

How One Library's Location Change Impacted Health Information Requests: Comparing Zip Codes and Health Disparities to Shape Library Services

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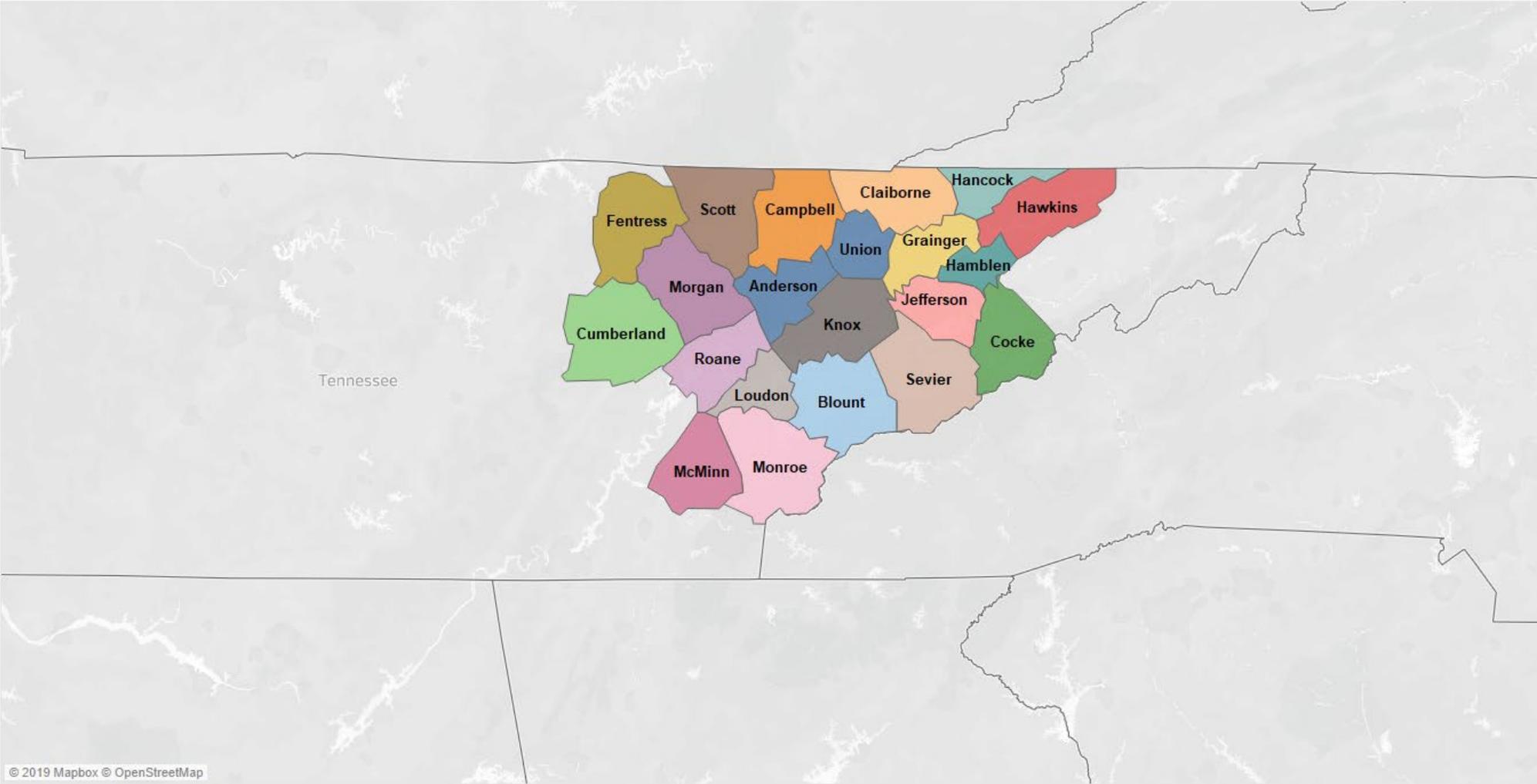
University of Tennessee Medical Center

Our Background

- Hybrid library—Health Information Center (HIC)/Preston Medical Library (PML)
- Until 2014, we were located in an academic office building on the hospital campus
- That year, we moved into our new space on the main floor of the hospital
- Interact daily with faculty, clinicians, residents, patients, and family members

UTMC Service Area

Serviced Counties



- County
- Anderson
- Blount
- Campbell
- Claiborne
- Cocke
- Cumberland
- Fentress
- Grainger
- Hamblen
- Hancock
- Hawkins
- Jefferson
- Knox
- Loudon
- McMinn
- Monroe
- Morgan
- Roane
- Scott
- Sevier
- Union

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Study Purpose

- Researchers reviewed the Consumer & Patient Health Information Service (CAPHIS) database to see if patrons were requesting information from counties or zip codes with high rates of poverty
- Researchers also reviewed what zip codes and counties that were now being reached that were not previously served in a 2012 study
 - 2012 study was useful, but data reflected old location
- Discovering what areas have not yet been reached
 - Opportunities for future outreach

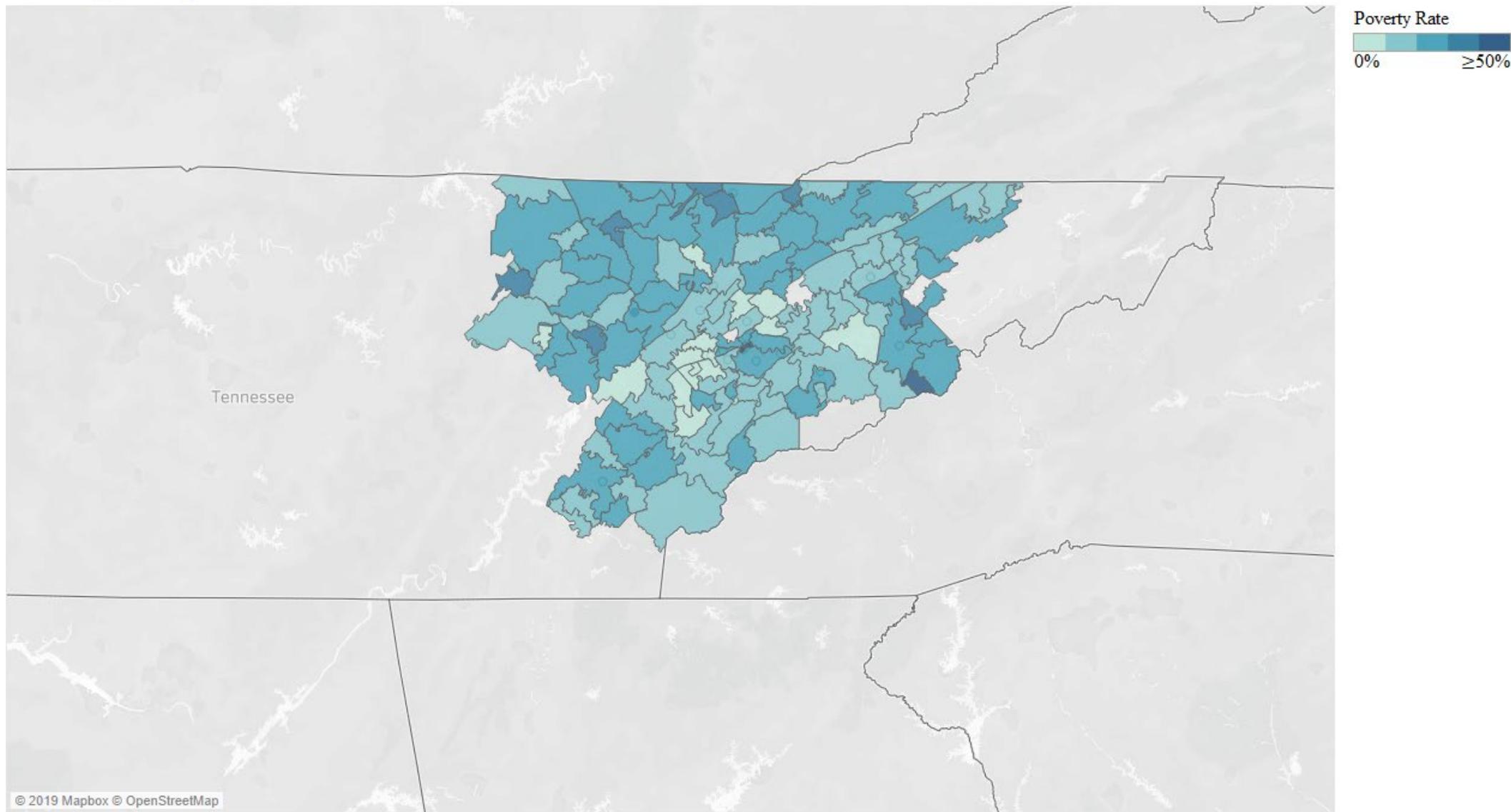
Methods

- CAPHIS database is stored on the hospital's server
 - Data exists from 1997-current
 - Each record gives topic(s) requested and patron county/zip code
 - This project discusses requests from counties/zip codes, but each request might have more than one search topic
- Split data into two sets
 - Pre-move (1997-Sept 2014)
 - Post-move (Sept 2014-current)
- This project was primarily concerned with the post-move data

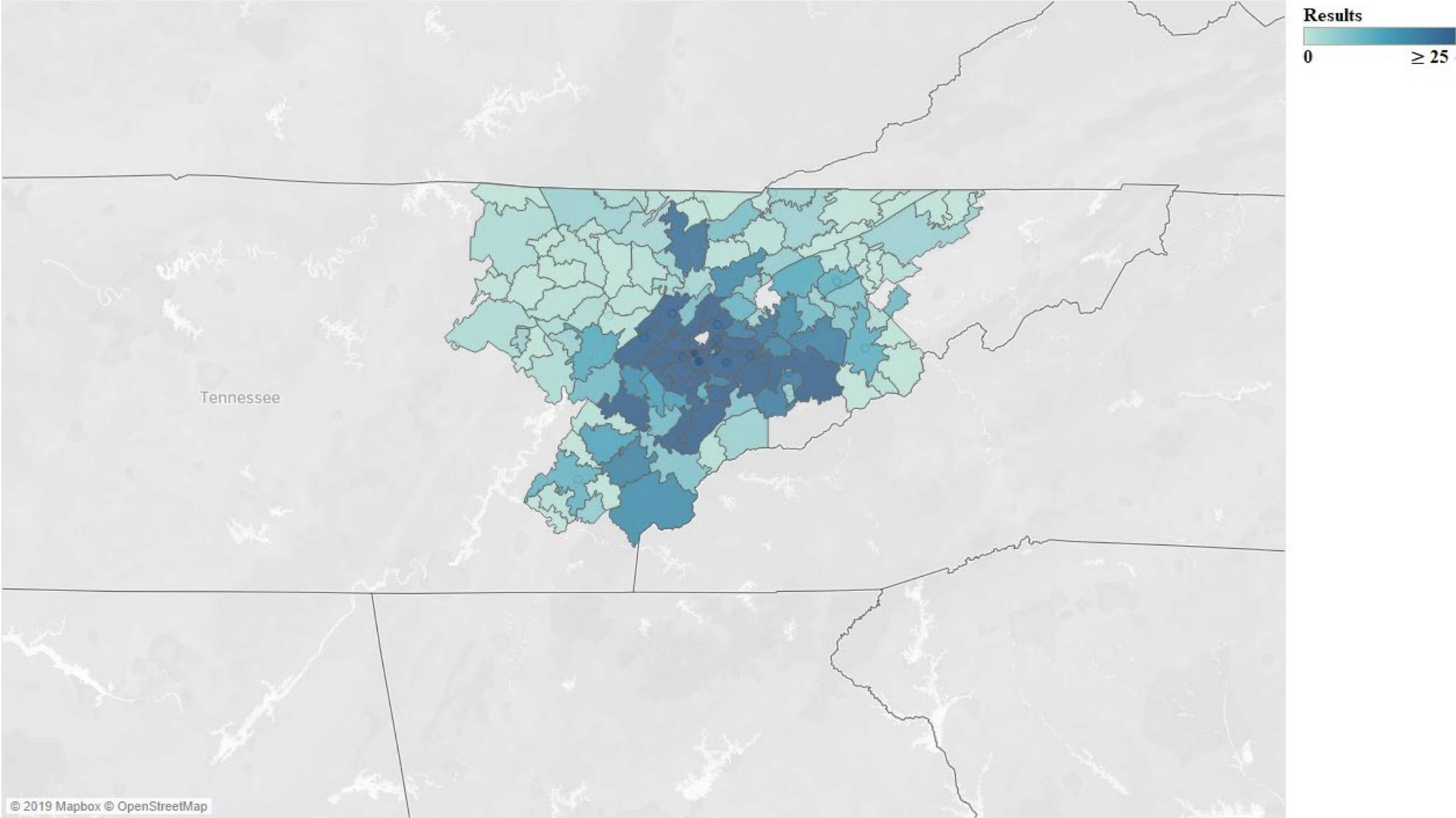
Methods

- Removed 383 results due to being anonymous walk-ins or requests from patient rooms
 - Originally used hospital zip code as place holder
- All requests were sorted by county and zip code, comparing results before and after the move
- Used Tableau to visually map what counties and zip codes we had reached since the move

Poverty Rate by ZIP code



Results by ZIP Code, 2014-2019



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Assessing Our Impact

- Raw numbers have greatly increased since moving locations
 - 3,801 requests from 1997-Sept 2014 (date of move)
 - 3,141 requests from Sept 2014-May 2019
- We reached six more counties in our region compared to the 2012 study
 - Five of these counties have poverty levels >20%
- Knox, Blount, and Sevier counties are the most frequent users
- We reached 20 counties in the hospital's 21 county service area

Assessing Our Impact on Knox County

- Three Knox County zip codes were not reached in the 2012 study
 - Since moving locations, all three have been reached
 - 37932: 40 requests
 - 37754: 8 requests
 - 37806: 4 requests
- Other local zip codes had very few requests in the 2012 study, but now are higher:
 - 37931: 30 requests
 - 37909: 28 requests
- Zip code: 37915 – 53.8% below poverty line
 - 34 requests

Challenges

- Data can be incomplete
- Issue with local hospital zip code being used as a placeholder
- Translating a mountain of data into usable information
 - Dealing with the problem of too much information
 - Setting a focus

Conclusions

- Aligning with hospital's mission of serving the 21 county area
- Proving we are an east TN regional resource for health information
- Providing people with health information that reside in zip codes with high rates of poverty
- Knowledge about what zip codes to target for outreach
 - RAM project grant



References

1. Harrow A, Marks LA, Schneider D, et al. Hospital library closures and consolidations: a case series. *J Med Libr Assoc.* 2019;107(2):129-136.
2. Taylor MV, Stephenson PL. Demonstrating Value in Federal Medical Center Libraries. *Med Ref Serv Q.* 2018;37(4):403-412.
3. Holst R, Funk CJ, Adams HS, et al. Vital pathways for hospital librarians: present and future roles. *J Med Libr Assoc.* 2009;97(4):285-292.
4. Ahmadi N. When Opportunity Knocks: Expanding Library Services to a New Children's Hospital. *Journal of Hospital Librarianship.* 2019;19(1):49-56.
5. Owusu E. A Pediatric Hospital Library Outpatient Outreach: Promoting Library Services to Outpatient Visitors and Evaluating Effectiveness. *Journal of Hospital Librarianship.* 2016;16(2):160-166.
6. Hill T. Fear, concern, fate, and hope: survival of hospital libraries. *J Med Libr Assoc.* 2007;95(4):371-373.
7. Lindsay JM, Partee li RP, Oelschlegel S, Leonard K. Mapping the Changes to a Health Information Service. *Journal of Electronic Resources in Medical Libraries.* 2016;13(3):124-130.
8. Socha YM, Oelschlegel S, Vaughn CJ, Earl M. Improving an outreach service by analyzing the relationship of health information disparities to socioeconomic indicators using geographic information systems. *J Med Libr Assoc.* 2012;100(3):222-225.
9. Kaufman BG, Thomas SR, Randolph RK, et al. The Rising Rate of Rural Hospital Closures. *J Rural Health.* 2016;32(1):35-43.
10. Dalaker J. *The 10-20-30 Provision: Defining Persistent Poverty Counties.* R45100, Congressional Research Service, March 27, 2019.