



AMERICAN COLLEGE OF
OCCUPATIONAL AND
ENVIRONMENTAL MEDICINE

ACOEM REQUEST FOR PROPOSAL (RFP) – HEALTH 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

In 2021, the American College of Occupational and Environmental Medicine (ACOEM) was 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 a total of 7-10 health care systems and/or large employers 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 an additional 1-4 health systems and/or large employers (approximately \$200,000 per health system). 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. Each approved application will be presented to CMSS and CDC for their review and final approval. ACOEM will evaluate each awardees' performance and future workplans annually and if deemed satisfactory, each awardee may receive additional funding for 1-3 years (approximately \$100,000 per health system/employer per year).

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 health 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 the 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, and 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 an agent acting for such recipient, related to any activity designed to influence the enactment of the legislation, appropriations, regulation, administrative action, or Executive order proposed or pending before any legislative body.

How to Apply

- Complete the **online application** at: <https://form.jotform.com/230995312949164> including attaching a budget and justification.
- If applicable, upload documentation of your organization's Federal Negotiated Indirect Cost Rate in the online application.
 - ***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/baRMAYH9cW4g0L17Pf3ub9FHUhEBt0q3MqsqBcl4s>.

Key Dates

Application Deadline: June 16, 2023

Scope of Services

Each health system awarded will:

1. In the first year of funding, 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. Add 1-2 clinics or sites in each year and add other routine adult vaccinations (Years 2-3).
4. Conduct an overview of the vaccine assessment and delivery process in 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 following years.
 - 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 (all deidentified)).
3. Attend one in-person meeting 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 Ording, MPH, jording@acoem.org

ACOEM's Program Manager: Isabel Montoya-Curtis, MPH, isabel@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 2022? *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 2022? 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
- Number of eligible patients counseled by clinical team
- Number of eligible patients refusing vaccination
- Number of patients referred to another site for vaccination (e.g., pharmacy)
- Number of immunizations administered at another site captured in patient record
- 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, are the societies expected 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

Must complete application online at: <https://form.jotform.com/230995312949164>

ACOEM Application: CMSS/CDC Funding Opportunity Health 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



Month Day Year

Healthcare TIN *

Name of health care 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: *

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First Name

Last Name

Suffix

Email: *

example@example.com

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

Yes

No

If yes, how many?

What is the estimated number of patients/workers that your health system serves per year? *

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

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

What is the percentage of the patient population residing in a rural area (if known)?

What is the percentage of the patient population residing in an area designated as a Medically Underserved Population (MUP)(if known)?

Does the health care system use an electronic health record (EHR)? *

Yes

No

If yes, which EHR is being used?

Does your health system actively use a vaccine module within your EHR? *

Yes

No

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

Do you agree to hire a full-time project coordinator as a requirement of accepting the award (also project manager, quality manager, or equivalent) to fulfill project requirements and related activities? *

- Yes
- No

Do you agree to submit relevant quality data, including vaccination status, provider recommendations to receive vaccines, vaccine administration, and other activities as requested by the CDC or American College of Occupational and Environmental Medicine (ACOEM) during the project? *

- 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.
- A description of your practice/health system’s experience with promoting vaccines within your patient population, including improving vaccine awareness, vaccine activity, and/or addressing vaccine hesitancy.
- A description of your practice/health system’s experience with promoting routine vaccines among your providers, including clinical quality improvement initiatives implemented and provider response.
- As part of the award associated with this application, all practices/health systems will be required to engage in performance improvement activities related to vaccination awareness, vaccine activity, and/or addressing vaccine hesitancy within your practice/health system. Please describe your aims and proposed approaches.
- Include a chart identifying a 3-year plan for the number of covered individuals each year and scope of immunizations covered (see example below).

Table X. Anticipated Enrollment

Use a table to show the anticipated enrollment in each of the 3 project years. (Please provide an estimate as we recognize that circumstances may change over time.)

	Number of sites	Participants		Vaccines	Worker Groups
		New	Follow-up*		
Year 1					
Year 2					
Year 3					

*Follow-up = enrolled in previous years

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/employer 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 of provider recommendations
- Number and percent of providers' recommendations that resulted in immunization
- Number of eligible patients counseled by clinical team
- Number of eligible patients refusing vaccination
- Number of patients referred to another site for vaccination (e.g., pharmacy)
- Number of immunizations administered at another site captured in patient record
- Frequency (stronger way or more routine way) and quality of the provider recommendations through patient assessments/surveys
- Number and percent of health care 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.

If applicable, upload documentation of your organization's Federal Negotiated Indirect Cost Rate.

It is crucial that leadership of the health system support team members' participation in the program. This includes a commitment of leadership to the improvement project(s) and willingness to dedicate resources and protect participants' time. To demonstrate this commitment, please upload a letter of support from a c-suite representative of the health system (e.g., Chief Executive Officer, Chief Medical Officer, Chief Quality Officer, Chief Nursing Officer).

To the best of my knowledge, my health system is not applying with another professional society to participate in the CDC Improving Adult Immunization Rates for COVID-19, Influenza, and Routine Adult Vaccinations Project. *

- Yes
- No

Submit