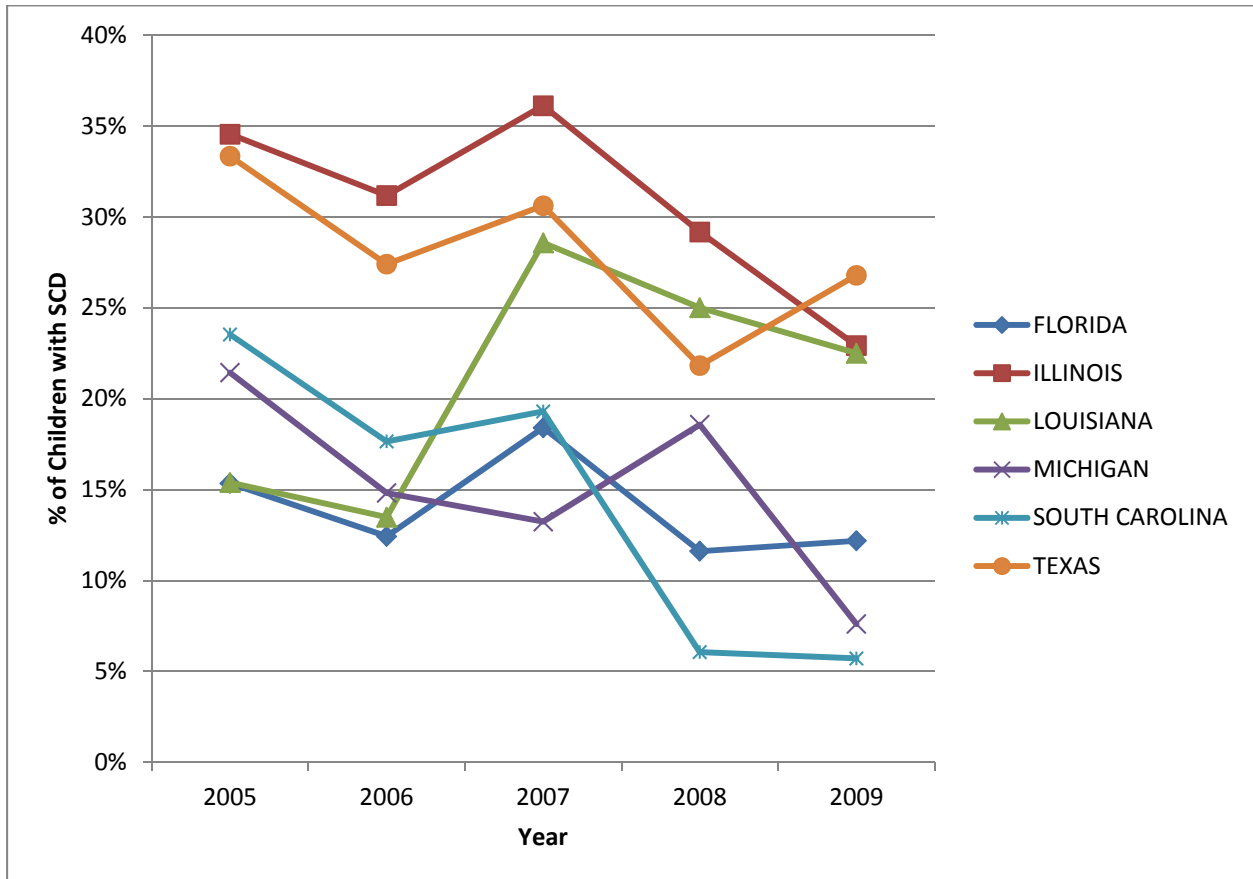


Q-METRIC Sickle Cell Disease Measure 3: Appropriate Antibiotic Prophylaxis for Children with Sickle Cell Disease

Graphics for Section VI. Scientific Soundness

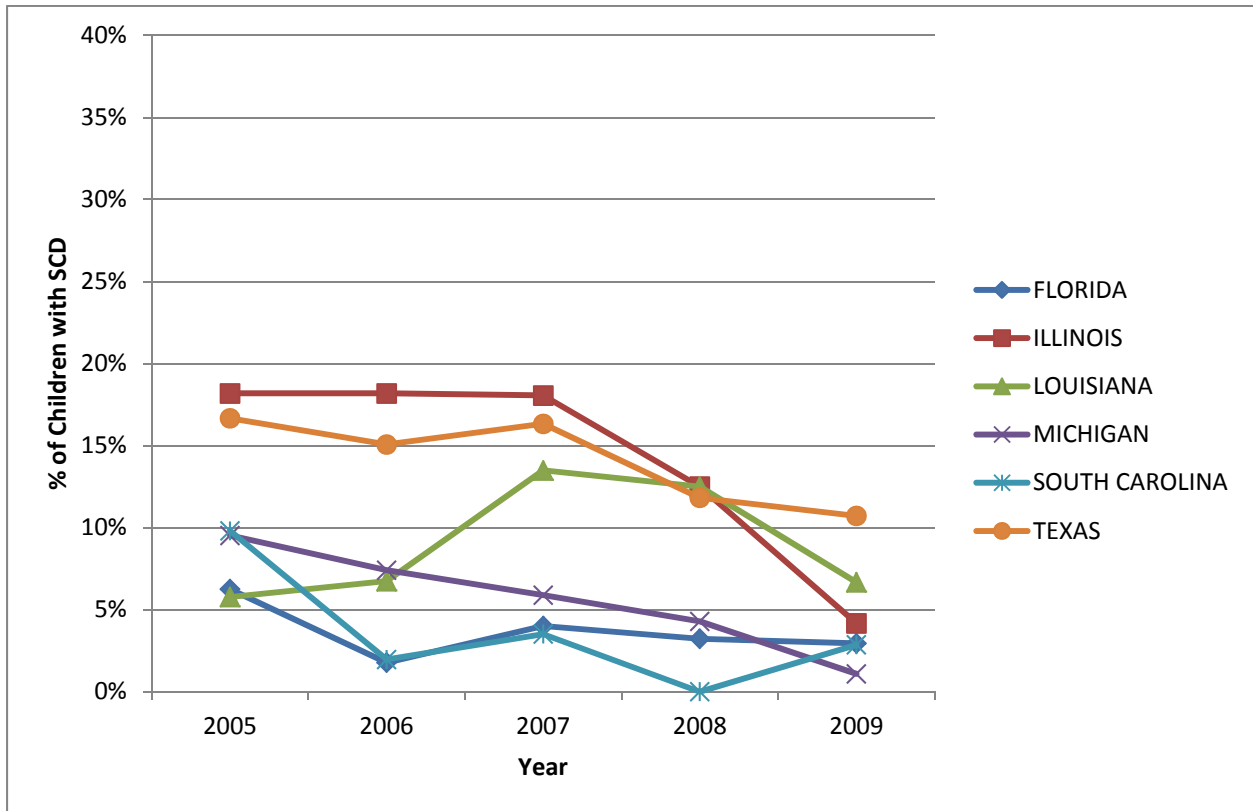
VI.A Reliability

Figure 1: Provision of Antibiotic Prescriptions, 300-Day Rate, for Children with Sickle Cell Disease



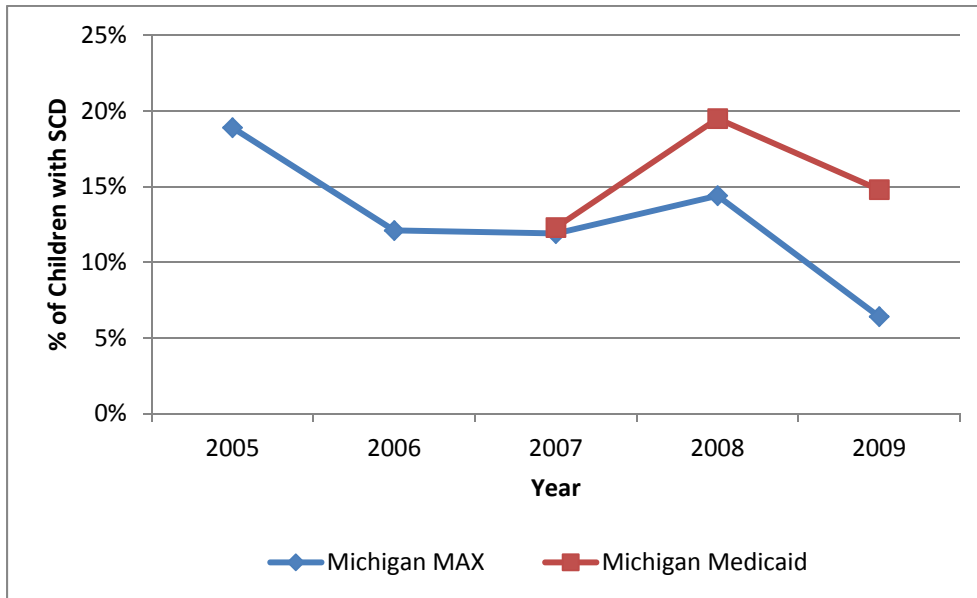
Note: The first rate for Measure 3, the percentage of eligible children who received antibiotics for at least 300 days, was tested in six states having moderate to high prevalence of SCD (Florida, Illinois, Louisiana, Michigan, South Carolina, and Texas). The measure was tested using a sample drawn from 5 consecutive years of Medicaid Analytic eXtract (MAX) administrative claims data provided by the Centers for Medicare & Medicaid Services (CMS).

Figure 2: Provision of Antibiotic Prescriptions, 350-Day Rate, for Children with Sickle Cell Disease



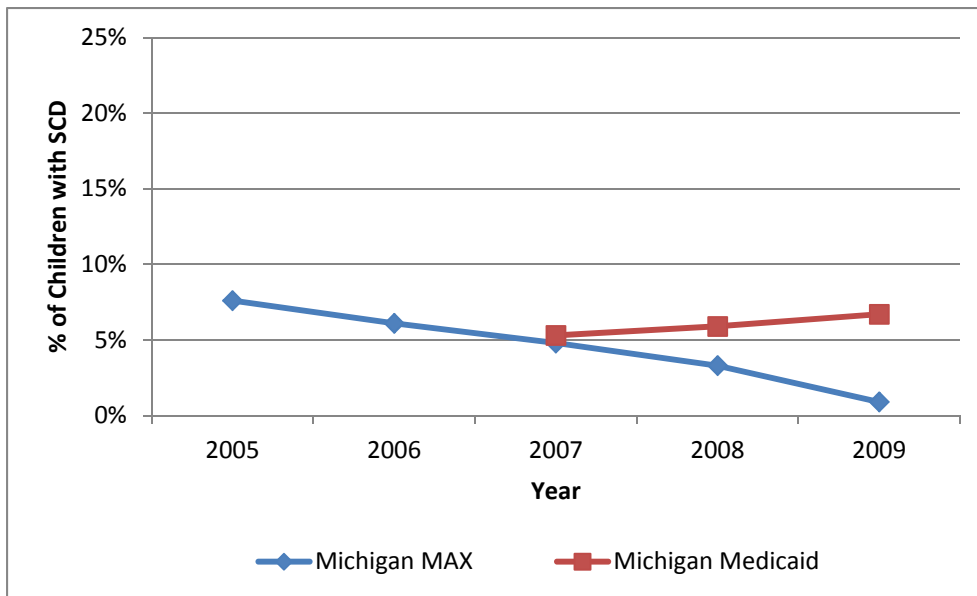
Note: The second rate for Measure 3, the percentage of eligible children who received antibiotics for at least 350 days, was tested in six states having moderate to high prevalence of SCD (Florida, Illinois, Louisiana, Michigan, South Carolina, and Texas). The measure was tested using a sample drawn from 5 consecutive years of Medicaid Analytic eXtract (MAX) administrative claims data provided by the Centers for Medicare & Medicaid Services (CMS).

Figure 3: Michigan Medicaid Claims Results Compared with MAX data for 300-Day Rate



Note: The first rate for Measure 3, the percentage of eligible children who received antibiotics for at least 300 days, calculated using 5 consecutive years of claims data from the Michigan Department of Community Health, Community Health Automated Medicaid Processing System (CHAMPS) compared with a corresponding sample drawn from Medicaid Analytic eXtract (MAX) administrative claims data provided by the Centers for Medicare & Medicaid Services (CMS).

Figure 4: Michigan Medicaid Claims Results Compared with MAX data for 350-Day Rate



Note: The second rate for Measure 3, the percentage of eligible children who received antibiotics for at least 350 days, calculated using 5 consecutive years of claims data from the Michigan Department of Community Health, Community Health Automated Medicaid Processing System (CHAMPS) compared with a corresponding sample drawn from Medicaid Analytic eXtract (MAX) administrative claims data provided by the Centers for Medicare & Medicaid Services (CMS).

Table 5: Sickle Cell Disease Measure 3 Reliability in Six States (Percentage of Children in State with SCD Receiving Antibiotics between 3 Months and 5 Years of Age for 2 rates: 300 days and 350 days)

State	Rate Components	2005		2006		2007		2008		2009	
		300 days	350 days	300 days	350 days	300 days	350 days	300 days	350 days	300 days	350 days
Florida	Numerator	28	11	21	3	23	5	19	5	30	7
	Denominator	212		207		175		196		278	
	Percentage	13.2%	5.2%	10.1%	1.5%	13.1%	2.9%	9.7%	2.6%	10.8%	2.5%
Illinois	Numerator	19	10	24	14	26	13	22	9	22	4
	Denominator	59		82		79		79		101	
	Percentage	32.2%	17.0%	29.3%	17.1%	32.9%	16.5%	27.9%	11.4%	21.8%	4.0%
Louisiana	Numerator	17	6	12	6	36	17	33	16	27	8
	Denominator	118		98		130		138		121	
	Percentage	14.4%	5.1%	12.2%	6.1%	27.7%	13.1%	23.9%	11.6%	22.3%	6.6%
Michigan	Numerator	10	4	8	4	10	4	13	3	7	1
	Denominator	53		66		84		90		110	
	Percentage	18.9%	7.6%	12.1%	6.1%	11.9%	4.8%	14.4%	3.3%	6.4%	0.9%
South Carolina	Numerator	12	5	10	1	12	2	4	0	2	1
	Denominator	59		90		82		54		44	
	Percentage	20.3%	8.5%	11.1%	1.1%	14.6%	2.4%	7.4%	0.0%	4.6%	2.3%
Texas	Numerator	28	14	20	11	33	18	27	14	34	15
	Denominator	99		100		134		154		156	
	Percentage	28.3%	14.1%	20.0%	11.0%	24.6%	13.4%	17.5%	9.1%	21.8%	9.6%

Note: Medicaid Analytic eXtract (MAX) data, provided by the Centers for Medicare & Medicaid Services (CMS).