

The relationship between food insecurity and gaps of care in diabetic patients at FQHC



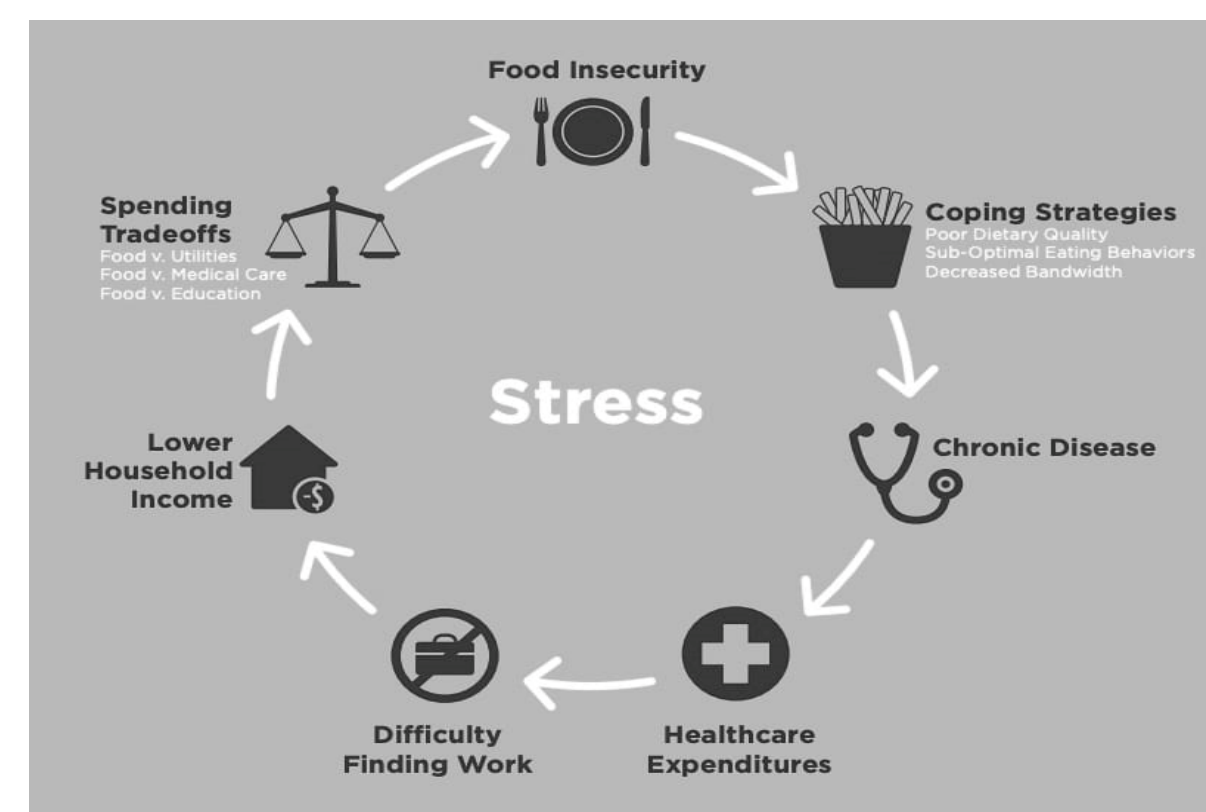
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Background

- USDA defines being “food secure” as having access, at all times, to enough food for an active, health life.
- In 2022, 12.8% of US households (~17 million) and 11.7% of Rhode Island households were food insecure (35,000)
- Gaps in Care Coordination exist between recommended best practices in delivering preventive services and the care that is delivered.
- Diabetes is a chronic health condition that affects how our body turns food into energy.
- East Bay Community Action Program (EBCAP) is a federally qualified community health center that serves a patient population largely comprised of these vulnerable groups.

Figure 1. A Conceptual Framework: Cycle of Food Insecurity and Chronic Disease.



Objectives

- Understand the relationship between the SDOH and Gap of Care in diabetic patients at a federally qualified health center (EBCAP).
- Explore possible methods to improve the food security of patients at EBCAP.

Methods

Mixed-methods study with literature review and quantitative analysis at EBCAP

Literature Review

- The literature review was conducted via PubMed and Google Scholar
- Keywords searched included “food insecurity, gaps of care, Social Determinants of Health, health outcomes, and Rhode Island”
- See reference handout for a full list of sources used in this presentation

QI Project

Design: Quantitative study with mixed literature review. Analyzing SDOH surveys between 2022–2023.

Setting: East Bay Community Action Program – A federally qualified health center in RI

Participants: Adults over the age of 18 who have filled out SDOH survey called PREPARE at EBCAP and have at least one gap of care.

Instrument: Data from standardized SDOH screening tools analyzed using Excel.

Results

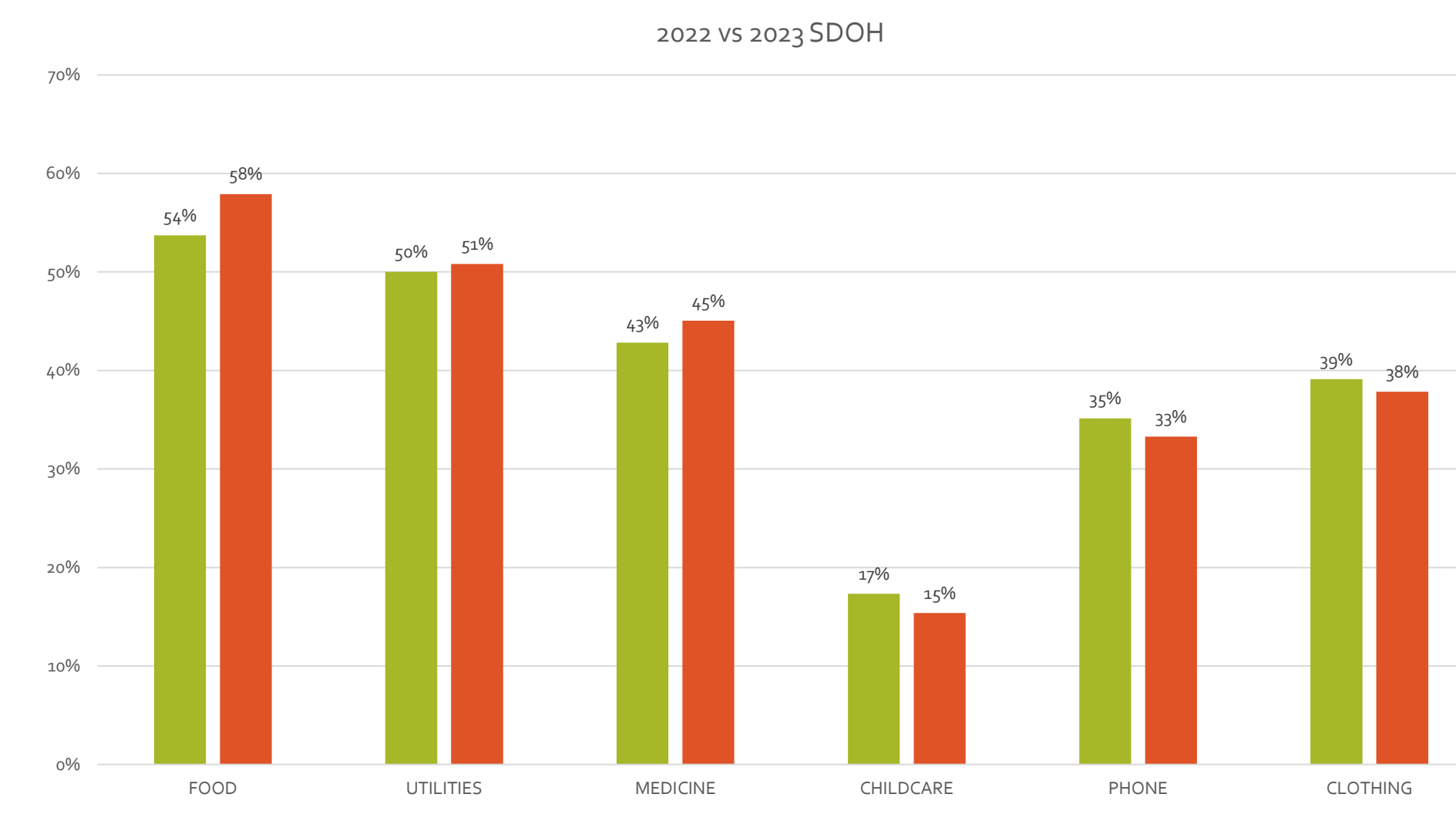


Figure 2. SDOH population comparison between 2022 (N= 404) and 2023 (N=748) Finding: Noticeable increase in Food Insecurity and Utility, follows national economic trend.

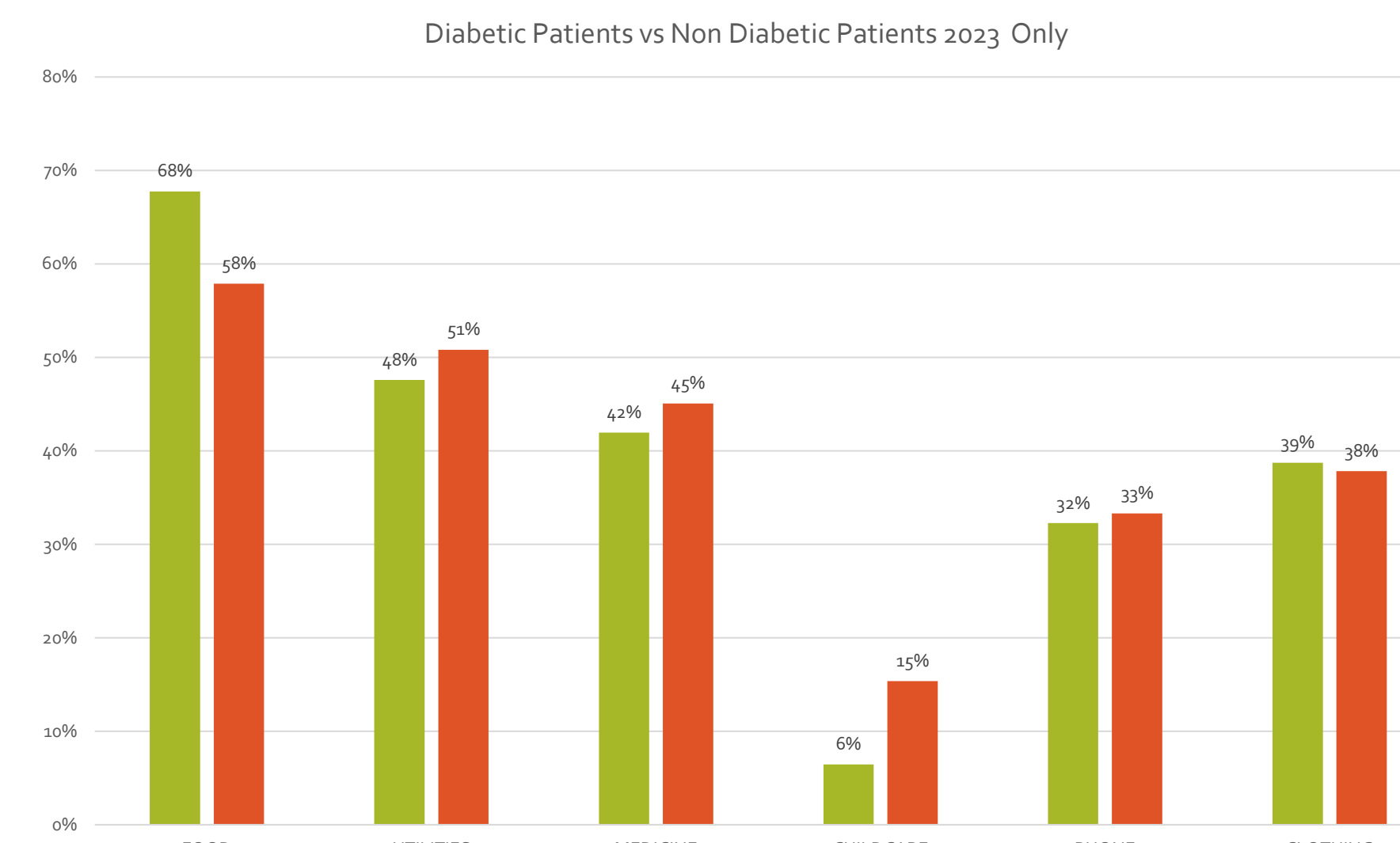


Figure 3. Diabetic patients (N=124) vs Non-diabetic patients (N=624) in 2023. Diabetic patients are more likely to face food insecurity than other patients. “Participants with diabetes were more likely than those without diabetes to report an adverse event they felt would have been preventable with better care coordination.”¹²

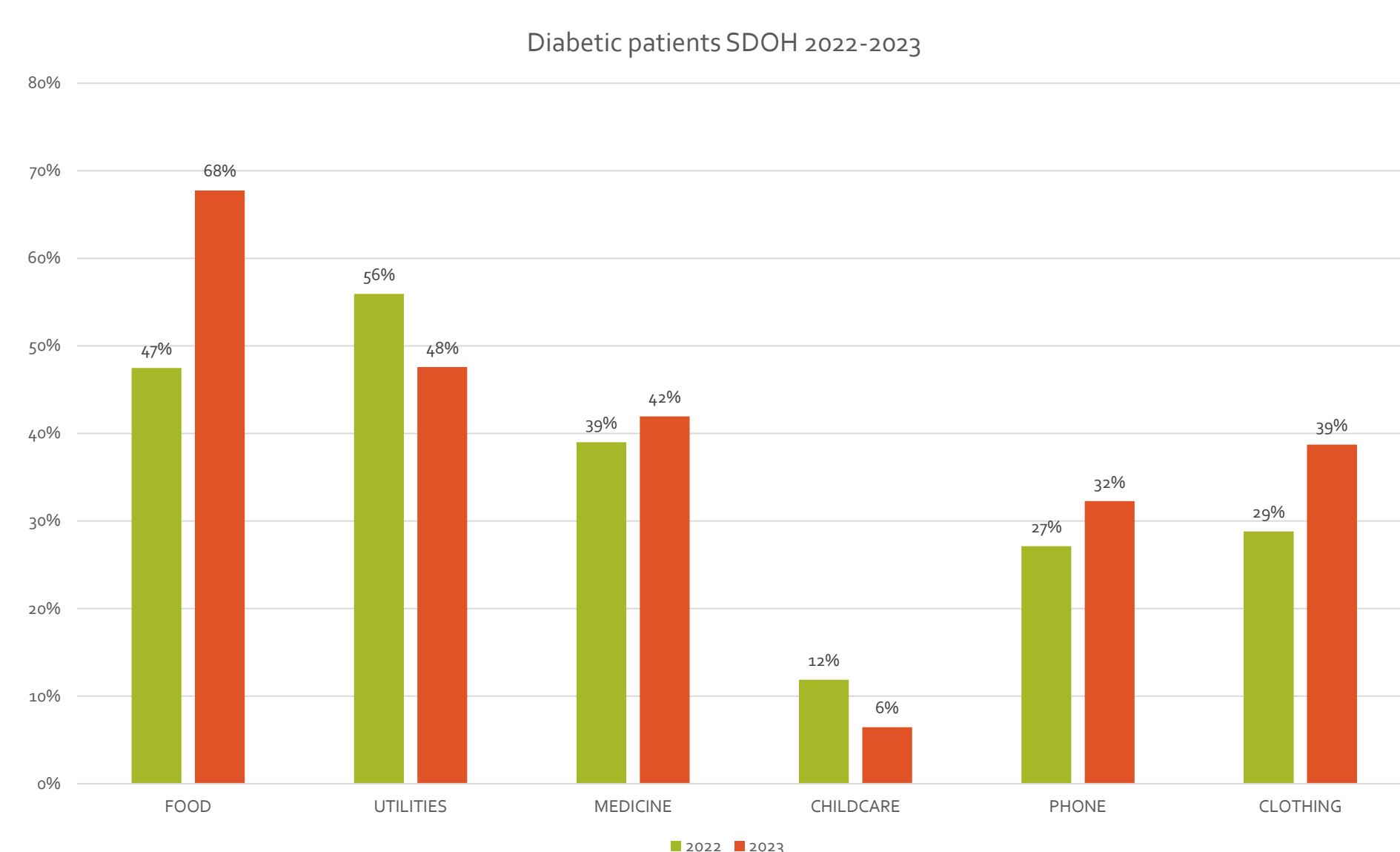


Figure 4. Comparison of Diabetic patients between 2022(N=59) and 2023(N=124) Finding: A much more noticeable increase in food insecurity for diabetic patients

Figure 5. There is a positive correlation between increasing Gaps of Care(GC) to increasing SDOH.

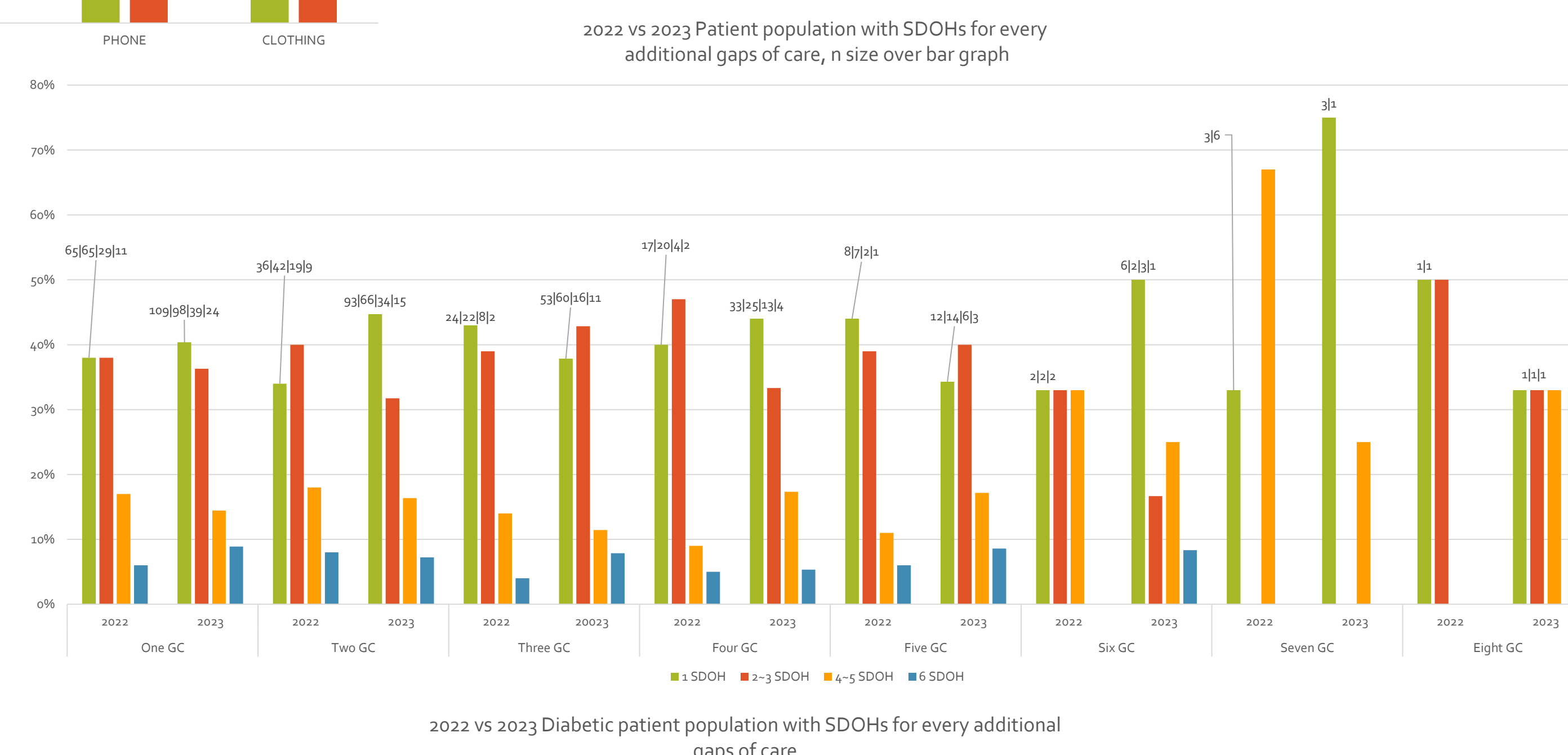
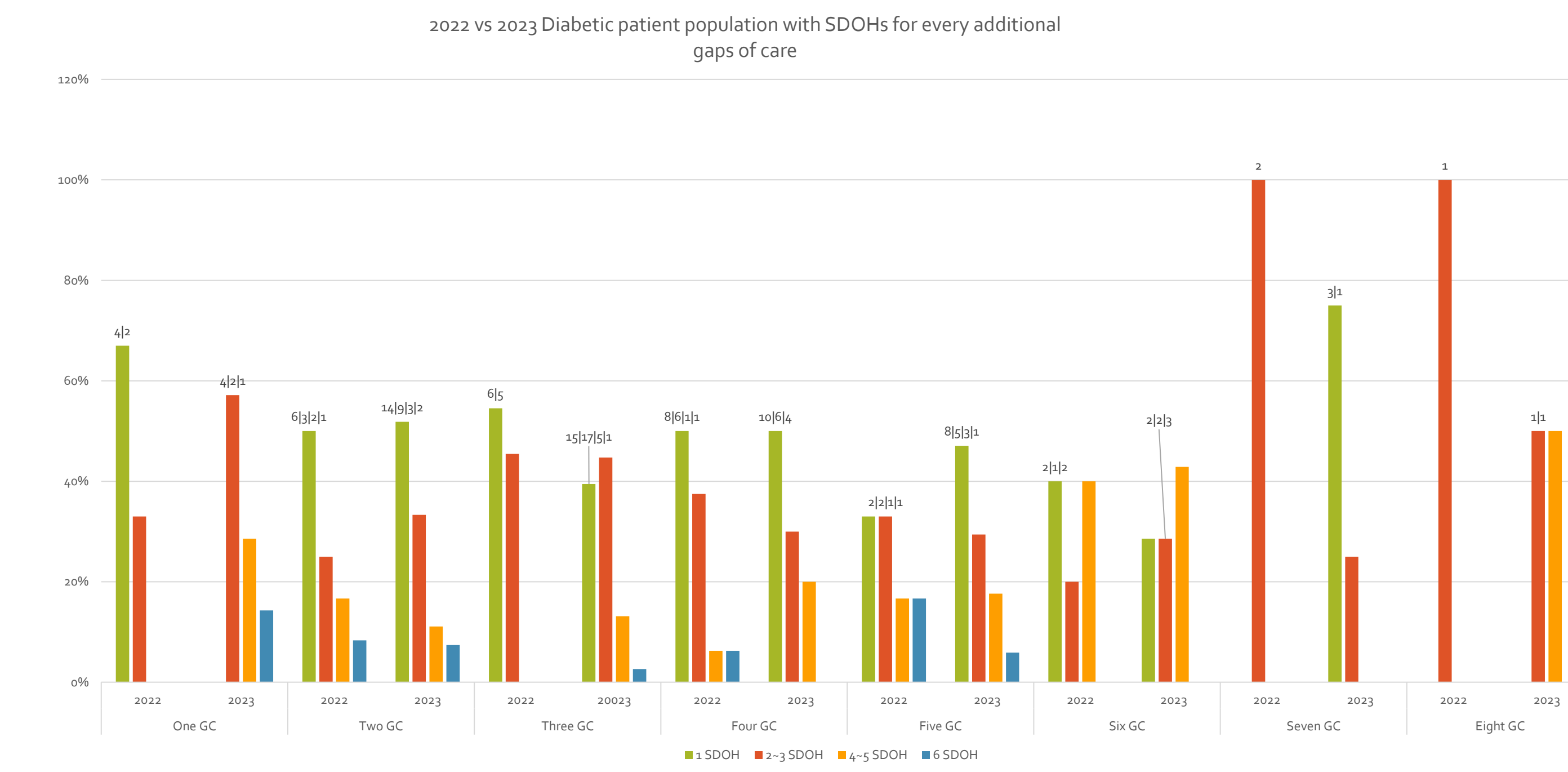


Figure 6. There is a positive correlation between increasing Gaps of Care(GC) to increasing SDOH. “Gaps in care coordination were associated with an increased odds of preventable adverse outcomes.”¹⁵



Results

- Approximately 10% of the 11,000 patients who completed PREPARE survey at EBCAP were positive for SDOH.
- There is an upward trend from 2022 to 2023 in food insecurity and utility due to economic downturn. This can also be seen in diabetic patients.
- There is a positive correlation between increasing numbers of SDOH and numbers of gaps of care. Meaning, it is important to tackle and reduce gaps of care to improve the quality of care for the patient.
- CDC study in 2019 recommends change-management approach which serves to improve clinical workflows of an organization but also serves to improve patient outcomes and population health.

Conclusions and Next Steps for EBCAP

- Both literature and results analysis show that there is a positive correlation between gaps of care and SDOH.
- To combat the increasing population of with food insecurity, it might be helpful for EBCAP to increase the number of food pantries offered from twice a month to four times a month

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References

