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Attachment A: Request for Proposal

The Government Resource Center (GRC) is requesting a technology vendor to develop and implement technology created for the **Infant Mortality Research Partnership**.

RELEASED BY: The Ohio Colleges of Medicine Government Resource Center (GRC)

RFP ISSUED: Wednesday, October 21, 2020
INQUIRY PERIOD BEGINS: Wednesday, October 21, 2020
INQUIRY PERIOD ENDS: Friday, November 13, 2020
PROPOSAL DUE DATE/BID CLOSING DATE: Friday, November 20, 2020, by 4:00 p.m., EST

PROPOSALS RECEIVED AFTER THE DUE DATE AND TIME AND/OR WITHOUT COMPLETE APPLICATION, WILL NOT BE EVALUATED.

RFP Contacts: Joe Hutchinson – Supervisor, Grants Compliance 614-688-3217 hutchinson.106@osu.edu

RFP Web Locations: https://osp.osu.edu/administration/procurement/bid-opportunities/ http://grc.osu.edu/funding/current

Offerors must note that all proposals and other material submitted will become the property of the GRC and may be returned only at the GRC's option. Proprietary information should not be included in a proposal or supporting materials because the GRC will have the right to use any materials or ideas submitted.

Submission Instructions: Proposals should be submitted electronically in a searchable pdf format to Joe Hutchinson at Hutchinson.106@osu.edu; submission must be received by November, 20, 2020.

To maintain a fair and impartial competitive selection process, all Ohio State University faculty, staff and students will avoid private communication with prospective proposers. Please respect this policy and do not contact anyone about this RFP except as provided herein. Unauthorized contact regarding the RFP with University faculty, staff or students may result in disqualification of the proposer. Any oral communication will be considered unofficial and non-binding, and will not change or alter this RFP. Vendors should rely only on written statements issued by Joe Hutchinson at The Ohio State University Office of Sponsored Programs.

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Ohio Colleges of Medicine Government Resource Center
Infant Mortality Research Partnership Project
Technology Enhancement RFP

Introduction

The Government Resource Center (GRC) is soliciting competitive proposals for activities relating to the Infant Mortality Research Partnership (IMRP). If a suitable offer is made in response to this RFP, OSU may enter into a contract (the Contract) to have the selected Bidder (the Contractor) perform the work. This RFP provides details on what is required to submit a Proposal for the Work, how OSU will evaluate the Proposals, and what will be required of the Contractor in performing the Work.

This RFP also gives the estimated dates for the various events in the submission process, selection process, and performance of the Work. While these dates are subject to change, prospective Bidders must be prepared to meet them as they currently stand.

The IMRP, a collaboration between state agencies, researchers, and subject matter experts, uses big data to gain a better understanding of how we can lower infant mortality in Ohio. GRC brought together the IMRP team from the Ohio Departments of Medicaid, Health, Higher Education, and university researchers across multiple disciplines such as biostatistics, pediatrics, and geography. The IMRP project is currently in its third phase. Phases I and II of the project focused on identifying interventions and resources needed to improve health outcomes for the underserved populations most at risk for infant mortality. The purpose of Phase III of the project is to expand on work done during phases I and II by expanding and updating the IMRP multi-agency linked dataset; providing refined analysis to predict infant mortality, preterm birth, severe maternal morbidity and maternal near-miss and the antecedents of those adverse outcomes; maintaining and updating the interactive tools and building new tools to deliver research insights to the field; and providing increased access to decision tools for Ohioans and state government agencies, health care practitioners, and community level organizations implementing state-sponsored projects to reduce Ohio's infant mortality rate.

Given the complexity of the technology systems used within this project, Bidders must have extensive expertise with EPIC EHR systems and iOS and Android application development. Additionally, serving as the IMRP technology vendor involves close communication with the Ohio Department of Medicaid and other State of Ohio agency representatives and other partners of interest (e.g., academic institutions). As such, the Bidder should demonstrate successful experiences working with staff of government agencies and university faculty.

Please see the Proposal Requirements section for detailed instructions as well as a checklist of required proposal components.

Inquiries concerning the proposal content and intent and general questions should be sent by email to Joe Hutchinson at hutchinson.106@osu.edu. Answers to inquiries will be posted at http://grc.osu.edu/funding/QA within 48 hours of receipt. The Inquiry Period for this proposal ends Friday, November 13, 2020.

To assist the proposal response process, final reports from phases I and II, PRAF variables, IMRP Risk Calculator screen shots, a mockup of the patient facing mobile app, and a deliverables based budget form have been posted on the GRC website's RFP section at http://grc.osu.edu/funding/current.

Any failure to meet a deadline in the submission or any objection to the dates for performance in the Work phase may result in OSU's refusal to consider the Proposal of the Bidder.

OSU will not be liable for any costs incurred by any Bidder in response to this RFP, even if OSU does not award a Contract through this process. OSU may decide not to award a Contract for any or all of the Work defined by this RFP or subsequent OSU amendments. It may also cancel this RFP and contract for the Work through some other process or by issuing another RFP. An award is contingent upon sponsor funding for the IMRP project.

Proposal Requirements

Formatting Requirements

Responses must address all aspects of this Request for Proposal and should follow the chronology of the RFP. Proposals must be single spaced, 11-pt Calibri font with 1-inch margins. The response, including appendices, shall be submitted as a single searchable PDF file. Proposals submitted that include multiple attachments will be disqualified.

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

RFP Response Requirement Checklist

The following conditions must be met in order for the RFP response to be considered free from defect:

- ❏ Formatted in 11-pt Calibri font, single spaced, with 1-inch margins

- ❏ Formatted as a single, searchable PDF file (including all appendices)Includes all required materials in the following order:
  - ❏ Filled and signed RFP cover page (PR-001 form)
  - ❏ Bidder signature page
  - ❏ Cover Letter
  - ❏ Project Proposal Narrative
  - ❏ Budgets and Budget Narratives
  - ❏ Staff Biosketches/Credentials

- ❏ Submitted by Response Due Date/Time: November 20, 2020, by 4:00 p.m.

Further explanation related to the proposal sections is below.

Cover Letter

The cover letter must be in the form of a standard business letter and must be signed by an individual authorized to legally bind the Bidder. The cover letter will provide an executive summary of the Bidder's request for funds. The letter must also include:

1. A statement regarding the Bidder's company, organization, university or college, including Federal tax identification number and address;

2. A list of the people who prepared the application, including titles;

3. The name, phone number, and email address of a contact person who has authority to answer questions regarding the application;

4. The name, phone number, and email address of the Sponsored Programs Officer or other Bidding Firm officer responsible for the application;

5. The name, phone number, and email address of the Principal Investigator or Project Manager for this project;

6. A list of all co-Bidders, if any, that the Bidder will use on the work if selected—no co-submitting Bidder may be included after proposal submission.

7. Note that the Bidder(s) may not subcontract activities detailed in their submission.

Project Proposal Narrative

Content and format requirements:

Section	Page Limit
A. Detailed technology enhancement plan: IMRP Risk Calculator and patient facing mobile application: *Please address all items included in the project summary section.*	10
B. Expertise and experience: *Applicant's expertise and experience working with similar technology and developing similar applications.*	5
C. Organizational capacity: *Applicant's demonstrated organizational capacity (e.g. staffing, technology, etc.) to undertake the work, referencing specific projects in the past.* *Bidder Profile: Each proposal must include a profile of the Bidder's experience working on similar projects. The profile must also include the Bidder's address, telephone number, and any other background information that will help the evaluation committee gauge the ability of the Bidder to fulfill the obligations of the contract.* *Equipment and Software Requirements: The Bidder must provide an assurance that they have the hardware, software, and technology staff support capacity capable of performing the tasks proposed in the application.*	2
D. Partnership experience: *Evidence of Applicant's experience working with academic medical centers, academic institutions, and government/state agencies.*	1

Section	Page Limit
E. Key personnel: *Brief description of key personnel that will participate in the project.* *Please note that a change of key staffing must be requested at least 2 weeks prior to the planned staffing changes and must be approved by GRC prior to implementation.* *Please include Biosketches/Credentials in the key personnel section.*	2

Budgets and Budget Narratives

Please complete a separate budget form and budget narrative, this should be formatted as a deliverables based budget segmented by the state fiscal year (SFY), as detailed in the checklist below. The SFY for Ohio starts on July 1st and ends on June 30th of the following calendar year. The SFY 2022 budget is contingent upon sponsor funding for the IMRP project. A deliverables based budget form can be found in Appendix C and on GRC website's RFP section at http://grc.osu.edu/funding/current.

Budgets and Budget Narratives Section Checklist:

❏ Budget Forms for SFY 2021: December 1, 2020 - June 30, 2021

   ❏ Budget Form
   ❏ Budget Narrative

❏ Budget Forms for SFY 2022: July 1, 2021 – December 31, 2021

   ❏ Budget Form
   ❏ Budget Narrative

Project Funding Period:

o <u>IMRP</u>: December 1, 2020 – June 30, 2021

o <u>IMRP</u>: July 1, 2021 – December 31, 2021 *contingent upon continued sponsor funding

Instructions:

In this section, the Bidder must provide a detailed budget breakdown for the IMRP by deliverable per state fiscal year (SFY) using the deliverables based budget form which is and available electronically at http://grc.osu.edu/funding/current. The Bidder must provide an accompanying budget narrative, detailing specific costs associated with the proposal. Please note that proposals exceeding $200,000 will not be considered.

NOTE: There is NO ability to carryover unspent funds beyond the project close dates, so selected Bidders must be able to spend the allotted dollars during the allotted timeframe.

Proposals should include:

    A. Direct costs related to:
  - i. Participating in the roll-out of the test of the IMRP Risk Calculator using the R-Studio software with FHIR protocol at 3 to 5 health systems;
  - ii. Creating an EPIC APP-Orchard version of the IMRP Risk Calculator;
  - iii. Extending the capability of the IMRP Risk Calculator to extracting PRAF data from EHR;
  - iv. Testing interface of IMRP Risk Calculator with Nurture Ohio;
  - v. Certifying and promoting the IMRP Risk Calculator to the EPIC App Orchard Marketplace;
  - vi. Converting the iOS version of the patient facing mobile application to the Android OS;
  - vii. Implementing the patient facing mobile application in a cloud environment; and
  - viii. Reports and deliverables.

Vendor Qualifications

Development and implementation of at least one software application utilizing data from an EPIC Electronic Health Record system that extracts patient clinical and demographic data for patient/patient management, real time data sharing, or clinical decision support.

Training and/or experience in development and integration of exchange languages using Fast Healthcare Interoperability Resources (FHIR) frameworks for exchanging, sharing, integrating, and retrieving electronic health information to support infrastructural, administrative, and clinical interoperability features deployed on cloud, and Web.

Experience as an App Orchard developer, including the use of the EPIC sandbox, APIs, and the certification of applications in the App Orchard Marketplace.

Staff Biosketches/Credentials

Biosketches for:
- ❏ Principal investigator,
- ❏ Senior software application developer,
- ❏ Project manager.

For any additional key personnel listed in Section E of the Project Proposal Narrative, please list staff credentials.

IMRP Project Overview

Under contracts with the Ohio Department of Medicaid and the Ohio Department of Higher Education, the Ohio Colleges of Medicine Government Resource Center has administered the Infant Mortality Research Partnership (IMRP). IMRP has been a multi-year effort which included the creation of multiple predictive models of infant mortality, pre-term birth, maternal morbidity, and maternal mortality for mothers on Medicaid in Ohio who have delivered live infants from 2008 thru 2018. Research partners were from the Ohio State University Wexner College of Medicine, including the Maternal/Fetal Medicine Department, Bio-Informatics Department, and Bio-Statistics Department.

The research partners produced 12 predictive models of pre-term birth and infant mortality. Additional models for maternal morbidity and mortality are currently being developed. The models were based upon demographic, geographically determined social determinants of health, individual health risk characteristics, and clinical services performed based upon linked Ohio Birth Certificates and Medicaid claims and enrollment data. The models used logistic regression to identify significant variables that increased the odds of poor birth outcomes.

Infant Mortality Risk Calculator Overview

The predictive models became the basis of an infant mortality and pre-term birth risk calculator (IMRP Risk Calculator) which is intended to be used by clinicians in their practice at the point-of-care. The initial IMRP Risk Calculator was built with a simple data entry screen for the predictor variables, a selection of one of the 12 models to calculate, and a graphic display of the predicted risk from the model and the relative risk (percentile rank) compared to the population. The IRMP Risk Calculator was tested by potential users and refined based upon their input. The IMRP Risk Calculator was created using the R-Studio software, an open source software product that is used extensively in academic settings.

The IMRP Risk Calculator is now being developed so that the data entry screens are being pre-populated when available by indicators sourced from a health care provider's electronic health record system (EHR) to make it easier for clinicians to use the IMRP Risk Calculator. The initial test is occurring at The Ohio State University Wexner Medical Center using the Integrated Healthcare Information System (IHIS), a licensed EPIC EHR installation.

The extraction of data from the EPIC EHR is being accomplished with the FHIR (Fast Healthcare Interoperability Resources) Specification. This is the specification which has been adopted by the Office of the National Coordinator for Health Information Technology (ONC) as the national standard, and is to be accepted by all EHRs in the future. The initial test using R-Studio software with FHIR protocol will be tested at OSU Wexner Medical Center, as well as with 3 to 5 other health systems with EPIC EHRs in Ohio.

A large majority of health systems in Ohio use EPIC. Eighty-five percent of the maternity hospitals in Ohio use EPIC. Twenty-five of the 30 largest maternity hospitals (based upon Medicaid deliveries) in Ohio use EPIC. Since R-Studio is not a standard software in most health care settings, further deployment of the IMRP Risk Calculator should be based upon the standard technology used by most of the maternity hospitals. Therefore, further deployment of the IMRP Risk Calculator will be through EPIC APP Orchard.

Risk Calculator Technology Specifications

The IMRP Risk Calculator is an app that allows a user to estimate the probability of infant outcomes over multiple time points during pregnancy. This estimate is based on a patient's demographics, medical history, and pregnancy related variables. The logistic regression models that form the back end of the app have been validated on a large cohort of Medicaid mothers and babies. The app is intended to allow a provider to use these complex models at the point of care to estimate the probability of poor infant outcomes.

The tech stack currently being used by the IMRP research team includes:

R-Shiny App Specs:
- Shiny
- Bootstrap 4
- Javascript
- JS3D
- OAuth 2
- FHIR

The tech vendor will create an enterprise application using this tech stack as a feature specification guide only. The vendor will recreate the functionality using their own tech stack based upon industry best practices and standards.

The tech vendor will integrate their application into other EHR systems and also make it available via Epic's App Orchard. The tech vendor will be responsible for making any modifications to their code that are necessary for this task.

Deliverable #1. The Technology Enhancement Vendor will create an EPIC APP-Orchard version of the Infant Mortality and Pre-term Birth Risk Calculator (IMRP Risk Calculator) using the FHIR protocol as developed by the IMRP research team. The technology vendor will:

a. Create a document outlining the technology, policy, compliance, and security requirements for implementation of the IMRP Risk Calculator at 3-5 institutions.
b. Create a document outlining the technology, policy, compliance and security requirements for publishing the IMRP Risk Calculator in the Epic App Orchard.
c. Create an enterprise version of the IMRP Risk Calculator for deployment at 3 to 5 health systems.
d. Modify the enterprise version of the IMRP Risk Calculator as needed in order to publish on the EPIC APP-Orchard platform, ensuring it can be used with Epic Software releases that are two or less years old.
e. Prepare system documentation, installation and user guide.
f. Publish the IMRP Risk Calculator in the App Orchard Marketplace to be used by Ohio Medicaid providers.
g. Perform needs assessment for scaling the IMRP Risk Calculator for non-Epic health centers

Reporting of IMRP Risk Calculator estimates and prenatal risk assessment to the Ohio Department of Medicaid

The Ohio Department of Medicaid requires that all pregnant women on Medicaid receive a pregnancy risk assessment at the beginning of their pregnancy, or at the earliest date from when they become enrolled in Medicaid during their pregnancy. The pregnancy risk assessment is required to be reported to ODM. Ohio Medicaid uses an electronic version of this assessment, called the Prenatal Risk Assessment Form (PRAF2.0) which can be accessed by Ohio Medicaid enrolled prenatal care providers through a technology system called Nurture Ohio. While there are many health care providers who report this information electronically through Nurture, there are many who still submit paper forms through a managed care plan or county department of Job and Family Services.

There is overlap between the data requirements for the IMRP Risk Calculator and the electronic PRAF, and the Ohio Department of Medicaid seeks to receive both sets of information from the prenatal point-of-clinical care in the most convenient and non-redundant manner from providers, for as many providers as possible, and reducing the submission of paper forms. ODM has asked GRC and the Research Team to extend the test build of the FHIR Specification for the IMRP Risk Calculator to include the data requirements for the electronic PRAF.

The goal is to expand the capability of the IMRP Risk Calculator to extract the additional PRAF variables from the EHR and push both the risk calculator variables and the PRAF variables to the Nurture Ohio technology system. Thus, for providers that install the IMRP Risk Calculator, it could also be a gateway for practitioners to open a PRAF for a Medicaid patient.

There is a technology vendor responsible for implementing Nurture Ohio. More information on Nurture Ohio can be found in Appendix D.

Deliverable #2. The Technology Enhancement Vendor will extend the capability of the IMRP Risk Calculator so that it will connect data extracted from the EHR to Ohio Medicaid designated technology systems. The technology vendor will develop the capability to:

   a. Extract additional PRAF variables from the EPIC EHR using FHIR code developed by the IMRP research team.
   b. Allow the provider to push PRAF and Risk Calculator variables to Nurture Ohio.
   c. The Technology Enhancement vendor will work directly with the Nurture Ohio vendor to develop the capability to allow providers to open a PRAF for a Medicaid patient in Nurture Ohio with appropriate provider authentication.
   d. Prepare this capability as an add-on to the App Orchard version of the IMRP Risk Calculator.

Patient Facing Application Overview

A patient facing mobile application is being developed by the IMRP research team. The mobile app, called "O hi mom", will implement a version of the IMRP Risk Calculator specifically designed to capture information based upon the mother's knowledge of her patient experience, behaviors, health status, and socioeconomic status. The mobile app will:

   1. Survey the mother about risk factors and specific needs;

2. Run a simplified risk stratification tool focused on variables that are highly predictive and/or have the potential to suggest specific resources;
3. Map suggestions/interventions to risk and needs;
4. Provide personalized resources, reminders, and support; and
5. Allow mothers to contribute to the resource database.

A mockup of this application can be found on the GRC website's RFP section at http://grc.osu.edu/funding/current.

A database consisting of resources, services, and supports available in the community in which patients reside is being developed to interact with the mobile application. An initial list of resources is being identified by the research team, in communities that will test the application. Community organizations and businesses will be invited to complete profiles. The IMRP research team will build the mobile app in IOS.

Patient Facing Application Technology Specifications

The tech vendor would be responsible for:
- Creating a matching Android application.
- Wiki oversite and maintenance
- Customer service

iOS Application:
- OS 13.2 +
- Xcode 11.6
- Swift 5
- HealthKit
- ResearchKit 1.5
- CareKit 2.1
- OAuth 2

Backend:
- Apache
- Tomcat 7
- Open JDK 8
- mail: 3.0.0
- external-config: 2.0.0
- spring-security-oauth2: 2.3.7.RELEASE
- MySQL
- RESTful API
- JSON

Wiki frontend:
- ReactJS
- React-Bootstrap

Wiki backend:
- Specs
- Apache
- Tomcat 8
- Open JDK 8
- audit-logging: 3.0.6
- mail: 3.0.0
- external-config: 2.0.0
- spring-security-oauth2: 2.3.7.RELEASE
- MySQL
- RESTful API
- JSON

Deliverable #3. The Technology Enhancement Vendor will assist the IMRP Research Team by:

1) Implementing the IMRP patient-facing mobile application (IMRP patient-facing app) on a commercial cloud-based system which includes:
   a. Allowing consumers to download and set-up the IMRP patient-facing app on their mobile device.
   b. Updating and maintaining a resource database.
   c. Allowing consumers to provide reviews of resources and services in the resource database.
   d. Allowing community organizations to initiate and update profiles, and respond to consumer reviews.
2) Developing and implementing an Android version of the mobile application.

IMRP Scope of Work

A detailed scope of work must be included within a bidder's proposal. This scope of work should include the activities necessary to meet the aforementioned deliverables.

Deliverable Timeline:

Deliverable	Description	Completion Date
Deliverable #1.	Create an EPIC APP-Orchard version of the Infant Mortality and Pre-term Birth Risk Calculator (IMRP Risk Calculator) using the FHIR protocol as developed by the IMRP research team. The technology vendor will:	
1.a	Create a document outlining the technology, policy, compliance, and security requirements for implementation of the IMRP Risk Calculator at 3-5 institutions.	1/31/2021
1.b	Create a document outlining the technology, policy, compliance and security requirements for publishing the IMRP Risk Calculator in the Epic App Orchard.	1/31/2021
1.c	Create an enterprise version of the IMRP Risk Calculator for deployment at 3 to 5 health systems.	1/31/2021

	1.d	Modify the enterprise version of the IMRP Risk Calculator as needed in order to publish on the EPIC APP-Orchard platform, ensuring it can be used with Epic Software releases that are two or less years old.	3/31/2021
	1.e	Prepare system documentation, installation, and user guide.	6/30/2021
	1.f	Publish the IMRP Risk Calculator in the App Orchard Marketplace to be used by Ohio Medicaid providers.	9/30/2021
	1.g	Perform needs assessment for scaling the IMRP Risk Calculator for non-Epic health centers	9/30/2021
Deliverable #2.		Extend the capability of the IMRP Risk Calculator so that it will connect data extracted from the EHR to Ohio Medicaid designated technology systems. The technology vendor will develop the capability to:	
	2.a	Extract additional PRAF variables from the EPIC EHR using FHIR code developed by the IMRP research team.	3/31/2021
	2.b	Allow the provider to push PRAF and IMRP Risk Calculator variables to Nurture Ohio.	6/30/2021
	2.c	Work directly with the Nurture Ohio vendor to develop the capability to allow providers to open a PRAF for a Medicaid patient in Nurture Ohio with appropriate provider authentication.	6/30/2021
	2.d	Prepare this capability as an add-on to the App Orchard version of the IMRP Risk Calculator.	9/30/2021
Deliverable #3.		Assist the IMRP Research Team by:	
	3.1	Implementing the IMRP patient-facing mobile application (IMRP patient-facing app) on a commercial cloud-based system.	9/30/2021
	3.2	Developing and implementing an Android version of the IMRP patient-facing app.	12/31/2021

Extension of agreement beyond the contracting period

Upon successful completion of the scope of work, the technology enhancement vendor may be requested to extend the agreement to be responsible for follow-up work. This would be contingent upon funding availability from the project sponsor. Follow-up work would include: 1) technical assistance to health systems in implementing the IMRP Risk Calculator in their EHR, 2) adapting the IMRP Risk Calculator to work with other EHR systems, 3) updating the IMRP Risk Calculator to reflect changes in EPIC, FHIR protocol, clinical coding, predictive modeling, and sponsor priorities, 4) updating the interface of the IMRP Risk Calculator with Nurture Ohio, 5) maintaining the operations of the patient facing mobile application, and 6) updating the patient facing application.

Appendix A: Legal Proposal and Contract Requirements

SECTION I: Definitions

The following definitions are relative to this Request for Proposal (hereinafter referred to as RFP), and any addenda incorporated hereafter:

Addendum(a): Written instruments, issued solely by, that detail amendments, changes or clarifications to the specifications and terms and conditions of this RFP. Such written instruments shall be the sole method employed by the University to amend, change or clarify this RFP and any claims (from whatever source) that verbal amendments, changes or clarifications have been made shall be summarily rejected by the University.

Agreement or Contract: Award resulting from the RFP.

ARO: After receipt of order.

Bid Closing Date: The date and time specified in this RFP by which the Proposal must be received by the University's Purchasing Department in accordance with Section II, Item 1 of this RFP. Proposals received after such date and time will not be considered.

Bidder: Respondent to the RFP.

ET: Eastern Standard Time

GRC: Ohio Colleges of Medicine Government Resource Center

May, Should: Indicates something that is requested but not mandatory. If the Bidder fails to provide requested information, the University may, at its sole option, either request that the Bidder provide the information or evaluate the proposal without the information.

OSU, University, Purchaser: The Ohio State University.

Proposal: Response provided by Supplier or Bidder.

RFP: Request for Proposal.

Shall, Must, Will: Indicates a mandatory requirement - failure to meet mandatory requirements will invalidate the bid response, or result in rejection of a proposal as non-responsive.

SECTION II: RFP Terms and Conditions

The Government Resource Center (GRC) reserves the right to:

- Reject any or all Proposals received in response to this RFP;
- Request clarification from any Bidder on any or all aspects of its proposal;
- Cancel and/or reissue this RFP at any time;
- Retain all Proposals submitted in response to this RFP; and,
- Invite some, all, or none of the Bidders for interviews and further discussion.

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.

Ethical Conduct: It is expected that once a purchase order or contract is issued, vendors not receiving an award will not undertake any actions that might interfere with, or be detrimental to, the contractual obligations of the University. The University reserves the right to take any and all actions deemed appropriate in response to unethical conduct by a vendor. Such actions include, but are not limited to, establishing guidelines for campus visits by a vendor, and/or removal of a vendor from the University's bidders' list(s).

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

Cancellation for Lack of Funding: A resultant agreement may be canceled without any further obligation on the part of the GRC 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.

Termination of Agreement: Consistent failure by the vendor to meet the terms and conditions of a resultant agreement deemed by the University, in its sole discretion, to be a material breach of the agreement, including, but not limited to delivery, required service-levels, quality, and invoice inaccuracies, will constitute a default of the agreement by the vendor. In the event that said default continues for a period of thirty (30) days after the vendor receipt of notice-of-default from the University, the University reserves the right to immediately terminate the agreement. Termination shall in no way limit the University's right to recover damages that occur as a result of the vendor's breach. Either party may cancel a resultant agreement after ninety (90) days from the effective date of the agreement by giving the other party thirty (30) days prior written notice of intent.

Quote: Response must be valid for 120 days.

Contract Term: The contract term will commence on December 1, 2020 or receipt of the purchase

order, whichever is later, and continue through December 31, 2021. Pricing will remain firm for the initial period.

The University, at its sole discretion, reserves the right to extend any resultant contract, under the same pricing and terms and conditions, to some or all University areas.

SECTION III: RFP Schedule and Other Forms

RFP Schedule of Events: the GRC will make every effort to adhere to the schedule below:
RELEASED BY: the Ohio Colleges of Medicine Government Resource Center (GRC)
RFP ISSUED: Wednesday, October 21, 2020
INQUIRY PERIOD BEGINS: Wednesday, October 21, 2020
INQUIRY PERIOD ENDS: Wednesday, November 13, 2020
PROPOSAL DUE DATE/BID CLOSING DATE: Wednesday, November 20, 2020, by 4:00 p.m., EST

Due prior to issuance of <u>purchase order</u> or <u>University contract</u>:
The following MUST be properly completed by Bidders and MUST be received by the University prior to the issuance of a purchase order or University contract. If not included in the bid-response package, the University reserves the right to request the following from (at its sole discretion) some, all, or none of the respondents. The University also reserves the right to define and impose reasonable deadlines for the receipt of the following; failure to meet such deadlines MAY, at the sole discretion of the University, invalidate the bid response.

- ❏ Signed and dated Bidder Signature Page
- ❏ DUA (related to Medicaid administrative data)
- ❏ Certificate of Insurance, upon request

The University reserves the right to request from (at its sole discretion) some or all of the respondents, any further information or documentation that it deems necessary for the issuance of a purchase order or University contract.

Multiple or Alternate Proposals
OSU welcomes multiple Proposals from a single Bidder, but OSU requires each such Proposal to be submitted separately from every other Proposal the Bidder makes. Additionally, the Bidder must treat every Proposal submitted as a separate and distinct submission and include in each Proposal all materials, information, documentation, and other items this RFP requires for a Proposal to be complete and acceptable.

No alternate Proposal may incorporate materials from another Proposal made by the Bidder or refer to another Proposal. OSU will judge each alternate Proposal on its own merits.

Appendix B: Forms

Bidder Signature Page

(Needed for Purchase Order Process - optional)

Any joint proposal must be signed by all bidders (when applicable: see Appendix A, Section II)

Bidder #1
By signing this document I am agreeing on behalf of my firm to the specifications of this RFP and accepting, without exception or amendment, The Ohio State University's "RFP Terms and Conditions" and the "Purchase Order Terms and Conditions." Any purchase order or University contract issued as a result of this RFP shall be subject to these terms and conditions. Should a Bidder propose exceptions to the Terms and Conditions cited above, the Bidder must submit such proposed exceptions and/or amendments in writing and in its bid response package by the Bid Closing Date/Time. The Ohio State University reserves the right to reject some, all, or none of the proposed exceptions and/or amendments and asserts its Terms and Conditions as described herein.

Company Name:	
Address:	
City/State/Zip:	
Federal Tax ID:	
Email Address:	
Phone:	
Fax:	
Authorized Signature:	
Signature Date:	
Printed Name:	
Title:	

Bidder #2

By signing this document I am agreeing on behalf of my firm to the specifications of this RFP and accepting, without exception or amendment the University's "RFP Terms and Conditions" and the "Purchase Order Terms and Conditions." Any purchase order or University contract issued as a result of this RFP shall be subject to these terms and conditions. Should a Bidder propose exceptions to the Terms and Conditions cited above, the Bidder must submit such proposed exceptions and/or amendments in writing, and in its bid response package, by the Bid Closing Date/Time. The University reserves the right to reject some, all or none of the proposed exceptions and/or amendments and asserts its Terms and Conditions as described herein.

Company Name:	
Address:	
City/State/Zip:	
Federal Tax ID:	
Email Address:	
Phone:	
Fax:	
Authorized Signature:	
Signature Date:	
Printed Name:	
Title:	

Appendix C: Deliverables Based Budget Form

Deliverables Based Budget Form for SFY 2021

Deliverable	Description	Hours	Cost per Hour	Total Cost
Deliverable #1.	Create an EPIC APP-Orchard version of the Infant Mortality and Pre-term Birth Risk Calculator (IMRP Risk Calculator) using the FHIR protocol as developed by the IMRP research team. The technology vendor will:			
1.a	Create a document outlining the technology, policy, compliance, and security requirements for implementation of the IMRP Risk Calculator at 3-5 institutions.			
1.b	Create a document outlining the technology, policy, compliance and security requirements for publishing the IMRP Risk Calculator in the Epic App Orchard.			
1.c	Create an enterprise version of the IMRP Risk Calculator for deployment at 3 to 5 health systems.			
1.d	Modify the enterprise version of the IMRP Risk Calculator as needed in order to publish on the EPIC APP-Orchard platform, ensuring it can be used with Epic Software releases that are two or less years old.			
1.e	Prepare system documentation, installation, and user guide.			
1.f	Publish the IMRP Risk Calculator in the App Orchard Marketplace to be used by Ohio Medicaid providers.			
1.g	Perform needs assessment for scaling the IMRP Risk Calculator for non-Epic health centers			
Deliverable #2.	Extend the capability of the IMRP Risk Calculator so that it will connect data extracted from the EHR to Ohio Medicaid designated technology systems. The technology vendor will develop the capability to:			
2.a	Extract additional PRAF variables from the EPIC EHR using FHIR code developed by the IMRP research team.			
2.b	Allow the provider to push PRAF and IMRP Risk Calculator variables to Nurture Ohio.			
2.c	Work directly with the Nurture Ohio vendor to develop the capability to allow providers to open a PRAF for a Medicaid patient in Nurture Ohio with appropriate provider authentication.			

Deliverables Based Budget Form for SFY 2022

Deliverable	Description	Hours	Cost per Hour	Total Cost
2.d	Prepare this capability as an add-on to the App Orchard version of the IMRP Risk Calculator.			
Deliverable #3.	Assist the IMRP Research Team by:			
3.1	Implementing the IMRP patient-facing mobile application (IMRP patient-facing app) on a commercial cloud-based system.			
3.2	Developing and implementing an Android version of the IMRP patient-facing app.			

Appendix D: PRAF Variables and Nurture Ohio

The Pregnancy Risk Assessment Form 2.0 (PRAF 2.0) was established to enhance care coordination and use of Progesterone for improved birth outcomes. The PRAF variables/data dictionary will be included on the website at http://grc.osu.edu/funding/current. Duet Health partnered with CCHMC-OPQC, GRC and ODM to design and implement Nurture Ohio for ODM's use of PRAF 2.0 in an online format. This process entailed developing a single-sign on process for Medicaid provider practice users including managed care plans, managed care contracted home health agencies such as Optum and OptionCare, ODM, CCHMC-OPQC, and County Job and Family Services (JFS) to access information from the PRAF 2.0 regarding pregnancy and the need for progesterone in order to improve care for pregnant women. Duet Health built a technology infrastructure that features the ability for Medicaid providers to simultaneously notify the county, MCP, home health agency, and pharmacy of pregnancy and related needs. Prescriptions and home health referrals are intended to be processed in real time and the system enables each user type to download information via CSVor PDF file. Administrative users can create flexible reports with common dataset formats.

Outside of the PRAF 2.0 system, CCHMC-OPQC affiliated OB practices utilize the Nurture Ohio system devices to facilitate more effective communication with social and clinical service providers. In SFY 20-21, Duet Health will continue to maintain the software, incorporate date checks for ensuring valid data, implement PRAF 2.0 to ensure that the prescriber's identify can be verified based on the information entered into the system, allow the submission of multiple prescriptions with the answering of provider challenge questions, allow the adding of additional variables and date fields deemed appropriate to the care of pregnant women by ODM as it relates to the receipt of Progesterone and other needs related to pregnancy, and, with ODM permission, make changes in response to stakeholder feedback.

Appendix E: Evaluation of Proposals

Evaluation of Proposals, Generally. The evaluation process may consist of up to three distinct phases:

1.   The Procurement Representative's Initial Review of all Proposals for Defects;
2.   The Evaluation Committee's Evaluation of the Proposals; and
3.   Request for More Information (Interviews, Presentations, and/or Demonstrations).

Proposal Evaluation Criteria. In the Proposal evaluation phase, the Evaluation Committee will rate the Proposals submitted in response to this RFP based on the following criteria and weight assigned to each criterion, to a total of 700.

Criteria	Weight	Requirements Rubric			
		Does Not Meet	**Meets**	**Exceeds**	**Greatly Exceeds**
GENERAL REQUIREMENTS					
ORGANIZATIONAL CAPACITY - 15%					
Bidder Profile	25	0	5	7	9
Past Project Performance	75	0	5	7	9
Equipment and Software Requirements	40	0	5	7	9
Support Requirements	20	0	5	7	9
STAFF QUALIFICATIONS – 40%					
Project Management	90	0	5	7	9
Technology App Development	80	0	5	7	9
Experience with EPIC EHR data	70	0	5	7	9
Experience working with academic partners and state agencies	60	0	5	7	9
ANALYTICAL PLAN – 5%					
Summary Report, Testing, and Implementation	30	0	5	7	9
PROJECT MANAGEMENT – 10%					
Project Management Plan and Weekly Reports	30	0	5	7	9
Project Schedule	30	0	5	7	9

		Requirements Rubric			
Criteria	Weight	Does Not Meet	Meets	Exceeds	Greatly Exceeds
Staffing Plan	30	0	5	7	9
RESOURCE ALLOCATION – 10%					
Time Commitment	60	0	5	7	9
COST SUMMARY - 20%	60	0	5	7	9
TOTAL (100%)	(700)				

Interviews, Demonstrations, and Presentations. The Proposal Evaluation Committee may require some Bidders to interview with the committee, make a presentation about their Proposal, and/or demonstrate their products or services. Such presentations, demonstrations, and interviews provide a Bidder with an opportunity to clarify its Proposals and to ensure a mutual understanding of the Proposal's content. The presentations, demonstrations, and interviews will be scheduled at the convenience and discretion of the evaluation committee. The evaluation committee may record any presentations, demonstrations, and interviews.

Project Caveat. Due to the evolving nature of the COVID-19 pandemic and resultant economic situation in Ohio, there remains a degree of fluidity in the project funding sources. Technology vendors should anticipate remaining flexible in response to changes in the economic and policy environment as associated with the IMRP. At the date of this RFP posting, the aforementioned scope of work described reflects the intent of the IMRP project and the anticipation of sufficient resources to meet the needs of the project.