



**CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE**

July 25, 2006

**H.R. 4157
Health Information Technology Promotion Act of 2006**

*As ordered reported by the House Committee on Ways and Means
on June 15, 2006*

SUMMARY

H.R. 4157 would amend the Public Health Service Act (PHSA) to codify the establishment and responsibilities of the Office of the National Coordinator for Health Information Technology (ONCHIT). In addition, the bill would modify the Social Security Act to:

- Establish “safe harbors” that would permit gifts of health information technology that might otherwise be subject to civil monetary penalties, criminal penalties, or sanctions for violating the prohibitions against certain types of inducements for physician referrals; and
- Specify procedures for adopting updated standards for the electronic exchange of health data, and require that certain updated standards for coding medical services be implemented in 2009.

The amendments to the PHSA and the deadline for updated standards for coding medical services would affect spending subject to appropriation. Assuming appropriation of the necessary amounts, CBO estimates that implementing the bill would increase discretionary spending by \$658 million over the 2007-2011 period and reduce such spending by \$150 million over the succeeding five years.

Enacting the deadline for updated standards for coding medical services and the safe-harbor provisions would affect direct spending. CBO estimates those provisions would increase direct spending by \$180 million over the 2007-2011 period and by \$80 million during the following five years.

CBO estimates that enacting the deadline for updated standards for coding medical services would reduce federal revenues by \$26 million over the 2007-2011 period, and would increase federal revenues by \$84 million over the succeeding five years. Social Security payroll taxes, which are off-budget, account for about one-third of those amounts.

H.R. 4157 would preempt, in some circumstances, certain state laws that govern the security and confidentiality of health information as well as laws that establish civil or criminal penalties for exchanging health information technology. Because those preemptions would limit the application of state laws, they would be intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA). CBO estimates that the costs of the mandates to states would be minimal and would not exceed the threshold established in UMRA (\$64 million in 2006, adjusted annually for inflation).

Other provisions of the bill, notably new coding requirements and the safe-harbor provisions for gifts of information technology, would affect states' spending, adding about \$200 million to their costs over the 2007-2011 period. However, those provisions would not be intergovernmental mandates as defined in UMRA.

The bill would impose private-sector mandates on health plans, providers, and clearing houses by requiring them to adopt updated coding and transaction standards by specified future dates. CBO estimates that the direct cost of these provisions would exceed the threshold specified in UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation) in the first three years following enactment of the bill.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated cost of H.R. 4157 is shown in the following table. The costs of this legislation fall within budget functions 550 (health) and 570 (Medicare).

ESTIMATED BUDGETARY EFFECTS OF H.R. 4157

By Fiscal Year, in Millions of Dollars

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2007- 2007-
2011 2016

CHANGES IN SPENDING SUBJECT TO APPROPRIATION

ONCHIT

Estimated Authorization Level	116	119	122	125	0	0	0	0	0	0	482	482
Estimated Outlays	58	94	114	121	61	24	5	1	0	0	448	478

Medicare

Estimated Authorization Level	0	200	25	25	-200	-20	0	0	0	0	50	30
Estimated Outlays	0	50	75	75	10	-70	-70	-40	0	0	210	30

Total, Changes in Discretionary Spending

Estimated Authorization level	116	319	147	150	-200	-20	0	0	0	0	532	512
Estimated Outlays	58	144	189	196	71	-46	-65	-39	0	0	658	508

CHANGES IN DIRECT SPENDING

Medicaid, Safe Harbors	10	15	15	15	20	20	20	25	25	25	75	190
Medicare, Safe Harbors	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>75</u>	<u>170</u>
Subtotal, Safe Harbors	25	30	30	30	35	35	40	45	45	45	150	360

Medicaid, ICD-10	5	20	25	5	-25	-40	-30	-25	-20	-15	30	-100
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Total, Changes in Direct Spending (Budget Authority and Outlays)	30	50	55	35	10	-5	10	20	25	30	180	260
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CHANGES IN REVENUE

Income and HI Payroll Taxes (on budget)	-2	-10	-14	-2	12	19	13	10	7	6	-16	39
Social Security Payroll Taxes (off-budget)	<u>-1</u>	<u>-6</u>	<u>-8</u>	<u>-1</u>	<u>6</u>	<u>10</u>	<u>7</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>-10</u>	<u>19</u>
Total, Changes in Revenue	-3	-16	-22	-3	18	29	20	15	11	9	-26	58

Notes: ICD-10 = 10th revision of the International Classification of Diseases; HI = Hospital Insurance (Part A of Medicare); ONCHIT = Office of the National Coordinator for Health Information Technology.

* = Increase or decrease of less than \$500,000.

BASIS OF ESTIMATE

H.R. 4157 would amend the Public Health Service Act to codify the establishment and responsibilities of the Office of the National Coordinator for Health Information Technology, establish safe harbors for gifts of health information technology, and specify procedures and establish deadlines for adopting updated standards for the electronic exchange of health data.

Health Information Technology and Quality

On April 27, 2004, the President issued Executive Order 13335, which established within the Office of the Secretary of Health and Human Services the position of National Coordinator of Health Information Technology. The Secretary subsequently established the Office of the National Coordinator of Health Information Technology to support the adoption of interoperable health information technology. Funding for ONCHIT totaled \$62 million for 2006: \$43 million was appropriated to the office, and \$19 million was reprogrammed from other activities. The President requested \$116 million for ONCHIT for 2007.

The National Coordinator for Health Information Technology serves as the senior advisor to the President and the Secretary of Health and Human Services on all health information technology programs and initiatives, and is responsible for:

- Developing and maintaining a strategic plan to guide the nationwide implementation of electronic health records in both the public and private health care sectors;
- Coordinating spending by federal agencies for health information technology programs and initiatives; and
- Coordinating outreach activities to the private sector on health information technology matters.

H.R. 4157 would codify the establishment and responsibilities of ONCHIT. The bill would require the Secretary to prepare reports on certain activities initiated pursuant to the executive order to promote the development of a nationwide health information network and on issues related to the development, operation, and implementation of state, regional, and community organizations that share and coordinate the deployment and use of health information technology (so-called health information exchanges).

The bill would authorize the appropriation for 2006 through 2010 of such sums as are necessary to conduct ONCHIT's activities. Based on information provided by the the Department of Health and Human Services (HHS), CBO estimates that funding the authorized activities would require the appropriation of about \$116 million in 2007 and that funding requirements would grow with inflation in subsequent years. Assuming appropriation of those amounts, CBO estimates that ONCHIT's activities would cost \$58 million in 2007, \$448 million over the 2007-2011 period, and \$478 million over the 2007-2016 period.

Safe Harbors for Gifts of Health Information Technology

H.R. 4157 would establish "safe harbors" for donations of health information technology that might otherwise be subject to civil monetary penalties, criminal penalties, or sanctions for violating the prohibitions on certain physician referrals. The bill would permit any entity to provide health information technology (hardware, software, or related services) to physicians. CBO estimates that provision would increase direct spending by \$25 million in 2007, \$150 million over the 2007-2011 period, and \$360 million over the 2007-2016 period; federal spending for Medicaid and Medicare would each account for about half of those increases.

The Administration has identified the current application of those penalties and sanctions as an impediment to the success of efforts to promote the widespread adoption of interoperable health information technology. Accordingly, the HHS Office of the Inspector General and the Centers for Medicare & Medicaid Services (CMS), under authority existing in current law, are engaged in a rule-making process to establish safe harbors for gifts of health information technology that would balance enforcement of program-integrity rules with promotion of the adoption of interoperable health information technology. In the preliminary stage of the rule-making process, those offices described a framework that would limit:

- Entities eligible for the safe harbor (a hospital may donate to members of its medical staff; a group practice may donate to physicians who are members of the group practice; and Medicare Advantage plans and prescription drug plans may donate to their prescribing physicians), and
- Eligible donations (software and related training).

It is likely that the final rules will specify a somewhat broader set of eligible entities and donations than the preliminary guidelines. In particular, we anticipate that hospitals and group practices will be allowed to donate to a broader set of physicians and that the eligible gifts will include some equipment.

However, CBO expects that, based on concerns about program integrity, the final rules will establish a set of eligible entities that is narrower than those specified in the bill. Thus, clinical laboratories, imaging centers, suppliers of durable medical equipment, pharmaceutical manufacturers, and other entities that probably will not be eligible for the safe harbor under current law would qualify under the bill. Although the legislation would prohibit the contract between the donor and the physician from including a condition that links the gift of technology to the volume or value of referrals to the donor, CBO expects that, in some cases, that condition would be implicit (or would be perceived by the physician as being implicit). To the extent that a gift might lead to a shift of business from one provider to another, such a development would not affect the cost of the government's health care programs. But CBO

estimates that, in aggregate, such donations by entities other than hospitals, group practices, Medicare Advantage plans, and prescription drug plans would lead to an increase in the volume of services that Medicare and state Medicaid programs pay for, thus increasing costs.

Information furnished by CMS, the HHS Inspector General, and the Department of Justice indicates that some physicians who receive gifts of value from suppliers substantially increase the volume of services they order. CBO's estimate assumes that the number of physicians inclined to do so is quite small—less than 1 percent of practicing physicians. Moreover, CBO expects that many of those physicians would not receive donations of technology from donors who would be covered by the safe harbors under H.R. 4157 but not covered under current law. Accordingly, CBO's estimate of the additional direct spending for Medicare and Medicaid represents an increase in spending for services furnished by the newly-protected categories of donors of less than one-tenth of a percent. (Total federal spending for such services in those two programs is estimated to total about \$55 billion in 2006.)

Budgetary Effects of Health Information Technology

CBO expects that the use of information technology in the health care sector will continue to grow under current law, and that expanded use of such technology will likely produce improvements in the quality of the health care provided to U.S. residents. In some cases, that improvement in the quality of health care might mean less use of medical services; in other cases, it might mean an increase in utilization.

Under current law, CBO also expects that the expanded use of health information technology will likely result in increased efficiency in the health care system. That is, the use of information technology will result in more health benefits per dollar of spending than would otherwise be realized.

Experts caution, however, that the evidence is mixed concerning whether those improvements in quality and efficiency will also result in lower spending for health care, either in the private sector or for government programs.¹ In her recent testimony to the Senate Subcommittee on

1. See, for example:

Testimony of Carolyn Clancy, MD to the Subcommittee on Technology, Innovation and Competitiveness of the Senate Committee on Commerce, Science, and Transportation, June 21, 2006.
(http://commerce.senate.gov/public/_files/Clancy062106.pdf)

Clifford Goodman, "Savings In Electronic Medical Record Systems? Do It For The Quality", Health Affairs, Sept./Oct. 2005.
(<http://content.healthaffairs.org/cgi/content/full/24/5/1124>)

Technology, Innovation, and Competitiveness, Dr. Carolyn Clancy (Director of the Agency for Health Research and Quality) noted that, if poorly designed or implemented, health information technology will not bring those benefits, and in some cases may even lead to new medical errors and potential costs. She also noted that achieving improvements in health care and realizing potential cost savings will require real process change and will not result from simply acquiring and deploying hardware and software.

To the extent that health information technology will result in lower spending for health care, much of those savings would not be passed through as a reduction in direct spending for federal programs—particularly Medicare—under current law. For example, two areas account for much of the potential savings reported in the literature: reductions in the cost of care during a hospital stay, and administrative savings for providers and claims processors. Under current law, Medicare’s payment rates for hospital inpatient services are updated each year to reflect changes in general inflation rates, and do not reflect changes in the costs that hospitals incur (either for administrative activities or for providing health care services). Medicare might realize savings in the cost of processing claims. However, funding for Medicare’s claims-processing activities is subject to appropriation, so such savings could only be realized through the appropriations process.

In preparing an estimate of the budgetary effect of legislation involving health information technology, CBO focuses on the extent to which the bill would change the rate at which the use of health technology will grow or how well that technology will be designed and implemented under current law. CBO then evaluates the extent to which those changes, in conjunction with other provisions in current law and in the proposed legislation, would affect direct spending.

CBO estimates that enacting H.R. 4157 would not significantly affect either the rate at which the use of health technology will grow or how well that technology will be designed and implemented. Therefore, with the exception of the effects on spending described above, CBO estimates enacting the bill would have no effect on spending by the federal government.

Paul B. Ginsburg, Ph.D., “Controlling Health Care Costs”, *New England Journal of Medicine*, Oct 14, 2004.
(<http://content.nejm.org/cgi/content/full/351/16/1591>)

Jaan Sidorov, “It Ain’t Necessarily So: The Electronic Health Record And The Unlikely Prospect Of Reducing Health Care Costs”, *Health Affairs*, July/August 2006
(<http://content.healthaffairs.org/cgi/reprint/25/4/1079>)

James Walker, “Electronic Medical Records And Health Care Transformation”, *Health Affairs*, Sept./Oct. 2005.
(<http://content.healthaffairs.org/cgi/content/full/24/5/1118>)

Standards for the Electronic Exchange of Health Data

H.R. 4157 would require the Secretary of HHS to establish expedited procedures for adopting updates to standards that enable the electronic exchange of health data.

The bill would require that two sets of standards apply to certain health information transactions by April 1, 2009: the "X12" standards developed by the Accredited Standards Committee for electronic data interchange, and the updated telecommunication standards adopted by the National Council for Prescription Drug Programs. CBO estimates that implementing those provisions would not have a significant effect on federal spending.

In addition, the bill would require health plans, providers, and clearinghouses to adopt the 10th revision of the International Classification of Diseases (ICD-10) by October 1, 2009, for all services currently submitted for payment using codes specified in the 9th revision (ICD-9). Under current law, CBO expects that the ICD-10 standard will be adopted by the end of fiscal year 2012.

Providers and health plans will incur costs for moving to ICD-10 no matter when the transition occurs. Many providers and health plans will purchase or upgrade computer hardware and software to handle the new codes, which are longer and contain alphanumeric characters. In addition, there will be costs to train people to use the new codes, and reductions in productivity while they become familiar with the new system.

There also will be benefits of moving to ICD-10, although they are more difficult to estimate and are subject to greater uncertainty. The increased specificity and clinical detail of the new set of codes will reduce providers' and plans' costs. For example, the more accurate coding will lower processing costs through a reduction in the number of rejected claims that must be resubmitted. Also, the more detailed information included in the new codes may discourage improper or fraudulent claims, which would lower plans' costs. However, those savings will be relatively low in the first few years because error rates will be higher during an initial period of unfamiliarity with the new system, and new algorithms will need to be developed for detecting improper claims under the new system.

Other changes could occur under the ICD-10 system that might be beneficial to patients and result in better health outcomes, but would not necessarily lower (and might even raise) health care costs. For example, more accurate payments for new procedures that would be possible under the new coding system might result in newer and more appropriate procedures being performed than under the old system. Health plans' costs would decrease to the extent that less costly procedures were performed, but would increase to the extent that more or more costly procedures were performed.

CBO expects that implementing the ICD-10 system will result in costs to providers and health plans in the first few years, with benefits beginning later. The shift to an earlier implementation date under the bill would thus result in increased costs in the near term and subsequent savings that would be realized earlier than under current law. In addition, the reduced amount of time that providers and plans would have to adopt ICD-10 under the bill, combined with the transition to updated standards for claims and transactions that also will be occurring during that same time period, would increase costs as providers and health plans would have to compete for scarce resources such as programmers and consultants.

Estimated Effect on Federal Revenues. CBO estimates that the net effect of accelerating implementation of the ICD-10 system would be to increase the cost of private health care benefits and health insurance premiums in the near term, and decrease such costs in later years, compared to current law. The changes would be small—an increase of 0.03 percent in 2008, followed by an even smaller decrease in later years. Because health care benefits generally are excluded from taxable incomes, H.R. 4157 would reduce federal tax revenues in the near term by increasing the share of employee compensation furnished as tax-excluded health benefits rather than as taxable wages and salaries. That pattern would be reversed in subsequent years. CBO estimates that enacting H.R. 4157 would reduce federal revenues by \$3 million in 2007 and by \$26 million over the 2007-2011 period; it would increase revenues by \$58 million over the 2007-2016 period. Social Security payroll taxes, which are off-budget, account for about one-third of those amounts.

Estimated Effect on Direct Spending. The Medicaid program would be subject to a similar pattern of acceleration of both the costs of implementing the ICD-10 coding system and the subsequent realization of savings for health benefits. CBO estimates that provision would increase Medicaid spending by \$30 million over the 2007-2011 period, and would reduce spending for Medicaid by \$100 million over the 2007-2016 period.

CBO expects that accelerating the implementation of the ICD-10 coding system would not have a significant effect on direct spending for Medicare for two reasons. First, Medicare funding for processing claims—including the implementation and maintenance of claims-processing systems—is subject to appropriation. Second, under current law, the Medicare program recalibrates payment rates each year to ensure that coding changes are implemented on a budget-neutral basis.

Estimated Effect on Spending Subject to Appropriation. Medicare's spending to implement, operate, and maintain claims-processing systems—including the cost of transition to the ICD-10 system—is subject to appropriation. In general, accelerating implementation of the ICD-10 system would shift implementation costs from the 2012-2016 period into the 2008-2011 period. Assuming appropriation of the necessary amounts, CBO estimates that the

cost to Medicare of implementing the ICD-10 system in 2009 would be \$210 million over the 2007-2011 period and \$30 million over the 2007-2016 period.

ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS

H.R. 4157 would preempt, in some circumstances, certain state laws that govern the security and confidentiality of health information as well as laws that establish civil or criminal penalties for exchanging health information technology. Although those preemptions would be intergovernmental mandates as defined in UMRA, CBO estimates that the costs of the mandates would be small and thus would not exceed the threshold established in UMRA (\$64 million in 2006, adjusted annually for inflation).

The bill would direct the Secretary of HHS to conduct a study of the variation in state security and confidentiality laws, compare the range of those laws with existing federal standards, and make recommendations to the Congress for establishing greater commonality among laws. If the Congress takes no action within 18 months after receiving the recommendations, they would become regulations with the force of law. The regulations would supersede any state security or confidentiality laws that relate to but are different from those standards. CBO estimates that this preemption would not significantly affect the budgets of state, local, or tribal governments because it would impose no duty on those governments that would result in additional spending or a loss of revenues.

The bill also would change safe-harbor guidelines for the exchange of health information technology, and it would preempt state laws that would assess civil or criminal penalties on exchanges of information that the bill would allow. Although this preemption could affect the ability of states to assess penalties and collect revenues, CBO estimates that such losses would be small.

Other Impacts

The bill would require health plans, providers, and clearing houses to adopt revisions to medical coding requirements by 2009. State, local, and tribal governments are excluded from the definitions of those entities in ERISA, and thus would not be directly subject to the required changes if they operate their own health plans for employees. However, from a practical perspective, they would have to comply in order for their health plans to be able to communicate information to providers, hospitals, other health plans, and clearing houses. CBO estimates that employee health plans of those governments would incur additional expenses of about \$125 million over the 2007-2011 period in order to meet the 2009 deadline.

Those five-year costs are net of savings that would begin to accrue to governments in 2011. In that year, savings are estimated to total about \$20 million.

The Medicaid program also would be subject to the new deadline, but because states have significant flexibility in that program to alter their programmatic and financial responsibilities to meet the new requirement, the change would not be an intergovernmental mandate as defined in UMRA. CBO estimates that state spending would increase by about \$20 million over the 2007-2011 period in order to meet the new coding deadline for Medicaid programs. Again, those five-year costs are net of savings that would begin to accrue in 2011.

The safe-harbor provisions would result in additional spending by states for Medicaid totaling about \$55 million over the 2007-2011 period, CBO estimates.

ESTIMATED IMPACT ON THE PRIVATE SECTOR

The bill would impose private-sector mandates on health plans, providers, and clearing houses by requiring them to adopt updated coding and transaction standards by specified future dates. CBO estimates that the direct cost of these mandates would exceed the threshold specified in UMRA (\$128 million in 2006, adjusted annually for inflation) in each of the first three years following enactment of the bill.

First, the bill would require the adoption of the 10th revision of the International Classification of Diseases (ICD-10) by October 1, 2009. Under current law, CBO expects that those updated standards will be adopted by the end of fiscal year 2012. CBO estimates the direct cost to the mandated entities would be \$320 million in 2007, \$470 million in 2008, \$490 million in 2009, and \$70 million in 2010. The new requirement would result in direct savings of \$330 million in 2011 (and additional amounts in later years) because a significant part of the adoption costs would be shifted to the earlier years under the bill.

Second, the bill would require the adoption of updated standards for claims transactions by April 1, 2009. Specifically, health plans, providers, and clearing houses would be required to adopt updated versions of the Accredited Standards Committee X12 standards and the National Council for Prescription Drug Programs Telecommunication Standards. CBO expects that the deadline specified in the bill would be met under current law. Thus, the mandate would impose no additional costs on the mandated entities.

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