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Correspondence Memorandum

Date: October 17, 2018

To: Group Insurance Board

From: Rachel Carabell, Senior Health Policy Advisor
             Office of Strategic Health Policy

Subject: Data Warehouse and Health Analytics Update

This memorandum is for informational purposes only. No Board action is required.

This memorandum provides the Group Insurance Board (Board) with an update on implementation of the data warehouse and business intelligence tools administered by IBM Watson Health (formerly known as Truven Health Analytics) and the Office of Strategic Health Policy's (OSHP) use of the new tools. Staff refer to these tools as **DAISI**, which stands for **D**ata, **A**nalytics and In**SI**ghts.
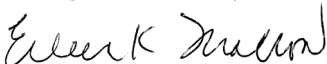
Contract Status
The Board initially awarded a contract for a data warehouse and business intelligence tools to Truven Health Analytics, LLC (Truven) effective March 1, 2017, through December 31, 2018. In August 2018, the Board signed an amendment extending the contract through December 31, 2020. The Board has an option for one additional two-year extension, which would extend the contract through December 31, 2022, if elected.

In 2016, Internal Business Machines Corporation (IBM) purchased Truven. Effective August 1, 2018, Truven changed its name to IBM and IBM will perform all responsibilities under the contract through IBM Watson Health, a division of IBM.

DAISI Implementation Status

Data Warehouse Deployment
In August 2018, IBM completed deployment of the DAISI data warehouse. Medical claims and provider data from all health plans is included as well as pharmacy, dental and wellness data. A deployment of the data warehouse earlier in 2018 did not include

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data from three of the health plans or supplemental provider data provided by the health and dental plans and the Wisconsin Health Information Organization (WHIO).

<u>Late Data Submitters</u>
For the three data submitters deemed late because they did not meet the timelines for the first deployment of the data warehouse, ETF withheld 25% of their December 2017 premium under the terms of their 2017 contract. After the August deployment, ETF released the withheld premium for two of the late data submitters because their data met the data submission requirements and was included in the August deployment.

ETF continues to hold the premium for the last late data submitter because its data continues to fail data quality thresholds. While its data was included in the August deployment, it is currently missing a key element required to understand the nature of services received during a service or procedure. This data submitter is currently in the process of resubmitting their data to include the required data element. Once all the revised files are received, tested and loaded into the data warehouse, ETF will release the last of the withheld premium.

Transition to Operations
The first phase of operations is considered a stabilization phase. This phase includes onboarding and training staff, getting to know the data by conducting limited analytic queries, establishing initial reporting, setting up policies and procedures, and beginning to expose the rest of ETF to DAISI and its capabilities to ensure coordination across the agency. A significant amount of data quality testing and review continues during this phase. ETF expects this stabilization phase to continue through the end of the year.

<u>Analytics Team and Initial Use of the DAISI Data Warehouse</u>
OSHP has established an analytics team, which includes a lead worker, a data analyst contractor and a part-time on-site analytic consultant provided by IBM. In addition, this team is supported by a data operations specialist. This team was hired over the spring and summer and has received two days of on-site training with IBM to become familiar with the data warehouse tool. They have been conducting initial analytic queries to get to know the data and the tool and have been heavily involved in recent data quality investigations.

<u>DAISI Reporting</u>
In October 2018, IBM deployed its new standard dashboard product to OSHP. These interactive dashboards provide numerous high-level aggregate financial, eligibility, clinical and pharmacy dashboards. Staff were trained on the dashboards in October and feedback was recently provided to IBM on how to improve the dashboards.

OSHP staff and IBM have also been focused on developing custom dashboards intended to fill gaps not addressed by the standard dashboards. Executive and wellness dashboards are the first priority. Staff are evaluating what other gaps exist that will require a custom dashboard.

Staff expect to be able to share some of DAISI's dashboards with the Board at its February 2019 meeting.

Policies and Procedures
ETF staff have also been working to establish policies and procedures for data submission penalties and the use of the new DAISI tools.

Data submission penalties apply to data submitters that do not meet the data submission requirements for notifications, timeliness and quality. As implementation transitions to operations, having procedures in place to ensure that data submitters failure to meet requirements are tracked and monitored and penalties are enforced is critical to ensure DAISI updates are timely and consistently include high-quality data.

ETF is also focused on ensuring that it has the appropriate policies and procedures in place for granting access to the new DAISI tools and managing data requests from external sources. These policies and procedures ensure ETF meets its requirements for transparency under the state's open records laws, but also maintains the security of the data included in the data warehouse as required under state and federal privacy laws.

Data Quality Reviews and Data Submissions
ETF and IBM continue to work on validating the quality of the data in the data warehouse and improving data submitters' submissions. IBM conducts regular quality reviews of each data submitters' monthly file submissions. During these reviews, IBM may identify opportunities for improvement. In addition, some data submitters struggle to submit high quality data consistently on time each month. IBM works one-on-one with each of these submitters. In addition, it held a session with all data submitters in September reminding them of the submission requirements and giving them tips on how to successfully submit their monthly files. Delays with data submission and questions about data quality are the biggest obstacle to fully realizing the value of the data warehouse, and ETF and IBM staff continue to press data submitters to meet their program obligations.

Early next year, ETF will be changing the format of the enrollment file it sends to IBM, which will allow for more efficient testing and processing of the file and more efficient future changes to the file. This change will also allow ETF to provide enhanced information on employers allowing for more targeted analysis.

DAISI Coordination
Ensuring that other business units within ETF are aware of DAISI, its role and how ETF data is used within DAISI is important since many decisions about employer and insurance enrollment data are made outside of OSHP. Therefore, OSHP staff have been providing presentations and demonstrations on the tools to the Data Governance Council and other groups within ETF to ensure that we are coordinated across ETF.

Analytics Agenda

OSHP and IBM staff are working together to develop an analytics agenda. The agenda is a shared list of prioritized analytic projects that OSHP and IBM will focus on for the next two years. The process for establishing the analytic agenda has focused on ensuring:

- alignment with the GIB and OSHP's strategic priorities;
- each project has a business purpose or goal;
- leveraging IBM's experience working with other public payers;
- identification of low-hanging fruit; and
- continual improvement in data quality.

ETF expects to finalize the 2019 and 2020 analytics agenda early next year and will update the Board at its February meeting.

Data Submitters Access to DAISI Data

ETF is working with IBM to develop an approach to give data submitters access to DAISI data for their *own* members. By giving each data submitter access to data on their own members, these vendors can validate and improve their performance against clinical and financial performance measures ETF may use to hold them accountable. They can also enhance and better target their member outreach strategies and perform program evaluations. Navitus and StayWell have already identified program evaluations they would like to complete using DAISI data. Delivery of such access is not expected until later in 2019.

Staff will be at the meeting to answer any questions.