UNITED STATES OFFICE OF PERSONNEL MANAGEMENT
Washington, DC 20415

May 1, 2024

MEMORANDUM for: Chief Human Capital Officers (CHCOs) and Deputy Chief Human Capital Officers (DCHCOs)

FROM: John W. Gill, Executive Director, Office of Human Capital Data Management and Modernization (HCDMM)

SUBJECT: Agency Data Quality Indicator Report – Initial Release and Long-Term Plans

The Office of Personnel Management (OPM) is prepared to release an Agency Data Quality Indicator Report in FY 2024 Q2. The Agency Data Quality Indicator Report will improve each agency's understanding of the quality of human capital data they are sending to OPM's Enterprise Human Resources Integration (EHRI) system. The importance of agencies fulfilling their statutory requirement1 in this regard is embodied in Priority 1 of the President's Management Agenda, particularly Strategy 4. An initial version of the Agency Data Quality Indicator Report will be released to CHCOs in FY 2024 Q2, and enhancements providing additional insights will continue to develop over the course of the year.

Background and Overview:

Executive branch agencies have a statutory obligation to send personnel data to OPM to be stored and maintained within the electronic Official Personnel Folder (eOPF) and EHRI systems. These centralized repositories provide a comprehensive view of government-wide personnel information and are often leveraged by the Office of Management and Budget (OMB) and other federal oversight units seeking to make policy decisions affecting the federal workforce. Given the importance of this data, how it is used and will be used as the foundation for future high quality human capital analyses, agencies have requested OPM's assistance in improving the quality and timeliness of the data.

There has historically been a lack of full-circle communication between an agency, its data providers(s), and OPM's EHRI team. The Agency Data Quality Indicator Report will significantly improve agency's visibility into the quality of the data OPM is receiving. Making data quality visible in this fashion is a necessary first step in improving agencies' ability to work with their HR Offices and their EHRI Data Providers to identify potential issues within their data systems and their data pipelines. Errors within EHRI impact the value of agency facing OPM data products, as well as the accuracy of data and reports OPM provides to oversight Agencies and to the public. Data quality is essential for constructing meaningful, timely, high-quality human capital data insights to agency leadership.

Agencies house human capital data within a variety of systems (personnel management systems, payroll systems, training systems, etc.), which transmit data to the Data Provider. Some agencies serve as their own Data Providers, while others contract a Shared Service Provider (SSP) to provide data. The Data Provider transforms the data as needed, to conform to EHRI data standards. The Data Provider will then transmit the data to OPM. Errors in transmitted data can originate at the agency's human capital feeder systems, or at the Data Provider during data transformation. In either case, it is the Agency's responsibility to identify and resolve data quality issues to ensure that EHRI contains accurate data that meets established data standards. The Agency Data Quality Indicator Report will highlight the data quality and timeliness of agency EHRI data sent to OPM.

Agency Data Quality Indicator Report:

The Data Quality Indicator Report has been developed to assist Agencies in their efforts to identify the root causes of data quality issues. The Report will start with a single criterion measuring both quality and

timeliness, focused on whether transmitted data conform to The Guide to Processing Personnel Actions (GPPA) and The Guide to Human Resources Reporting (GHRR).

In Q1 2024, we previewed the planned metric with attendees of the monthly CHCO Council Data Working Group and the monthly HR Quality Service Management Office's (QSMO) Shared Service Provider (SSP) Advisory Forum. Attendees of those meetings include the newly established agency Human Capital Data Champions (HCDCs), representatives of Data Providers, as well as several CHCOs and other relevant agency leadership. A key purpose of that preview was to identify any concerns with OPM's initial approach to creating an Agency Data Quality Indicator Report.

In Q2, the Agency Data Quality Indicator Report for each agency will be distributed to the agency CHCO, Deputy CHCO and HC Data Champion.

In Q3 and Q4, we will further develop the Agency Data Quality Indicator Report, enhancing the level of detail we can provide agencies. (Please see the attachment for further details.)

Actions Expected:

CHCOs should begin addressing any deficits in performance indicated in the Agency Data Quality Indicator Report upon its release.

For data quality issues originating within the agency data systems, work through internal agency channels to correct issues identified in data transmittals to EHRI.

For data quality issues originating at the Data Provider, work through your Data Provider points of contact. Your HCDC was provided a draft version of your agency's score and may already be working to address any issues identified.

The monthly CHCO Council Data Working Group meeting and the monthly QSMO SSP Advisory Forum will provide time for further discussion of this effort as needed.

Contact Information:

If you have questions about the Agency Data Quality Indicator Report, please contact OPM's Data Standards Management and Modernization Branch mailbox at DSMMallstaff@opm.gov.

Attachment: Agency Data Quality Indicator Report FAQs

cc: Agency Human Capital Data Champions and EHRI Data Provider Representatives

Attachments: Agency Data Quality Indicator Report FAQs and Details of Administration

February 2024 - FAQs

Can you describe the roles and responsibilities of the stakeholders in EHRI data quality?

Director, Office of Personnel Management (OPM) – OPM is responsible for setting standards for personnel records throughout the federal government, and for collecting those records (5 U.S.C. § 2951, 5 C.F.R.§ 293.101, 5 C.F.R. § 9.2, and Executive Order 12107). Those standards are currently embodied in the Guide to Processing Personnel Actions (GPPA), among other documents.

Agency Heads – Agency heads are responsible for ensuring that employees creating, maintaining, and transmitting personnel records are informed of pertinent regulations and requirements (5 C.F.R. § 293.103(a)).

Chief Human Capital Officer (CHCO) – The CHCO is responsible for ensuring Agencies are gathering personnel information and processing personnel actions in compliance with the GPPA (5 C.F.R. § 250.202 & 204).

Chief Data Officer (CDO) – The CDO is responsible for lifecycle data management, and general management of Agency data assets (44 U.S.C. § 3520). That includes any human capital data that is created, maintained, and transmitted by the Agency.

Human Capital Data Champion (HCDC) – CFO Act agencies have each recently required to identify a Data Champion. A primary role of the champion is to assist Agency leadership in understanding and utilizing resources available from OPM, which will now include the Agency Data Quality Indicator Report. They will also serve as a crucial POC for working with EHRI Data Providers.

EHRI Data Provider – The data provider, whether an in-house unit or a contracted Shared Service Provider (SSP), is responsible for transforming data from Agency HR systems into an EHRI compliant data format, transmitting data at the cadence specified in the GPPA, and in resolving any errors in a timely fashion.

OPM EHRI Team – The EHRI team at OPM is responsible for identifying errors in submitted data, and loading data into the EHRI system once it meets the EHRI Guide to Human Resources Reporting (GHRR) specifications.

Can you provide us with more context for the Agency Data Quality Indicator Report, to help Agencies and SSPs communicate about this constructively?

For Q1 we are providing a single score which combines timeliness and quality expectations – —a measure of the time it took for your Agency's submission to achieve a certain degree of accuracy – —with anyone submitting accurate data within the 5-day regulatory requirement earning an "A."

Initially this Agency Data Quality Indicator Report will reflect only Dynamics and Status data submitted to EHRI. Payroll and Training data submissions may be incorporated into future versions of the Agency Data Quality Indicator Report.

At this time, when "error rate" is discussed, we are strictly talking about "adherence to EHRI GHRR data reporting standards." The data standards specify the format of the data to be received (details such as number of digits, letters or numbers, acceptable codes, etc.) and can all be found at Data Standards (opm.gov)

Elaborating on the above point: The current metric does not include any external-to-the-system notion of data accuracy, nor any notion of data consistency that could be created by comparison between variables, or through analysis of submitted data in light of relevant laws, regulations, or policies. It is highly likely that future versions of the Agency Data Quality Indicator Report will add in data quality metrics where appropriate.

Can you explain the initial Agency Data Quality Indicator Report criterion (Q1 & Q2 FY 2024) in more detail?

Q1 & Q2 will have a single grading criterion: time from the end of a reporting period until all reported fields have less than a 3% error rate.

We will run the report on the first day of each month.

The grade will reflect your Agency's average time to meet the above criterion over the past 6 months. For any months not yet meeting the above criterion, we will compute the average by using the number of days between the last day of the reporting period and the date at which OPM ran its analysis.

Example 1: What would happen if an Agency successfully turned in their June data with a sub-3% error rate on July 4th? All reports run from end-of-July until end-of-December (a 6-month window) will use "4 days" as the score for this data when calculating the rolling average.

Example 2: What would happen if an Agency failed for several months to turn in their June data with a sub-3% error rate? That data is "31 days late" when we run our end-of-July report, "62 days late" when we run our end-of-August report. If the data was transmitted with less than 3% error on August 11th, the score of "72 days" would be used until that data aged out of the 6-month average.

Grades (using 6-month average):

- 0-5 days = A
- 6-15 days = B
- 16-30 days = C
- 31-45 days = D
- 46 days or more = F

The initial metric seems very ambitious, why are you pushing for such a low error rate in the data?

Agencies are demanding OPM to be able produce and deliver human capital analytical insights that are more real time and actionable. Data quality and timeliness, beyond compliance, are foundational for OPM's ability to provide this to Agencies.

The initial metric will measure compliance with The Guide to Processing Personnel Actions (GPPA) and The Guide to Human Resources Reporting (GHRR). If Agency human resource units and the EHRI Data Provider are complying with the GPPA, there would be no errors regarding data standards. As such, this initial Agency Data Quality Indicator Report also serves to inform Agencies if they are facing compliance challenges.

While OPM is initiating this effort with a target of achieving sub-3% error rates in all fields, it is very realistic for compliance auditing by Agencies and Data Providers to make a 0% error rate the norm.

Who do we reach out to for more information?

The CHCO Council Data Working Group and QSMO SSP meetings will continue to be venues for discussion of this effort. You can also reach out to OPM's Data Standards Management and Modernization Branch mailbox (DSMMallstaff@opm.gov), which can direct your question to an appropriate person.

Details of Administration / Workflow

This seems very new to many of the Agency representatives. What has OPM been doing to communicate about this issue in the past?

A crucial function of the Agency Data Quality Indicator Report is to complete the communication loop by ensuring Agency representatives have visibility into issues OPM has already established thorough communication with EHRI Data Providers.

Your Data Provider receives an error report on data they submit, by email, typically within 24 hours of the submission. The error report provided to the Data Provider is broken down by Agency, to better facilitate communication between Data Providers and their Agency representatives.

The error report tells your Data Provider:

The number of records submitted, the number of rejected records, and the % rejected.

The data is then further broken down by "Edit Code," which tells the Data Provider which data fields are not meeting OPM data standards.

For example, the Data Provider may be informed there is a 4% error rate for a particular Agency in the "Remote/Telework Agreement Type" data field. There are 6 two-letter codes allowable for that field. An error would indicate that the Data Provider is submitting data to OPM in the values in that field are not on the list of allowable codes. Data Providers are able to log in to the EHRI Portal to view their submitted records, to determine which records caused errors. Note that all Data Providers are required to go through compliance testing to ensure their systems conform with EHRI Data Standards. It is possible for a Data Provider to achieve a 100% compliance with EHRI Data Standards (i.e., a 0% error rate) on any submitted data. There are practical reasons why that may not be achieved every time, (e.g. system revisions in progress, new bugs detected, etc.) but it is realistic for 100% compliance to be the norm.

What are examples of errors under the initial metric? How do they relate to policy and statutory compliance?

The initial metric will measure compliance with The Guide to Processing Personnel Actions (GPPA) and The Guide to Human Resources Reporting (GHRR).

Error Example: A limited number of codes are allowed in the legally required "Race and Nation of Origin (RNO)" field. An "error" in that field indicates the Data Provider is transmitting a code that is not allowed or has left the required field blank.

An Error of this type indicates either that the Agency HR system contains a non-compliant code or has left the required field blank, or that an error was introduced during transmission from the Agency HR system to the OPM EHRI system.

How does OPM expect the Agency Data Quality Indicator Report to develop in the future?

FY 2024 Q3, OPM is likely to expand the Agency Data Quality Indicator Report. This includes providing monthly data and separating timeliness and quality into individual measures. Expected delivery is the first full week of May.

FY 2024 Q4, OPM is likely to expand the Agency Data Quality Indicator Report to include quality checks of the data beyond whether the data merely meets data standards. This will include identifying inconsistencies between EHRI data fields that indicate incorrect data. Expected delivery is the first full week of August.

FY 2025 Q1, OPM will evaluate turning the Agency Data Quality Indicator Report into a dashboard. If that effort seems appropriate, expected delivery of the dashboard is FY 2025 Q2.