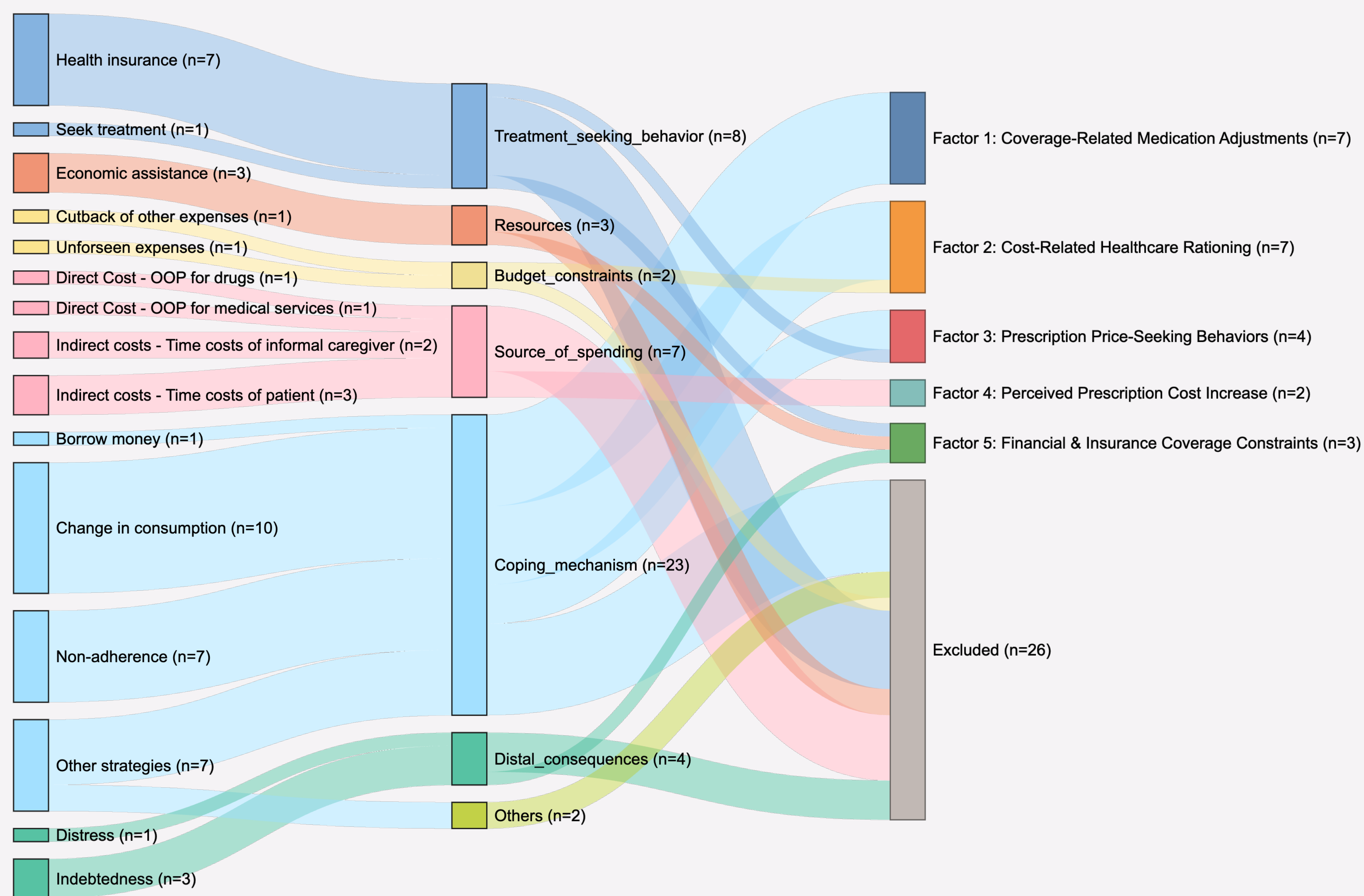


# Financial Hardship, Medication Management Behaviors & Perceived Quality of Care Among Medicare Beneficiaries

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Figure 1. Variable mapping from theory-driven framework to empirically derived domains



## Take home message

Five empirical cost-related management strategies (CrMS) domains were identified, each was associated with outcomes differently.

Prescription cost burden & financial constraints drove dissatisfaction, while beneficiaries cope through coverage-related adjustments and healthcare rationing.

## Implications

- Cost-related medication management among Medicare beneficiaries was composed of multiple domains. Distinct behavioral domains carried differential consequences for self-rated health and satisfaction outcomes.
- Sensitivity analysis showed that health, care quality, and cost satisfaction were correlated, suggesting beneficiaries facing financial constraints navigate simultaneous trade-offs across these domains such that these outcomes should not be studied in isolation.
- Future measurement frameworks should integrate theory-driven structures with empirically derived domains to support targeted interventions.



<https://bit.ly/4cY1mqR>

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## Background

- Personal financial hardship creates cascading effects on medication management and perceived care quality among Medicare beneficiaries.
- We aimed to identify domains of cost-related management strategies (CrMS) and quantify their associations with satisfaction and health status.

## Methods

- Data:** Medicare Current Beneficiary Survey (MCBS) Public Use File
- Cohort:** Medicare beneficiaries who were enrolled in a prescription drug plan and participated in all three survey rounds in 2022
- Variable Selection:** Guided by conceptual framework, 49 variables describing cost-related medication management strategies were initially considered
- Outcomes:**
  - Self-reported health worse than the prior year
  - Dissatisfaction with quality of medical care
  - Dissatisfaction with out-of-pocket medical costs
  - Dissatisfaction with out-of-pocket prescription drug costs
- Statistical analysis:**
  - Exploratory factor analysis (EFA) was conducted to identify the relationship and structure of variables.
  - Separate probit structural equation models (SEMs) were then estimated for each of four binary outcomes, adjusting for demographic and characteristics.
  - As a sensitivity analysis, a seemingly unrelated regression (SUR) model estimated all four outcomes simultaneously.

## Results

- A total of 5,297 individuals were included in final analytic cohort. Sixteen percent of the study cohort was under 65 years old, 58.2% were female, 73.7% were non-Hispanic White, 10.2% were non-Hispanic Black, 11.4% were Hispanic.
- Five empirically derived domains were identified.
- Coverage-Related Medication Adjustment* was associated with worse self-rated health (standardized  $\beta = 0.22$  [0.07, 0.38]) and lower prescription cost satisfaction (standardized  $\beta = 0.39$  [0.25, 0.52]).
- Cost-Related Healthcare Rationing* was associated with lower satisfaction with quality of care (standardized  $\beta = 0.30$  [0.08, 0.53]).
- Perceived Prescription Cost Increase* was associated with lower satisfaction with medical costs (standardized  $\beta = 0.10$  [0.02, 0.19]) and prescription drug costs (standardized  $\beta = 0.31$  [0.25, 0.36]).
- Financial and Insurance Coverage Constraints* was associated with lower satisfaction with medical costs (standardized  $\beta = 0.47$  [0.16, 0.78]).
- Based on a SUR, factors 1 through 4 were each significantly associated with lower satisfaction with prescription drug costs. Associations between factors and the remaining three outcomes were not statistically significant in the SUR model, suggesting that the simultaneous estimation of correlated outcomes may have redistributed shared variance toward the cost satisfaction outcome.

## Limitations

- The mapping exercise was based on measures available in the MCBS survey. Mapping exercises using other national surveys may yield a different mapping.
- We only included Medicare beneficiary who participated in all three rounds of MCBS survey, regardless the rotating panel design, losing the generalizability to the sample of respondents to the MCBS survey.

Figure 2. Illustration of methods

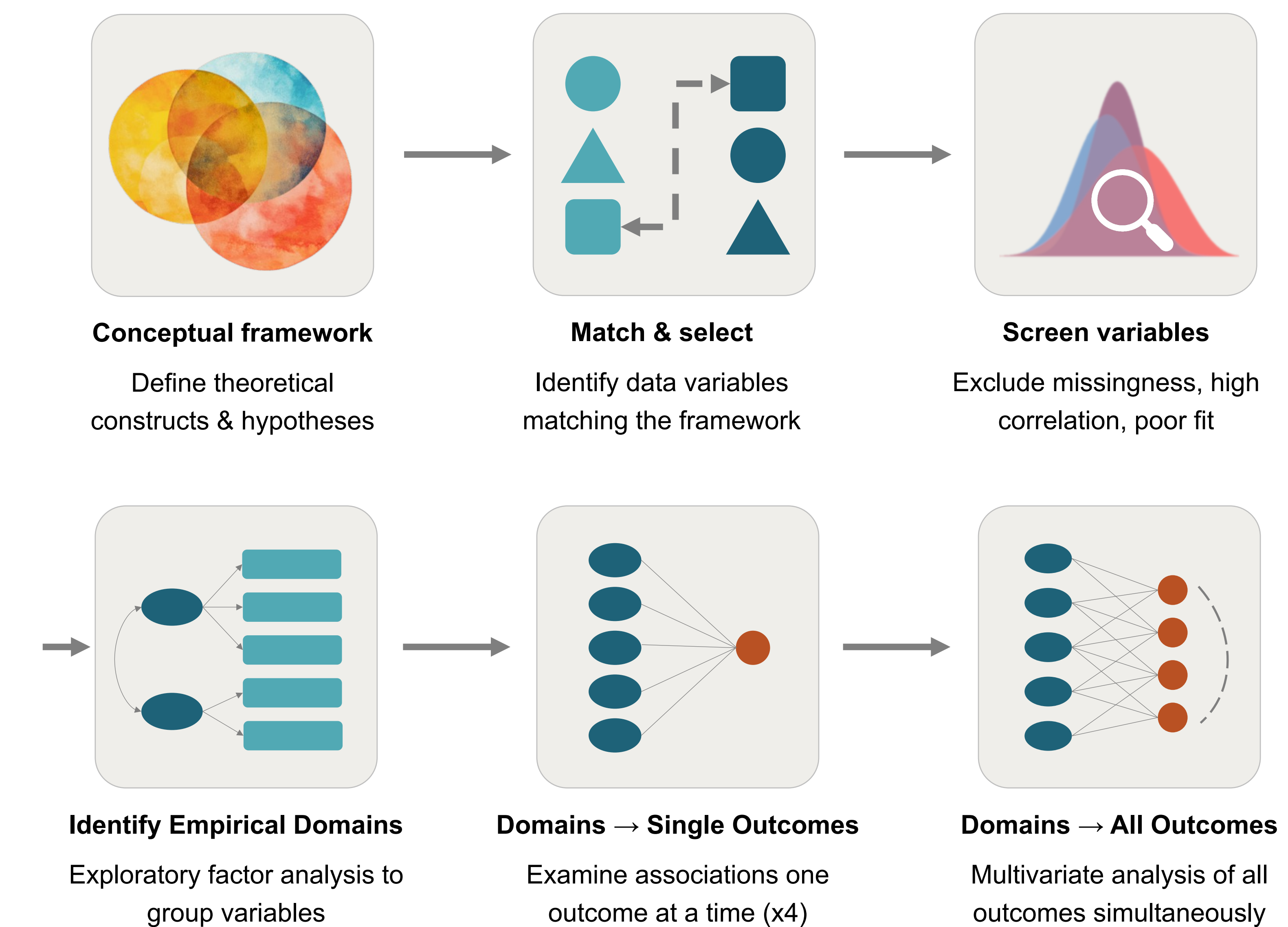


Figure 3. Association between empirically derived domains and outcomes

