To:	Third Way
From:	Actuarial Research Corporation
Subject:	Final Scoring Memo: EHRs
Date:	March 17, 2015

Policy Background

Background information on the policy issue is described below and comes from Third Way's analysis of estimated budgetary savings from portable electronic health records offered through a system of personal health records.[1]

> After more than a decade of effort, no one in the country has a complete and comprehensive electronic health record (EHR). Instead, individual health information is stored in various places. Even though records are increasingly digitized, they are seldom being integrated. As of 2013, 39% of physicians reported electronically sharing data with other providers, however only 14% shared data with providers or hospitals outside of their organization.
>
> Unlike today's provider-based electronic health records, a portable EHR would consist of a data from all available sources ranging from doctors' offices to hospitals to health plans. The data would be collected into personal health record from a centralized source, which is often called a health record bank or from a decentralized source like a health information exchange, which assembles data as needed from multiple sources. Both kinds of systems would offer patients an account so they have access to their own records. These personal health record systems could serve a specific community, health plan, or provider group, but all of their patient records would have to be portable so patients could transfer them to the personal health record system of their choice.

This analysis looks at extending the EHR policy to the under 65 population. Modeling specifications for expanding Medicare policies to the under 65 population are from Third Way.[2]

> For Medicaid, states would be required to adopt the same policy as Medicare. For people not in Medicare of Medicaid, the incentives for health plans to offer a personal health care record should be strong enough to create information exchanges without further public investment. But, if needed, Congress could guarantee all Americans access to a personal health record by including it as part of the essential benefits package.

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[1] D. Kendall email communication "Further specifications for electronic health record proposal," February 20, 2015. Attachment: "ARC Draft Scoring Memo EHR 2015 2-17 dk edits.doc."
[2] D. Kendall email communication "Further specifications for electronic health record proposal," February 20, 2015. Attachment: "ARC Draft Scoring Memo EHR 2015 2-17 dk edits.doc."

The estimates of projected savings as a result of extending the EHR policy to the under 65 population are shown in Table 1. In summary, projected savings to Medicare total $34.0 billion, projected savings to Medicaid total $14.5 billion, projected savings to PHI total $37.1 billion and projected out-of-pocket (OOP) savings total $12.2 billion over the 10-year period (2015-2024). Total projected savings including Medicare, Medicaid, PHI and OOP total $97.9 billion. We also estimated the portion of Medicaid savings by the federal government and by states using the average Federal Medical Assistance Percentage (FMAP) for states in FY2015 (59%).[3] Of the $14.5 billion in savings to Medicaid, the federal share is $8.6 billion and the state share is $5.9 billion.

Estimation Process and Results

The estimation process for distributing Medicare savings is based off of the methodology used in Third Way's model.[4] Non-Medicare savings are allocated across Medicaid, PHI and OOP based on these payers relative shares of NHE, including those three payers. Details on the estimation process and any additional assumptions and deviations made are described below.

Taking the total national health expenditure savings[5] from selected benefits, we partition the savings to Medicare, Medicaid, PHI, and OOP. The areas for generating savings included in the analysis are sharing complete test results, congestive heart failure (CHF) remote monitoring, medication renewals, pre-encounter questionnaires and e-visits.[6]

We used Medicare's portion of projected national health expenditures in 2015 (20%) to distribute savings to Medicare for sharing complete test results. The remaining savings are distributed to Medicaid, PHI and OOP based on those payers relative shares of NHE, including those three payers. The estimates of projected aggregate spending by payer are derived from CMS projections. The distribution of non-Medicare savings is as follows: 27% for Medicaid, 55% for PHI and 18% for OOP.

To distribute the savings for CHF remote monitoring, we used heart disease prevalence rates by age[7] and assumed illustrative portions attributed to payers for the under 65 population. Using the 2013 population estimates by age,[8] we estimated the total number of coronary heart disease cases by age and the percent of those aged 65 and older. We estimated that 55% of the total number of persons with coronary heart disease is age 65 and older, which is used to distribute CHF remote monitoring savings to Medicare. For the under 65 population, we assume the remaining cases of coronary heart disease are split between PHI, Medicaid and OOP using the following illustrative factors: 60/20/20.[9] The distribution of CHF remote monitoring savings to the under 65 population is as follows: 9% for Medicaid, 27% for PHI and 9% for OOP.

Distributing savings for medication renewals follows a similar process. We used data on the per capita retail prescription drugs filled at pharmacies each year by age[10] and 2013 population estimates by age[11] to calculate

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[3] Average FMAP percentage for total US (51). Accessed: http://kff.org/medicaid/state-indicator/federal-matching-rate-and-multiplier/

[4] See Appendix A, "EHR scoring model.xlsx" (included as a separate attachment).

[5] Total selected benefits less cost in nominal dollars using NHE historical and projected per capita spending, from "EHR scoring model.xlsx".

[6] As noted in "Estimated Budgetary Savings from Health Record Banks.docx"

[7] From Centers for Disease Control and Prevention (CDC) and Behavioral Risk Factor Surveillance System: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6040a1.htm?s_cid=mm6040a1_w

[8] http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

[9] Illustrative factors based on the assumption that the majority of the portion would be attributed to PHI.

[10] http://kff.org/other/state-indicator/retail-rx-drugs-by-age/

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the total number of prescriptions filled each year by age. We estimate that 31% of the total number of prescription drugs filled at pharmacies each year is for those age 65 and older, which is used to distribute total medication renewal savings to Medicare. For the under 65 population, we assume the remaining prescriptions filled at pharmacies each year are split between PHI, Medicaid and OOP using the following illustrative factors: 60/20/20.[12] The distribution of medication renewal savings to the under 65 population is as follows: 14% for Medicaid, 41% for PHI and 14% for OOP.

To allocate pre-encounter questionnaires and e-visit savings by payer, we use data on the percent distribution of office visits by age.[13] Twenty-six percent (26%) of the total number of visits is attributed to those age 65 and older, which is used to distribute pre-encounter questionnaires and e-visit savings to Medicare. For the under 65 population, we assume the remaining visits are split between PHI, Medicaid and OOP using the following illustrative factors: 60/20/20.[14] The distribution of pre-encounter questionnaires and e-visit savings to the under 65 population is as follows: 15% for Medicaid, 45% for PHI and 15% for OOP.

Total acquisition and annual operating costs[15] is allocated to Medicare using Medicare's portion of projected national health expenditures in 2015 (20%). The remaining costs are distributed to Medicaid, PHI and OOP based on those payers relative shares of NHE, including those three payers. The estimates of projected aggregate spending by payer are derived from CMS projections. The distribution of non-Medicare savings is as follows: 27% for Medicaid, 55% for PHI and 18% for OOP. Total acquisition and annual operating costs are subtracted from the total estimated benefits to produce the estimated savings due to personal health records shown in Table 1.

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[11] http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
[12] Illustrative factors based on the assumption that the majority of the portion would be attributed to PHI.
[13] http://www.cdc.gov/nchs/data/ahcd/namcs_summary/2010_namcs_web_tables.pdf
[14] Illustrative factors based on the assumption that the majority of the portion would be attributed to PHI.
[15] From "EHR scoring model.xlsx"

Final Estimates for Third Way

Estimated change in spending due to EHRs

ARC

Table 1: Estimated change in spending due to personal health record systems by payer ($ in billions, by fiscal year)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2015-2024
Medicare	0.0	0.0	1.4	1.0	-0.2	-2.7	-5.6	-8.1	-9.4	-10.4	-34.0
Medicaid-federal	0.0	0.0	0.7	0.3	-0.1	-0.7	-1.5	-2.1	-2.5	-2.7	-8.6
total federal	0.0	0.0	2.1	1.3	-0.3	-3.4	-7.1	-10.3	-11.8	-13.2	-42.6
Medicaid-state	0.0	0.0	0.5	0.2	0.0	-0.5	-1.0	-1.5	-1.7	-1.9	-5.9
Private health insurance	0.0	0.0	2.6	1.2	-0.2	-3.0	-6.3	-9.1	-10.5	-11.7	-37.1
Out-of-pocket spending	0.0	0.0	0.8	0.4	-0.1	-1.0	-2.1	-3.0	-3.4	-3.8	-12.2
total-Medicare, Medicaid, PHI + OOP	0.0	0.0	6.1	3.0	-0.6	-7.9	-16.5	-23.9	-27.5	-30.6	-97.9