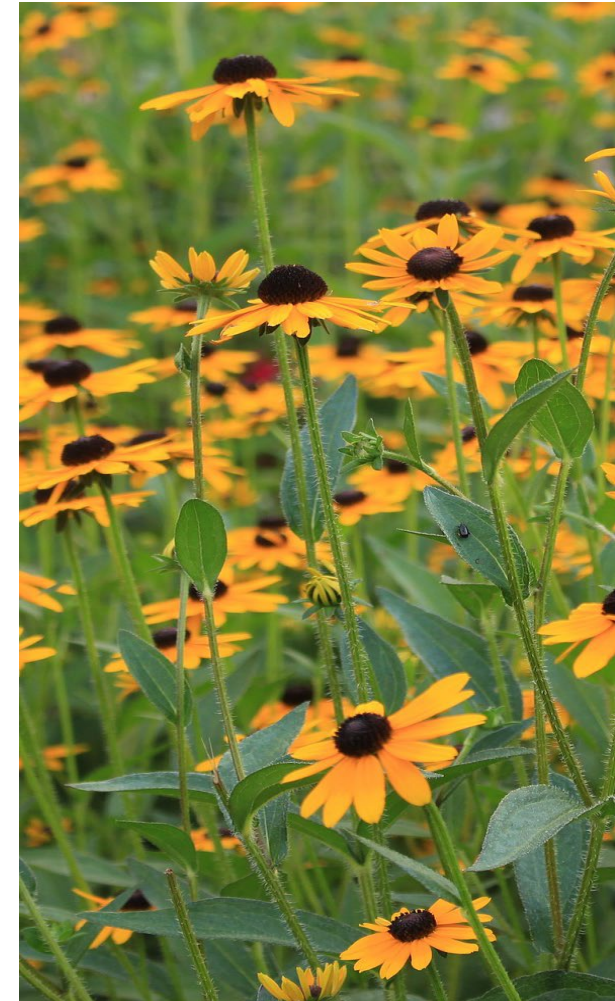




The Hilltop Institute

Health Service Utilization of Medicaid Beneficiaries Receiving Supportive Housing Services

MaryAnn Mood
AcademyHealth
July 2, 2024



UMBC

The Assistance in Community Integration Services (ACIS) Pilot Program

- ACIS
 - Authorized through Maryland's §1115 HealthChoice Waiver in late 2017
- Goals of ACIS
 - Reduce unnecessary or inappropriate utilization of health services
 - Improve health outcomes for target populations
 - Improve community integration
- Eligibility Criteria/Target Population
 - Full Medicaid beneficiary
 - Health: repeated emergency department (ED) visits OR chronic conditions
 - Housing: homelessness OR institutional risk

ACIS Services

- ACIS Services
 - Housing case management
 - Tenancy-based case management
- Programmatic Structure
 - Lead entities (LEs) and participating entities (PEs)
 - Per member per month (PMPM) payment structure

Research Questions



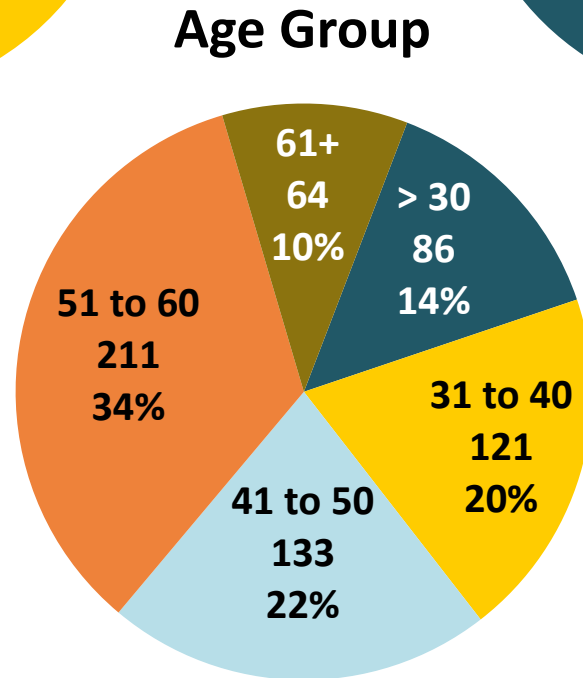
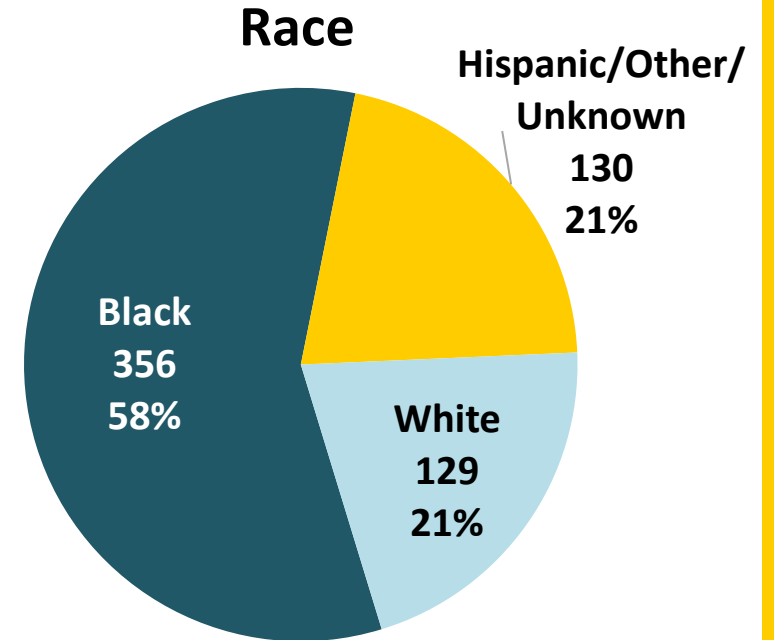
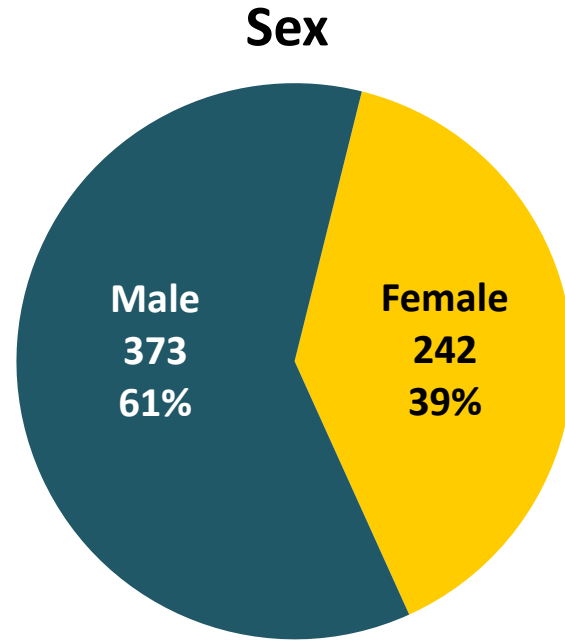
- How effective were LEs at meeting their program enrollment goal?
- How effective were LEs in serving the target population, specifically those identified as homeless?
- Did participants obtain stable housing?
- Did ED and ambulatory use vary from the pre-ACIS to the post-ACIS time period?

Methods

Study Populations

- Full population 1: 615 ACIS participants
 - Pre/Post population 2: 467 ACIS participants
- Analyses
 - Descriptive analyses on full population
 - Wilcoxon Signed-Rank statistical test for pre/post population
- Data Sources
 - Participant data collected by LEs
 - Medicaid Management Information System (MMIS2) claims and encounter data

Demographics (N = 615)





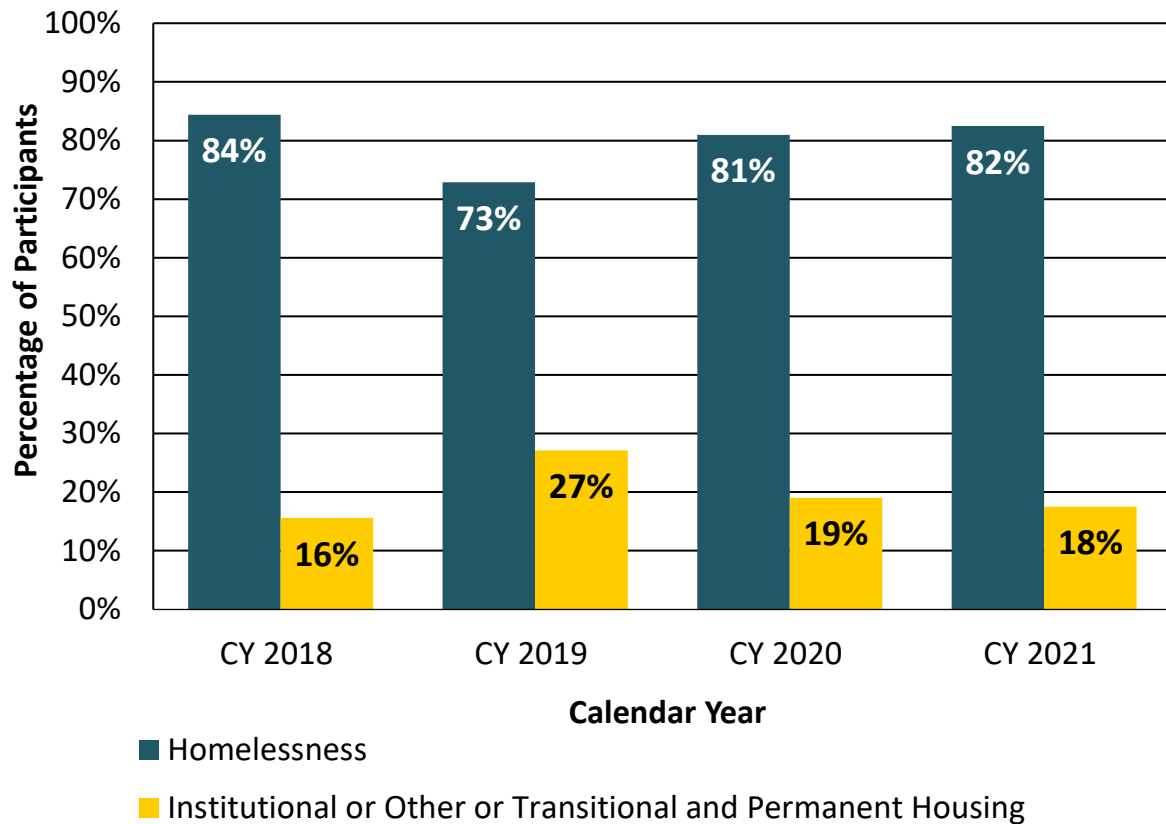
LEs Varied in Meeting Program Enrollment Goal

Average Number of Participants Served and Approved Capacities	All CY 2020*				All CY 2021			
	Baltimore City	Cecil County	Montgomery County	Prince George's County	Baltimore City	Cecil County	Montgomery County	Prince George's County
Average Number of Participants Served	112.2	13.2	73.3	24.3	162.4	13.3	103.7	42.2
Approved Capacity	200	15	120	75	200	15	130	75
Percentage of Approved Capacity Served	56.1%	87.8%	61.1%	32.4%	81.2%	88.9%	79.7%	56.2%

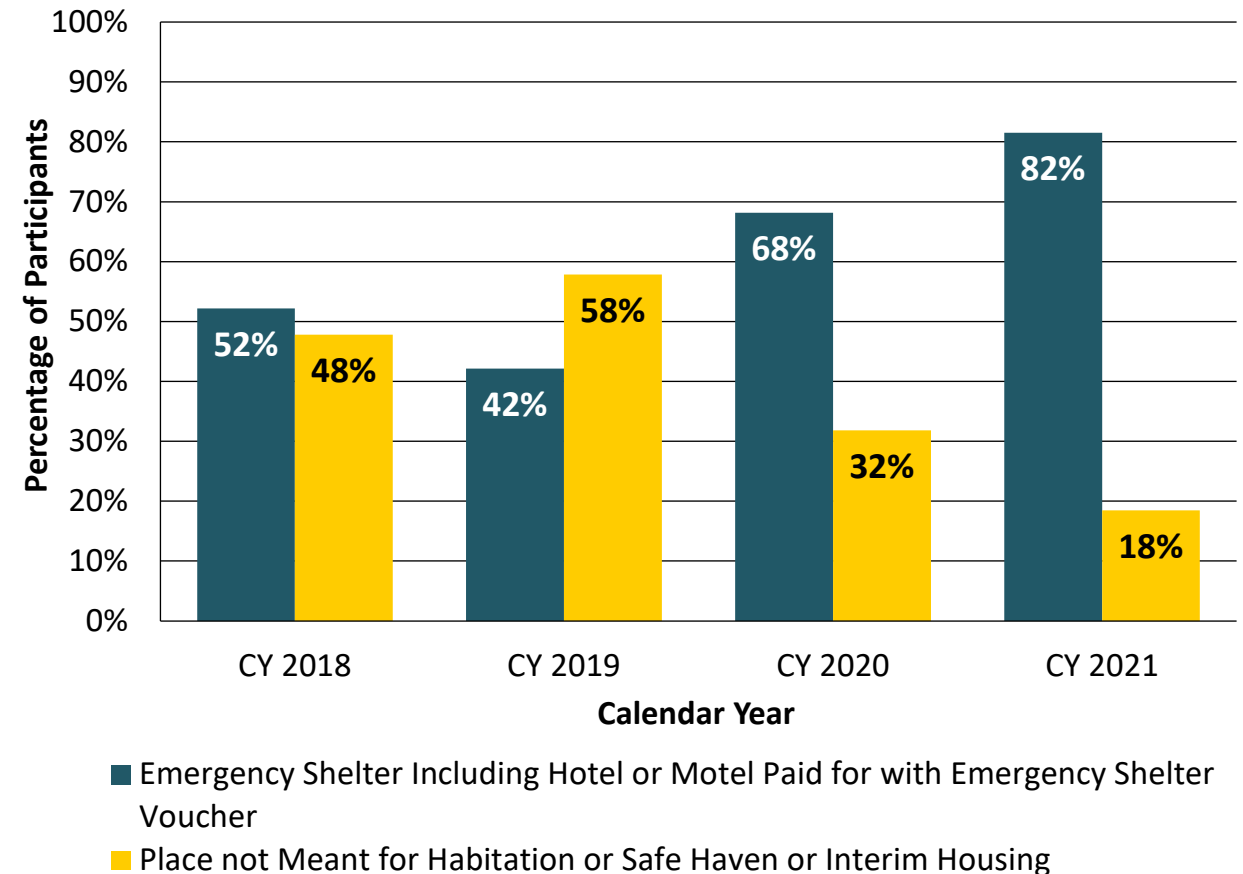
*CY 2019 is not shown due to small cell sizes (less than 11). Montgomery County's capacity changed from 110 to 130 mid-year 2020; this was accounted for by using an average capacity of 120 for CY 2020.

80% of New Enrollees Were Homeless at Enrollment

Living Situation At Time of ACIS Enrollment

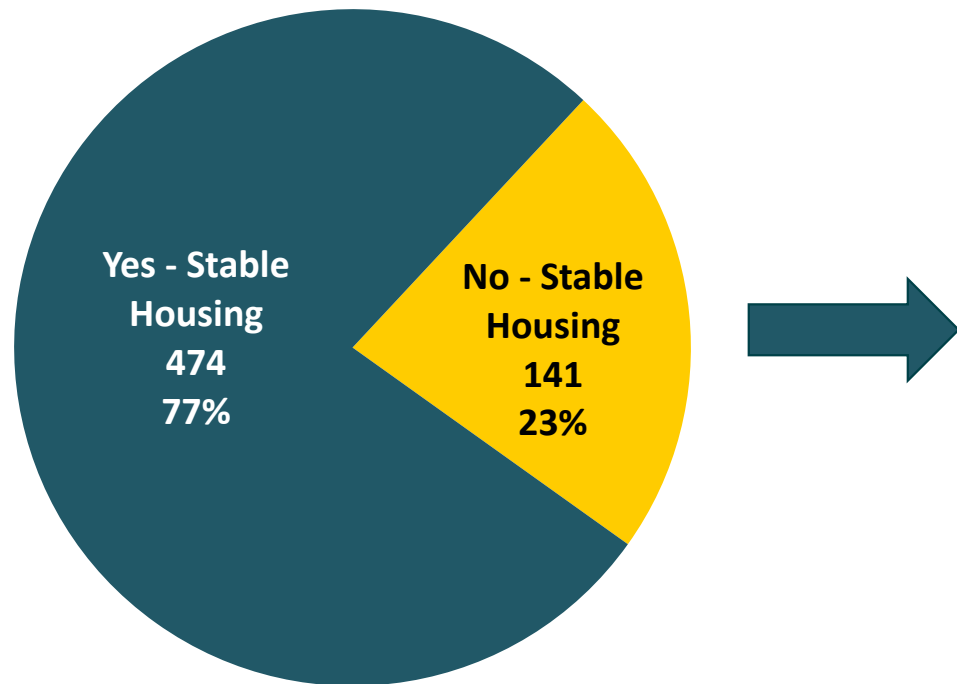


Specific Homeless Situation at Time of ACIS Enrollment

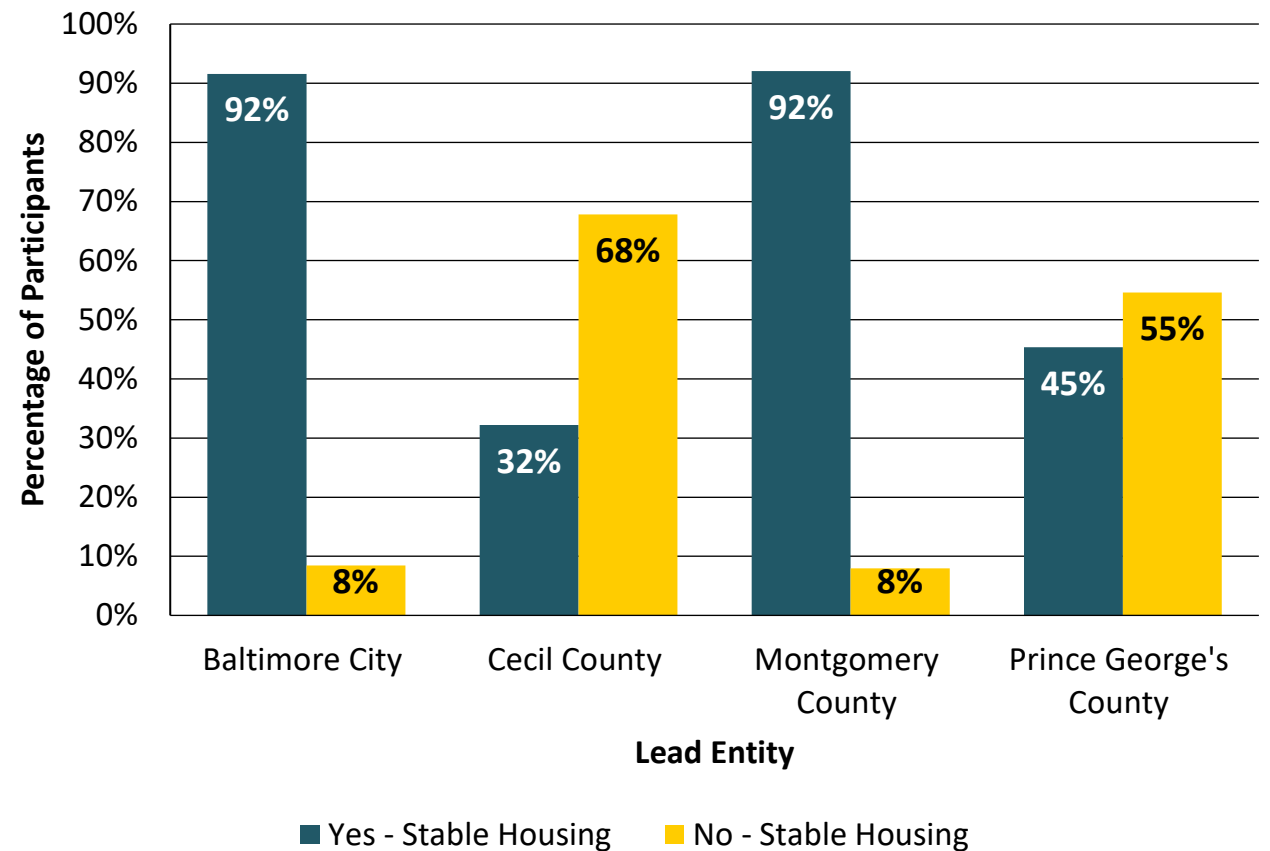


Almost 80% of ACIS Participants Obtained Stable Housing

ACIS Participants Obtaining Stable Housing



Participants Stably Housed, by Lead Entity



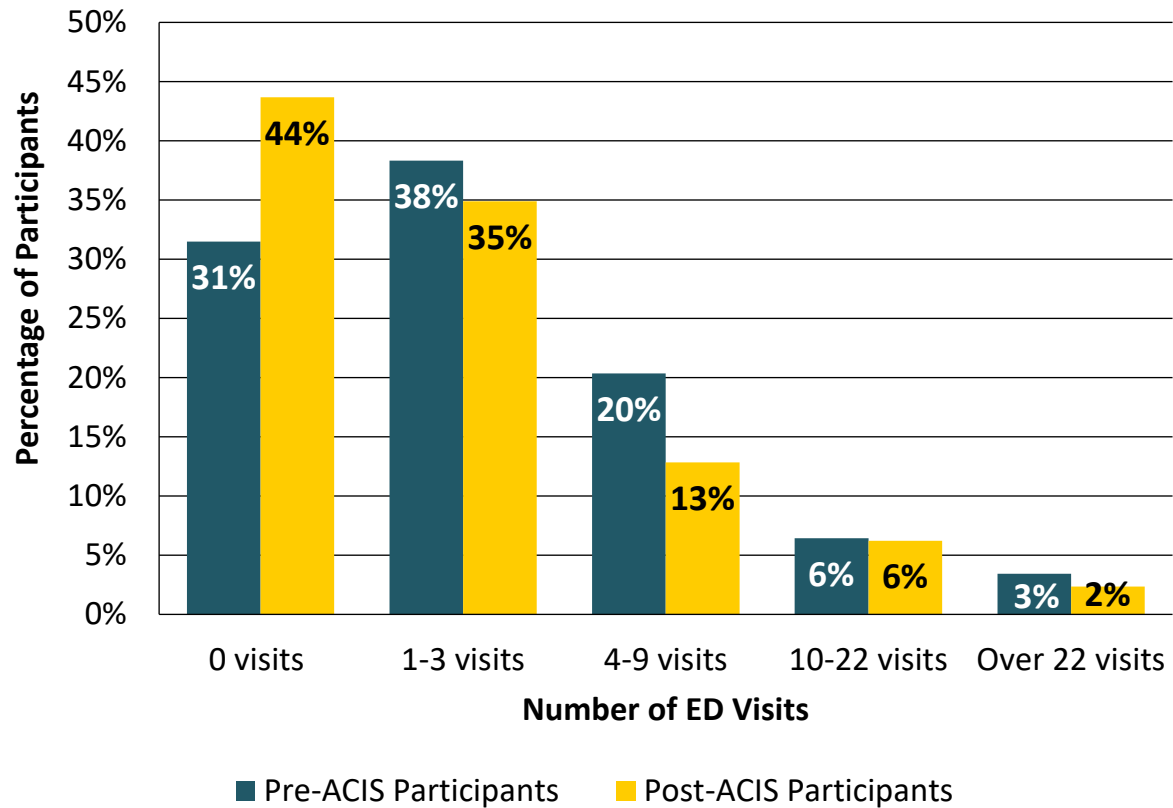
Statistically Significant Decline in ED and Avoidable ED Visits from Pre-ACIS to Post-ACIS

Health Service	Pre and Post Maximum Visits		Pre and Post Median Visits		Pre and Post Mean Visits		Wilcoxon Signed-Rank Test Mean Difference & Statistical Significance: p-value	
	Pre	Post	Pre	Post	Pre	Post	Mean Difference	p-value*
All ED Visits	192	166	2	1	4.65	3.61	-1.04	p < .0001*
Avoidable ED Visits	81	63	0	0	1.93	1.33	-0.59	p < .0001*
Ambulatory Visits	97	105	9	9	13.11	13.31	0.19	p = .07554

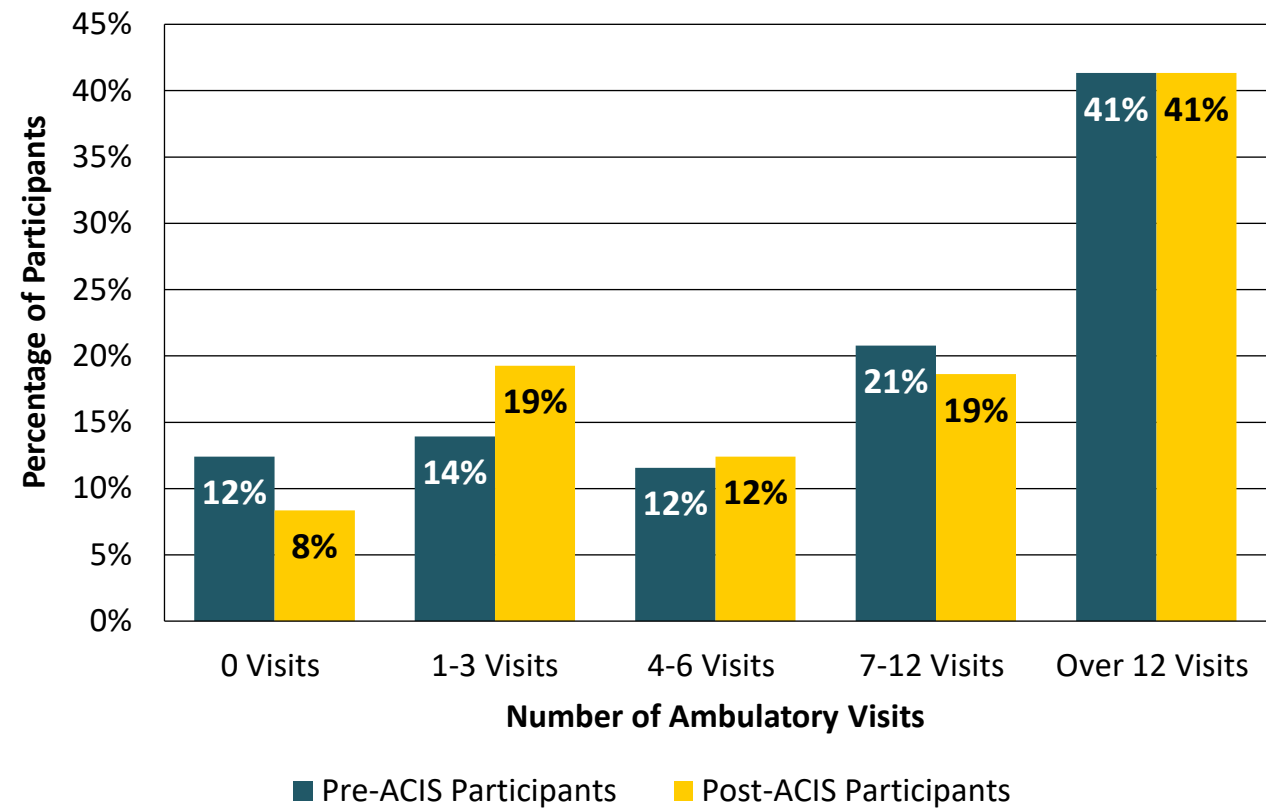
*The difference between the pre and post visit means are statistically significant at p < .05 or below.

ED Visits Decreased & Ambulatory Visits Increased from Pre-ACIS to Post-ACIS

Pre- and Post- ACIS Enrollment Participant ED Use



Pre- and Post- ACIS Enrollment Participant Ambulatory Use



Limitations

- Small study population
- Lack of a comparison group
- Short pre-/post- enrollment periods
- Two of the study years occurred during the COVID pandemic public health emergency

Conclusions

- LEs varied in meeting approved participant program capacities
- 80% of new enrollees experienced homelessness at the time of their ACIS enrollment
- Almost 80% of participants obtained stable housing
- Statistically significant reduction in ED and avoidable ED visits
- More research is needed to determine if ambulatory visits are replacing ED visits

Policy Implications

- Implementation matters
 - Encourage knowledge transfer between lead organizations
 - Importance of new referral sources
- Continue to break down silos between health and housing
 - Medicaid beneficiaries benefit when health and housing organizations work together
- Data quality is important

Acknowledgements

- Hilltop Co-Authors
 - Jayne Miller, Senior Programmer
 - Christin Diehl, Director of Aging and Disability Studies
- The Maryland Department of Health
 - Tricia Roddy, Deputy Medicaid Director
 - Alyssa Brown, Director, Innovation, Research, and Development
 - Sandy Kick, Director, Office of Medical Benefits Management
 - Claire Gregory, Senior Program Manager, Office of Innovation, Research, and Development
 - John Parrish, Regulatory Economist III
 - Sania Rahman, Health Policy Analyst

About Hilltop

The Hilltop Institute is a nonpartisan research organization at the University of Maryland, Baltimore County (UMBC) dedicated to improving the health and wellbeing of people and communities. We conduct cutting-edge data analytics and translational research on behalf of government agencies, foundations, and nonprofit organizations to inform public policy at the national, state, and local levels.

www.hilltopinstitute.org

Contact

MaryAnn Mood

Senior Policy Analyst

The Hilltop Institute



mamood@hilltop.umbc.edu