

Adapting the Sustainable High-Utilization Team Model in Four Diverse Sites

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Acknowledgements

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- The PICO national network initiated the learning network that laid the foundation for this project
- Technical assistance partners are Rutgers CSHP, CCHP & the Center for Health Care Strategies
- Our clinical partners coordinate care for the patients, collect project data, and provided insights for the analysis



Outline

- Introduction
- The Camden Model
- Intervention adaptation
- Patient characteristics
- Changes in selected outcomes
- Summary, next steps, reflections

Introduction

CMS Innovation Center Health Care Innovation Awards

- “...compelling new ideas to deliver better health, improved care and lower costs to people enrolled in Medicare, Medicaid and Children's Health Insurance Program (CHIP), particularly those with the highest health care needs.” (innovation.cms.gov)

Project Elements

- Camden Coalition of Healthcare Providers high-utilizer care coordination model
- “Adapt” not “replicate”
- Establish a learning network
- Demonstrate effectiveness
- Achieve sustainability

Data & Measures

- Data collected by care management staff at or shortly after each encounter at four sites (11/12 to 9/14) and Camden (11/12 to 5/14)
- N = 1,110 (range 82 to 400 per site)

| Care management tracking | Baseline | Monthly | Exit |
|--|----------|---------|------|
| Demographics & payer | X | | |
| Hospital admissions & emergency department (ED) visits | X | | |
| Chronic conditions (CCW) ¹ | X | | |
| General health status and unhealthy days | X | X | |
| Social comorbidities | X | X | |
| Patient-centered care coordination (CPCQ) ² | X | | X |

¹ The 27 chronic conditions in the Chronic Conditions Warehouse (www.ccwdata.org/web/guest/home).

² Client Perception of Coordination Questionnaire (McGuiness 2003, <http://dx.doi.org/10.1093/intqhc/mzg043>).

The Camden Model

MEDICAL REPORT

THE HOT SPOTTERS

Can we lower medical costs by giving the neediest patients better care?

BY ATUL GAWANDE

If Camden, New Jersey, becomes the first American community to lower its medical costs, it will have a murder to thank. At nine-fifty on a February night in 2001, a twenty-two-year-old black man was shot while driving his Ford Taurus station wagon through a neighborhood on the edge of the Rutgers University campus. The victim lay on the street beside the driver's side, as if the car had been crushed. A neighborhood cop, a nurse, a volunteer, and a volunteer approached to see if the

injured man was a well-known family physician who had grown up in a bedroom suburb of Philadelphia. As a medical student at Robert Wood Johnson Medical School, in Piscataway, he had planned to become a neuroscientist. But he volunteered once a week in a free primary-care clinic for poor immigrants, and he found the work there more

rewarding than the crime mapping and hot-spotting that he had done in the nineties, which centered on crime and focusing resources on hot spots. The reform panel at the Camden Police Department created crime maps, and he and his colleagues shifted to focus on hot spots and times.

When the police used the crime maps, Brenner managed to persuade Camden's mayor to let him have access to the police records. He transferred



CHAPTER 114

AN ACT establishing a Medicaid Accountable Care Organization Demonstration Program supplementing Title 30 of the Revised Statutes.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

MacArthur Foundation

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MacArthur Fellows Program

MACARTHUR FELLOWS / MEET THE CLASS OF 2013

Jeffrey Brenner

Primary Care Physician

Founder and Executive Director

Camden Coalition of Healthcare Providers

News Release

Institute of Medicine Elects 70 New Members and Associates

Released: 10/20/2014

The Institute of Medicine (IOM) today announced the names of 70 new members during its 44th annual meeting. Election to the IOM is considered one of the highest honors in health and medicine and recognizes individuals who have demonstrated c

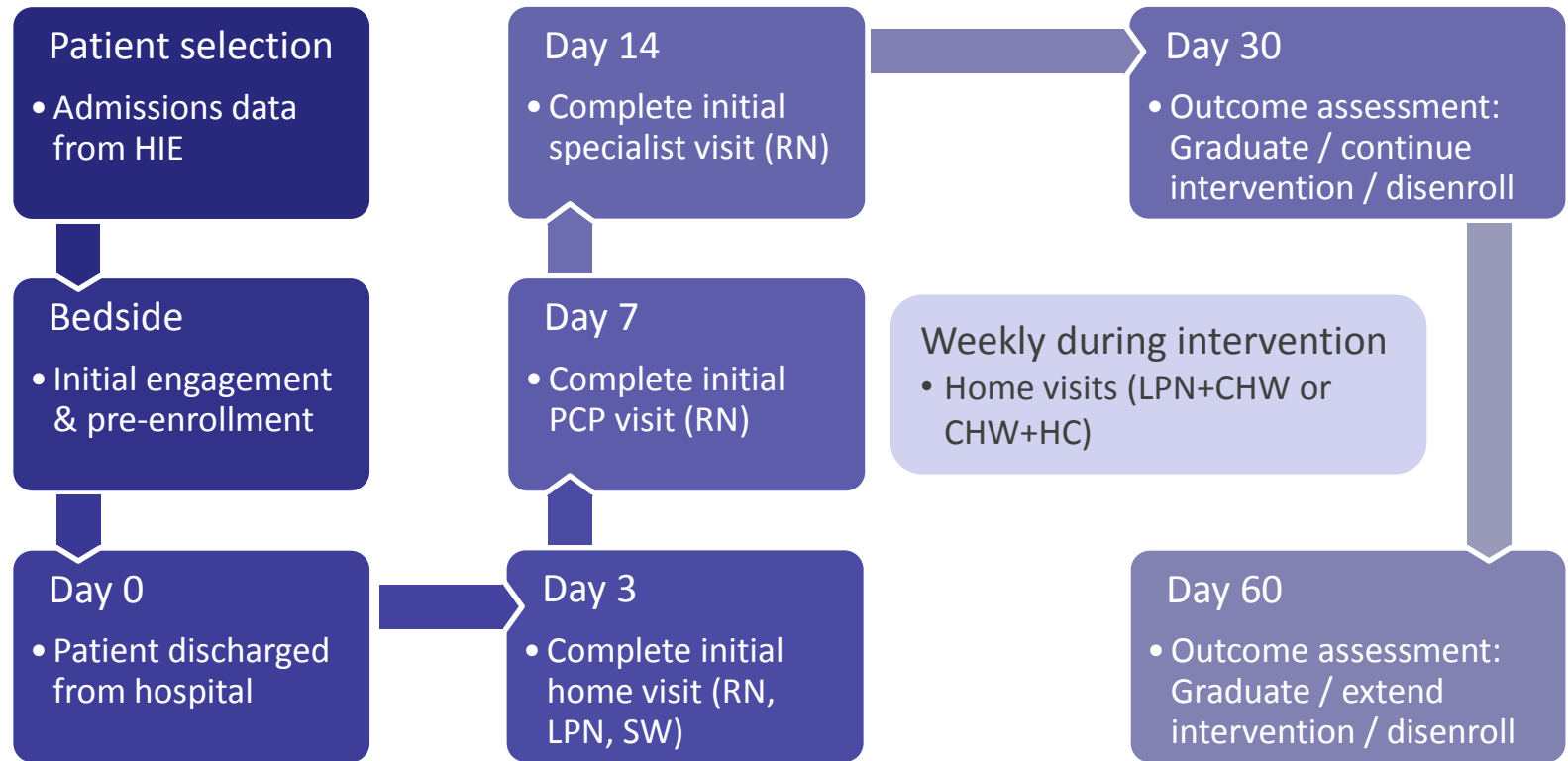
The Camden Model ¹

Enrollment criteria:

- 2+ admissions in 6 months
- Medical and/or social comorbidities
- Selected exclusions

Team composition:

- Nurse (RN) team leader
- Social worker (SW)
- Licensed practical nurse (LPN)
- Community health workers (CHW)
- AmeriCorps Health Coaches (HC)



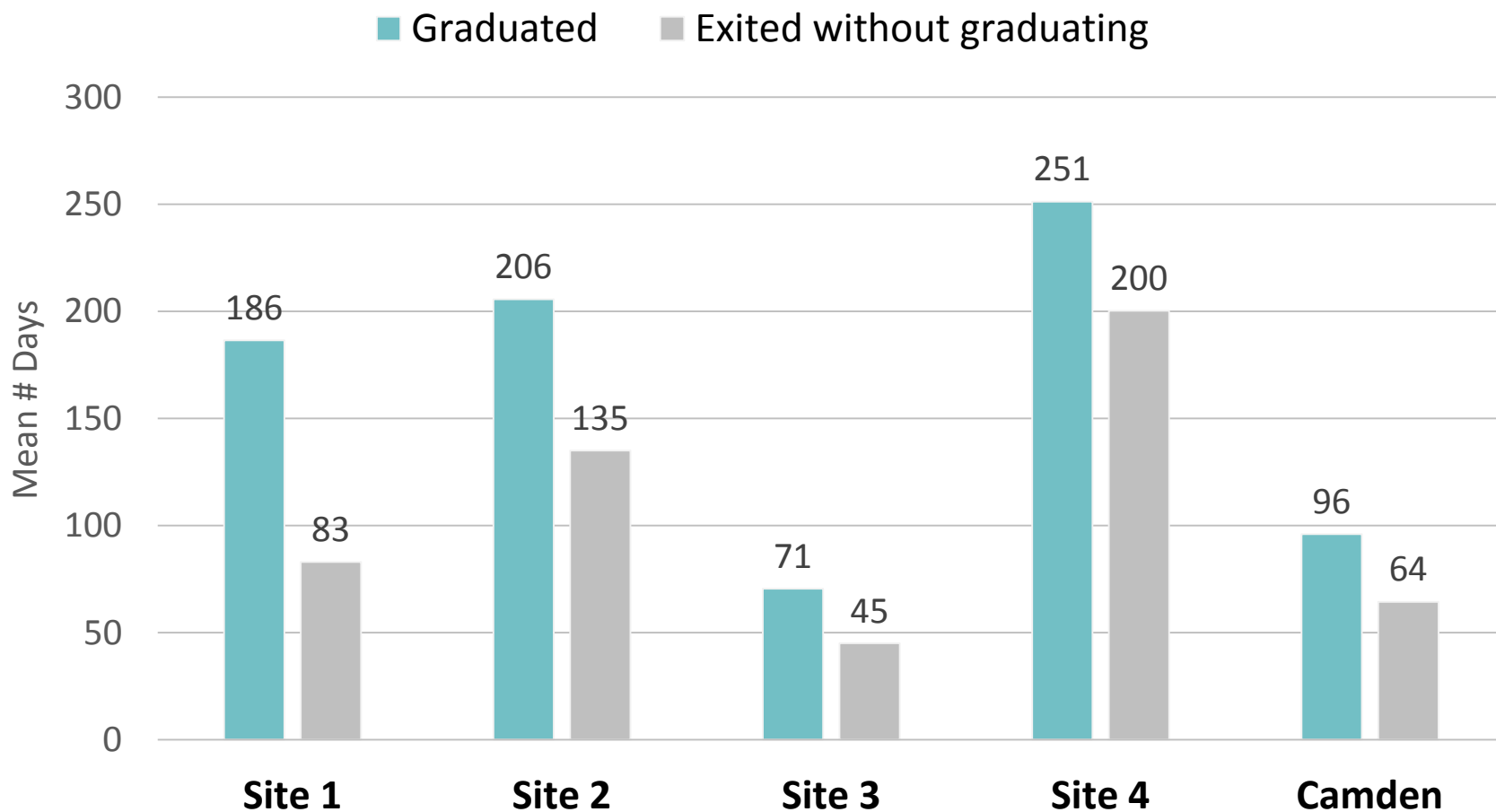
¹ As presented to the clinical partners at start of program; model continues to undergo adjustments.

Intervention Adaptation

Enrollment Criteria

| Program | Inclusion | Exclusion |
|---------------|---|---|
| Camden | 2+ admissions in 6 months, with medical and/or social comorbidities | OB, cancer, certain surgeries, chronic conditions w/ limited treatment, mental health as sole Dx, Age >80, receiving care management services elsewhere |
| Site 1 | 2+ admissions in 6 months and 2+ chronic conditions | OB, cancer, maternity, mental/ behavioral health as 1° Dx |
| Site 2 | 2+ admissions in 6 months or 3+ in a year, Medicaid/ Medicare/ uninsured | OB, terminal cancer |
| Site 3 | 3+ visits in 6 months (inpatient or ED) | OB, cancer, HIV, personality disorder or substance abuse as 1° Dx, certain surgeries, diminished capacity, violent/ sex offenses |
| Site 4 | 2+ admissions in 6 months (but allowing exceptions if multiple ED visits + chronic diseases + meds) | Behavioral health as 1° Dx, terminally ill |

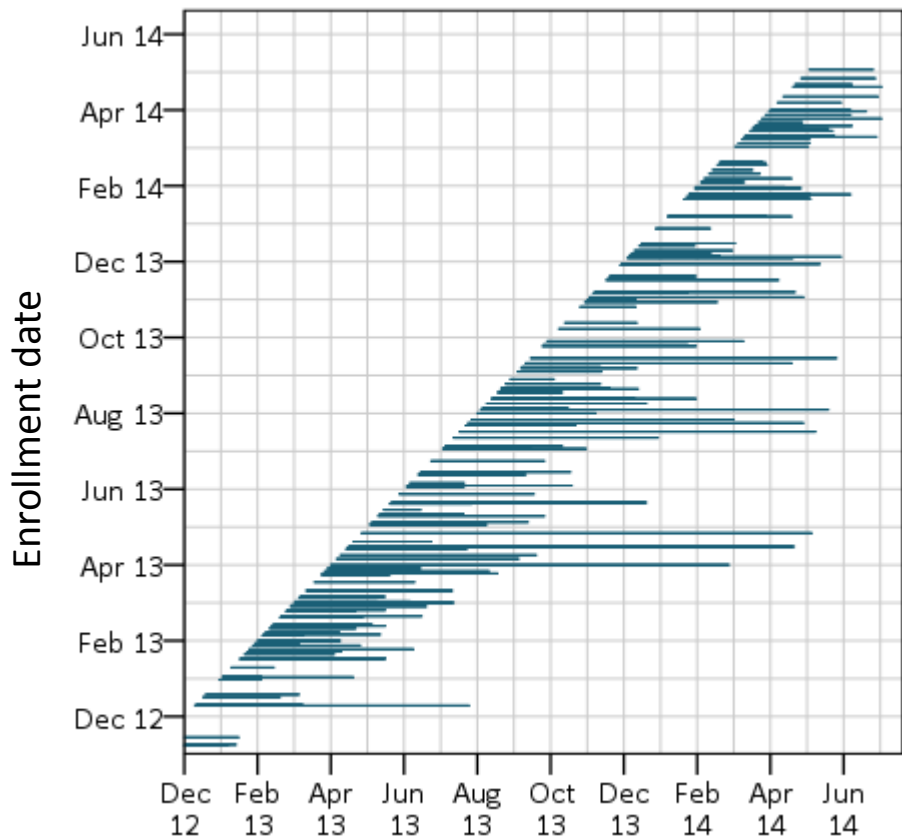
Days from Enrollment to Exit



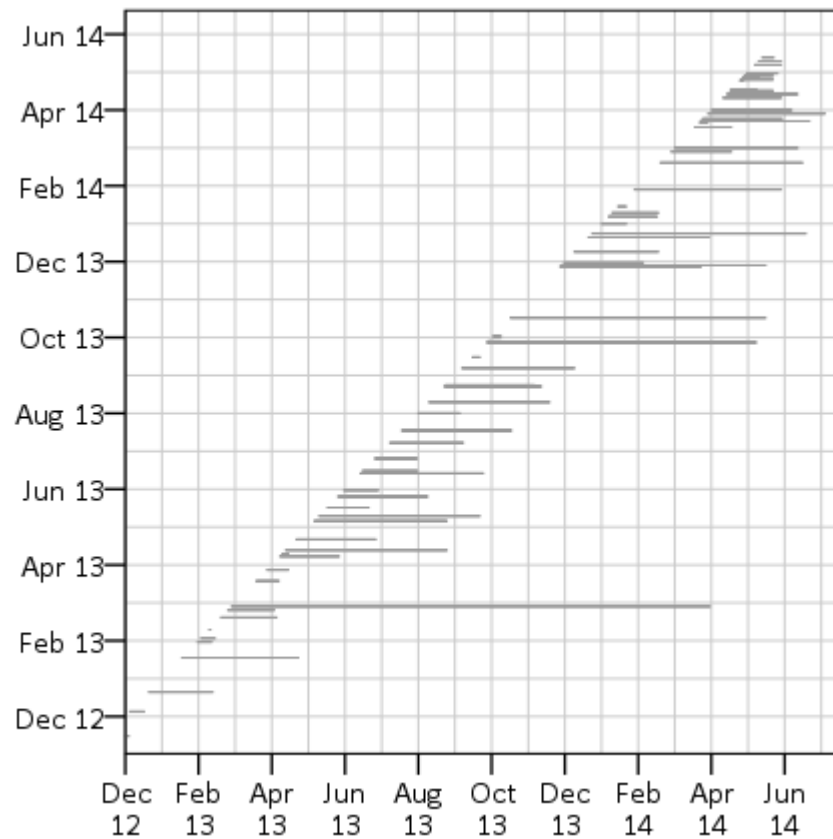
Days from Enrollment to Exit

Camden

Graduated



Exited without Graduating

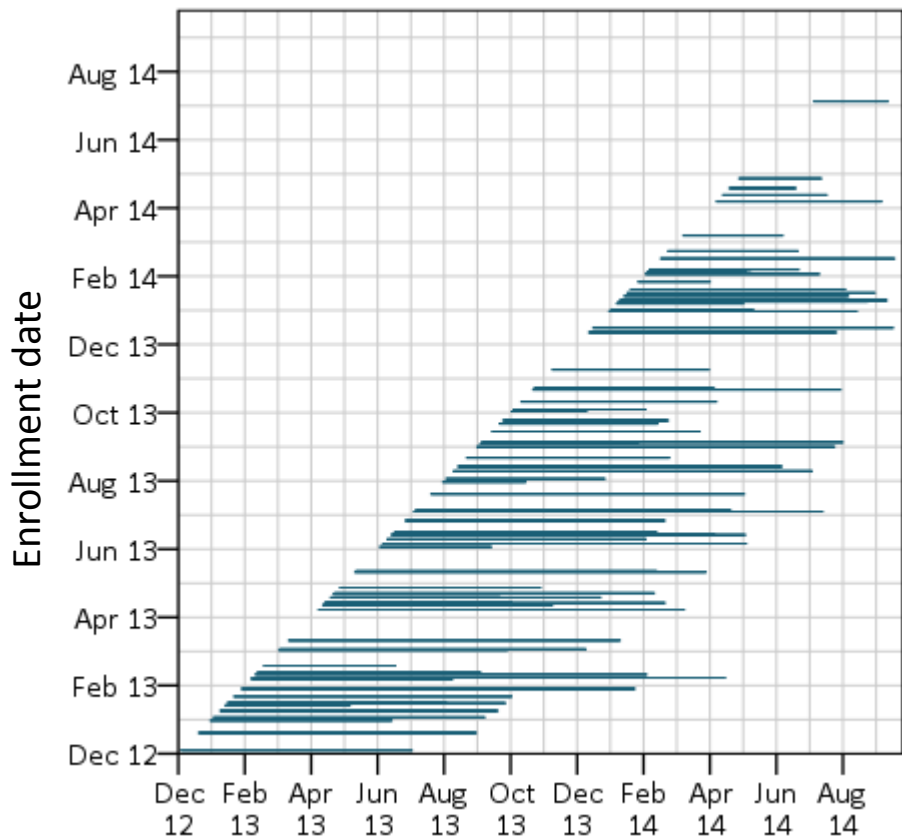


Program timeline: Entry and exit dates of enrolled patients

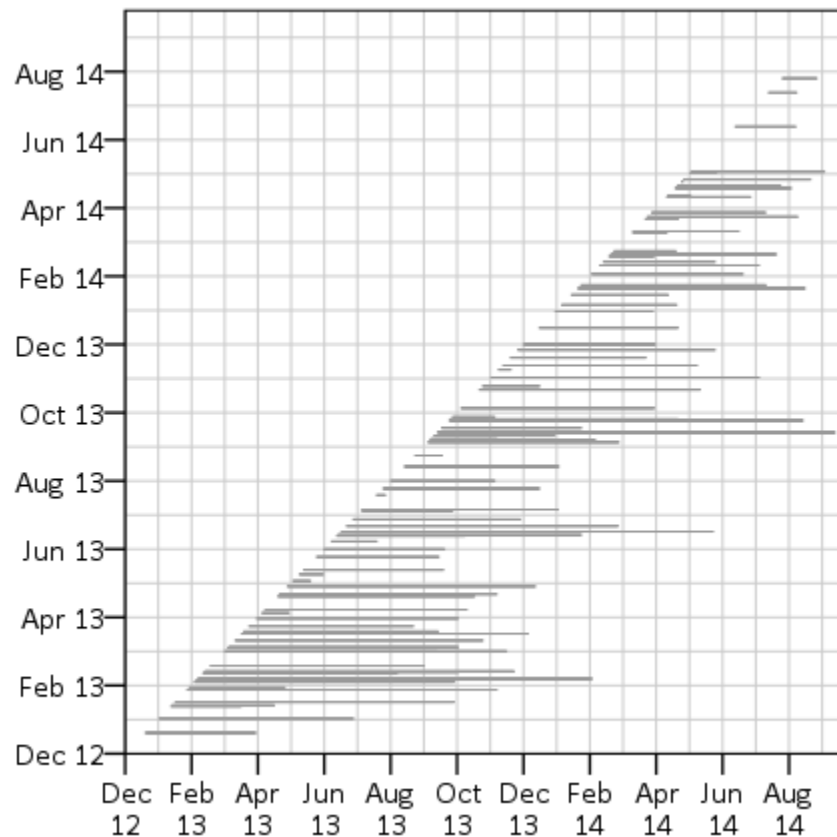
Days from Enrollment to Exit

Site 2

Graduated



Exited without Graduating

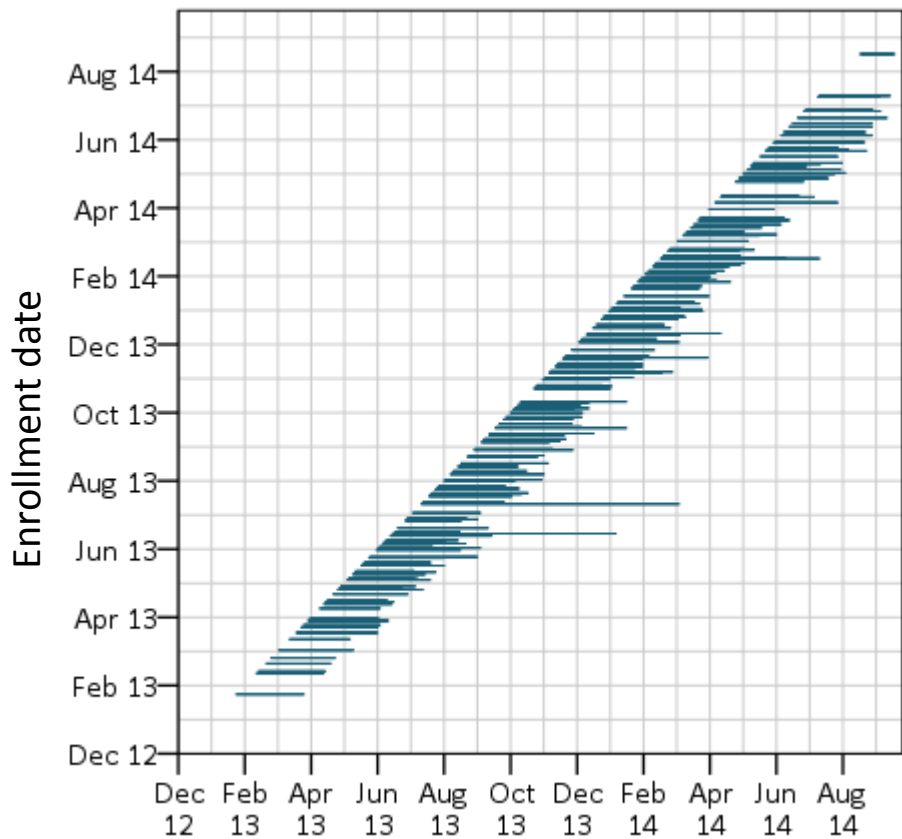


Program timeline: Entry and exit dates of enrolled patients

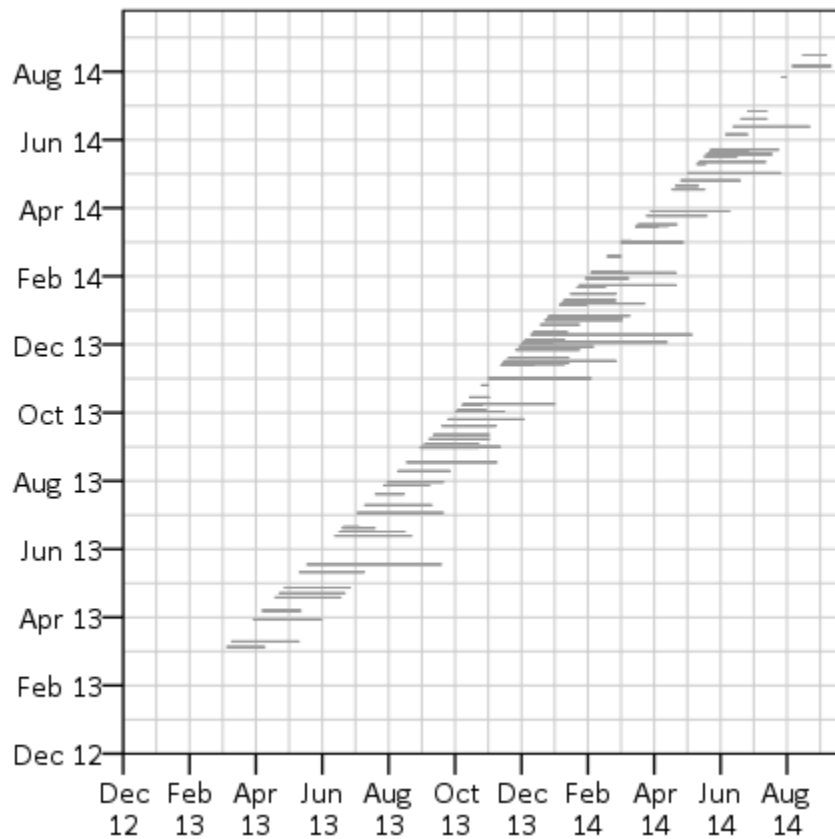
Days from Enrollment to Exit

Site 3

Graduated

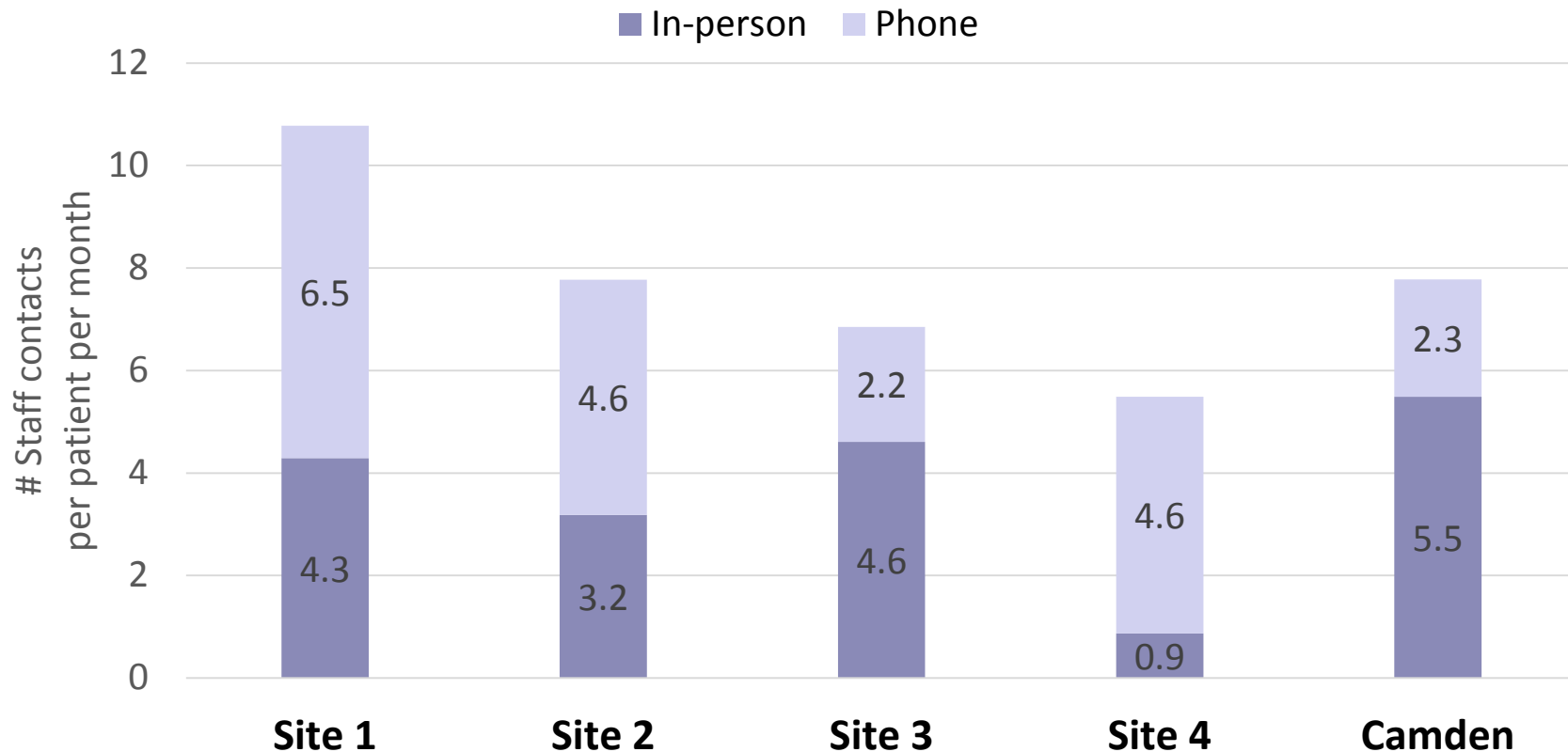


Exited without Graduating



Program timeline: Entry and exit dates of enrolled patients

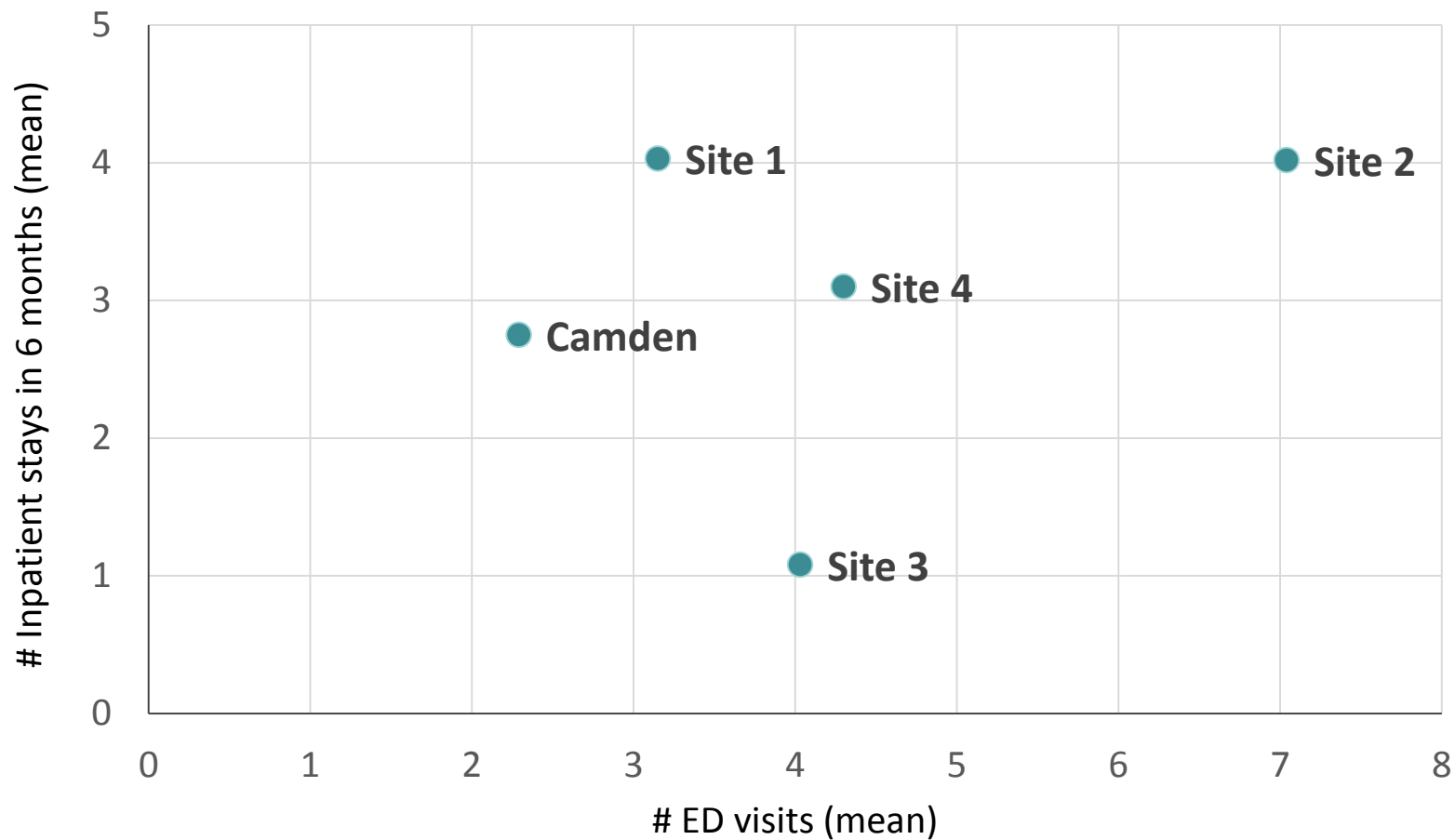
Staff Contacts Per Patient-Month, by Mode



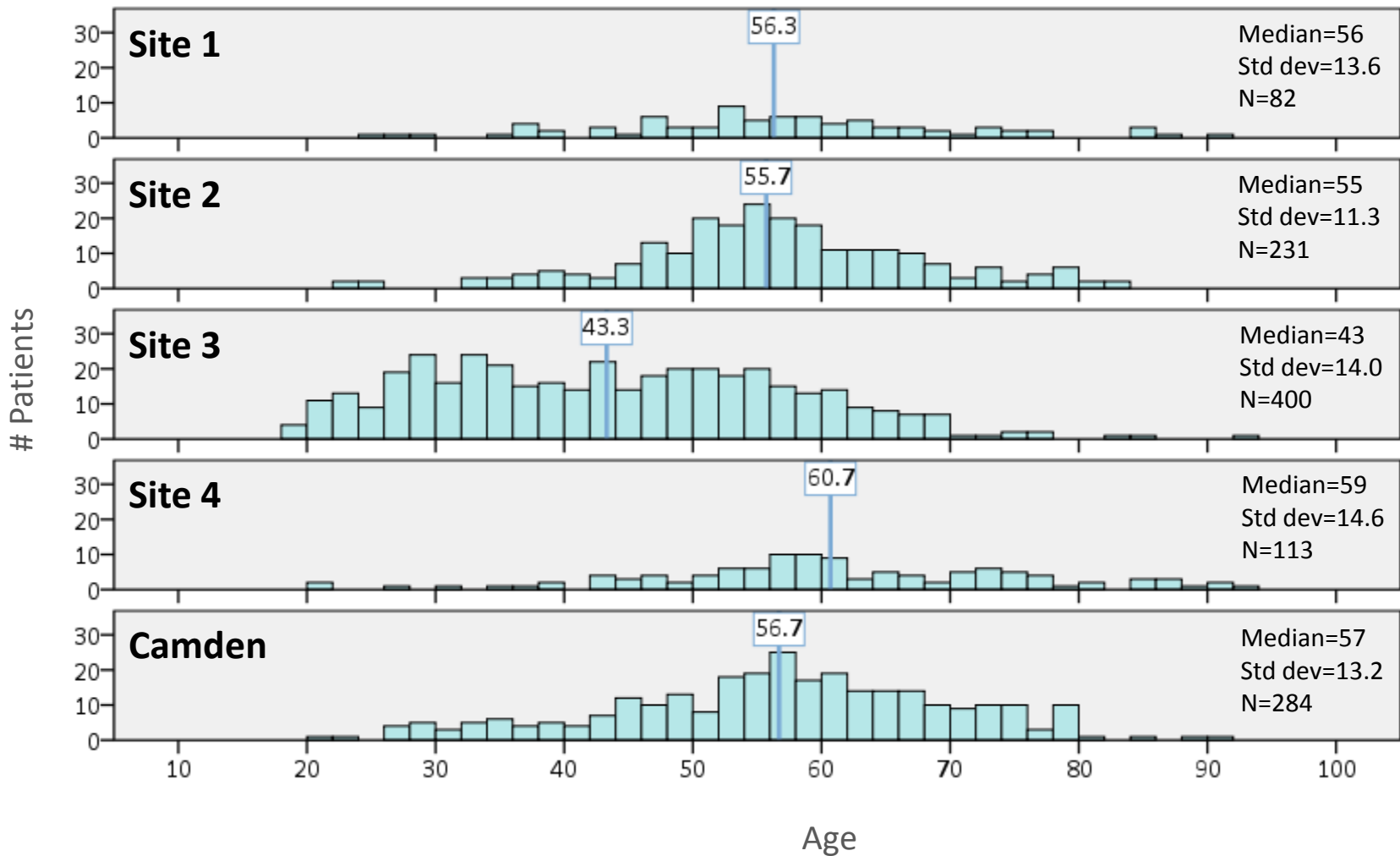
Notes: Total staff contacts (in-person, telephone, etc.) with or without patient present per 30 days of enrollment; excluding patients in intervention for <30 days.

Patient Characteristics at Enrollment

Inpatient Stays & ED Visits 6 mo. Before Enrollment



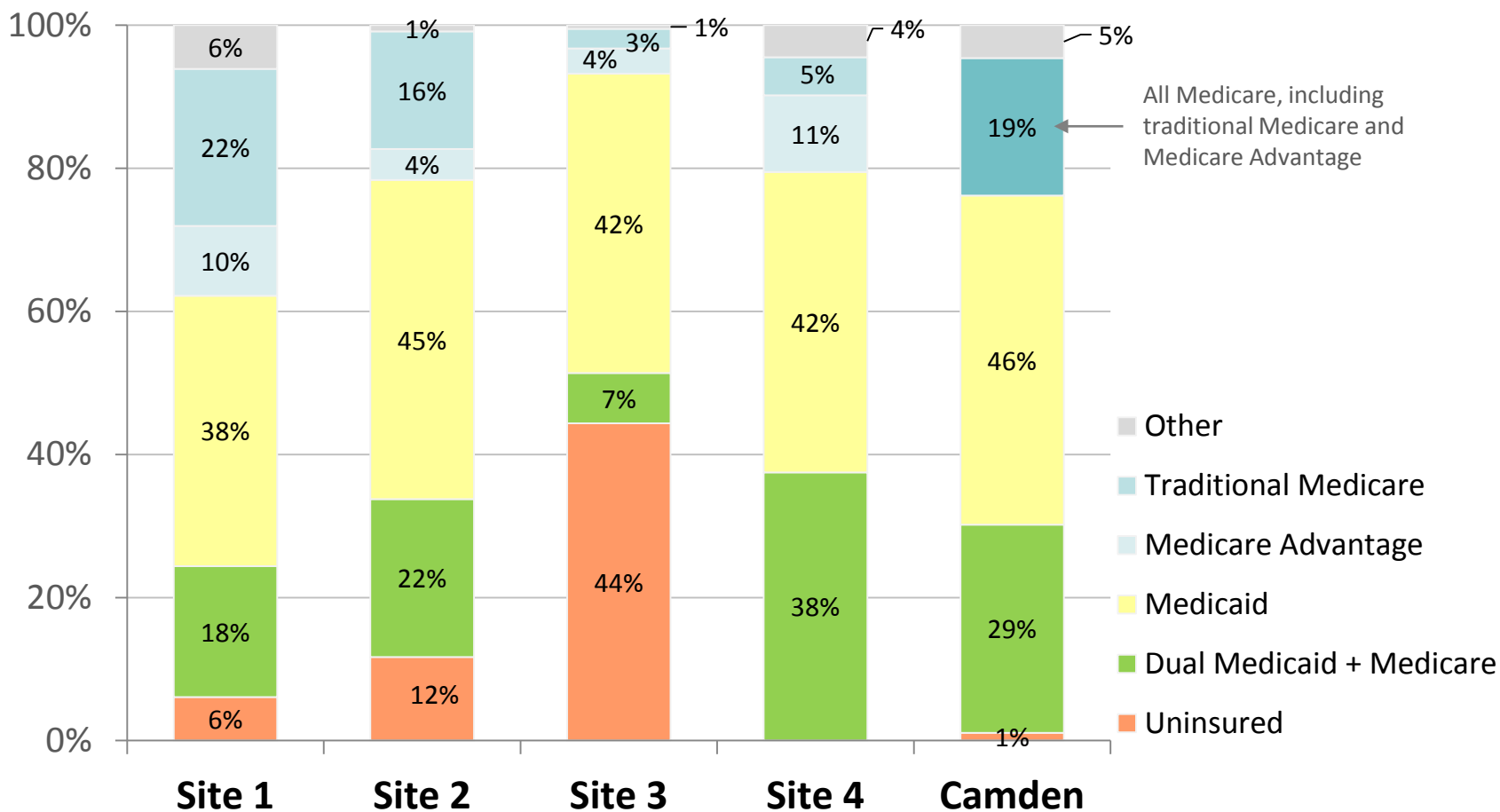
Age at Enrollment



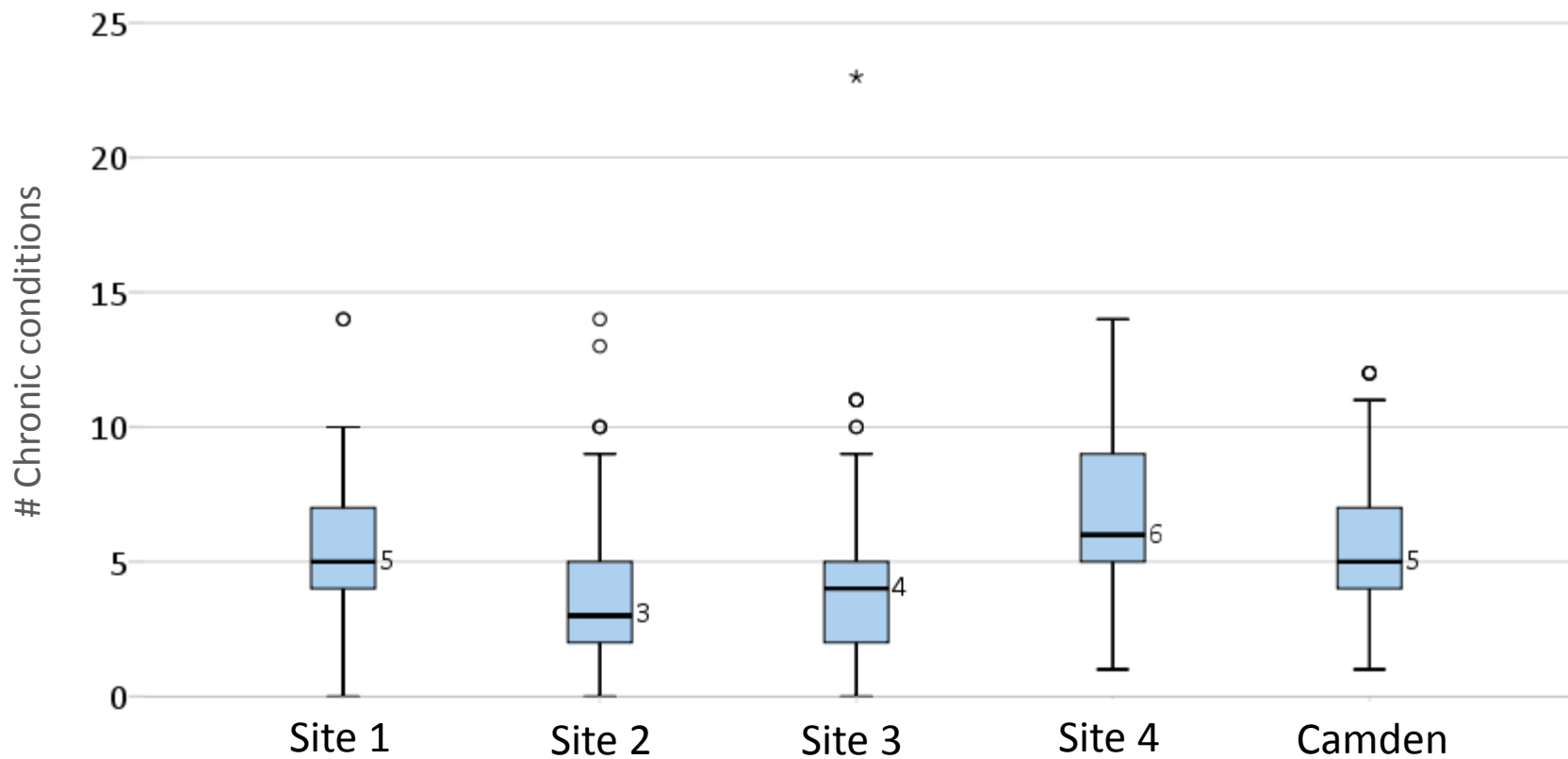
Patient Demographics

| | Site 1 | Site 2 | Site 3 | Site 4 | Camden |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|
| Age | | | | | |
| Mean (std dev) | 56.3 (13.6) | 55.7 (11.3) | 43.3 (14.0) | 60.7 (14.6) | 56.7 (13.2) |
| Race & Ethnicity | | | | | |
| % Hispanic | 41.5 | 1.7 | 31.5 | 22.1 | 41.9 |
| % Non-Hisp black | 15.9 | 71.4 | 30.7 | 37.2 | 47.5 |
| % Non-Hisp white | 35.4 | 25.1 | 27.8 | 27.4 | 8.5 |
| % Other / unknown | 7.2 | 1.8 | 10.0 | 13.3 | 2.1 |
| Gender | | | | | |
| % Female | 45.1 | 50.2 | 70.8 | 54.0 | 48.6 |

Coverage Status, by Site



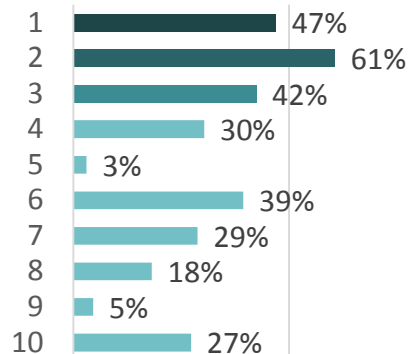
Number of Chronic Conditions



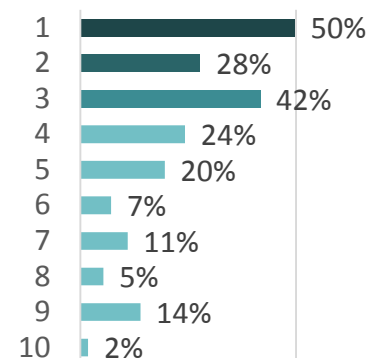
Top 10 Chronic Conditions, by Site

1. Hypertension
2. Diabetes
3. Depression
4. Asthma
5. Hyperlipidemia
6. Heart failure
7. COPD
8. Chronic kidney disease
9. Arthritis
10. Stroke

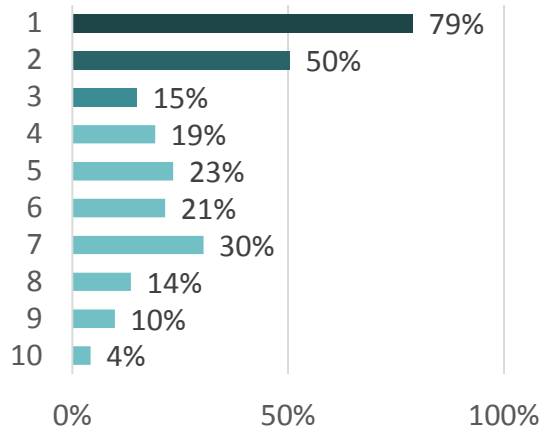
Site 1



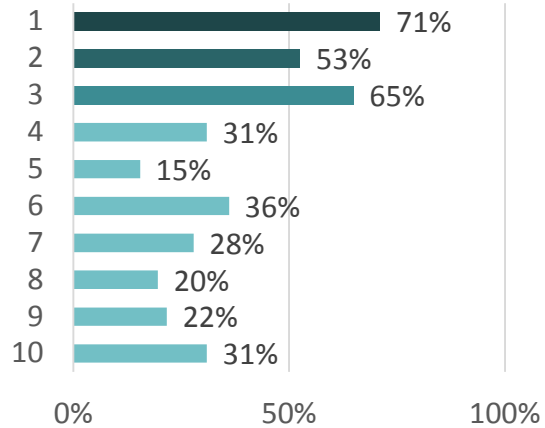
Site 3



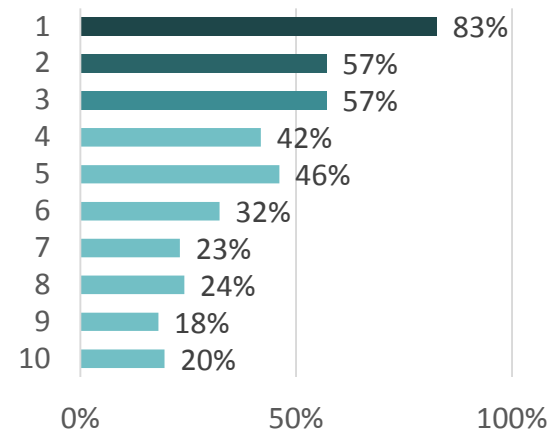
Site 2



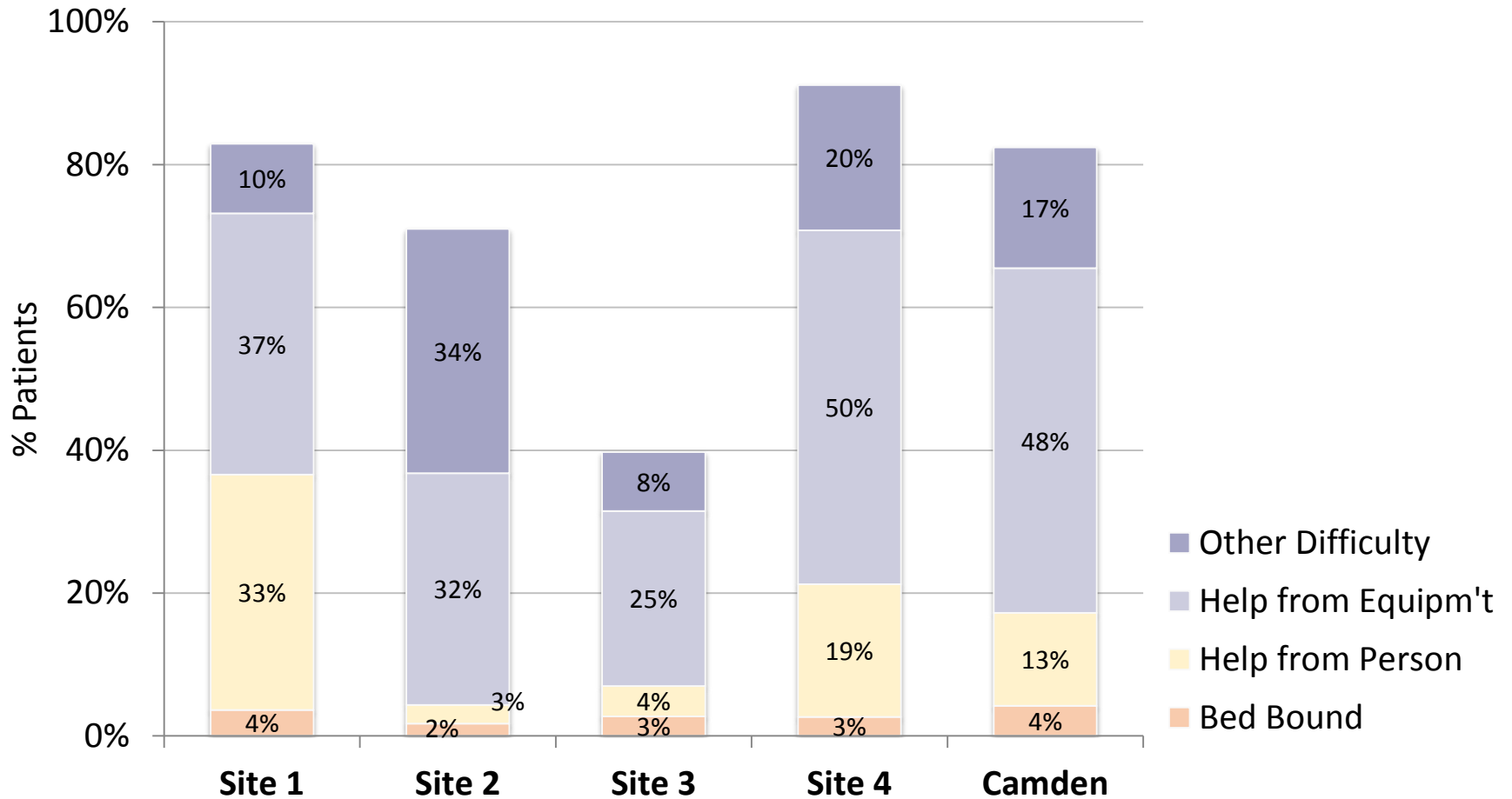
Site 4



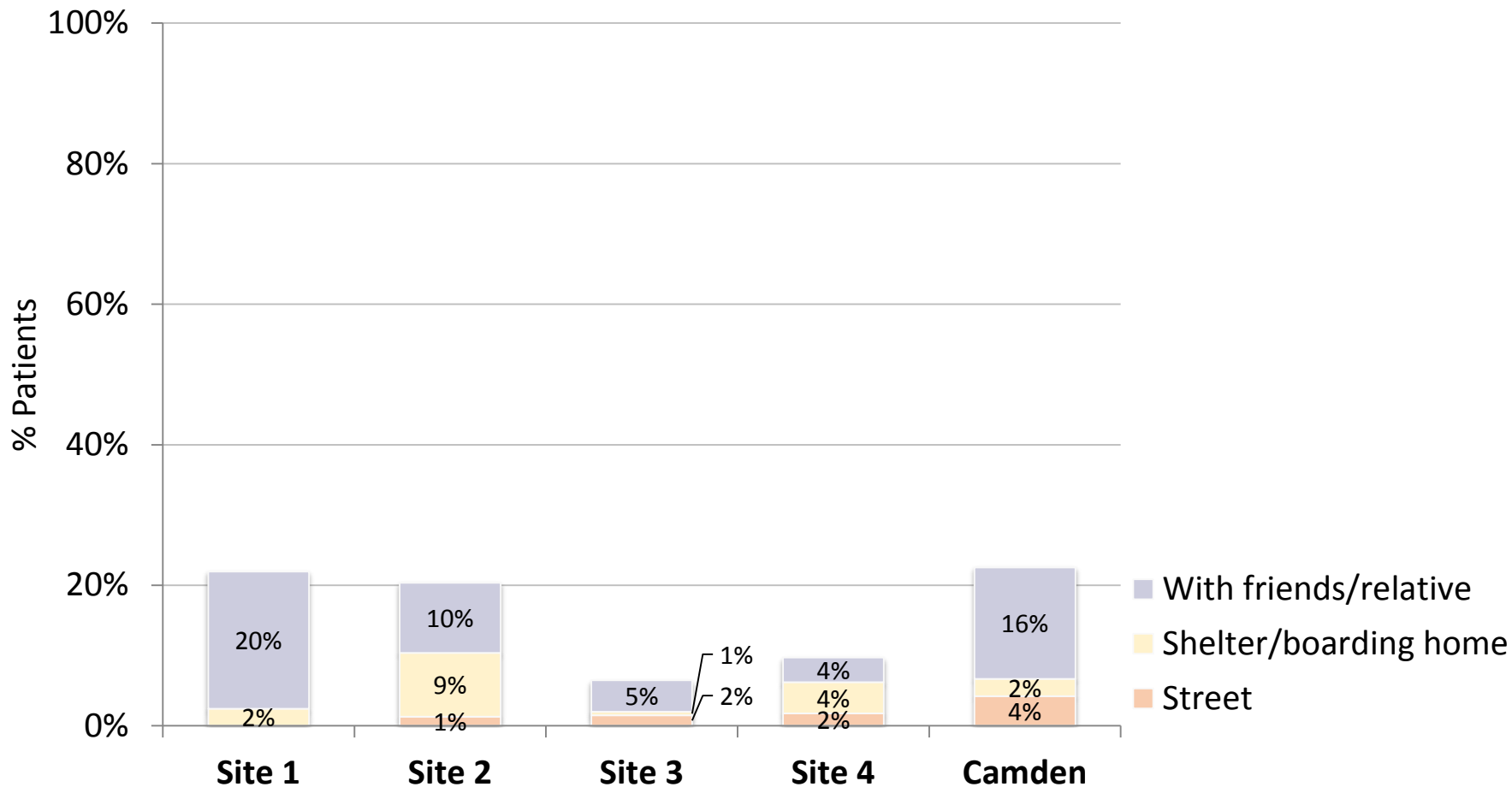
CCHP



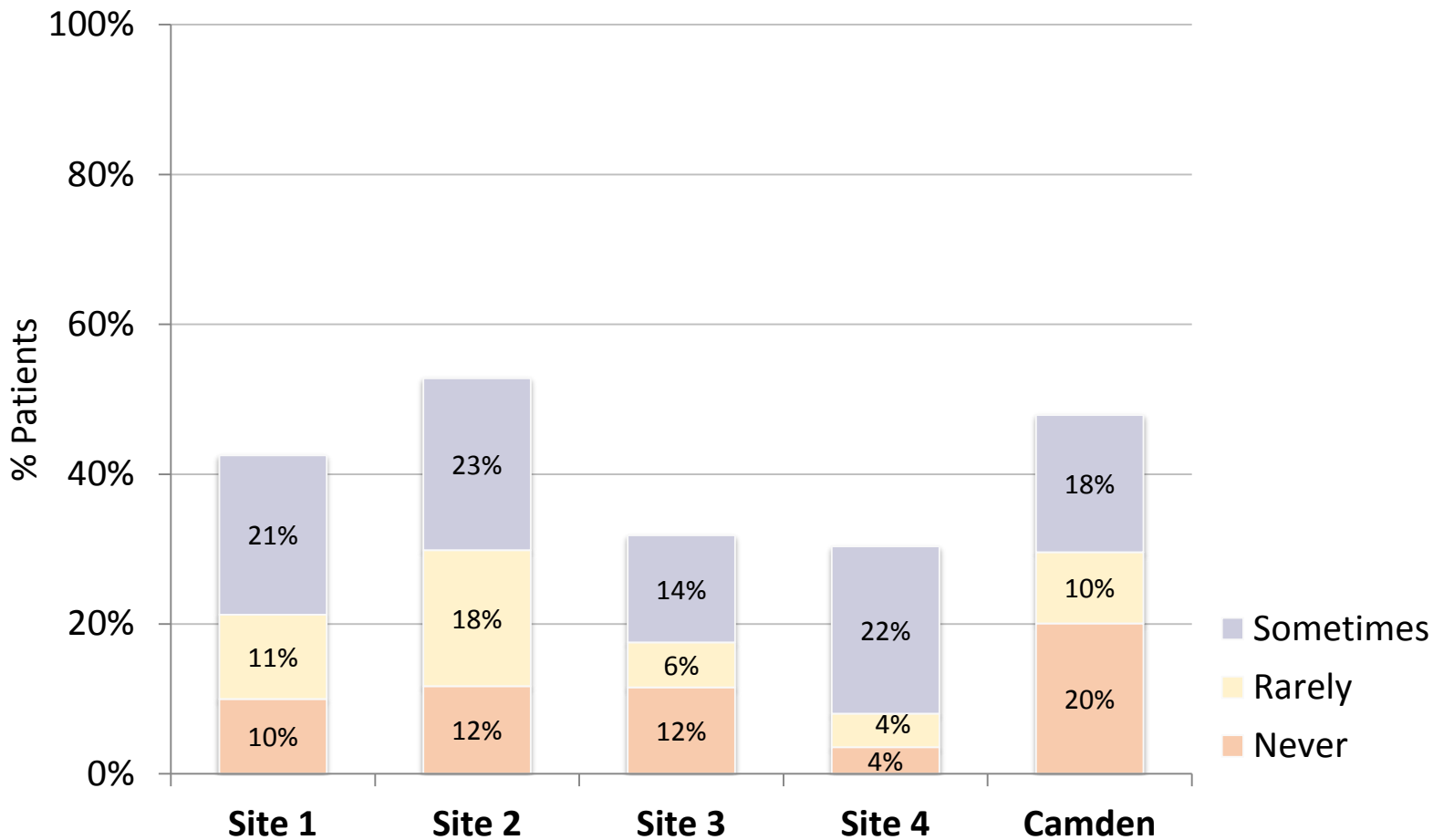
Mobility Difficulty at Enrollment



Housing Difficulty at Enrollment

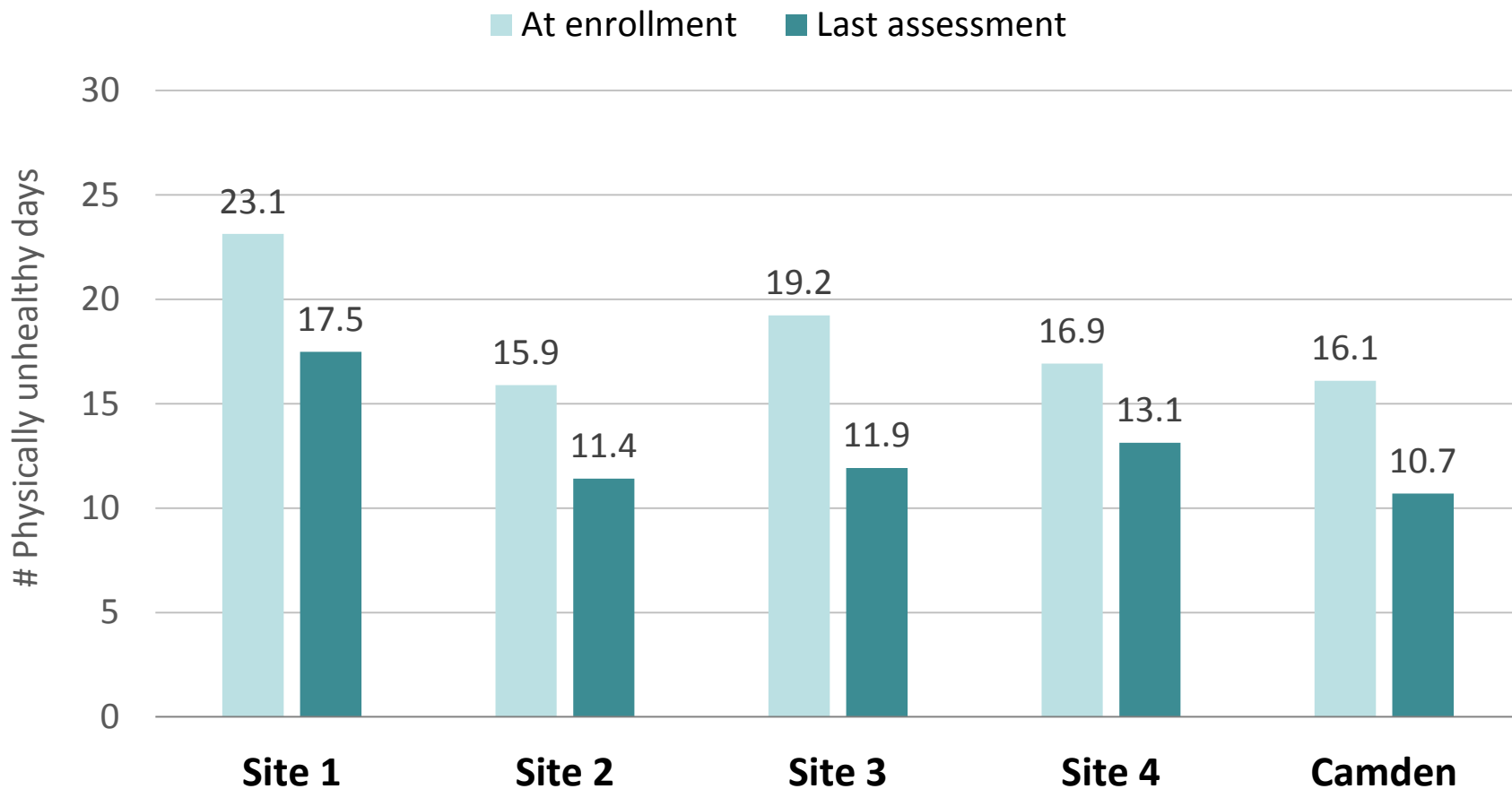


Social Support Available at Enrollment

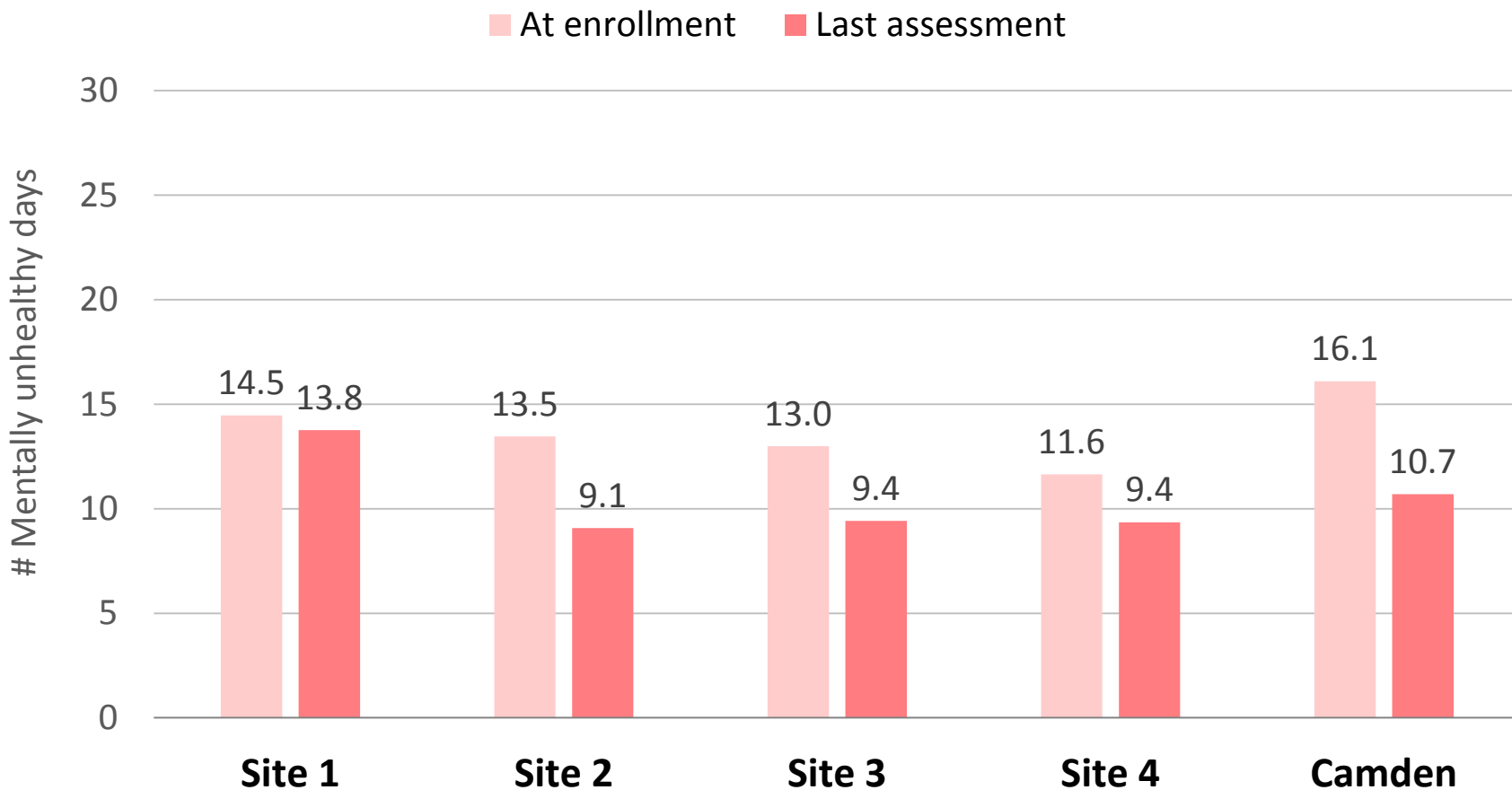


Changes in Selected Outcomes

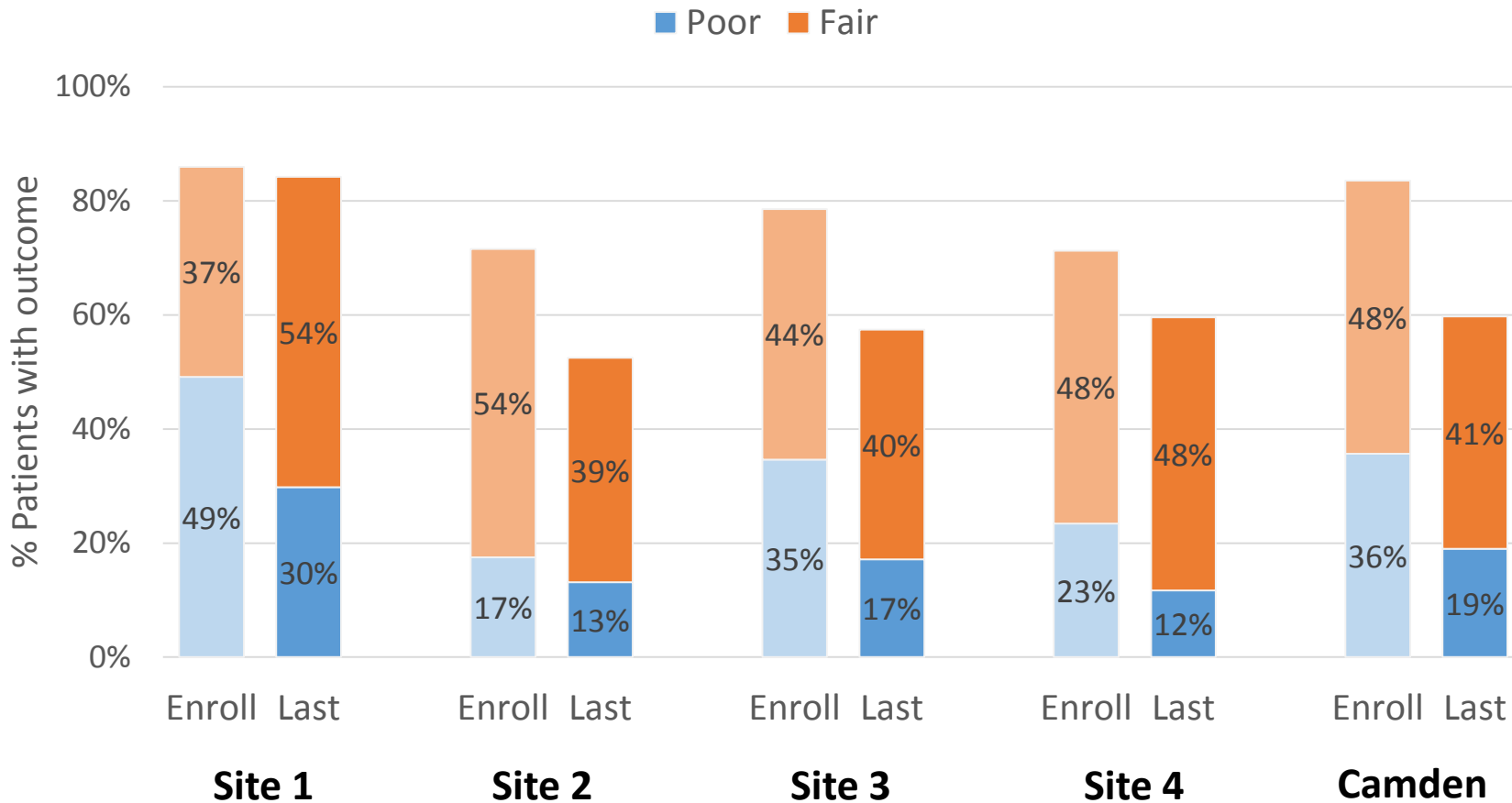
Days (in Prior 30) Feeling Physical Unhealthy



Days (in Prior 30) Feeling Mentally Unhealthy

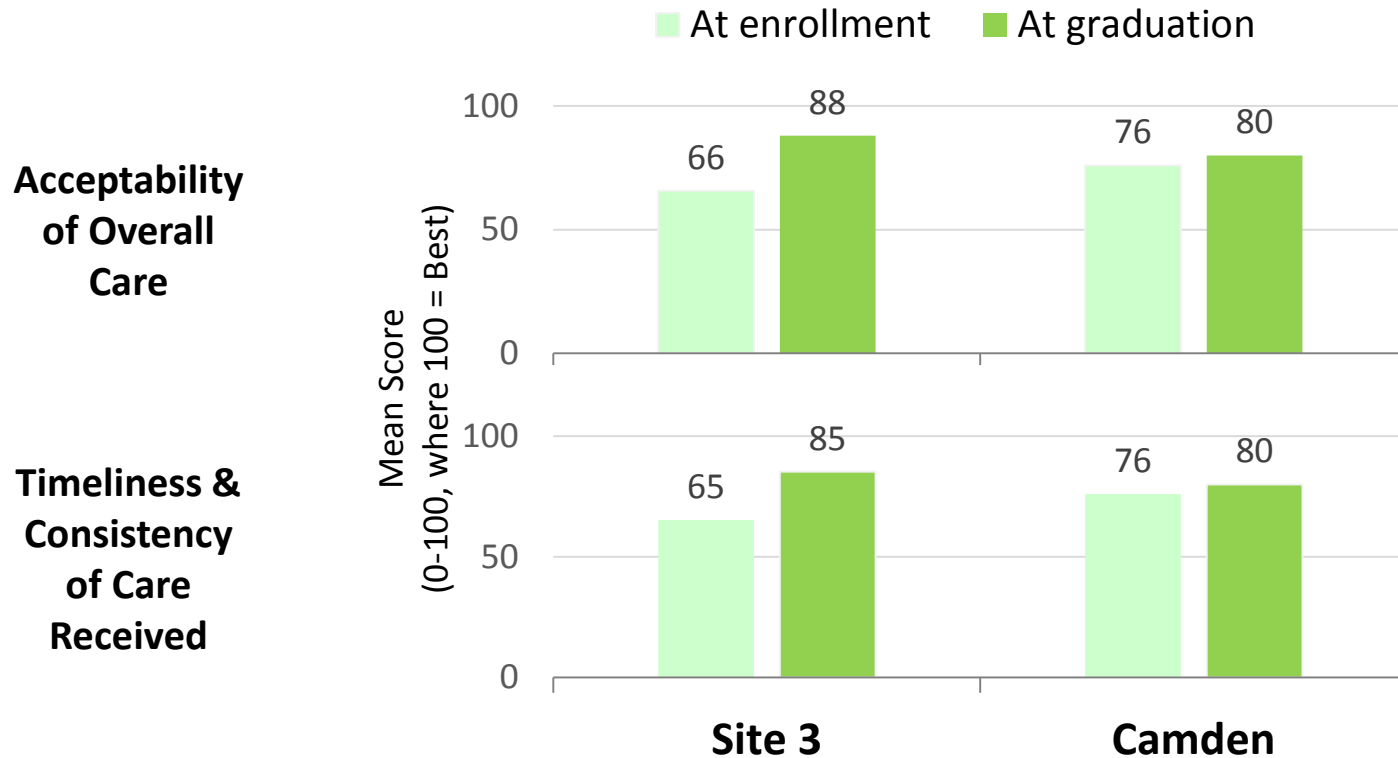


General Health Rating, % Fair or Poor



Patient Perceived Care Coordination (CPCQ)

Graduates Only



Note: Sites with >20% missing data are not shown.

Summary

- Unhealthy population, high hospital use, substantial social challenges
- Variations across sites
 - Enrollment criteria
 - Patient characteristics
 - Intervention duration and intensity
- Outcome indicators trend toward improvement
 - Cannot rule out regression to the mean
 - Some variability across sites

Reflections

- Camden model not protocolized when project began
 - Has evolved a great deal
 - Presently undergoing a randomized clinical trial
- Variations in adaptation driven by
 - Environment (e.g., Medicaid program difference)
 - Organizational context (e.g., for-profit, FQHC, hospital)
 - Leadership

Next Steps

- Intervention continues through June 2015
- Evaluation and documentation
 - Continue to collect intervention data
 - Document patient and staff stories
 - Benchmark hospital use and costs for all payers over time
 - Evaluate process and Medicare use and cost (Mathematica)
- Sustainability planning
 - Philanthropic support
 - Medicaid MCO contracting
 - Institutional support

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