



Privacy Impact Assessment for  
Health Insurance Data Warehouse  
(HIDW)

July 2, 2021

**Contact Point**

Dennis Hardy, Program Manager  
Program Development and Support  
Healthcare and Insurance

**Reviewing Official**

Kellie Cosgrove Riley  
Chief Privacy Officer



## **Abstract**

The purpose of the Health Insurance Data Warehouse (HIDW) is to assist the Office of Personnel Management's (OPM) Healthcare and Insurance office (HI) to oversee, manage, and analyze the Federal Employees Health Benefits (FEHB) Program by being a repository for enrollment and aggregate pharmacy data. One of the primary functions of the HIDW is to establish, maintain, and serve as the repository for the Master Enrollment Index (MEI), the authoritative source for all enrollment data in the FEHB Program. The other primary function of the HIDW is to collect and maintain aggregate pharmacy data for analysis. This Privacy Impact Assessment (PIA) is being conducted because the HIDW collects, maintains, and uses personally identifiable information (PII) about FEHB enrollees and their family members who are or have been covered under the FEHB Program.

This PIA replaces the Health Claims Data Warehouse (HCDW) PIA dated May 8, 2018.

## **Overview**

The FEHB Program is the largest employer-sponsored group health insurance program in the world, covering approximately 8.2 million Federal employees, Postal employees, annuitants, former employees, former spouses, and other eligible individuals, plus their eligible family members. The FEHB Program offers over 200 health plan choices provided by FEHB Carriers who contract with OPM to offer these plans.

One of the primary functions of the HIDW is to establish a comprehensive FEHB enrollment database, the Master Enrollment Index (MEI), which OPM will use to help administer and manage the FEHB Program in order to ensure the best value for the enrollees and taxpayers. The MEI will consist of a Master Person Index (MPI) that includes FEHB enrollees and family members and a Master Enrollment File (MEF) that includes FEHB enrollment transactions. Each individual in the MPI has a unique randomly-assigned



MPI\_ID. The MPI\_ID is then used to de-identify the transaction level information in the MEF so that it can be used by staff for further analysis.

Establishment of the MEI will promote effective FEHB Program management and improve program integrity. Proposed uses of the MEI include:

- Developing a baseline of improper enrollments, including dual enrollments and identification of ineligible family members, and to determine the associated costs;
- Developing a five-year historical enrollment record to enable OPM's Retirement Services to more quickly and accurately determine annuitants' eligibility for FEHB into retirement;
- Creating more complete enrollment data, which may lead to a reduction in manual/exception processing by FEHB Carriers;
- Eliminating some of the FEHB Carrier reporting requirements;
- Identifying one-person enrollment in Self Plus One or Self and Family coverage, which may facilitate efforts to encourage switching to self-only coverage, thereby resulting in cost savings;
- Analyzing population movement between plans and thereby informing strategies to promote competition, quality and affordability in FEHB plans; and
- Facilitating the future goal of a FEHB central enrollment portal.

The MEI will be established and maintained through data obtained from FEHB Carriers transferring a seven-year period of historical enrollment data to the HIDW. After this submission, Carriers will be required to provide updated enrollment data on a monthly or other basis as established by OPM. Transfer of the enrollment data from the OPM Carriers to the HIDW will be accomplished using approved secure cybersecurity protocols, including encryption.

Other sources of FEHB enrollment data may include OPM's Retirement Services and information technology systems managed by OPM directly and



through an interagency agreement with the U.S. Department of Agriculture's National Finance Center (NFC).<sup>1</sup>

The HIDW will provide a feed of certain enrollment data to Employee Express (EEX), a system that allows Federal employees to view and make changes to their payroll and associated personnel records. The HIDW feed to EEX will include names of family members, dates of birth, and relationship of family member to enrollee (e.g., child, stepchild, spouse). The purpose of the EEX feed is to identify what is known about enrollment in a plan, so that enrollees and OPM can verify eligibility for or coverage under the FEHB Program.

Enrollment data included in the HIDW will not be used to affect the enrollment of any individual except to the extent that information is already used for such a purpose in accordance with OPM statutes, regulations, and guidance. For example, enrollment data may reveal instances where an enrollee is covered under more than one FEHB contract. This would only occur in error but may be revealed through enrollment files included in the HIDW. Typically, such an occurrence would be identified and addressed outside of the HIDW.

Pharmacy data is also collected and maintained in the HIDW in an aggregated form submitted by FEHB Carriers. OPM uses the pharmacy data to assess broad patterns of pharmacy service use and costs under the program; it does not contain record-level identifiable information about individual enrollees. The aggregate pharmacy data is not linked with information in the MEI and/or other individual-level data that would allow for

---

<sup>1</sup> These systems include the FEHB Data Hub (an OPM system which, in part, receives enrollment transactions from agencies and posts the data to a server for secure distribution to FEHB Carriers), the Enterprise Human Resources Integration (EHRI) warehouse (an OPM reporting system that stores human resources, payroll, and training workforce information sent from Executive Branch agencies), and the Centralized Enrollment Reconciliation Clearinghouse System (CLER) operated for OPM by NFC (a system which receives quarterly enrollment data from federal agencies and FEHB Carriers to facilitate reconciliation and reporting).



re-identification; analysis of the pharmacy data within the HIDW will only be performed by OPM on the aggregate data. The pharmacy data will be physically and logically firewalled from the MEI and other OPM data via separate physical access controls (permissions) to files and data based on roles and responsibilities established by OPM's Chief Pharmacy Officer.

The HIDW replaces the Health Claim Data Warehouse (HCDW). The primary function of the former HCDW was to receive and analyze claims data supplied by FEHB Carriers to support management and administration of the FEHB Program. A limited amount of claims data was received in the HCDW from FEHB Carriers but has now been permanently deleted. If OPM elects in the future to collect claims data from FEHB Carriers (apart from the aggregate pharmacy cost and use data), this PIA will be updated.

## **Section 1.0. Authorities and Other Requirements**

### **1.1. What specific legal authorities and/or agreements permit and define the collection of information by the project in question?**

Authority for requiring FEHB Carriers to provide enrollment and aggregate pharmacy data to OPM is provided by 5 U.S.C. § 8910, which requires OPM to continually study the operation and administration of the FEHB Program and requires the Carriers to furnish reports and provide OPM access to records upon request.

### **1.2. What Privacy Act System of Records Notice(s) (SORN(s)) apply to the information?**

The applicable SORN is OPM/Central-23, FEHB Program Enrollment Records.

### **1.3. Has a system security plan been completed for the information system(s) supporting the project?**

A system security plan was completed for the HIDW as part of the Authority to Operate, which was granted on or about May 2, 2019.



**1.4. Does a records retention schedule approved by the National Archives and Records Administration (NARA) exist?**

All information in the HIDW is retained in accordance with the NARA Disposition Authority Number DAA-0478-2017-0006.

**1.5. If the information is covered by the Paperwork Reduction Act (PRA), provide the OMB Control number and the agency number for the collection. If there are multiple forms, include a list in an appendix.**

Enrollment information is usually collected from enrollees through the Health Benefits Election Form (SF Form 2809 (OMB Control Number 3206-0160) or OPM 2809 (OMB Control Number 3206-0141)), or electronic equivalent. Information is also collected from agencies through the Notice of Change in Health Benefits Enrollment Form (SF 2810), which is not subject to the PRA. Enrollment information is forwarded to the relevant FEHB plan for purposes of effectuating enrollment and changes to enrollment.

## **Section 2.0. Characterization of the Information**

**2.1. Identify the information the project collects, uses, disseminates, or maintains.**

The records in the HIDW contain the following information about those individuals who are or have been enrolled in the FEHB and their covered family members:

- Full name, including any former names;
- Social Security number, or other current or previous unique identification number(s);
- Date of birth;
- Date of death;
- Sex;
- Relationship code of any covered family member(s) to enrollee;
- Mailing address;



- Indicator for non-deliverable mailing address;
- Date mailing address information was last processed;
- Marital status;
- Enrollee's employment status;
- Enrollee's employing office, including name and Personnel Office Identifier;
- Enrollee's payroll office number;
- Event code indicating the qualifying life event which permitted enrollment, a change in enrollment, or enrollment cancellation;
- Transaction code indicating the most recent action that resulted in the creation or change of enrollment;
- Date enrollment record was processed;
- FEHB enrollment code, indicating plan and enrollment type (Self Only, Self Plus One, or Self and Family);
- Effective date of FEHB coverage and any change in coverage;
- Agency payroll office effective date;
- Agency payroll office enrollment match code;
- End date of FEHB coverage, including possible 31-day extension;
- Reason code for FEHB coverage termination;
- Retirement claim number;
- Date employee retired;
- Date enrollee is reemployed by the Federal government;
- Medicare status, forms of Medicare coverage, and Medicare Beneficiary Identifier (formerly Medicare Claim Number); and
- Aggregate pharmacy cost and use data.

**2.2. What are the sources of the information and how is the information collected for the project?**

The FEHB Program data is securely transmitted from participating Carriers and other OPM data sources containing enrollment information (including but not limited to the FEHB Data Hub, EHRI and CLER) to the HIDW system either monthly, quarterly or annually (depending on the data updating



preference). Pharmacy data is also collected and maintained in the HIDW in an aggregated form submitted by FEHB Carriers.

**2.3. Does the project use information from commercial sources or publicly available data? If so, explain why and how this information is used.**

HIDW receives pharmacy reference data (containing drug names, uses, industry categorizations, and reference costs) from commercial sources. This data is not specific to a particular individual and contains no personally identifiable information.

**2.4. Discuss how accuracy of the data is ensured.**

OPM validates the enrollment data for quality and integrity of the information. The Carriers are responsible for the accuracy of the data they submit to OPM. It is presumed that the Carriers will provide accurate data, as inaccurate data may have an adverse impact on any analysis concerning their performance.

**2.5. Privacy Impact Analysis: Related to Characterization of the Information**

**Privacy Risk:** There is a risk that the HIDW may collect and maintain more information than is necessary for OPM to effectively administer the FEHB Program.

**Mitigation:** This risk is mitigated by OPM verifying that the data it requests from the Carriers and other sources is the minimum necessary to administer the program. In addition, OPM specifies the file formats and specific data elements in order to ensure that it does not over collect information.

**Privacy Risk:** There is a risk that the information received from the Carriers and other sources will contain inaccuracies that impact OPM's analysis and an individual's enrollment in the FEHB Program.

**Mitigation:** This risk is mitigated in part by the quality control checks that OPM conducts on the data it receives from the Carriers and other sources.





These checks include review of the consistency and completeness of the data and cross-verification of sources to ensure their appropriate integration. Any anomalies will be examined and addressed. In addition, this risk is mitigated in part by the Carriers, who have a business interest in providing accurate information.

## **Section 3.0. Uses of the Information**

### **3.1. Describe how and why the project uses the information.**

The information in the HIDW is used for the effective administration of the FEHB Program by analyzing FEHB enrollment and providing internal agency reports regarding enrollment count, dual enrollments, and demographics of enrollment in FEHB plans. Aggregate pharmacy data is used to assess broad patterns of pharmacy service use and costs under the program, as well as other analytical uses to support policy and administrative services under the direction of OPM's Chief Pharmacy Officer. Individual enrollment data that can be linked over time, de-identified, and then aggregated at various levels for specific analyses are essential to enable OPM to examine issues both within and across health plans. The types of analyses this data support include, but are not limited to:

Modeling the effects of potential policy and program changes; and

Monitoring enrollment patterns across benefit levels and across health plans as new offerings emerge, such as value plans that target Medicare enrollment.

### **3.2. Does the project use technology to conduct electronic searches, queries, or analyses in an electronic database to discover or locate a predictive pattern or an anomaly? If so, state how OPM plans to use such results.**

Yes. The data may be used to model both retrospective and prospective cost expectations under the program.



### **3.3. Are there other programs or offices with assigned roles and responsibilities within the system?**

OPM has assigned roles and responsibilities with respect to the information in the HIDW to a limited number of HI analysts, as more fully described in Section 8.3. No other programs or offices within OPM or within other Federal agencies have roles or responsibilities within the HIDW.

### **3.4. Privacy Impact Analysis: Related to the Uses of Information**

**Privacy Risk:** There is a risk that an authorized user may access the information in the HIDW for an unauthorized purpose, such as to conduct searches on themselves, friends, family members or others.

**Mitigation:** This risk is mitigated by ensuring that only a limited number of well-trained HI analysts have access to the information in the HIDW. Once linked using a randomly assigned unique OPM ID, de-identified data will be segregated from the identifiable data for use in conducting subsequent analyses. Even within HI, most users only have access to de-identified data. Additionally, access to HIDW is audited systematically and atypical activity is monitored.

**Privacy Risk:** Because the HIDW compiles identifiable data from multiple sources and information that previously was not accessible in a single system, there is a risk that authorized users will unnecessarily have access to comprehensive, sensitive information about individuals.

**Mitigation:** This risk is mitigated through training those individuals who have access to the HIDW regarding the sensitivity and proper handling of the information it contains, and through segregating the identifiable information from the de-identified information that is used by HI to conduct its analyses. The unique identifier that is assigned at the record level is generated systematically and can only be linked to the identifiable data by the limited number of HI analysts with access to that segregated data. This identifier is also attached to enrollment data included in the HIDW.



## Section 4.0. Notice

### **4.1. How does the project provide individuals notice prior to the collection of information? If notice is not provided, explain why not.**

Individuals who participate in the FEHB Program do not interact directly with the HIDW and therefore do not receive direct notice from the HIDW prior to the collection of information. Individuals receive notice about why the information they provide in the enrollment process is being collected and how it will be used via the Privacy Act statement on the Health Benefits Election Form (SF 2809 or OPM 2809) provided to employees by their employing agency and the Privacy Act statements found in the FEHB plan brochure and/or on the FEHB Carrier website, both available to enrollees. In addition, this PIA as well as the SORN referenced in Section 1.2 provide notice to individuals.

### **4.2. What opportunities are available for individuals to consent to uses, decline to provide information, or opt out of the project?**

Once individuals enroll in a FEHB plan, they do not have the opportunity to specifically consent or decline to participate and have their information included in the HIDW. Participation in the FEHB Program, however, is voluntary. The relevant Privacy Act statement that individuals receive when they enroll in an FEHB plan gives notice that providing information is voluntary but failure to provide it may result in a delay in processing their enrollment. and that failure to furnish a Social Security number or Medicare Beneficiary Identifier may impact the processing or the promptness of claims payments, proper coordination with Medicare, and/or proper insurance status reporting to the IRS. There is no way to “opt out” of having information included in the HIDW other than to decline to enroll in a FEHB plan.

### **4.3. Privacy Impact Analysis: Related to Notice**

**Privacy Risk:** There is a risk that individuals will not have notice that their enrollment data will be collected and stored in the HIDW nor regarding how it will be used.



**Mitigation:** This risk is mitigated primarily through publication of this PIA and, more indirectly, by providing individuals with the Privacy Act statements found on the SF 2809 or OPM 2809 and the FEHB Carrier brochure and/or the FEHB Carrier website, and through publication of the SORN referenced in Section 1.2.

## **Section 5.0. Data Retention by the Project**

### **5.1. Explain how long and for what reason the information is retained.**

The records in the HIDW are retained pursuant to NARA Records Schedule Number DAA-0478-2017-0006.

Information obtained from the Carriers that has been entered into a master file or database and verified will be deleted when no longer required to support reconstruction of, or serve as backup to, a master file or database, whichever is later. In no case will information or data be retained in excess of 30 years, in compliance with the NARA Records Schedule.

The Master Enrollment Index will be maintained as a permanent record to support longitudinal analyses of FEHB enrollment patterns.

### **5.2. Privacy Impact Analysis: Related to Retention**

**Privacy Risk:** There is a risk that the information in the HIDW will be retained for longer than is necessary.

**Mitigation:** This risk is mitigated by properly training HI staff to dispose of records as designated in the relevant records schedule. The system is set up to flag relevant records for deletion at the appropriate time.



## Section 6.0. Information Sharing

**6.1. Is information shared outside of OPM as part of the normal agency operations? If so, identify the organization(s) and how the information is accessed and how it is to be used.**

OPM shares certain enrollment data with EEX as described and for the reasons given in the Overview, above. Other than this, none of the information in the HIDW is shared outside of OPM.

**6.2. Describe how the external sharing noted in 6.1 is compatible with the SORN noted in 1.2.**

The limited information sharing with EEX described in the Overview is conducted in accordance with routine use "h" described in OPM/Central-23, FEHB Program Enrollment Records.

**6.3. Does the project place limitations on re-dissemination?**

Re-dissemination of data by OPM or EEX participating agencies is strictly limited by terms set forth in agreements between the agencies. Other than the information sharing outlined in the agreements, none of the information in the HIDW is shared outside of OPM.

**6.4. Describe how the project maintains a record of any disclosures outside of OPM.**

Other than sharing with EEX, none of the information in the HIDW is shared outside of OPM.

**6.5. Privacy Impact Analysis: Related to Information Sharing**

**Privacy Risk:** There is a risk that information will be shared outside of OPM for purposes other than the purpose for which it was collected.

**Mitigation:** This risk is mitigated in part through training project team members on the proper handling of the information in the system, including appropriate disclosures.



## **Section 7.0. Redress**

### **7.1. What are the procedures that allow individuals to access their information?**

Individuals do not have direct access to the HIDW in order to access their FEHB enrollment information or health service use data. Some individuals may, however, be able to access their enrollment information directly through the self-service enrollment system employed by their agency. Health Benefit Election Forms (SF 2809 or OPM 2809) and enrollment plan changes are also maintained and may be viewed in the employee's official personnel folder. Individuals may also be able to access and confirm certain enrollment information directly with their FEHB plan.

In addition, individuals may obtain access to their information by following the process outlined in the applicable SORN referenced in Section 1.2 and submitting a request in writing to the U.S. Office of Personnel Management, Office of Privacy and Information Management - FOIA, 1900 E Street, NW., Washington, DC 20415-7900 or by emailing [foia@opm.gov](mailto:foia@opm.gov); ATTN: Healthcare and Insurance. Individuals must provide the following information for their records to be located: full name (including any former names), date of birth, Social Security number, name and address of employing agency or retirement system, reasonable specification of the information requested, the address to which the information should be sent, and signature. Individuals must also comply with OPM's Privacy Act regulations regarding verification of identity and access to records (5 CFR 297).

Enrollees who request access to their records will have access to the entirety of their record, to include information about all covered individuals who are part of their enrollment record. Family members of the enrollee who request access to their records may have access only to their own information and not to that of the enrollee or other covered family members.



**7.2. What procedures are in place to allow the subject individual to correct inaccurate or erroneous information?**

Individuals do not have direct access to the HIDW in order to correct their FEHB enrollment information or health service use data. Employees should contact their employing agency to assist in correcting inaccurate or erroneous enrollment information. Federal annuitants should contact OPM Retirement Services to assist in correcting inaccurate or erroneous enrollment information. Individuals may be able to make certain corrections to their enrollment information directly through the self-service enrollment system employed by their agency or through their FEHB plan.

In addition, individuals wishing to request amendment of records about them in the HIDW may make that request in writing to the U.S. Office of Personnel Management, Office of Privacy and Information Management - FOIA, 1900 E Street NW., Washington, DC 20415-7900 or by emailing [foia@opm.gov](mailto:foia@opm.gov); ATTN: Healthcare and Insurance. Requests for amendment of records should include the words "PRIVACY ACT AMENDMENT REQUEST" in capital letters at the top of the request letter; if e-mailed, include those words in the subject line. Individuals must provide the following information for their records to be located: full name (including any former names), address, date of birth, Social Security number, name and address of employing agency or retirement system, precise identification of the information to be amended, and signature. Individuals must also comply with OPM's Privacy Act regulations regarding verification of identity and access to records (5 CFR 297).

OPM may refer amendment requests to employing agencies, retirement systems, and FEHB Carriers because they may be the original source of FEHB enrollment records.

**7.3. How does the project notify individuals about the procedures for correcting their information?**

Individuals do not receive any notice directly from the HIDW about the procedures for correcting their information. However, they are provided



notice through this PIA, the applicable SORN referenced in Section 1.2, and from their individual agencies regarding how to correct any erroneous or inaccurate information.

#### **7.4. Privacy Impact Analysis: Related to Redress**

**Privacy Risk:** There is a risk that individuals will be unable to correct or amend information about them that is contained in the HIDW.

**Mitigation:** This risk is not fully mitigated as OPM cannot amend the read-only files that it obtains from the Carriers and other sources and does not have relevant information to determine whether the information requires correction. OPM can only direct individuals to correct information through their employing agency, OPM Retirement Services, self-service system, the FEHB Carrier, or through formal Privacy Act requests. If the correction is communicated to the Carrier, the updated information should be transmitted from the Carrier to the HIDW in the usual course of reporting up-to-date enrollment information. The risk to the individual is low, however, as the information in the HIDW is not being used to make any decisions that would affect the individual's benefits.

## **Section 8.0. Auditing and Accountability**

### **8.1. How does the project ensure that the information is used in accordance with stated practices in the PIA?**

The system audits access to the HIDW records according to user ID and session ID. OPM also maintains internal management controls to minimize access, monitor employee access, and ensure the quality of the data.

### **8.2. Describe what privacy training is provided to users either generally or specifically relevant to the project.**

All analysts with access to the HIDW take OPM's annual IT Security and Privacy Awareness Training. In addition, employees with IT administration and security responsibilities are required to take additional specialized





training. There are no other specialized role-based trainings required to access the system.

**8.3. What procedures are in place to determine which users may access the information and how does the project determine who has access?**

HI staff who have a need to access the information in the HIDW are required to have an appropriate background investigation that must be favorably adjudicated before they are hired and allowed access to the HIDW system. Once an HI employee is favorably adjudicated and credentialed, access is granted by an HI authorizing official who determines that the employee needs access and is eligible to obtain access.

Additionally, OPM uses software which allows system administrators to provide for account and role management. The software is restricted to authorized system administrators. Supervisors must submit a technical personnel access request via an IT service portal. Only system administrators can grant access.

**8.4. How does the project review and approve information sharing agreements, MOUs, new uses of the information, new access to the system by organizations within OPM and outside?**

All access to the system, and any uses of the information in the system, are evaluated and approved by the HIDW Program Manager and HI executive leadership.

**Responsible Officials**

Laurie Bodenheimer  
Associate Director, Healthcare and Insurance



## **Approval Signature**

*Signed Copy on file with the Chief Privacy Officer*

Kellie Cosgrove Riley  
Chief Privacy Officer