2017-19 Biennium Budget
Decision Package

FINAL

Agency: 303 Department of Health

Decision Package Code/Title: CD Contract for **Hospital Patient Data**

Budget Period: 2017-19

Budget Level: PL-Performance Level

Agency Recommendation Summary Text: The Department of Health requests funding to contract for the collection of hospital patient discharge data. This solution will replace the current Comprehensive Hospital Abstract Reporting System (CHARS) system when it reaches the end of its lifecycle in July 2019.

Fiscal Summary: Decision package total dollar and FTE cost/savings by year, by fund, for 4 years. Additional fiscal details are required below.

Operating Expenditures	FY 2018	FY 2019	FY 2020	FY 2021
Fund 001-1	0	556,000	77,000	88,000
Total Cost	**0**	**556,000**	**77,000**	**88,000**
Staffing	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
FTEs	0	0	-1.5	-1.5
Object of Expenditure	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
A - Salaries and Wages	0	4,000	-91,000	-91,000
B - Employee Benefits	0	1,000	-31,000	-31,000
C - Personal Service Contracts	0	550,000	214,000	225,000
E - Goods and Services	0	1,000	-12,000	-12,000
G - Travel	0	0	0	0
J - Capital Outlays	0	0	0	0
N - Grants, Benefits & Client Svc	0	0	0	0
T- Intra-Agency Reimbursements	0	0	-3,000	-3,000

Package Description

The Department of Health (DOH) requests funding to maintain its ability to acquire hospital patient data as required by RCW 43.70.052. This will be done by contracting for hospital patient data rather than purchasing or developing a new system to replace the current system when it reaches its end of life.

DOH is statutorily required to collect data on inpatient hospital stays (RCW 43.70.052). The Comprehensive Hospital Abstract Reporting System (CHARS) is the foundational public health data system used widely to study public health and health care in Washington State. Through the CHARS system, the department currently collects individual patient medical information from 100 hospitals in Washington, totaling over 750,000 records per year. Data is collected on patient demographics, diagnoses, and procedures. This information provides policy makers and stakeholders with information necessary to analyze significant public health and health care issues.

The CHARS system was built on .Net and SQL server technology that will no longer be supported or compatible with the new version of the Windows operating system. In July 2019, the system will have to be quarantined based on state security and IT standards, resulting in hospitals no longer being able to report to CHARS.

Rather than replacing the CHARS system internally, the Department determined that it was more cost-effective to contract for the data collection in the future. If the system is not replaced and the CHARS system is quarantined, hospitals will not have electronic access to submit data to the system. Manual entry of the data is not an option as DOH would require more staffing and IT support than would be financially feasible. If DOH does not receive funding to contract the collection of the data, the system will need to be decommissioned and hospital patient discharge data will no longer be collected by DOH.

Without access to this data, the Department of Health, local health, hospitals, researchers, and other data users will lose critical data about the causes and frequency of inpatient hospitalizations in Washington communities. Having that information is essential to making important policy decisions, assessing programs, and conducting research that could lead to more preventative measures and practices resulting in a positive impact to the health of babies, children and adults in Washington. For example, OFM, HCA and DOH use the data to determine incidences of neonatal abstinence syndrome. DOH also uses it to determine cases of maternal morbidity, which will help inform recommendations of the Maternal Mortality panel, established by legislation.

There is an anticipated future (and ongoing) cost savings by contracting for data collection rather than maintaining an in-house data collections system.

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Base Budget: If the proposal is an expansion or alteration of a current program or service, provide information on the resources now devoted to the program or service. Please include annual expenditures and FTEs by fund and activity (or provide working models or backup materials containing this information).

The current base budget for the CHARS program consists of 4.6 FTE and $479,000 per fiscal year from General Fund State, Activity A008. These funds are used to ensure timeliness of hospital reporting, data quality, and provide data analysis and linkage. This includes partnering with the vendor to resolve data errors and recurring data issues, such as incorrect, missing or underreported data and delays in reporting. This also includes working with the vendor to create reports for both the agency *and* hospitals in order to identify data

quality issues, maintaining knowledge of industry standards *and* improvements, developing communications to hospitals on data issues, and changes to industry standards.

Decision Package expenditure, FTE and revenue assumptions, calculations and details: Agencies must clearly articulate the workload or policy assumptions used in calculating expenditure and revenue changes proposed.

Although DOH's role would change somewhat from its current process, the department assumes most of the existing work will continue in order to manage the contract and ensure timeliness of hospital reporting and data quality.

Ongoing work includes partnering with the vendor to resolve data errors and recurring data issues, such as incorrect, missing or underreported data and delays in reporting, working with the vendor to create reports for both the agency and hospitals in order to identify data issues, maintaining knowledge of industry standards and improvements, developing communications to hospitals on data issues and changes to industry standards. The agency will also continue data analysis and data linkage, including responding to customer requests for standard and custom data sets and creating hospital inpatient re-visit data sets. This work must continue to reside with the agency as the agency is the data owner by law.

Starting in fiscal year (FY) 2020, the department anticipates a reduction in the current base budget of $140,000 and 1.5 FTE per year. This will be a reduction in existing staff of 0.2 FTE ITS 5 and 1.0 FTE HSC 2 as system IT support and program technical assistance will decrease. Reductions in staffing would not occur until the contract is in place and hospitals start submitting data to the vendor by July 2019. There will also be a 0.3 FTE reduction for division and agency workload per fiscal year.

New work will include maintaining the contract, monitoring the vendor system, and working with the vendor to identify and resolve data issues. In May of 2017, the department issued a Request for Information (RFI) to explore vendor availability and estimated costs for contracting collection of hospital inpatient data, as authorized under RCW43.70.052(1). The department received responses from six different organizations and cost estimates from five. In addition, information was obtained from two other states currently contracting for the collection of hospitalization data. Estimates for this decision package are based on the mean costs (excluding 2 outliers) received from the RFI responses and experience in other states.

The department assumes one-time costs of $550,000 in FY2019 to contract and implement data collection services, as well as $214,000 in FY2020 for maintenance and subscription charges. Ongoing costs through year six are estimated to increase by 5% per year for maintenance and subscription charges. Subsequent fiscal year estimated contractual costs are FY21 $225,000, FY22 $236,000 and FY23 $248,000. The total six year contractual cost is 1.5 million. The estimated net fiscal impact to the department starting in FY19 is $556,000, FY20 $77,000, FY21 $88,000, FY22 $99,000 and FY23 $111,000.

A summary of the current and projected costs is provided below:

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
FTE	3.40	3.40	2.20	2.20	2.20	2.20
Salary	244,752	251,304	176,143	176,143	176,143	176,143
Benefit	88,224	91,344	65,038	65,038	65,038	65,038
Contractual	***-***	***550,000***	***214,000***	***224,700***	***235,935***	***247,732***
Goods/Svs	41,559	41,551	32,106	32,106	32,106	32,106
Travel	696	696	696	696	696	696
Equipment	3,192	3,192	3,192	3,192	3,192	3,192
IT Support (T)	8,364	8,609	5,657	5,657	5,657	5,657
Total Direct	**386,787**	**946,696**	**496,832**	**507,532**	**518,767**	**530,564**
Division Indirect 8.3%	32,103	32,925	23,475	23,475	23,475	23,475
Agency Indirect 15.4% & 1.2%	59,565	67,691	46,124	46,253	46,387	46,529
Total Program Costs	**478,455**	**1,047,312**	**566,431**	**577,260**	**588,629**	**600,568**

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Base Budget	478,000	491,000	491,000	491,000	491,000	491,000
Decision Package Request		***556,000***	***77,000***	***88,000***	***99,000***	***111,000***
Total	**478,000**	**1,047,000**	**568,000**	**579,000**	**590,000**	**602,000**

Decision Package Justification and Impacts

What specific performance outcomes does the agency expect?

Describe and quantify the specific performance outcomes the agency expects as a result of this funding change. (results washington link)

Hospital patient discharge data support the Governor's Goal 4 efforts to create healthy and safe communities. Representing data on every hospitalization in the state, the data provide a rich information source on the health of Washingtonians. Through this data, the department can study key public health issues including the burden of chronic disease (e.g., diabetes and asthma), injuries, and perinatal care. If funded, the return on investment will be the seamless transition of data collection from an agency-supported application to a vendor-supplied solution. If the not funded, hospital patient discharge data will no longer be collected, analyzed or distributed and the program will cease to exist. Although similar data is collected by other agencies and systems, the hospital patient discharge data is the most comprehensive and complete picture of a patients hospital stay. It includes 25 diagnoses and 25 procedures codes related to the stay. The department has the only program which collects a final record of every inpatient stay by facility regardless of payer. Without this information, there will be an incomplete view of community health status. A lack of complete information will affect the department's ability to assess and affect critical health factors, such as social determinants of health, access to health care and health outcomes, and monitoring health and readmissions over time.

Performance Measure detail:

Chapter 43.70 RCW requires hospitals to report data within 45 days after the end of the month of discharge. The department will continue to ensure hospital patient discharge data is collected in a timely manner. It will also continue to monitor and ensure data quality, including errors and missing and underreported data.

In addition, contracting data collection will reduce the footprint of in-house systems maintained by the department's limited IT staffing resources, moving the responsibility of software maintenance and upgrades outside of the department.

Fully describe and quantify expected impacts on state residents and specific populations served:
Funding this decision package will allow the department to continue the collection of hospital patient discharge data. Hospital patient discharge data provide foundational public health data used to measure social determinants of health, including race, income, education, access to health services, disability, and other factors. The data enable the department to assess disparities in hospitalizations for different geographic areas and race/ethnicity groups, which may be indicative of differential access to health care and health outcomes.

The data is also used to monitor health over time by looking at readmissions and to allow the study of differences in the availability of health care interventions. For example, the department's Certificate of Need uses the CHARS data to determine the need for Hospital Acute care beds, level 1 Rehabilitation beds, Level 2 and up Neonatal bassinets, open heart surgery, elective percutaneous coronary intervention, transplant services and burn units.

The benefit of contracting for data collection will be improved stability of the system and a reduction in IT system support, maintenance and upgrades. The department will be able to focus its staff and resources on data timeliness, quality and analysis.

What are other important connections or impacts related to this proposal? Please complete the following table and provide detailed explanations or information below:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	**No**	**Identify:**
Other local gov't impacts?	**Yes**	**Identify:** Hospital Districts will have to report data to a new vendor. They will still need to ensure continued and timely submission of data.
Tribal gov't impacts?	**No**	**Identify:**
Other state agency impacts?	**No**	**Identify:**
Responds to specific task force, report, mandate or exec order?	**No**	**Identify:**
Does request contain a compensation change?	**No**	**Identify:**
Does request require a change to a collective bargaining agreement?	**No**	**Identify:**
Facility/workplace needs or impacts?	**No**	**Identify:**

Capital Budget Impacts?	**No**	**Identify:**
Is change required to existing statutes, rules or contracts?	**No**	**Identify:**
Is the request related to or a result of litigation?	**No**	**Identify lawsuit (please consult with Attorney General's Office):**
Is the request related to Puget Sound recovery?	**No**	**If yes, see budget instructions Section 14.4 for additional instructions**
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.
Transition to a vendor provided solution should be straightforward and will not impact data users. The impact to hospitals will be minimal as the solution will need to comply with existing file formats and system requirements. Hospitals will continue to submit data in the same format through a web-based solution but to a contracted vendor rather than the department. Although notification to hospitals of late reporting and errors will initially be through the vendor, the department will continue to work with hospitals when issues need to be escalated or late reporting is recurring.

What alternatives were explored by the agency and why was this option chosen?
In 2016, the department explored building an in-house replacement for CHARS. The cost was estimated to be $875,000 for development and $75,000 for ongoing maintenance. The agency decided to not move forward with a replacement because building another stand-alone surveillance system did not align with the vision of the agency's Public Health Data Interoperability (PHDI) Project. In addition, the department explored existing systems, including the Syndromic Surveillance and the All Payers Claims Database, as options for data collection. At this point, there are no viable alternatives available within the timeframe needed to replace the existing system. Those options would require major system changes or upgrades as well as statutory changes. In addition, funding would still be needed to expand existing systems, which could potentially be more costly than contracting for data collection.

What are the consequences of not funding this request?
Without funding to contract for data collection, the Department will not be able to continue capturing this foundational public health data beyond summer 2019.

Hospital patient discharge data are used by:

- Public health for tracking of diseases caused by tobacco, illness caused by diabetes and heart disease and infectious diseases
- Hospitals to help determine best practices for treatment and program evaluation
- Government and communities to assess community health needs
- Medical researchers to look at outcomes of specific kinds of treatments
- Health planners to trend the data to understand the future services needed in communities

Specific examples of how hospital discharge data are being used include:

Institute for Health Metrics and Evaluation
The King County Burden of Disease Assessment Tool will leverage routinely collected health data to compare burden of disease at the sub-county level within King County. It will evaluate the success and cost-effectiveness of policy, systems, and environment changes to maximize health and minimize disparities. The project offers a proof of concept that is applicable to, and a potential pilot for, all U.S. local health departments.

Prosser Hospital District
Prosser Hospital District, concerned about high use of hospital care among patients who unnecessarily frequently use hospital care, created a Community Paramedic program to reduce hospital visits. They are using the data to track how well their intervention program is working to reduce unnecessary hospital visits. If the program is successful, they hope to expand it.

Seattle Children's
Seattle Children's hospital is hoping to improve the lives of babies born prematurely. They are using hospital patient discharge data to understand the health outcomes of babies born prematurely. The data will be used to develop programs to help prevent preterm births.

Washington State Department of Health
Community hospitals must apply to the department's Certificate of Need (CON) program to add licensed acute care beds. The CON program uses hospital discharge data to determine if a given geographic area of the state has a need for more beds. The department also uses the data to identify maternal mortality cases and link death records with hospitalization data for review by the maternal mortality panel, which is mandated by law.

Washington State Department of Labor and Industries
L&I develops hospital inpatient payment rates based on modeling combined L&I and CHARS data. Without CHARS data, L&I may not have a complete picture of potential inpatient costs.

John Hopkins University
John Hopkins University is using hospital patient discharge data to determine if minority serving hospitals are more likely to be penalized by the Affordable Care Act readmission penalty after controlling for social risk factors and health care market variables.

Montana State University
Hospital patient discharge data are being used to estimate the effect needle exchange programs have on drug overdose rates that result in hospitalization.

How has or can the agency address the issue or need in its current appropriation level?

At the current appropriation level, the department will not be able to fund this decision package without affecting other important priority work. Reducing other core public health services to fund this program is not an acceptable alternative.

Other supporting materials: Please attach or reference any other supporting materials or information that will help analysts and policymakers understand and prioritize your request.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No 

☒ Yes Continue to IT Addendum below and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology Items in this DP (*insert rows as required*)	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Contract for service of data collection costs	0	550,000	214,000	225,000
	0	0	0	0
Total Cost	**Enter Sum**	**Enter Sum**	**Enter Sum**	**Enter Sum**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☒Yes ☐ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.