



AMERICAN COLLEGE OF
OCCUPATIONAL AND
ENVIRONMENTAL MEDICINE

ACOEM REQUEST FOR PROPOSAL (RFP) – HEALTHCARE SYSTEMS

Improving Adult Immunization Rates for COVID-19, Influenza, and Routine Adult Vaccinations through Partnerships and Medical Subspecialty Professional Societies and the Long-Term Care Professional Society

Background

The American College of Occupational and Environmental Medicine (ACOEM) has been chosen as one of seven specialty society partners for a cooperative agreement awarded to the Council of Medical Specialty Societies (CMSS) from the Centers for Disease Control and Prevention (CDC) (CDC-RFA-IP21-2111) to improve vaccination among high-risk adults.

This five-year award between CMSS and CDC includes \$22 million in funding in the first year (with an estimated \$55.5 million over five years) to support increased COVID-19, influenza, and routine vaccinations in high-risk adults with chronic medical conditions, including patients with chronic obstructive pulmonary disease, asthma, diabetes, heart disease, cancer, and chronic kidney disease, as well as older adults and staff in occupational health settings. This is a quality improvement project (not a research project). **The CDC specifically asked CMSS to target adults and workers in occupational health settings and the Council recognized that ACOEM members' long-standing relationships with health systems and clinics would be an asset to this vaccination improvement initiative.** Specialty societies that care for patients with chronic illness can provide more targeted continuing education and clinical guidance to ensure that specialty physicians play a greater role in immunization of these high-risk patients.

As part of this agreement, **ACOEM will partner with 7-10 healthcare systems to incorporate CDC Standards for Adult Immunization Practice into clinical care and increase adult immunization through education, dissemination, and quality improvement initiatives.** Projects proposed should focus on the CDC's Standards for Adult Immunization Practice (<https://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/index.html>) which include:

1. Assess the immunization status of all your patients at every clinical encounter,
2. Strongly recommend vaccines that your patients need,
3. Administer needed vaccines or refer your patients to a vaccination provider, and
4. Document vaccines received by your patients.

Award

ACOEM can award 7-10 healthcare systems or organizations (approximately \$200,000 per healthcare system) in the first year. ACOEM will evaluate each awardee's performance and future workplans annually and if deemed satisfactory, each awardee may participate over the 5-year cooperative agreement and may receive additional funding in years 2-5 (approximately \$100,000 per healthcare system per year). Award determinations will be made by an independent workgroup comprised of ACOEM leadership and awarded contracts will be provided directly to successful applicants by ACOEM. Information submitted will be reviewed for scientific merit, quality improvement potential and in future years for compliance with requirements and ability to meet prior stated goals and metrics. ACOEM will also ensure that awardees have a patient or worker population that represents broad geographic, racial/ethnic, and economic diversity.

Eligibility Criteria

See Appendices 1-3 for additional information on health system eligibility and data requirements.

1. Applications must include a designated ACOEM member from the health system to oversee the project.
2. The healthcare system is located in the United States and has multiple occupational medicine clinics.
3. Work settings preferably represent broad geographic, racial/ethnic, rural/urban, and economic diversity in patient/employee population.
4. Capability to provide ACOEM with necessary data for outcome and process measures.

Use of Funds

Awardees may use funds only for reasonable program purposes, including personnel, travel, supplies, and services. Funds may not be used for research, to purchase furniture or equipment (any such proposed spending must be clearly identified in the budget). Applicants may claim indirect costs according to their federally negotiated indirect cost (IDC) rate or in the absence of a federally negotiated IDC rate, can use the de minimus rate of 10%. If you have a federally negotiated IDC, please submit paperwork with your application. In addition, other than for normal and recognized executive-legislative relationships, no funds may be used for publicity or propaganda purposes; for the preparation, distribution, or use of any material designed to support or defeat the enactment of legislation before any legislative body; the salary or expenses of any grant or contract recipient, or agent acting for such recipient, related to any activity designed to influence the enactment of legislation, appropriations, regulation, administrative action, or Executive order proposed or pending before any legislative body.

How to Apply

- Complete the online application [<https://form.jotform.com/213546750686060>] including attaching a budget and justification.
 - ***Please note that the application form, once initiated, does not save automatically. To save your work, be sure to click the “save” button at the bottom of the page. Once you hit the “save” button, you can skip creating an account and just enter your email address. You will then receive an email with a link to continue your form at a later time.***
- Limit your project description to a maximum of 10 pages.
- For your reference only, a PDF version of the complete application is available in Appendix 4.
- For budget guidelines, see CDC’s Budget Preparation Guidelines at <https://acoem.my.salesforce.com/sfc/p/1N000002ArMw/a/3m0000006Xtl/baRMAYH9cW4gk.0L17Pf3ub9FHUhEBt0q3MqsqBcL4s>.

Key Dates

December 30, 2021	ACOEM RFP Release Date
February 10, 2022	Application Deadline
March 4, 2022	Selection Notification
March 7, 2022	Project Implementation Start

Scope of Services

Each healthcare system awarded will:

1. In the first year, select 1-2 clinics or sites and focus on COVID-19 and influenza vaccinations.
2. Collect baseline vaccination rates including those given outside the facility.
3. In years 2-5, add more clinics or sites in each year and add other routine adult vaccinations.
4. Conduct overview of vaccine assessment and delivery process in the occupational health clinics or sites. This could include identifying best practices for systemizing vaccine needs assessment.
5. Determine baseline coverage of influenza, COVID-19 and routine vaccination in workers and those with chronic medical conditions relevant to occupational health, using electronic health record (EHR) and Immunization Information Systems (IIS).
6. Conduct monthly EHR or IIS vaccine coverage assessments and measure changes.
7. Assess and address challenges/barriers to vaccine hesitancy and confidence among healthcare personnel and their patients in the relevant clinics.
8. Develop and implement quality improvement interventions to increase vaccination coverage in the relevant clinics or sites. Pilot intervention in the first year and then expand to other sites in years 2-5.
 - Address racial/ethnic, geographic, and other diverse characteristics in the clinics selected.
 - Some examples of interventions may include (but are not limited to) using identified vaccine champions in the relevant clinics, peer educators, developing protocols which streamline immunization delivery in clinical practice and throughout patient flow, funding enhancements in practices' EHRs to incorporate immunization protocols/templates in standing orders, coordinate onboarding/reporting to IIS in bidirectional manner or directly to immunization gateway, collecting data to develop and/or support QI measures and reporting these measures to national partners, implementing reminder/recall systems.
 - When possible, healthcare system should use evidence-based strategies for increasing vaccination as identified in the Community Guide (<https://www.thecommunityguide.org/>).
9. Provide monthly updates to ACOEM regarding metrics, progress towards goals and expenditures.
10. Develop, implement, and evaluate culturally and linguistically appropriate provider resources incorporating the Standards for Adult Immunization Practice in the relevant clinics or sites (<http://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/index.html>).
11. Assist ACOEM in disseminating findings on best practices over the course of the project through manuscripts, webinars, conference presentations, newsletters, etc.

Requirements

All recipients must:

1. Participate in any project-related calls.
2. Compile and upload necessary data to ACOEM throughout the project (e.g., baseline data on immunization rates and then updated data monthly).
3. Attend two in-person meetings with all awardees in the first year at ACOEM's headquarters (Chicagoland area) (Travel expenses will be paid for by ACOEM for 2 representatives to attend).

Contact for RFP-related inquiries

ACOEM's Director, Scientific Programs: Julie Ordning, jording@acoem.org

Disclaimer: This Request for Proposal is supported by the American College of Occupational and Environmental Medicine through a cooperative agreement between the Centers of Medical Specialty Societies and the Centers for Disease Control and Prevention – CDC-RFA-IP21-2111: *Improving Adult Immunization Rates for COVID-19, Influenza, and Routine Adult Vaccinations through Partnerships and Medical Subspecialty Professional Societies and the Long-Term Care Professional Society.*

Appendix 1

CMSS' Candidate Health System Screening Questions

Checklist for the selection of health systems that includes structural factors (e.g., participation in state IIS) and data capabilities (e.g., demographic data to assess equity).

Connectivity with State and/or City IIS:

1. Do you currently work with the state and/or city IIS?
2. Do you both send and receive information with the IIS?
3. What is the frequency of information exchange with the IIS?

How to assess data quality from the health system or organization:

1. Define your patient population of interest. e.g., all patients with at least 1 visit with clinicians in the occupational medicine specialty or at your organization's occupational health clinic.
2. Health system or organization to provide count of those patients or workers. Let's say there are 5,000 patients. *Addresses capacity.*
3. Of those patients or workers, how many have no immunization information in the EHR in 2021? *Addresses data capture.*
4. Of those patients or workers, how many have no IIS data in the EHR? *Addresses IIS connectivity. May be difficult to distinguish from same data, other sources?*
5. Of those patients or workers, how many had at least 1 COVID-19 vaccination in 2021? At least 2? 3? Same for Influenza. *How do these numbers compare to community averages for this population? Addresses completeness of data and organizational policies.*
6. Of those patients or workers, how many vaccinations were administered at this health system vs. IIS reported from another provider vs documented in alternative ways from another provider? *Addresses delineation of internal vs. external sources.*
7. Of those patients or workers, how many had IIS data updated in the past 6 months? 3 months? 1 month? *Addresses frequency of information exchange.*

Appendix 2

CMSS Recommended Metrics

Outcome Measures:

- Number and percent of patients who have documented vaccine assessment in their record
- Number of provider-made recommendations about vaccination; frequency of provider recommendations
- Number and percent of providers' recommendations that resulted in immunization
- Frequency (stronger way or more routine way) and quality of the provider recommendations through patient assessments/surveys
- Number and percent of healthcare providers using EHR and/or IIS to screen or forecast vaccination needs
- Number and types of new technologies or procedures utilized to streamline the vaccine assessment

Process Measures:

- Changes in adult patient care procedures to ensure appropriate immunization assessment, recommendation, vaccine offers and/or documentation
- Number and types of improvements to referral systems/procedures
- Changes in how immunizations are documented in IIS or EHRs
- Number of patient records in IIS
- Number of new users in IIS
- Number and types of exchange of immunization information among multiple categories of providers
- Number and percent of patients reporting access to their own immunization records

Appendix 3 Data-related Questions and Assumptions

1. *For some of the adherence to the Standards for Adult Immunization Practice that are not likely to be found in structural data fields, could patient surveys be used to evaluate whether they were assessed, offered vaccine, or referred?*
 - CDC Response: Likely yes since the data are for evaluation/quality improvement (QI) and not research. CDC will need to put it through their project determination system. As part of our QI work, they would also like us to work with EHRs to get these fields included. Given new reimbursement codes for vaccination discussion, billing data may also be helpful.
2. *For the denominator, does CDC expect a population view of all patients (e.g., all cardiology patients) or only those high-risk patients who were seen by the specialty providers?*
 - CDC response: They would only want this information on patients who are being seen at the clinics where the QI interventions are being implemented since the intent is to determine whether the interventions improve vaccine coverage. In the project's later years, a more population-based QI strategy could be considered (e.g., reminder recall systems for eligible patients).
3. *How much specificity will be needed on the type of flu or COVID vaccination administered?*
 - CDC Response: The societies do not need to get to specifics on type of COVID/flu vaccination. It is fine if the health systems want to capture that level of data for their own purposes.
4. *Could the specialty societies use a sampling approach for vaccination of specialty patients, particularly for the data that are patient reported?*
 - CDC Response: For vaccination, it would be preferable to have data pulls of EHRs or IISs of all patients who were seen by providers in the selected clinics during the specified time frame. To ascertain whether a vaccine assessment/offer/referral occurred, a sampling strategy could work.
5. *Given privacy concerns, the societies expect to receive only aggregated de-identified data from the health systems.*
 - CDC Response: Yes, it is acceptable to receive aggregated de-identified data from the health systems. However, quality checks will be required by the health systems to ensure that accurate data are pulled, and denominators are correct (e.g., including only patients that were eligible to receive the vaccine in the first place, especially for some vaccinations like pneumococcus and Shingrix).
6. *Assumption: The societies will receive these aggregated "count" data from the health systems in a spreadsheet/data base of the core data elements for each of the key steps in the Standards for Adult Immunization Practice, but they will not collect patient-level data from the health systems.*
 - CDC Response: It will be difficult to receive "count" data for vaccine assessments, offers, and referrals. It might be more realistic to have sampling from the patient surveys (or even provider surveys to see how far apart patients and providers are in their view of whether the Standards for Adult Immunization Practice were implemented during a patient visit).

Appendix 4: ACOEM Application: CMSS/CDC Funding Opportunity
(Must complete application online at: <https://form.jotform.com/213546750686060>)

Name of healthcare system: *

Headquarter address: *

Street Address

Street Address Line 2

City

State / Province

Postal / Zip Code

ACOEM member overseeing the project: *

First Name

Last Name

Suffix

Email: *

Individual completing the application: *

First Name

Last Name

Suffix

Email: *

Does the healthcare system have its own occupational medicine clinics? *

Yes

No

If yes, how many?

What are the average number of patient visits either per month or per year or the number of workers or employees that you serve? *

What are the demographics of the patients/workers that you serve? *

What population/type of workers do you see in the clinics? *

Do you use an electronic health record (EHR)? *

- Yes
- No

If yes, what EHR do you use?

Do you administer vaccines? *

- Yes
- No

If yes, which vaccines do you administer? (check all that apply)

- COVID-19
- Influenza
- Pneumococcal Shingles (Zoster)
- Human papillomavirus (HPV)
- Measles, mumps, rubella (MMR)
- Chickenpox (Varicella)
- Meningococcal
- Hepatitis A
- Hepatitis B
- Tdap or Td booster
- Vaccinia
- Rabies

- Travel-related vaccines
- Other occupational vaccines

Does your staff routinely access the Immunization Information Systems (IIS) in your state? *

- Yes
- No

If yes, does your staff access the IIS to see which vaccines have been received?

- Yes
- No

Does your staff input any vaccines given into your state IIS?

- Yes
- No

Does your staff access the IIS for any other purpose?

- Yes
- No

Upload a description of your work plan. The work plan should include:

- **A description of your proposed pilot program/potential strategies in the first year to improve the delivery of care/increase vaccination rates among adults or workers in occupational health clinics (starting with COVID-19 and influenza vaccines).**
- **A description on how immunization rates will be determined at baseline and post-intervention points.**
- **Location and description of the clinic or clinics including population served that you will use in year one of this project.**

Please review Appendices 1-3 which list the CMSS recommended structural elements, data quality issues and recommended data outcome and process measures to submit. We realize that every health system may not be able to meet or choose to meet all of the required items.

Which of these structural elements or data quality issues will you be able to meet? *

Which of the data outcome measures or process measures will you be able to measure or provide? (check all that apply) *

- Number and percent of patients who have documented vaccine assessment in their record
- Number of provider-made recommendations about vaccination; frequency or provider recommendations
- Number and percent of providers' recommendations that resulted in immunization
- Frequency (stronger way or more routine way) and quality of the provider recommendations through patient assessments/surveys
- Number and percent of healthcare providers using EHR and/or IIS to screen or forecast vaccination needs
- Number and types of new technologies or procedures utilized to streamline the vaccine assessment
- Changes in adult patient care procedures to ensure appropriate immunization assessment, recommendation, vaccine offers and/or documentation
- Number and types of improvements to referral systems/procedures
- Changes in how immunizations are documented in IIS or EHRs
- Number of patient records in IIS
- Number of new users in IIS
- Number and types of exchange of immunization information among multiple categories of providers
- Number and percent of patients reporting access to their own immunization records

Will your health system be able to provide ACOEM a monthly report which assesses and measures changes to monitor progress? *

- Yes
- No

If you are not planning on providing monthly reports, how often would you plan to report progress to ACOEM?

Please upload your budget with justification and ACOEM member CV.