

Attachment 1

Marketplace Computer Matching Programs:
Cost-Benefit Analysis



MARKETPLACE COMPUTER MATCHING PROGRAMS: COST-BENEFIT ANALYSIS

Prepared by:

Center of Consumer Information and Insurance Oversight (CCIIO), CMS

COST-BENEFIT ANALYSIS FOR MARKETPLACE MATCHING PROGRAMS

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Introduction

This cost benefit analysis (CBA) provides information about the costs and benefits of conducting the eight required Marketplace matching programs, which are conducted under matching agreements between CMS and each federal data source agency and between CMS and state administering entities (AEs). The objective of the Marketplace matching programs is to support the enrollment of eligible individuals in appropriate health coverage programs, thereby reducing the uninsured population and improving overall health care delivery.

The Marketplace matching programs enable AEs to make efficient and accurate eligibility determinations and redeterminations for enrollment in qualified health plans, insurance affordability programs, Medicaid and CHIP programs, and Basic Health Programs, and support the issuance of certificates of exemption to individuals who are exempt from the individual mandate to maintain health insurance coverage. The Marketplace matching programs provide for a single streamlined application process as required by the Affordable Care Act, support accurate and real-time eligibility determinations, and ensure that consumers can enroll in the correct program or be properly determined to be exempt from needing coverage.

The matching programs enable AEs to verify individuals' attested application responses with matched data elements from relevant federal data sources based on the type of eligibility determination being performed. These data elements may include citizenship or immigration status, household income, and access to non-employer-sponsored and/or employer-sponsored minimum essential coverage. Non-employer-sponsored coverage includes coverage through TRICARE, Veteran's Health Benefits, Medicaid, Medicare, or benefits through service in the Peace Corps. Employer-sponsored coverage for Federal Employee Health Benefits can be verified with the Office of Personnel Management.

While the matching programs support accurate eligibility determinations, which help avoid improper payments (e.g., improper payments of tax credits to ineligible individuals), no data is available to quantify the amount of improper payments avoided. In addition, the match results are not currently used to identify or recover past improper payments. Consequently, there are no estimates of avoided or recovered improper payments in key elements 3 and 4 (i.e., the "benefits" portion) of the CBA to offset against the personnel and computer costs estimated in key elements 1 and 2 (i.e., the "cost" portion) of the CBA, so the four key elements of the CBA do not demonstrate that the matching programs are likely to be cost-effective. However, the CBA describes other justifications (i.e., factors demonstrating that the matching programs are effective in maximizing enrollments in qualified health plans and are structured to avoid unnecessary costs) which support Data Integrity Board (DIB) approval of the matching programs. As permitted by the Privacy Act at 5 U.S.C. § 552a(u)(4)(B), the Justification section of each matching agreement requests the DIB(s) to determine, in writing, that the CBA is not required in this case to support approval of the agreement and to approve the agreement based on the other

stated justifications. This underlying reality of the cost effectiveness of the Marketplace matching programs applies to all eight programs supported by this CBA.

The four key elements and sub-elements required to be addressed in the CBA are summarized on the CBA template below. The name of each key element and sub-element is highlighted in bold in the narrative portion of the CBA to indicate where that element is discussed in more detail.

Costs

Costs for the recipient and source agencies are primarily personnel costs associated with maintenance and operations supported by information technology resources; therefore, key elements 1 and 2 (personnel costs and computer costs) are combined in this analysis. Note that more detail on the summary figures that follow is provided in later sections of this document.

For Agencies –

- **CMS (Recipient Agency):** \$33.0 million (\$1.8 million internal costs; \$31.2 million external costs) per year.
- **Source Federal Agencies:** \$6.0 million per year (reimbursed by CMS)
- **State AEs:** No data developed.
- **Justice Agencies:** Not applicable, as these matching programs are not currently used to detect and recover past improper payments and therefore do not generate collection cases for justice agencies to investigate and prosecute.

For Clients (Applicants/Consumers), and any Third Parties assisting them –

- Opportunity costs (time required to apply for coverage) are quantified as \$1 billion per year (\$90.52 per application x 11.4 million applications resulting in QHP enrollment).

For the General Public –

- No data developed. Costs to the public (such as discouragement of legitimate potential participants from applying, and threats to privacy, Constitutional rights, and other legal rights) would be less significant in these matching programs than in other matching programs, because these matching programs are intended to support enrollments and are not currently used to detect and recover past improper payments.

Benefits

Avoidance of Future Improper Payments

For advance payments of the Premium Tax Credit, consumers must reconcile the tax credit at the time of tax filing, and so improper payment is mitigated. For state and federal costs associated with Medicaid coverage, the avoidance of future improper payment is not quantified here.

However, the use of matching programs mitigates the risk of fraud and abuse by applicants or third parties by requiring that personal information provided on an eligibility application match known data on the individuals.

Not applicable, because data from the Marketplace matching programs are not currently used to identify and recover improper payments and debts.

Matching Program Structure

The Patient Protection and Affordable Care Act, Public Law No. 111-148, as amended by the Health Care and Education Reconciliation Act of 2010, Public Law No. 111-152 (ACA) requires that each state develop secure electronic interfaces for the exchange of data under a matching program using a single application form for determining eligibility for all state health subsidy programs.

CMS has entered into matching agreements with the following federal source agencies: 1) Social Security Administration (SSA), 2) Department of Homeland Security (DHS), 3) Internal Revenue Service (IRS), 4) Veterans Health Administration (VHA), 5) Department of Defense (DoD), 6) Office of Personnel Management (OPM), and 7) the Peace Corps. In addition, CMS has developed a matching program that is executed with every state AE, including state Medicaid and CHIP agencies and State-based Marketplaces. CMS designed the Federal Data Services Hub (Hub) to be a centralized platform for the secure electronic interface that connects all AEs and trusted data sources.

Without the Hub, each State AE would be required to enter into a separate arrangement with each federal agency to determine whether applicants for state health subsidy programs are eligible for coverage. If the match operations were conducted through separate arrangements outside of the Hub, the costs to CMS, the source federal agencies, the AEs, and consumers (applicants) would be significantly greater than under the current structure.

Background assumptions

CMS has made the following assumptions in developing this CBA:

- The ACA does not expressly mandate the use of computer matching, but effectively requires it by requiring a single streamlined application process for consumers. Because matching must be conducted to provide the single, streamlined application process Congress required (i.e., is not optional), this CBA does not evaluate whether the matching programs should be conducted versus not conducted, but rather it evaluates whether the matching programs are efficiently structured and conducted, and whether the current structure is less costly than an alternative structure.
- Eight matching programs are currently operational. CMS receives data from seven source federal agencies (IRS, DHS, SSA, OPM, Peace Corps, VHA, and DoD) under separate CMAs. Under an eighth CMA, CMS makes the data from those seven source federal agencies, as well as CMS data regarding Medicare enrollment, available to state AEs; in addition, the eighth CMA makes state Medicaid and CHIP enrollment data available to CMS. The seven source federal agencies, CMS, and the state AEs are collectively known

as the trusted data sources (TDSs). All data from the TDSs are accessed by CMS and by state AEs via the Hub platform, rather than via direct access from any AE to any TDS.

- Any alternative, non-Hub structure that could be used instead of the current Hub structure would require many more than eight CMAs, as well as many more system interconnections and data transmissions between agencies.
- For a subset of the TDSs, CMS incurs a cost as the recipient agency. The cost of each data transaction is estimated based on a prior year's matching program budget and the estimated number of data transactions occurring that year.
- In addition to the TDSs themselves, additional entities are necessary to provide support services to the Hub. CMS therefore incurs external costs in the hiring, maintenance, and associated costs of contractors to perform numerous functions related to the Hub. In addition, costs are incurred for identity proofing of applicants, troubleshooting, procedure writing, and maintenance support.
- CMS has internal costs related to the funding of CMS federal staff and associated resources to complete processes and responsibilities related to the Hub and the matching programs.
- The benefit of these matching programs is to consumers who apply for and obtain health coverage. The private benefit to them is improved health care delivery and the expected value of the coverage (whether through private insurance, Medicaid, CHIP or a Basic Health Plan).
- Regarding the Recovery of Improper Payments and Debts (Key Element 4), CMS is not currently utilizing the data match result from the matching programs for payment and debt reconciliations; however, the benefit of the match does provide the potential to implement this capability in the future.

I. Costs

Costs for the recipient and source agencies are primarily personnel costs associated with maintenance and operations supported by information technology resources; therefore, **key elements 1 and 2 (personnel costs and computer costs) are combined in this analysis.**

Internal CMS Costs - \$1.8 million / year

Most costs paid by CMS to implement of the Marketplace matching programs and the Hub are external costs paid to contractors, which are addressed in the next section. CMS' internal costs for federal staff tasked to work on these programs are approximately \$1.7 million per year. The below chart attributes all of the costs to federal staff working in the Center for Consumer Information and Insurance Oversight (CCIIO) office; however, many teams across CMS provide support to the implementation of these programs, and CCIIO staff often have other programs in their portfolios beyond the Marketplace matching programs and the Hub.

CCIO Team	Estimated Annual Cost
Eligibility and Enrollment (E&E)	\$681,868
SMIPG (State Policy)	\$288,552
Marketplace Information Technology (MITG/HUB)	\$800,187
Total	\$1,770,607

External CMS costs: Hub operations – an undetermined portion of \$31.2 million/ year

- **Federal Data Services Hub (Hub) – a portion of \$17.7 million / year**
 The Hub is maintained by a CMS contract. While the initial build costs of the Hub were largely incurred before the implementation of the Marketplace programs in 2013, there are ongoing costs associated with system maintenance, changes necessitated by ongoing technology development and new program implementation, and general system health monitoring. In FY2020, the average annual cost of the Hub contract was \$17.7 million. The Hub supports many other Marketplace program efforts besides the matching programs, including the transmission of data to and from insurance issuers, and electronic file transfer for many programs within the Marketplace; as a result, \$17.7 million is an overestimate of the annual Hub costs associated with Marketplace matching program operations.
- **Marketplace Security Operations Center (SOC) – \$2.9 million / year**
 The Marketplace SOC is responsible for the security operations and maintenance for the Hub and the Federally-facilitated Marketplace (FFM). The current cost of the Marketplace SOC work is \$2.9 million per year. However, because the Marketplace SOC budget is not formally delineated for the Hub and for the FFM, the cost cited above is an overestimate of the costs specific to supporting Hub operations.
- **Exchange Operations Center (XOC) - \$5.4 million / year**
 The Exchange Operations Center (XOC) is an entity managed under the Marketplace System Integrator contract tasked with coordinating the technical operations of the Hub and of the FFM. The XOC supports system availability, communication of system issues to stakeholders, and incident triage. Because the XOC budget line is not formally delineated for the Hub and for the FFM, the operational cost cited above is an overestimate of the costs specific to supporting Hub operations. The \$5.4 million cost estimate provided here covers both XOC operations as well as site reliability engineer and metrics costs in support of the XOC.

- **Identity-Proofing Service Costs – \$5.2 million / year**

Before consumer information can be submitted to a data source for data verification, a consumer's online account must be identity proofed. Remote identity proofing (RIDP) is a service supported through the Hub for AE programs. While identify proofing is not an eligibility requirement, it is a requirement for online application submission.

Costs paid by CMS to TDS agencies – \$6.0 million / year

- **Social Security Administration (SSA) - \$2.6 million / year**

The SSA is the source of numerous data elements for the Hub: verification of the applicant's name, date of birth, citizenship, Social Security Number (SSN), a binary indicator for incarceration, Title II income (retirement and disability), and work quarters. Verification of an individual's SSN is a required precursor to accessing consumer information through the other Marketplace matching programs.

Matching with SSA data is accomplished through a reimbursable agreement with CMS. The total cost of the SSA contract with CMS was \$2,617,316 in FY2020 under IAA number IA20-01.

- **Department of Homeland Security (DHS) – \$2.4 million / year**

DHS is the verification source for naturalized and derived citizenship, and immigration status. The total cost of the DHS contract with CMS was \$2,413,277 in FY2020 under IAA number IA20-03.

The DHS charges according to a graduated fee schedule for using the database called "SAVE" (Systematic Alien Verification for Entitlements Program). There are up to 3 steps of SAVE verification process: Step 1 is a real-time "ping" to their system. Consumers who could not be successfully verified may go to Step 2, which takes 3-5 days for additional database searches. The third step requires manual touch from a DHS Status Verification Officer and requires a G-845 form. Costs are currently 50 cents per use at Steps 1, 2 and 3. Ongoing automation through DHS's paperless initiative will impact these costs in the future.

- **Veterans Health Administration (VHA) - \$0.9 million / year**

Data from the VHA are used to identify current enrollment in health coverage through the VHA, which is an eligibility factor for APTC and CSR programs. The VHA contract with CMS is transactions-based. The total cost of the VHA contract with CMS was \$903,839 in FY2020 under IAA number IA20-02.

- **Office of Personnel Management - \$16,800 / year**

For FY2020, OPM charged CMS a flat fee of \$16,800 under IAA number IA20-04.

- Other Trusted Data Sources

CMS does not pay the other Trusted Data Sources (IRS, DoD, Peace Corps, and state Medicaid and CHIP agencies) for access to and use of their data.

Consumer opportunity costs – non-monetary, but quantified

Applying for coverage does not have a monetary cost to applicants, but does have an opportunity cost. The average time for a consumer to apply for and enroll (or re-enroll) in a qualified health plan each year has been estimated to average 3.965 hours per applicant. At a rate of \$22.83 per hour, this opportunity cost is roughly estimated at \$90.52 per application per year. The complete number of applications submitted each year across all AEs is not known, but the total number of applications submitted to exchanges and resulting in a QHP enrollment for 2020 is 11.4 million. This results in a consumer opportunity cost of approximately \$1 billion, but is an underestimate as it does not include the opportunity costs for enrollees in Medicaid, CHIP, or BHP programs, or for consumers who submit an application but do not subsequently enroll in coverage.

II. Benefits

Benefits to Agencies – not quantified

The Marketplace matching programs improve the accuracy of data used for making program eligibility determinations, and ensure that individuals are correctly determined and are not inappropriately enrolled in multiple programs. Improved data quality helps ensure that eligibility determinations and other decisions affecting advanced premium tax credits (APTC) are accurate, which helps avoid future improper payments. This avoidance of future improper payments fits the third cost benefit analysis key element but hasn't been quantified.

Using data made available through the Marketplace matching programs in combination with an individual applicant's attestation of his or her personal information is more reliable than relying solely on applicant attestations. The use of data matching mitigates the risk of fraud and abuse by applicants or third parties by requiring that personal information provided on an eligibility application match known data on the individuals.

Benefits to Enrollees of obtaining health coverage – quantified, but outside the scope of the 4 key elements

For plan year 2019, 10,579,744 consumers enrolled in a QHP across all exchanges. Of these, 87% received an advanced payment of the premium tax credit (APTC), with an average value of

\$514 per month (annualized to \$6,168 per year). In total, therefore, approximately \$56.8 billion in APTC was provided to enrollees in plan year 2019.¹

Approximately 52% of the QHP enrollees in plan year 2019 received financial assistance through cost-sharing reductions when enrolling in a silver-level plan. The financial estimate of this benefit is not quantified here, as it is dependent on individual utilization of medical services.

Additionally, a significant number of consumers receive health coverage through Medicaid, CHIP, or a BHP, and received eligibility determinations for that coverage based on data made available through these agreements. Because of the wide variety in state approaches to making and reporting eligibility determinations, the number of enrollees in these programs is not quantified here.

The financial benefit of having health coverage, whether through a QHP, Medicaid, CHIP, or BHP varies by individual and individual health needs, and is therefore not estimated here.

While these benefits to consumers are made possible in part by the Marketplace matching programs, the benefits are ultimately paid with federal funds (or, in the case of Medicaid and CHIP enrollees, with a combination of federal and state funds). Neither that funding nor these benefits to consumers can be considered a direct cost or benefit of conducting the Marketplace matching programs. As a result, these benefits are not directly applicable to this analysis.

Recovery of improper payments – not germane (not an objective) at this time

The fourth cost benefit analysis key element (recovery of improper payments and debts) is not germane to this cost benefit analysis, because data from the Marketplace matching programs are not currently used to identify and recover improper payments and debts. Annual reconciliation and recovery of improper tax payments are performed by the IRS through a process that is independent of the Marketplace matching programs and other CMS eligibility determination activities. While the Marketplace matching programs could provide for annual and monthly reporting of data by Marketplaces to the IRS and consumers for the purpose of supporting IRS's annual reconciliation, annual and monthly reporting is not currently an activity covered in the IRS-CMS CMA; rather, that information is exchanged between the agencies through Information Exchange Agreements. At most, the data used in the Marketplace matching programs has the future potential benefit of being used in an analytical form, to assist IRS in identifying and/or recovering improper payments and debts.

¹ 1/24/20: Plan Year 2019 data from <https://www.cms.gov/newsroom/fact-sheets/early-2019-effectuated-enrollment-snapshot>.

Consideration of Alternative Approaches to the Matching Programs

In requiring a single, streamlined application process and specifying electronic data access, the ACA effectively required use of computer matching to make eligibility determinations. As a result, wholly manual alternatives for verification of application information (such as a paper-based documentation process) are not considered as a viable alternative in this analysis.

The Marketplace matching programs currently leverage the Federal Data Services Hub (Hub) to minimize connections between administering entities (AEs) and the federal partners. This model has successfully met program needs by providing for a single streamlined application process for consumers, and supporting accurate eligibility determinations, which in turn increase program integrity for the Marketplace programs.

An alternative, non-Hub approach, for AEs to manage matching programs individually without using the Hub, was considered through this analysis. Without the Hub, each State AE would be required to enter into separate matching arrangements with each federal partner, and build direct connections to each system. CMS believes a non-Hub approach would involve:

- More agreements to prepare and administer (there would be one agreement per AE with each TDS, in place of one agreement per AE with CMS, and one agreement per TDS with CMS);
- More TDS data transmissions to effect and secure (there would be one TDS transmission per AE, in place of each single TDS transmission to the Hub);
- More systems to maintain and secure, to store the TDS data (there would be one system per AE, in place of the single, central Hub system); and
- More copies of TDS data to correct when errors are identified (there would be one copy to correct in each AE system, instead of the single copy in the Hub system).

Based on this analysis, CMS believes the current structure minimizes duplication of effort and is therefore less costly for CMS, federal partners, and State AEs, than an alternative structure that would not leverage the Hub.

Conclusion

The Marketplace matching programs are effectively required, not discretionary, in order to provide the single streamlined application process Congress required. As a result, Marketplace matching programs must continue in the absence of a cost-effectiveness finding.

After careful evaluation of the data presented above, CMS intends to continue using the current matching program structure, which is less costly than the alternative, non-Hub structure and achieves the primary goals of providing a single streamlined application process and accurate eligibility determinations. While CMS intends to retain the existing matching program structure

moving forward, necessary changes will be made as needed to keep the matching programs compatible with changes in program operations and data flow. This cost benefit analysis and the decision to retain the current matching structure should increase the public's trust in the participating agencies as careful stewards of taxpayer dollars.

Because the Marketplace matching programs incur a net cost (i.e., do not demonstrate that the matching programs are likely to be cost-effective), the Marketplace matching agreements should be worded to provide for data integrity board (DIB) approval to be based on the other benefits and mitigating factors described in this analysis and in each individual agreement. Specifically, the agreements should provide justification for each DIB's written determination that the cost benefit analysis is not required to demonstrate cost-effectiveness for Marketplace matching programs.