

AIM Research Biosketch

Updated July 2025

The Association of Immunization Managers (AIM) conducts research independently and in partnership with outside organizations and researchers to develop and share evidence-based immunization policies and practices. AIM participates in various aspects of research projects, including research design, data collection and analysis, and dissemination of results. This biosketch includes AIM's publications, presentations, and research support projects in chronological order.

Publications

(in chronological order, AIM staff in bold)

Vielot N, Bucklin I, **Westfall K**, Kepka D, Zimet G, Zorn, S. How immunization information systems inform aged-based HPV vaccination recommendations in the United States: A mixed-methods study. Vaccine. 2025; 13(7): 716. https://doi.org/10.3390/vaccines13070716

Orfield C, Loosier P, Wagner S, Sabin E, **Fiscus M**, Matulewicz H, Vohra D, Staatz C, Taylor M, Caruso E, DeLuca N, Moonan P, Oeltmann J, Thorpe P. Design and modification of COVID-19 case investigation and contact tracing interview scripts used by health departments throughout the COVID-19 pandemic. Public Health Management and Practice. 2024; 30(3):336-345. doi: 10.1097/PHH.0000000000001875

Koneru A, **Wells K**, Carnes CA, **Drumhiller K**, Chatham-Stephens K, **Melton M**, Oliphant H, Hall S, Dennison C, **Fiscus M**, Vogt T. A survey of state and local practices encouraging pediatric COVID-19 vaccination of children ages 6 months through 11 years. Vaccine. 2024; S0264-410X (24): 00369-4. https://doi.org/10.1016/j.vaccine.2024.03.064

Mercado-Andino AK, Suárez-Pérez E, Díaz-Miranda OL, Medina-Laabes DT, Ortiz AP, **Wells K**, and Colón-López V. Abstract 721: Vaccination barriers for HPV vaccine initiation and completion: A perception analysis using the Association of Immunization Managers annual survey. Cancer Research. 2023; 83(S7): 721-721. https://doi.org/10.1158/1538-7445.AM2023-721

Mercado-Andino AK, Toro-Garay YG, Díaz-Miranda OL, Medina-Laabes DT, Ortiz AP, **Wells K**, Suárez E, and Colón-López V. Abstract A128: National partnerships for HPV promotion: An evaluation using the Association of Immunization Managers annual survey. Cancer Epidemiology, Biomarkers & Prevention. 2023; 32(S1): A128-A128. https://doi.org/10.1158/1538-7755.DISP22-A128

Toro-Garay YG, Mercado-Andino AK, Díaz-Miranda OL, Medina-Laabes DT, Ortiz AP, **Wells K**, Suárez E, and Colón-López V. Abstract A129: National assessment of the HPV acceptance: Public attitudes and policy climate. Cancer Epidemiology, Biomarkers & Prevention. 2023; 32(S1): A129-A129. https://doi.org/10.1158/1538-7755.DISP22-A129

Plescia M, Hannan C, & Baggett, J. A pandemic success story: distribution and administration of COVID-19 vaccines. Public Health and Management Practice. 2023; 28(6): 749-750. doi: 10.1097/PHH.000000000001651

Shen A, Sobczyk E, Coyle R, Tirmal A, & **Hannan C.** How ready was the US vaccination infrastructure and network of immunization information systems for COVID-19 vaccination campaigns: recommendations to strengthen the routine vaccination program and prepare for the next pandemic. Human Vaccines & Immunotherapeutics. 2022; doi: https://doi.org/10.1080/21645515.2022.2088010

Wells K, Moore K, & Bednarczyk R. Supporting immunization programs to address COVID-19 vaccine hesitancy: recommendations for national and community-based stakeholders. Vaccine. 2022; 40(20): 2819-2822. doi: 10.1016/j.vaccine.2022.03.039

Huber K, Greene K, Perkinson L, **Wells K**, Bollinger J, **Melton M**, **Less E**. Priorities and policy levers to support school-located vaccination. Health Affairs. 2022; doi: 10.1377/forefront.20220228.651782

AIM & National Association of School Nurses (NASN). Key challenges and opportunities for implementing school located vaccination clinics for COVID-19 and influenza: roundtables with school nurses and immunization programs. NASN School Nurse. 2022; 37(1): 15S-23S. doi: 10.1177/1942602X211064752

AIM & NASN. The landscape of state and local school-located vaccination clinics: practices, policies, and lessons learned for providing COVID-19 and routine vaccinations. NASN School Nurse. 2022; 37(1): 3S-14S. doi: 10.1177/1942602X211064750

Hannan C & Mazyck, D. Letter to the editor. NASN School Nurse. 2022; 37(1): 1S-2S. doi: 10.1177/1942602X211064733

Grabert B, Heisler-MacKinnon J, Kurtzman R, Bjork A, **Wells K**, & Brewer N. Partnering with healthcare systems to improve HPV vaccination: the perspective of immunization program managers. Human Vaccines & Immunotherapeutics 2021; 17(12): 5402-5406. doi: 10.1080/21645515.2021.1993041

Clark S & **Wells K**. Data-driven assessment of nonmedical vaccination exemption can guide public health response. Pediatrics. 2021; 148(3): e2021050445. doi: 10.1542/peds.2021-050445

Colón-López V, Rivera-Figueroa V, Arroyo-Morales GO, Medina-Laabes DT, Soto-Abreu R, Rivera-Encarnación M, Díaz-Miranda OL, Ortiz AP, **Wells K**, Vázquez-Otero C & Hull PC. Content analysis of digital media coverage of the human papillomavirus vaccine school-entry requirement policy in Puerto Rico. BMC Public Health. 2021; 21: 1286. doi: 10.1186/s12889-021-11311-9

Clark S, Cowan A & **Wells K**. Improving childhood vaccination coverage rates: the case of fourth dose of DTaP. Human Vaccines & Immunotherapeutics. 2020; 16(8): 1884–1887. doi: 10.1080/21645515.2019.1699357

Eden L, Dunn E, Luthy K, **Wells K**, Macintosh J & Beckstrand R. Identifying United States and territory education requirements for childhood vaccination exemptions. Journal of Vaccines and Vaccination. 2017; (8)362. doi: 10.4172/2157-7560.1000362

Seib K, Chamberlain A, **Wells K**, et al. Challenges and changes: immunization program managers share perspectives in a 2012 national survey about the US immunization system since the H1N1 pandemic response. Human Vaccines & Immunotherapeutics. 2014; 10(10): 2915-2921. doi: 10.4161/21645515.2014.972798

Moriarty L, Omer S, Seib K, Chamberlain K, **Wells K**. Changes in immunization program managers' perceptions of program's functional capabilities during and after vaccine shortages and the H1N1 influenza pandemic. Public Health Reports. 2014; 129(Suppl 4): 42-48. doi: 10.1177/00333549141296S407

Wells K & Omer S. The financial impact of a state adopting a personal/philosophical belief exemption policy: modeling the cost of pertussis disease in infants, children and adolescents. Vaccine. 2012; 30(41): 5901-5904. doi: 10.1016/j.vaccine.2012.07.047

Chamberlain A, Seib K, **Wells K**, **Hannan C**, Orenstein WA, Whitney E, Hinman AR, Berkelman RL, & Omer SB. Perspectives of immunization program managers on 2009-10 H1N1 vaccination in the United States: a national survey. Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science. 2012; 10(1): 142-150. doi: 10.1089/bsp.2011.0077

Chamberlain A, **Wells K**, Seib K, Kudis A, **Hannan C**, et al. Lessons learned from the 2007 – 2009 Hib vaccine shortage: implications for future vaccine shortages and public health preparedness. Journal of Public Health Management & Practice. 2012; 18(3): E9–E16. doi: 10.1097/PHH.0b013e31821dce27

Hannan C, DeBlois A & Monroe J. Maintaining the vaccine safety net. Pediatrics. 2009; 124: S571-S572. doi: 10.1542/peds.2009-1542U

Lee G, Santoli J, **Hannan C**, et al. Gaps in vaccine financing for underinsured children in the United States. JAMA. 2007; 298(6): 638–643. doi: 10.1001/jama.298.6.638

Research Presentations

2024	Section 317 Vaccine Purchase Funding: The challenge of keeping pace with new vaccines. <i>National Immunization Conference</i> , Atlanta, GA.
2024	Five Strategies for Increasing Pediatric COVID-19 Vaccine Coverage: Translating Lessons Learned During the Pandemic to the Current Environment, <i>National Immunization Conference</i> , Atlanta, GA.
2024	Barriers and Success to Enrolling Birthing Institutions in the Vaccines for Children Program. <i>National Immunization Conference</i> , Atlanta, GA.

2024	Vaccine Access Cooperative (VAC) on Pediatric COVID-19 Under 11 Years of Age Overview. <i>National Immunization Conference</i> , Atlanta, GA.
2024	Understanding Provider and Pharmacist Experiences and Perspectives toward Pediatric COVID-19 Vaccination. <i>National Immunization Conference</i> , Atlanta, GA.
2024	Economic Analysis of Implementing Five Strategies for Increasing COVID-19 Pediatric Vaccine Coverage. <i>National Immunization Conference</i> , Atlanta, GA.
2023	Immunization Program Views on IIS-Related Pandemic Challenges, Response, and Priorities. <i>American Immunization Registry Association Meeting</i> , San Diego, CA.
2018	Common Practices, Program Priorities and Awardee Perspectives on Increasing Older Adolescent Coverage Rates. <i>National Immunization Conference</i> , Atlanta, GA.
2018	Collaborative Efforts to Promote Adolescent Human Papillomavirus Vaccination Among 64 State, Local and Territorial Immunization Programs. <i>National Immunization Conference</i> , Atlanta, GA.
2018	Trends in how the 64 State, Local and Territorial Immunization Programs View Vaccine Hesitancy and Address Vaccine Confidence. <i>National Immunization Conference</i> , Atlanta, GA.
2017	Recommendations on VFC Seasonal Influenza Vaccine Distribution, National Adult and Influenza Immunizations Summit, Atlanta, GA.
2016	If You've Seen One Immunization Program, 2016 National Immunization Conference, Atlanta, GA.
2016	Immunization Program Efforts to Promote Adult Vaccination, 2016 National Immunization Conference, Atlanta, GA.
2015	State/Local/Territorial Immunization Program Vaccine Hesitancy/Confidence/Safety Activities-Lessons Learned- Recommendations, <i>Texas State Conference</i> , Austin, TX.
2014	State of the States: Immunization Program Perspective, National Adult and Influenza Immunization Summit, Washington, DC.
2014	State/Local/Territorial Immunization Program Vaccine Hesitancy/Confidence/Safety Activities-Lessons Learned- Recommendations, NVAC Vaccine Hesitancy Workgroup Meeting, Webinar.
2012	Strategies to Improve Eligibility Screening in Immunization Information Systems (IIS), American Immunization Registry Association Meeting, St. Paul, MN.
2011	Implementation of ACIP Permissive Recommendation in State, Local and Territorial Immunization Programs, <i>National Immunization Conference</i> , Washington, DC.
2011	Using ARRA Funds to Implement Strategies to Improve Immunization Coverage Rates, <i>National Immunization Conference</i> , Washington, DC.

2011	Part of the Plan: Use of Incident Command System (ICS) and Emergency Operation Center (EOC) Structures During the 2009 H1N1 Influenza Vaccination Response, <i>National Immunization Conference</i> , Washington, DC.
2011	Use of Immunization Information Systems During the 2009 – 2010 Pandemic H1N1 Vaccination Campaign: A Survey of Immunization Program Managers, <i>National Immunization Conference</i> , Washington, DC.
2011	State, Local and Territorial Immunization Programs and Emergency Preparedness Programs Collaboration During the H1N1 Vaccination Initiative, <i>National Immunization Conference</i> , Washington, DC.
2010	Implementation of ACIP Permissive Recommendation in State, Local and Territorial Immunization Programs, October ACIP HPV Work Group Meeting.
2010	Characterization and costs of vaccine storage failures resulting in wasted vaccine, <i>National Immunization Conference</i> , Atlanta, GA.
2010	Improving Communications During a Vaccine Shortage: Lessons learned from the 2008 – 2009 Haemophilus influenza Type-B (Hib) shortage, <i>National Immunization Conference</i> , Atlanta, GA.
2010	Functional Capabilities of Immunization Information Systems during Vaccine Shortages and Public Health Emergencies, <i>National Immunization Conference</i> , Atlanta, GA.
2010	Tracking State-Level Implementation of 2009-H1N1 Vaccination, <i>National Immunization Conference</i> , Atlanta, GA.
2010	Use of Immunization Information Systems by VFC Provider Sites in Oregon and Louisiana in Planning for and Managing the 2009 – 2010 Influenza Vaccination Campaign, <i>National Immunization Conference</i> , Atlanta, GA.
2008	The perceived importance of vaccine storage problems and variability of storage and handling policies among immunization programs in the US, <i>National Immunization Conference</i> , Atlanta, GA.
2008	Considerations and timeline to incorporate a new vaccine in city and state immunization programs in the US, <i>National Immunization Conference</i> , Atlanta, GA.
2008	Achieving better use of existing vaccines: An overlooked option, IOM Committee on Review of Priorities in the National Vaccine Plan, Chicago, IL.
2007	School vaccination requirements, <i>National Immunization Conference</i> , Kansas City, MO.
2006	Lessons learned from the 2004-2005 influenza vaccine shortage, <i>National Immunization Conference</i> , Washington, DC.

Research Support

(in chronological order)

Melissa Gilkey (Primary Investigator (PI))

University of North Carolina Gillings School of Public Health

Sept. 2024 - Sept. 2029

Funded by: Centers for Disease Control and Prevention

Engaging School Communities to Reduce Exemptions to Kindergarten Vaccination Mandates This initiative focuses on collaborating with school communities in three U.S. states where kindergarten vaccination rates fall below the national average.

AIM Role: Advisory Board

Daniel Salmon (PI)

Johns Hopkins Bloomberg School of Public Health

Sept. 2023 - Aug. 2026

Funded by: Centers for Disease Control and Prevention

Adult Immunization Quality Improvement for Providers (IQIP)

This three-phase study aims to evaluate interventions and approaches to increase quality of adult immunization delivery as well as to direct the adult immunization quality improvement (QI) activities among various types of adult healthcare settings.

AIM Role: Co-investigator

Maria Thacker Goethe (PI)

Center for Global Health Innovation (CGHI)

Feb. 2022 - Jan. 2023

Funded by: U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) – American Rescue Plan Act

Vaccine Access and Training (VAT) Initiative to Address Vaccine Hesitancy in Seven States
The goal of the project was to increase COVID-19 vaccine confidence and uptake in
underserved communities across seven states (Alabama, Arizona, Florida, Georgia, Kentucky,
Michigan, and Texas) through a coordinated effort involving community health worker (CHW)
training, immunization program support, and implementation of tailored outreach strategies.
The initiative was led by CGHI in collaboration with Emory University, Johns Hopkins
University, Urban Strategies, and AIM, among others.

AIM Role: Co-Investigator

Emily Brunson (PI) Brigham Young University

Jan. 2021 - May 2021

Funded by: CommuniVax and Texas State

Equity in Vaccination: A Plan to Work with Communities of Color Toward COVID-19 Recovery and Beyond

The primary goal was to provide guidance to elected and appointed officials as they work to advance equity in the COVID-19 vaccination campaign, to provide efforts to ensure that historically underserved populations receive the benefits of life-sustaining vaccines, and propel an even broader process of social reparation and improvement for Black, Indigenous, and People of Color (BIPOC) communities in the United States.

AIM Role: Consultant

Daniel Salmon (PI)

Johns Hopkins Bloomberg School of Public Health

Nov. 2020 - Aug. 2021

Funded by: Robert Wood Johnson Foundation and Horizon Foundation

Understanding Diverse Communities and Supporting Equitable and Informed Vaccination

Decision-Making

To aid in understanding diverse communities and supporting equitable and informed COVID-19 vaccination decision-making, AIM disseminated three rapid reports to national stakeholder groups, their respective constituency, and state and territorial health authorities.

AIM Role: Consultant

Vivian Cólon-López and Pamela Hull (PIs) University of Puerto Rico

Sept. 2018 - Aug. 2023

Funded by: National Cancer Institute

Implementation of School-Entry Policies for Human Papillomavirus Vaccination

The goal was to enhance understanding of geographic variation in HPV vaccine policies and outcomes across U.S. states and territories, while taking advantage of the timely opportunity to study the implementation and impact of the new school-entry HPV vaccine policy in Puerto Rico.

AIM Role: Consultant

Brewer and Gilkey (PIs)

University of North Carolina at Chapel Hill

July 2017 - June 2020

Funded by: Centers for Disease Control and Prevention

Improving HPV Vaccination Coverage Among Adolescent Patients: A Randomized Controlled Trial of AFIX and Remote Physician-to-Physician Engagement Strategies

Supported a factorial design randomized controlled trial (RCT) to evaluate the effectiveness of Assessment, Feedback, Incentives, and eXchange (AFIX) and remote physician-to-physician (P2P) vaccine provider engagement strategies to increase adolescent human papillomavirus (HPV) vaccination rates and monitor the impact of immunization service delivery of other adolescent vaccines.

AIM Role: Co-investigator

Kempe and Szilagyi (PIs)

University of Colorado, University of California at Los Angeles

May 2015 - April 2019

Funded by: National Institute of Allergy and Infectious Diseases

Centralized IIS-Based Reminder/Recall to Increase Influenza Vaccination Rates

This project compared centralized vs practice-based reminder/recall approaches for increasing influenza rates.

AIM Role: Advisor

Lacey Eden (PI)

Brigham Young University

Jan. 2015 - Dec. 2015

Funded by: Faculty Resources Grant, Brigham Young University

Identification of State Efforts to Improve Immunization Education and Reduce Exemption Rates The major goal of this project was to identify state immunization exemption requirements and specifics of parental educational training prior to immunization exemption.

AIM Role: Advisor

Christine Layton (PI)

RTI International

Feb. 2010 - Feb. 2012

Funded by: Centers for Disease Control and Prevention

Strengthening the Evidence Base: Monitoring Vaccination Coverage and Exemptions among Kindergarteners

The major goal of this project was to identify barriers and best practices for kindergarten assessments and develop tools for grantees to improve practices.

AIM Role: Consultant

Alan O'Connor (PI)

RTI International

Oct. 2010 - Sept. 2011

Funded by: Centers for Disease Control and Prevention

Impact of a Modern Bar Code for Vaccine Production, Clinical Documentation, Public Health Reporting and Tracking

This project analyzed the potential impacts of changing how vaccine product labels are barcoded would have on vaccine manufacturers, immunization providers, and immunization data users. Instead of linear barcodes with only the National Drug Code (NDC), the barcode would be a data matrix that would include the NDC, expiration date, and lot number.

AIM Role: Consultant

Susan Vadaparampil (PI)

University of South Florida Moffitt Cancer Center

July 2008 - June 2012

Funded by: National Institute of Health

Recommendation of HPV Vaccination Among U.S. Physicians

The major goal of this study was to conduct a nationally representative prospective study of physicians in the U.S. assessing recommendation for HPV vaccination at 2 time points: early (three years post HPV vaccine licensure) and later (five years post vaccine licensure) in the diffusion of HPV vaccination into clinical practice.

AIM Role: Consultant

Ruth Berkelman (PI)

Emory University

May 2008 - Sept. 2011

Funded by: Centers for Disease Control and Prevention

Vaccine Shortages and Public Health Preparedness

The overarching goal of this project was to help improve public health preparedness through maximizing the capabilities of the U.S. vaccination system.

AIM Role: Consultant

National Association of County & City Health Officials (NACCHO)

Aug. 2008 - May 2009

Funded by: Centers for Disease Control and Prevention Evaluation of the CDC Adult Hepatitis B Vaccine Initiative

The overarching goal of this project was to evaluate the 2007 CDC Hepatitis B Vaccine Initiative in order to demonstrate efficacy, better characterize the initiative, and understand the operational elements.

AIM Role: Advisor

Gary Freed (PI) University of Michigan

Nov. 2007 - Oct. 2008

Funded by: Sabin Vaccine Institute

State-Level Perspectives on Immunization Policies, Practices, and Program Financing
The goal of this study was to document state-level immunization policies and practices, and to explore the different ways that states addressed the current challenges to their programs.

AIM Role: Advisor