

“SNAP Participation Dynamics in a Long-Term Administrative Data Panel (in State X)”

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Acknowledgements

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- The findings and conclusions in this presentation are those of the authors and should not be construed to represent any official USDA or U.S. Census Bureau or U.S. Government determination or policy.
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SNAP: One Program—Two Populations (or Three?)

SNAP serves *two populations* in a single program:

- Shorter term participants (measured in months)
- Longer term participants (measured in years)

A further complication: Some households *cycle* on and off SNAP

- They do not participate continuously for years at a time
- They do not exit the program permanently
- Cyclers are a third “type” of population



Motivation for Studying SNAP Participation Dynamics

Broad motivation: To examine how SNAP operates as temporary assistance for some and longer-term source of support for others.

By examining entry, exit, re-entry, and spell durations, the study plans to:

- Identify characteristics associated with short and long-term participants
- Link participation dynamics to changes in SNAP caseload over that time



Background: SNAP by the Numbers

SNAP Administrative Data (aggregate)

- Average Monthly Participation: 41.2 million (FY 2022)
- Annual Federal Expenditure: \$119.5 billion (FY 2022)
- Benefits per month, per person: \$230.88 (FY 2022)

Survey of Income and Program Participation (SIPP) data (2008-2012)

- Median length of participation spell: 12 months
- Average length of participation spell: unknown (right censoring)



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Survey of Income and Program Participation (SIPP) data (2008-2012)

- Median length of participation spell: 12 months **Remember this**
- Average length of participation spell: unknown (right censoring)



SNAP Eligibility

- Eligibility is restricted to households with low income and low assets
 - State variation in income and asset tests
 - Few nonfinancial criteria
- Rigorous process to establish and maintain eligibility
 - Income and expenses are reported by applicant, with verification by caseworkers
 - Eligibility must be re-established by applicant periodically
 - Typically, every 6-12 months; 24 months for seniors



Prior Work on SNAP dynamics

- Series of SIPP-based analyses that examine dynamics and determinants of SNAP participation over a 4-5 year period.
 - Highlight the role of changes in earnings and family composition on SNAP participation dynamics
 - Latest is Leftin et al. (2014)
- State-level studies of micro-level administrative data.
 - Highlight the role of recertification policy, including potential inefficiencies in the process
 - Studies include Heflin et al. (2021), Homonoff and Somerville (2021), Ribar et al. (2008)



Strengths and Limitations of Data Sources

Large Federal surveys

Strengths

- Include participants and non-participants in sample
 - Sample weights to ensure pop. representativeness
- Include a rich set of socio-economic data
- Include outcomes

Limitations

- Households underreport SNAP participation and benefits
- May lack any information on SNAP duration and benefits

State SNAP records

Strengths

- Include all SNAP participants (universe)
- Reliable detail on SNAP duration and benefits each month
- Long time series is feasible

Limitations

- Exclude non-participants
- Include only data needed to operate program
- No data on food security, health, other outcomes



SNAP Administrative Data for this Study (Descriptive Analysis Today)

- SNAP administrative data from states representing different regions and different mixes of urban and rural areas
- Data and permissions obtained from three States, a fourth State is pending
- Today, results are from a Single State (unnamed at this time), highly preliminary
- Data acquired by partnership among Census Bureau, ERS, USDA's Food and Nutrition Service (FNS), and State SNAP agencies



SNAP Participation Dynamics and Methodology

	Month												Total Time On
	1	2	3	4	5	6	7	8	9	10	11	12	
Cross Section for Month 1													
Person A	X	X	X	X	X	X	X	X	X	X	X	X	12
Person B	X	X											2
New Entrants													
Person C		X	X	X	X								4
Person D										X	X		2
Person E				X	X	X	X	X	X	X	X	X	"9"
Person F			X	X	X				X	X	X		6

Two methods to slice SNAP participants to analyze dynamics:

- Cross-section (at moment in time, e.g., Month 1)—A and B are excluded from results today
- New Entrants (observe entry after Month 1)—C, D, E, and F are focus of results today



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Cross Section for Month 1													
Person A	X	X	X	X	X	X	X	X	X	X	X	X	12
Person B	X	X											2
New Entrants													
Person C		X	X	X	X								4
Person D										X	X		2
Person E				X	X	X	X	X	X	X	X	X	"9"
Person F			X	X	X				X	X	X		6

- Dynamics of Cross-Section and New Entrants Differ
- Individuals in Cross-Section tend to be in middle of a long spell (“length-biased sampling”)



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Person A	X	X	X	X	X	X	X	X	X	X	X	X	12
Person B	X	X											2
New Entrants													
Person C		X	X	X	X								4
Person D										X	X		2
Person E				X	X	X	X	X	X	X	X	X	"9"
Person F			X	X	X				X	X	X		6

Total Time On = Cumulative number of months on SNAP (continuous or not) in 60 months

Note: Figure is for 12 months; actual data analysis is for 60 months



SNAP Participation Dynamics (New Entrants)

New Entrants	Spell Type	Month												Total Time On
		1	2	3	4	5	6	7	8	9	10	11	12	
Person C	Single Short-Term	X	X	X	X									4
Person D	Single Short-Term									X	X			2
Person E	Single Long-Term				X	X	X	X	X	X	X	X	X	"9"
Person F	Cycler		X	X	X					X	X	X		6

Spell Type = Single Short-Term

= Person has one spell in 60 months, lasting 8 months or less

Examples: Person C and D

Note: Spell Length is affected by end of sample period (month 60) when right-censored



SNAP Participation Dynamics (New Entrants)

		Month												Total Time On
		1	2	3	4	5	6	7	8	9	10	11	12	
New Entrants	Spell Type													
Person C	Single Short-Term		X	X	X	X								4
Person D	Single Short-Term										X	X		2
Person E	Single Long-Term				X	X	X	X	X	X	X	X	X	"9"
Person F	Cycler			X	X	X				X	X	X		6

Spell Type = Single Long-Term

= Person has one spell in 60 months, lasting 24 months or more

Examples: Person E

Note: Spell Length is "9" in 12-month figure; actual long-term spells are 24+ months



SNAP Participation Dynamics (New Entrants)

		Month												Total Time On
		1	2	3	4	5	6	7	8	9	10	11	12	
New Entrants	Spell Type													
Person C	Single Short-Term		X	X	X	X								4
Person D	Single Short-Term										X	X		2
Person E	Single Long-Term				X	X	X	X	X	X	X	X	X	"9"
Person F	Multiple Spells		X	X	X				X	X	X			6

Spell Type = Multiple Spells (person is a “Cycler”)

= Person has more than one spell in 60 months

Examples: Person F



Fig. 1. Dist'n of Total Time on SNAP (New Entrants) State X, 2014-2018

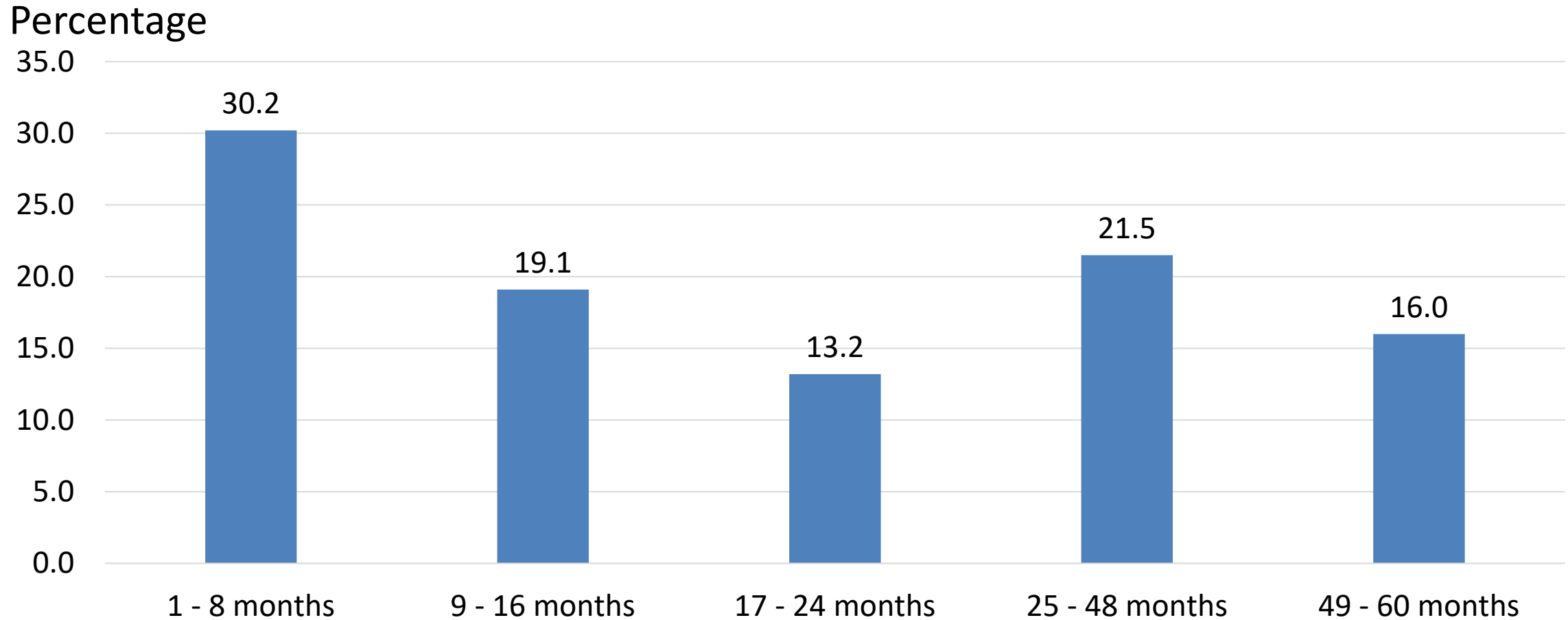


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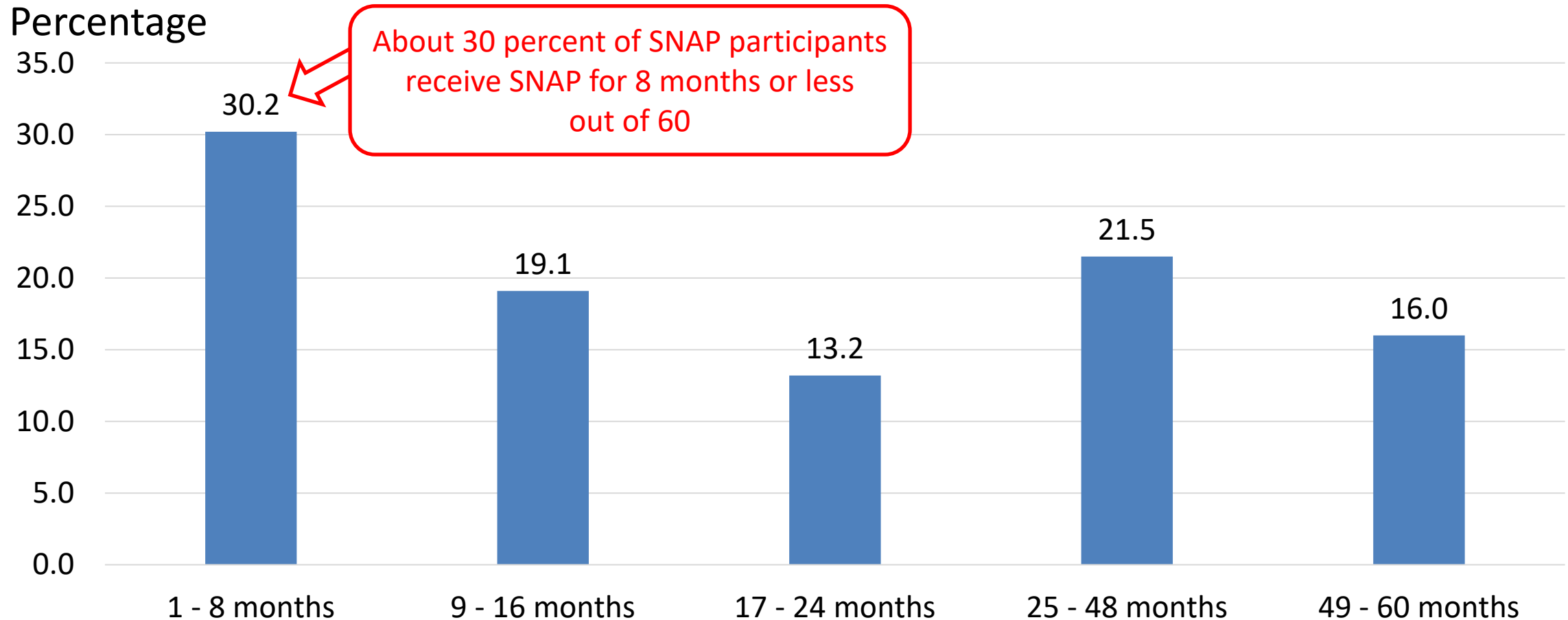


Fig. 1. Dist'n of Total Time on SNAP (New Entrants, SNAP units) State X, 2014-2018

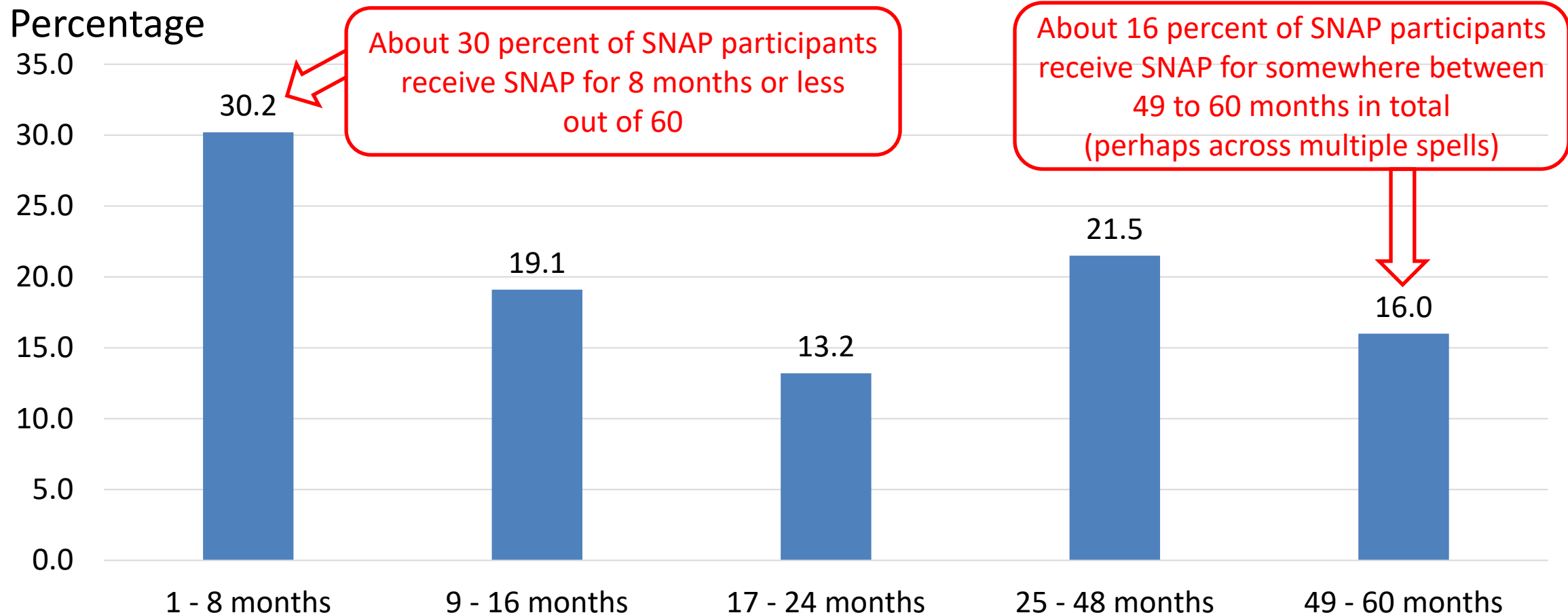


Fig. 2. SNAP Household Participation, by Type and Length of Spells, State X, 2014-2018

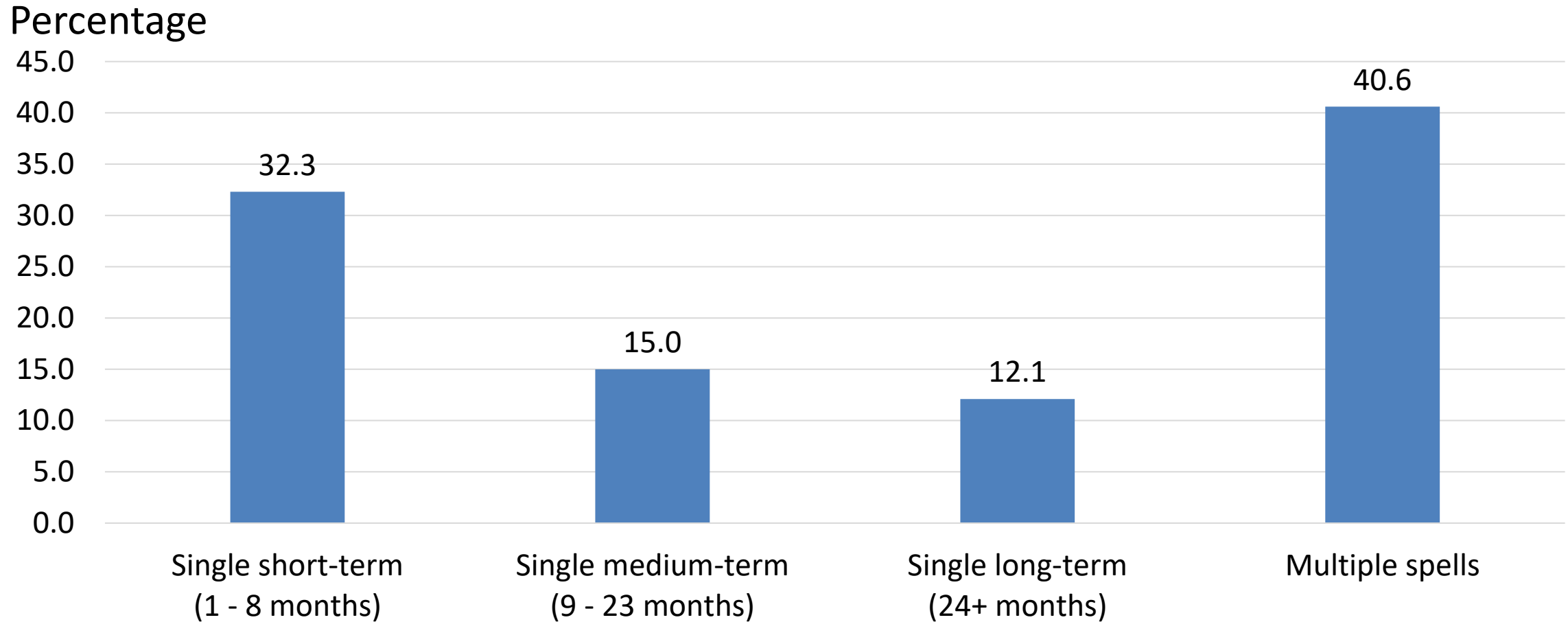


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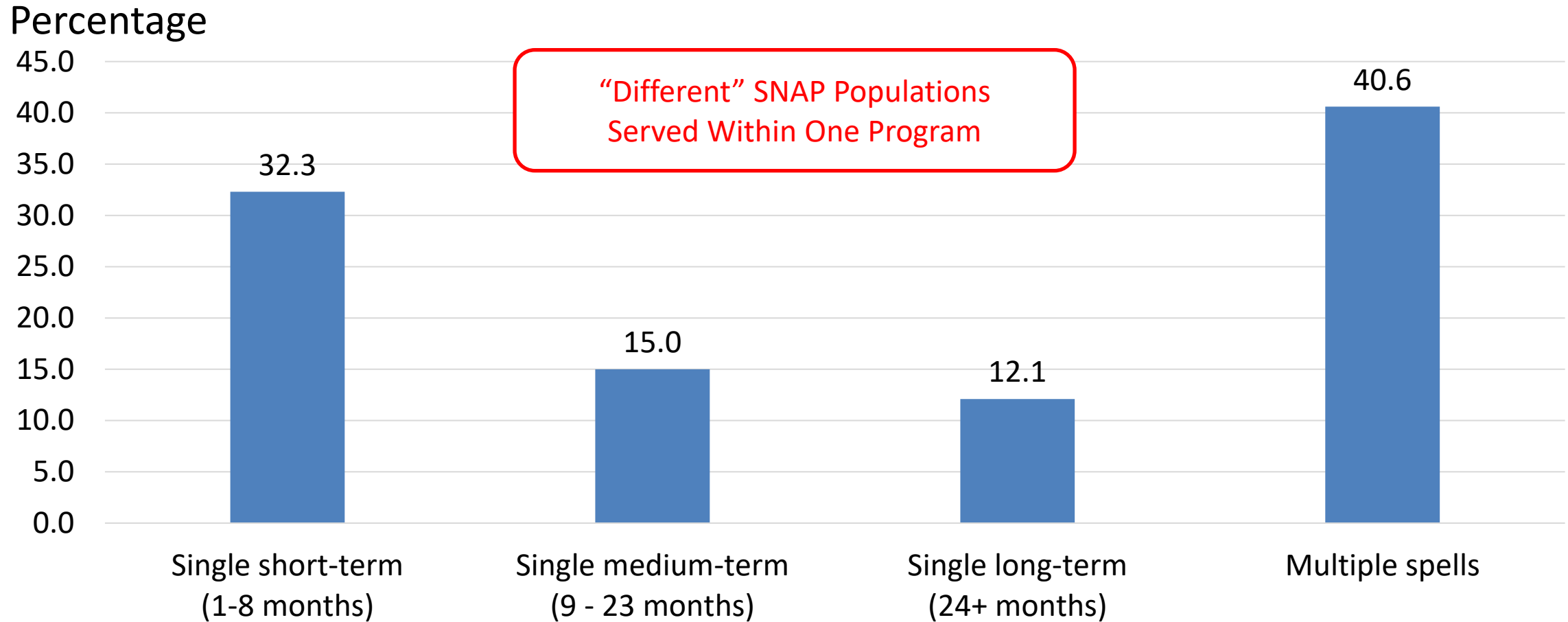


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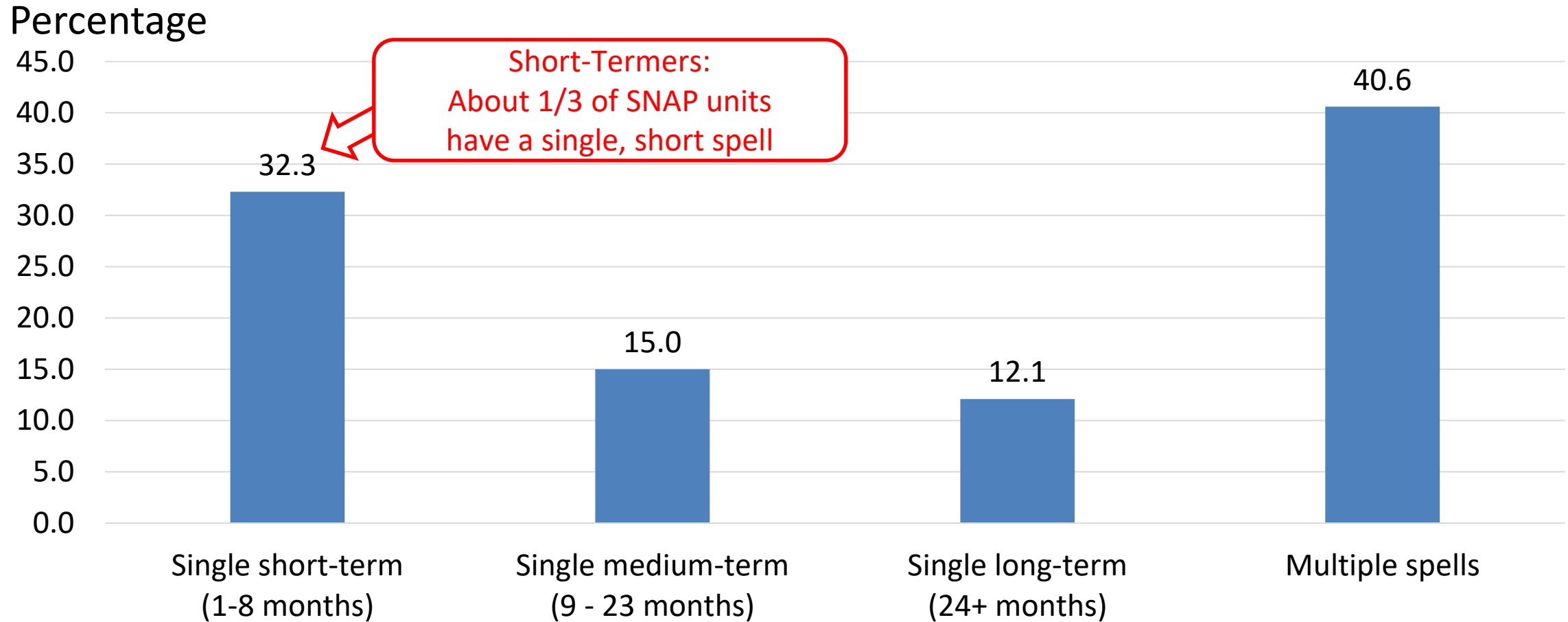


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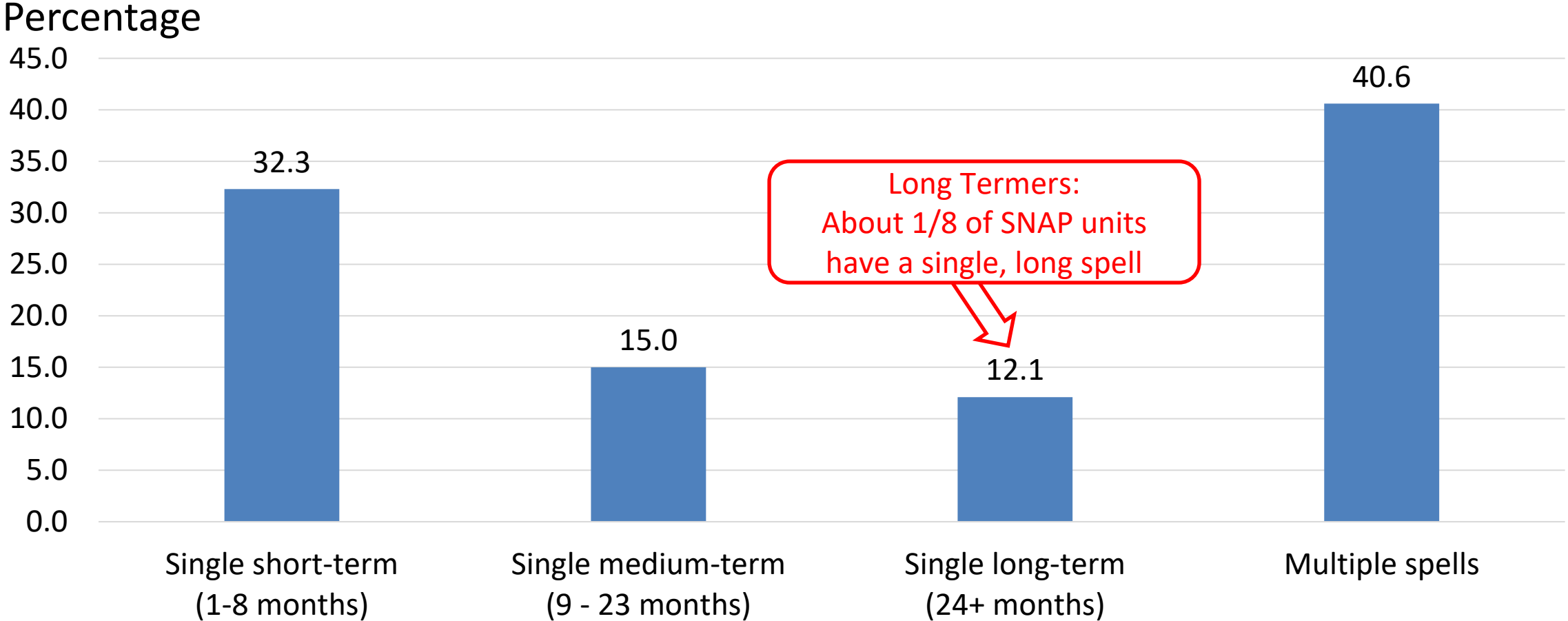


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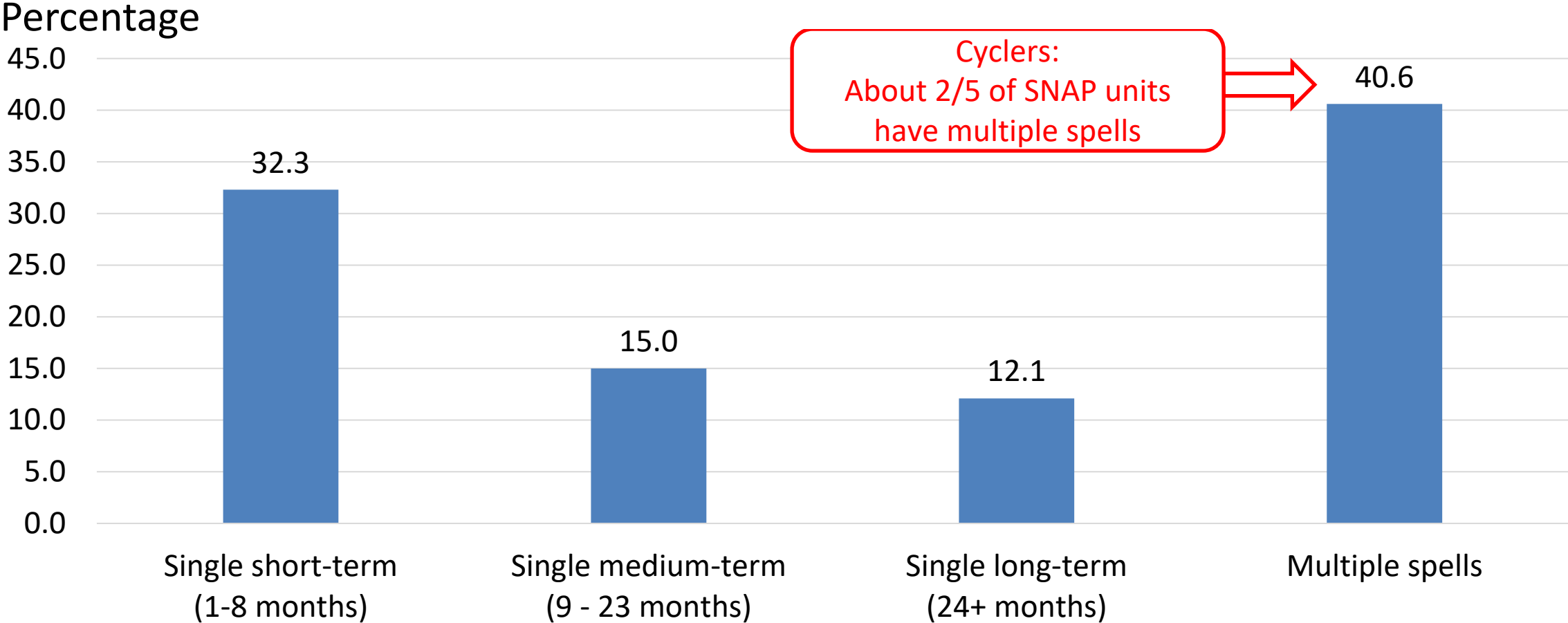


Fig. 3. Cumulative Dist'n of SNAP Spell Lengths,
State X, 2014-2018

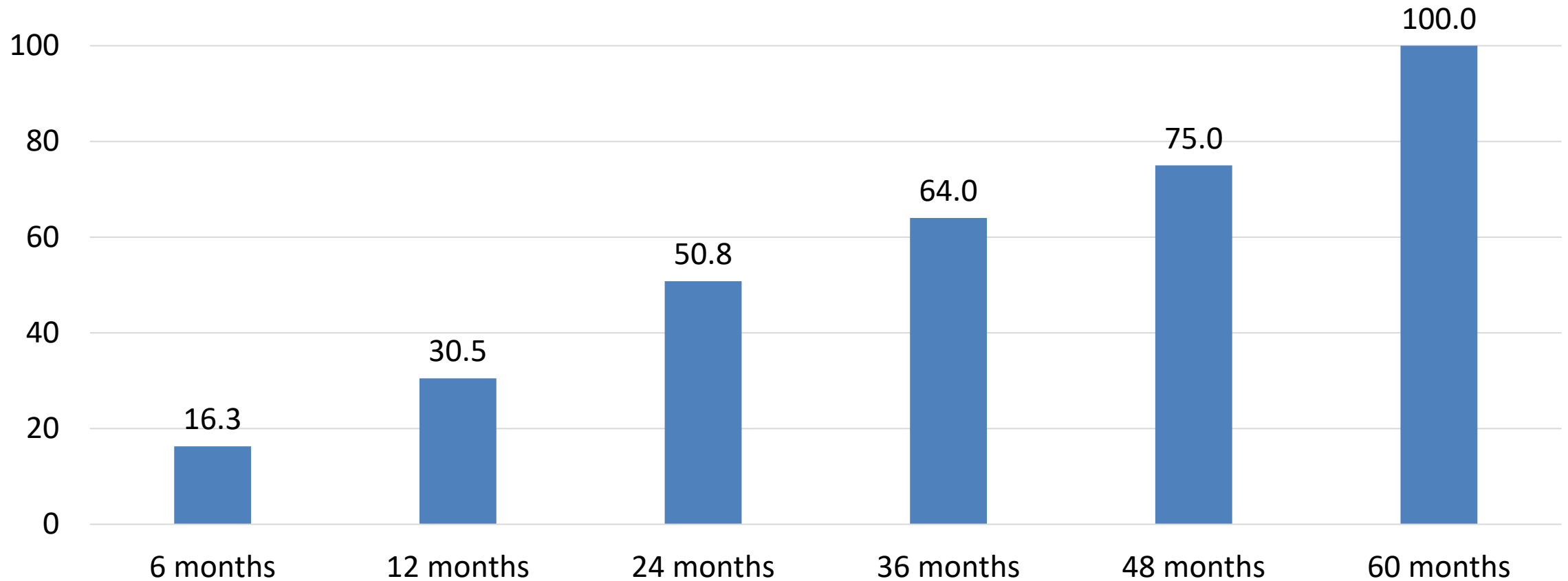


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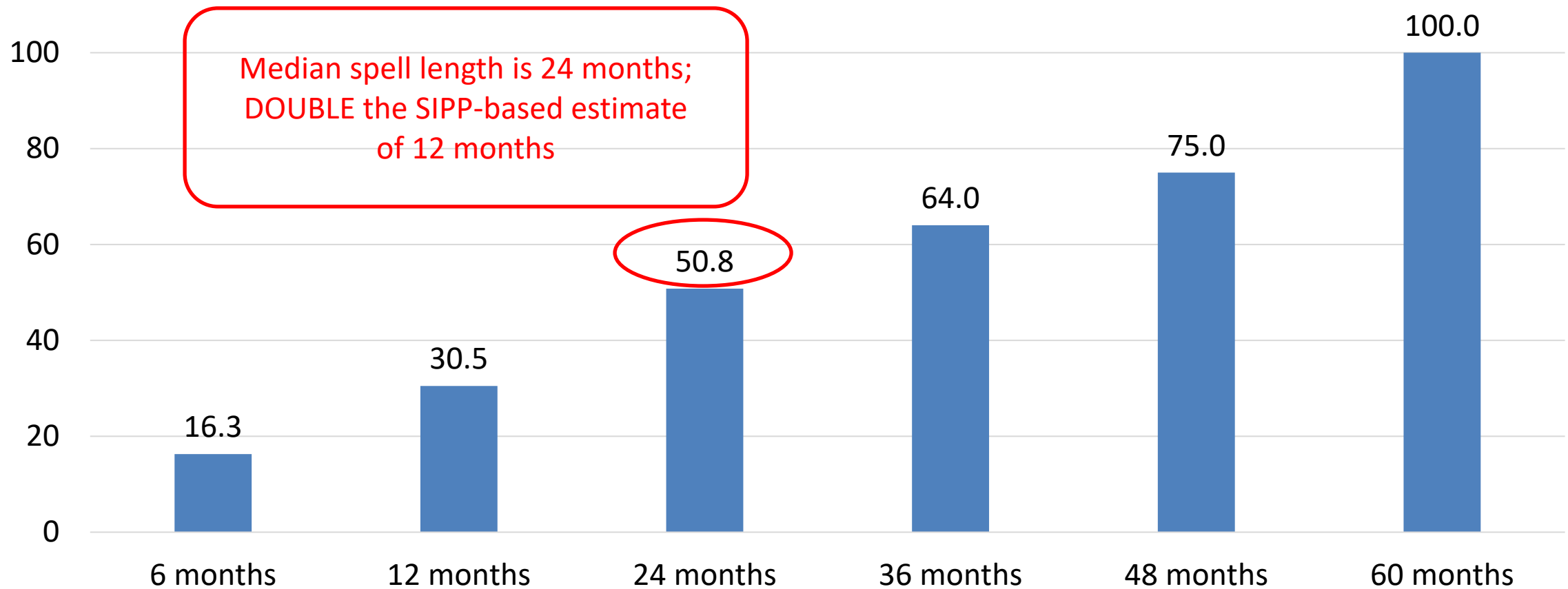


Fig. 4. Cumulative Dist'n of Elapsed Time to SNAP Re-entry, Among all Re-entering Spells, State X, 2014-2018

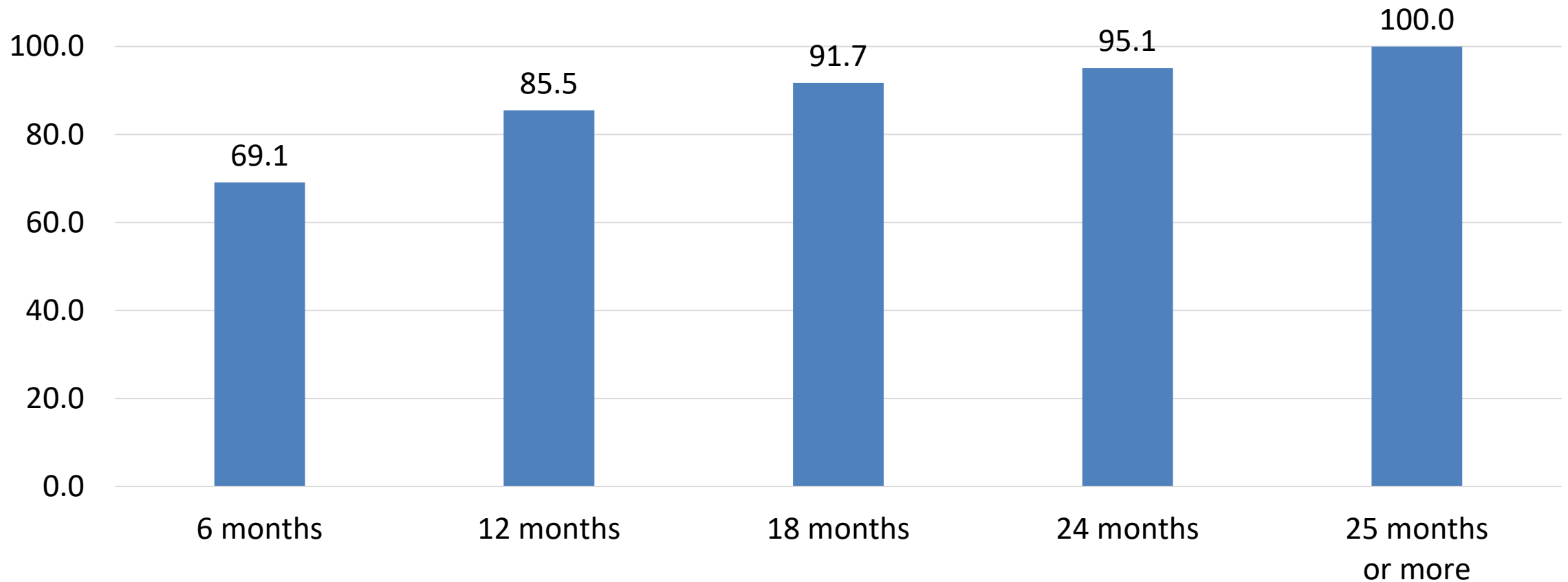
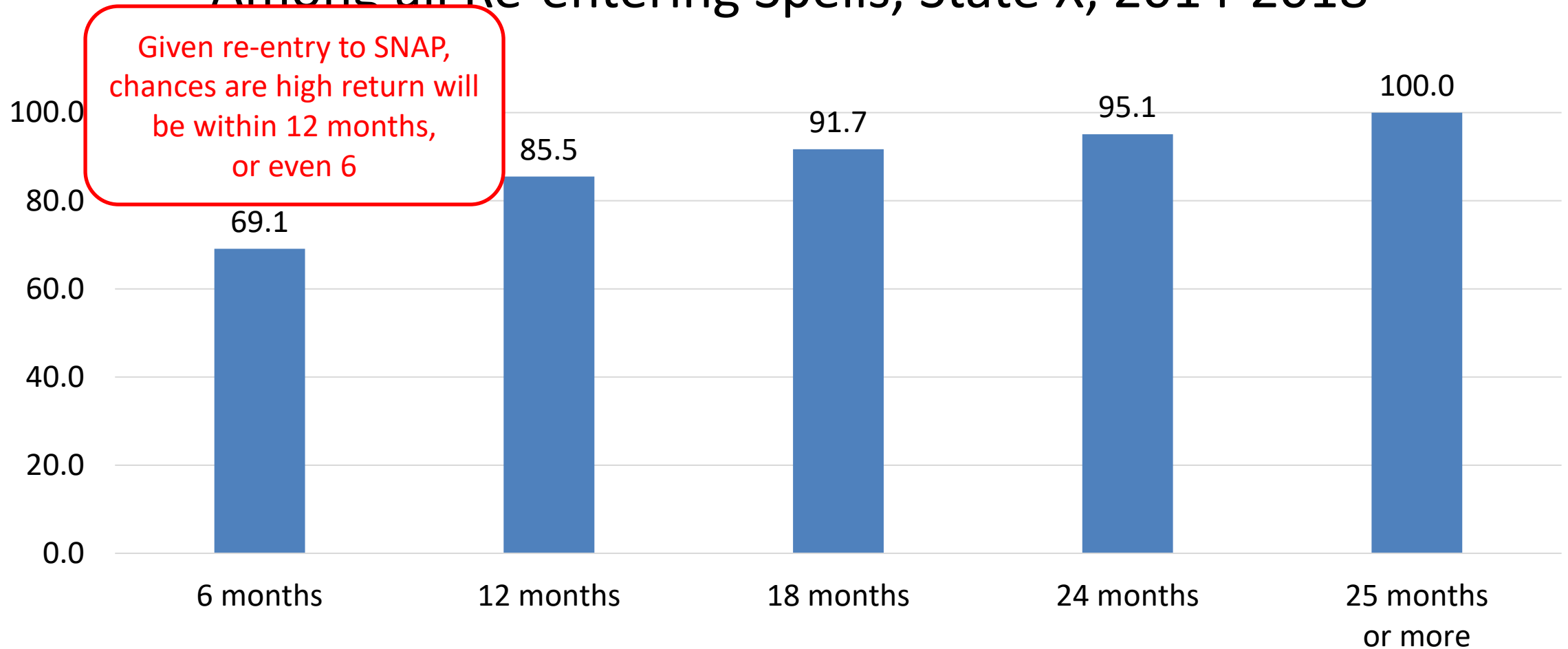


Fig. 4. Cumulative Dist'n of Elapsed Time to SNAP Re-entry,
Among all Re-entering Spells, State X, 2014-2018



Key Findings

- SNAP serves vulnerable populations with distinct needs for both short- and long-term assistance
- Among new SNAP entrants between 2014-2018, over the 60-month study period
 - 30% received SNAP for 8 months or less
 - 16% received SNAP for 49-60 months
 - 40% experience multiple spells



Key Findings

- SNAP participation is dynamic, and administrative data suggest longer spell lengths than those found in survey data.
 - The median spell length is 24 months
 - If re-entry occurs after a SNAP exit, the majority (69%) will occur within 6 months and most (85%) within 1 year.



Future Work

- Bring in additional States to the analysis
- Identify characteristics associated with short and long-term participants
- Link participation dynamics to changes in SNAP caseload over that time
- Analyze spell duration changes, for which groups, in response to:
 - macroeconomic conditions across two decades
 - COVID-19 pandemic



You Can Request Data Access

- Federal and non-federal researchers can request permission to access micro-level SNAP data, and other restricted-use data, through the Standard Application Process (SAP)



- SAP Application Portal: <https://www.researchdatagov.org/>
- NOTE: Physical access to the data is through a Federal Statistical Research Data Center (FSRDC)



Thank you!

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