



Massachusetts Department of Public Health

Bureau of Substance Addiction Services Treatment Program Workforce Data Update Western Region

FY 2016 - 2023

BSAS & DMA Health Strategies
Workforce Development Teams

Introduction

BSAS analyzes Treatment System Program Staff information in order to monitor workforce trends. This presentation offers Statewide analysis with comparison to the Western Region.*

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*Additional presentations available:

- Statewide
- Each BSAS region



Western Region

To use this information for your own presentation, policy or program development, please contact Jen Parks at BSAS (refer to slide 49).

Background

Purpose:

To describe workforce trends in the BSAS Treatment System (not including other BSAS services such as Prevention, Harm Reduction, or Recovery Support Services)

Data source:

Data retrieved from program licensure renewal applications submitted via the electronic licensing system administered by BSAS (eLicensing) for Fiscal Years (FY) 2014-2023

- Programs renew licenses every two years
- Some programs renew early or late
 - For analysis purposes only, Reporting Period may be shifted to reflect continuous program operations.

Key Terms:

Position: Role reported for each program, independent of the individual that occupies it.

Staff: Individuals that are listed in an application's "Staff Information" section.

Role: Position Category listed in treatment program regulations 105 CMR 164.00 ("Staff Role Type" in eLicensing).

Reporting Period: A two-year snapshot of application data.

Current Reporting Periods: FY 16/17, FY 18/19, FY 20/21, & FY 22/23

Cohort: People working in the System during a specific Reporting Period. (e.g. Cohort FY 22/23)

Level of Care: High level grouping of treatment types.

Limitations

- eLicensing fields are periodically updated; thus, some data has not been collected for all reporting periods.
- eLicensing only captures BSAS Treatment Programs; other BSAS services such as Recovery Supports, Housing, Harm Reduction, and Prevention, etc. are not included.
- Some free-text responses result in data exclusion.
- All information, including demographics, is reported by program representatives, not individual staff members.
- Some programs renew late or early, causing gaps in reporting despite continuous program operations.
- There is no unique identifier for individual staff in raw data. Programs report staff by name; linking individuals across applications is a manual process.
- Vacancies are not uniformly reported.
- Programs only report on positions required by regulations; programs may employ staff not reported.
- Data only provides a snapshot of program activity; workforce hiring/loss between applications is not captured.

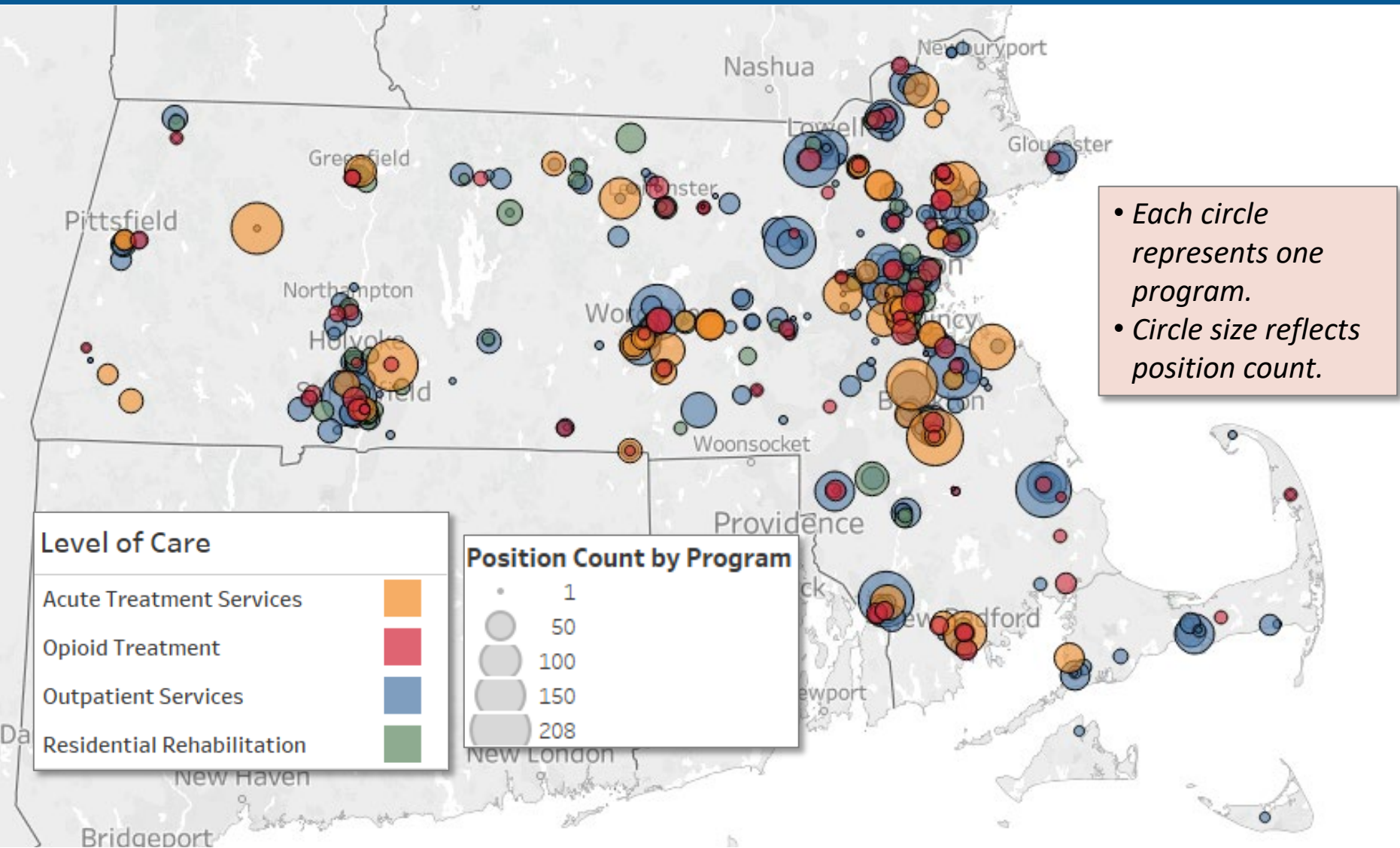
Some sections include specific notes.

Section 1:

Program and Staffing Trends

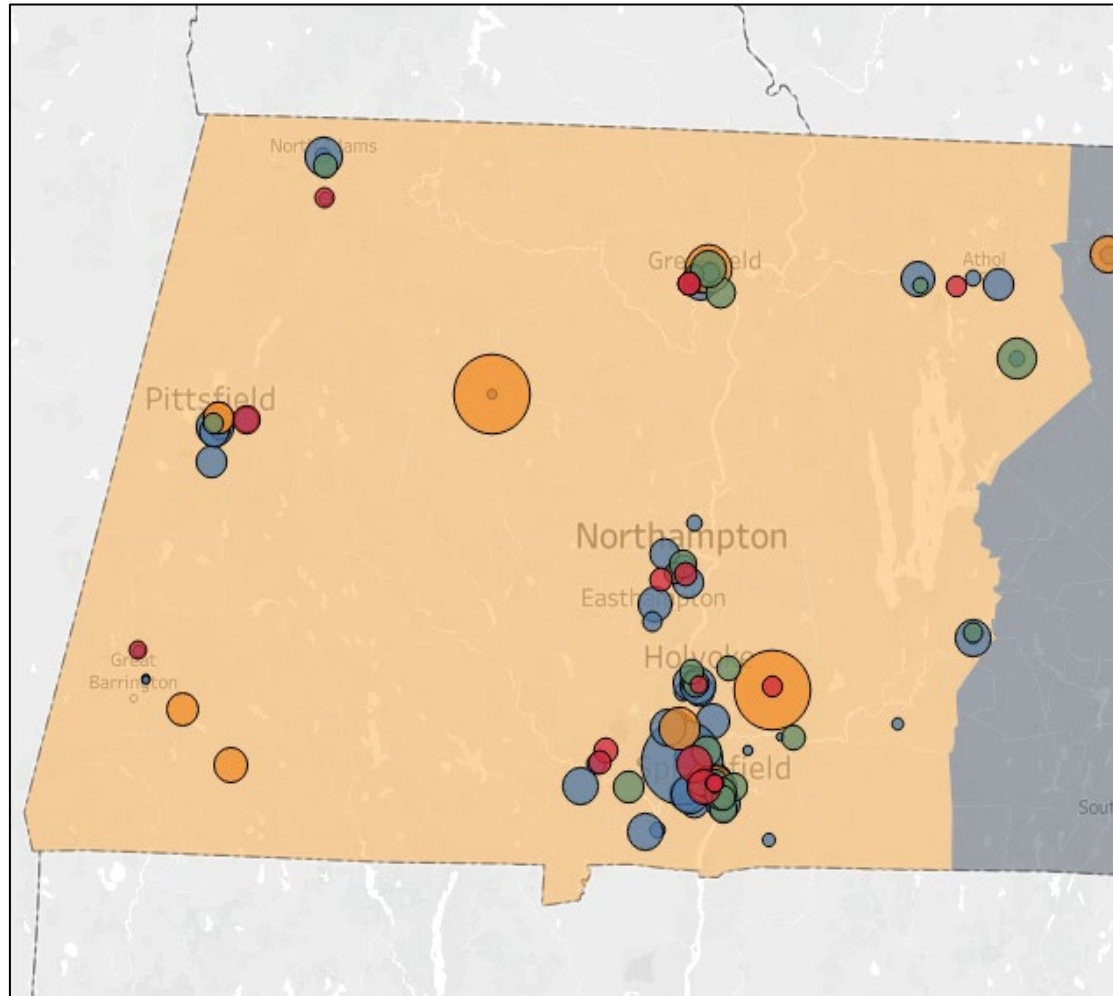


Distribution of Programs by Level of Care (FY 22/23)



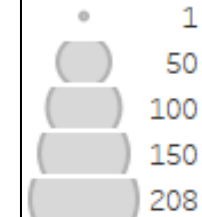
Western Region Distribution of Programs

by Level of Care (FY 22/23)



- Each circle represents one program.
- Circle size reflects position count.

Position Count by Program

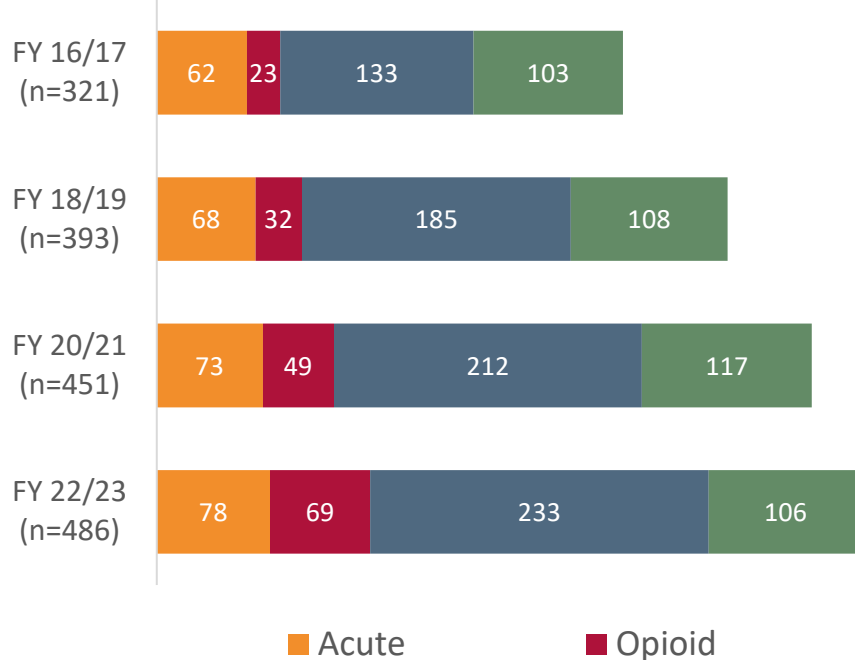


Level of Care

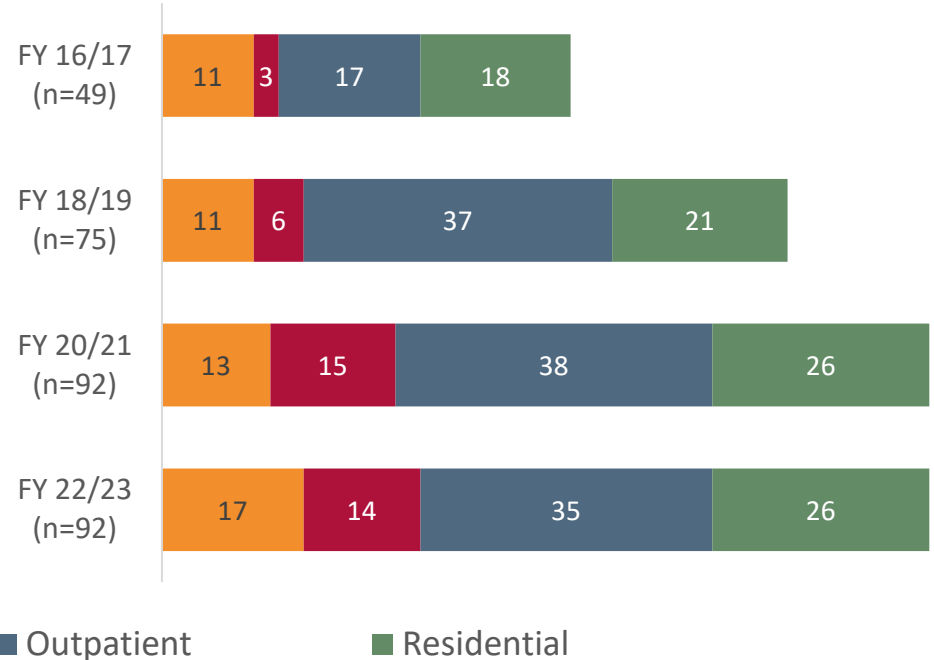
Acute Treatment Services	■
Opioid Treatment	■
Outpatient Services	■
Residential Rehabilitation	■

System Landscape

Programs by Level of Care: Statewide



Programs by Level of Care: Southeast Region



Statewide, there has been a **51%** overall increase in programs in the Massachusetts Treatment System since FY 16/17, with an average increase of **6%** growth per year.

In the **Western Region**, there has been an **88%** increase in programs since FY 16/17, with an average increase of **11%** growth per year.

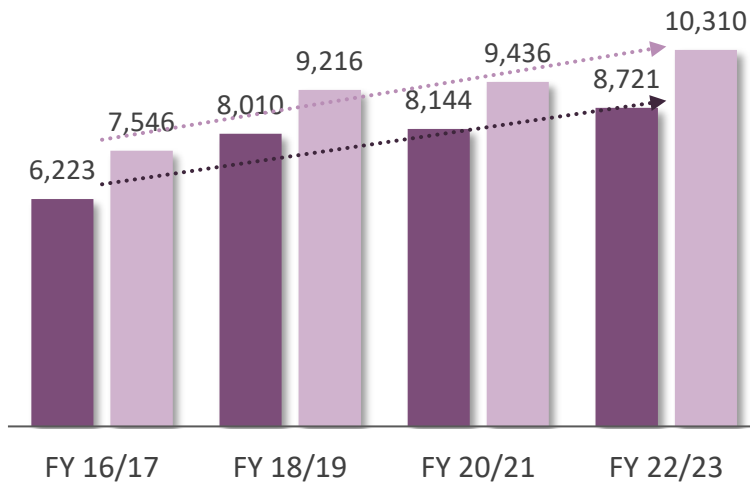
1. Amendments to 105 cmr 164 were promulgated in 2022, reconfiguring how BSAS licenses certain services, which may impact the numbers in this chart.
2. Chart provides count of existing and new programs based on service setting licensure applications approved by BSAS during each time period. During these times, programs opened and closed, creating a variance in counts at any given time.

Charts presented on different scales.

Many factors affect workforce trends; this includes COVID-19 in 2020.

Staff and Position Counts

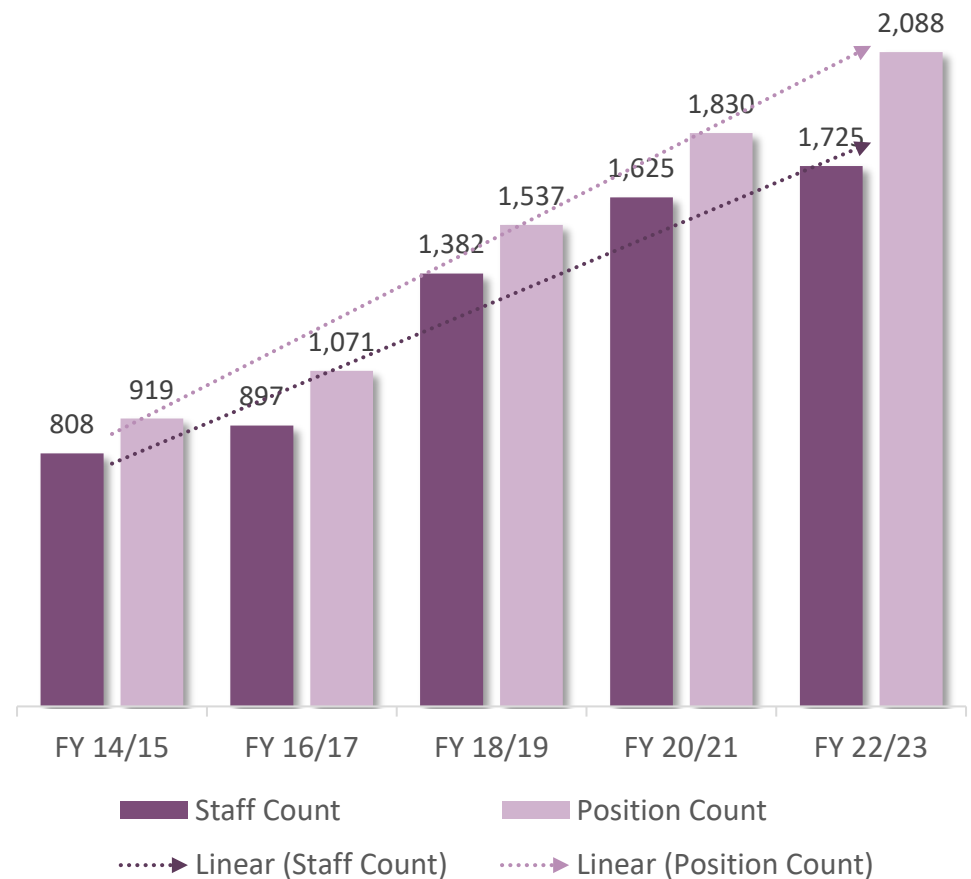
Statewide Staff and Position Counts



Statewide, staff and position growth slowed in FY 20/21 (relative to previous years), and then resumed in FY 22/23.

The Western Region has seen continuous steady growth since FY 16/17. The difference between staff count and position count increased in FY22/23.

Western Region Staff & Position Counts

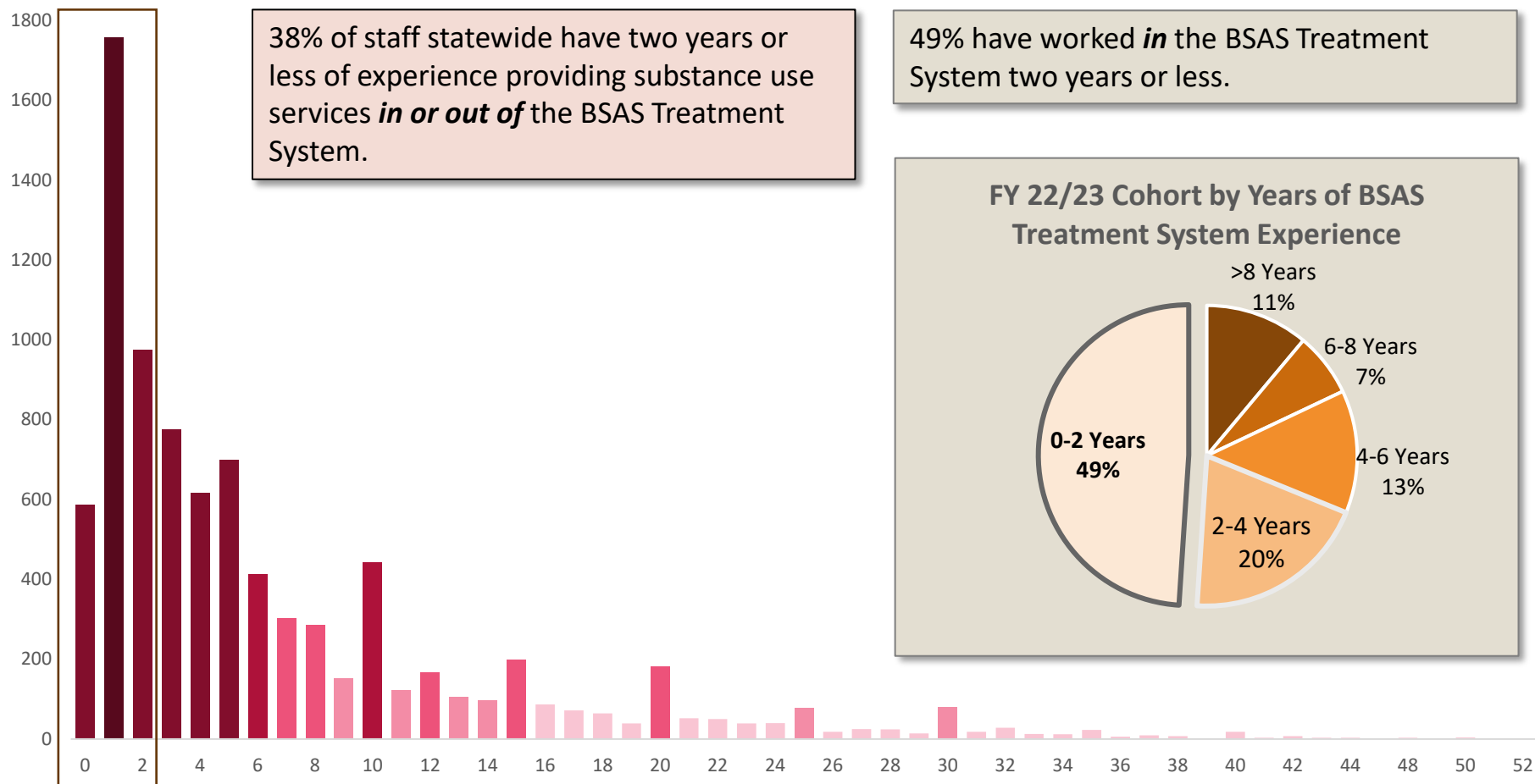


Many factors affect workforce trends; this includes COVID-19 in 2020.

Years of Experience

Providing Substance Use Services

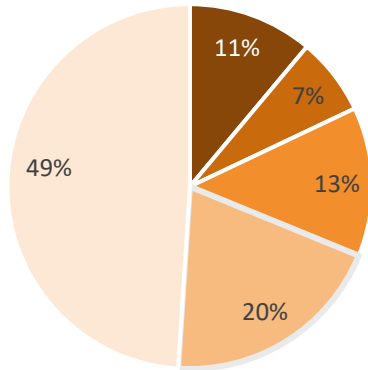
Reported Years of Experience (FY 22/23) (N=8,721)



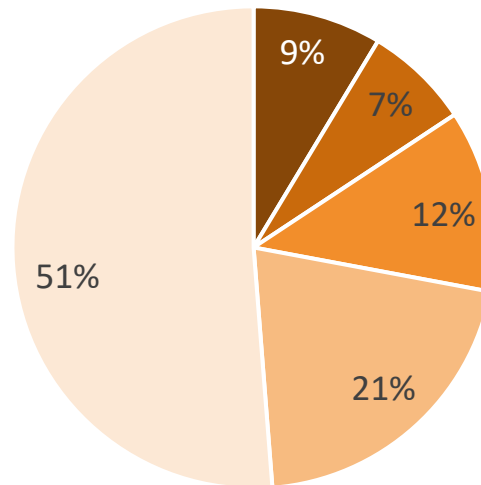
1. Reported Years of Experience (FY 22/23) sourced from eLicensure application data field titled "Years in Addiction Services" from FY 2022 or FY 2023.
2. FY 22/23 Cohort by Years of BSAS Treatment System Experience sourced from ongoing eLicensure application data tracking individuals across applications from FY 2014 through FY 2023.

Current Cohort Composition

Statewide Cohort Composition



Western Region Cohort Composition
FY 22/23



■ >8 Years ■ 6-8 Years ■ 4-6 Years ■ 2-4 Years ■ 0-2 Years

Similar to Statewide, about half of the Central Region's staff have worked in the BSAS Treatment System two years or less.

1. Reported Years of Experience (FY 22/23) sourced from eLicensure application data field titled "Years in Addiction Services" from FY 2022 or FY 2023.
2. FY 22/23 Cohort by Years of BSAS Treatment System Experience sourced from ongoing eLicensure application data tracking individuals across applications from FY 2014 through FY 2023.

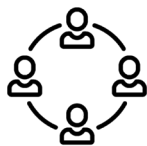
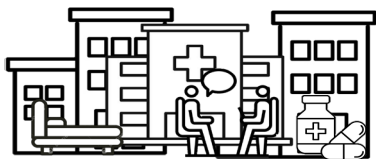
Section 2: Retention



Section 2:

Section-Specific Definitions

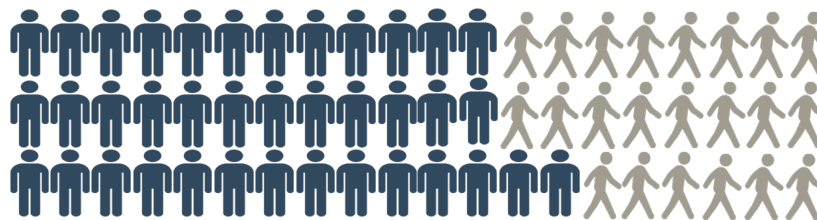
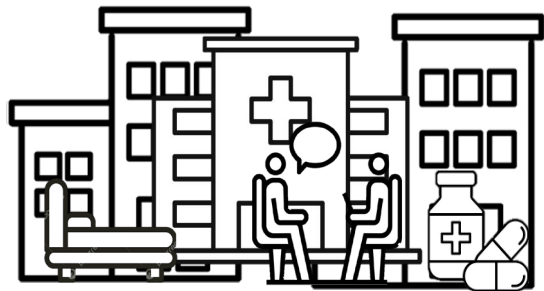
Retention is defined as reporting of a given individual across multiple renewal applications over time.



Retention is analyzed on multiple levels:

- **System Level:** Staff who remain in the BSAS Treatment System (even if they change program or role).
- **Program Level:** Staff who remain in the same Program (averaged across all Programs within the Treatment System).
- **Role Level:** Staff who remain in the System in the same Role (even if they change programs).

System Retention



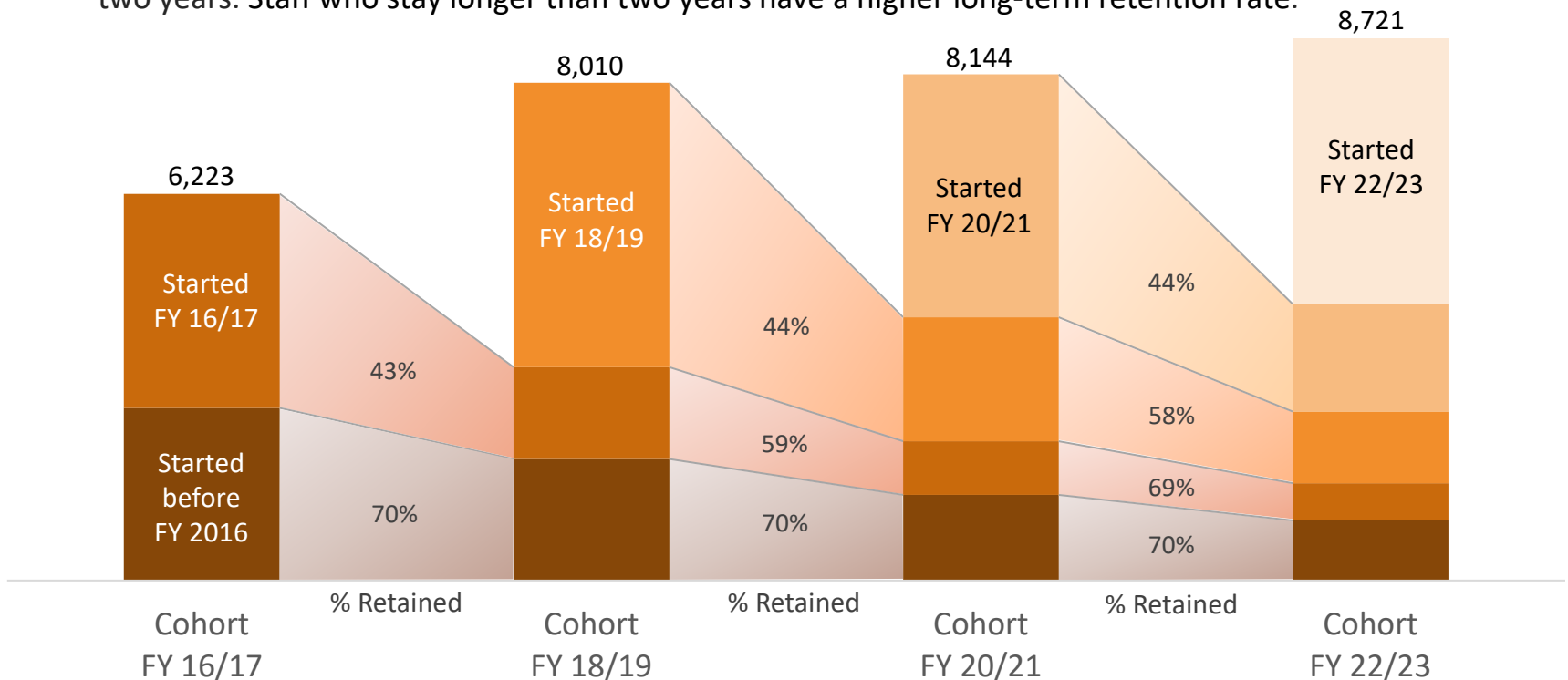
The BSAS Treatment System retained **55%** of staff between FY 20/21 and FY 22/23.

Historical Cohort Composition

Historical Cohort Composition by Start Date

(Overall System Retention: 56%)

While there is overall staff growth across reporting periods, only 44% of new staff are retained beyond two years. Staff who stay longer than two years have a higher long-term retention rate.



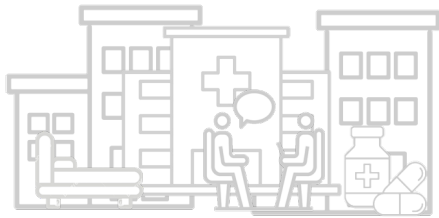
- Almost 50% of the current workforce is new (two years or less in System).
- Staff with six years or more in the System are retained at a higher rate (70%) than staff with two years or less (44%).

Please refer to slide 3 for terminology reference.

Many factors affect workforce trends; this includes COVID-19 in 2020.

System and Program Level Retention

System Level



The BSAS Treatment system retained **55%** of staff between FY 20/21 and FY 22/23.

Program Level



Staff who leave their program may or may not stay in the System.

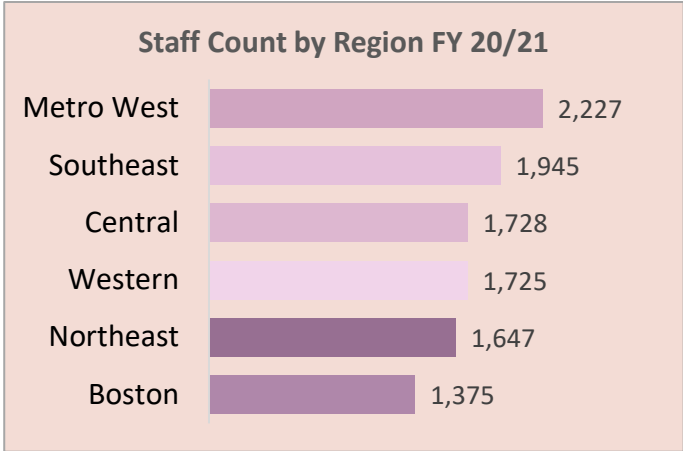
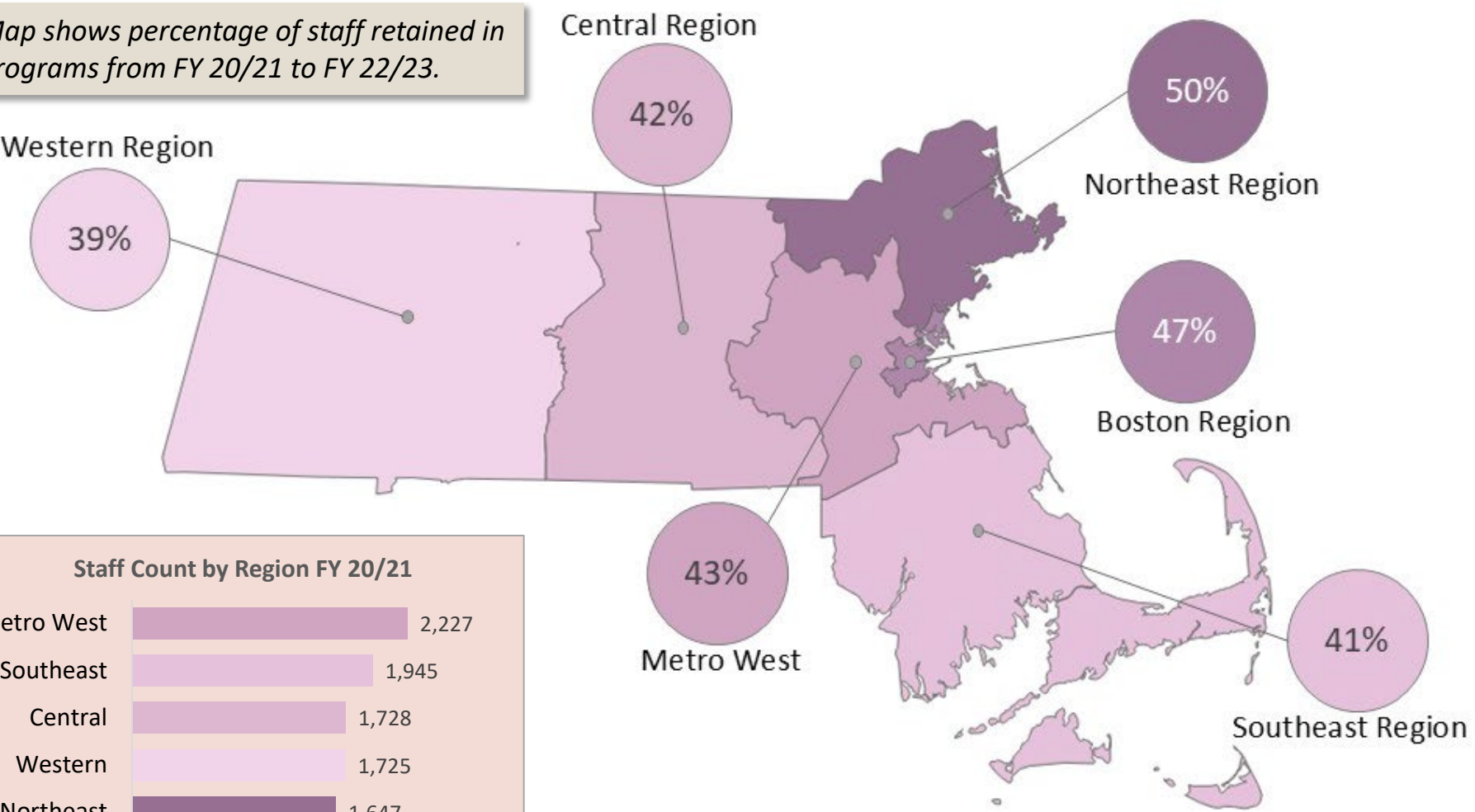


The average program in the BSAS Treatment System retained **41%** of staff between FY 20/21 and FY 22/23.

Program Level Retention by Region

(FY 20/21 to FY 22/23)

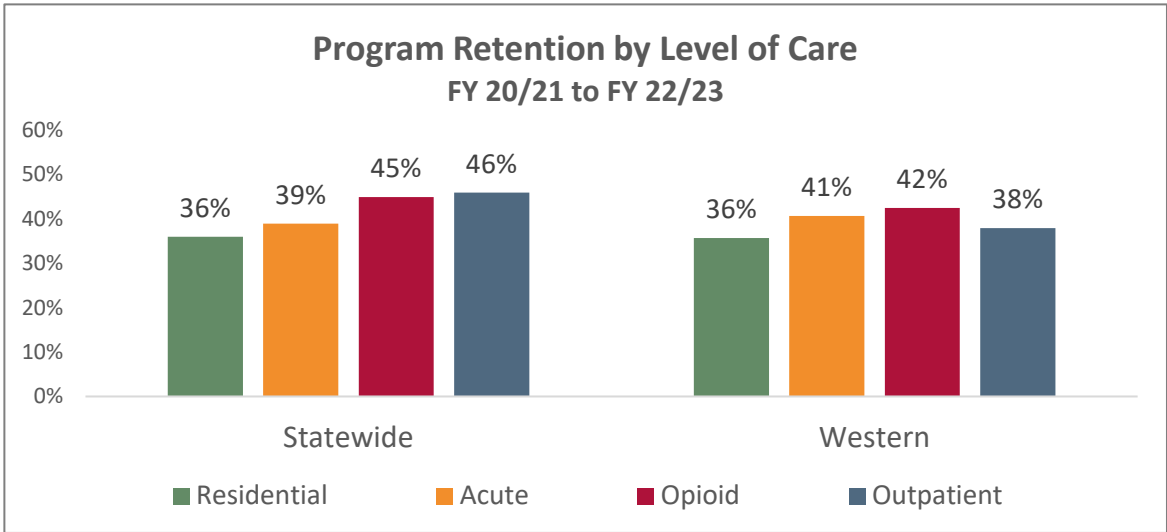
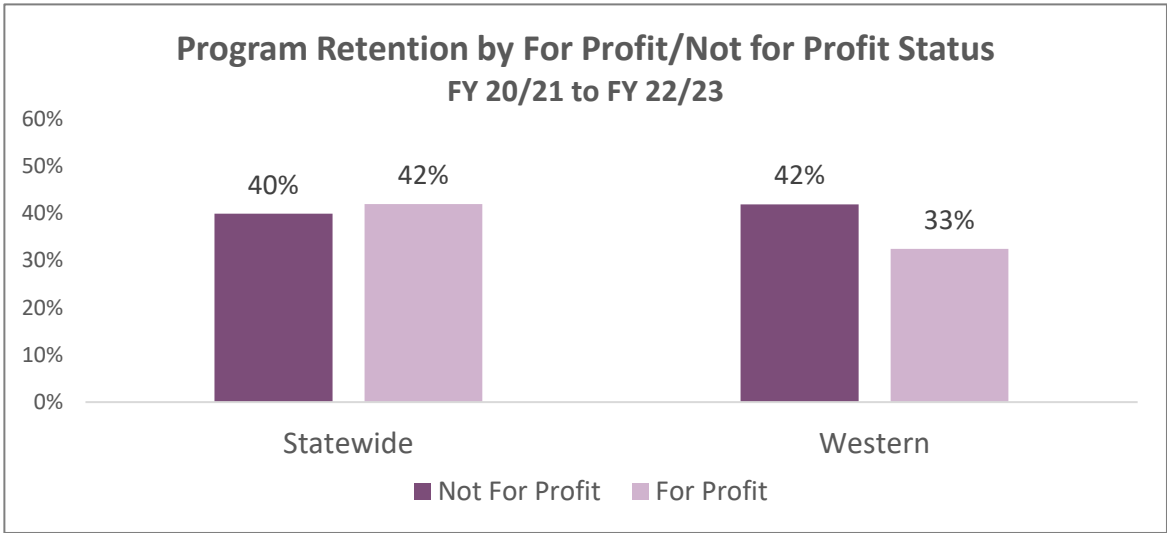
Map shows percentage of staff retained in programs from FY 20/21 to FY 22/23.



Program Level Retention

by Level of Care and For Profit/Not For Profit Status

Average program retention: 41%



- For Profit and Not For Profit programs retain staff at **nearly the same rate**.
- In contrast to Statewide, the Western Region has notably **higher retention rates in Not For Profits** compared to For Profits.
- Generally, **inpatient services** retain their staff at a **lower rate** than outpatient services.
- There is only an **10%** difference between the highest and lowest level of care retention rates.
- In the Western Region, **Acute Services and OTPs** have **slightly higher retention rates** compared to Outpatient and Residential Services.

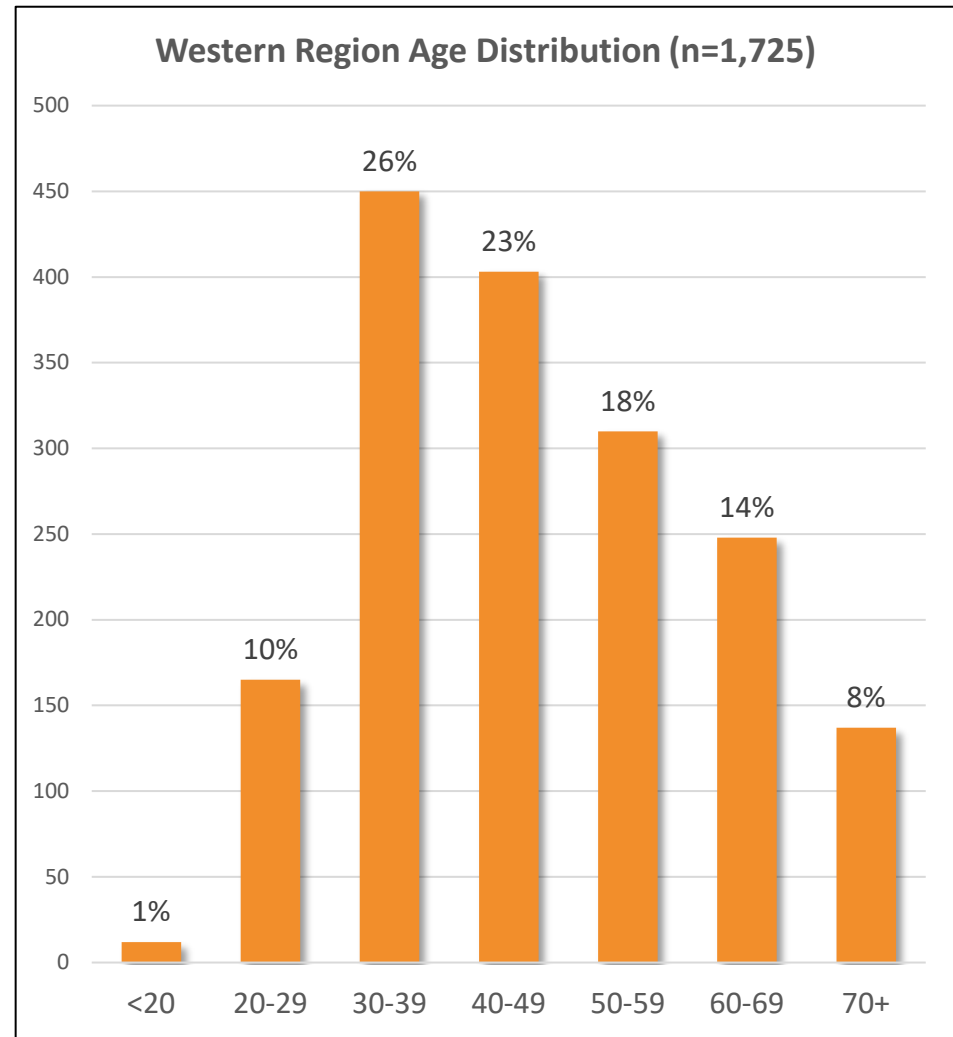
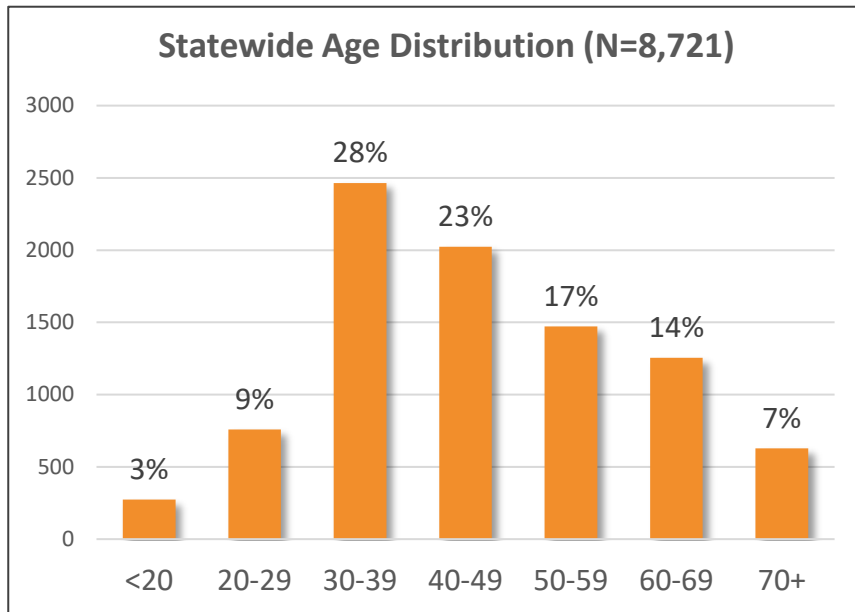
Program Level retention applied to Level of Care and Organization Type because categories are grouped at the program level, not the System level.

Section 3:

Staff Characteristics FY 22/23



Staff Age and Gender

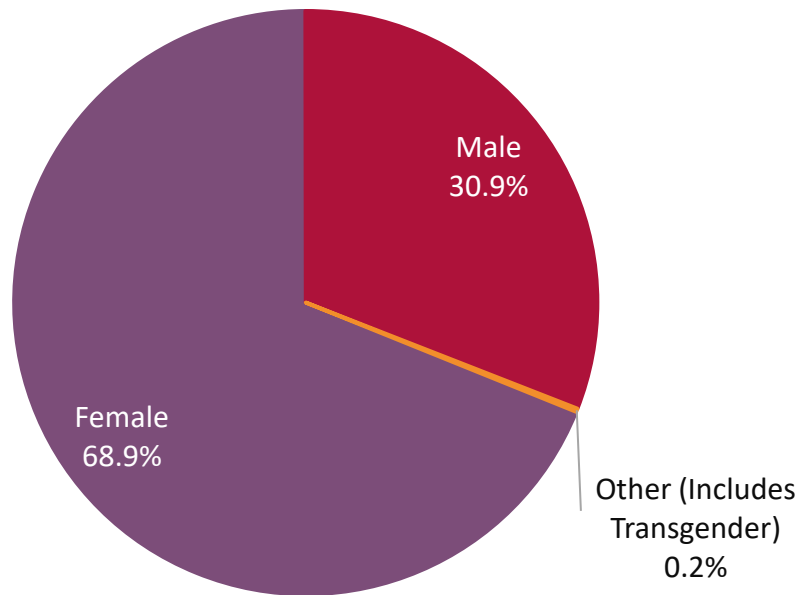


Both Statewide and in the Western Region, more than 60% of the workforce is age 40 or older.

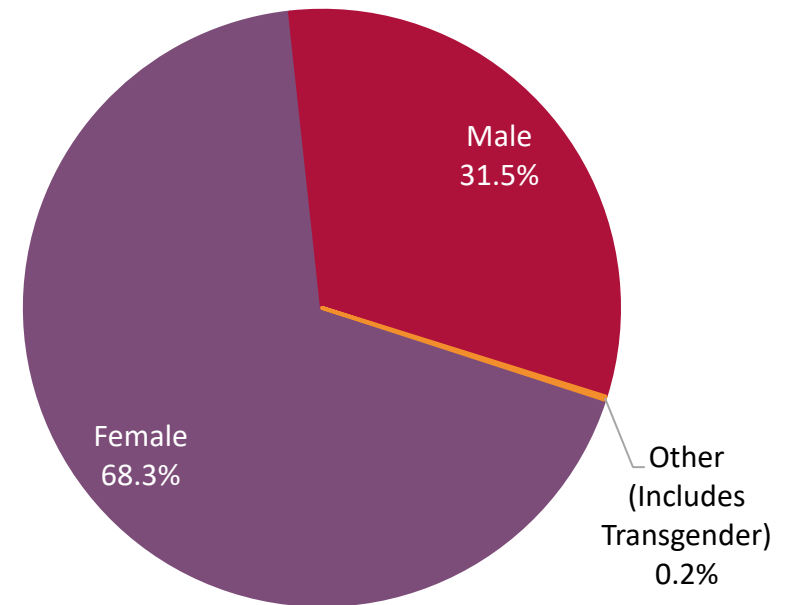
*Age distribution reported for the FY 22/23 reporting period.
All demographic information is reported by program representatives, not individual staff members.*

Staff Age and Gender

Statewide Gender Distribution (N=8,711)



Western Gender Distribution (n=1,712)



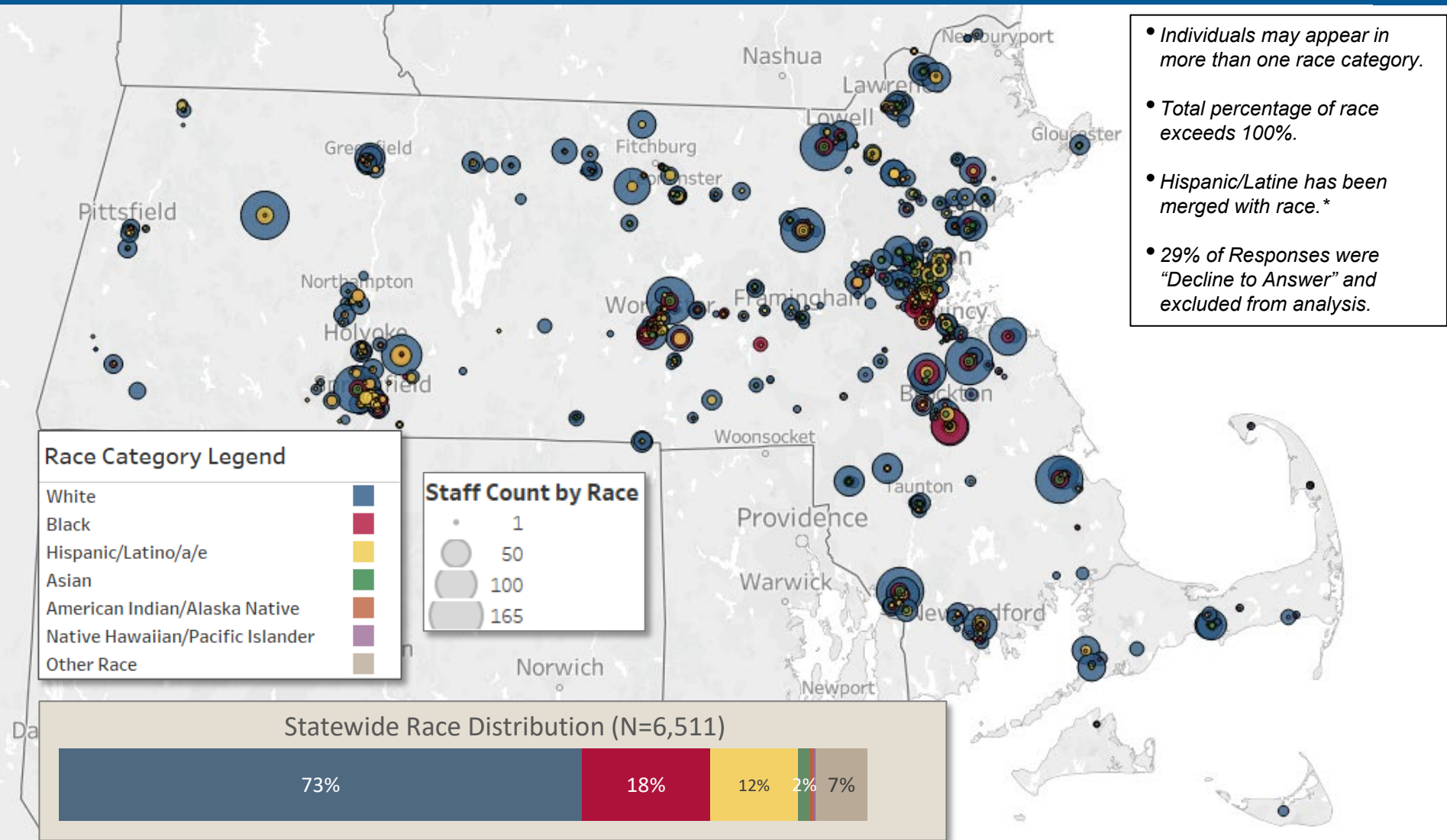
■ Female ■ Male ■ Other (Includes Transgender)

In both statewide and the Western Region, about 70% of the workforce is reported as female.

*Gender distribution reported for the FY 22/23 reporting period.
All demographic information is reported by program representatives, not individual staff members.*

Distribution of Staff by Race

(FY 22/23)

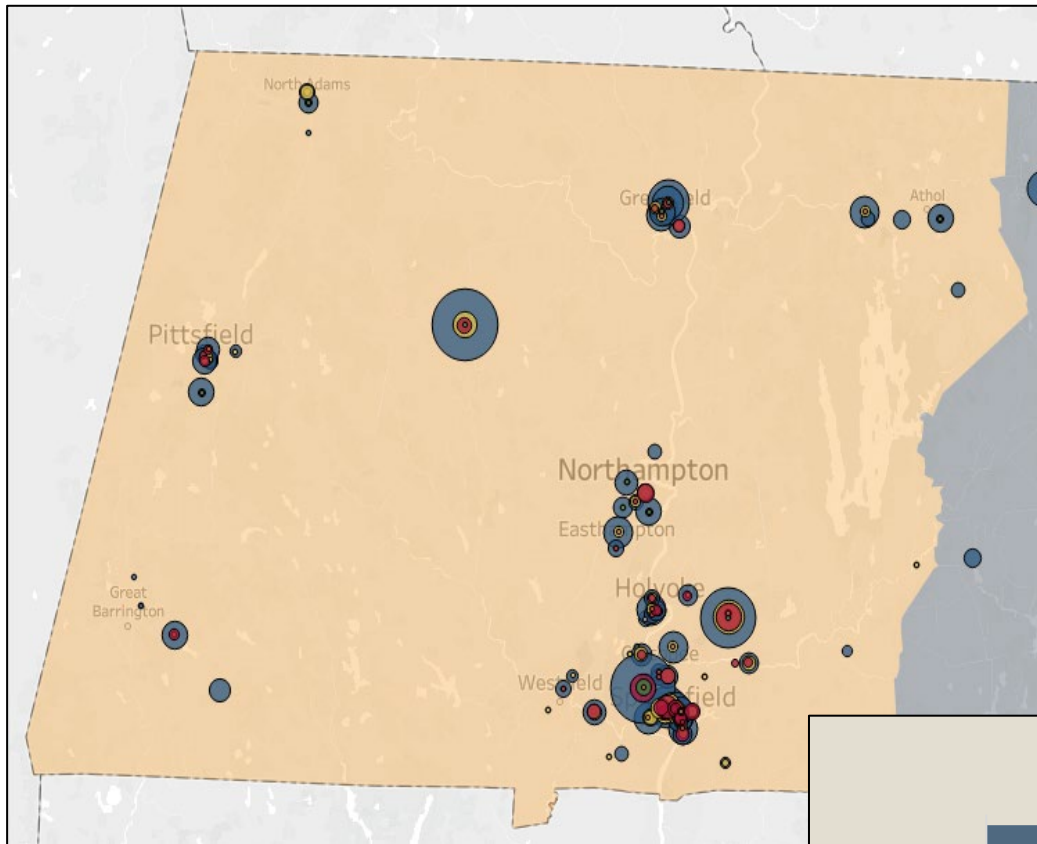


All demographic information is reported by program representatives, not individual staff members.

*Some individuals identify their race as Hispanic/Latine.

Distribution of Staff by Race

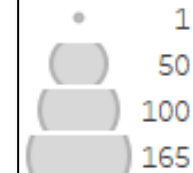
Western Region (FY 22/23)



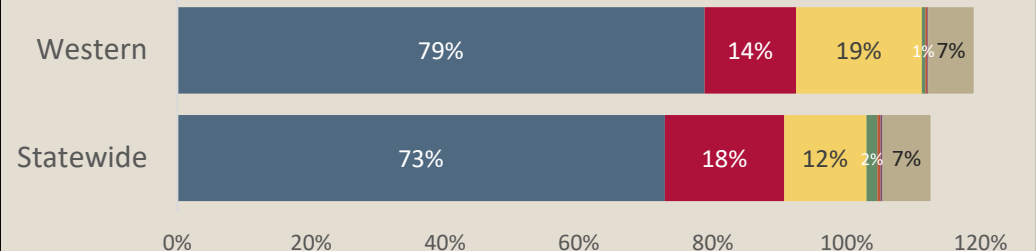
Race Category Legend

White	Blue
Black	Red
Hispanic/Latino/a/e	Yellow
Asian	Green
American Indian/Alaska Native	Brown
Native Hawaiian/Pacific Islander	Purple
Other Race	Grey

Staff Count by Race



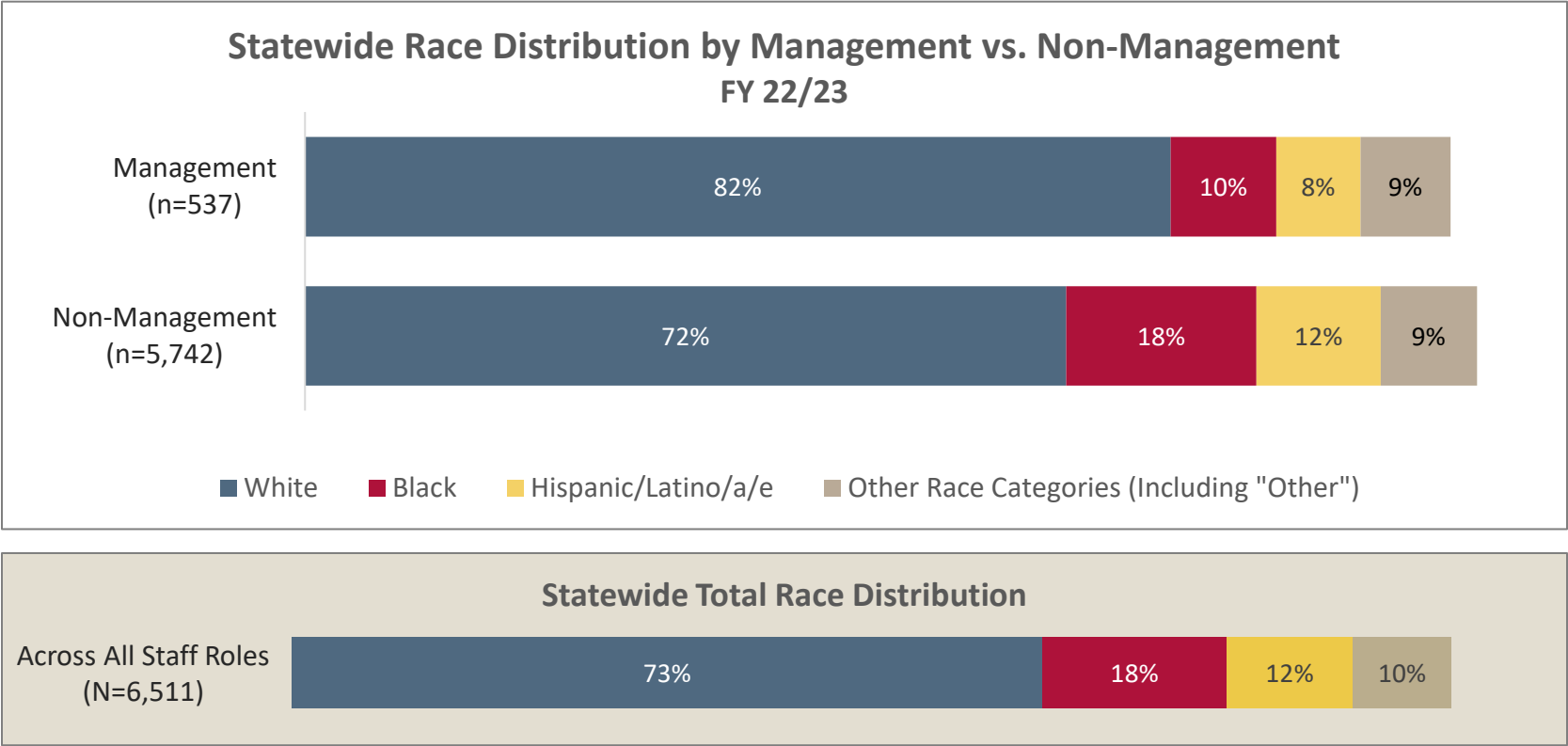
Western Region Race Distribution



All demographic information is reported by program representatives, not individual staff members.

*Some individuals identify their race as Hispanic/Latine.

Management Status and Race



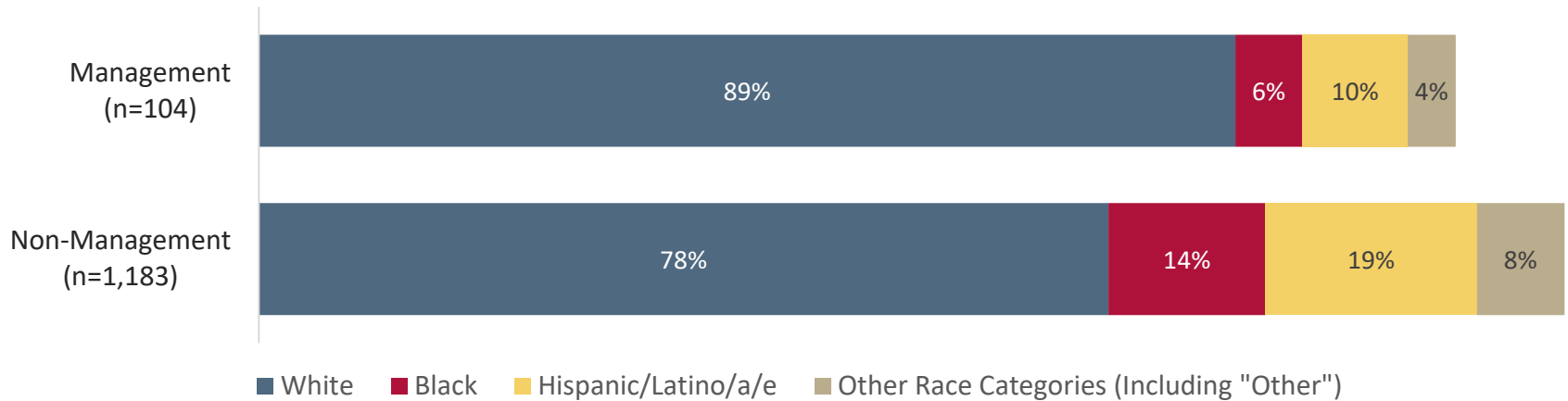
- In Management Roles,
- Staff reported as White are **over**-represented
 - Staff reported as Black or Hispanic/Latine are **under**-represented
- compared to Non-Management and Total Race Distribution.*

*Race distribution reported for the FY 22/23 reporting period.
All demographic information is reported by program representatives, not individual staff members.*

Management Status and Race

Western Region

Western Region Race Distribution by Management vs. Non-Management
FY 22/23



Western Region Total Race Distribution



In Management Roles,

- Staff reported as White are **over**-represented
- Staff reported as Black or Hispanic/Latine are **under**-represented compared to Non-Management and Total Race Distribution.

Race distribution of management and non-management roles in the Western Region is similar to Statewide.

Race distribution reported for the FY 22/23 reporting period.

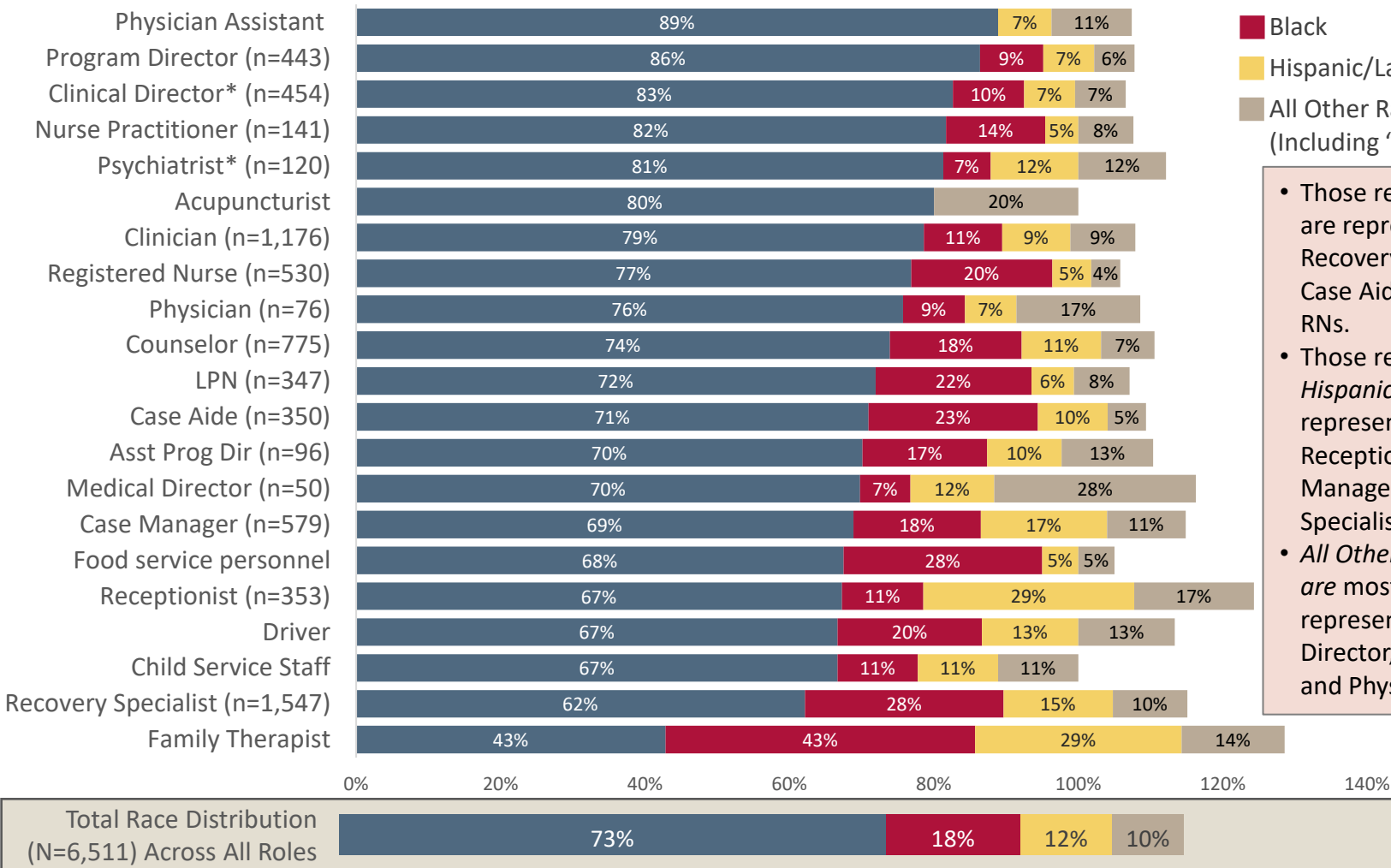
All demographic information is reported by program representatives, not individual staff members.

Roles and Race

Race Distribution by Role FY 22/23

■ White
■ Black
■ Hispanic/Latino/a/e
■ All Other Race Categories (Including "Other")

- Those reported as *Black* are represented most in Recovery Specialists, Case Aides, LPNs, and RNs.
- Those reported as *Hispanic/Latine* are represented most in Receptionists, Case Managers, and Recovery Specialists.
- *All Other Race Categories* are most highly represented in Medical Director, Receptionist, and Physician.



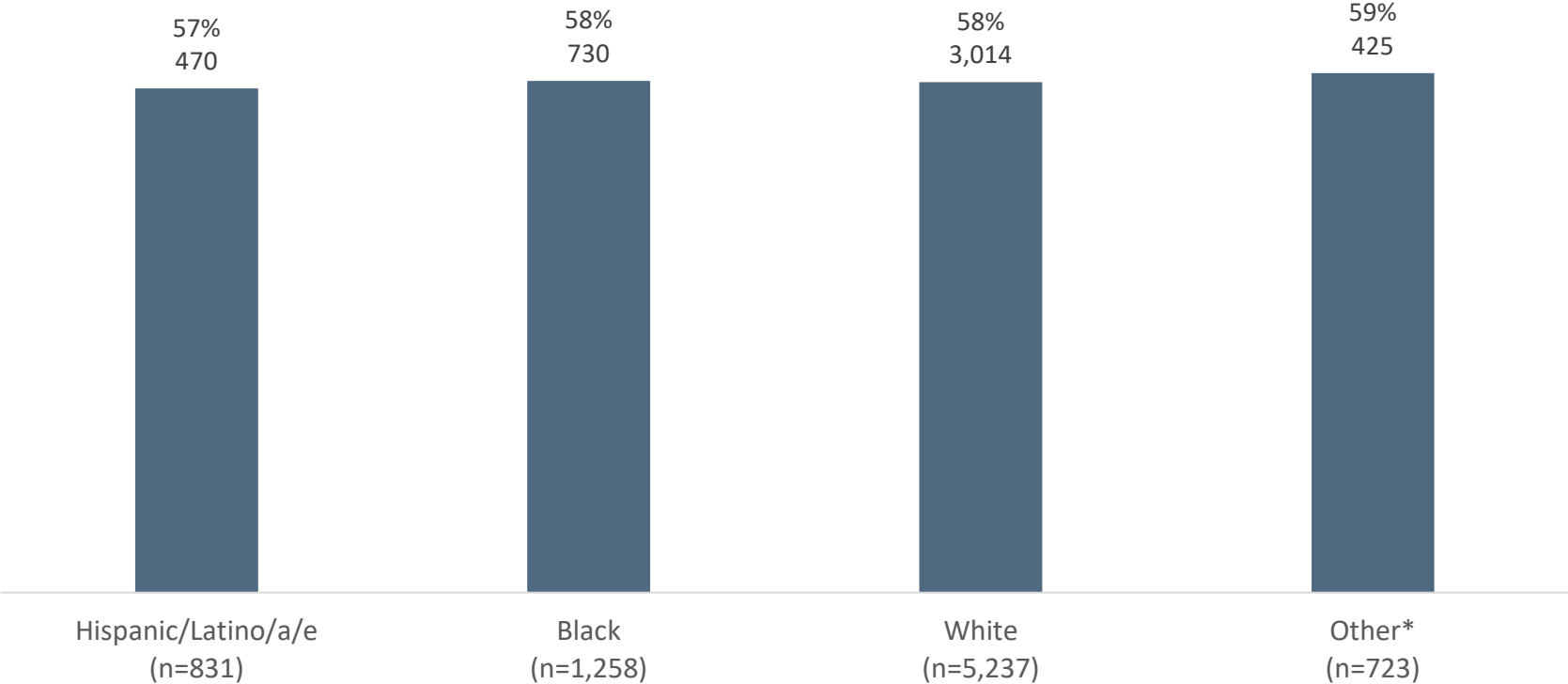
*Clinical Director/Clinical Supervisor/Senior Clinician

*Psychiatrist full Label: Psychiatrist/Psychologist

All demographic information is reported by program representatives, not individual staff members.

System Level Retention by Race

Statewide System Retention by Race FY 20/21 to FY 22/23
(Overall System Retention: 55%)

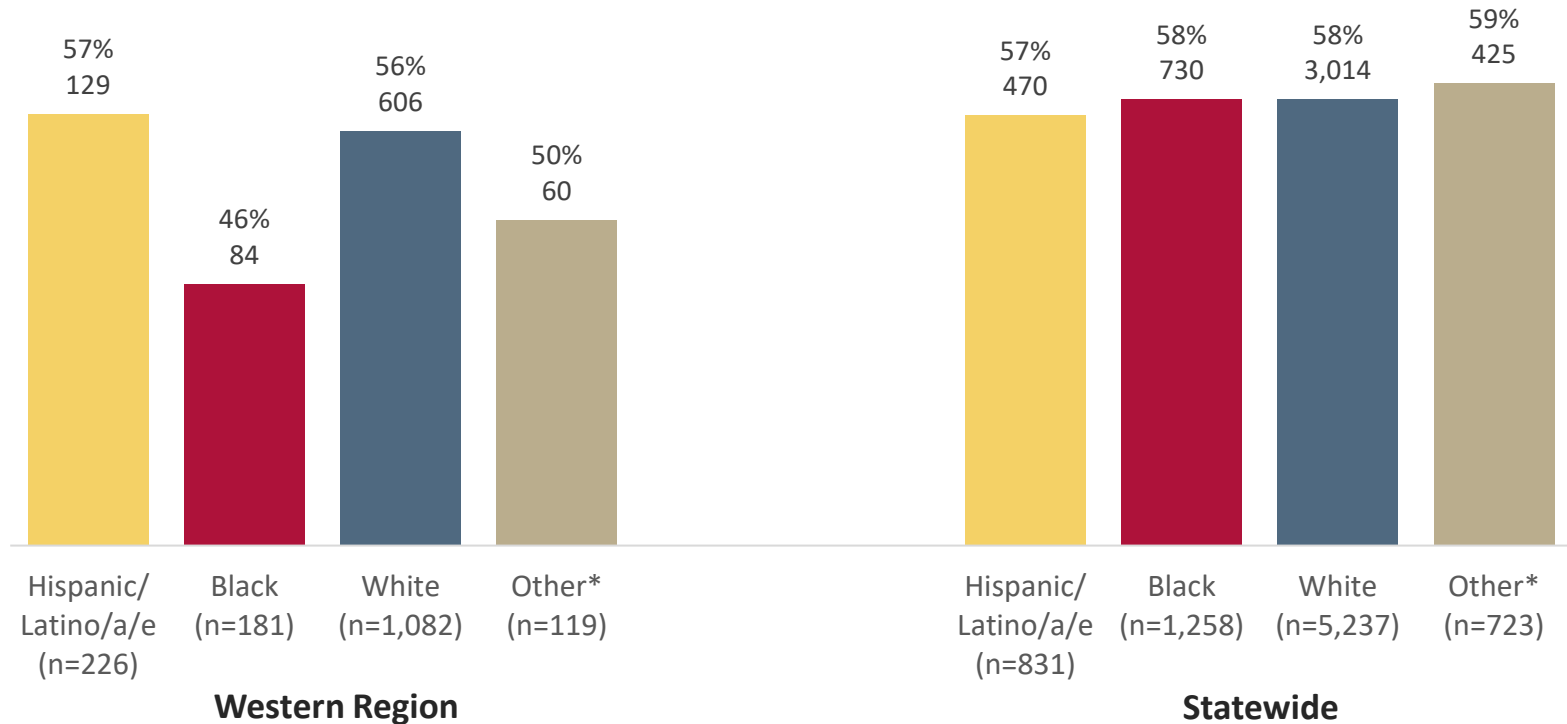


System level retention **does not vary by race.**

All demographic information is reported by program representatives, not individual staff members.

System Level Retention by Race

System Retention by Race FY 20/21 to FY 22/23
(Overall System Retention: 55%)



- Overall, retention in the Western Region is **lower** for all races compared to statewide.
- However, there are **larger differences** in retention rates between races in the Western Region compared to statewide.

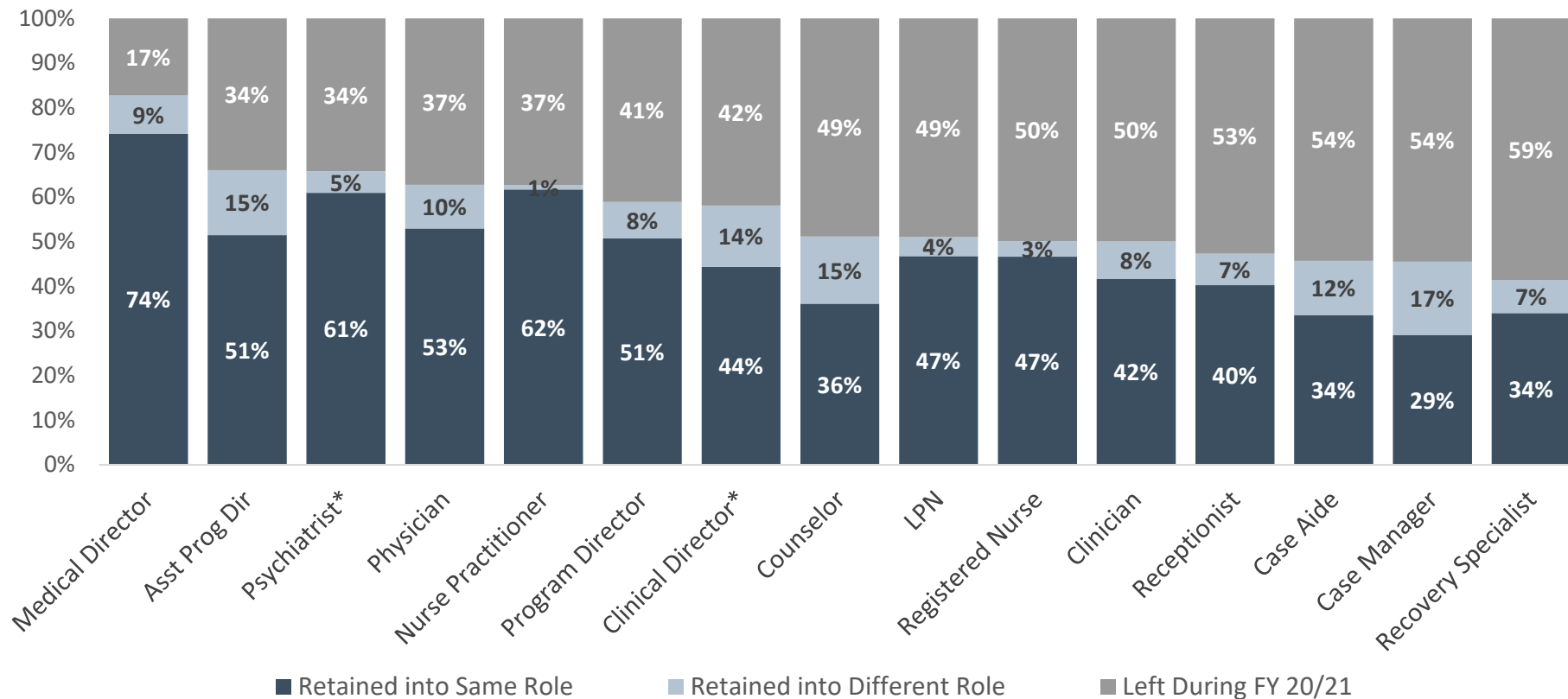
All demographic information is reported by program representatives, not individual staff members.

Role Level Retention

Statewide System Retention by Role from FY 20/21 into FY 22/23

(Overall System Retention: 55%)

Directors and higher degreed professionals showed the highest overall retention. While Case Manager had some of the lowest overall retention, it also showed the highest amount of growth into higher level roles.



In the Western Region, **Medical Directors** had the highest retention at 78%, while **Registered Nurses** had the lowest level of retention at 43%.

*Clinical Director full Label: Clinical Director/Clinical Supervisor/Senior Clinician

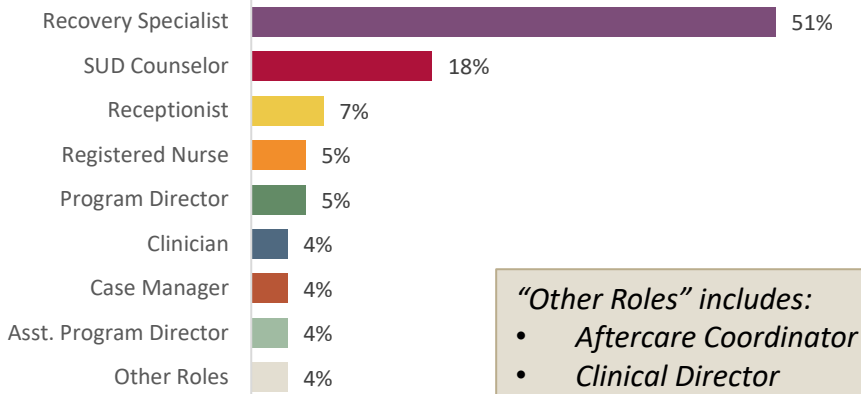
*Psychiatrist full Label: Psychiatrist/Psychologist

Many factors affect workforce trends; this includes COVID-19 in 2020.

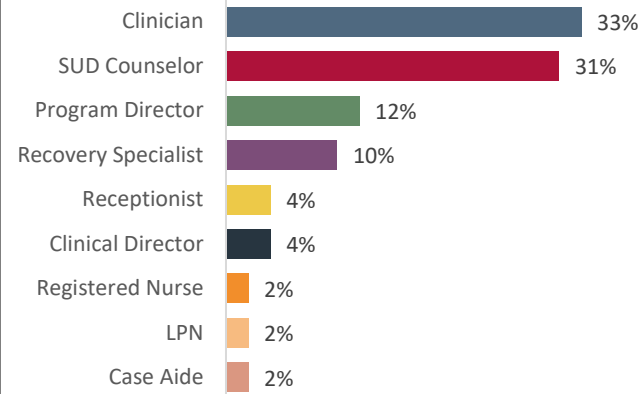
Retention into New Roles

FY 20/21 to FY 22/23

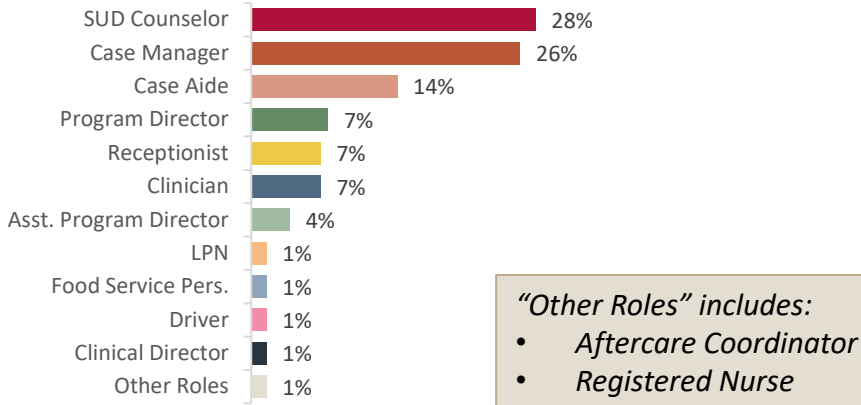
Case Aides become... (n=57)



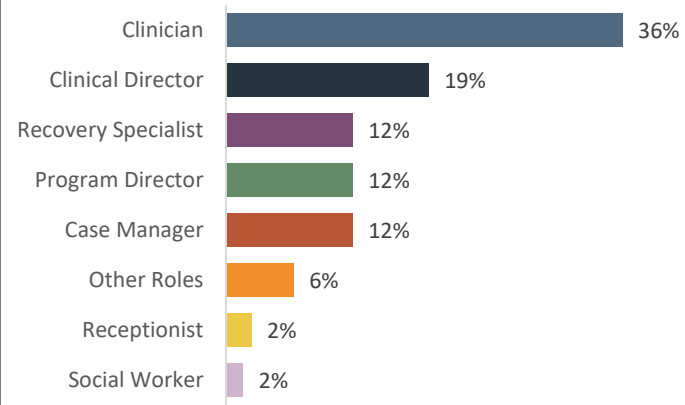
Case Managers become... (n=98)



Recovery Specialists become... (n=134)



SUD Counselors become... (n=129)



Charts show new roles taken by individuals who were **retained into a different role** between FY 20/21 and FY 22/23 (refer to slide 19). Movement reflects both within and between program changes.

Section 4:

Staff Income FY 22/23



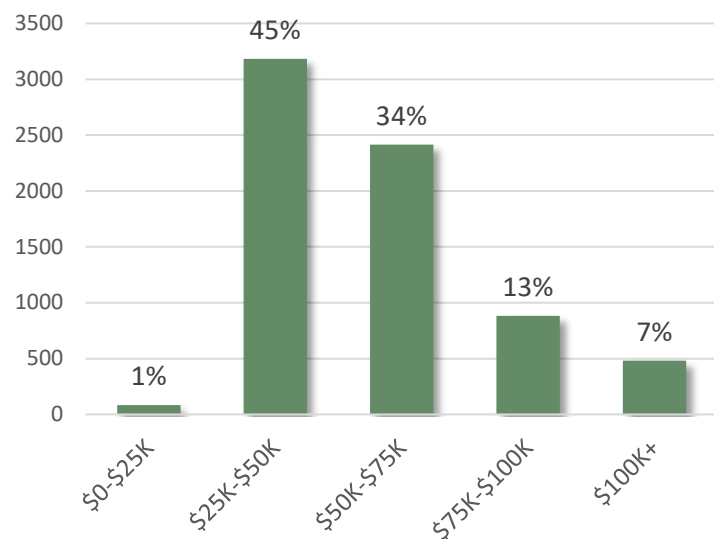
Section 4:

Section-Specific Notes

- Salaries are reported in selected ranges. Salary ranges are not exclusive.
- Income analysis is limited to full-time employees only.
 - Full-time workers per the IRS are employed on average at least 30 hours per week or 130 hours per month.
- Salary range is based on annual salary rather than an hourly wage for both full-time and part-time employees.
- Individuals may be reported in more than one salary category if they appear in multiple program applications in FY 2022 and FY 2023.
- Results for income analysis by race categories are suppressed for small groupings to protect confidentiality.

Annual Income

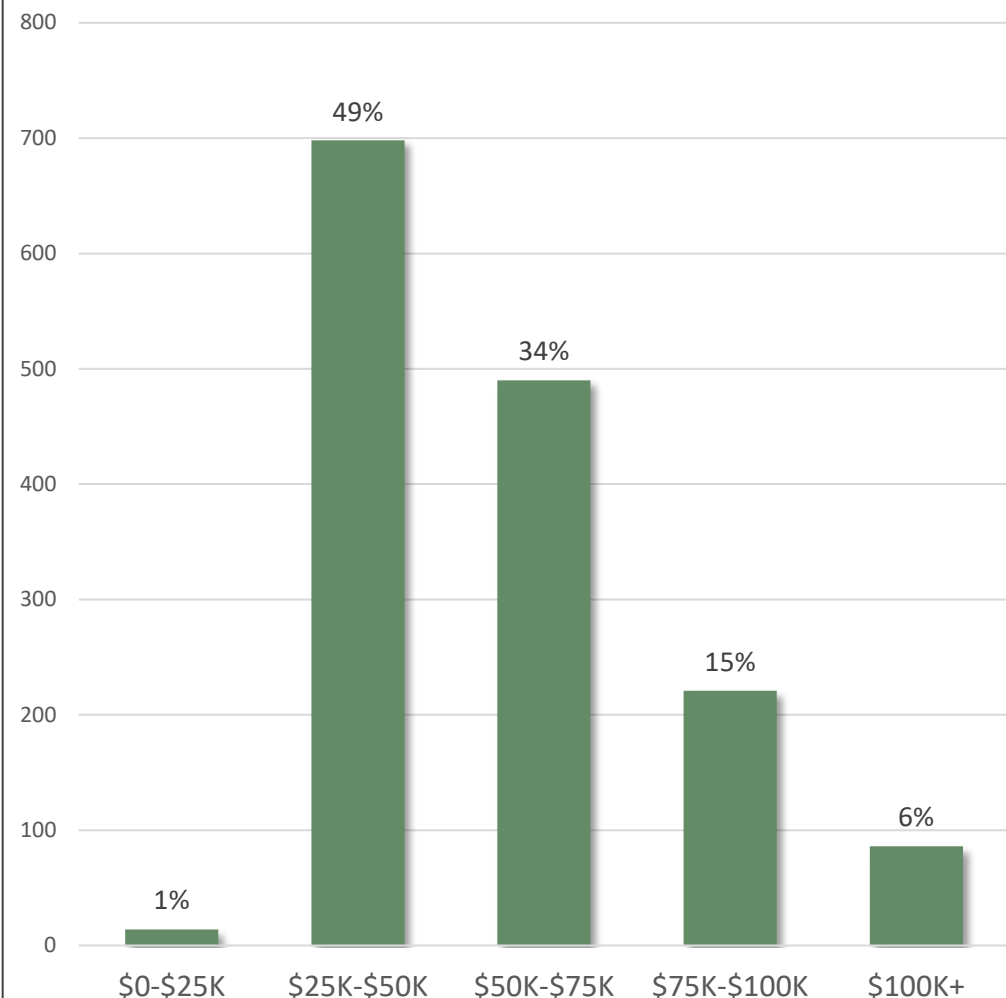
Statewide Staff Income Distribution
(N=7,045)



Both statewide and in the Western Region, over **45%** of the full-time workforce statewide reported making \$50,000 or less per year.

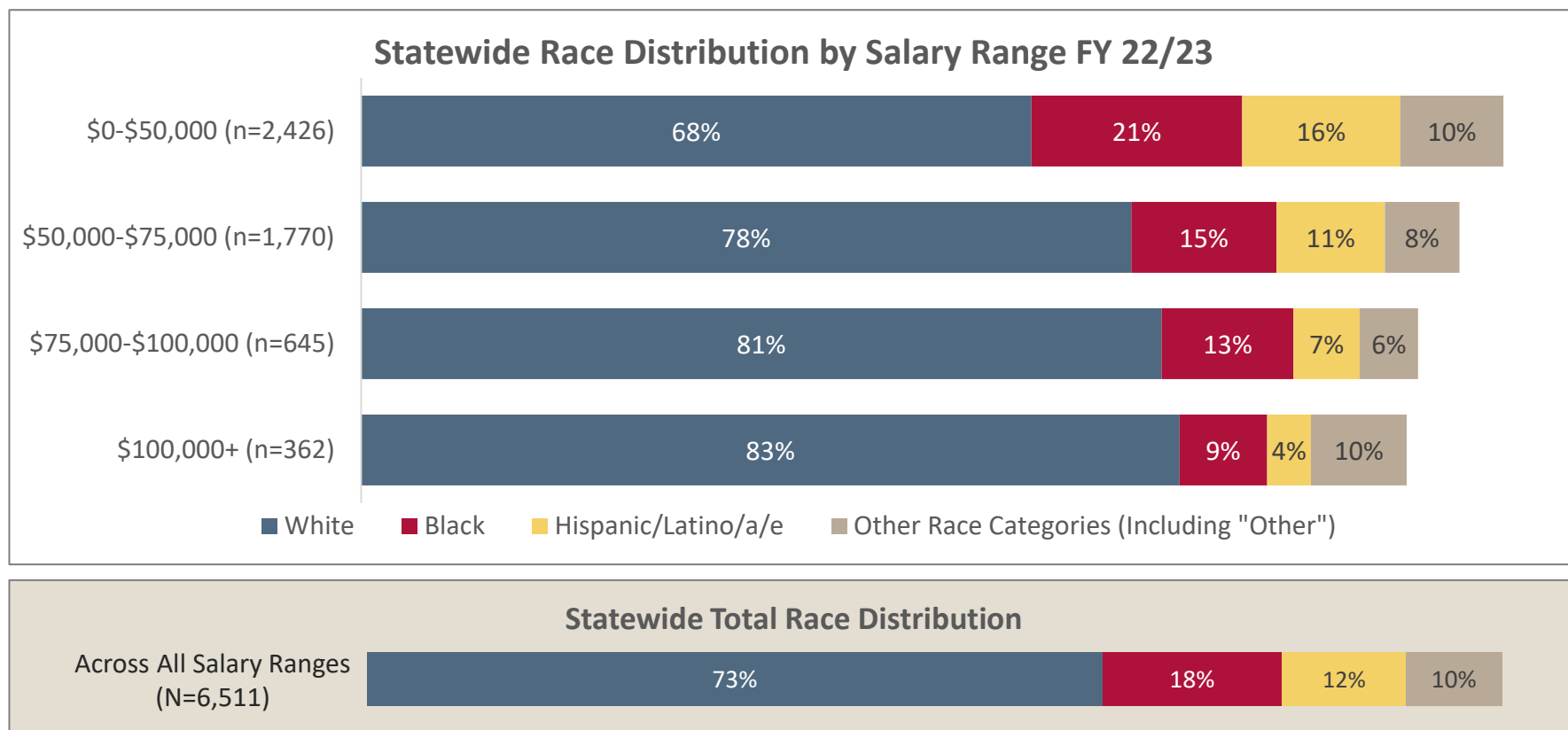
The average annual salary in FY 22/23, based on salary range mid-points, was **\$60,400** statewide, and **\$59,700** in the Western Region.

Western Region Staff Income Distribution (n=1,246)



*Income distribution reported for the FY 22/23 reporting period.
Please refer to slide 32 for section notes.*

Salary Range and Race Distribution



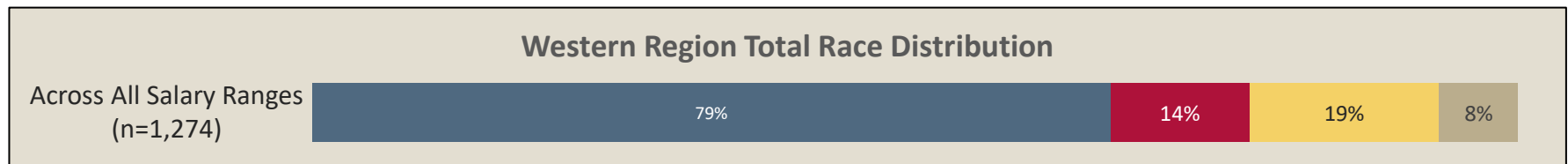
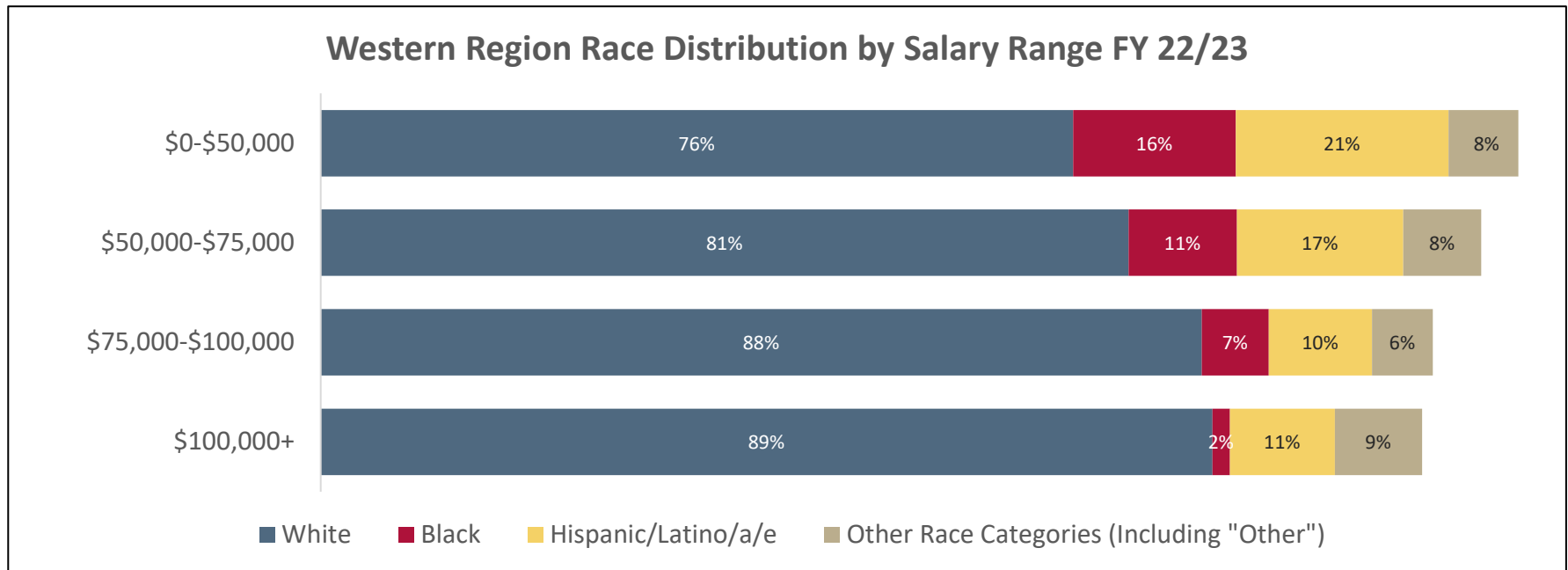
Compared to their proportion in the total race distribution:

- Staff reported as White are **over**-represented in **higher** salary ranges and **under**-represented in **lower** salary ranges.
- Staff reported as Black or Hispanic/Latine are **over**-represented in **lower** salary ranges and **under**-represented in **higher** salary ranges.

Please refer to slide 24 for description of race categories, and slide 32 for section notes.

Salary Range and Race Distribution

Western Region



Compared to the Western Region's total race distribution:

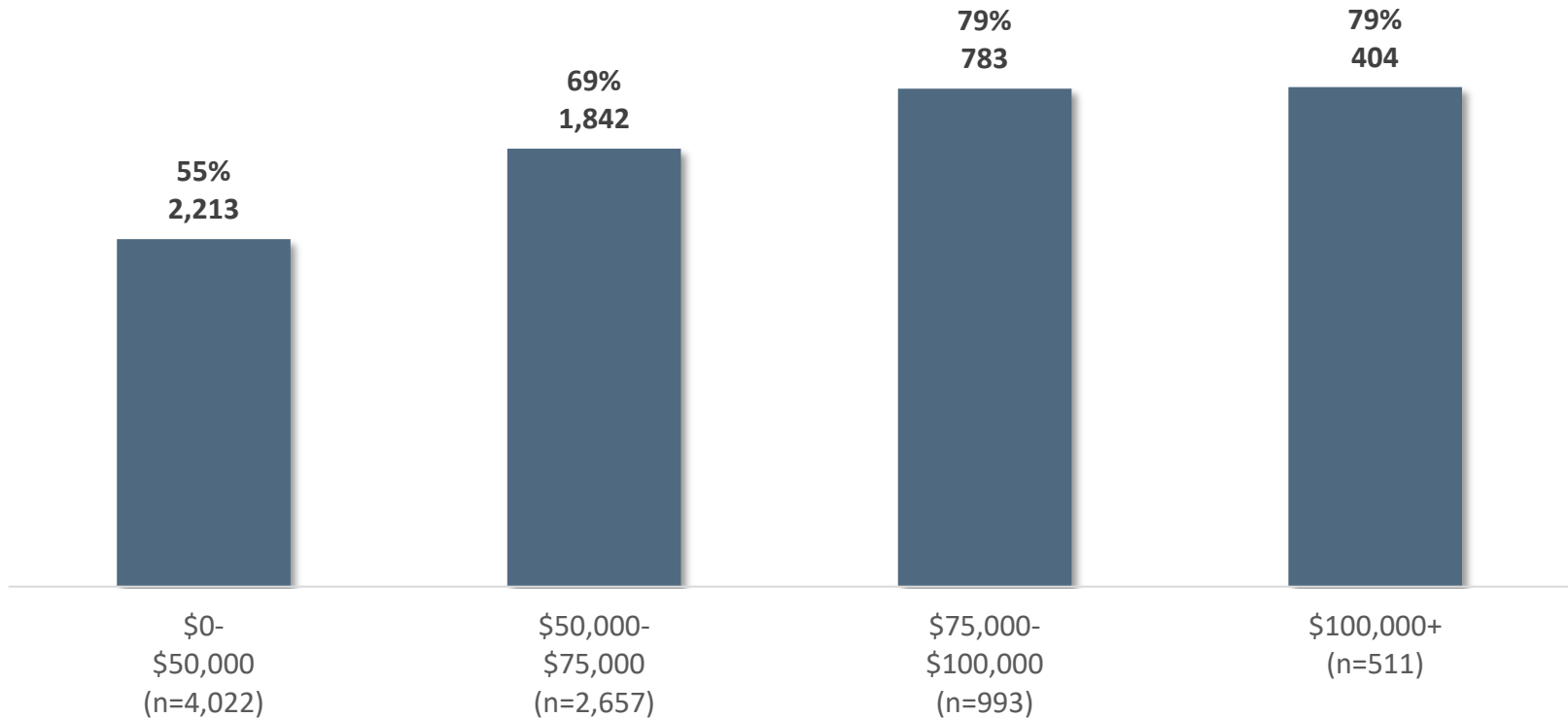
- Staff reported as White are **over-represented** in every salary range except the lowest.
- Staff reported as Black and staff reported as Hispanic/Latine are **over-represented** in the lowest salary range, and **under-represented** in the highest salary range.

Race distribution by salary range in the Western Region is similar to Statewide.

Please refer to slide 24 for description of race categories, and slide 32 for section notes.

System Level Retention by Income

Statewide System Level Retention by Income FY 20/21 to FY 22/23
(Overall System Level Retention: 55%)

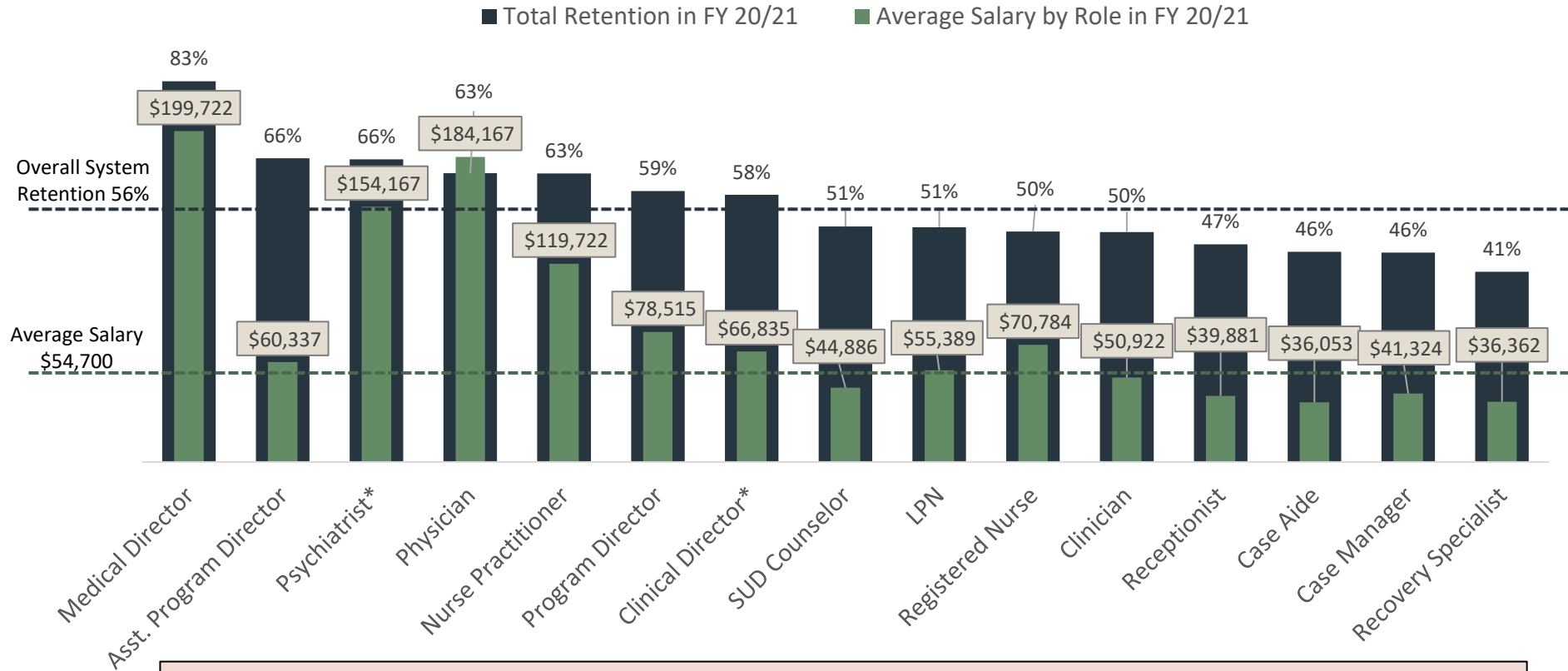


- Retention generally **increases** as salary range increases.
- Retention generally plateaus at just under 80% from \$75,000.

Please refer to slide 32 for Section notes.

Role Level Retention and Salary

Statewide Retention Rate and Average Salary by Role (FY 20/21 into FY 22/23)



Generally, retention rates by role follow salary patterns with some exceptions:

- Assistant Program Directors have one of the highest retention rates while their salary is closer to the overall average.
- Registered Nurses have a salary slightly higher than the overall average, but a below average retention rate.
- Physicians have some of the highest reported salaries, but only slightly above average retention.

*Clinical Director full Label: Clinical Director/Clinical Supervisor/Senior Clinician

*Psychiatrist full Label: Psychiatrist/Psychologist

Please refer to slide 32 for Section notes.

Section 5: Turnover Cost Model



Staff Turnover in BSAS Treatment System (FY20/21 Cohort)

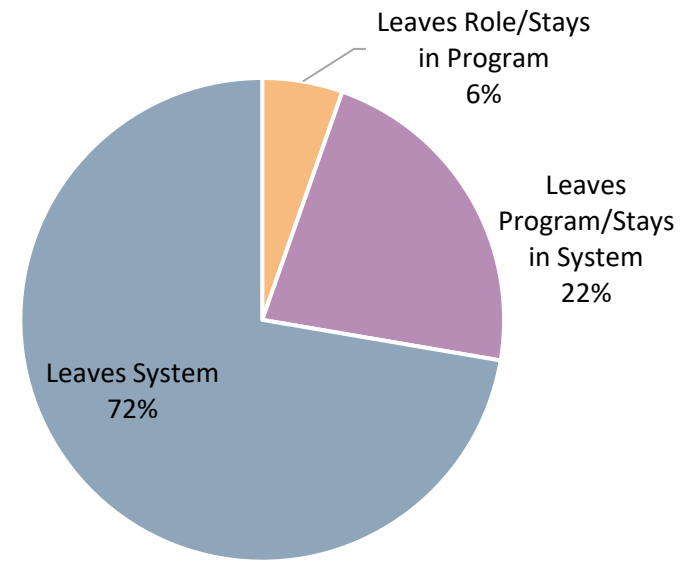
- **Turnover** occurs when a worker leaves a job, creating a vacancy which must be filled.
- Lower retention rates imply higher turnover rates and associated costs (e.g., substitute coverage, productivity loss, recruitment, hiring, training).
- *Movement can be good for the worker or the system, but the program still has to deal with the vacancy.*

Three types of Vacancies*:

- A worker leaves their role but **stays in their program**
- A worker leaves their program, but **stays in the system**
- A worker **leaves the system**

Does **not include: program closure; eliminated positions; or new positions created by program expansion.*

Percent of Created Vacancies in FY 20/21



Illustrative Model: System Turnover Cost

Literature review

- Replacement cost calculations use various actual or estimated direct and indirect costs.
- Costs range from 30% to 213% of the salary paid to a vacant position.
- Higher cost ranges are often found for higher paid employees.

Selected Model

Estimated Turnover Cost =

Total # of Employees x Turnover Rate x Estimated Cost of Departure

Base *Estimated Cost of Departure* on annual income tiers

- < \$50,000, cost of replacement equals **30%** of annual income.
- \$50,000-\$100,000, cost of replacement equals **35%** of annual income.
- >\$100,000, cost of replacement equals **40%** of annual income.

Overall Result

\$94.8M total estimated cost of turnover **across all programs** based on the conservative Selective Model

\$155.6M total estimated cost **across all programs** *if* highest income tier estimated with highest percentage (213%).

\$217K would be the average estimated turnover cost **per program** in FY 20/21, using the conservative model.

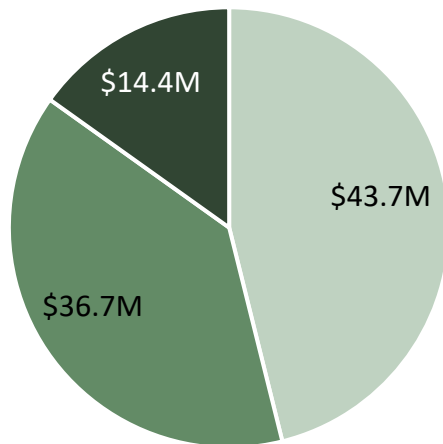
Notes:

Cost includes both PT & FT employees. Cost estimation calculated over a two-year Reporting Period. Data collection on actual costs was not part of this project. Individuals with invalid reported salary ranges excluded overall from turnover analysis (n=2)

Cost of Turnover (FY20/21 Cohort)

Based on Conservative Model

Turnover Cost by Salary Range



- \$0-\$50,000
- \$50,000-\$100,000
- \$100,000 or More

Those earning \$50,000 or less make up almost half of all turnover costs (\$43.7M).

Cost of Turnover by Role FY 20/21 to FY 22/23



Statewide & Regional Takeaways

Programs & Staff

-----Statewide -----

- Treatment system growing.
- 50% of workforce have been in System two years or less.

----- Western Region---

- Program increase since FY 16/17 greater than Statewide.
- Recent growth in positions, but less growth in staff.

Retention

- 56% of staff retained in system.
- Average of 41% of staff retained in programs.
- Varies by role and income; not by race.

- Lower average retention compared to Statewide.
- Not for Profit retention higher than For Profit.
- Retention by race varies more than Statewide.

Income

- 46% earn \$50,000 or less annually.
- Average annual salary \$54,000.
- Black & Hispanic/Latine staff earn less proportionally than White staff.

Western Region income trends are in line with Statewide trends.

BSAS Workforce Initiatives

FY 25 BSAS Equity Initiatives

Supporting Culturally Responsive and Affirming service provision

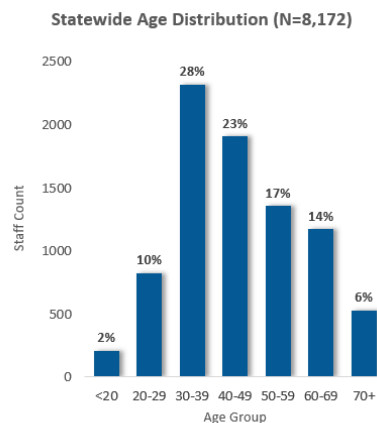
- Hired BSAS Director of Equity and Focus Populations
- Launched the Living Expertise Advisory Pool (LEAP) to engage with community members
- Released Request for Information to gather community recommendations about elements of Culturally Responsive Education
- Finalizing Practice Guidance on working with Transgender and Gender Expansive clients
- Used a Racial Equity lens throughout BSAS organizational development process (including hiring)
- Continued making anti-racism and other equity-focused trainings available and encouraged for internal and external workforce



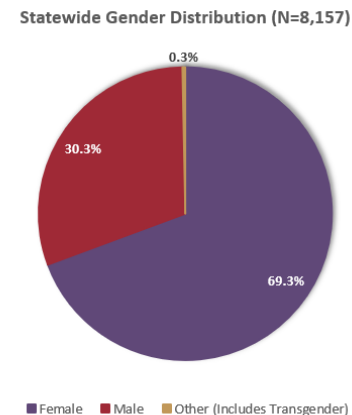
Ongoing Use of Data for Quality Improvement

Provider data gathering and analysis

- Licensed treatment program workforce data – ongoing since 2014
- Career Ladder/Pathway Practice Guidance in development
- Prevention Workforce Survey



Sixty percent of the workforce is age 40 or older.



Training/Technical Assistance Quality Improvement

- Training/TA Evaluation project
- T/TA Trainer & Facilitator Training

FY25 BSAS Capacity Building Initiatives



CAREERS OF SUBSTANCE

Workforce recruitment & retention

- [Careers of Substance](#) website
- Credentialing collaborations with Schools of Social Work
- Cross systems collaborations

Training & technical assistance (T/TA)

- Recovery Education Collaborative
- Addiction Education Advisory Group
- Supervisor Communities of Practice for clinical and non-clinical supervisors



RECOVERY EDUCATION COLLABORATIVE

Practice Improvement Throughout the BSAS System

Organization/Program Practice Improvement Training & Tech Assistance

Annual Peer Review -

Collaboration across programs

Dual Diagnosis Capability of Addiction Treatment (DDCAT) –

Co-occurring services assessment and support in collaboration with Case Western University



EMO Health -

Medication Management

NIATx - Continuous Quality Improvement

Evaluation of workforce development activities, through **Appreciative Inquiry**

Resources

Careers of Substance: www.careersofsubstance.org

Careers of Substance Trainings and Events:

<https://www.careersofsubstance.org/trainings-and-events/calendar>

The Massachusetts Substance Use Helpline Helplinema.org

BSAS Website: www.mass.gov/dph/bsas

MA Health Promotions Clearinghouse:

massclearinghouse.ehs.state.ma.us

EMO Health: www.emo.health

NIATx (Process Improvement for Behavioral Health): niatx.wisc.edu

Dual Diagnosis Capability of Addiction Treatment Services (DDCAT)

(Case Western Reserve): case.edu/socialwork/centerforebp

Contact Us

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