Adult Immunization Disparities: A persistent and growing problem

Racial and ethnic disparities in adult immunization coverage persist for several vaccines, including pneumococcal, hepatitis A, hepatitis B, herpes zoster (shingles), influenza, human papillomavirus (HPV), and the tetanus/diphtheria/pertussis vaccines, with lower vaccination coverage among racial and ethnic minorities compared with whites. Persons who lack health insurance, have lower incomes, or have less education also have lower vaccination coverage. For zoster and pneumococcal vaccines, the gaps in coverage between whites and other racial and ethnic groups have widened. Regardless of the underlying causes, adult immunization disparities in vaccination leave adults at risk of preventable illness that could be avoided.1-6

Disparities in Vaccination Coverage for Older Adults: Among persons ≥60 years, whites had higher shingles vaccination coverage (34.6%) compared with blacks (13.6%), Hispanics (16.0%), and Asians (26.0%). Disparities in vaccination with influenza and pneumococcal vaccines persist as well among older adults.

HPV Vaccination Disparities among Young Women: Among women aged 19–26 years, non-Hispanic blacks (38.0%), Hispanics (35.7%), and non-Hispanic Asians (36.3%) had lower coverage compared with non-Hispanic whites (44.7%). However, the coverage rates are different among teens, with higher rates among some racial/ethnic minorities and those living below poverty level. This pattern might be partly attributable to the Vaccines for Children (VFC) program, which provides recommended vaccines at no cost to children who are uninsured, underinsured, or on Medicaid, as well as other eligible children.

Disparities among Healthcare Personnel (HCP): White HCP had higher Tdap coverage (49.2%) compared with black HCP (28.3%) and Hispanic HCP (38.7%). Hispanic HCP had lower hepatitis B vaccination coverage (57.1%) compared with white HCP (67.8%).

Disparities among Uninsured and Persons with Lower Incomes: Uninsured people have lower immunization rates than insured people. Out-of-pocket costs have been shown to reduce the likelihood of vaccination, especially in populations with income constraints.

Disparities Based on Insurance Type: For pregnant women, two states (Wisconsin and California) have reported substantial disparities for Tdap vaccination. In Wisconsin, 61.7% of privately insured and 43.1% of publicly insured pregnant women had received Tdap vaccination.7 In California, 65% of privately insured and 36% of publicly insured pregnant women were vaccinated with Tdap.8
What Can Be Done to Reduce Adult Immunization Disparities?

Factors contributing to immunization disparities, like other healthcare disparities, include social determinants of health. According to the World Health Organization, the social determinants of health – the conditions in which persons are born, grow, live, work and age – are mostly responsible for health inequities.9,10

There Is No Single Intervention

Rather than focusing on a single solution, broad collaborative attention and efforts sustained over time are needed. The complex causes of health disparities must be addressed with the involvement of many individuals and organizations in a cross-disciplinary approach that leverages housing, transportation, education and employment.2

Know the Numbers

Improvement demands good surveillance. “Identifying disparities and monitoring them over time is a necessary first step toward the development and evaluation of evidence-based interventions that can reduce disparities.”2

Evidence-based Interventions

The CDC’s Office of Minority Health states that the use of evidence-based interventions targeted at reaching minority populations is needed to eliminate disparities. These interventions include:

- use of reminder/recall systems;
- use of standing orders for vaccination;
- regular assessments of vaccination coverage among provider practices;
- use of immunization information systems (“registries”); and
- improving public and provider awareness on the importance of vaccines for adults.

Routine offering of influenza vaccine to patients in office-based settings has the potential to reduce racial and ethnic disparities for influenza vaccination by half.11

Healthcare Providers Can Prompt Action

Healthcare providers have a unique voice with the power to prompt action. They are positioned to collaborate with others on broad-based solutions, as well as find ways to reduce disparities within their own practice or clinic. The National Adult and Influenza Immunization Summit urges healthcare providers to increase their awareness about immunization disparities and promote solutions aimed at reducing them, including implementing the Standards for Adult Immunization Practice by assessing patients’ vaccination needs at each encounter, recommending needed vaccines, offering or referring to a vaccine provider for vaccination, and documenting vaccinations in immunization information systems.12

Actions Healthcare Providers Can Take12,13

- Implement the Standards for Adult Immunization Practice by routinely assessing, recommending, and offering needed vaccines to ALL adult patients. If vaccine cannot be administered, patients should be referred to a reliable provider of immunizations.
Find out what disparities may exist among your own patients. Assess baseline data on the immunization rates among patients, and identify disparities that can be reduced.

Become an energetic immunization champion, which is key for successful immunization programs. Behind every successful effort is passionate human leadership.

Implement quality improvement projects as part of the healthcare provider “Maintenance of Certification” process or residency training. Taking on quality improvement projects aimed at reducing disparities in immunization rates is a concrete commitment to addressing inequities within the provider’s sphere of influence.

Document receipt of vaccination in patient medical records and immunization registries.

Build a diversified workforce of healthcare providers in clinics, hospitals or workplaces.

Utilize patient education materials in foreign languages, when appropriate.

The NAIIS and other national collaborative groups can be a forum for continual problem-solving action on this important issue. To make a difference, adult immunization partners must look at evidence-based strategies to reduce disparities and to prompt action in their practices and communities.

Related Projects and Resources


National Influenza Vaccination Disparities Partnership: www.cdc.gov/flu/partners/disparities.htm


2012 National Healthcare Quality Report (discusses prevailing disparities as they relate to racial factors and socioeconomic factors in priority populations): www.ahrq.gov/research/findings/nhqrdr/nhqr12/highlights.html

Public Health and Faith Community Partnerships: Model Practices to Increase Influenza Prevention Among Hard-to-Reach Populations. From Emory University’s Interfaith Health Program: www.interfaithhealth.emory.edu

The Center for Faith-based and Neighborhood Partnerships: www.hhs.gov/partnerships/index.html

For providers who seek to better target or customize the immunization advice they make to adult patients, information is available at: www.cdc.gov/vaccines/hcp/patient-ed/adults/index.html

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