

# Financing Food is Medicine: Exploring Costs and Cost-Savings of Medically Tailored Meals for Type 2 Diabetes



Authors: Dagimawi Mohammed, Dan Ferris, Tyler Frank, Stephen Roll, Sydney Gosik

Brown School at Washington University in St. Louis, St. Louis, MO, Food Outreach, St. Louis, MO



## BACKGROUND

- ❖ The U.S. healthcare system faces significant cost challenges, with diabetes costing an estimated \$412.9 billion in 2022.<sup>1</sup>
- ❖ Medically Tailored Meals (MTMs) have emerged as a promising intervention for improving patient outcomes.
- ❖ In September 2023, Food Outreach launched a twelve-month Medically Tailored Meals pilot program for Type 2 Diabetes in partnership with two St. Louis-area health systems.
- ❖ To inform a forthcoming cost-effectiveness analysis of this pilot program, we examined existing research on program costs, cost savings, and the economic burden of uncontrolled diabetes.

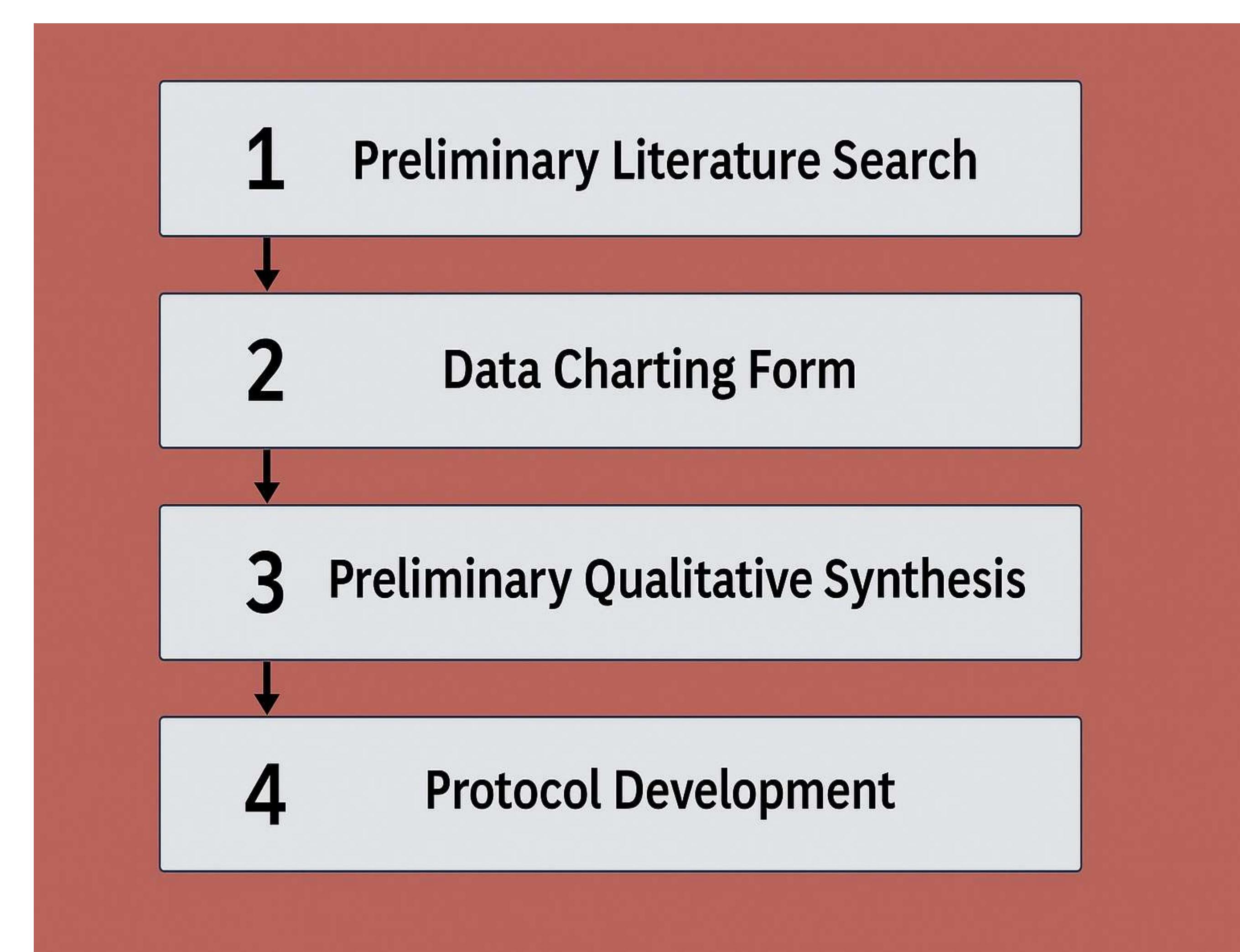
## OBJECTIVES

To produce a comprehensive synthesis of how prior studies have measured healthcare costs attributable to uncontrolled Type 2 Diabetes (T2D) and program costs for Medically Tailored Meal (MTM) interventions, with the dual aim of

- ❖ Identifying methodological standards, biases, and gaps, and
- ❖ constructing an analytic blueprint for a subsequent, policy-relevant cost-effectiveness evaluation of MTMs in adults with T2D.

## METHODS

- ❖ A preliminary search of the literature, including peer-reviewed literature, gray literature, and policy documents, was conducted to identify studies on the cost of uncontrolled type 2 diabetes in adults and the cost of food is medicine, including MTMs.
- ❖ A data-charting form was used to extract key information from these sources. A preliminary qualitative synthesis was then performed to identify gaps in the literature and understand common methodological approaches.
- ❖ A protocol for the full scoping review was developed following the JBI Manual for Evidence Synthesis, adapting the insights gained from the preliminary search.



## PRELIMINARY FINDINGS

- ❖ Prior studies have measured healthcare and program cost using retrospective cohort studies, randomized controlled trials, and Monte Carlo policy simulation models incorporating administrative claims and clinical data.
- ❖ Cost analyses for diabetes typically measure direct and indirect healthcare costs, and analyses for MTMs focus on core program expenses.
- ❖ Comprehensive evaluations are hindered by a lack of standardized measurement methodologies and significant variability in MTM program design and costing approaches.
- ❖ Despite significant evidence linking food is medicine interventions to substantial program cost savings and effectiveness, no comprehensive examination or scan has been completed to date.

## IMPLICATIONS

- ❖ This work demonstrates that a systematic scoping review would be beneficial in identifying gaps in current approaches.
- ❖ The distillation will serve as a toolkit for forthcoming Food is Medicine-focused economic analyses, accelerating study setup and sharpening methodological rigor.

## REFERENCES

1. Parker ED, Lin J, Mahoney T, et al. Economic Costs of Diabetes in the U.S. in 2022. *Diabetes Care*. 2023;47(1):26-43. doi:10.2337/dc23-0085