

Insurance Patterns of Medicaid Beneficiaries With Sickle Cell Disease in California and Georgia, 2014 to 2016

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BACKGROUND

- Sickle cell disease (SCD) is an inherited hemoglobinopathy characterized by sickle hemoglobin polymerization and erythrocyte sickling.^{1,2}
- Persons with SCD experience lifelong complications stemming from chronic hemolytic anemia and repeated episodes of acute pain that lead to reduced quality of life, increased disability, and early mortality.^{1,2}
- Continued care is essential for improving outcomes in persons living with SCD.³
- While a substantial proportion of those living with SCD are insured through Medicaid, the consistency of coverage has not been examined.

OBJECTIVE

- To assess the longitudinal patterns of Medicaid benefits for persons with SCD who lived in California or Georgia from 2014 to 2016

METHODS

Study Design

- The California and Georgia Sickle Cell Data Collection (SCDC) programs collect clinical, newborn screening, and administrative data to inform on long-term diagnosis, treatment, and healthcare access for persons with SCD.
- A validated case definition for SCD was applied to deduplicated, linked data.
- Identified persons had either a physician-confirmed or newborn screening-confirmed sickling hemoglobinopathy or ≥3 unique SCD-coded claims within 5 years in the administrative data from 2004 to 2016.
 - SCD-coded claims were based on the following SCD International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) codes: 282.41, 282.42, 282.6, 282.60-64, 282.68, and 282.69.
- The current analysis focused on persons identified from 2014 to 2016.

RESULTS

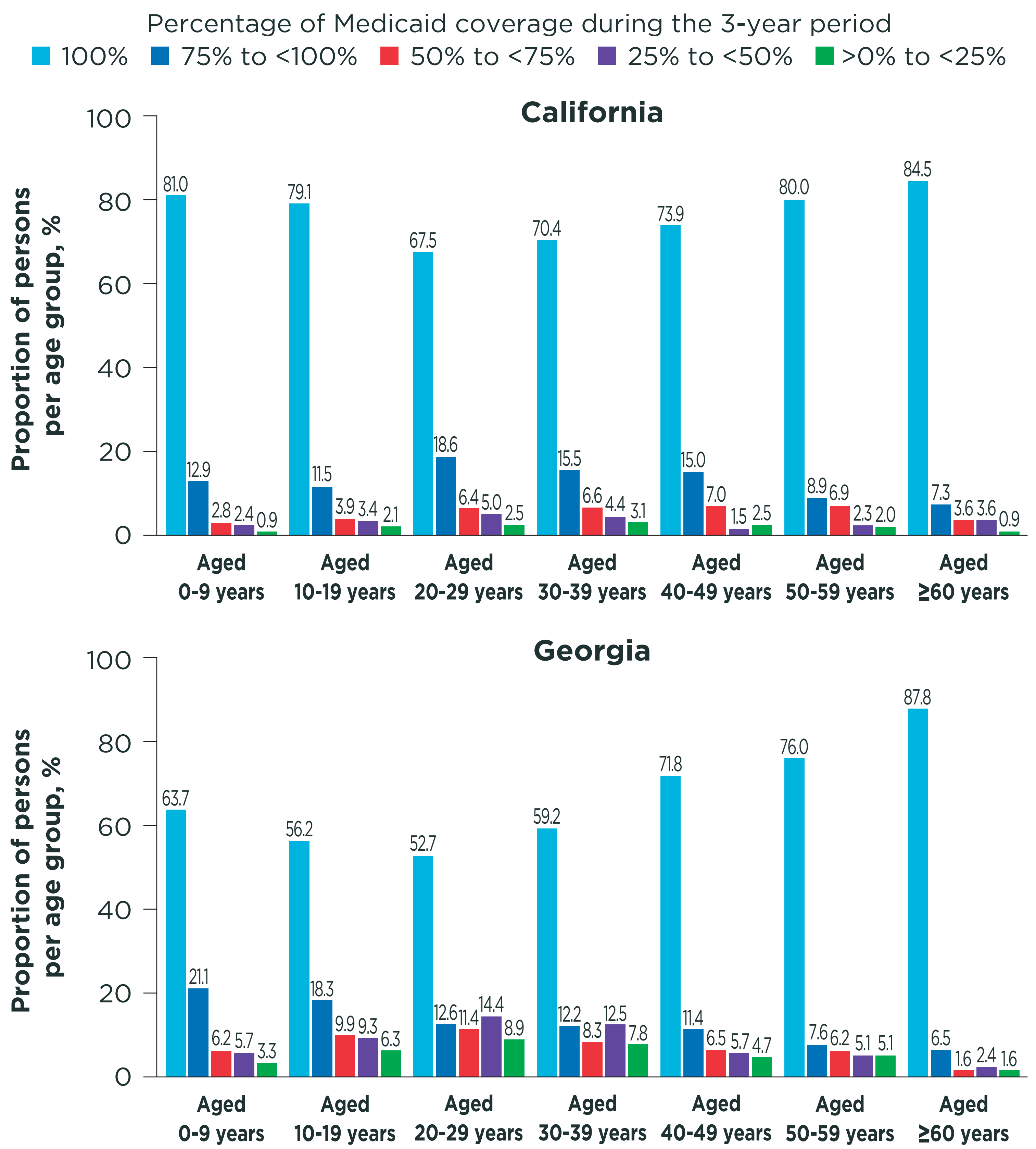
- The California SCDC program identified 5124 persons with SCD living in the state from 2014 to 2016, and the Georgia SCDC program identified 9382 persons.
- Of these persons with SCD, 3555 (69.4%) from California (64.9% were ≥20 years of age, 57% were male) and 6179 (65.9%) from Georgia (43.2% ≥20 years of age, 43% male) were Medicaid beneficiaries at any point during the study (**Table 1**).

Table 1. Characteristics of Persons With SCD Enrolled in California and Georgia Medicaid

	California n=3555	Georgia n=6179
Age at index year, mean (SD), years	26.1 (17.6)	19.6 (16.3)
0-9, n (%)	536 (15.1)	2120 (34.3)
10-19, n (%)	713 (20.1)	1389 (22.5)
20-29, n (%)	873 (24.6)	1140 (18.4)
30-39, n (%)	619 (17.4)	746 (12.1)
40-49, n (%)	399 (11.2)	386 (6.2)
50-59, n (%)	305 (8.6)	275 (4.5)
≥60, n (%)	110 (3.1)	123 (2.0)
Male, n (%)	2015 (56.7)	2649 (42.9)

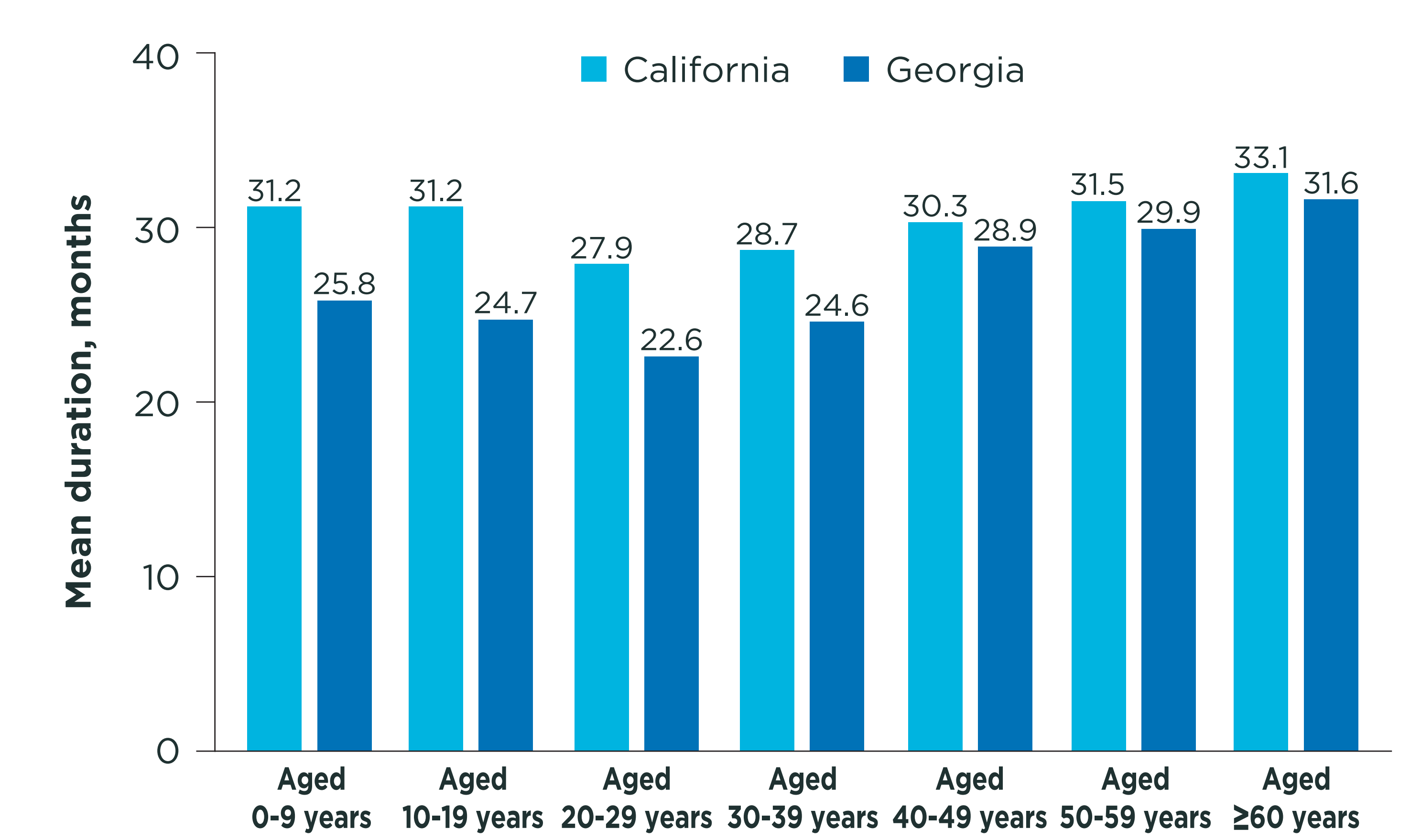
- Among persons who received Medicaid benefits in California and Georgia, 3352 (94.3%) and 5282 (85.5%) were beneficiaries for ≥50% of the follow-up period, respectively, and 2655 (74.7%) and 3768 (61.0%) were beneficiaries for the entire follow-up period, respectively.
 - Lower proportions of persons aged 20 to 29 years had continuous Medicaid coverage in California and Georgia than those aged 10 to 19 years (**Figure 1**).

Figure 1. Breakdown of Medicaid Coverage by Age Group for Persons With SCD in California and Georgia From 2014 to 2016



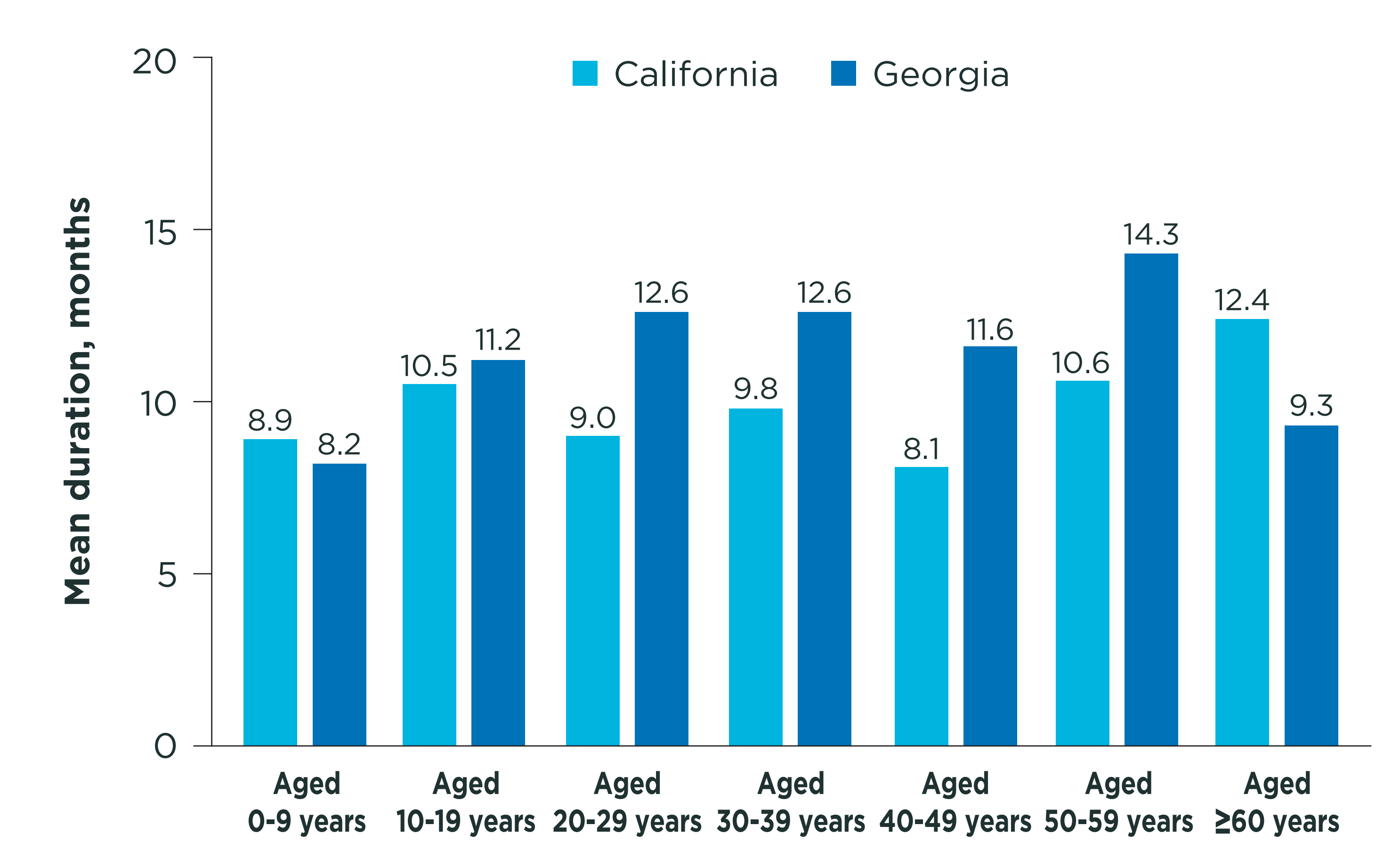
- For those who were Medicaid beneficiaries at any time during the study period, the mean length of continuous Medicaid coverage ranged from 27.9 to 33.1 months across all age groups in California and 22.6 to 31.6 months in Georgia (**Figure 2**).
 - The mean duration of continuous coverage was shortest for persons aged 20 to 29 years in both states.

Figure 2. Duration of Continuous Coverage by Age Group for Persons Enrolled in California and Georgia Medicaid From 2014 to 2016



- Among those with gaps in their Medicaid coverage, the mean length of Medicaid coverage gaps was 9.4 months in California and 11.0 months in Georgia.
 - The longest gaps occurred with persons aged 60 years and older in California (12.4 months) and those aged 50 to 59 years in Georgia (14.3 months) (**Figure 3**).

Figure 3. Length of Medicaid Coverage Gaps by Age Group for Persons Enrolled in California and Georgia Medicaid From 2014 to 2016



CONCLUSIONS

- During the 3-year study period, approximately two-thirds of persons with SCD in California and Georgia had some Medicaid coverage.
- Almost 75% of persons with SCD in California and 61% in Georgia were covered by Medicaid across all 3 years.
- While persons aged 20 to 29 years had the lowest percentage of continuous Medicaid coverage and shortest duration of continuous coverage, those aged 50 to 59 years had the longest coverage gaps.
- Long-term insurance coverage for persons living with SCD may be an important consideration for Medicaid policy makers in both states to address the cumulative healthcare needs of their constituents living with this lifelong disorder.

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