation and electronic solutions for administration and payment functions began in the 1980s. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) addressed administrative simplification, and early on, many hoped this would provide the mandated framework necessary to unify the system in transition to automation. HIPAA regulations provided a basic level of specifications, but no detailed operating rules, leading to significant operational variances from payer to payer that have hindered the transition to a fully electronic system.

"...address these  barriers..."

These variances burden payers and providers alike with reconciling inconsistent formats. This can lead to significant rework or work-around processes, particularly for providers. In addition, industry-wide inconsistency makes it almost impossible to create interoperable systems, further exacerbating the inefficiency. This patchwork of systems that cannot communicate with one another is a far cry from the seamless automation envisioned when HIPAA was first enacted.

The Administrative Simplification provisions of the healthcare reform legislation are designed to address these barriers by accelerating the standardization of transactions and solidifying a set of operating rules that will eliminate these kinds of inconsistencies.

Unfortunately, the barriers – and the associated waste – have not made the headlines in the healthcare reform debate. Not surprisingly, they are often overshadowed by clinical concerns or political controversies. With passage of the ARRA, electronic health records (EHRs) and Meaningful Use criteria remain on center stage, with a promise to deliver significant improvements in quality and efficiency – but only after a long and complex implementation period.

The point of this report – and the USHEI itself – is to focus on immediate and tangible savings available through administrative simplification and encourage stakeholder participation in the process as regulations, standards and operating rules are defined and barriers come down.

USHEI Phases 1 & 2:
Data Collection Methods and Findings

This report represents a snapshot of the progress of the USHEI to date. Phase 1, launched in December 2008, focused on analyzing industry data available through research reports and other sources. Phase 1 included five basic medical claims-related transactions that take place between payers and providers: Claims Submission, Eligibility Verification, Claim Status, Claim Payment and Remittance Advice. Details of Phase 1 findings and methodology are included in the Appendix of this report.

Phase 2, launched in the summer of 2009, marked the beginning of primary data collection, beginning with major healthcare payers. To facilitate the data collection process, the USHEI team spent several months developing the National Data Collection Center which allowed participants to self-report transaction data through a secure, password protected web portal. Non-identifiable data was sent to statisticians at Scheuren – Ruffner, where it was aggregated and analyzed.

"...the needle is moving toward greater electronic adoption."

The Advisory Council, under the guidance of the statisticians, worked to develop a data collection methodology which would then be tested using a smaller sample of payers and transactions. Once the analysis is completed on the small sample, outreach will begin to the entire payer community to complete data collection, and analysis on the remaining transactions will be completed.

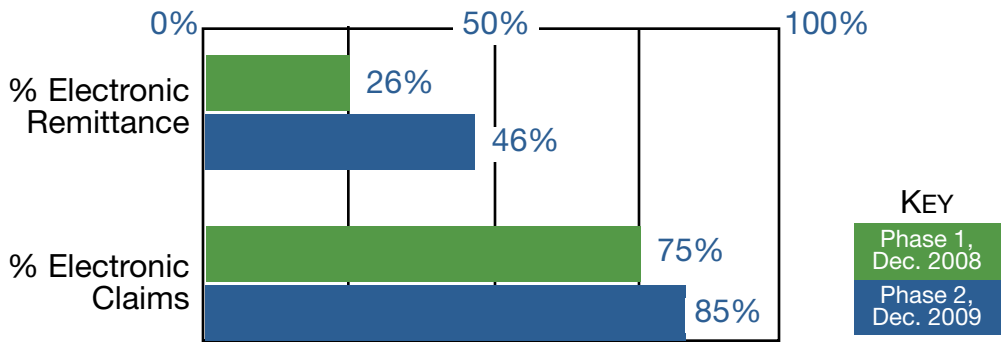
Phase 2 Sample

The findings in this report are based on a sample of 113 payers, including two large national payers and over 100 medium and small regional payers which are estimated to represent 122 million covered lives or about 40 percent of the U.S. population. To date, analysis has been completed on two of the five original data transactions: Claim Submission and Remittance Advice.

Moving the Needle

Based on current data collected from the payers in the sample, the needle is moving toward greater electronic adoption. Electronic Claims Submission increased from 75% in Phase 1 to 85% during Phase 2. Use of the Electronic Remittance Advice transaction also increased from 26% in Phase 1 to 46% in Phase 2.

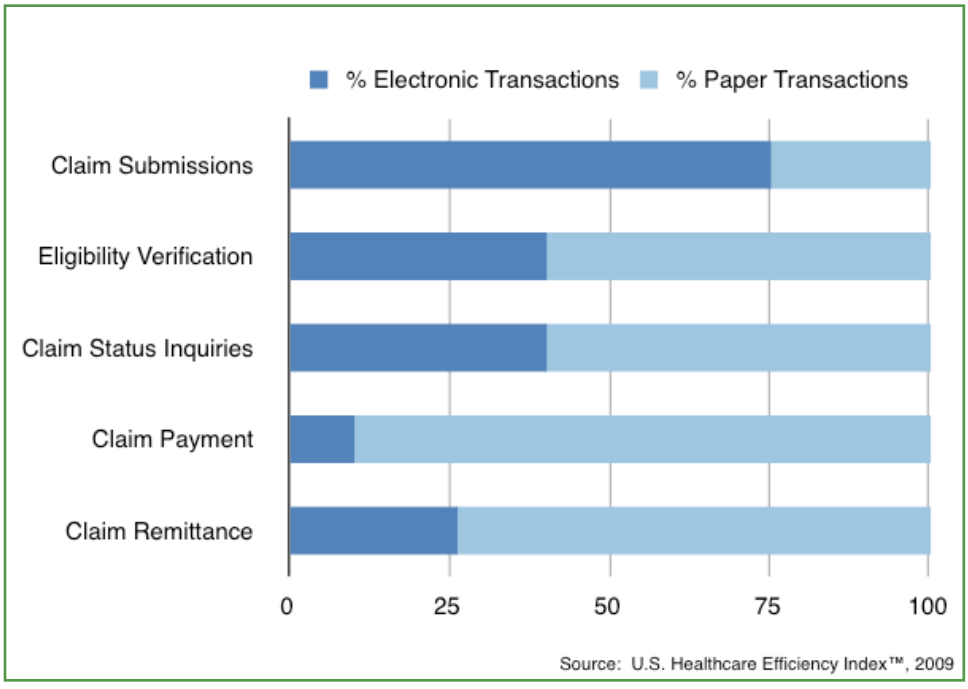
Comparison of Remittance & Claims Data from Phases 1 & 2



Significance of Findings

While work continues to expand the data set and analysis, the findings are significant in a number of important ways. First, they represent a new baseline for tracking progress. Second, they represent the successful testing and validation of the data collection methodology which can now be scaled up for the complete set of payers and then beyond to other healthcare stakeholders. Finally and most importantly, they confirm that electronic adoption is trending upward, however opportunities for significant savings still exist.

Phase 1 revealed ***a $30 billion opportunity*** *industrywide*.



complete details on page 19 of this report

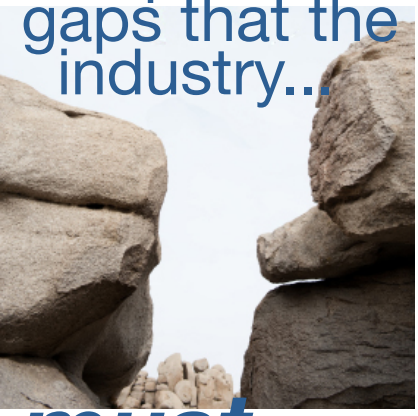
Gaps in the Industry:
Lessons Learned in Year One

In its first year, the USHEI brought important insights on adoption trends, but it also highlighted some important gaps that the industry must address if true efficiency is to be achieved.

1. Transparency on costs is vital to the nation's economy.
Healthcare cost transparency is minimal at best. The same inconsistencies that hinder adoption of electronic transactions also make it difficult to measure costs and potential savings.

- What tasks or expenses contribute to administrative costs?
- How do they differ among stakeholders in the workflow (payers, providers, etc.)?
- Which ones can be measurably reduced or eliminated through automation?

"...important gaps that the industry...



must address..."

These questions make it more challenging to gather and standardize the data. Individual payers, for example, define and measure EDI savings quite differently. For the purposes of this report, the Advisory Council opted to use existing industry savings per transaction as quantified by Milliman and other industry researchers. The newest USHEI data focuses on transaction volumes and shows the corresponding impact on savings as adoption levels increase. Ultimately, the healthcare sector must do a much better job at identifying and quantifying costs and potential savings – and in standardizing the way in which costs are measured and reported. Only then can we achieve true transparency and eliminate waste.

Given the large percentage of the U.S. gross domestic product (GDP) devoted to healthcare, cost transparency is vital to the strength of the national economy. Certainly, the USHEI can play a role in achieving cost transparency. The Advisory Council has already spent a great deal of time evaluating the factors that impact the costs for the five transactions tracked by the USHEI, which leads to the second lesson from Year One..

2. The lines are blurring between manual and electronic processing.
Increasingly, the lines between manual and electronic processes are being blurred. Rarely is a provider practice purely manual or purely electronic. A provider's place along the continuum can vary greatly, and therefore, so can the savings from automation. In order to identify and remove costs associated with manual processes, it is important to see all of the components of those processes.

Recently, Milliman, Inc. prepared a transaction analysis (to follow) that breaks down each administrative transaction into a finite set of tasks. The Index Advisory Council is using this information to further examine cost drivers and refine its methods for measuring cost savings.

Transaction	Tasks: Manual/Non-Electronic	Tasks: Electronic
Eligibility Verification (270/271)	**Staffed Telephone Response** 1. Provider services representative answers phone call 2. Provider gives information regarding proof of identity and member identifying information to provider services representative 3. Representative looks up eligibility information on system 4. Representative provides eligibility status **Automated Telephone Response** 1. Plan phone system receives, routes provider call 2. Provider inputs provider and patient identification information 3. Provider receives automated voice response on eligibility status **Fax** 1. Health plan receives fax in automated queue 2. Provider services representative retrieves fax from queue 3. Representative looks up eligibility information on system 4. Representative generates reply fax back from System	1. Plan IT system receives request and patient information electronically, either through direct data entry or through batch file 2. System certifies requester as approved 3. System determines eligibility status 4. System responds with requested eligibility information using the same modality as the inquiry
Claim Receipt (837)	1. Mailroom receives, scans and bundles claims 2. Scanned claims are either: a. Processed and verified with Optical Character Recognition; or b. Entered in to system by a claim processor 3. Claims are automatically screened for required information 4. System rejects claims not meeting standards (i.e. duplicates, missing information, untimely filing, etc.) and generates rejection report 5. Rejection report merged with postage paid and addressed envelopes and mailed to providers 6. Claim system automatically adjudicates remaining claims or suspends claim for manual review if automatic adjudication is not possible 7. Claim processor manually adjudicates pended claims on IT system 8. Adjudicated claim results forwarded in system for payment processing	1. Plan IT system receives claims electronically, either through direct data entry or batch file 2. System performs initial claim screens and either accepts claims for processing or notifies senders of rejection status 3. Claim system automatically adjudicates remaining claims or suspends claims for manual review if automatic adjudication is not possible 4. Claim processor manually adjudicates pended claims on IT system 5. Adjudicated claim results forwarded in system for payment processing

Claim Status Inquiry (276/277)	**Staffed Telephone Response** 1. Provider services representative answers phone calls 2. Providers give claim information to the provider representative 3. Provider representative verifies requesters are approved for information 4. Representative looks up claim status information on system 5. Representative provides status i information to callers **Automated Telephone Response** 1. Plan phone system receives and routes provider calls 2. Providers input provider and claim identification information by phone 3. Providers receive automated voice responses on claim status	1. Plan IT system receives requests electronically, either in batch file or DDE 2. System verifies requesters as approved for information as part of accepting the request 3. System responds with claim status information using the same modality as the inquiry
Remittance Advice/ Explanation of Payment (835)	1. Information system prints Explanation of Payments (EOPs) based on processed claims 2. System prints stamped addressed envelopes to match EOPs 3. EOPs stuffed into envelopes using automated equipment 4. EOPs mailed to providers through US Postal Service	1. System generates electronic Explanation of Payment notices based on processed claims 2. Notices transmitted to providers electronically either as secure message or batch file
Payment	1. Information system prints checks as part of EOP printing 2. Checks included with EOP mailings	1. Information system initiates fund transfers between payer and provider financial institutions

As the table illustrates, the “manual” transactions may involve use of websites and electronic processing, and the “electronic” transactions may involve certain manual processes like data entry. Distinguishing the cost differences between the two is becoming more difficult as the lines continue to blur. Analyzing the components of each transaction can help stakeholders streamline, standardize and enhance the value of the transactions.

3. The industry must address systemic costs.

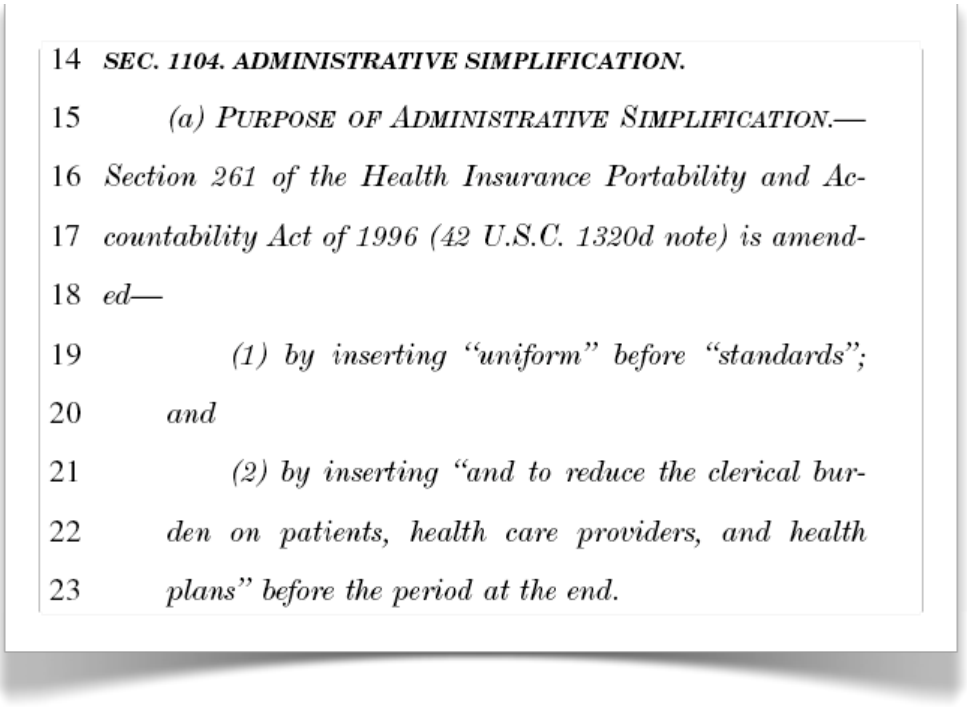
Measuring efficiency is important to all stakeholders in the healthcare system—providers, payers of all types, as well as patients. As more costs and more health decisions are shifted to consumers, we must improve how market participants interact in order to achieve efficiencies. Taking cues from other industries, we must remove barriers in the system to simplify the communications process and ensure the right information gets to the right place at the right time. The FedEx online tracking system is a great example, allowing customers to track the progress of a package quickly and easily without making a phone call. Customers like the convenience, and costs have been permanently been removed from the system.

4. Efficiency is a journey, not a destination: driving transaction value.
Undoubtedly, efficiency is a journey, not a destination. The rate of electronic adoption is directly linked to the value perceived by the adopter. While some early adopters may be motivated by being "the first", most adopters are motivated by perceived value, such as achieving quality, efficiency or avoiding penalties.

For example, a physician in a small medical practice may choose not to spend money to automate eligibility because manual telephone calls can get the job done. However, if that same provider could get real-time clinical data (like the status of preventive health services) through an enhanced eligibility transaction, the perceived value goes up significantly.

Increasingly, these standard transactions are being viewed as platforms through which other valuable services like clinical messaging can be delivered. This also points to the increasing convergence of clinical and financial information exchange.

Section 1104 of H.R. 3590 addresses ***administrative simplification*** *industrywide*.



SEC. 1104. ADMINISTRATIVE SIMPLIFICATION.

(a) PURPOSE OF ADMINISTRATIVE SIMPLIFICATION.—Section 261 of the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. 1320d note) is amended—

(1) by inserting "uniform" before "standards"; and

(2) by inserting "and to reduce the clerical burden on patients, health care providers, and health plans" before the period at the end.

The Journey Continues:
Where Do We Go From Here?

The USHEI is moving forward in Phase 2 with its increasingly robust and comprehensive data collection and analysis, as well as preparing for later phases to address efficiencies in pharmacy safety and adherence. Phase 2 started with a small sample but can now be scaled up to include all major payers through outreach and partnership with America's Health Insurance Plans (AHIP) and other organizations.

Over time, the network of contributors will expand. Providers—physicians and hospitals, as well as clearinghouses, will begin to contribute their data as the Index expands. More diverse participants and detailed data will provide increasingly accurate and precise information to drive policy and decisions on investment in HIT.

Phase 3 of the USHEI is focused on pharmacy-related data. Prescription medicine has an immense impact on the health of the population. Automation of pharmacy transactions can help ensure dosage accuracy, manage drug interactions and improve compliance with prescription directions and medicine use. By exploring efficiency within the pharmacy sector, we can not only quantify potential cost savings but also identify opportunities to enhance quality of care and patient safety. Development of the U.S. Pharmacy Efficiency and Adherence Index® is underway and is scheduled to launch by early 2011.

Finally, as implementation of healthcare reform and the HITECH Act get underway and more dollars are invested in HIT, it will be more important than ever to track progress on adoption and savings associated with electronic transactions. As new contributors and data are added to the USHEI, adoption rates can be compared over a period of years, industry-wide, using a consistent methodology. This information will help show both the short-term and long-term impact of these policies on overall healthcare efficiency.

Just Do It:
The Opportunity for Efficiency is Here

By Stanley Nachimson
Principal
Nachimson Associates

The U.S. Congress has realized the opportunity that is available through increasing the rates of electronic transactions in this country. In the Patient Protections and Affordable Care Act, there were significant changes and additions to the original HIPAA requirements. Many of these involve the initiatives that the USHEI is measuring. All will encourage providers and payers to expand their use of electronic data interchange (EDI) and make the process more efficient for the industry.

The Act requires the adoption of standards for electronic funds transfer (EFT), a unique health plan identifier, and claims attachments. It establishes a process for updating standards every two years, enabling a regular and predictable cycle of updates for vendors, providers and payers. And it requires health plans to certify that they meet all of the required standards or face financial penalties.

There are already a large number of initiatives that vendors, payers, and providers must address in the foreseeable future, such as Incentives for Meaningful Use of EHRs, 5010, ICD-10, Health Information Exchanges, personal health records and others. These mandates provide opportunities but further complicate the picture.

Where will the money come from to implement all of these HIT initiatives?

The USHEI project has identified a considerable source of savings from using electronic administrative transactions. This money can be accessed directly by providers and payers by implementing the transactions. No forms to fill out, no data to report. The government regulations are already in place.

The products have been developed. The opportunity is here.

Just do it.

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Appendix

Phase 1 Findings & Methodology:
Details, Data Collection and Analysis

The USHEI Phase 1 findings in December 2008 were as follows.

Cost Detail

Claims:
Presently 75% electronic utilization
Provider cost savings electronic vs. paper: $3.73
Payer cost savings electronic vs. paper: $0.73

Eligibility:
Presently 40% electronic utilization
Provider cost savings electronic vs. paper: $2.95
Payer cost savings electronic vs. paper: $1.38

Claim Status:
Presently 40% electronic utilization
Provider cost savings electronic vs. paper: $3.33
Payer cost savings electronic vs. paper: $2.56

Claim Payment:
Presently 10% electronic utilization
Cumulative Provider and Payer cost savings electronic vs. paper: $4.80

Claim Remittance:
Presently 26% electronic utilization
Provider cost savings electronic vs. paper: $1.49

TOTAL:
Total unrealized industry savings: $29,718,502,500
Present transaction types by percentage: 57% paper / 43% electronic

Calculation Detail
The data used to populate the USHEI in Phase 1 calculated based on an extensive search and review of trusted industry sources. For each transaction type, a list of sources is provided below.

Claims

Source: *Claims Attachments Regulation: Federal Register 45 CFR Part 162*, Published: September 23, 2005

Source: *2006 AHIP Report: An Updated Survey of Health Care Claims Receipt and Processing Times*, May 2006
Provider cost savings electronic vs. paper: $3.73

Source: *Electronic Transaction Savings Opportunities for Physician Practices*, Milliman, January 2006
Payer cost savings electronic vs. paper: $0.73

Source: *2006 AHIP Report: An Updated Survey of Health Care Claims Receipt and Processing Times*, May 2006

Eligibility

Source: *Overhauling the US Healthcare Payment System*, The McKinsey Quarterly, June 2007
Provider cost savings electronic vs. paper: $2.95

Source: *Electronic Transaction Savings Opportunities for Physician Practices*, Milliman, January 2006
Payer cost savings electronic vs. paper: $1.38

Source: *CAQH CORE Study Shows Health Plans, Providers Could Cut Labor Costs Through Automated Insurance Verification*, CAQH, April 18, 2007

Claim Status

Source: *Overhauling the US Healthcare Payment System*, The McKinsey Quarterly, June 2007
Provider cost savings electronic vs. paper: $3.33

Source: *Electronic Transaction Savings Opportunities for Physician Practices*, Milliman, January 2006
Payer cost savings electronic vs. paper: $2.56

Source: *Version 5010 Regulatory Impact Analysis – Supplement September*, 2008, Gartner, Inc.

Claim Payment

Cumulative Provider and Payer cost savings electronic vs. paper: $4.80

Source: *Overhauling the US Healthcare Payment System*, The McKinsey Quarterly, June 2007

Source: *Overhauling the US Healthcare Payment System*, The McKinsey Quarterly, June 2007

Source: Ingenix Press Release, *"Ingenix Launches Exante Electronic Payments and Statements to Spur Health Care to go Electronic"*, Wednesday, June 20, 2007

Source: Survey of public domain literature. Estimates of electronic payment utilization varied widely and were not well substantiated. Phase 1 assumed a utilization rate of 10% based on frequency of citation and consistency with a known sample of Emdeon payer data (October 2008).

Claim Remittance

Source: Emdeon internal analysis of electronic claims and matched ERA data, October 2008.
Provider cost savings electronic vs. paper: $1.49

Source: *Electronic Transaction Savings Opportunities for Physician Practices*, Milliman, January 2006

Payer cost savings electronic vs. paper: data not available.