Community-Level Factors Associated with Medical Marijuana Prescriber Authorizations in Florida

Amie J Goodin, PhD, MPP[1,2]; Yun Shen, MPH[1,2]; Michael Maguire, MS[1]; Joshua Brown, PharmD, PhD[1,2]

1. Department of Pharmaceutical Outcomes & Policy, University of Florida, Gainesville, FL; 2. Center for Drug Evaluation and Safety, University of Florida, Gainesville, FL

UF

Introduction

- Medical marijuana in Florida is required to be purchased through a licensed medical marijuana treatment center (MMTC) dispensary under certified order from an authorized physician.

Objective: to map MMTC and authorized physician location concentration by geographic area, and compare concentration of medical marijuana service availability by community characteristics.

Methods

- MMTCs and authorized physician lists were obtained from Florida Department of Health's Office of Medical Marijuana Use (OMMU).
- Zip Code Census Tract Area (ZCTA) were used to map MMTC and physician location concentrations using Tableau software.
  - MMTC and physician counts were adjusted and mapped per 100,000 residents in each ZCTA.
  - Marijuana orders were also calculated per 100k residents.
- Social Deprivation Index (SDI), a composite measure of community-level socioeconomic statistics derived from the American Community Survey, were overlayed with MMTC and physician maps. SDI with higher scores indicating worse deprivation (Florida mean=52.7).
- Other demographic characteristics (e.g., proportion of Black residents, proportion of Hispanic residents, proportion of residents living below the federal poverty limit) were also overlayed with MMTCs and physicians.

Results
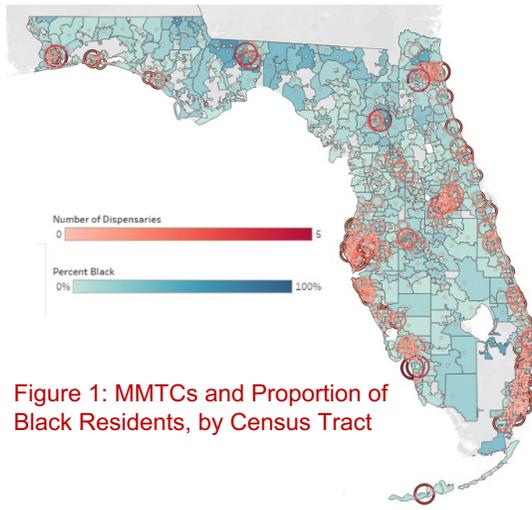
Figure 1: MMTCs and Proportion of Black Residents, by Census Tract
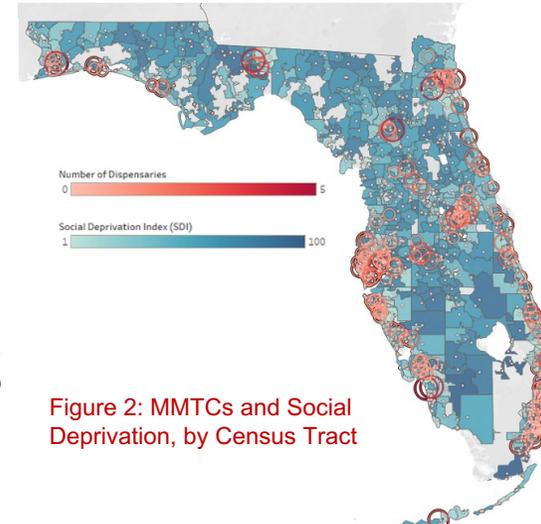
Figure 2: MMTCs and Social Deprivation, by Census Tract
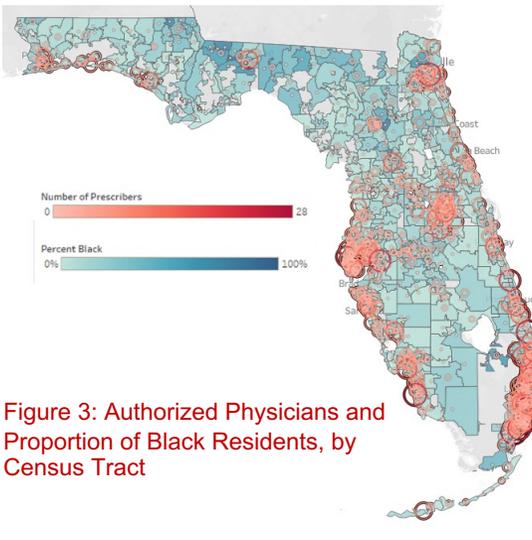
Figure 3: Authorized Physicians and Proportion of Black Residents, by Census Tract
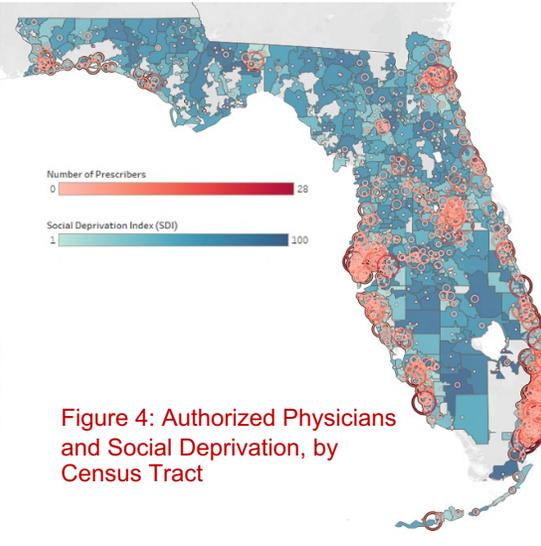
Figure 4: Authorized Physicians and Social Deprivation, by Census Tract

Results, continued

- 2,274 authorized medical marijuana physicians and 239 MMTCs had valid location data for 2017.
- Walton County had the most concentrated number of medical marijuana orders (2941 per 100k residents), followed by the Tampa area (1379 orders/100k residents), and the Naples area (133 orders/100k residents).
- Fort Lauderdale area had the highest concentration of MMTCs (562MMTCs/100k residents.
- MMTCs and authorized physicians were more concentrated in tracts with higher proportions of Black residents (Figures 1, 3).
- MMTCs and authorized physicians were less concentrated in tracts with low SDI (Figures 2, 4).

Discussion

- Medical marijuana authorized physicians and MMTCs are concentrated in distinct regions throughout Florida.
- Orders for medical marijuana in Florida were more concentrated in northern and central Florida regions, while MMTCs were more concentrated in southern urban regions.

Follow us on Twitter: @UFCoDES