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## Proposal to Reduce Adult Immunization Barriers in California

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**SUMMARY:** Adult vaccination rates in the United States are consistently lower than the National Healthy People 2020 goals. Barriers to adult vaccination include inconsistency of insurance coverage of adult vaccines and difficulty in accessing vaccines. To help address the gap in adult access to vaccines, in 2016 the Department of Health Care Services—which administers the Medi-Cal program (California’s version of Medicaid)—implemented the All Plan

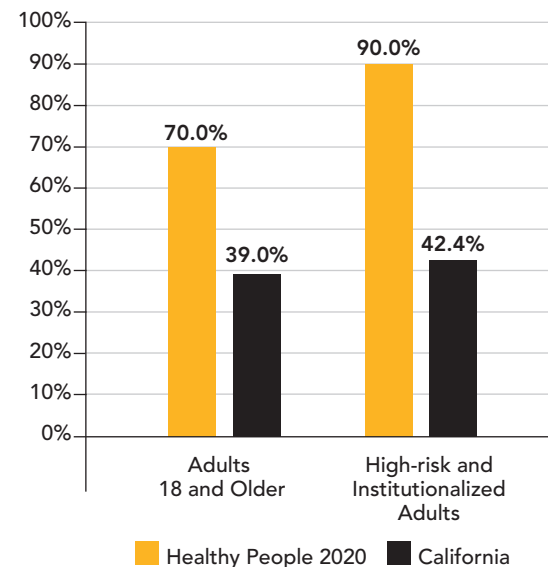
Letter (APL) 16-009, which requires coverage of recommended adult vaccines as a pharmacy benefit. Adult Medi-Cal patients can now receive the vaccines recommended for their age and underlying health conditions, and they can do so not only at a provider’s office but also at local pharmacies, improving access and convenience. This policy brief recommends expanding coverage of all adult vaccines as a pharmacy benefit of all public and commercial insurance plans.

*“The rates of immunization in California fall far below {federal Healthy People 2020} objectives.”*

Health experts recommend improving vaccination coverage for adults in order to decrease the prevalence of vaccine-preventable disease and death.<sup>1</sup> The federal Healthy People 2020 initiative identifies objectives for many important issues in public health, including immunization rates.<sup>2</sup> The rates of immunization in California fall far below those objectives. For example, while the Healthy People 2020 goal for flu vaccination of noninstitutionalized adults 18 years and older is 70.0 percent,<sup>2</sup> only 39 percent of adults 18 and older in California report receiving the vaccine during the 2015-2016 flu season.<sup>3</sup> The gap is even larger for individuals at higher risk for influenza: the Healthy People 2020 goal for flu vaccination of high-risk and institutionalized adults 18 years and older is 90 percent, but the immunization rate of high-risk individuals 18-64 years of age in California from 2015 to 2016 was just 42.4 percent.<sup>2, 3</sup>

**Exhibit 1**

### Adult Flu Vaccination Rates, Healthy People 2020 Goal vs. California 2015-16



Sources: Healthy People 2020 and Centers for Disease Control and Prevention

## Exhibit 2

## California Vaccination Rates of Pneumococcal and Herpes Zoster Vaccines Compared to Healthy People 2020 Goals

	Overall Vaccination Rates	Healthy 2020 Goals
Pneumococcal, 18-64 years at increased risk	34.1%	60%
Pneumococcal, ≥65 years	72.4%	90%
Zoster, ≥60 years	35.9%	30%

Source: 2016 BRFSS data

*“Latina, black, and Asian women ages 23-31 years old had significantly lower rates of completing the HPV vaccine series than white women.”*

### Other Vaccination Rates Are Also Low

Vaccinations routinely recommended for adults include the herpes zoster, human papillomavirus (HPV), pneumococcal, Tdap, hepatitis B, and annual flu vaccines. While the Healthy People 2020 objective for the herpes zoster vaccine is 30 percent coverage among adults ages 60 and older, a study by Kaiser Permanente Southern California showed that only 21.7 percent of Californians in that group had received the vaccine in 2011,<sup>2,4</sup> and just 35.9 percent of those who completed a BRFSS interview said they had received it in 2016.<sup>5</sup> The Healthy People 2020 objective for HPV vaccination is for 80 percent of females to have received three doses of the HPV vaccine by the ages of 13 to 15.<sup>2</sup> However, in California, the HPV series completion rate among females 18-22 was just 22.7 percent in 2015.<sup>6</sup> A 2000 study found that among California dialysis patients, the vaccination rate for hepatitis B was 53 percent—one of the lowest hepatitis B vaccination rates in the country—despite this population’s high risk for acquiring hepatitis B.<sup>7</sup> In addition, in a 2014 study by Kaiser Permanente Southern California, only 10.6 percent of individuals who tested negative for the hepatitis B virus sought to have the vaccination for it.<sup>8</sup>

The Healthy People 2020 adult pneumococcal vaccination rate objective is 90 percent for people 65 and older, and 60 percent for people

ages 18-64 who have high-risk conditions.<sup>2</sup> According to the 2016 CDC BRFSS survey report, the overall pneumococcal vaccination rates among people 65 and older and those 18-64 years of age with increased risk were 72.4 percent and 34.1 percent, respectively (Exhibit 2).<sup>5</sup> In addition, according to the same report, only 29.4 percent of Californians ages 65 and older have received the Tdap vaccine.<sup>5</sup>

### Racial Disparities in Vaccination Rates

In addition to the overall low immunization rates for adults, there are racial disparities in vaccine access. For example, during the 2011-2012 flu season, influenza vaccination rates were lower among blacks than whites in California.<sup>9</sup> In 2011, herpes zoster vaccination coverage was highest among non-Hispanic whites and those who lived in neighborhoods with higher education attainment.<sup>4</sup> One study found that Latina, black, and Asian women ages 23-31 years old had significantly lower rates of completing the HPV vaccine series than white women.<sup>6</sup> The rate of hepatitis B virus infection (vaccine-preventable) is three to four times higher among Asian-Americans than among other races.<sup>8</sup> However, the hepatitis B immunization rate among Asian-Americans is lower than that for whites (11.7 percent vs. 17.7 percent, respectively), although it is higher than the initiation rate among blacks and Hispanics (7.7 percent and 9.3 percent, respectively).<sup>8</sup> There are racial disparities in pneumococcal and zoster vaccines

## Racial Disparities in California Vaccination Rates of Pneumococcal and Herpes Zoster Vaccines

Exhibit 3

	White	Black	Hispanic	Other	Healthy 2020 Goals
Pneumococcal, 18-64 years at increased risk	37.9%	35.6%	23.9%	47.2%	60%
Pneumococcal, ≥65 years	78.4%	67.8%	54.6%	73.2%	90%
Zoster, ≥60 years	46.8%	NR	13.2%	34.4%	30%

Source: 2016 BRFSS data

as well, as shown in Exhibit 3.<sup>5</sup> Studies have consistently shown that Latinos have worse access to and utilization of health care than other races.<sup>10</sup> While the Affordable Care Act expanded Medicaid to increase the access of low-income, nonelderly adults to primary care services, Hispanics received fewer benefits than other racial/ethnic groups.<sup>11</sup>

### Barriers and Challenges to Adult Vaccination

Under the Affordable Care Act, all new health plans are required to cover vaccines recommended by the Advisory Committee on Immunization Practices (ACIP) without charging a deductible or copayment. However, insurance coverage of individual vaccines and patient cost-sharing is inconsistent across commercial and Medicaid payers.<sup>12</sup> Some, but not all, group plans (commercial or self-insured) outside the individual marketplace have a similar benefit structure. Other group plans may only allow the flu vaccine to be administered at the pharmacy under pharmacy benefit. Still other plans may provide reimbursement after an individual pays for the vaccine up front and submits a claim, but payment may be delayed for weeks or months, and there is a risk that the claim will be denied.

For uninsured adults 19 years of age and older,<sup>13, 14</sup> the states of California<sup>15</sup> and New York<sup>16</sup> are piloting limited and variable Vaccination Assistance Act Section 317 funding of Vaccines for Adults (VFA) programs. However, uninsured people may be unaware of these programs.<sup>17</sup>

Another barrier to vaccination is the difficulty in finding out where vaccines are available. Many solo or small group physician practices do not maintain an inventory of the full range of ACIP-recommended vaccines due to the cost of purchasing, storage requirements, and concerns over waste due to expiration.<sup>18</sup> It may take patients many weeks and phone calls to understand the process and switch to a new provider who administers the vaccine, thus increasing the likelihood of unnecessary delays or miscommunications. Worse, the difficulty in finding vaccines could lead to adults remaining unvaccinated, leaving them vulnerable to preventable communicable diseases, unnecessary hospitalizations, and even death.

Lack of knowledge about vaccines and a lack of adult vaccine prioritization are also challenges that hinder vaccination. Individuals may be unaware of the recommendations for and benefits of vaccination, and thus do not prioritize vaccines or initiate discussion about them when receiving health care services.<sup>19</sup> Adult vaccines are also not often prioritized by the health care system; for pediatric patients, the importance of preventive care and vaccines has been well established,<sup>20</sup> and the Vaccines for Children (VFC) program assures that even uninsured children receive the recommended vaccines. However, unlike the VFC program, permanent financing for adult vaccines is nonexistent for adults ages 18-64 who are noninstitutionalized or ineligible for government programs such as the Indian Health Service, Defense Department, or Veterans Health Administration.<sup>21</sup>

*“Lack of knowledge about vaccines and a lack of adult vaccine prioritization are also challenges that hinder vaccination.”*

*“Cultural differences can result in different attitudes toward vaccines, and therefore disparities in vaccine administration rates.”*

Another barrier is patient concern over vaccine safety. Singleton et al. found that the rate of influenza and pneumococcal polysaccharide vaccine coverage for blacks and Hispanics was at least 15 percent lower than it was for whites, with one of the top reasons for not receiving the influenza vaccine being concern about side effects.<sup>22</sup>

Cultural differences can result in different attitudes toward vaccines, and therefore disparities in vaccine administration rates. In one study, Haitian immigrants were found to be less knowledgeable about the HPV vaccine than African-Americans and felt uncomfortable with being vaccinated against HPV.<sup>23</sup>

Fragmented and inconsistent access to health care has also been implicated as one of the barriers to adult vaccination.<sup>18</sup> Patients from minority groups are disproportionately affected by poor health care access and have fewer opportunities to discuss vaccine safety and effectiveness with their provider.

The 2015 legislation SB277<sup>24</sup> sought to combat vaccine resistance by eliminating the “personal belief” exemptions for children in schools. While this law has made a significant improvement in California pediatric immunization rates,<sup>25</sup> gaps still remain in adult access to vaccines, and vaccine-preventable adult diseases and deaths are a common occurrence.<sup>26, 27</sup>

### **Recommendations**

To help address the gap in adult access to vaccines, in 2016 the Department of Health Care Services, which administers California’s Medi-Cal (Medicaid) program, implemented the All Plan Letter (APL) 16-009, requiring coverage of recommended adult vaccines as a pharmacy benefit.<sup>28</sup> Adult Medi-Cal patients can now receive the vaccines that are recommended for their age and underlying health conditions not only at a provider’s office, but also at their local community

pharmacy. Pharmacists can, in real time, check insurance coverage for vaccines, determine the risks and benefits, and administer the vaccines.

Providing access to vaccines at retail pharmacies for adults with either public or commercial insurance plans would make access easier for all patients, particularly those who have socioeconomic and transportation challenges and are at the highest risk for vaccine-preventable disease. Because most pharmacies do not require appointments and some are open 24 hours a day, working adults would especially benefit. In addition, while patients may see their primary care providers only once or twice a year, many often visit their community pharmacy at least once a month.<sup>29</sup>

Pharmacists who give immunizations complete an accredited training program on vaccine administration, recommendations, and contraindications.<sup>30</sup> Assessing drug interactions and contraindications is a routine component of the pharmacist’s job.<sup>31</sup> Pharmacies are also mandated to report all administered vaccines to the California Immunization Registry (CAIR) and to a patient’s primary care provider, which provides continuity of care and prevents vaccine duplications and errors due to poor recording.<sup>30</sup> Technology has been recently developed in Washington and Arizona that allows the immunization registry decision support systems to inform the pharmacist of the vaccines needed by the patient; the process has been shown to be effective.<sup>29, 32</sup>

In order to improve adult access to lifesaving immunizations and streamline the process of adults receiving vaccinations, the authors recommend that the California State Legislature require the Department of Managed Health Care and the Department of Insurance to follow the lead of Medi-Cal and expand the coverage of all adult vaccines to include the pharmacy benefit for public and commercial insurance plans.

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