Ohio Opioid Analytics Project

Application Due Date: April 10, 2018, 5:00 PM (EST)

Application Release Date: March 20, 2018

Request for Applications Primary Contact:

Ohio Colleges of Medicine Government Resource Center
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Program Manager
Email: Tina.Bickert@osumc.edu
Executive Summary

On behalf of the Ohio Departments of Medicaid (ODM), and Higher Education (ODHE), the Ohio Colleges of Medicine Government Resource Center (GRC) is requesting applications from qualified academic researchers, data analysts, and subject matter experts for the Ohio Opioid Analytics Project (OOAP) to develop predictive models around three categories of opioid endpoints: prevention, child welfare, and treatment. Predictive models and data solutions will be developed for state leadership to inform program and policy decisions. Point-of-service models and tools will be developed to inform point-of-contact decision making for clinicians and other change agents (i.e. pharmacists, law enforcement). Advanced data analytic strategies such as spatial analysis and artificial neural networking will be used to provide insight into regional and sub-regional factors and increase the accuracy of predictions related to opioid endpoints, including opioid use disorder, overdose, death, loss of child custody, neonatal abstinence syndrome, medication assisted treatment, and other endpoints included at the request of state sponsors.

The Ohio Opioid Analytics Project seeks to fund three categories of opioid endpoints: prevention, child welfare, and treatment. This opportunity will support, at minimum, at least three Opioid Analytics Teams (OATs) and a Data Solutions Group (DSG) totaling up to $1,770,000 over an 18-month period.

Technical Assistance

Questions regarding this Request for Applications may be emailed to Tina Bickert at: Tina.Bickert@osumc.edu.

Questions will be accepted until April 2, 2018 at 12:00 PM Noon EST

A copy of this Request for Applications and all questions and answers posed by potential vendors will be posted at grc.osu.edu/funding.
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MEDTAPP Overview

Section 1903(a) of the Social Security Act allows the federal government to participate financially in state Medicaid programs in such amounts "found necessary by the Secretary for the proper and efficient administration of the State (Medicaid) plan." The Medicaid Technical Assistance and Policy Program (MEDTAPP) is a Medicaid and university research partnership aimed at supporting the efficient and effective administration of the Medicaid program. GRC manages MEDTAPP for ODM, under which the Ohio Opioid Analytics Project (RFA) is sponsored.

Ohio Opioid Analytics Project Overview

In 2016, unintentional drug overdoses caused the deaths of 4,050 Ohio residents, a 32.8 percent increase from 3,050 overdose deaths in 2015 (ODH). Ohio had the fourth highest overdose death rate in the nation at 29.9 per 100,000 (CDC). The numbers of unintentional overdose deaths have slowly increased year after year in Ohio since the early 2000’s. Deaths caused by prescription opioid overdose began to climb in 2010, followed by an increase in unintentional heroin overdose deaths in 2012. The most significant spike in overdose deaths, however, is attributed to the synthetic opioid fentanyl. Fentanyl overdose deaths jumped from 75 deaths in 2012 to 2,357 deaths in 2016 – a 92.7 time increase.

The State of Ohio has taken bold action to fight opiate abuse and to reduce the number of deaths caused by accidental opioid overdose. Initiatives have been launched to: 1) Curb over-prescribing of opioid pain medication; 2) shut down “pill mills”; 3) increase illegal drug seizures; 4) empower healthcare providers and families to prevent and address drug abuse; and 5) make the opiate overdose reversal drug Naloxone widely available to the public. The number of opioid doses dispensed to Ohio patients decreased by almost 162 million between 2012 and 2016 (GCOAT) and the state has invested over $1,000,000 annually to make naloxone, an opioid overdose antidote, available to first responders and communities. Despite the state’s aggressive campaign to limit access to opioids, crack down on illegal opioid trafficking, prevent deaths with widespread naloxone access, and treat opioid addiction, the death toll from opioid addiction continues to rise.

In order to guide future state efforts to address the Ohio opioid crisis, ODM and ODHE recognize the need for rigorous research and data solutions to identify the factors that contribute to opioid endpoints. GRC will assist ODM to engage leading content experts who will develop and implement analytic strategies for the purpose of identifying high risk groups and potentially modifiable factors related to critical opioid endpoints. Advanced data analytic strategies such as spatial analysis and artificial neural networking will be used to provide insight into regional and sub-regional factors to increase the accuracy of predictions related to opioid endpoints.

To assist ODM and ODHE with the efficient project management and effective administration, the Ohio Colleges of Medicine Government Resource Center (GRC) will implement the Ohio Opioid Analytics Project.
**Scope of Work**

**MEDTAPP related Scope of Work**
The vendors procured through this RFA will undertake activities as defined and directed by ODM and ODHE, and agreed to by GRC to support the efficient and effective administration of the Medicaid program.

*Vendor must complete and submit the application in Appendix A and other required documentation for consideration.*

Specifically, selected vendors will complete the activities for which they apply and are selected related to the MEDTAPP directed and supported Ohio Opioid Analytics Project as described below. Note that the research and associated deliverables in this RFA must be actionable across the state health and human services enterprise (e.g. ODH, ODM, ODMHAS) to improve high risk groups and potentially modifiable factors related to critical opioid endpoints.

An Executive Committee (EC) of academic and state agency subject matter experts (SMEs), healthcare administrators, and clinicians will provide direction and oversite regarding the research design and methodology of the Ohio Opioid Analytics Project. Opioid Analytics Teams (OATs) will be established around core domains of opioid-related endpoints (e.g., treatment, child welfare). A Data Solutions Group will support the project’s data infrastructure and deliverables. Figure 1 shows the organizational structure of the project. A minimum of three core domains of opioid-related endpoints will be identified by the EC in collaboration with ODM:

1. **Prevention** including opioid endpoints such as dependency, addiction, recovery, overdose, and death. These will include endpoints that align with the Ohio Board of Pharmacy (BOP) dashboard;
2. **Child Welfare** including opioid endpoints impacting children and families, such as neonatal abstinence syndrome (NAS) and out of home placement (foster care);
3. **Treatment** including medication assistant treatment (type, dose, duration), psychosocial treatment and factors influencing treatment retention (e.g., housing and other supports) identified in project development or data analyses; and
4. **Additional endpoint domains** will be included at the request of state sponsors.

GRC will engage at least three OATs to plan, develop, and execute the research around distinct clusters of opioid endpoints: *Prevention, Child Welfare, and Treatment.*

1. OAT team members will include research and data analytic experts across the state with experience in opioid endpoint research, spatial analytics, and logistic regression.
2. Each OAT will have a research lead assigned and a project manager to ensure team tasks are executed as approved by the Executive Committee.
3. At least one GRC researcher will be assigned to each Analytics Team.
4. Each team will be required to have at least one individual assigned to prepare written reports and communications.

GRC will establish a Data Solutions Group (DSG) of data analytics, data infrastructure, and data solutions experts.
1. The DSG will be responsible for supporting all data management needs of the OOAP, including data cleaning and linkages, data infrastructure, the Opioid Analytics Server (OAS), and point-of-service and predictive modeling deliverables.

2. The DSG will work via the EC structure across all OOAP committees and groups to secure necessary data sets, maintain data integrity, and ensure deliverables meet the needs of health policy and clinical practitioners.

Using methods and data sources identified in Table 1, the OATs will apply similar methods to each opioid-related endpoint including spatial analysis, logistic regression, survival analysis, and artificial neural network methodology. Collaboration with other state research initiatives may be sought through the State University Partnership Learning Network (SUPLN) located at Academy Health and the Medicaid Medical Directors Network (MMDN) located at Academy Health to draw conclusions about impacts to state policies. Modifiable and non-modifiable risk factors and their indicators (IVs) will be identified by the EC and will include at a minimum:

1. Regional trends in opioid prescribing and drug trafficking, access to local treatment programs and providers, MAT (methadone, naltrexone, buprenorphine), and naloxone;
2. Social determinants such as safe and stable housing, employment, demographics, economic health of geographic area, criminal history); and
3. Involvement in child protective services, access to other supports, and factors identified by EC and requested by state sponsors.

Predictive models and data solutions will be developed for use by state leadership to inform program and policy decisions. Point-of-service models and tools will be developed to support decision-making at points of contact with clinicians and other potential change agents (e.g., pharmacists, law enforcement officials).

Table 1: Methods and Measures

<table>
<thead>
<tr>
<th>Predictive Modeling Methods</th>
<th>Point-of-Service Modeling Methods</th>
<th>Data Sources and Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistic regression and other relevant predictive models to identify relevant IVs and predict impact of change in IVs. Test multiple models using historic outcomes. Spatial modeling. Analysis of georeferenced data to identify spatial and temporal patterns relevant to each opioid endpoint and sociodemographic characteristics that explain regional variations in opioid endpoints. Artificial neural network methodology to identify highly interconnected systems based on past models to make more</td>
<td>Logistic regression to identify individual level risk factors that clinicians can readily identify and possibly influence to drive treatment in real time (e.g., SBIRT, MAT, comorbid MH). Spatial modeling to identify local resource constraints or protective factors that can increase or reduce vulnerability. Artificial neural networks and machine learning to accommodate changes and weights of covariates in point of service modeling.</td>
<td>ODM Claims (e.g., substance use disorder and NAS diagnosis, service utilization, MAT, opioid prescribing) SACWIS – ODJFS (CPS involvement due to substance use, out-of-home placement) VDRS – ODH (Cause of death data, drug poisoning/overdose death, Naloxone administration) EpiCenter – ODH (ED admissions for overdose by location and date, presenting problem for ED visits) Vital Stats – ODH (cause of</td>
</tr>
</tbody>
</table>
precise predictions. Survival analysis to estimate time to outcome (death, relapse) given exposures of interest, implementation of legislation
Propensity Score Matching (PSM) to evaluate program impact and identify critical risk factors (e.g., which children with propensity for NAS are at greatest risk for negative outcomes?)
Quantitative and qualitative analyses of upstream factors of opioid prevalence
Collaborate with other research programs through SUPLN and the MMDN to conduct policy impact analysis for Ohio compared to other states.

dead, demographics
OARRS – Pharmacy Board (Patient history of opioid prescriptions distributed as reported by pharmacy board, small physician offices), oral doses per capita, MEDs per patient, solid doses dispensed
Drug Seizures – Public Safety/Ohio HIDTA (drug trafficking, drug seizures, drug type e.g., fentanyl, naloxone doses administered)
Ohio Medicaid Assessment Survey regional data (regional social determinants)
Survey Data addressing upstream factors to opioid prevalence
DPS – drug recognition expert data;
Start Talking – 5 Minutes for Life and KNOW! program outreach data;
MHAS – prescribers prescribing Vivitrol, facilities providing Methadone, providers prescribing buprenorphine, patients receiving methadone, patients receiving buprenorphine, patients receiving any MAT or SUD treatment, DEA waiver providers;
Supreme Court – certified specialty dockets
Project Roles and Responsibilities

Applicants selected for the OAP will work within interdisciplinary, multi-university teams of three (3) to five (5) vendors to meet project deliverables (See Figure 1 for project structure). Roles in each of the Opioid Analytics Teams (OATs) will include data analysts, subject matter experts, and at least one individual responsible for technical writing. Under the guidance of the Executive Committee, OATs will plan, develop, and execute the research around distinct clusters of opioid endpoints: Prevention, Child Welfare, and Treatment. Additional variables or endpoints may also be considered. The Data Solutions Group will support the project’s data infrastructure and deliverables, including data visualizations, web- and app-based solutions, predictive modeling tools, and point-of-service tools. The activities and responsibilities for each project role include:

Subject Matter Expert (SME) - SMEs will serve as content and policy consultants for opioid endpoints: prevention, child welfare, treatment, and other relevant endpoints identified by sponsors and the Executive Committee (see page 5 of this RFA for topics related to each endpoint). SMEs will work with the assigned project team(s) to identify risk factors, develop conceptual models to be tested, and contribute to the interpretation of results and project reporting.

Data Analyst – Analysts will participate in the design, implementation, and testing of opioid analytic models, data analysis, interpretation of findings, and report writing. Analytics will include, but may not be limited to logistic regression and other statistical predictive models, spatial statistical modeling, AI/machine learning, survival analysis, propensity score matching, geographical information systems, interactive web-based data visualization, and other quantitative and qualitative methods or data solutions.

Data Solutions Expert – Participants in the Data Solutions Group will work with multiple OATs to support the project’s data infrastructure and to participate in the development, implementation, and testing of predictive models (e.g. ArcGIS, Tableau, R Shiny), data visualization tools for health policy decisions, and point-of-service tools.

Figure 1: Ohio Opioid Analytics Project Organizational Structure
Deliverables

A. The selected vendors will submit monthly reports to GRC detailing work activities with a focus on key accomplishments. GRC will review, reject or approve and compile approved reports and submit to ODM and ODE. The reports will provide detailed information on the status on each of the action items. The status of each item in the scope of work and each deliverable will be coded as P=Progress, NP= No Progress, and C= Completed in the report. A detailed description must accompany each code for each reported action item and deliverable. In the first report, the vendor will also identify a target date that the action item and/or deliverable being reported on will be completed. Once the action item and/or deliverable are completed, the subcontractor will report on the end date. If the target completion date is not met, the vendor will be required to submit an explanation in writing as an attachment to the report. This written explanation will include the following components: a) reason why the target completion date was not met b) identified next steps for completing the action item and/or deliverable, and c) new target completion date. Please see Appendix B for an example of the format of the report.

B. The selected vendors will submit invoices to GRC according to the guidelines provided by the Ohio State University Office of Sponsored Programs (OSP). The invoices will be submitted in hard copy to OSP and in electronic format to the GRC Finance.

C. The selected vendors will submit a draft of the research design and implementation process, including research questions, by June 1, 2018, and a final version of the research design and implementation process by July 1, 2018.

D. The selected vendors will submit a finalized list of variables required for each research dataset at least 6-weeks in advance of requiring the dataset.

E. The selected vendors will complete an interim report of the progress of the awarded Ohio Opioid Analytic Project research tasks by November 30, 2018.

F. The selected vendors will participate in, at minimum, bi-weekly meetings via conference call with GRC to discuss project development and progress.

G. As needed, the selected vendors will participate in meetings in person and via conference call with ODM, ODHE, the OAP Executive Committee, and GRC as needed to discuss project development and progress. All vendors will attend a minimum of two meetings in Columbus, Ohio, in SFY 2018 and three meetings in SFY 2019. Travel expenses should be included in the project budget.

H. Vendors will collaborate with each other and with other university experts by sharing best practices in research methods, spatial analytics, population and health care analytics. The vendors will collaborate with each other, GRC, and the state sponsors in creating common data and variable definitions and a data dictionary for all work.

I. The selected vendors will submit a draft final report prior by March 31, 2019. The report will summarize findings of the studies, with data presented in both tabular and graphical form. The report will be written for a general audience and include limited technical terminology. Technical
information will be included in an appendix.

J. Selected vendors will be required to give in-person final presentation to be scheduled in June 2019.

**Roles and Responsibilities**

GRC will be responsible for the overall performance of the contract. GRC will provide project management and data support for the Ohio Opioid Analytic Project including: monitoring the performance of all the vendors to ensure adherence with the scope of work and completion of the deliverables; serving as the data steward for the project and maintaining all datasets used in completing the research objectives; serving as the primary recipient for the project and subcontract with the selected vendors to provide payment for services; providing technical assistance to the selected vendors as needed to facilitate contracting processes; coordinating communication between ODM and ODHE project sponsors and selected vendors; providing staffing support for the Ohio Opioid Analytic Project Executive Committee; and providing written feedback on project deliverables. GRC researchers will be assigned to participate in conceptual/logic modeling research design development, and provide assistance in development of datasets and measurements, data linkages, statistical models, and conversion of analytical products to end-user-facing software. GRC researchers should be considered project team members and should be given attribution in outputs such as presentations and publications appropriate to their contributions to the project.

The vendor will be responsible for executing the deliverables outlined in the scope of work above for the Ohio Opioid Analytic Project. The vendor’s role is to ensure the adequate completion of the activities listed under the scope of work and the deliverables, provide detailed documentation and feedback to sponsors on work completed, and collaborate with GRC on all identified tasks listed under the scope of work and deliverables section for which the vendor is applying.

**Project Governance**

The Project will be governed using the following structure:

1. **Ohio Opioid Analytic Project Executive Committee**
   - Will be comprised of members from the state agency sponsors (ODM and ODHE), funded investigators, GRC investigators, clinicians, and other university subject matter experts.
   - It is expected that the Executive Committee will meet at least once monthly.

2. **Data Stewardship**
   - GRC will be responsible for implementing a technology platform to:
     - House all of the data used for the Ohio Opioid Analytics Project.
     - Link datasets using protected health information.
     - Provide secure access to protected health information for vendors.
     - Serve as the platform for the spatial analytics project which requires the use of protected health information.
     - Serve as a developmental analytical platform for use by state agencies for opioid endpoint predictive models and by healthcare providers for point-of-service tools.
Project Budget

The total project budget for vendors, as set forth by project sponsors and GRC, is not to exceed $860,000 for the period May 2018 through June 30, 2018 and $910,000 for the period July 1, 2018 through June 30, 2019.

The total project budget allows for a range of vendor effort depending on the role and whether the applicant includes only one individual or a small team of up to three members. For example, a single content advisor or subject matter expert may only require a .10 FTE but a data analyst may require .30 FTE. A team application may include up to three individuals with different roles, such as one subject matter expert at .10 FTE, an analyst at .20 FTE, and an another analyst or a data solutions expert at .15 FTE. The proposed budget for each applicant, whether an individual or a small team, is not to exceed $50,000 total cost (including F&A) for the period May 2018 through June 30, 2018 or $84,000 total cost (including F&A) for July 1, 2018 through June 30, 2019.

NOTE: There is no ability to carryover unspent funds from May through June 2018 into the next state fiscal year, so selected vendors must be able to spend their proposed budgeted dollars during this timeframe.

The vendor should provide a detailed budget by fiscal year 2018 (May 1, 2018 – June 30, 2018) and fiscal year 2019 (July 1, 2018 – June 30, 2019) (using Appendix C) that includes annual salary, benefits, travel and institutional indirect rate capped at 10% of total direct project costs that does not exceed the amount in the table above. The evaluation of applications will consider the vendor’s ability to fulfill the scope and meet the deliverables within the established timeframe and budget.

Note that the institution will be required to cost share unrecovered F&A (unrecovered F&A is the difference between the institutions federally negotiated rate and the allowable 10% indirect rate).

Eligible Vendors

Eligible vendors include faculty, staff, and researchers affiliated with Ohio colleges and universities. Applicants must have at least five (5) years of experience related to the role being applied for. Priority will be given to applicants that demonstrate unique skills or experience related to the project to ensure all roles are filled (see Appendix A for innovation scoring). Individual and small team applications will be considered. Teams may consist of up to three individuals. Additional unfunded team members may be added after awards are made.

RFA Response Requirements

<table>
<thead>
<tr>
<th>RFA Schedule of Events</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFA Issued to Vendors</td>
<td>3/20/18</td>
</tr>
<tr>
<td>Vendors Questions Due</td>
<td>4/2/18 @ 12:00 Noon EST</td>
</tr>
<tr>
<td>Response to Vendor Questions</td>
<td>04/04/18 @ 5:00 P.M. EST</td>
</tr>
<tr>
<td>RFA Due Date</td>
<td>04/10/18 @ 5:00 P.M. EST</td>
</tr>
<tr>
<td>Award Information Estimated Posting Date</td>
<td>To be determined</td>
</tr>
</tbody>
</table>
**RFA Response Format:** Responses must address all aspects of this Request for Applications and should follow the chronology of the RFA. The response, including appendices, shall be submitted as a single searchable PDF file. Applications submitted that include multiple attachments will be disqualified.

Failure to conform to any of the requirements may result in disqualification of the submitted response.

Applications must be submitted via email to Tina Bickert at Tina.Bickert@osumc.edu.

**Vendor Questions:** Questions regarding the RFA process must be submitted in writing to Tina Bickert at Tina.Bickert@osumc.edu. Responses to all questions received will be posted online at grc.osu.edu/funding/QA. Vendors should check periodically for updates. Questions received after April 2, 2018 at 12:00 PM Noon EST will not receive responses.

**RFA Response Requirement Checklist**

Due by Response Closing Date/Time: April 10, 2018 at 5:00 PM EST

The following must be included in the RFA response in order for it to be considered free from defect:

A. Cover Letter  
B. Organizational Capacity  
C. Budget and Budget Narrative  
D. Appendices  
  - Completed Ohio Opioid Analytics Project Vendor Application  
  - CV(s) or resume(s)

Further explanation related to each topic area is below.

**A. Cover Letter**

The cover letter must be in the form of a standard business letter, and must be signed by an individual authorized by the university to legally bind the vendor. The cover letter will provide an executive summary of the vendor's request for funds, including whether planning and/or implementation funding is requested. The letter must also include:

1. A statement regarding the vendor's university or college, Federal tax identification number, and address;
2. A list of the people who prepared the application, including titles;
3. The name, phone number, fax number, and email address of a contact person who has authority to answer questions regarding the application;
4. The name, phone number, fax number, and email address of the Sponsored Programs Officer responsible for the application;
5. The name, phone number, fax number, and email address of the individual(s) responsible for certifying the non-federal matching funds required under this funding opportunity;
6. The name, phone number, fax number, and email address of the Principal Investigator for this project;
7. A list of all vendors, if any, that the vendor will use on the work if selected. If these vendors have not yet been identified, this information must be submitted once selected;
8. For each proposed vendor, the vendor must attach a letter from the vendor, signed by...
someone authorized to legally bind the vendor, including the following:

a. The vendor’s legal status, tax identification number, and principal place of business address;

b. The name and phone number of someone who is authorized to legally bind the vendor to contractual obligations;

c. A description of the portions of the work the vendor will complete;

d. A commitment to complete the work if the vendor is selected;

e. A statement that the vendor has read and understood the RFA and will comply with the requirements of the RFA.

9. A statement that the vendor’s application meets all the requirements of this RFA.

B. Organizational Capacity

Vendor Profile: Each application must include a profile of the vendor’s experience working on similar projects. The profile must also include the vendor’s university or college address, and telephone number, and any other background information that will help the evaluation committee gauge the ability of the vendor to fulfill the obligations of the contract.

Equipment and Software Requirements: The vendor must provide an assurance they have the hardware, software, and technology staff support capacity capable of performing the tasks proposed in the application.

Note that GRC currently uses Unix/Linux based R, SAS BI Enterprise Guide, and ArcGIS for analytics; SQL Server for database support; R-Shiny Pro, ArcGIS, and Tableau for web enabled user-facing applications. Other software can be used, but the cost of licensing, installation, and development using other software must be factored into the vendor’s application. Equipment over $5,000 must be identified in the application, or otherwise approved by GRC prior to purchase.

C. Budget and Budget Narratives

Detailed Budget: In this section, the vendor must provide detailed budget for the total scope of the application using the budget form provided in Appendix C and on the GRC website, (grc.osu.edu/funding/current). The vendor must also provide an accompanying budget narrative, detailing specific direct and indirect costs associated with the application. Please note that the sponsor limits facility and administrative cost (F&A or indirect rate, overhead) reimbursement to 10% of total project costs.

This project spans the 2018 and 2019 State Fiscal Years (SFY). The total subcontract budget is limited to approximately $860,000 for the period May 2018 through June 30, 2018 and $910,000 for the period July 1, 2018 through June 30, 2019.

NOTE: There is no ability to carryover unspent funds from May through June 2018 into the next state fiscal year, so selected vendors must be able to spend the allotted dollars during this two-month timeframe.

Award funding may be used for personnel expenses, software, travel and other direct costs. Funds may not be used for food, computer hardware or equipment over $5,000 (without extensive explanation and additional approval). The institution will be required to cost share unrecovered F&A (unrecovered F&A is the difference between the institutions federally negotiated rate and the allowable 10% indirect rate).
In addition, applications must breakdown the amount of requested project funds required to meet the project deliverables per State Fiscal Year (SFY) within the project period identified in the Executive Summary (SFY 18 – May 1, 2018 – June 30, 2019 and SFY 19 – July 1, 2018 – June 30, 2019).

D. Appendices
Ohio Opioid Analytics Project Vendor Application: The project application is provided in Appendix A of this RFA and on the GRC website (grc.osu.edu/funding/current). Each applicant must complete the application to indicate the project role(s) being applied for, describe how the applicant will contribute to the project in that role, and describe previous related experience and expertise.

CV or Resume:
A four-page maximum resume or curriculum vitae (CV) must be submitted for each team member included in the application.

Application Review

Evaluation of Applications: The evaluation process may consist of up to five distinct phases:

1. The initial review of all applications for defects;
2. The evaluation committee’s evaluation of the applications;
3. Request for more information (interviews, presentations, and/or demonstrations);
4. Negotiation with vendors on best and final offer if necessary; and
5. Selection of vendors and eventual contract award.

The RFA selection committee will be composed of representatives from the sponsor agencies. GRC will facilitate the review, but does not sit on the selection committee.

Initial Review of Applications for Defects: All applications must meet the following criteria in order to be considered free from defects. A no answer for any of the following criteria will result in the application receiving no further consideration as it is not free from defects.

<table>
<thead>
<tr>
<th>Mandatory Criteria to be Free from Defect</th>
<th>Application Meets Mandatory Submission Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Application received by April 10, 2018 5:00 Noon EDST</td>
<td>Yes No</td>
</tr>
<tr>
<td>2 Application submitted using required format</td>
<td>Yes No</td>
</tr>
<tr>
<td>3 Budget is within funding limitations</td>
<td>Yes No</td>
</tr>
<tr>
<td>4 Applicant is an individual affiliated with Ohio college or university</td>
<td>Yes No</td>
</tr>
</tbody>
</table>

Application Evaluation Criteria: In the application evaluation phase, the committee will rate the applications free from defects submitted in response to this RFA based on the following criteria:
Vendors will be scored based on their responses. Scores will then be weighted for each section. Vendors must receive a minimum of 1650 out of the maximum 2750 overall points for all criteria combined, to be considered for the award. In the case of a tie, additional points will be awarded to applications that demonstrate collaboration across universities or colleges.

### RFA Terms and Conditions

As the primary recipient of the Ohio Colleges of Medicine Government Resource Center, The Ohio State University (OSU) reserves the right to:

- Reject any or all applications received in response to this RFA;
- Request clarification from any vendor on any or all aspects of its application;
- Conduct finalist interviews for the top ten scoring applicants in each role;
- Cancel and/or reissue this RFA at any time;
- Retain all applications submitted in response to this RFA; and,
- Invite some, all, or none of the vendors for interviews and further discussion; and
- Negotiate with vendor(s) on best and final offer, including the need to submit a best and final Application resulting from negotiations. If negotiations were limited and all changes were reduced to signed writings during negotiations, a best and final Application may not need to be submitted.

**Provisions:** If any provisions in a resultant agreement are held to be invalid, void, or unenforceable, the remaining provisions shall continue in full force and effect without being impaired or invalidated in any way. Funding will be adjusted to reflect any changes in the deliverables. The vendor will submit any changes in deliverables to GRC.

**Ethical Conduct:** Apart from a contact required for any on-going business at OSU, vendors are specifically prohibited from contacting any individual at, or associated with OSU regarding this RFP. Vendor communication shall be limited to the contact named on the cover page of this document. A vendor’s failure to adhere to this prohibition may, at OSU’s sole discretion, disqualify the vendor’s application.

**Cancellation for Lack of Funding:** A resultant agreement may be canceled without any further obligation on the part of The Ohio State University in the event that sufficient appropriated funding is unavailable to assure full performance of its terms. The vendor shall be notified in writing of such non-appropriation at the earliest opportunity.

**Quote:** Vendor responses must be valid for 120 days.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Possible Points Scored in Response</th>
<th>Weight</th>
<th>Total Possible Points (2750)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role Proposal</td>
<td>20</td>
<td>30</td>
<td>600</td>
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<td>50</td>
<td>1250</td>
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<tr>
<td>Innovation</td>
<td>30</td>
<td>30</td>
<td>900</td>
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**Contract Term:** The contract term will commence on the date of award and continue through June 30, 2019. Pricing will remain firm for the entire period.

**Requirements for Advance Approval:** Prior to out-of-state travel or conference attendance by the vendor, the vendor will consult with OSU concerning the nature and cost of each out-of-state travel plan and conference registration for an amount exceeding $2,500.

**Data Use and Management**

A. The vendor will become familiar with and fully implement all requirements of HIPAA.

B. The vendor will be in compliance with Federal, HIPAA and State confidentiality law, for data use, and management including but not limited to access, storage, and transmission, shall be role-based, specific to this agreement.

C. The vendor shall enter separately into a Business Associate Agreement (BAA) with OSU-GRC to receive data funded/authorized under this agreement, in accordance with the Business Associate Agreement between ODM and OSU-GRC.

D. The vendor shall submit a signed Data Use Agreement (DUA) upon notification of award. Failure to submit the signed DUA will result in withdrawal of award.

E. The vendor shall not use any information, systems, or records made available for any purpose other than to fulfill the obligations specified herein.

F. The vendor’s possession of information provided may be considered confidential or proprietary under the laws of the State of Ohio or under federal law, and that vendor agrees to promptly notify OSU and ODM of the receipt of any public records requests for information related to this Agreement in order to seek to have any confidential or proprietary information withheld from the document prior to its release.

G. All data provided to the vendor may only be used for the specific associated agreement and for no other use in projects not associated with the agreement, and that any vendor’s data release, sharing, or transfer beyond its initial approved scope and specifications will be considered as unauthorized.

H. This project will require the use of protected health information. All work with identifiable data must be done on GRC’s Ohio Opioid Analytics Project Server (OAPS). Project staff will receive security tokens, must pass a background check, and receive an OSU guest e-mail account as needed. OAPS software will include ArcGIS, SAS/BI Enterprise Guide, R and Shiny Server (Pro), and Tableau.

I. See Table 1 for proposed data sets.
**Presentation, Publications and Dissemination**

A. The vendor shall obtain prior approval from GRC and either ODM or ODHE, as applicable, for release of any results including preliminary and/or final results related to funded projects or funded data under this Agreement. GRC and either ODM or ODHE, as applicable, will review, approve or reject publications, presentations or disseminations resulting from activities of this Agreement.

B. GRC and ODM, or ODHE, as applicable, will review and comment within 30 days upon submission of a draft to ODM, ODH, or ODHE, as applicable, proof peer-reviewed academic journal articles. Notwithstanding the proceeding, if the parties disagree concerning whether certain information should be deleted or modified, the parties agree to meet for the purpose of making good faith efforts to discuss and resolve any issues or disagreements.

C. Time Sensitivity – Any data or publication release may be pending or delayed due to ODM policy/program change.

D. The vendor shall obtain GRC and either ODM, or ODHE, as applicable, prior review and permission to release any products resulting from activities, funded data or projects under this Agreement.

E. When issuing press releases, requests for applications, bid solicitations, and other documents or statements describing projects or programs funded in whole or in part with Federal money, all grantees receiving Federal funds, including but not limited to State and local governments shall clearly state:

   1. The percentage of total costs of the program or project which will be financed with Federal money;
   2. The dollar amount of Federal funds for the program or project; and
   3. The percentage and dollar amount of the total costs or the program or project that will be financed by nongovernment sources.
Appendix A

Click Here to View the Ohio Opioid Analytics Project Vendor Application

Thank you for your interest in the Ohio Opioid Analytics Project (OAP), administered by the Ohio Colleges of Medicine Government Resource Center (GRC) on behalf of the Ohio Department of Medicaid (ODM) and the Ohio Department of Higher Education (ODHE).

Applicants selected for the OAP will work within interdisciplinary, multi-university teams of three (3) to five (5) vendors to meet project deliverables. Roles in each of the Opioid Analytics Teams (OATs) will include data analysts, subject matter experts, and at least one individual responsible for technical writing. Under the guidance of the Executive Committee, OATs will plan, develop, and execute the research around distinct clusters of opioid endpoints: Prevention, Child Welfare, and Treatment. Additional variables or endpoints may also be considered. The Data Solutions Group will support the project’s data infrastructure and deliverables, including data visualizations, web-and app-based solutions, predictive modeling tools, and point-of-service tools. Applicants will be evaluated for selection based on the criteria detailed below for each question, as well as experience and expertise documented in the applicant’s CV(s) or resume(s). Extra points will be awarded for unique and innovative approaches and experience.

Completed applications should be submitted to Tina Bickert, Project Manager, at Tina.Bickert@osumc.edu. Applications should clearly indicate whether the applying as an individual or a small team (up to three individuals). Team applications should clearly define the roles and responsibilities of each team member, as well as the experience of each.

I. Project Role

A. Indicate which of the following roles you are applying for (select all that apply):

Subject Matter Expert – Serve as content and policy consultant for opioid endpoints (see page 5 of the RFA for topics related to each endpoint) to identify risk factors, develop conceptual models to be tested, and contribute to the interpretation of results and project reporting. Indicate which team, or teams, you are applying for:

☐ Prevention
☐ Child Welfare
☐ Treatment
☐ Other relevant endpoints (please describe):

Data Analyst – Participate in the design, implementation, and testing of opioid analytic models, data analysis, interpretation of findings, and report writing:

☐ Logistic Regression and other statistical predictive models
☐ Spatial Statistical Modeling
☐ AI/Machine Learning
☐ Survival Analysis
☐ Propensity Score Matching
☐ Geographic Information Systems
☐ Interactive Web-Based Data Visualization
☐ Other Quantitative and Qualitative methods or Data Solutions (please describe):

**Data Solutions Expert** – participate in the development, implementation, and testing of predictive models (e.g. ArcGIS, Tableau, R Shiny), data visualization tools for health policy decisions, and point-of-service tools:

☐ Data Visualization Tools
☐ Web- and App-Based Solutions for point-of-service
☐ Other (please describe):

**B.** Based on your responses to the above, describe how you (or your team) propose to contribute to the Opioid Analytics Project. Be specific about the role(s) that you will fill, how you propose to complete the tasks required to ensure deliverables are met, and the output variables that you will be working with. Discuss how much time (%FTE for each individual) will be committed to the project (10% - 30%). How will you work with academic and subject matter experts from other universities on your project team? (800 word limit)

### Proposed Role Evaluation Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Possible Points</th>
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<tr>
<td>1. Proposal contains sufficient detail to fulfill roles identified.</td>
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<tr>
<td>2. Output variables identified demonstrate thorough understanding of the problem being addressed.</td>
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<tr>
<td>3. Plan for working with multi-university teams is thorough and realistic.</td>
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<tr>
<td>4. Demonstrates adequate time commitment for role.</td>
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</table>

### II. Experience and Innovation

Describe your experience and expertise as it pertains to the role(s) you (or your team) are applying for. Discuss projects you have worked on similar to the Opioid Analytics Project. Discuss unique qualifications and areas of study or practice; be specific about positions held, data analytics software and visualization platforms used (if applicable to role), etc. Discuss novel or innovative approaches applied in similar work that you have completed. (800 word limit)

### Experience Evaluation Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Possible Points</th>
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<tbody>
<tr>
<td>1. Demonstrates relevant experience working on similar projects.</td>
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<tr>
<td>2. Description of previous projects is consistent with the size, scope, and nature of the project.</td>
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<tr>
<td>3. Demonstrates previous experience working with multidiscipline/multi-university teams.</td>
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<td>4. Demonstrates subject matter expertise in multiple roles/endpoints.</td>
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<td>5. Applicant has publications related to proposed role.</td>
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### Innovation

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<td>2. Addresses an otherwise unaddressed population or need.</td>
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<tr>
<td>3. Demonstrates innovative approach to problem.</td>
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## Appendix B
### MEDTAPP Project Progress Report

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<tr>
<th>Project Title:</th>
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### Project Information

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<th>Description of Accomplishments:</th>
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<th>Emerging/Pending Issues (that could impact schedule, scope or resources):</th>
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<th>Action Steps for Scope of Work/ Deliverables</th>
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<th>Completion Date</th>
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<th>Schedule</th>
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<th>Other Description:</th>
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150 Pressey Hall | 1070 Carmack Road | Columbus, Ohio 43210 | 614-366-0017 | grc.osu.edu | Page 20 of 5
Appendix C

Click Here to View the Project Budget Form

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<tr>
<th>PERSONNEL</th>
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<th>Monthly Current Salary</th>
<th>% Increase</th>
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<th>MM Salary</th>
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