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Nancy R. Mudrick, PhD, Mary Lou Breslin, MA, Julia Blackwell, MSW, Xiafei Wang, PhD, Kyrian A. Nielsen, MSW

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Accessible medical diagnostic equipment in primary care: Assessing its geographic distribution for disability equity

Nancy R. Mudrick, PhD^{a*}
mudrick@syr.edu

Mary Lou Breslin, MA^b
mlbreslin@dredf.org

Julia Blackwell, MSW^a
jblackwe@syr.edu

Xiafei Wang, PhD^a
xiwang@syr.edu

Kyrian A. Nielsen, MSW^a
kanielse@syr.edu

^a School of Social Work, Falk College of Sport and Human Dynamics, Syracuse University, Syracuse, New York, United States of America, 13244

^b Disability Rights Education & Defense Fund, 3075 Adeline St., Suite 210, Berkeley, California, United States of America, 94703

* Corresponding Author. mudrick@syr.edu +1 315-569-4707

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Key words: disability, accessible medical diagnostic equipment; height adjustable examination tables, accessible weight scales; Medicaid network adequacy

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References: 39

Figures and tables: 6 (4 figures, 2 tables)

Supplemental for online: 2 appendices

1 **Abstract**

2 **Background.** Height adjustable examination tables, accessible weight scales, and lifts for
3 transferring individuals on/off examination equipment enable delivery of equitable health care to
4 persons with mobility impairment. Because most Medicaid-covered patients must utilize a
5 managed care network, network providers with accessible medical diagnostic equipment (MDE)
6 at proximate locations for travel time and distance are necessary. Network density and
7 distribution of accessible MDE has not been studied.

8 **Objective.** This descriptive research examined geographic network adequacy by comparing the
9 density of persons with mobility impairments and location of Medicaid managed care practices
10 with accessible MDE in Los Angeles County.

11 **Methods.** Medicaid managed care practices with MDE were mapped by ZIP Codes shaded to
12 indicate the number of persons with mobility impairment. Zero-inflated negative binomial
13 regression examined ZIP Code population characteristics as potential predictors of accessible
14 MDE presence. Data sources were: (1) 2013-2016 primary care facility audit of Medicaid
15 managed care network providers in LA County, aggregated by ZIP Code, and (2) LA County ZIP
16 Code characteristics from the 2016 American Community Survey. ArcGIS was used for
17 mapping and MPlus for the regression analysis.

18 **Results.** No consistent association between the size of the mobility limited population,
19 demographic characteristics, and presence of accessible MDE was observed or measured by
20 regression. The observed low MDE density suggests network adequacy likely is not achieved in
21 LA County.

22 **Conclusions.** Actions by state and federal agencies are necessary to increase accessible MDE
23 and network adequacy by enforcing existing non-discrimination law and Medicaid regulations.

24 **Key words.** Disability, accessible medical diagnostic equipment, height adjustable examination
25 table, accessible weight scale, Medicaid network adequacy

26

27 Introduction

28 The importance of accessible medical diagnostic equipment (MDE) for the delivery of
29 quality health care to people with mobility limitations is well documented.¹ The absence of
30 accessible MDE contributes to lower rates than recommended for mammograms, cervical
31 cancer screening and dental care, and higher rates of delayed care and dissatisfaction.²⁻⁷ The
32 population of patients who may benefit from accessible MDE is larger than the 8.4 million
33 persons with mobility impairment (13.7% of disabled people) and can include individuals who
34 are weak or frail, of short stature, or limited by arthritis, obesity, or pregnancy.⁸

35 The delivery of health care to these patients is facilitated by use of height adjustable
36 examination tables, accessible examination chairs, scales to weigh a seated person, and lifts for
37 transfer from wheelchair to examination table.¹ The equipment facilitates monitoring patient
38 weight and conducting medical examinations with the same thoroughness as that provided
39 other patients. However, only a minority of primary care doctors' offices are equipped with
40 accessible MDE.⁹⁻¹²

41 With Los Angeles County data for primary care practices affiliated with a Medicaid
42 Managed Care Organization (MMCO), this research compared the locations of offices with
43 accessible MDE to the residential locations of persons with mobility impairment. The aim was to
44 assess whether offices with MDE were sufficient in number and spatial location to enable
45 reasonable access to quality care. Understanding the location of accessible MDE is important
46 due to federal Medicaid network adequacy regulations for travel time and distance, for disability
47 non-discrimination, and for compliance with the Americans with Disabilities Act (ADA). These
48 concerns link directly to health disparities wherein receipt of health services is affected by
49 systematic barriers that influence access, quality, and equity of care.

50 Accessible health care and discrimination

51 The ADA, Section 504 of the 1973 Rehabilitation Act, and Section 1557 of the Affordable
52 Care Act (ACA) prohibit disability-based discrimination by virtually all health care plans,

53 services, and programs in the U.S. Health plans and providers can avoid disability-based
54 discrimination by implementing various accommodations including providing accessible MDE.¹³
55 ADA and 504 complaints have prevailed against primary care practices and health services
56 operated by state and local governments with accessible MDE required as part of providing
57 equitable and effective health care to patients.¹⁴ Despite these laws, most primary care
58 physician offices are not equipped with accessible MDE.^{10, 15, 16}

59 Accessible medical diagnostic equipment

60 In its 2021 report on MDE, the National Council on Disability reviews the evidence
61 linking accessible medical care facilities to health care utilization and quality of health care for
62 people with mobility limitation.¹ As evidence of the impact on quality, people with mobility
63 difficulties reported they were examined in a chair or their wheelchair and seldom weighed when
64 weight measurement or examination on a table would occur for others.^{4, 16, 17} Patients not
65 weighed were asked to provide their weight, although research has found patient reports often
66 are inaccurate.¹⁸ Failing to obtain a weight measure is a quality of care issue as weight is used
67 for medication dosage and to monitor health status. In some studies providers reported they
68 would examine a patient in their wheelchair if transferring to an examination table was not easy
69 or possible or required too much time, even though some problems might be missed.^{19, 20}
70 Quality and care disparity also may arise when accessible MDE is available in the medical
71 office, but not consistently utilized.¹² By contrast, providers have reported that use of a height
72 adjustable examination table is safer for patients and enables them to examine fragile or
73 mobility-limited patients more thoroughly.²¹

74 No regular national data collection tracks the presence of accessible MDE in health care
75 delivery settings, but surveys of physicians and practice administrators suggest that between
76 10%-40% of practice sites have accessible MDE.^{12, 15, 19} Four studies that directly observed
77 whether accessible MDE was present found between 10-44% of practices had height adjustable
78 examination tables and 1-11% had accessible scales.^{9-11, 22} A survey of primary care practice

79 administrators, who often are responsible for equipment purchase, found that less than half
80 knew accessible MDE existed.¹⁵

81 Network adequacy and travel to accessible health care

82 The location of health care providers and the ability of patients with disability to travel to
83 providers can constitute barriers to care.^{23, 24} Transportation disadvantage and geographic
84 barriers are social determinants of health. They contribute to poor health outcomes or late-stage
85 presentation of medical problems when patients skip, postpone, or miss appointments due to
86 problems with transportation.²⁵ In a 2017 national survey, 5.8 million people reported delaying
87 health care for lack of transportation.²⁴ Within this group, people with a functional limitation were
88 2.6 times more likely to report a transport barrier that caused a delay in care. A 2017 Federal
89 Highway Administration survey classified 25.5 million people as having “travel-limiting
90 disabilities.”²⁶ Compared to persons without travel-limiting disability, these persons were less
91 likely to use a personal vehicle (74.8% vs. 83.9%) and more often used local public transit
92 (4.3% vs. 2.7%). Even when using a personal vehicle, persons with travel-limiting disability were
93 more likely to be passengers (38.9% vs. 16.1%). Trips for medical care were not the most
94 frequent reason for travel, but persons with travel-limiting disability reported double the number
95 of trips for medical care.

96 Disabled enrollees in a MMCO plan can only seek care from providers approved for that
97 plan's network, making the travel mode, time, and distance to accessible care important.
98 Concerned about MCO's ability to deliver contractual benefits within closed provider networks,
99 the Centers for Medicare & Medicaid Services (CMS) spelled out access standards in
100 regulations issued in 2002 and 2016. The Network Adequacy Standards (42 C.F.R. § 438.68)
101 direct states to consider physical accessibility and presence of accessible MDE at the practices
102 within MCO networks, and to develop travel time and distance standards with consideration of
103 geographic locations of network providers and Medicaid enrollees.²⁷ California's 2017 network
104 adequacy standards allowed for alternative access standards when the MCO showed it could

105 not reasonably meet the federal requirement ²⁸ ; its 2018 regulations required providers to be
106 located within 10 miles or 30 minutes from the beneficiary's residence unless unreasonable to
107 do so. ²⁹ In 2020, California approved nearly 15,000 MCO exception requests³⁰ including
108 exceptions for travel distances of 41-60 miles in LA County. Other exceptions affected diverse
109 rural and urban communities, including lower-income communities of color in urban areas where
110 barriers to accessing health care have been reported. ^{30, 31}

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112 **Methods**

113 Using data from LA County, this descriptive research explored geographic network
114 adequacy by examining the presence of persons with mobility impairments compared to the
115 presence of medical practices with accessible MDE. Four research questions comprised this
116 inquiry: (1) what is the frequency of MCO-affiliated practices with accessible equipment within
117 LA County? (2) does the distribution indicate geographic spread or concentration? (3) are ZIP
118 Codes with larger numbers of persons with mobility impairment served by larger numbers of
119 practices with MDE? and (4) is there an association between the ZIP Code's population
120 characteristics and the presence of accessible MDE? The demographic characteristics are race,
121 ethnicity, age, use of public health insurance, population density of the ZIP Code, and number
122 of persons reporting mobility impairment. We hypothesized that ZIP Codes more densely
123 populated by people with mobility impairments and by older persons would have a greater
124 number of practices with accessible MDE as a response to population need. The other
125 demographic characteristics were selected to represent social determinants of health, with the
126 expectation that ZIP Codes more densely populated by persons of color and participants in
127 public health insurance (an indicator of low income) would show fewer practices with accessible
128 MDE. ZIP Code population density/1000 was included because population and geographic
129 sizes of ZIP Codes vary widely. The total number of MMCO-affiliated practices (regardless of
130 MDE presence) was used as a control, expecting that the greater the number of practices the
131 more likely at least one will have MDE.

132 Sources of Data

133 Two sources of data were used: (1) a 2013-2016 facility site review of primary care
134 offices participating in Medicaid Managed Care networks serving LA County and (2)
135 demographic characteristics data for LA County ZIP Codes from the 2016 wave of the American
136 Community Survey. This research was IRB exempt because data had no human subjects.

137 Physical Accessibility Review Survey (PARS). Primary care practices that join MMCO
138 plans in California are triennially audited using the state's Physical Accessibility Review Survey
139 to rate accessibility for individuals with disability.³² Trained reviewers observe architectural and
140 equipment features using a survey based on the U.S. Access Board's 2010 ADA Accessibility
141 Guidelines.³³ This research used three dichotomous questions about the presence of height
142 adjustable examination tables, lift equipment, and accessible weight scales (Table 1). The
143 examination table question conforms to the standard issued by the Access Board in the 2017
144 MDE accessibility standards.³⁴ The PARS data cover 2096 MMCO-affiliated LA County
145 practices audited during 2013-2016, aggregated into their ZIP Codes. Practices not affiliated
146 with a MMCO are not in the dataset; included practices also may treat patients with private
147 insurance or Medicare. Appendix A has more detail about the survey instrument and data
148 collection.

149 American Community Survey (ACS). The demographic data from the 2016 American
150 Community Survey for LA County includes ZIP Code population density, race, ethnicity, age,
151 use of public health insurance, and the number of individuals reporting mobility impairment.³⁵
152 Mobility impairment, not disability more broadly, was used as accessible MDE is likely most
153 needed by these individuals (wording in Table 1). Age was coded as the percent of the
154 population age 65 or older. Race and ethnicity were coded as separate dichotomous variables.
155 The public health insurance variable includes Medicaid, Medicare, CHIP (Children's Health
156 Insurance Program), Veterans Administration health care, and individual state insurance.³⁶ The
157 ACS ZIP Code data did not offer a separate variable for Medicaid.

158 Data Analysis

159 ZIP Codes are the unit of analysis. The number of practices within the ZIP Code with
160 each piece of accessible MDE are outcome variables. MMCO affiliated practices were observed
161 in 233 of the county's 290 ZIP Codes. ArcGIS ArcMap Version 10.7 was used for mapping. For
162 Figure 1 ZIP Codes were colored from lightest to darkest (shades of blue) to indicate the

163 number of practices in the ZIP Code with each type of equipment. Diagonal lines (grey) indicate
164 no MMCO participating practices.

165 The PARS and 2016 ACS datasets were used together to map accessible equipment by
166 population of individuals with mobility impairments. ZIP Codes were shaded to indicate the
167 density of the population with mobility impairment: 0-2000 people (lightest, in beige), 2001-4000
168 people (darker, in orange), and 4001 or more people (darkest, in brown). Some ZIP Codes
169 belong to an organization (e.g. university) that internally distributes mail. These, indicated by
170 dots, have no ACS population data. The circled number overlaid in each ZIP Code indicates the
171 number of practices with an accessible MDE equipment item. The placement of the number
172 within the ZIP Code does not indicate the exact location of the practices.

173 *Mplus 8* was used to analyze the relationship between MDE and other demographic
174 characteristics as potential predictors of the presence of accessible MDE using zero-inflated
175 negative binomial regression models. Since outcome variables were count variables both with
176 excessive values of zero and with variances larger than means, zero-inflated negative binomial
177 regression was used.

178 Study Setting

179 LA County is the study site because PARS data were available from all county-
180 designated MMCOs for 2013-2016. Thus, all MMCO-affiliated primary care practices likely are
181 represented. LA County extends nearly 70 miles east to west and 100 miles from south to
182 north.³⁷ The ZIP Codes in the south and southwest areas of the county include the Los Angeles
183 Metropolitan Area, highly urban and crisscrossed by freeways with bus and rail transit. ZIP
184 Code sizes are 3-10 square miles with approximately 24,000 persons per square mile. In the
185 northern border of the county 13 ZIP Codes are 50-250 square miles with population density
186 approximately 300-700 per square mile. This area includes arid terrain, high desert, and forests.
187 The road network is not dense, with fewer transportation options. There are two centrally
188 located adjoining cities of 150,000.

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190 Results

191 In the 233 studied ZIP Codes, the Black and the Hispanic populations averaged 9.17%
192 and 40.33%. Roughly 33% of the population participated in public health insurance. The
193 average for the population over age 65 was almost 14% and for mobility impairment 6%. The
194 mean number of practices per ZIP Code was 8.9 and mean population 36,010 (Appendix B).

195 Figure 1 displays the presence of practices with a height adjustable examination table,
196 an accessible weight scale, and a patient lift in separate maps; the darker colors indicate
197 greater presence of that type of equipment. Map A shows that in 37.8% of ZIP Codes there was
198 no MMCO participating practice with height adjustable examination tables and in 28.3% of ZIP
199 Codes there was one practice. Map B displays even fewer ZIP Codes with practices equipped
200 with an accessible weight scale; 57.1% of ZIP Codes did not have a MMCO practice with an
201 accessible weight scale and 22.7% had only one practice with an accessible scale. Lift
202 equipment was the least present (Map C) with 74.2% of ZIP Codes without a MMCO practice
203 with lift equipment and 21% of ZIP Codes with only one practice. The ZIP Codes in darkest
204 shade show that only or one two ZIP Codes contained 6-10 practices with accessible MDE.
205 Maps B and C also indicated that for scales and lifts there was sparse presence in both the
206 southern and northern parts of the county. The two darkest shaded ZIP Codes in the
207 northeastern part of the county show 2-5 practices with accessible equipment served a mid-
208 sized city and a large sparsely populated surrounding area.

209 Figure 2 shows the geographic match of practices with a height adjustable examination
210 table to the population potentially in need of such equipment. The numerical distribution of
211 practices with a height adjustable examination table is below the map. Regardless of the size of
212 the population of individuals with mobility limitations, the map indicated no observable pattern,
213 with most ZIP Codes containing zero or one practice with a height adjustable examination table.
214 A single ZIP code, on the eastern border of Los Angeles County, was an outlier with 10
215 practices with height adjustable examination tables. Noteworthy was how few practices had an

216 accessible examination table across the many square miles of the northern part of the county
217 despite the indication of a sizeable number of people for whom such equipment would be of
218 benefit. Numerous ZIP Codes in the dense southern part of the county had few to no practices
219 with accessible equipment, although the smaller distance between ZIP Codes could provide
220 greater potential to meet the network adequacy standard. By observation, there were few
221 differences between the number of practices with accessible tables in ZIP Codes estimated to
222 have 4,000 persons with mobility impairments compared to ZIP Codes where the population
223 size was 0-2,000 persons.

224 The Figure 3 map shows that over half of the ZIP Codes did not have a single practice
225 with an accessible weight scale. The observed geographic distribution showed greater presence
226 of accessible scales near the center of the City of Los Angeles, with one ZIP Code containing
227 10 practices and another 5 practices with an accessible weight scale. Moving north on the map,
228 the presence of accessible scales appeared to decrease. The areas containing larger numbers
229 of persons with mobility impairments (darkest shade) showed little difference in the number of
230 practices with accessible weight scales compared to the ZIP Codes where those numbers were
231 smaller.

232 Figure 4 shows that the presence of lifts was extremely small and spread over a wide
233 area. Nearly three quarters of ZIP Codes had zero MMCO-affiliated practices with lift
234 equipment. In the northern part of the county only one ZIP Code contained practices with lift
235 equipment. Even in the central and southern regions of the county there was often only one ZIP
236 Code with a practice with lift equipment. Out of 233 ZIP Codes, only eleven contained more
237 than one medical practice with a lift. The map shading does not suggest that lift equipment was
238 especially located in the ZIP Codes with larger numbers of residents with mobility impairments.

239 The statistical summary of the ZIP Code profile data (Appendix B) found the average
240 number of practices with accessible examination tables, accessible scales, and lift equipment

241 was 1.34 ($SD = 1.64$), 0.77 ($SD = 1.21$), 0.33 ($SD = 0.69$) respectively, confirming the skewed
242 distributions displayed in Figures 2,3,4, with standard deviations larger than the means.

243 Table 2 displays zero-inflated negative binomial regression model results, with the
244 population characteristics as predictors for examination tables, weight scales, and lifts. The
245 number of practices providing exam tables was negatively associated with the percentage of the
246 population over 65 and population density while positively associated with the total number of
247 practices in the ZIP Code. The number of practices providing lifts was only positively associated
248 with the total number of practices. The number of practices providing scales was positively
249 associated with the percentage using public insurance and the total number of practices. The
250 percent of the Black and Hispanic populations, and the percent with mobility impairment, were
251 not significantly associated with the numbers of practices providing examination tables, lifts, or
252 scales.

253

254 Discussion

255 This study mapped the geographical locations of accessible examination tables, weight
256 scales, and patient lifts in LA County and quantitatively explored potential population predictors.
257 The maps illustrated a very low presence of accessible MDE in MMCO-affiliated practices with
258 many ZIP Codes having no practices with accessible equipment of any kind. Although low, more
259 practices had height adjustable examination tables than accessible weight scales and lift
260 equipment. These findings are consistent with previous studies.^{9, 15} Lack of accessible MDE
261 may pose a greater challenge in northern LA County than in the southern areas because people
262 there may face the need to travel longer distances to reach a facility with accessible MDE. The
263 need to travel more than 30 minutes for primary care, even if this meets a network adequacy
264 exception, likely results in delayed or postponed care for some people.^{24, 26} Persons who
265 cannot drive themselves will need to rely on another's availability, a scheduled medical
266 transport, paratransit, or where feasible, public transit. Each option may pose time or schedule
267 limitations that present a barrier to medical care.

268 The maps and quantitative findings revealed that even when accessible equipment was
269 present, its geographic placement did not appear to be an intentional response to federal or
270 state policy, population need, patient demographics, travel time or distance considerations, or
271 other concerns for disabled Medicaid participants. Areas with larger population density, older
272 populations, and populations with mobility impairment were not afforded greater consistent
273 access to accessible MDE. However, a larger number of MMCO practices increased the likely
274 presence of MDE in at least one practice in a ZIP Code. Some MMCOs have purchased
275 accessible MDE for some of their affiliated medical practices, and this may explain the high
276 outliers and positive association of scales with public health insurance.³⁸ The non-significant
277 findings on association between Black and Hispanic populations with numbers of practices with
278 accessible MDE raises concerns about equitable access to health care services for some racial
279 groups. The 2015 Los Angeles County Health Survey reports the Black population had the

280 highest percentage of adults with disability (33.5%) compared to other racial/ethnic groups³⁹.
281 The findings suggest deeper examination of the intersection of Black population disability rates
282 and provider disability accessibility is needed.

283 The maps offer a visual assessment of probable compliance with the required travel time
284 and distance network standards per Medicaid and ADA non-discrimination mandates.^{27, 30}
285 Network adequacy standards create an expectation that a reasonable number of primary care
286 providers in a network will have accessible MDE. The minor role of population density as a
287 predictor of MDE tests this assumption, with Figures 2, 3, and 4 further suggesting that LA
288 County may not be meeting the state's network adequacy standards. With the granted
289 exceptions the standards may fail to achieve their intent. Patients may face a significant
290 challenge to find and utilize a medical practice with accessible MDE.

291 Study Limitations

292 One study limitation is that the PARS data obtained from MMCOs did not include
293 practices' addresses, sizes, patient capacities, or number of pieces of accessible MDE within
294 each practice. This limited our ability to assess other factors that could influence the presence of
295 accessible MDE. The audit instrument and process were developed by MMCOs for their needs
296 without testing for data reliability and quality; this is a limitation for research application. The
297 data cover only MMCO-affiliated practices, not all primary care practices in LA County. Because
298 of state variation, we cannot generalize about equipment presence to MMCO practices in other
299 states with other policies. However, this mandatory auditing methodology is generalizable and
300 offers a model for developing a national database. Our data are older than 6 years; the current
301 equipment rate might be greater. However, the increase between a 2006-2009 measurement
302 and this dataset was just under 10%.⁹ To our knowledge, no other large observation-based
303 dataset exists.

304 Policy recommendations

305 These findings suggest policy actions that may advance healthcare equity for people
306 with disability. First, the findings highlight a disconnect between data collected by MMCOs and
307 resulting action. MMCOs are not required to use the accessible equipment data as an indicator
308 of disability non-discrimination in health care services or to inform network adequacy. Thus,
309 well-established disability rights law and policy are disregarded, and the purpose and
310 effectiveness of network adequacy standards is undermined. States should require that MMCOs
311 collect, use, and submit to the state data on the presence of accessible equipment in network
312 adequacy determinations.

313 Second, to address the paucity of primary care offices with accessible MDE, DOJ and
314 HHS should revise their ADA regulations and require health care providers subject to their
315 jurisdiction to acquire accessible equipment that meets the Access Board's MDE Standards.³⁴
316 Regulations should spell out how many of each type of accessible equipment are required
317 based on practice and patient characteristics. The regulations could induce MMCOs to tie
318 provider reimbursements to benchmarks for accessible MDE. Further, MMCOs could leverage
319 their purchasing power to lower provider equipment costs or offer grants for acquisition of
320 accessible MDE. Another strategy is to increase provider knowledge about accessible MDE and
321 its importance when treating patients with disability. Other studies have identified lack of
322 knowledge as a key factor.^{12, 19} The Accreditation Council on Graduate Medical Education
323 (ACGME) should require all federally funded medical residency programs to include disability
324 competency training that addresses the use of accessible MDE as integral to equitable health
325 care.

326 Finally, all MMCOs should be required to conduct *on-site* accessibility reviews using a
327 nationally standardized and tested survey instrument that notes accessible MDE and practice
328 address and characteristics. This would improve the utility of the data for compliance and

329 facilitate further research on the intersection of accessible MDE with local disability,
330 demographic, and transportation characteristics.

331 **Conclusions**

332 This is the first study to analyze the presence of accessible MDE from a geographical
333 perspective and link findings to Medicaid MCO network adequacy for patients with disability.
334 There was no evidence of intentional geographic placement of accessible MDE as a response
335 to the patient population. The geographical locations of accessible MDE revealed a substantial
336 need to increase its presence in MMCO-affiliated practices in urban and non-urban areas and
337 especially in areas with higher numbers of people with mobility impairment. A stronger match
338 between the residential locations of people with mobility limitation and location of accessible
339 MDE will increase the receipt of equitable primary and preventive care.

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446 Figure legends

447 Figure 1. Presence of accessible equipment in MMCO-affiliated primary care practices by ZIP
448 Code

449
450 Figure 2. Height adjustable examination tables and individuals with mobility limitations by ZIP
451 Code

452
453 Figure 3. Accessible weight scales and individuals with mobility limitations by ZIP Code

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455 Figure 4. Patient lifts and individuals with mobility limitations by ZIP Code

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Table 1. Wording of survey questions identifying medical diagnostic equipment and mobility impairment

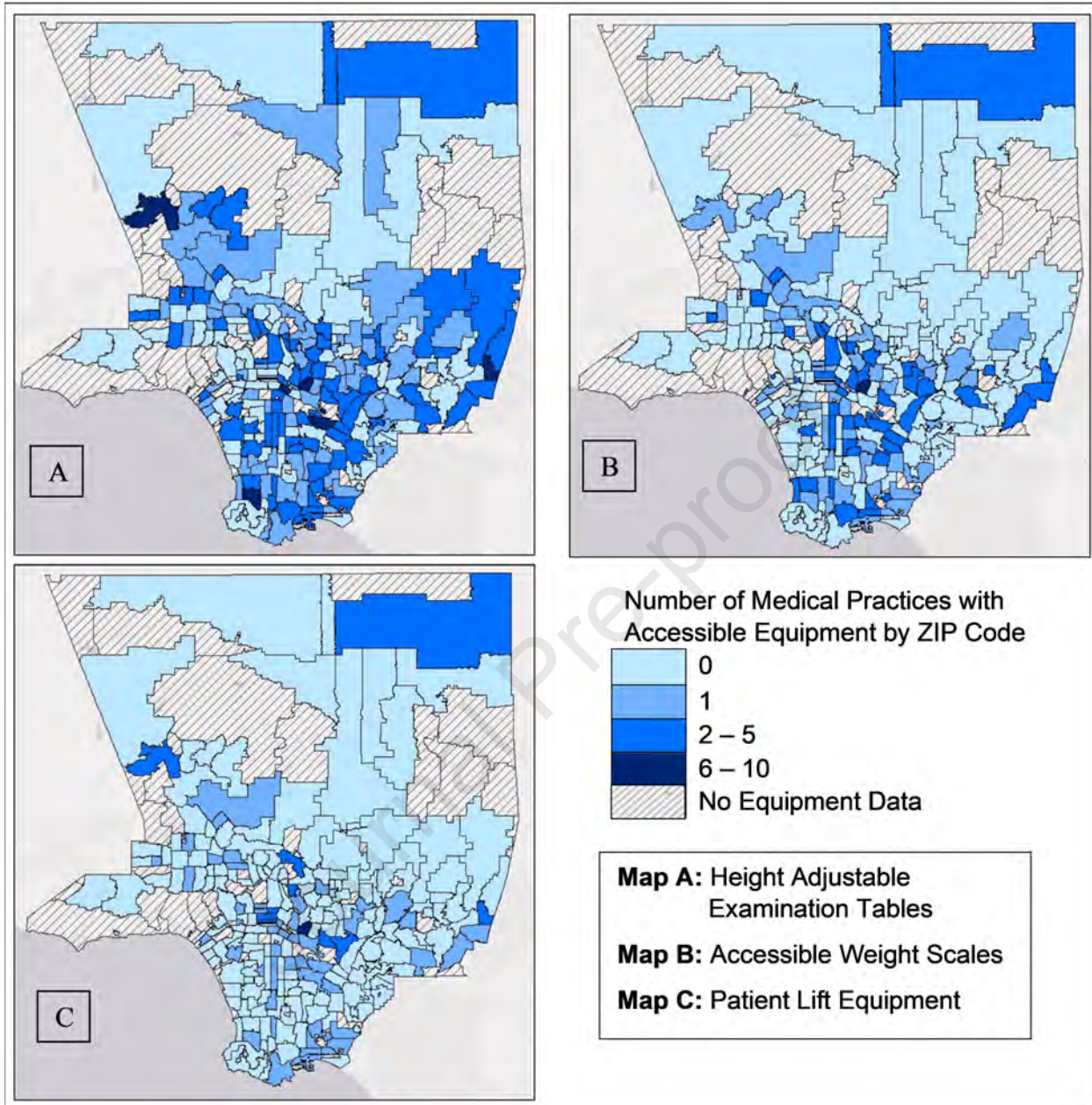
Physical Accessibility Review Survey Exam Equipment Questions (N=2096)		Yes
Q 81	Is there a height adjustable exam table that lowers between 17 inches and 19 inches from the floor to the top of the cushion?	14.9%
Q 84	Is a lift available to assist staff with transfers (portable, overhead, or ceiling mounted)?	3.6%
Q 86	Is a weight scale available within the medical office with a platform to accommodate a wheelchair or scooter and the patient?	8.6%
American Community Survey 2016 Mobility Impairment Question Used for Maps		Yes- LA County
Q 17b	Does this person have serious difficulty walking or climbing stairs?	5.9%

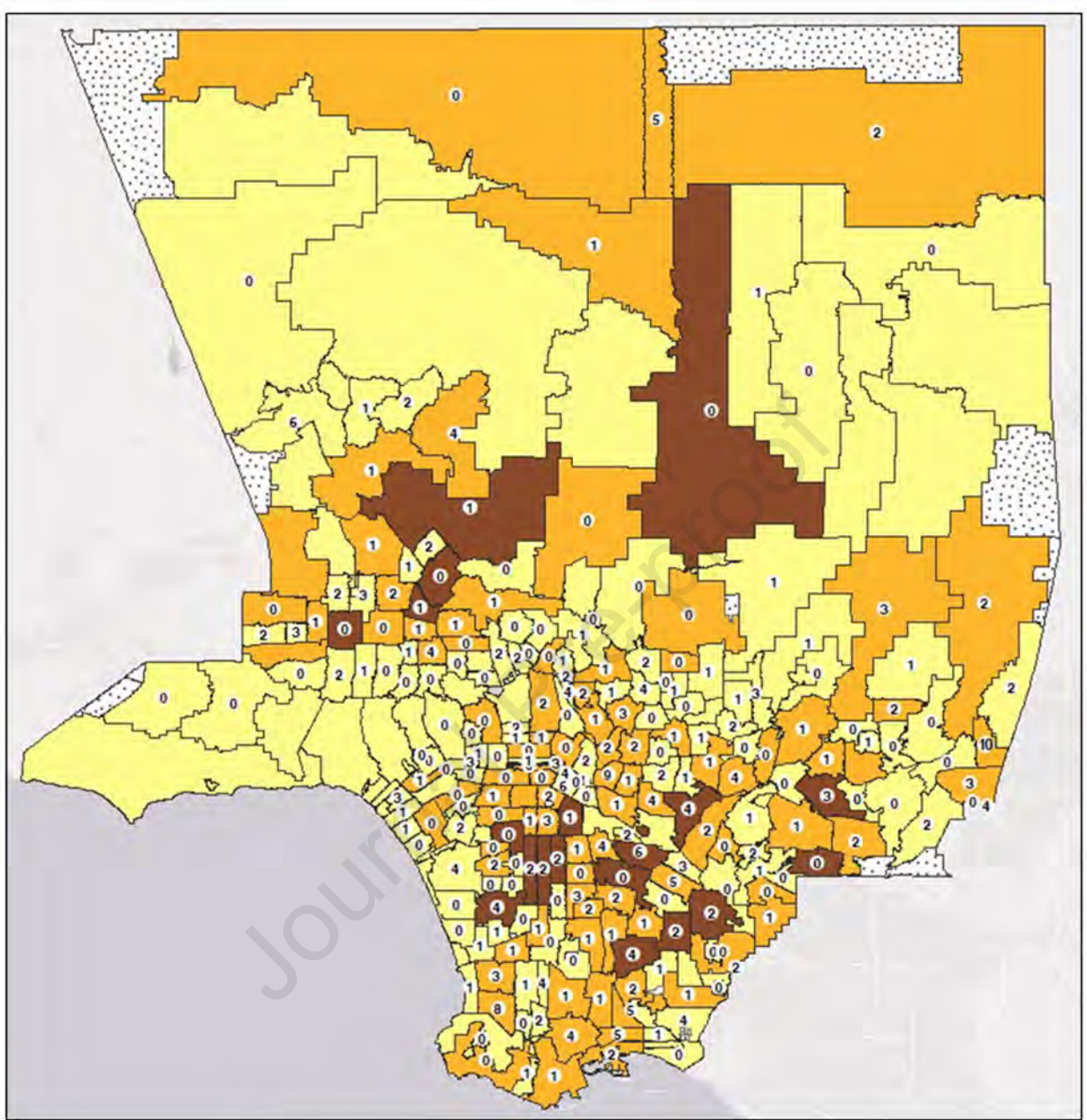
Note: All questions are answered Yes or No.

Table 2. Zero-inflated negative binomial regression of predictors for accessible medical diagnostic equipment, Los Angeles County

	Exam tables b (SE)	Scales b (SE)	Lifts b (SE)
Percent of the Black Population	-0.001 (0.007)	-0.008 (0.009)	-0.008 (0.014)
Percent of the Hispanic Population	-0.001 (0.004)	0.004 (0.006)	-0.005 (0.008)
Percent of the Population with Public Health Insurance	0.001 (0.011)	0.037* (0.015)	0.033 (0.021)
Percent of the Population over the age of 65	-0.061* (0.024)	-0.039 (0.049)	-0.016 (0.042)
Percent of the Population with mobility impairment	-0.021 (0.052)	-0.051 (0.074)	-0.029 (0.098)
Population density/1000	-0.026** (0.010)	-0.005 (0.011)	0.006 (0.015)
Total number of practices per ZIP Code	0.066*** (0.006)	0.049*** (0.008)	0.063*** (0.011)

*p<.05 **p<.01 ***p<.001



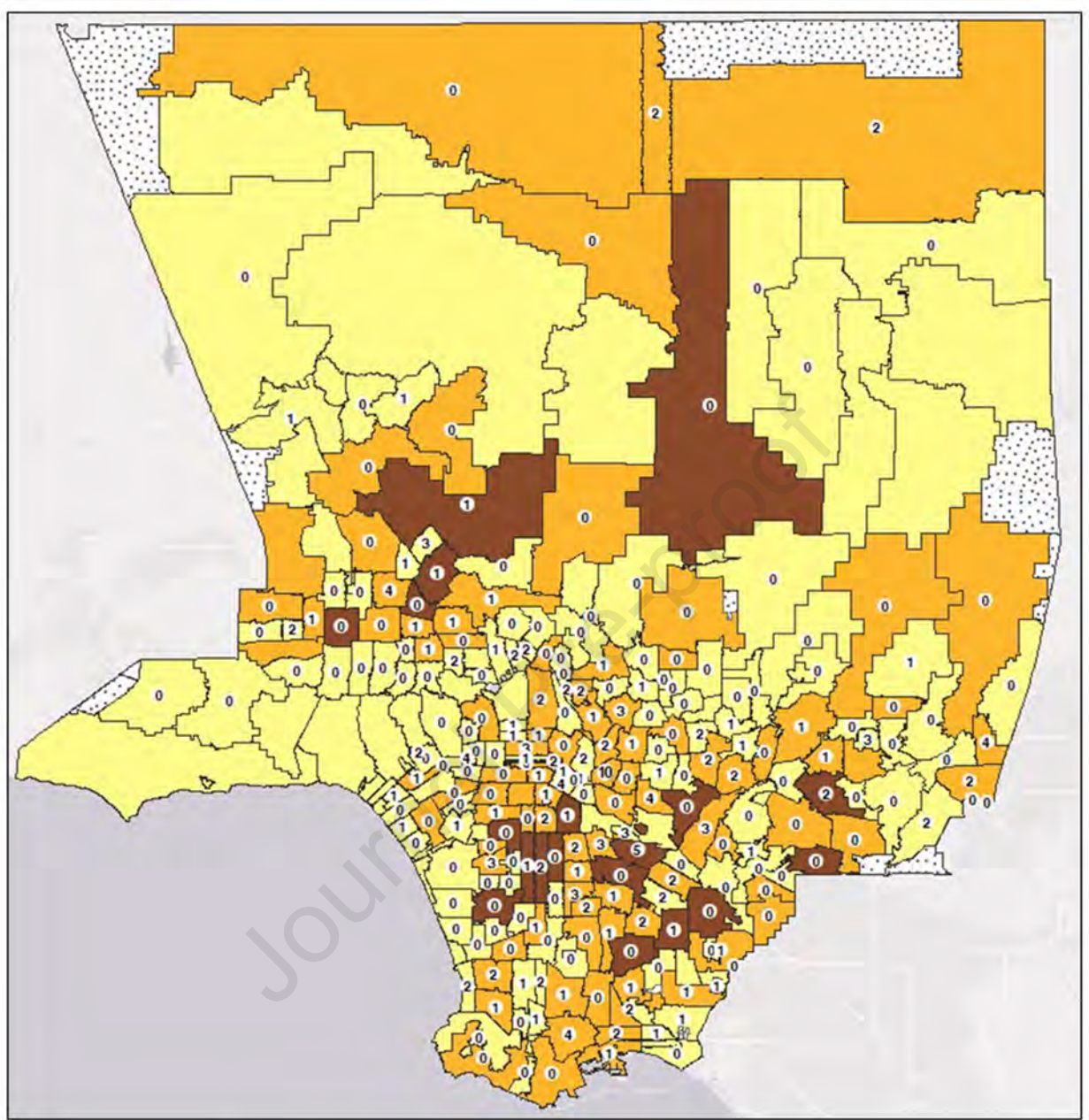


Number of people with mobility limitations by ZIP Code:



Medicaid MCO Primary Care Practices with a Height Adjustable Exam Table by ZIP Code

Count of practices	0	1	2	3	4	5	6	7	8	9	10	Total
Count of ZIP Codes	88	66	40	14	15	4	3	0	1	1	1	233
Percent of total ZIP Codes (%)	37.8	28.3	17.2	6.0	6.4	1.7	1.3	0.0	0.4	0.4	0.4	100.0

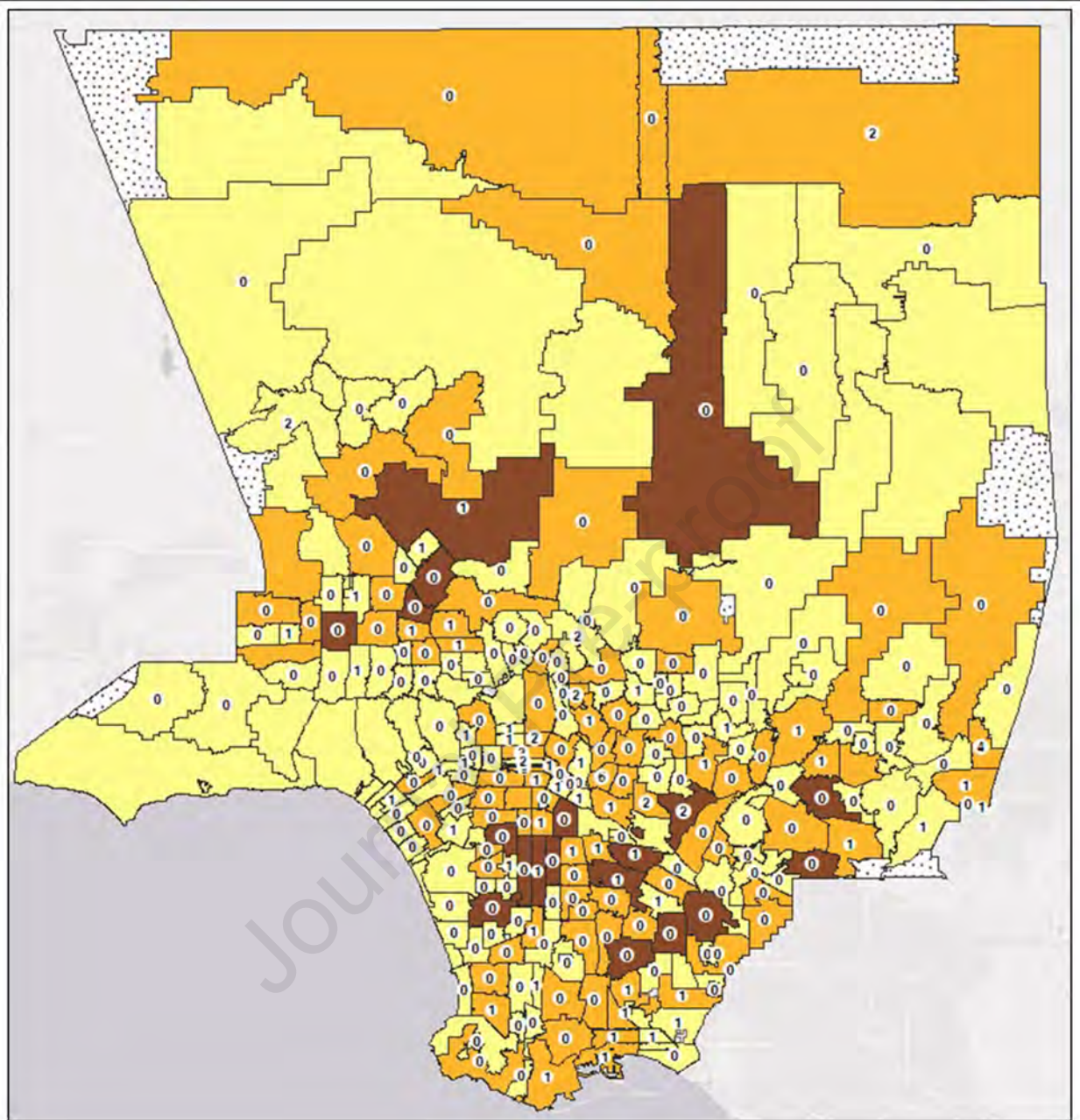


Number of people with mobility limitations by ZIP Code:



Medicaid MCO Primary Care Practices with an Accessible Weight Scale by ZIP Code

Count of practices	0	1	2	3	4	5	6	7	8	9	10	Total
Count of ZIP Codes	133	53	30	9	6	1	0	0	0	0	1	233
Percent (%)	57.1	22.7	12.9	3.9	2.6	0.4	0.0	0.0	0.0	0.0	0.4	100.0



Number of people with mobility limitations by ZIP Code:



Medicaid MCO Primary Care Practices with Lift Equipment by ZIP Code

	0	1	2	3	4	5	6	7	8	9	10	Total
Count of practices	0	1	2	3	4	5	6	7	8	9	10	
Count of ZIP Codes	173	49	9	0	1	0	1	0	0	0	0	233
Percent (%)	74.2	21.0	3.9	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	100.0