Policy Level

Agency:
107 Health Care Authority on Behalf of the Health Benefit Exchange

Decision Package Code/Title:
PL - HL HBE Modernizing Healthplanfinder

Agency RecSum:
The Exchange will accelerate its modernization efforts by moving to a new hosting platform; creating a system made up of several smaller applications that are easily changed, tested, secured, and managed.

Fiscal detail:

<table>
<thead>
<tr>
<th>Operating Expenditures</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
<th>FY 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>17T-1 HBEA</td>
<td>$693,000</td>
<td>$631,000</td>
<td>$97,000</td>
<td>$97,000</td>
</tr>
<tr>
<td>001-C GF-Federal</td>
<td>$1,434,000</td>
<td>$1,306,000</td>
<td>$201,000</td>
<td>$201,000</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$2,127,000</strong></td>
<td><strong>$1,937,000</strong></td>
<td><strong>$298,000</strong></td>
<td><strong>$298,000</strong></td>
</tr>
<tr>
<td><strong>Biennial Totals</strong></td>
<td><strong>$4,064,000</strong></td>
<td><strong>$3,937,000</strong></td>
<td><strong>$596,000</strong></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staffing</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
<th>FY 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTEs</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
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</tbody>
</table>

| Average Annual                  | 2.0     | 2.0     | 2.0     | 2.0     |

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<tr>
<th>Object of Expenditure</th>
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<tr>
<th>Revenue</th>
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Package Description

What is the problem, opportunity or priority you are addressing with the request?
It is critical for the Exchange to keep its systems modern, secure, and responsive to changing needs. Without continuous investment, the Exchange’s systems incur technical debt that could stifle future innovation. This request will allow the Exchange to accelerate its modernization efforts, increase system nimbleness and position HBE to respond quickly to unforeseen asks.

Healthplanfinder has been operating on the Azure Government Cloud for over a year, as a result the Exchange is well positioned to shift to cloud native technologies to drive innovation, reduce risk, and stabilize costs. Healthplanfinder is extremely stable, but is built using a monolithic java application on non-cloud native technologies. With the underlying technologies approaching end of life, it is more cost effective to expedite upgrading the platform rather than delaying. Continuing with the current platform will result in costlier deployments with longer testing, and higher system integrity risks.

For additional information contact:
Nicholas Aaseby, Financial Analysis and Reporting Manager
360-688-1574 nicholas.aaseby@wahbexchange.org
What is your proposal?
To adapt to growing and changing needs of our partners and customers, we will invest in modernizing and modularizing our systems to be cloud native solutions. This allows for large systems to operate like small autonomous teams all driving to the same goals.

We will rearchitect Healthplanfinder to a cloud native modular design using microservices and containers. These technologies allow for an application that can change quickly with little overhead and avoid costly large-scale projects. Operating on cloud native platforms using modular design allows the application to meet the customer where they are and provide a customized user experience. The final product will be highly flexible with a reduced security risk, lower costs for system changes, and reduce time needed for deployments.

How is your proposal impacting equity in the state?
The goal of the Exchange is for all Washingtonians to have full and equal access to opportunities, power, and resources to achieve their full potential. Underlying disparities in health coverage for low income people and people of color continue to be a major equity issue. It is more important than ever that new and returning customers have stable and responsive tools for enrolling in health insurance plans. This project will continue to reduce current limitations of Healthplanfinder and will result in a more accessible platform for all Washingtonians regardless of when and how they apply for coverage.

What are you purchasing and how does it solve the problem?
This will reduce dependencies on large single vendors and will increase the procurements of subcomponents of Healthplanfinder (HPF) with increased competition for cost and quality across multiple parallel initiatives:

- **Database cloud migration and data archiving**: The existing database would be re-architected to a cloud native database structure. This will provide the Exchange increased flexibility, better data utilization, and reduce data breach risk.

- **Migrating from proprietary products to cloud native and in some cases open source products**: This will accelerate the upgrade away from outstanding proprietary projects (middleware, FTP, etc.) to cloud native and open source products where applicable. This will provide the Exchange increased flexibility, reduced system complexity, and contain cost.

- **Modularity and Containerization**: Implementing Kubernetes and micro services capabilities across the ecosystem breaks large complicated system into a collection of small applications that are able to work together but can be changed, updated, or replaced with minimal impacts to the rest of the application. This reduces time in testing, support, development, and reduces the risks to data.

- **Decoupling account worker systems from the customer facing portal**: This allows for Backoffice solutions that support the operational needs for call centers, data analysis, customer issues, and cross agency support in an integrated fashion. This suite will also be built to be modular and containerized which then allows for adding functionality much faster and at a reduced cost whenever is needed be it a federal change or a state need.

- **Cloud Native first migration**: By moving back-end system components to cloud native (Platform as a Service (PaaS) or Software as a Service (SaaS)) we better utilize our staff, time,
and funding. These systems changes would simplify our architecture and reduce the complexity other core processes and systems things like code deployment, disaster recovery, and backups.

This modernization project will increase HPF’s nimbleness and its ability to support new customers and changes to the health insurance system.

The system changes and move to a new hosting platform will change so that the application will be a system made up of several smaller applications that are easily changed, tested, secured, and managed. The hosting platforms will be hosted and managed by the cloud providers and reduce the need to focus on non-value add efforts like patching and system migrations.

What alternatives did you explore and why was this option chosen?
Recent events have highlighted the need for HPF to react more quickly to the increase in complexity of the insurance market. Absent this package, modernization will be less cost effective and will require twice as much time to implement (four to five year effort under current resources).

Assumptions and Calculations
Expansion or alteration of a current program or service
This is a modernization of the Healthplanfinder system.

Detailed assumptions and calculations
The estimate provided reflects the costs associated with modernizing and modularizing Healthplanfinder in addition to two ongoing staff resources.

- No increase in Carrier Assessment is expected to cover this expenditure.
- No new General Fund-State dollars are requested.
- This Expedited modernization is eligible for a 75% federal match rate.

The non-staff costs include:

- **On prem systems:** to migrate the Backoffice systems currently hosted at the Exchange’s physical location into the new platform. Costs include continued hosting, data migration, future state design, and implementation
- **Duplicated platform environment:** to operate both the new platform and the legacy environment and systems as they are being sunset
- **HPF enhancement for modularity:** include HPF cloud native design, containerization design, build out, and implementation
- **System integrator cloud native migrations:** system integrator (SI) support for the HPF cloud native migration activities
- **System integrator for data modeling:** system integrator efforts for the database migration and data archival design and implementation
Workforce assumptions
The Exchange requests funding for two ongoing staff resources.

**Developer** - The developer will be used to focus on modularizing the applications and drive the move to new containerization technologies and coding practices. They will work with the Development team to implement, develop, and assist with the coding standardization change in Java and .Net to new structures that include micro services and code reusability. They will take on specific modules and develop them using the new practices. The technologies will include containerization using Docker, Microservices deployment using GitHub to Kubernetes and Data type separation using No SQL and PaaS SQL services.

**Senior System Engineer** - The Senior System Engineer will be the primary subject matter expert and implementation coordinator for the technology infrastructure and deployment for all Modernization and Modularization efforts. They will work with Architects to translate and draft ideas and design into actionable projects and milestones for the IT teams. They will work with teams to engineer and deploy the underlying technologies for Microservices, Modularity, and Containerization. These technologies will be developed on the Azure cloud using Kubernetes, Cosmos DB, Docker, GitHub, and SQL PaaS.

Strategic and Performance Outcomes

**Strategic framework**
This proposal relates to Results Washington’s Healthy and Safe Communities goal and meets the Exchange’s strategic plan to build on the success of Healthplanfinder technology, focused on innovative customer-based solutions.

The Exchange operates Washington Healthplanfinder (Healthplanfinder), an online marketplace that helps nearly 1 in 4 Washington residents enroll in Qualified Health Plans (QHP) and Washington Apple Health (WAH). Healthplanfinder is a single portal that provides customers the opportunity to determine their eligibility for WAH or federal subsidies for QHPs, compare different health plans, and enroll for coverage.

**Performance outcomes**
By funding this request and accelerating Healthplanfinder’s modernization plans, the Exchange expects a more flexible, stable, and modern system.

**Other supporting materials**
Copies of the APD have been previously provided to HCA, OFM, the House and Senate.
Other Collateral Connections
Intergovernmental
None

Legal or administrative mandates
None

Changes from current law
None

State workforce impacts
None

State facilities impacts
None

Puget Sound recovery
None

Other supporting materials
Copies of the APD have been provided to HCA, OFM, the House and Senate.

Stakeholder response
None

Information technology (IT)
ABS will pose the question below for each DP. If the answer is yes, you will be prompted to attach an IT addendum. (See Chapter 10 of the budget instructions for additional requirements.)

<table>
<thead>
<tr>
<th>Information Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does this DP include funding for any IT-related costs, including hardware, software (including cloud-based services), contracts or IT staff?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

Please download the IT-addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review. After completing the IT addendum, please upload the document to continue.