



State of California—Health and Human Services Agency
Department of Health Care Services



MOBILE VISION PILOT EVALUATION

July 5, 2018

Background

Senate Bill 870 (Committee on Budget and Fiscal Review, Chapter 40, Statutes of 2014) directed the Department of Health Care Services (DHCS) to establish a three-year pilot program (Mobile Vision Pilot program) in Los Angeles County to expand vision services at school sites using mobile vision service providers. The purpose of the Mobile Vision Pilot program is to evaluate the value of offering mobile vision services directly at school sites to increase access and improve utilization of Medi-Cal covered vision services for children.

The Mobile Vision Pilot program began in Los Angeles County on January 1, 2015. Two Medi-Cal managed care health plans (MCPs) operating in Los Angeles County, LA Care and Health Net, partnered together to submit a joint concept paper to DHCS for approval. DHCS held regularly scheduled conference calls with the MCPs to oversee the implementation process and provide technical assistance. School districts had the option to participate in the pilot program and student participation was also voluntary. Parents or legal guardians of the student must give consent before the student receives services through the mobile vision provider. Medi-Cal covered children maintained the option to obtain vision services, including the provision of frames and lenses from other providers in their MCP network.

Under the State Plan, MCP members can access these services once every 24 months. Mobile Vision Pilot program providers are required to coordinate with the Prison Industry Authority (PIA) for the fabrication of eyeglass lenses. Lenses requested by Mobile Vision Pilot program provider(s) must be within PIA parameter limits and are subject to utilization controls set by DHCS' Vision Services Branch. Mobile Vision Pilot program providers must coordinate with school sites to ensure that completed eyeglasses are delivered to the appropriate MCP members no later than two weeks following the providers' receipt of completed eyeglass lenses from PIA.

Demonstration Initiative Goals / Objectives

The purpose of the Mobile Vision Pilot program is to evaluate the value of offering mobile vision services to Medi-Cal managed care members directly at school sites. The vision care services delivery model developed pursuant to SB 870 was designed to streamline service accessibility and increase utilization of Medi-Cal covered vision services to MCP members who attend school in Los Angeles County.

Evaluation Design

To evaluate the effectiveness of the pilot and its impact on increasing utilization of vision services among Medi-Cal MCP children attending school in Los Angeles County, the Department created three analytic datasets combining Medi-Cal claims, encounter, and eligibility data for three 24-month study periods (i.e., CYs 2011-12, 2013-14, 2015-16). The analytic datasets included one record for each Medi-Cal child, which identified demographic, health plan participation, and vision services utilization that occurred over

the 24-month study period. Using the analytic datasets, the Department calculated Medi-Cal vision services utilization rates per 100 unduplicated children for three 24-month study periods. A vision service was defined as a service with any one of the following Healthcare Common Procedure Coding System (HCPCS) codes:

92002	Intermediate exam, new patient
92004	Comprehensive exam, new patient
92012	Intermediate exam, established patient
92014	Comprehensive exam, established patient
92015	Determination of refractive state
92340	Dispensing of Eyeglasses, Single Vision
92341	Dispensing of Eyeglasses, Bifocals
92342	Dispensing of Eyeglasses, Multifocals
92352	Dispensing of Eyeglasses, for aphakic, Single Vision
92353	Dispensing of Eyeglasses, for aphakic, Multifocals
V2020	Provision of Eyeglass Frames
V2025	Provision of Deluxe Frames

The first two 24-month study periods (CYs 2011-12 and CYs 2013-14) serve as comparison periods to determine vision services utilization trends among school age children both statewide and in Los Angeles County prior to the pilot. The CYs 2015-16 study period does not contain the utilization of the mobile vision providers. However, the mobile vision providers did provide the roster of students that received a mobile vision service and that utilization was added to the CY 2015-16 utilization data to determine what impact the provision of mobile vision services through the pilot had on overall vision services utilization. This could also be compared to the prior two study periods to determine the impact of the pilot on the baseline trend of vision service utilization.

Furthermore, since the mobile vision services pilot focused on specific schools and zip codes within LA County, the Department also evaluated the vision services utilization rates within these same LA county zip codes for the three study periods. The Department evaluated vision services rates for zip codes affiliated with the roughly 500 schools focused on in the pilot study. To identify applicable zip codes, the Department reviewed the roster of children that received vision services from a mobile vision service provider as provided by the mobile vision providers, which included fields denoting: date of exam, school site, city, zip code, first name, last name, date-of-birth, telephone number, parent first name, and parent last name. The mobile vision service providers identified 29,346 total children served during the pilot and of that amount 20,685 were unique children, meaning some children were served more than once during the pilot period.

Finally, matching the mobile vision service provider data with the Medi-Cal eligibility dataset, the Department was able to determine with reasonable confidence which Medi-Cal children were served by the pilot and were enrolled in the Medi-Cal program during the pre-pilot study period in order to perform a cohort analysis to determine their vision

services utilization prior to the pilot. The Department was able to identify 16,160 students to be used in the cohort analysis.

Findings

What were the statewide, and LA County specific vision services utilization rates for Medi-Cal eligible school age children for 2011-12, 2013-14, and 2015-16 calendar years?

The statewide vision-services utilization rate for children varied by county. During the 24-month period encompassing calendar years 2011 and 2012, the vision services utilization rate per 100 unduplicated children between the ages of 5 and 18 was 23.29. The following periods (i.e., 2013-2014 and 2015-2016) showed declining vision services utilization rates, dropping from 23.29 to 19.22 over the three study periods (Table 1). This negative trend in school aged child vision services utilization was also seen when focusing exclusively on LA County, with the rate dropping from 27.40 per 100 school-aged children to 20.48 per 100 children (Table 1). During this same time frame, school aged children eligible for Medi-Cal increased significantly, from 3.1 million to 4.4 million statewide, or about 42 percent.

Table 1: Trend in Medi-Cal Vision Services utilization Rate per 100 Unduplicated School Age Children; Statewide and LA County

Study Period	Statewide		LA County	
	School Aged Children	Rate / 100 Unduplicated School Aged Children	School Aged Children	Vision Services utilization Rate / 100 Unduplicated School Aged Children
2011-12 Study Period	3,141,367	23.29	992,961	27.40
2013-14 Study Period	4,131,635	23.05	1,208,318	24.23
2015-16 Study Period	4,479,170	19.22	1,271,322	20.48

“School age” children are between the ages of 5 and 18. Age was calculated as of September 1 of 2011, 2013, and 2015 for each corresponding study period. This data does not include the vision services utilization provided by the mobile vision providers.

What was the LA zip code specific vision services utilization rate for school age children eligible for Medi-Cal for 2011-12, 2013-14, and 2015-16 calendar years?

Using the zip codes identified from the mobile vision pilot program roster, the Department calculated Medi-Cal vision services utilization rates per 100 unduplicated school aged children over the three 24-month study periods. Consistent with statewide and LA County rates, the utilization rate declined at similar levels over the three study periods, while Medi-Cal child enrollment increased (Table 2). This shows that the zip codes served by the mobile vision pilot were not dissimilar from the rest of LA County or the state as a whole as it relates to vision services utilization.

Table 2: Trend in Vision Services Utilization Rates for Children Eligible for Medi-Cal Residing in LA County Zip Codes Targeted by the Mobile Vision Pilot Program

Study Period	School Aged Children Eligible for Medi-Cal Residing In LA County Zip Codes Targeted by the Mobile Vision Pilot Program	Vision Services utilization Rate / 100 Unduplicated Children
2011-12 Study Period	737,728	27.38
2013-14 Study Period	854,804	24.01
2015-16 Study Period	898,083	20.20

This data does not include the vision services utilization provided by the mobile vision providers.

What was the school aged child vision-services utilization rate with and without the mobile vision pilot program within the LA county zip codes affiliated with the pilot?

Figure 1 displays the trend in Medi-Cal’s vision services utilization rate per 100 unduplicated school aged children for the zip codes covered by the pilot. When the mobile vision services provider data is included in the trend line, it shows the pilot influenced the negative trend in vision services utilization, bending the curve up slightly. The vision-services utilization rate would have been 20.20 per 100 unduplicated children without the pilot; however, with the pilot the rate per 100 unduplicated children rose to 21.39, or roughly 5.9 percent greater. This indicates that there were modest improvements to the utilization of vision services among the students served by the pilot.

Figure 1: Trend in Vision Services utilization; LA County Zip Codes

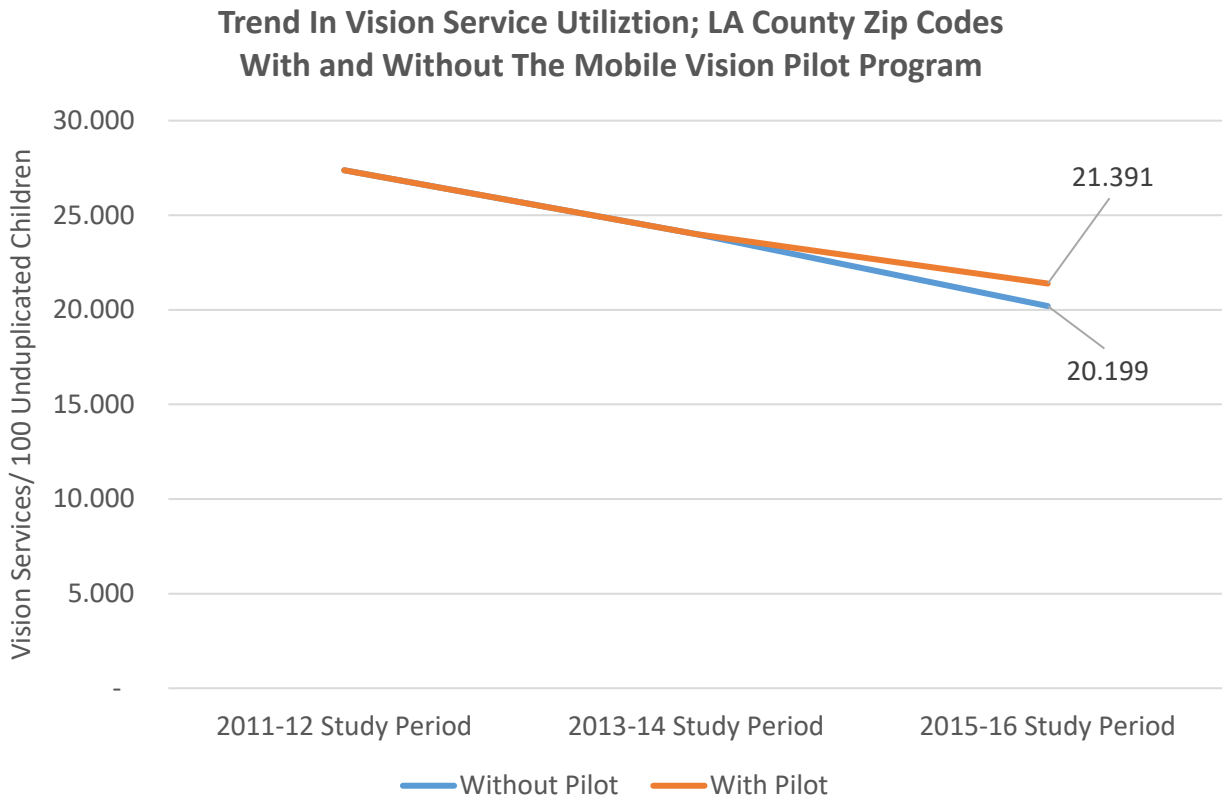


Table 3: Trend in Medi-Cal Vision Services Utilization; With and Without Mobile Vision Pilot Program

Study Period	LA County Unduplicated School Aged Children Eligible for Medi-Cal	LA County Zip Codes Included in the Pilot Vision Services utilization Rate Per 100 Unduplicated Children	
		Services utilization Without Pilot	Vision Services utilization with Pilot
2011-12 Study Period	737,728	27.378	27.378
2013-14 Study Period	854,804	24.010	24.010
2015-16 Study Period	898,083	20.199	21.391

This data does include the vision services utilization provided by the mobile vision providers.

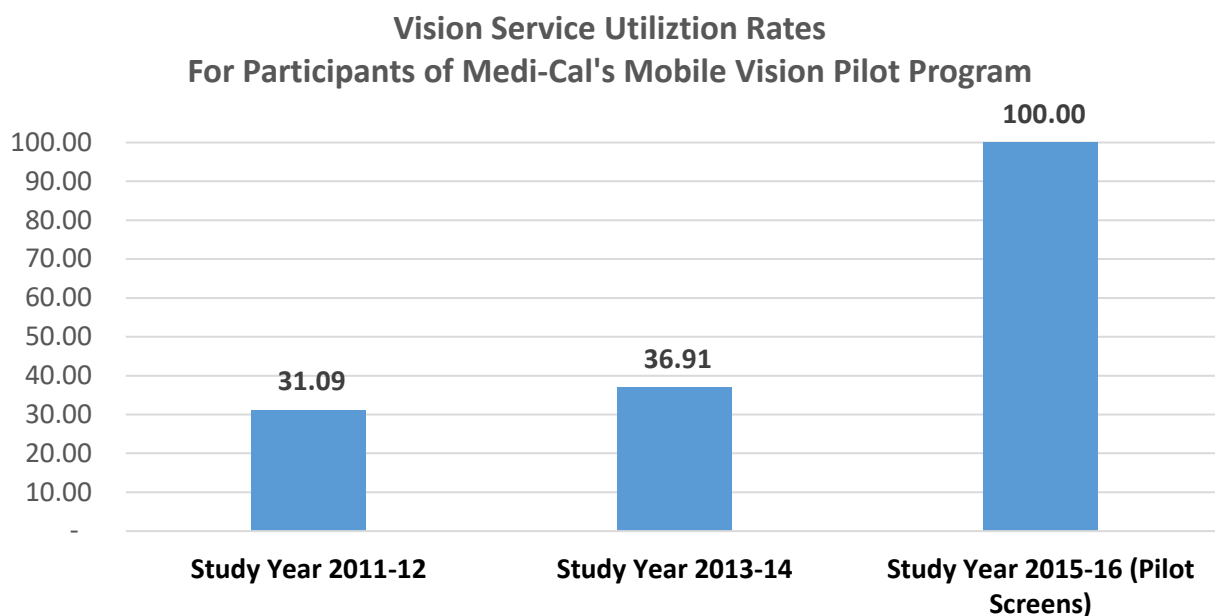
What was the rate of vision-services utilization for the cohort of children eligible for Medi-Cal who received a vision service through the mobile vision pilot program during two prior 24-month periods (i.e., 2013-14 and 2011-12)?

To evaluate the mobile vision pilot’s cohort of children relative to Medi-Cal, the Department had to match the mobile vision pilot roster of children who received vision services to Medi-Cal’s datasets. The mobile vision pilot program roster was limited to vision services occurring between January 1, 2015 and December 31, 2016. This dataset was then matched to Medi-Cal’s eligibility dataset for Medi-Cal calendar year months-of-eligibility January 2015 through December 2016. Based on this match, 16,160 unduplicated children were identified as Medi-Cal eligible for at least one-month during one of the 24-month pre-pilot periods (Table 9).

These children, hereafter referred to as the *study cohort*, were evaluated over the three 24-month study periods. Three 24-month study periods were selected because pursuant to Medi-Cal benefits, a child may receive a vision services utilization once during a 24-month period.

To calculate vision-services utilization rates for the study cohort, the Department identified all children who were served by the pilot in 2015-16 and Medi-Cal eligible (i.e., 16,160). The Department then matched this list of children to the two prior study periods (i.e., 2013-14 and 2011-12). In the 2011-12 study period, 31% received a vision service, equating to a rate of 31.09 per 100 unduplicated children (Figure 2). In study period 2013-14, roughly, 37% of these children received a vision service, equating to a rate of 36.91 per 100 unduplicated children. This indicates that roughly two-thirds of the children served by the pilot in the study cohort had not received a vision service in the study period prior to the pilot.

Figure 2: Trend in Vision Services utilization Rates for Participants of Medi-Cal's Mobile Vision Pilot Program



Conclusions

The historical trend line prior to the pilot showed declining utilization in vision services among school-aged children in Medi-Cal statewide, in Los Angeles County, and the zip codes in Los Angeles County served by the pilot. While the pilot did not completely reverse this trend in Los Angeles County or the pilot zip codes, analysis does show that the rate of decline was marginally slowed which could be attributed to the mobile vision pilot project. It should be noted that while the pilot project did not show a considerable change in the overall utilization of vision services, the pilot did serve thousands of students and based on the cohort analysis, it appears roughly two-thirds of those kids served by the pilot had not received a vision service in the study periods prior to pilot, which would indicate increased access to services that were not otherwise being utilized.