



Estimating Eligibility for Medicaid Homeless Support Service Benefits and Potential Healthcare Savings in New Jersey

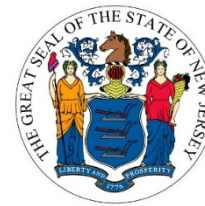
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Sponsors & Acknowledgements

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CSHP colleagues Dave Golden and Kristen Lloyd play significant roles in preparing the data used for this project. Staff and contractors at NJ DMAHS and the HMFA were instrumental in advancing the project. The views expressed in this presentation are exclusively those of the Rutgers team, and may not reflect those of any agency of the State of New Jersey or The Nicholson Foundation.

Project Team

RUTGERS

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Background

- Permanent Supportive Housing (PSH) has been shown to improve health and reduce health services use and spending¹⁻⁴
- CMS offered guidance for Medicaid Section 1115 demonstration waivers to fund housing support service (HSS) for the homeless⁵
- In 2017-18, Medicaid demonstration waivers for HSS pilot projects for homeless populations were approved in CA, IL, MD, and WA⁶

¹National Academies of Sciences, Engineering, and Medicine (2018). *Permanent Supportive Housing: Evaluating the Evidence for Improving Health Outcomes Among People Experiencing Chronic Homelessness*. Washington, DC: The National Academies Press.

²Ly, Angela, and Eric Latimer. 2015. "Housing First Impact on Costs and Associated Cost Offsets: A Review of the Literature." *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie* 60 (11): 475–87.

³Rog, Debra J., Tina Marshall, Richard H. Dougherty, Preethy George, Allen S. Daniels, Sushmita Shoma Ghose, and Miriam E. Delphin-Rittmon. 2014. "Permanent Supportive Housing: Assessing the Evidence." *Psychiatric Services (Washington, D.C.)* 65 (3): 287–94. doi:10.1176/appi.ps.201300261.

⁴Treglia, Dan, and Aileen Rothbard. 2015. "Evaluating the Cost of Permanent Supportive Housing for Formerly Homeless Adults." Policy Brief. University of Pennsylvania.

⁵Wachino, Vicki. "Coverage of Housing-Related Activities and Services for Individuals with Disabilities." *CMCS Informational Bulletin*. Baltimore MD: Centers for Medicare and Medicaid Services. June 26, 2015.

⁶Centers for Medicare and Medicaid Services. State Waivers List. Available at: <https://www.medicare.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/index.html>. Accessed October 14, 2018.

Examples of Housing Support Services (HSS) that could be Medicaid Funded

- Pre-tenancy supports
 - Screening and assessment
 - Housing plan development
 - Application assistance
 - Resource identification (e.g., security deposit, moving costs)
 - Move-in arrangements
 - Crisis prevention and preparation planning
- Tenancy supports
 - Education and training on the role, rights and responsibilities of tenant and landlord
 - Coaching on establishing relationships with landlords/property managers
 - Early identification and intervention for behaviors jeopardizing tenancy (e.g., late rent)
 - Landlord and neighbor dispute resolution
 - Advocacy and linkage to community resources
 - Recertification assistance

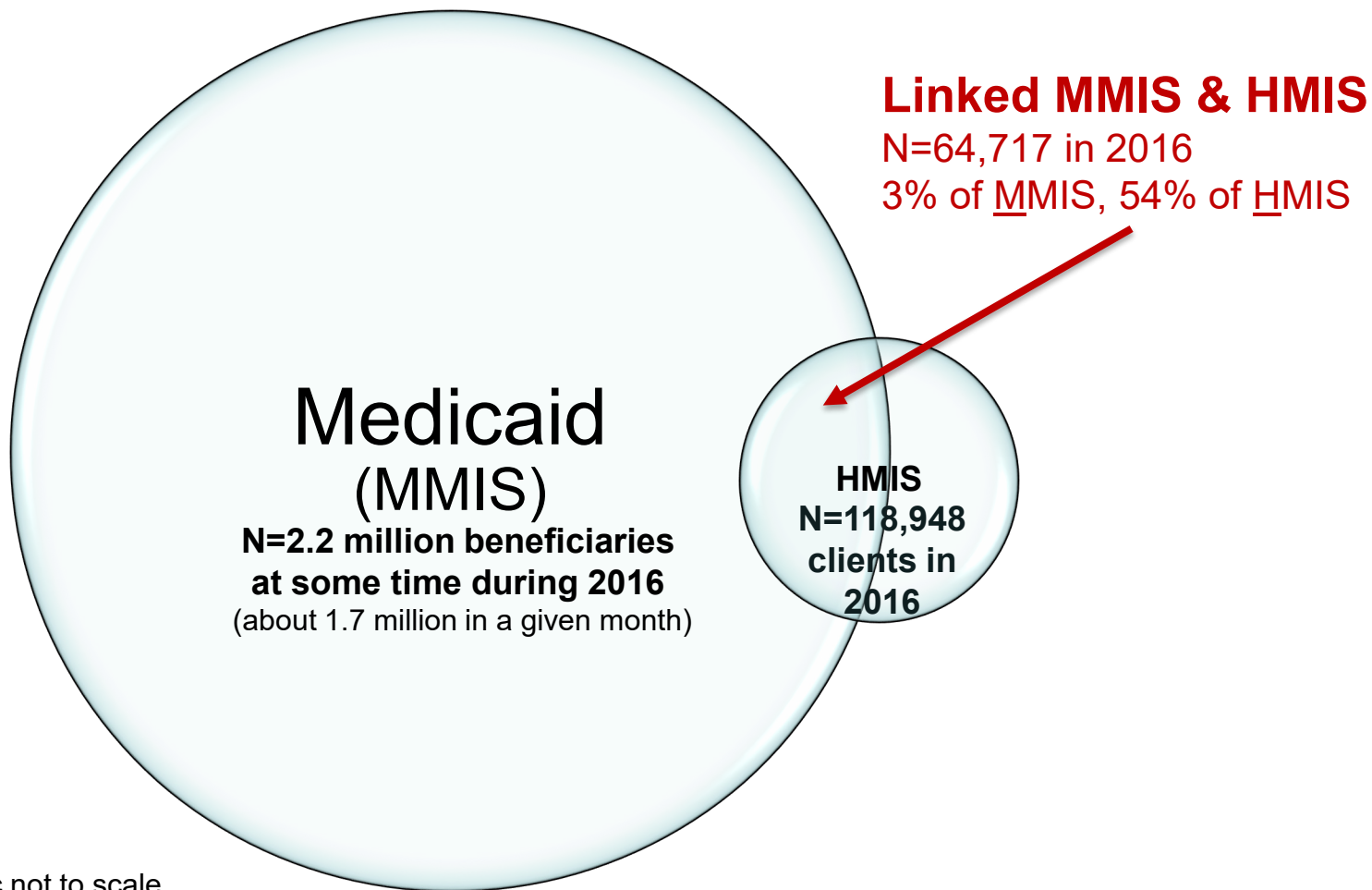
Research Questions

1. How many 2016 NJ Medicaid beneficiaries could be eligible for Medicaid-funded housing support services (HSS)?
2. What are the demographic and health characteristics of those potentially eligible?
3. How do health care use and spending patterns of groups potentially eligible compare to similar but non-homeless populations?

Project Data, 2011-2016

- **Homeless Management Information System (HMIS)**
 - NJ Housing and Mortgage Finance Agency
 - Encounter-level data for homeless services and client characteristics
 - All NJ counties for some services (e.g., emergency shelter) and 19 of 21 counties for other services (e.g., supportive housing)
- **Medicaid Management Information System (MMIS)**
 - NJ Div. of Medical Assistance and Health Services
 - Enrollment and encounter data for covered services, spending, and characteristics of all NJ Medicaid beneficiaries
- **Linked by trusted third party**
 - Trillium™ matching software (using SSN, DOB, gender, names, etc.)
 - The Rutgers research team received linked, de-identified data only

MMIS & HMIS Data



Note: Graphic not to scale

Hierarchy of Groups Potentially Eligible for Medicaid HSS in 2016

- A. Persons in **permanent supportive housing (PSH)** placements at any time during the year
- B. Persons **designated as “chronically homeless”** in the HMIS
- C. Persons with a disability *and* homeless history making them **probably eligible for “chronically homeless” designation**
- D. Persons **at-risk of chronic homelessness**, i.e., meets disability criterion *but* was homeless less than what is required for designation

Group B: HUD “Chronically Homeless” Designation

- **HMIS generated flag as “Chronically Homeless” in 2016**
- **Homeless History Requirement**
 - 12 consecutive months in an emergency shelter, safe haven, or “place not fit for human habitation” over three years (2014-2016)
 - Total of 12 months ... in four or more episodes in three years
 - Periods in institutional settings may count toward time homeless
- **Disabling Condition Requirement**
 - Physical disability, developmental disability, chronic health condition, HIV/AIDS, mental health problem, and/or substance use disorder
 - “...expected to be of long-continued and indefinite duration ... [and] substantially impedes ... ability to live independently”*

* US Department of Housing and Urban Development (HUD), *HMIS Data Standards Manual*. July 2017. p. 43. Available at: www.hudexchange.info.

Group C: Probably eligible for Chronically Homeless Designation

- **Meets HUD homeless history criterion (2014-16)**
 - HMIS recorded time in emergency shelter or safe haven
 - Last 2016 HMIS record of “place not fit for human habitation”
- **Meets Disabling Condition Criterion (2014-16)**
 - HMIS generated “disabling condition” flag
 - HMIS recorded disability income (SSI, SSDI, VA)
 - Medicaid diagnosis of developmental disability or serious mental illness

Group D: “At risk” of Chronic Homelessness

- **HUD homeless history of 3-11 months** (2014-16)
 - *Measured same as Group C*
- **Disabling condition criterion** (2014-16)
 - *Measured same as Group C*

Analysis Population Exclusions

- Living in nursing facilities or facilities for persons with intellectual and developmental disabilities
- Children under 18 years old
- Enrolled in Medicaid for <10 months in 2016

Groups Potentially Eligible for Medicaid HSS Benefit, 2016

Group	N Before Exclusions*	N After Exclusions**	Percent Reduction
A. Permanent Supportive Housing	6,625	4,081	38.4%
B. HMIS Chronically Homeless	1,117	849	24.0%
C. Probably Chronically Homeless	1,809	1,355	25.1%
D. At-Risk of Chronic Homelessness	2,988	2,160	27.7%
TOTAL	12,539	8,445	37.2%

*All persons in 2016 linked HMIS-MMIS data

**Excludes persons living in nursing facilities or institutions for persons with intellectual or developmental disabilities, children (<18), and those enrolled in Medicaid <10 months (300 days) in 2016.

N's and Demographics, 2016 (% Distributions)

	Not Homeless		Potentially Eligible for Medicaid HSS			
	ABD	Exp.	PSH	CH	Prob. CH	At Risk
N	221,320	282,649	4,081	849	1,355	2,160
Age						
18-29	10.7	30.6	21.5	*	13.7	20.5
30-49	17.4	31.5	36.1	41.3	43.2	44.0
50-64	25.9	36.9	38.1	40.8	39.2	33.1
65+	45.9	0.9	4.3	*	3.8	2.4
Male	40.7	51.1	44.8	67.6	57.3	49.6
Race/Eth.						
White	37.8	31.4	28.3	41.7	41.5	37.7
Black/AA	23.3	20.2	59.3	42.5	46.1	50.0
Hispanic	13.8	16.7	7.6	9.7	9.1	8.3
Other	25.1	31.7	4.8	6.1	3.2	4.0

Notes:

Excludes persons under age 18, with Medicaid enrollment of less than 10 months during 2016, and those living in nursing facilities or institutions for persons with intellectual or developmental disabilities.

Selected modal values shown in red.

CH = Chronically Homeless.

*Data not shown due to small numbers (N<30), cells with next smallest N also redacted.

Medicaid Eligibility Category, 2016 (% Distributions)

	Not Homeless During Year	Potentially Eligible Medicaid for HSS			
		PSH	Chronically Homeless	Prob. Chron. Homeless	At Risk
Aged, Blind, Disabled	26.2	43.9	37.0	33.9	27.0
Expansion/GA	33.5	27.2	56.4	52.1	50.6
NJ FamilyCare/Other	40.2	28.9	6.6	13.9	22.4

Notes:

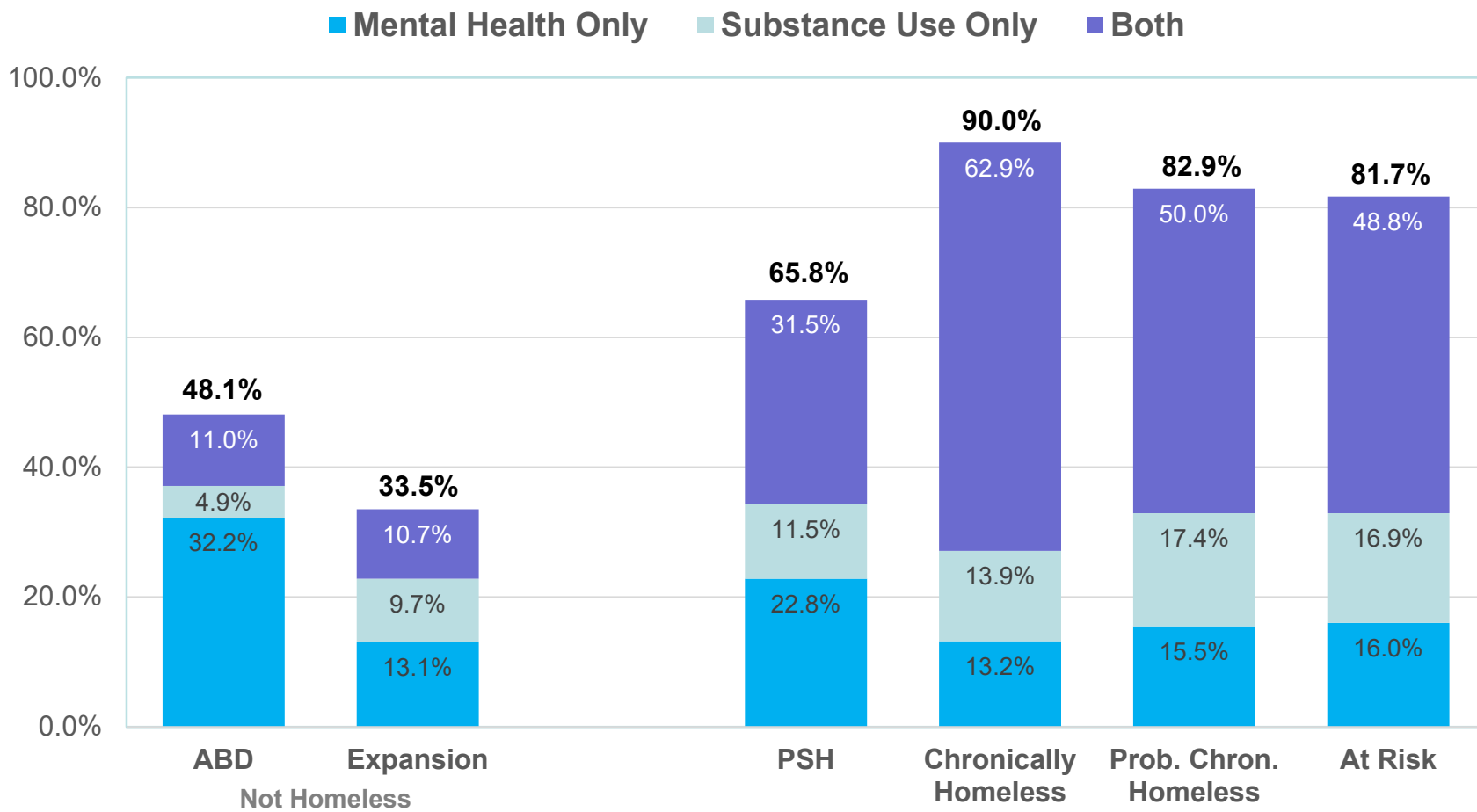
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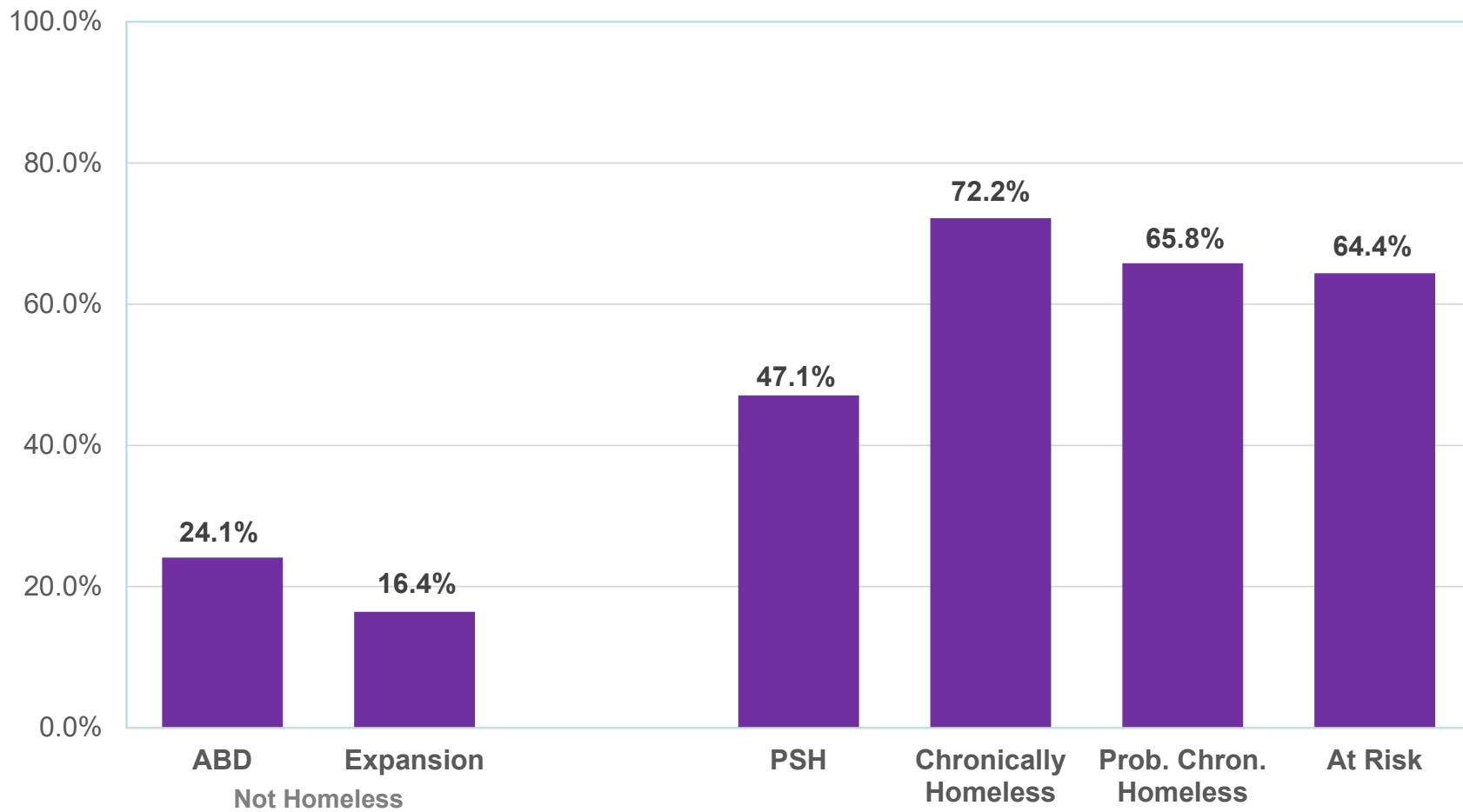
CH = Chronically Homeless.

GA = General Assistance.

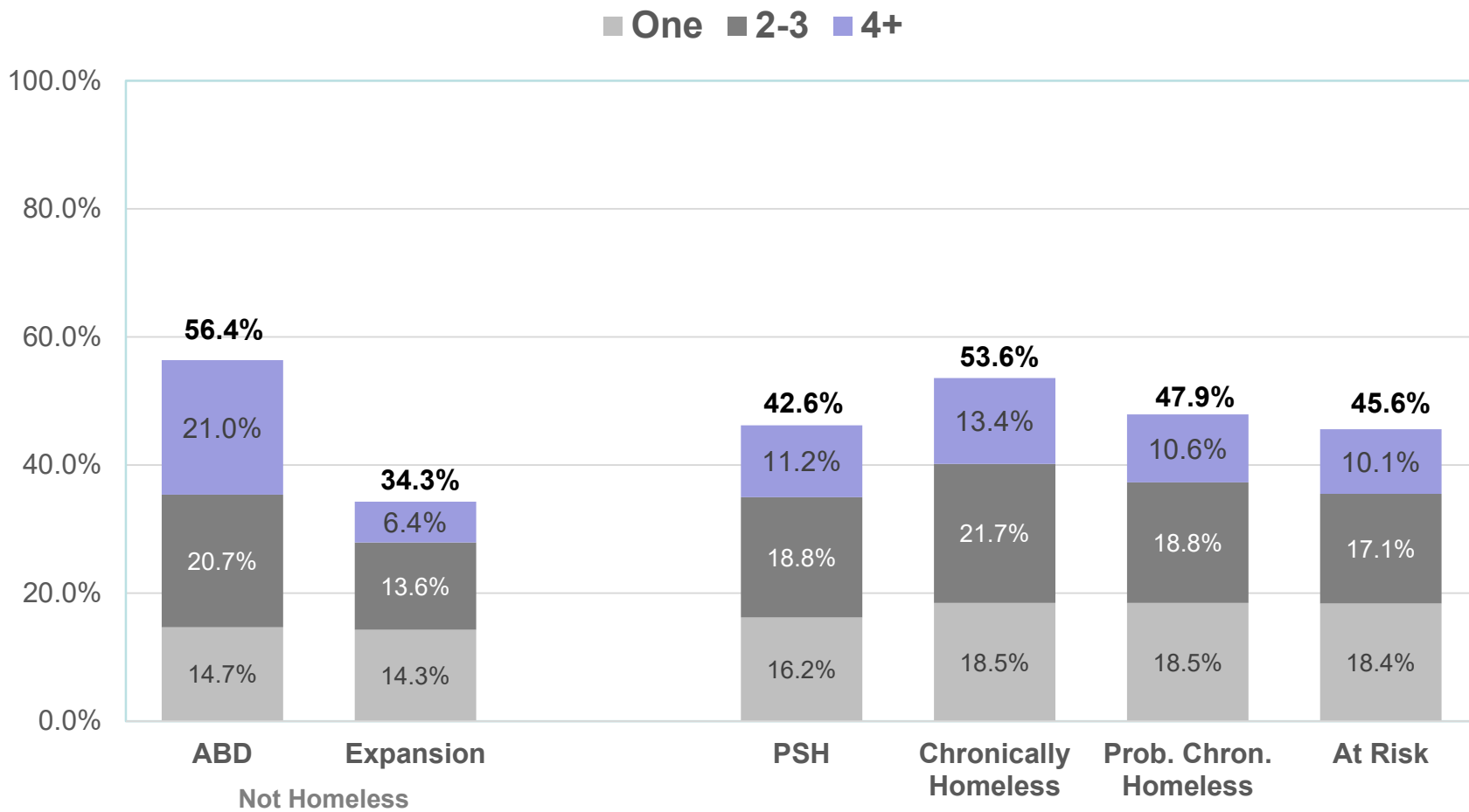
Mental Health and Substance Use Disorders, 2016



Serious Mental Illness, 2016



Number of Chronic Physical Conditions[^], 2016



[^]Out of 26 non-behavioral health chronic conditions, based on CMS Chronic Condition Warehouse metric (<https://www.ccwdata.org/web/guest/condition-categories>).

ABD = Aged, Blind, and Disabled Medicaid eligibility category. PSH = Permanent Supportive Housing.

Health Care Use and Spending Metrics (from MMIS)

- Emergency department (ED) treat-and-release visits
- Inpatient (IP) admissions
- Ambulatory-care sensitive IP admission rates
- All-cause 30-day inpatient readmissions
- Total Medicaid spending overall and for selected service types

Matched Comparison Group

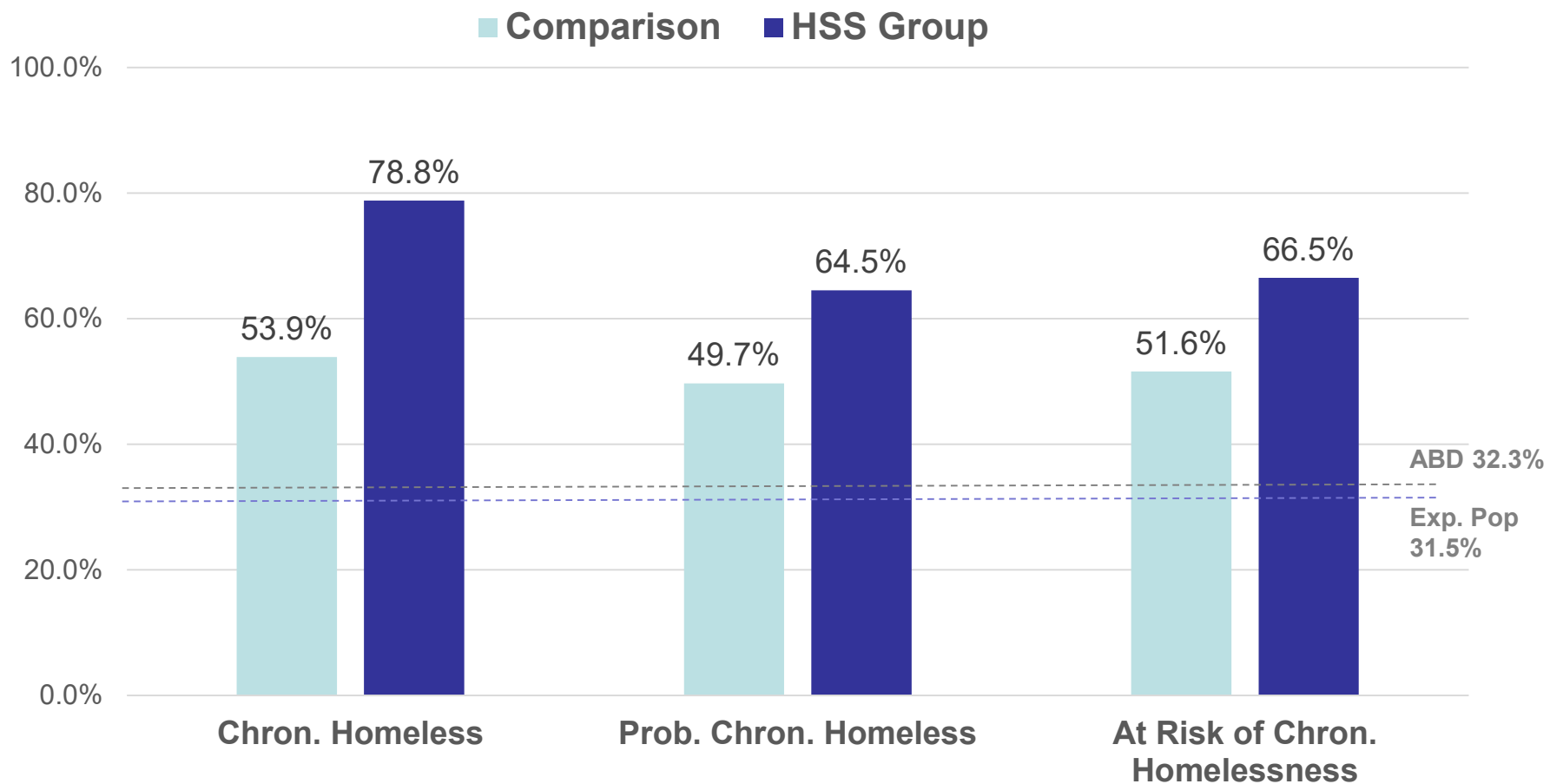
- Five comparison beneficiaries with no history of homeless services (i.e., did not link to HMIS) matched Groups B-D
- Match based on characteristics in 2015 (77%) when available, otherwise 2014 (11%) or 2016 (12%)
- Exact matching and then **Mahalanobis distance matching***

Exact Match		Distance Match
Medicaid eligibility group	Mental health diagnosis	Age
Sex	Substance use disorder diagnosis	# Chronic conditions
Race/ethnicity	Serious mental illness (SMI)	# Medicaid days enrolled
Year of data match	Quartile of Chronic Illness and Disability Payment Score (CDPS)	CDPS (within CDPS group)

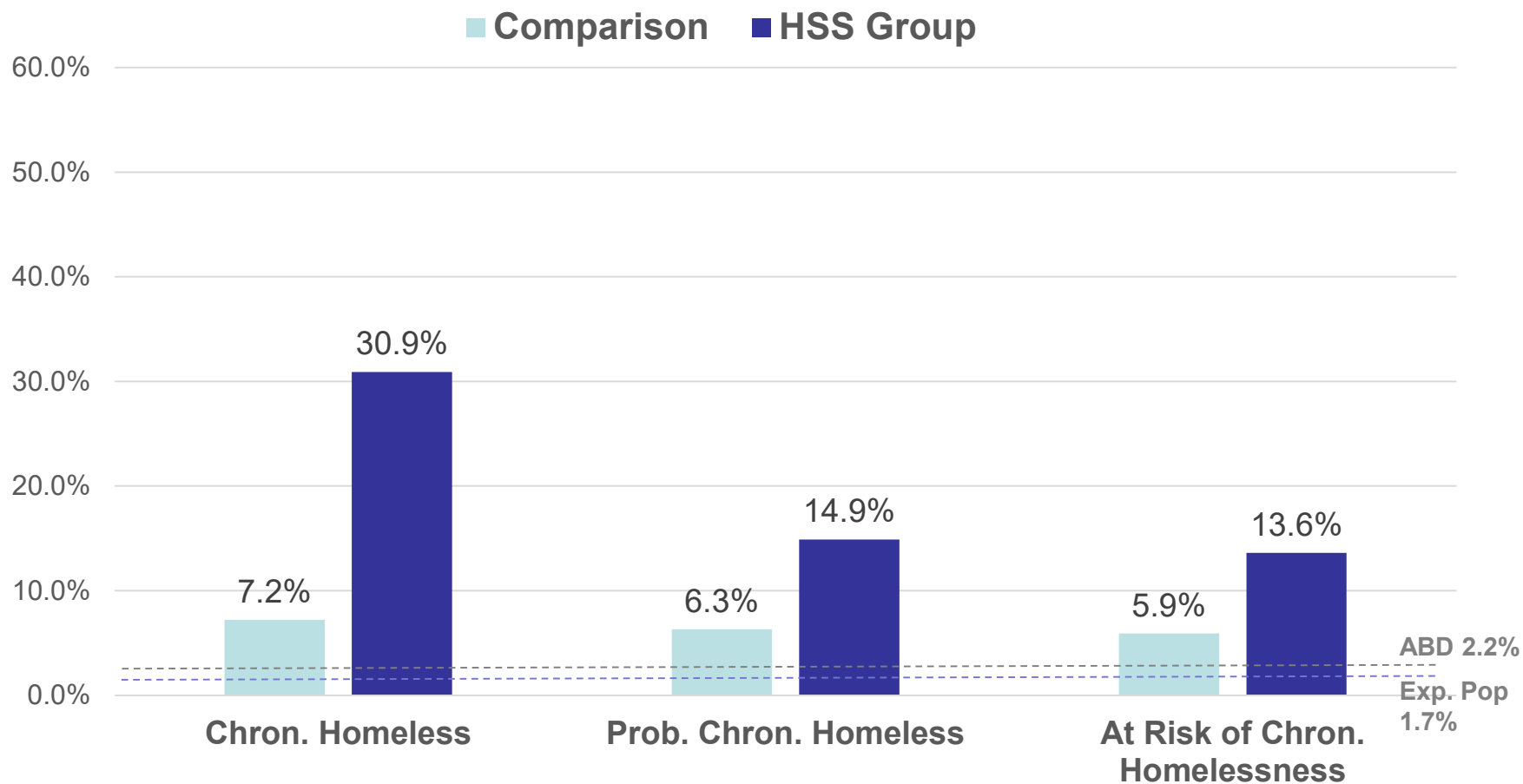
- Exclude 5% most distant matches

*Mahalanobis, P.C. 1936. ON the Generalised Distance in Statistics. *Proceedings of the National Institute for Sciences of India*. 2(1): 49-55.

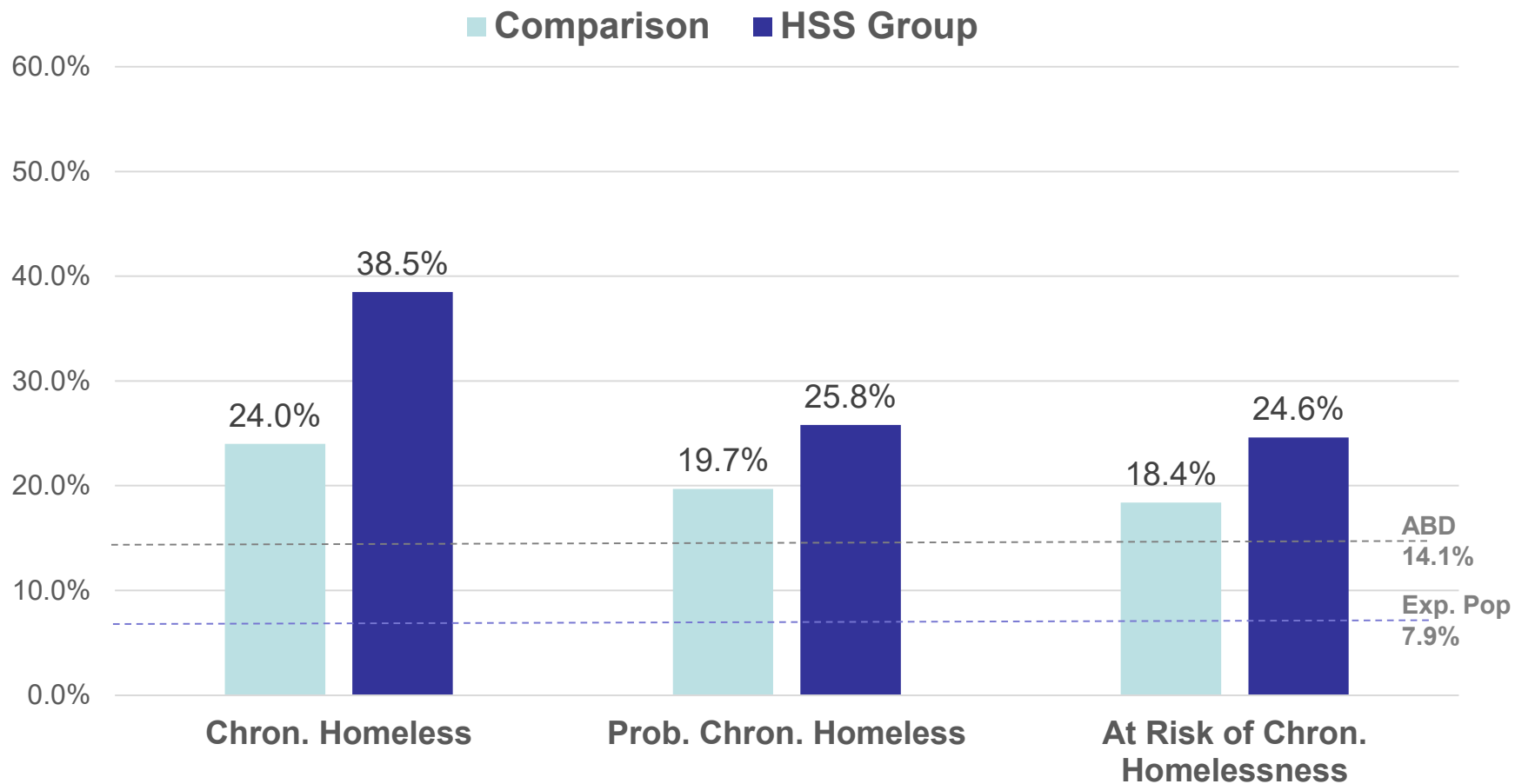
At Least One Emergency Department (ED) Visit, 2016



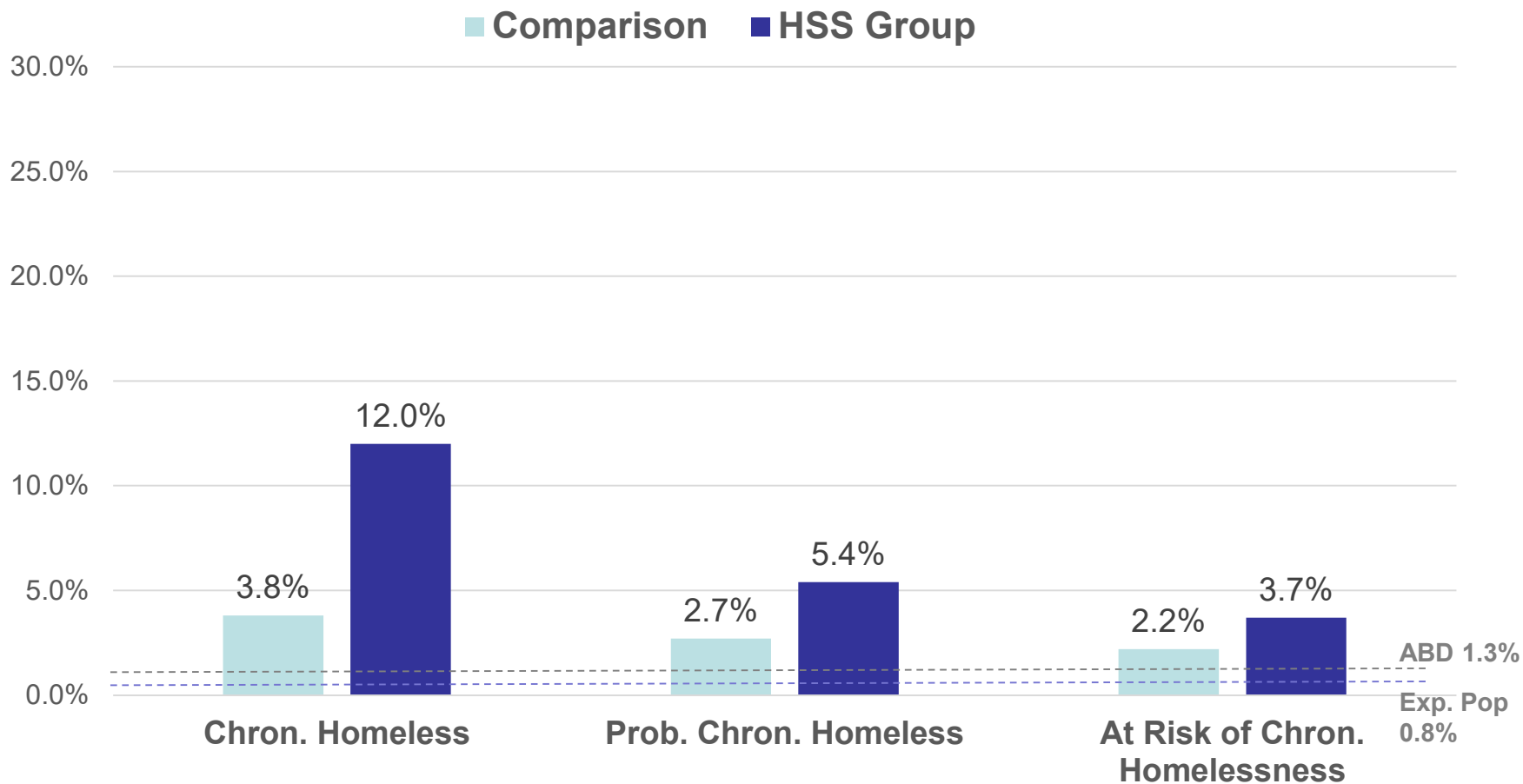
Six or More ED Visits, 2016



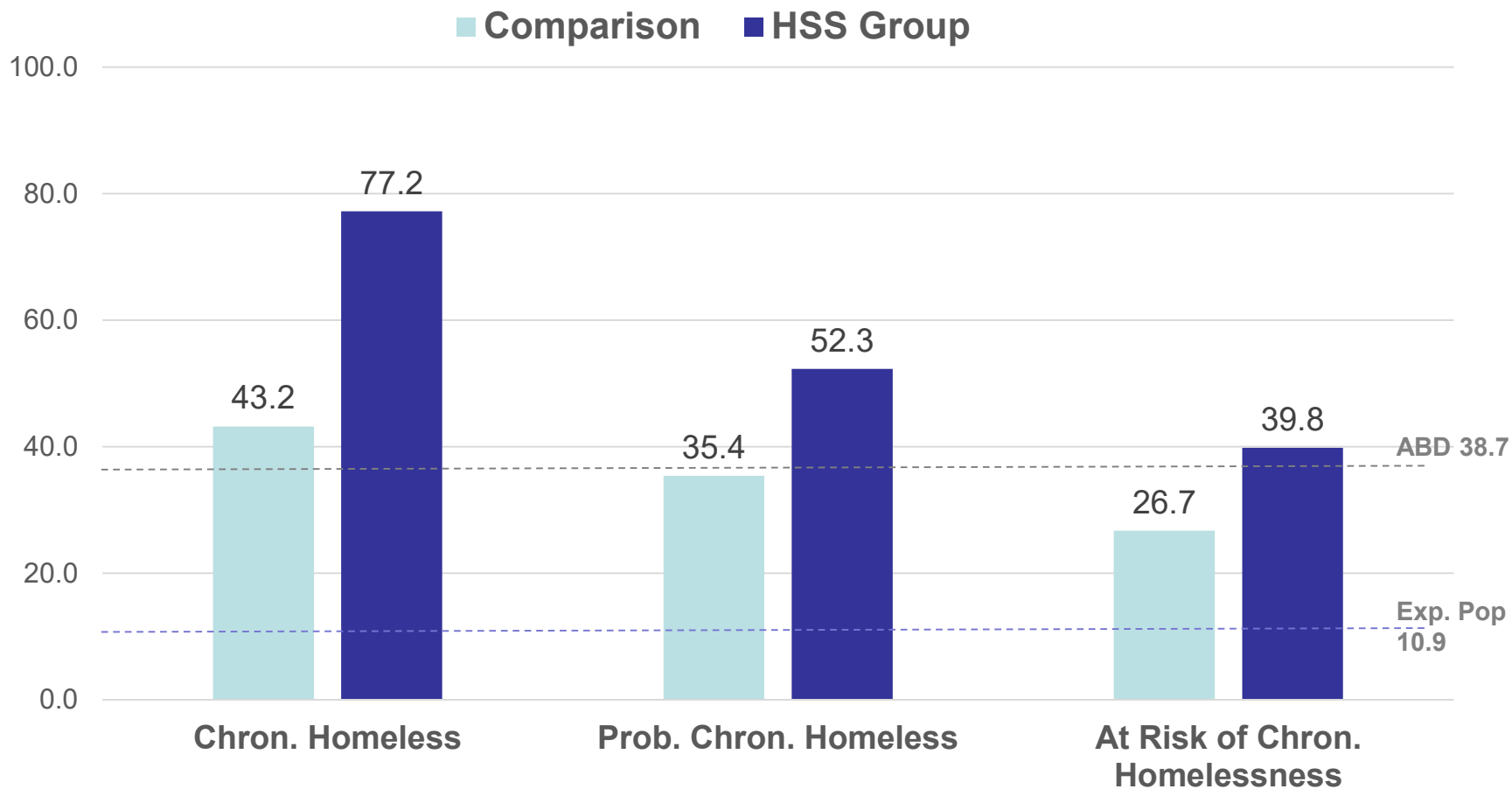
At Least One Inpatient (IP) Stay, 2016



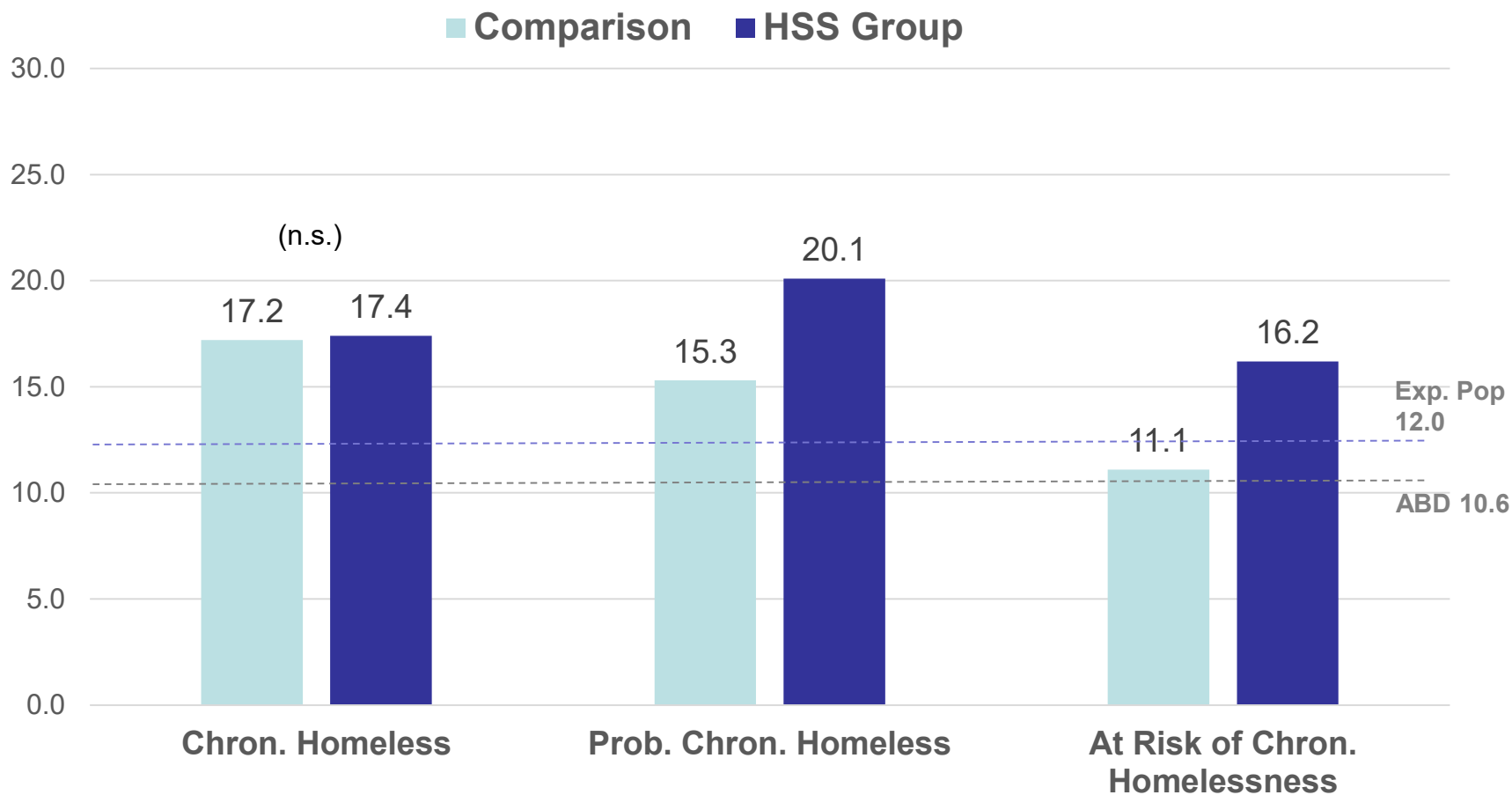
Three or More IP Stays, 2016



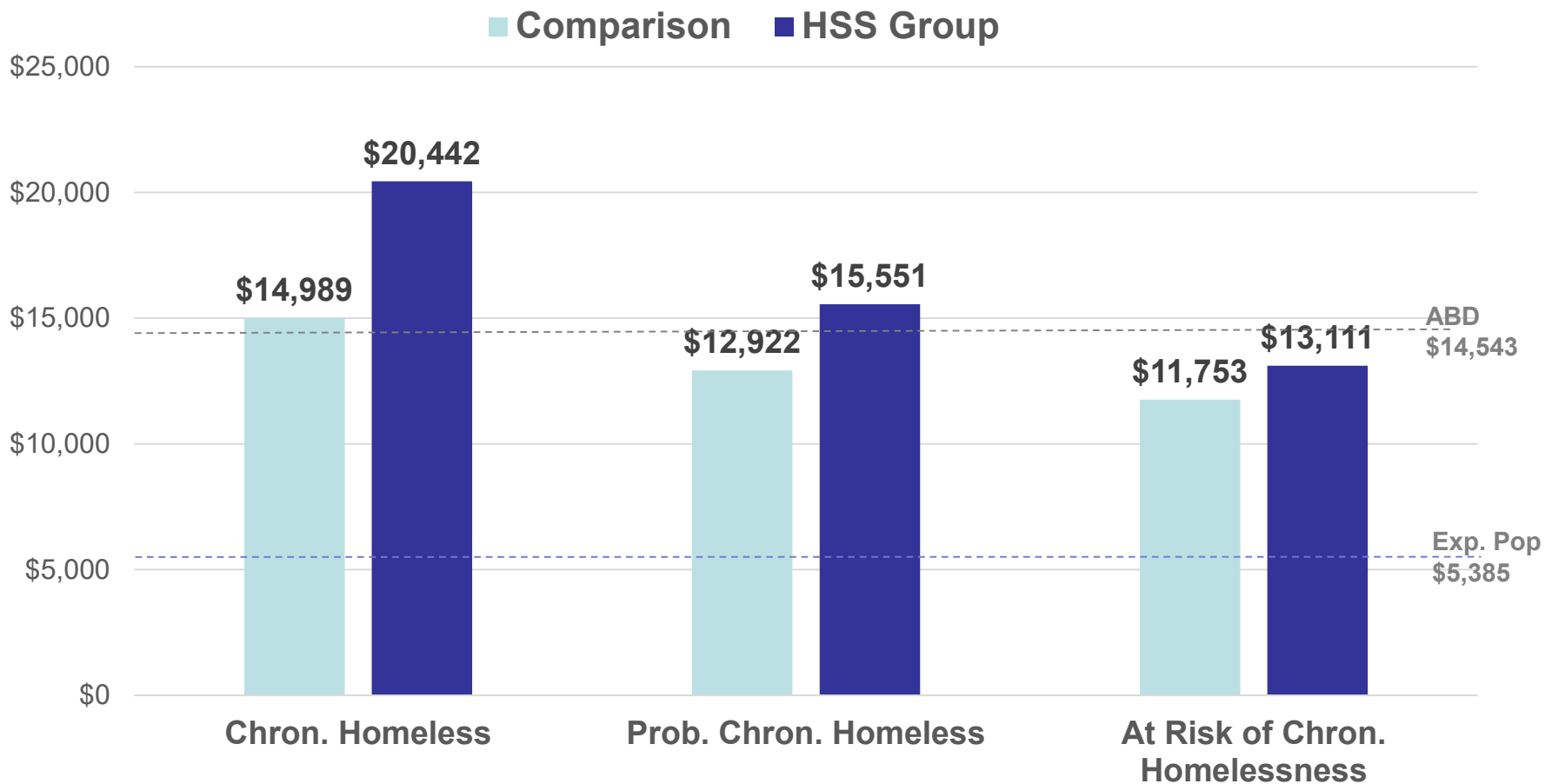
Ambulatory Care Sensitive IP Admissions per 1,000, 2016



30-Day Hospital Readmission Rate per 100 Index Admissions, 2016



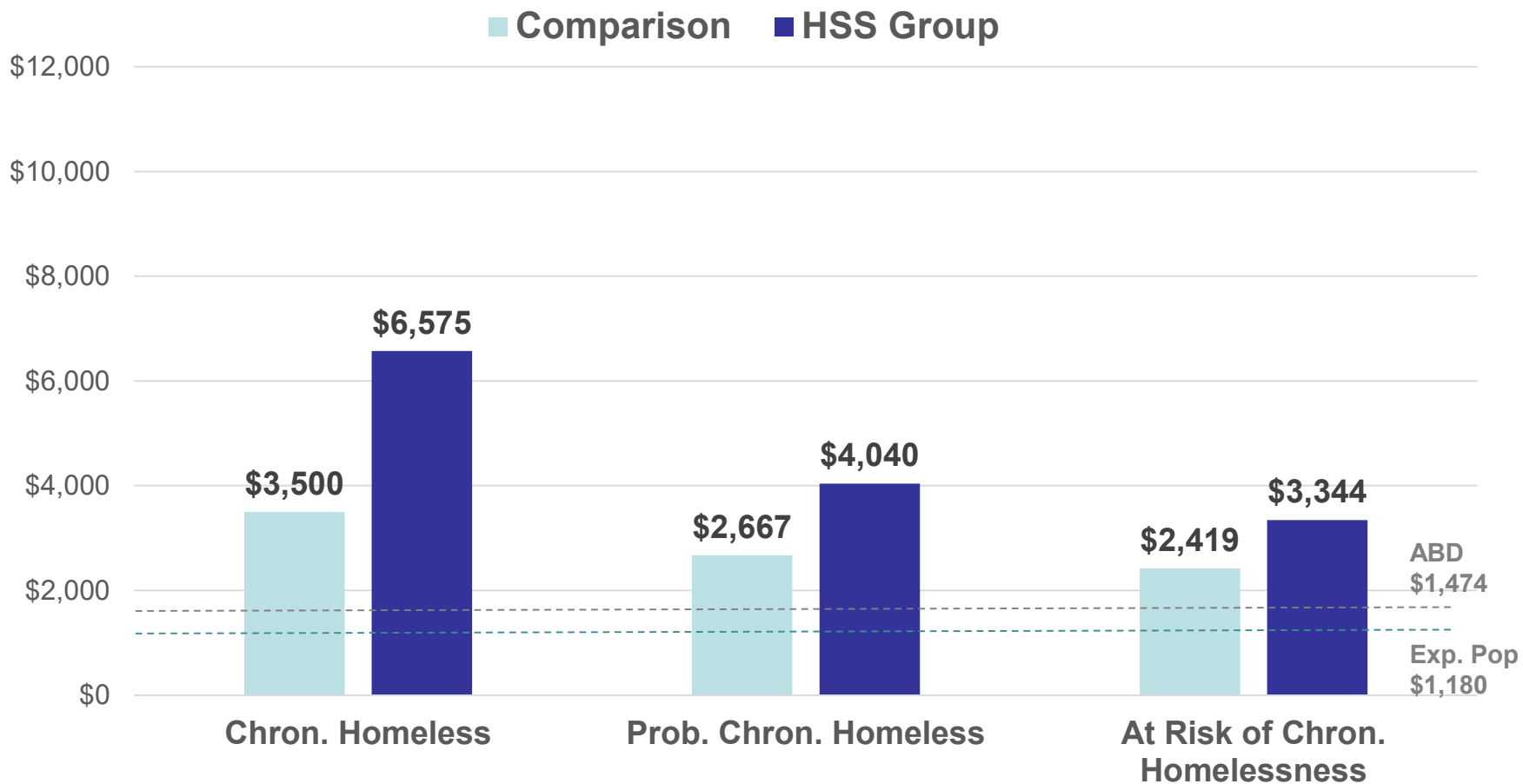
Average Total Medicaid Spending*, 2016



*Adjusted for number of months enrolled.

Note: Group differences are statistically significant at $p < 0.01$.

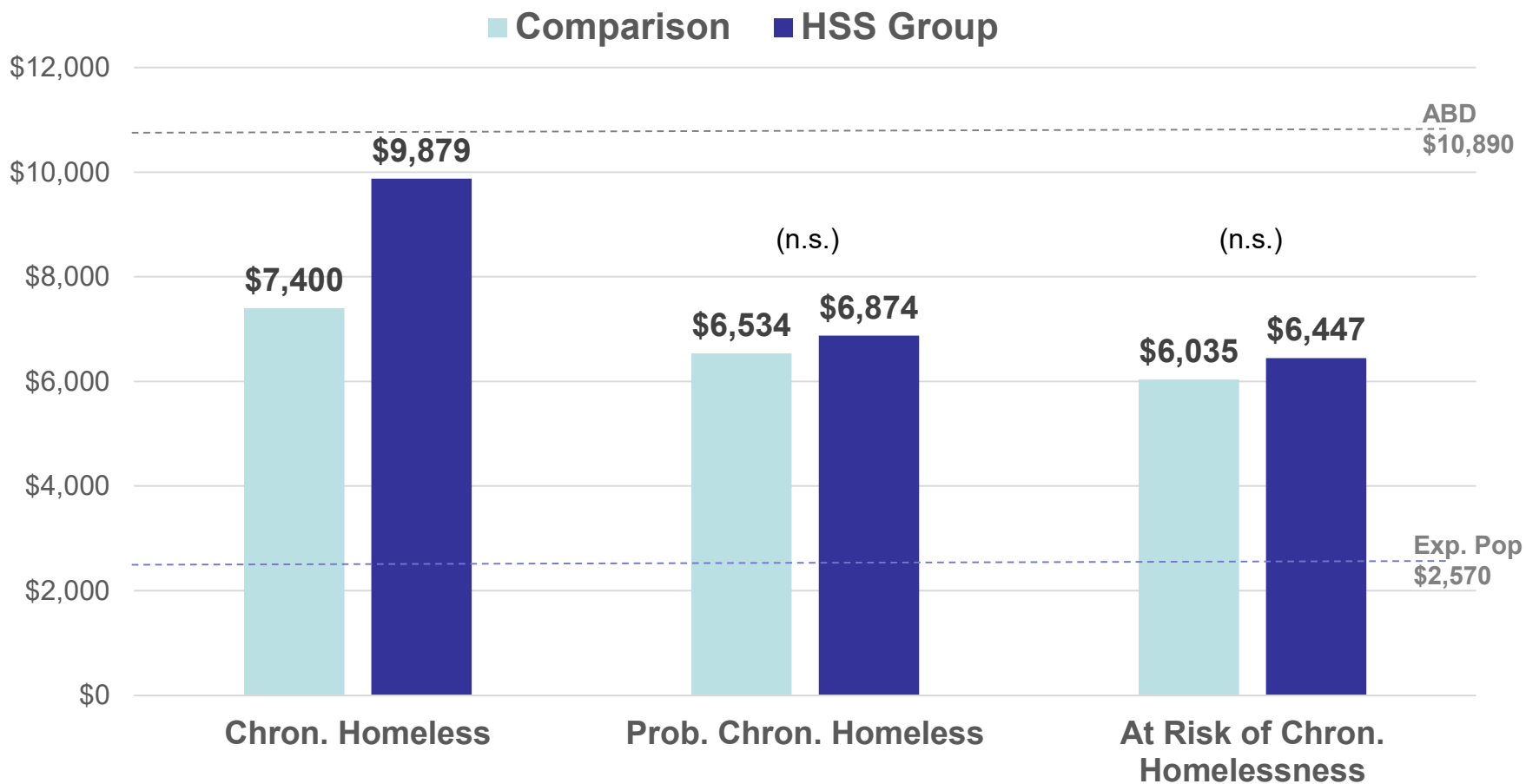
Average IP Hospital Spending*, 2016



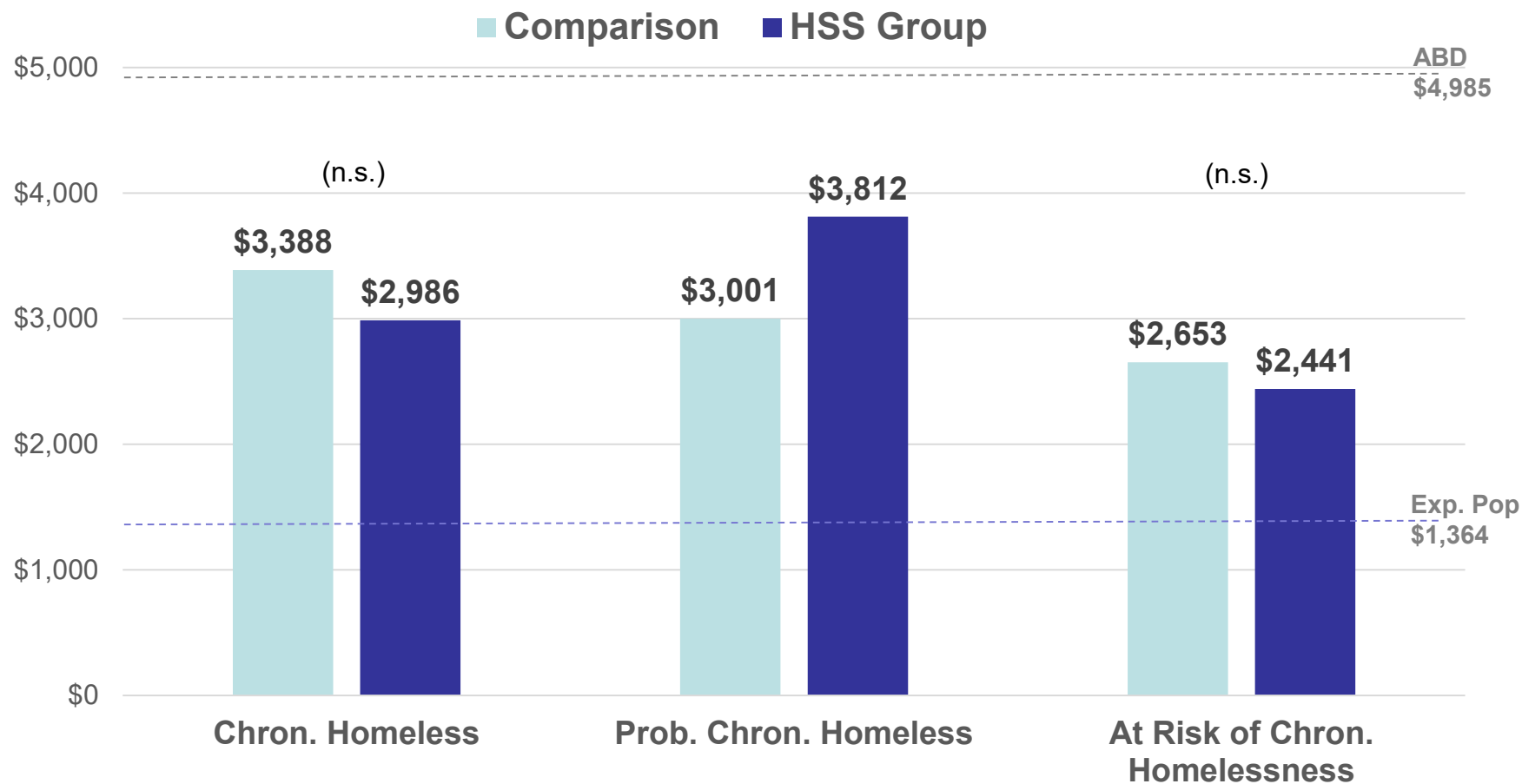
*Adjusted for number of months enrolled.

Note: Group differences are statistically significant at $p < 0.001$.

Average Ambulatory Care Spending*, 2016



Average Prescription Drug Spending*, 2016



Conclusions

- Up to about 12,500 individuals were potentially eligible for Medicaid HSS benefits in 2016
 - Analysis based on about 4,400 non-institutionalized adults enrolled at least 10 months and not placed in PHS in 2016
- Compared to non-homeless Medicaid enrollees and PSH residents, the homeless groups examined (groups B, C & D) ...
 - Very high behavioral health morbidity & high chronic condition rates
- *Potential* savings evident among HSS eligible groups compared to clinically and demographically *matched* beneficiaries
 - Higher potentially avoidable utilization
 - Higher Medicaid spending, especially hospital inpatient spending

Limitations

- One state
- Medicaid data do not include comprehensive measures of disability
- Our estimates of potential savings \neq projected likely savings
 - Broadly consistent with published evaluations of PSH
 - But, our population has much higher rates behavioral health conditions, so may be harder to engage in effective PSH

Thank You!