



# Screening for Social Determinants of Health in a Community Pharmacy

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## Background

- The Centers for Disease Control and Prevention (CDC) describes social determinants of health (SDOH) to be the conditions in places where people live, work, and learn in and its impact on their well-being and quality of life<sup>1</sup>
- SDOH accounts for up to **80% of health outcomes**, however only **16% of clinic practices** and **24% of hospitals** report screening their patients' SDOH<sup>2,3</sup>
- Community pharmacists are in a unique position to **identify barriers** affecting patients' health outcomes and **provide them with resources** in their communities
- The CDC and Agency for Toxic Substances and Disease Registry created the social vulnerability index (SVI) as a metric to identify communities that may need support
- This study will evaluate **how often** patients connect with resources referred to them by a pharmacist employing a **SDOH screening tool** in a large retail pharmacy setting and could provide insight on areas of improvement for the screening tool

## Objectives

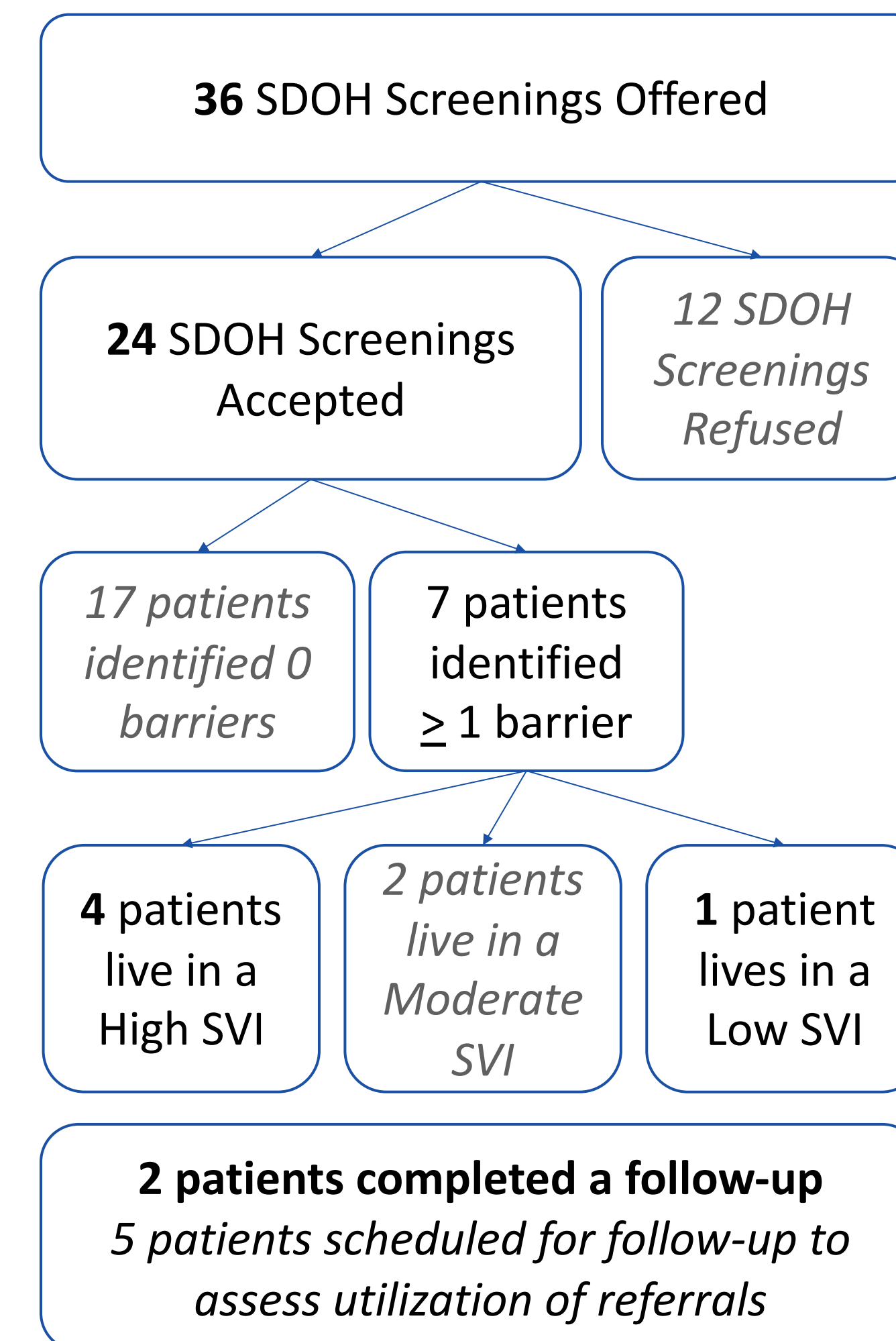
- Primary Objective:** Assess the utilization of community pharmacist referrals in connecting patients with local resources that address SDOH in low vs high SVI areas
- Secondary Objective:** Assess the utilization of referrals between the groups of patients who identified different levels of unmet needs during the screening

## Methods

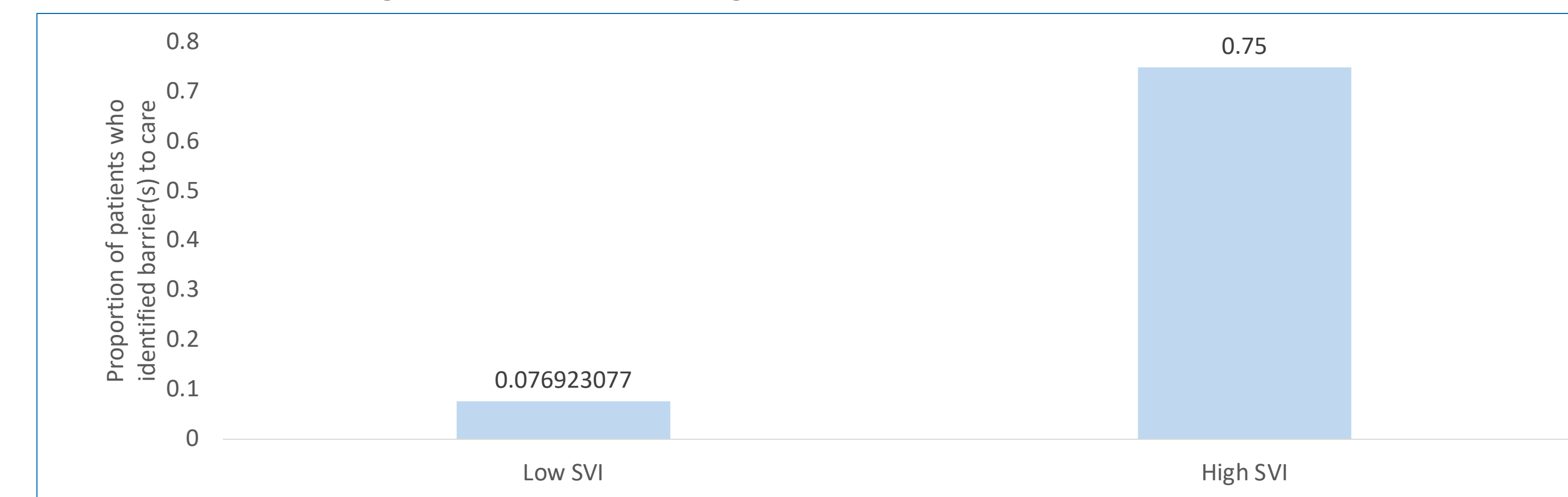
<b>Design</b>	<ul style="list-style-type: none"> <li>This partially-retrospective cross-sectional study was conducted across a large community chain pharmacy and has been reviewed and approved by the Institutional Review Board</li> <li>Data was collected from December 1<sup>st</sup>, 2021, to February 18<sup>th</sup>, 2022</li> <li>Pharmacists and pharmacy interns conducted SDOH screenings, provided a resource to the patient if a barrier to care was identified, and followed-up in 2 weeks to assess use</li> </ul>
<b>Eligibility</b>	<ul style="list-style-type: none"> <li>Inclusion criteria: patients who were given the SDOH screening, identified at least one barrier to care</li> <li>Exclusion criteria: patients who declined the SDOH screening or did not identify any barriers to their care</li> </ul>
<b>Evaluation</b>	<ul style="list-style-type: none"> <li>Low vs High SVI was determined by individual patients' zip codes</li> </ul>
<b>Data Analysis</b>	<ul style="list-style-type: none"> <li>Demographic data was analyzed using descriptive statistics</li> <li>Utilization comparison calculated by Fishers Exact Tests in Excel</li> </ul>

## Results

**Figure 1.** Sample sizes from SDOH screenings and follow-up encounters



**Figure 2.** Proportion of patients in low (n=16) vs high (n=6) SVI who identified at least one barrier to care during the SDOH screening



**Table 1.** Demographic data of patients in low (n=13) vs high (n=4) SVI who completed an SDOH screening

	Low SVI (0-0.333)	High SVI (0.667-1)
% who identified barrier(s)	7.69%	75%
Avg age (year)	72.15 ± 8.86	74.2 ± 15.5
Avg # of meds	5.67 ± 2.39	9.75 ± 0.96
Avg # of STAR rated meds	2.25 ± 1.42	1.75 ± 0.96
Avg proportion of days covered to STAR rated meds	51.70 ± 9.95	61.1 ± 4.42

**Table 2.** Data of patients in low vs high SVI who utilized resources

	Low SVI	High SVI
# patients referred	1	4
# follow-up	0	2
% utilized resources	TBD	50%

## Discussion

- Currently, approximately **29% of patients** self-identify with having SDOH barriers
- Two patients have successfully received follow-ups (**Table 2**). One patient reported using the resource provided to them and the other patient reported forgetting and was re-referred and scheduled for another follow-up
- The primary resource provided to patients is a website that lists a large variety of available resources in the area, which may be limiting in terms of patients' access
- The preliminary results in **Figure 2** show a statistically significant association between SVI and proportion of patients that report having barriers to care (95% CI, p = 0.0093)

## Limitations

- Lack of responses:** many patients did not respond to telephonic follow-ups or were unwilling to respond to questions on the SDOH screening
- Staff availability:** community pharmacies were short-staffed and faced an increase in dispensing and demand for vaccination duties due to the COVID-19 pandemic, so less time was dedicated to clinical tasks
- Short time period:** this is a new pilot study and is currently ongoing

## Conclusions

- As we begin conducting more follow-up encounters, we hypothesize that more patients living in high SVI versus low SVI will need and use the resources provided to them by a pharmacist following the SDOH screening
- The most common unmet need patients have identified so far were healthcare costs
- As pharmacists become more accustomed to providing screenings, this study should be replicated to better determine whether there is a statistical difference in patient utilization of community pharmacist-provided resources regarding SDOH

## References

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