

Forecasting Imaging Use Under Health-care Reform

Introduction: A key element of the Patient Protection and Affordable Care Act (PPACA) is extending coverage to uninsured individuals, which raises a number of questions in the imaging marketplace. What is the predicted impact on utilization in 2015, when an estimated 31 million formerly uninsured people will join the ranks of the insured? With continued downward pressure on reimbursement for the technical component of outpatient imaging, will there be enough capacity and resources to accommodate the new patients? This edition of Imaging Market File provides an estimated state-by-state impact of health reform on imaging use, which adds up to 13.6% growth nationally (Table 1).

Methodology: To calculate the impact of reform on imaging utilization, current utilization rates were normalized by removing the Medicare population (over age 65) to arrive at a utilization rate that would represent the population under 65 years old. Those rates were then corrected for uncompensated care for the uninsured already being delivered in emergency departments and elsewhere (estimated as 25% of their care).

To counterbalance utilization management—which has already had a chilling effect on imaging growth (see the February/March Imaging Market File) and is likely to increase—the impact of the aging of the population was not factored into

the equation, so these projections could be conservative. Thomson Reuters and National Imaging Network have provided proprietary data on 2010 procedure counts, and proprietary utilization forecasts have been made by Regents Health Resources, Inc.

Five greatest-growth states: The states with the greatest predicted postreform growth rates are Texas, New Mexico, Georgia, Nevada, and California (Table 2). Tight certificate-of-need regulations in Georgia and stringent construction requirements from the Office of Statewide Health Planning and Development in California raise questions about whether those states have the capacity to address the needs of the new patients—and if not, whether capacity can be increased quickly enough to absorb the predicted volumes.

Five lowest-growth states: As might be expected, in states (such as Vermont and Massachusetts) that have focused on providing unique or specialized programs to minimize the number of uninsured residents, the overall impact of health-care reform on utilization is predicted to be significantly lower than the national average of 13.6% growth (Table 3). While the number of uninsured people is a factor in moderating projected imaging growth, clinical decision support for medical imaging might also be a factor. Minnesota, which has implemented clinical decision support for outpatient imaging statewide, is among the low-growth states.

Table 1. Estimated State-by-state Impact on Imaging Use¹

State	2010 procedures	Postreform increase
TX	32,392,152	22.7%
NM	2,599,487	18.8%
GA	13,842,217	17.7%
NV	3,930,924	17.6%
CA	51,760,382	17.3%
FL	35,813,118	16.9%
MS	4,140,106	16.8%
AR	4,155,773	16.5%
AK	723,417	16.2%
SC	6,739,092	15.5%
AZ	10,377,474	15.4%
LA	6,910,334	15%
NC	13,697,438	14.8%
ID	1,850,244	14.7%
OK	5,257,198	14.2%
MT	1,357,627	13.9%
WY	659,593	13.6%
OR	4,783,249	13.6%
AL	7,848,066	13.4%
KY	6,338,236	12.5%
NY	35,341,082	12.4%
TN	9,567,503	12.3%
NJ	13,591,630	12.2%
IL	17,368,063	11.9%
WA	9,015,647	11.3%
CO	6,545,197	11.3%
IN	8,819,053	11.2%
WV	2,804,866	11.1%
MO	8,442,612	11.1%
VA	10,674,958	11%
UT	3,057,941	11%
MI	17,034,329	10.8%
OH	16,874,490	10.7%
MD	8,084,594	10.6%
DC	602,154	10.4%
SD	1,194,644	10.2%
KS	4,207,828	10.1%
DE	1,440,843	9.3%
RI	1,653,766	9.3%
NE	2,572,944	9.2%
CT	5,600,490	8.7%
IA	4,296,126	8.7%
ND	1,039,645	8.6%
PA	19,531,562	8.3%
NH	1,922,661	7.9%
ME	1,942,471	7.7%
VT	903,839	7.4%
WI	7,991,789	7.3%
MN	6,752,406	6.9%
HI	1,634,074	6.4%
MA	10,139,703	3.7%
Total	455,825,035	13.6%

Table 2. States With the Highest Projected Imaging Growth

STATE	2010 PROCEDURES	UNINSURED POPULATION	POSTREFORM VOLUME	POSTREFORM INCREASE
TX	32,392,152	6,234,900	39,748,177	22.7%
NM	2,599,487	424,400	3,089,002	18.8%
GA	13,842,217	1,942,600	16,287,885	17.7%
NV	3,930,924	552,400	4,622,678	17.6%
CA	51,760,382	7,162,700	60,732,420	17.3%

Table 3. States With the Lowest Projected Imaging Growth

STATE	2010 PROCEDURES	UNINSURED POPULATION	POSTREFORM VOLUME	POSTREFORM INCREASE
VT	903,839	58,700	970,408	7.4%
WI	7,991,789	511,500	8,574,961	7.3%
MN	6,752,406	463,100	7,219,577	6.9%
HI	1,634,074	94,500	1,739,015	6.4%
MA	10,139,703	327,900	10,517,759	3.7%

Growth by modality: Texas and Massachusetts, the states expected to experience the largest and smallest postreform bumps in imaging volumes, share one characteristic: MRI volume is predicted to grow more than CT volume (Table 4). This trend was already established in previous years as MRI became more ubiquitous and user friendly (and less expensive). Concern about exposure to ionizing radiation might also be a factor.

Differences between uninsured populations: Populations that are, on average, younger or less economically advantaged are reflected in the regional percentages of uninsured people (Figures 1 and 2). The Kaiser Family Foundation estimates the total uninsured US population at just over 49 million.¹

Notes and caveats: Predicted utilization rates rely on the supposition that the 2014 mandate for individual insurance coverage will remain

intact. Under the PPACA, individuals meeting specific criteria may fall outside the individual-insurance mandate. This provision could affect the utilization forecast in states with high undocumented-resident populations. Additional data details are available by zip code, modality, and age group.

Reference

1. Kaiser Family Foundation. [insured/uninsured by state: source title. URL.] Published [date]. Accessed April 18, 2012.

Table 4. Growth by Modality in Texas and Massachusetts

STATE	MODALITY	2010 PROCEDURES	TOTAL POPULATION	UNINSURED POPULATION	POSTREFORM VOLUME	VOLUME GROWTH	POSTREFORM INCREASE
TX	CT	3,391,398	24,840,114	6,234,900	4,108,176	716,778	21.1%
TX	MRI	2,010,818	24,840,114	6,234,900	2,501,081	490,263	24.4%
TX	Other	26,989,936	24,840,114	6,234,900	33,138,921	6,148,984	22.8%
TX	Total	32,392,152	24,840,114	6,234,900	39,748,177	7,356,025	22.7%
MA	CT	1,253,781	6,613,107	327,900	1,297,085	43,305	3.5%
MA	MRI	530,980	6,613,107	327,900	551,963	20,983	4%
MA	Other	8,354,942	6,613,107	327,900	8,668,711	313,769	3.8%
MA	Total	10,139,703	6,613,107	327,900	10,517,759	378,057	3.7%

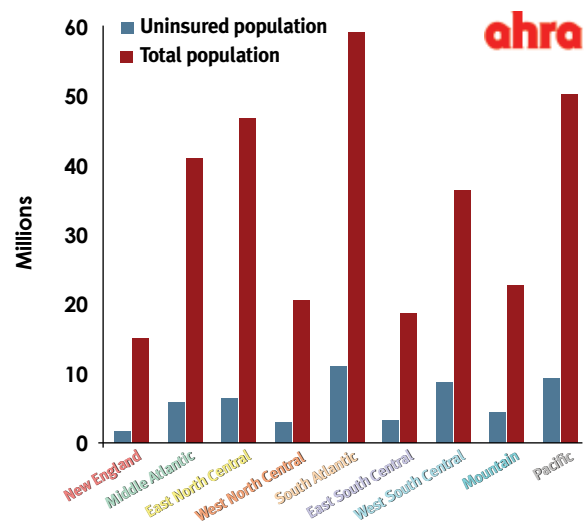


Figure 1. The regions with the greatest predicted postreform increases in imaging utilization (AHRA regions West South Central, South Atlantic, and Pacific) correspond to those with the highest percentage of young and disadvantaged people, including illegal-immigrant populations.¹

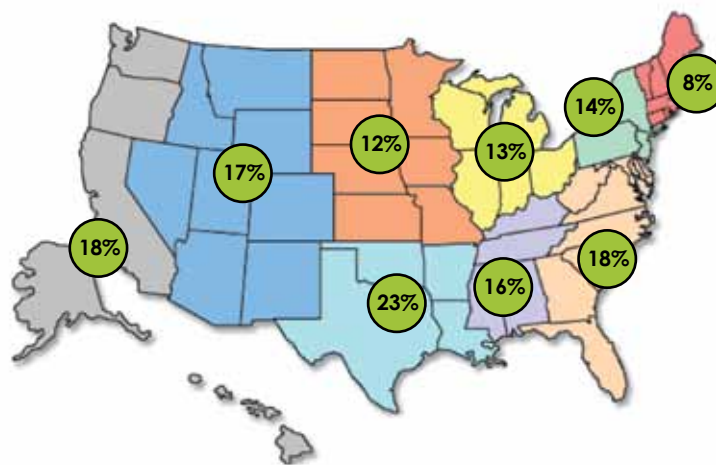


Figure 2. Uninsured US population (by region).

Data and Research Provided by



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