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## Errata

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To: Recipients of TR-687-TCE, *Understanding the Public Health Implications of Prisoner Reentry in California: Phase I Report*

From: RAND Corporation Publications Department

Date: October 2009

Re: Corrected page (p. 102)

A paragraph containing duplicated information was removed from p. 102. This error did not affect the conclusions or findings presented in the report.

Our geographic mapping and accessibility measures suggest that parolees' accessibility varies across counties and by race/ethnicity within counties. Parolees' accessibility also varies by facility type (i.e., hospital or clinic). Table 5.9 summarizes the results from our accessibility measures by county and type of health care setting.

In terms of general acute care hospitals, a larger share of parolees in Alameda County resided in areas with lower levels of accessibility than in the other counties. Interestingly, within all three of the large urban counties (Alameda, Los Angeles, and San Diego), more than half of parolees resided in areas with the two lowest levels of accessibility for general acute care hospitals. In comparison, only 37 percent of parolees in Kern County lived in areas that had the lowest levels of hospital accessibility. Accessibility to health care resources also varied by parolees' race/ethnicity (Table 5.10). With respect to accessibility to general acute care hospitals, in Los Angeles and Alameda counties, more African-American parolees were in areas with lower accessibility compared to Latino and white parolees. However, in Kern and San Diego counties, more Latino parolees resided in areas with lower accessibility to hospitals compared to white and African-American parolees.

With respect to accessibility to PCCs by race/ethnicity, the story is more complex, with a key theme being that the county matters (see Table 5.10). In three counties, only one out of five African-American parolees resided in areas with the two lowest levels of accessibility. The exception was Los Angeles County, where 44 percent of African-Americans resided in areas with the two lowest levels of accessibility. For Latino parolees in Alameda and Los Angeles counties, the share residing in areas with the two lowest levels of accessibility to clinics was nearly 50 percent. This is significantly higher than the roughly 20 percent of Latino parolees in Kern and San Diego counties. Finally, about 60 percent of white parolees in Alameda and Los Angeles counties were in areas with the two lowest levels of accessibility to clinics, compared to 37 percent in Kern and 36 percent in San Diego.

**Table 5.9**  
**Summary of Accessibility Results, by County and Type of Facility**

County	Percentage of Parolees Who Fell into the Two Lowest Accessibility Categories
<b>Hospitals</b>	
Alameda	63
Kern	37
Los Angeles	53
San Diego	54
<b>Clinics</b>	
Alameda	38
Kern	30
Los Angeles <sup>a</sup>	48
San Diego	27

<sup>a</sup> In Los Angeles County, the comparison represents accessibility to public/private partnership clinics and other PCCs. It differs from the other three counties, whose measure of accessibility includes both MISP clinics and other PCCs.

**Table 5.10**  
**Summary of Accessibility Results, by County, Type of Facility, and by Race/Ethnicity**

County	Percentage of Parolees by Race/Ethnicity Who Fell into Two Lowest Accessibility Categories		
	African-American	Latino	White
<b>Hospitals</b>			
Alameda	73	47	48
Kern	31	40	37
Los Angeles	60	51	47
San Diego	51	59	53
<b>Clinics</b>			
Alameda	24	48	59
Kern	24	25	37
Los Angeles <sup>a</sup>	44	47	57
San Diego	21	20	36

<sup>a</sup> In Los Angeles County, the comparison represents accessibility to public/private partnership clinics and other PCCs. It differs from the other three counties, whose measure of accessibility includes both MISP clinics and other PCCs.

As discussed earlier, we elected to include in our maps the supervisorial districts and, in the case of Los Angeles County, the SPAs to better place these results both in a policy- and health-planning context. The supervisorial districts represent the political districts in a county. The eight SPAs in Los Angeles County are for health-planning purposes, with each SPA having an assigned Area Health Office that is responsible for planning public health and clinical services according to the health needs of local communities (County of Los Angeles Department of Public Health, undated). These results highlight which districts in the four counties and which SPAs in Los Angeles County are disproportionately affected by prisoner reentry and relative accessibility of parolees to health care resources.

All the counties show some geographic gaps in health care resources vis-à-vis the distribution of parolees. However, the most prominent gaps appear to be in Los Angeles County. For this county, the maps and measures of accessibility illustrate how areas with the highest concentration of parolees (e.g., SPA 6 and District 2, which include South Los Angeles) lack health care resources in general. SPAs 3 (San Gabriel area) and 7 (East Los Angeles area) also lack safety-net hospitals. Other general acute care hospitals play an important role in filling gaps in services in most areas of the county, but not in SPA 6 (South Los Angeles) or SPA 1 (Antelope Valley). The situation in SPA 6 may actually have worsened since the period shown in our maps. In 2005, Martin Luther King Jr./Charles R. Drew Medical Center was a fully functioning hospital with both inpatient and outpatient services. It served as a major hospital for the uninsured and poor in Los Angeles County. However, in August 2007, the hospital was shut down and, currently, it provides only outpatient services. Other surrounding hospitals have had to fill the gap in inpatient services. The outpatient clinic at King/Drew has seen a substantial drop in visits because of the negative attention that the medical center has received with community clinics having to pick up the slack (Steinhauer, 2008).

In all the counties, community clinics appear to play an important role in filling geographic gaps in coverage relative to the MISP clinics vis-à-vis the reentry population. To illustrate, in Los Angeles County, there are relatively few MISP clinics scattered throughout the county; as a result, PPP community clinics, or MISP (PPPs), extend safety-net services to many areas without MISP clinics. Yet, the areas with some of the highest concentrations of parolees (e.g., SPA 6, South Los Angeles; SPA 7, East Los Angeles; and SPA 8, especially north Long Beach) do not have a commensurate number of facilities nearby. These findings have planning implications for these SPAs and districts in terms of how best to provide services to this population.

Our finding that gaps in health care accessibility are more prominent in Los Angeles County and, in particular, in South Los Angeles or SPA 6, is consistent with other research. The South Los Angeles Equity Scorecard provides a comprehensive picture of disparities between South Los Angeles and the rest of the county in terms of availability of health care resources (e.g., health care facilities, access to primary care, and health care coverage) and physical resources (e.g., affordable housing, quality schools, and public safety). Park, Watson, and Galloway-Gilliam (2008) found that the supply of general acute care beds and licensed acute psychiatric beds per 1,000 population was substantially lower in South Los Angeles (0.68) than in Los Angeles County overall, which had with 1.23 beds per 1,000 population. And that the supply of inpatient bed capacity in South Los Angeles decreased further—to 0.43 beds per 1,000 population—following the closure of Martin Luther King/Harbor Hospital and Daniel Freeman Memorial Hospital in 2007. An important contribution of our study is to highlight how such differences in health care resources (in SPA 6 and other areas of Los Angeles County) relate to the parolee population.

We used a measure of accessibility that was based on a drive time of 10 minutes to a facility. An alternate measure would rely on the federal health professional shortage area designation of excessive distance: 30 minutes of travel time to primary care (HRSA, undated). However, we used a shorter drive time for several reasons. First, we are concerned that this population may be less mobile than the general population and likely more reliant on public transportation. Second, our goal was to identify variation in terms of how well certain areas are served, rather than to designate shortage areas. Finally, our measure of accessibility takes into account more than simple drive time; it also includes measures of facilities' capacity (when available) and the underlying population demand for services as measured by the percentage of the population below the FPL.

That said, our measure of accessibility is influenced by the 10-minute drive time threshold, our measure of potential demand for safety-net services (i.e., percent of population below the federal poverty level), and the spatial units that we had to use (i.e., census tracts versus street addresses). If one were to increase the drive time, change the spatial units, or use a different proxy to measure potential demand, a different set of results might be obtained.

We validated our findings by examining whether areas or populations defined as having relatively lower accessibility according to our metric were similar to those identified as being medically underserved according to other metrics. Our accessibility scale is relative within a given county, whereas the areas identified as being underserved are not (those identifications are simply based on an absolute definition). Nevertheless, if there are underserved areas in a county, they should overlap with our lower (rather than higher) accessibility areas. To determine whether an area or population is medically underserved, an index can be computed using four variables: (1) the ratio of primary care physicians per 1,000 population, (2) the infant

mortality rate, (3) the percentage of the population with incomes below the poverty level, and (4) the percentage of the population age 65 and over (Rural Policy Research Institute, 2006).

We compared the locations of medically underserved areas and populations in California (OSHPD, 2007) with our measures of accessibility. For example, according to the California Office of Statewide Planning and Development, the northwestern section of Alameda County has a medically underserved *population* (OSHPD, 2007). Using our measure of accessibility, we also found that accessibility to hospitals was low in this area of the county. However, no *area* of Alameda County was designated as medically underserved (OSHPD, 2007).

Approximately two-thirds of Kern County has been designated as a medically underserved *area*, with the exception of the city of Bakersfield and the southeast corner of the county. In addition, two areas are designated as having medically underserved *populations*: (1) near the city of Delano and (2) the northeast corner of the county near Ridgecrest. Our analysis indicated that accessibility to clinics in these two areas and to hospitals in the Ridgecrest area was reasonably good. However, with the exception of Bakersfield, we found that many areas of Kern County had low levels of accessibility to hospitals and clinics.

The northeastern part of Los Angeles County (east of Lancaster and Palmdale) is designated as a medically underserved *area*. This is consistent with our finding of low levels of accessibility to clinics and hospitals in this part of the county. In addition, most of SPA 6, the area around San Pedro and Long Beach in SPA 8, the eastern half of SPA 4, the northern section of SPA 7, and part of SPA 2 in the San Fernando Valley are designated as having medically underserved *populations*. This is consistent with our finding that these areas, particularly SPAs 6 and 7, tend to have some of the lowest levels of accessibility. These gaps have potentially important implications for reentry, because large concentrations of parolees reside in these areas.

The eastern half of San Diego County is designated as a medically underserved *area*, with the areas around the city of San Diego and to the south of San Diego considered to have medically underserved *populations*. This is consistent with our measure of accessibility for clinics but less so with respect to our measure of accessibility for hospitals.

In addition, our measure of accessibility is intended to provide an assessment of the relative differences in accessibility to health care facilities within a county. This relative measure also reflects differences in land use and transportation development within that county. Our intent was not to make judgments about what is or should be an acceptable level of accessibility for a county. It may be that the lowest level of accessibility is an acceptable level for a given area or population, or that the highest level of accessibility is not enough. As noted earlier, there are standard metrics used by health planners to identify medically underserved areas and populations or areas with a shortage of health professionals. Our measure complements these metrics by enabling health planners and policymakers to focus specifically on relative accessibility among the parolee population—a population not typically considered in these other measures.

Finally, as noted earlier, one needs to interpret the mapping of concentrations of parolees with caution. Census tracts located in more rural areas tend to be larger in size, so concentrations of parolees may appear to be larger in rural areas than in urban areas, where the census tracts tend to be smaller.