

UCI School of Medicine

Train New Trainers (TNT) Primary Care Fellowships



A N N U A L R E P O R T

Mental Health Care **Transformed**



**The University of California, Irvine
Train New Trainers Primary Care Fellowships**

January 2023 – June 2024

Expanding and Optimizing Mental Health Workforce

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Message from the Directors



Robert McCarron, DO



Jane Gagliardi, MD, MHS

The Train New Trainers Fellowships continues to increase the global capacity and reach to primary care clinicians, emphasizing high-quality behavioral health care delivery across all age groups. In 2023-2024 the TNT Fellowships increased enrolled fellows among the Primary Care Psychiatry (PCP) Fellowship and the Child and Adolescent Psychiatry (CAP) Track and added the Primary Care – Training and Education in Addiction Medicine (PC-TEAM) Fellowship. Each program provides over 60 hours of specialized training and includes:

- Two in-person and intensive training conferences
- Live, interactive webinars
- Small group mentorship sessions with experienced, multi-trained faculty
- Topic-focused “Open Office” sessions for small-group learning
- Career-long training and mentorship

TNT’s unique structure supports a robust, evidence-informed education that prepares trainees to effectively prevent, diagnose, and manage psychiatric and addiction-related conditions within their primary or general medical care practices. Upon completion, graduates receive a certificate of completion from the UCI School of Medicine and benefit from no-cost career-long learning opportunities, including synchronous and asynchronous CME learning sessions and small group mentorship.



Testimonial: Michael J. Singleton, MD, MBA - 2024 PCP Fellow



TNT Director: Overview on Fellowships

Milestones

50

TNT
Faculty

8

Administrative
Staff

6

Research
Staff

979

TNT
Alumni

Awards and Recognitions

2023

American Psychiatric Association
Psychiatric Services Achievement

2024

Steinberg Institute Champion

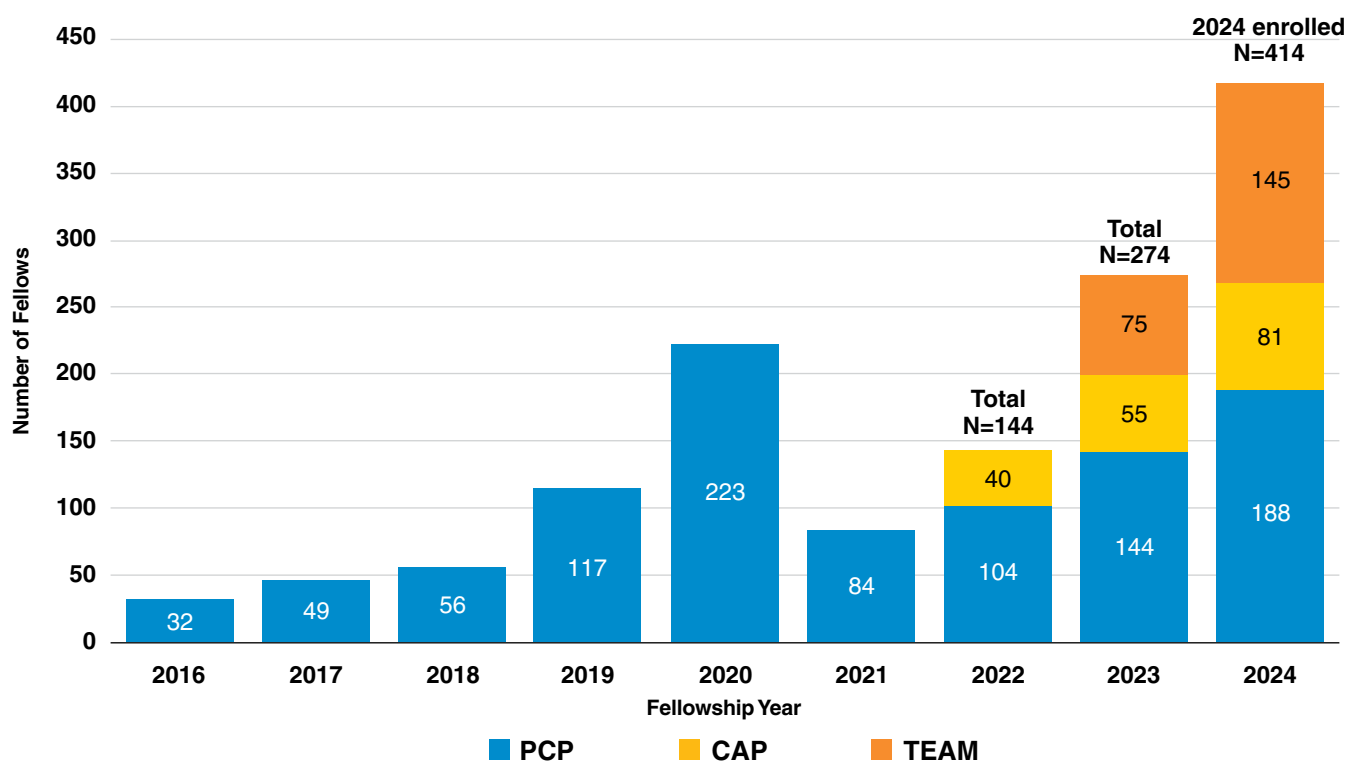
Key Achievements Review

- **Curricular Enhancements:** Curricular additions to PCP and CAP tracks and the addition of PC-TEAM expand and broaden primary care-based training, equipping providers to more effectively prevent, diagnose and treat a comprehensive range of psychiatric and addiction-related conditions.
- **Increased Enrollment:** The TNT Fellowships experienced a significant 69.5% increase in enrollment from 2022 to 2024. The 2024 TNT cohort includes 414 fellows from internal medicine, family medicine, pediatrics, OBGYN, pharmacy and neurology.
- **Program Evaluations:** Feedback from participants indicates substantial improvements in clinical skills, confidence in managing psychiatric and addiction-related conditions, and ability to apply learned principles.
- **Community Engagement and Partnerships:** TNT recruited fellows from diverse geographic regions to participate in TNT Fellowships, partnered with the California Department of Health Care Access and Information (HCAI); with the Kentucky Primary Care Association and the Commonwealth of Kentucky; with Tennessee Primary Care Association; with Rocky Mountain Health Plan (Colorado); and with Advocate Health Plan (Illinois); and with Emirates Health System (UAE).
- **Expanded Geographic Reach:** TNT-trained clinicians are represented in 45 of 58 counties in California, 31 of the 50 states, and the District of Columbia.
- **TNT Research Dissemination:** Research from TNT Fellowships has been disseminated through publication in journals including *Administration and Policy in Mental Health* and *Mental Health Services Research*.

2023 Demographics of Enrolled Participants

	PCP n=160 fellows		CAP n=60 fellows		TEAM n=88 fellows	
Sex	Frequency	Percent	Frequency	Percent	Frequency	Percent
F	129	80.63%	49	81.67%	53	60.23%
M	30	18.75%	11	18.33%	33	37.50%
Non-Binary	1	0.63%	0	0.00%	2	2.27%
Race-Ethnicity	Frequency	Percent	Frequency	Percent	Frequency	Percent
White or Caucasian	49	30.63%	18	30.00%	25	28.41%
Asian	47	29.38%	19	31.67%	18	20.45%
Black/African American	12	7.50%	4	6.67%	10	11.36%
Hispanic/Latinx	34	21.25%	14	23.33%	21	23.86%
American Indian or Alaskan Native	1	0.63%	0	0.00%	2	2.27%
Hawaiian or Other Pacific Islander	0	0.00%	0	0.00%	0	0.00%
More Than One Race	5	3.13%	3	5.00%	5	5.68%
Other	2	1.25%	1	1.67%	3	3.41%
Decline	10	6.25%	1	1.67%	4	4.55%
Years since degree	Mean (sd)	Range	Mean (sd)	Range	mean (sd)	Range
	9.6 (9.0)	0-42	12.3 (9.9)	1-37	10.5 (9.0)	1-41
Discipline	Frequency	Percent	Frequency	Percent	Frequency	Percent
MD	70	43.75%	39	65.00%	34	38.64%
NP	52	32.50%	15	25.00%	37	42.05%
PA	21	13.13%	2	3.33%	13	14.77%
DO	14	8.75%	4	6.67%	4	4.55%
Other	3	1.88%	0	0.00%	0	0.00%
Specialty (Allowed multiple selections)	Frequency	Percent	Frequency	Percent	Frequency	Percent
Family Medicine/Primary Care	131	81.88%	25	41.67%	73	82.02%
Internal Medicine	27	16.88%	6	10.00%	6	6.74%
Pediatrics	2	1.25%	35	58.33%	2	2.25%
Psychiatry	0	0.00%	0	0.00%	6	6.74%
Other	27	16.88%	2	3.33%	4	4.49%
Referral Source	Frequency (n=157 responses)	Percent	Frequency (n=57 responses)	Percent	Frequency (n=87 responses)	Percent
Colleague	83	52.87%	25	43.86%	26	29.89%
Online Search/Social Media	16	10.19%	7	12.28%	1	1.15%
TNT-Alumni	26	16.56%	12	21.05%	47	54.02%
TNT-Faculty	3	1.91%	1	1.75%	9	10.34%
Other	29	18.47%	12	21.05%	4	4.60%

UCI Train New Trainers Program Participation



By training clinicians in evidence-informed psychiatric and addiction medical practices, TNT Fellowships significantly expand access to behavioral healthcare. The widespread distribution of TNT-trained clinicians ensures that more communities have access to professionals equipped to prevent, diagnose and treat psychiatric and addiction-related conditions, across all age groups. The map illustrates the current spread of TNT-trained clinicians across California counties, highlighting the broad-based coverage achieved by the program.

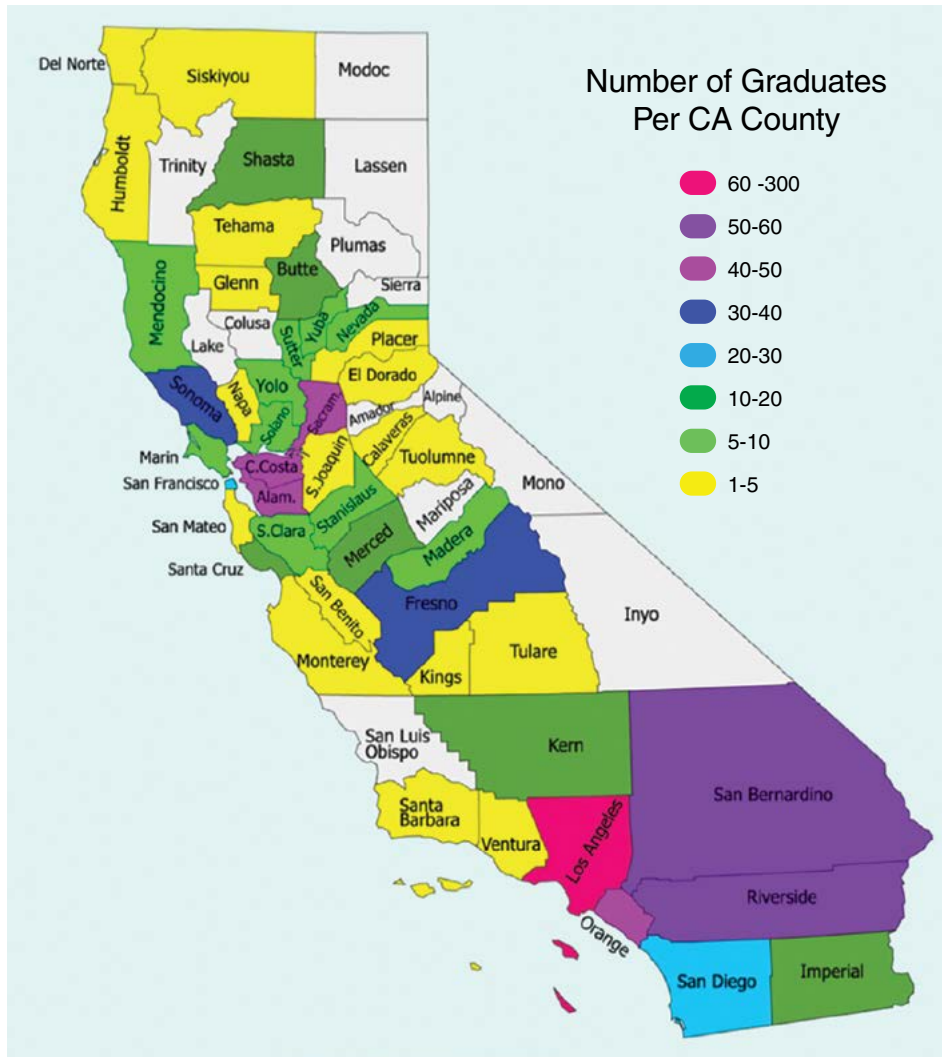
In 2023, the program’s recruitment criteria were evaluated against the aim of the fellowship to improve access to primary care behavioral medicine services in areas of high disparity.

Key Findings:

- Participant Data:** 86.5% of TNT alumni from 2016 to 2023 served in communities meeting at least one state or federal criterion for medical shortage areas.
- Area Deprivation Index (ADI):** A significant proportion (32.3%) of fellows served in areas with the highest levels of disadvantage (ADI deciles 9 or 10). In 2023, 40.5% of practices were in the highest ADI deciles (Figure 5-6).
- Effectiveness of Recruitment Strategy:** In 2023, 89.9% of practice sites for TNT fellows met federal shortage criteria.
- Impact on Behavioral Health Care Access:** The TNT program’s approach to equip primary care clinicians with enhanced knowledge and skills in behavioral medicine has the potential to significantly reduce the access gap in disadvantaged and under-resourced communities.

Conclusion: The TNT program has demonstrated a successful strategy in recruiting and training primary care clinicians from high-need areas, thus enhancing the availability of quality behavioral health care in underserved communities. The findings underscore the importance of targeted educational initiatives and stakeholder-supported scholarships in addressing healthcare disparities and promoting health equity.

2016-2023 TNT Enrollment in CA by County



2023 TNT Fellows PCP, PC-TEAM, CAP Track in California by County

Alameda	8	Los Angeles	86	Riverside	20	Shasta	2
Butte	5	MaDera	3	Sacramento	13	Siskiyou	2
Chico	2	Marin	1	San Benito	3	Sonoma	2
Contra Costa	14	Mendocino	1	San Bernardino	16	Stanislaus	3
Del Norte	2	Merced	2	San Diego	7	Sutter	4
Fresno	13	Monterey	1	San Francisco	3	Tehama	1
Glenn	1	Nevada	1	San Mateo	1	Tulare	1
Imperial	5	Orange	32	Santa Clara	4	Ventura	3
Kern	14	Placer	1	Santa Cruz	2	Yuba	4
Kings	1						

01

Confidence and Comfort of Primary Care Providers in the Assessment and Treatment of Insomnia Disorder

Stehli, A., Cho, S.S., Nguyen, E. S., Garcia, C., Xiong, G.L., Gagliardi, J. P., McCarron, R.M., Neikrug, A. B

Abstract presented at: Society of Behavioral Sleep Medicine Conference on November 5, 2023.

02

Antidepressant Prescription Behavior among Primary Care Clinician Providers after a Psychiatric Training Program

Huo S., Bruckner T.A., Xiong G.L., Cooper E., Wade A., Neikrug A.B., Gagliardi J.P., McCarron R.

Journal of Administration and Policy in Mental Health and Mental Health Services Research doi: 10.1007/s10488-023-01290-x

03

Improving Behavioral Health Disparities in Disadvantaged Communities

Nguyen, E. S., Cho, S.S., Stehli, A., Neikrug, A. B.

Abstract presented at: UCI Undergraduate Research Opportunities Program Symposium on May 17, 2024.

04

Suicide Risk Assessment in the Primary Care Setting: Utilization and Confidence Rates Among Providers

Neikrug, A. B., Cho, S., Nguyen, E. S., Stehli, A., Gagliardi, J., McCarron, R.M.

Abstract presented at: American Association of Suicidology Conference on May 6, 2024.

05

Changing Opioid Prescription Behavior in Primary Care Clinician Providers

Shutong, H. Bruckner, T. A., Xiong, G., Cooper, E., Neikrug, A. B., Gagliardi, J., & McCarron R.M.

Under review with the *Journal of Continuing Education in the Health Professions*

06

Improving Behavioral Healthcare Access Disparities by Training Providers in Disadvantaged Communities – Evidence of Strategy Effectiveness

Neikrug, A.B., Cho, S.S., Nguyen, E.S., Stehli, A., Huo, S., Garcia, C., Au, S., Masoumirad, M., Cant, W., Le-Bucklin, K.V., Gagliardi, J.P., Xiong, G.L., McCarron, R.M

Accepted and in press with the Journal of General Internal Medicine

Figure 1

Number of Scholarships Awarded per Year.

Bars on the right represent the scholarships awarded while bars on the left represent the total number of fellows for each year.

- Number of Fellows
- Number of Scholarships

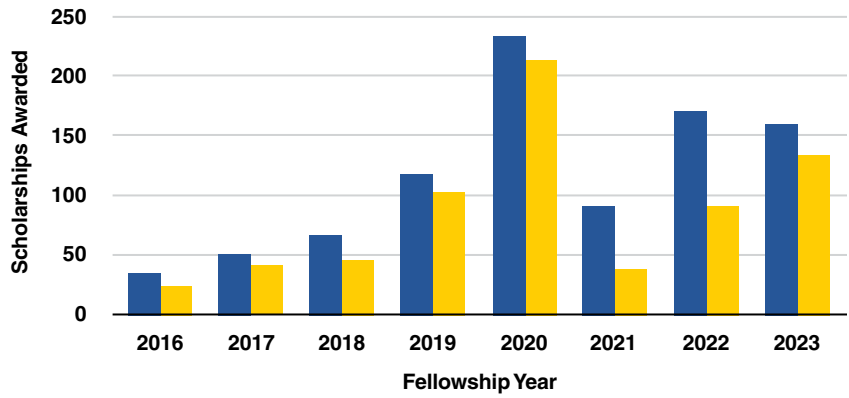


Figure 2

Distribution of Disparity Scores 2021-2023 (n=328).

Area Deprivation Index (ADI) scores distribution for all fellows from 2021 through 2023.

An ADI Decile of 1 signifies the lowest disparity level whereas an ADI decile of 10 indicates the highest disparity level.

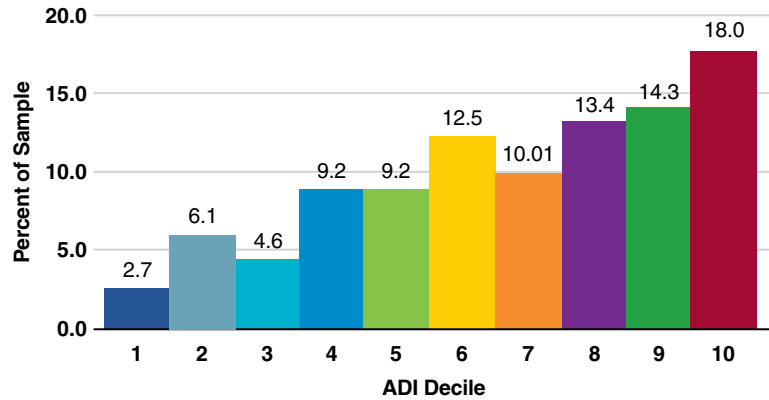


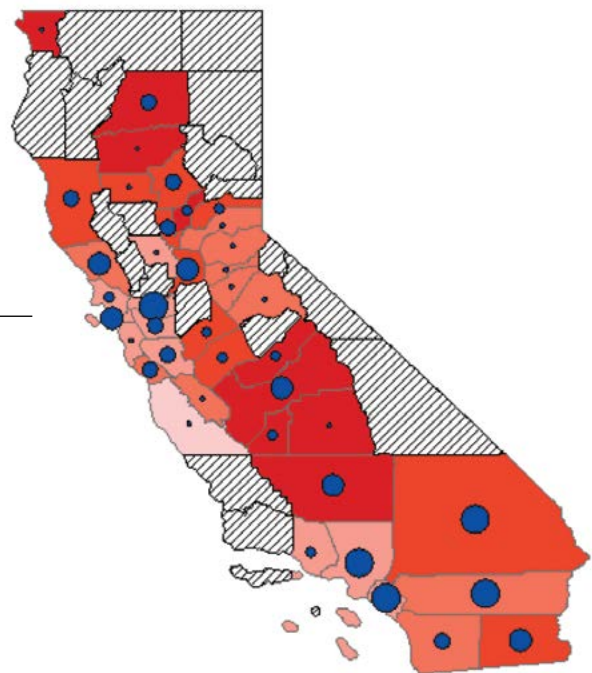
Figure 3

Distribution of Area Deprivation Index (State Level Disparity Score) and Total Number of TNT Providers in 2021-2023.

Blue circles indicate the concentration of TNT fellows from each county with smaller circles representing a smaller number of fellows and large circles representing a larger number of fellows. Unshaded, striped regions indicate the counties the program did not reach between 2021-2023. Shaded regions specify the average disparity score for the county, with lighter shades corresponding with lower disparity scores and darker shades corresponding with higher disparity scores.

Legend

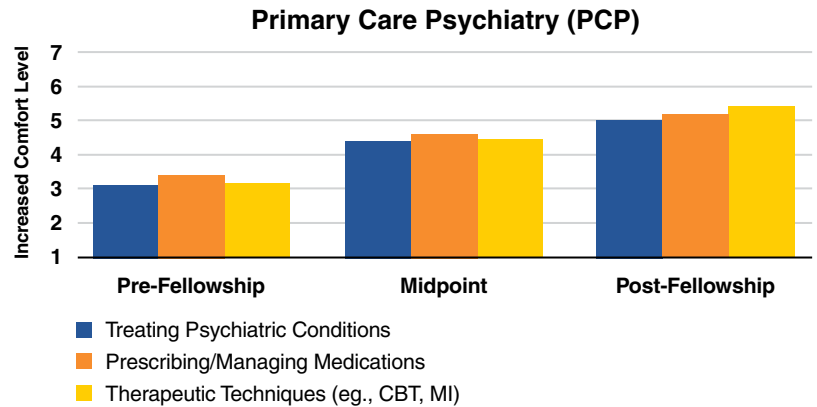
- Average Disparity Score**
 - 0.00
 - 0.01 - 5.86
 - 5.87 - 8.00
 - 8.01 - 9.50
 - 9.51 - 10.00
 - Uncovered Countries
- Number of TNT Providers**
 - 0-2
 - 3
 - 4-7
 - 8-11
 - >11



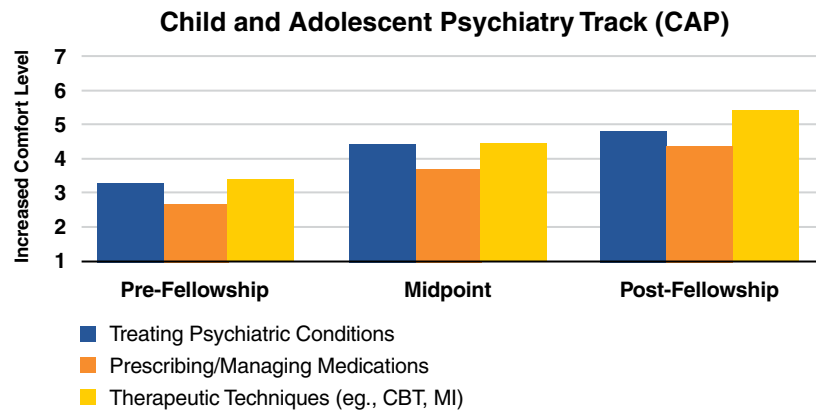
Program Evaluation

In 2023, the TNT program implemented a 7-section program evaluation at beginning, mid-point, and post-fellowship. Figures highlight the significant improvements in comfort levels for assessing and treating psychiatric conditions, prescribing/managing medications, and utilizing behavioral techniques.

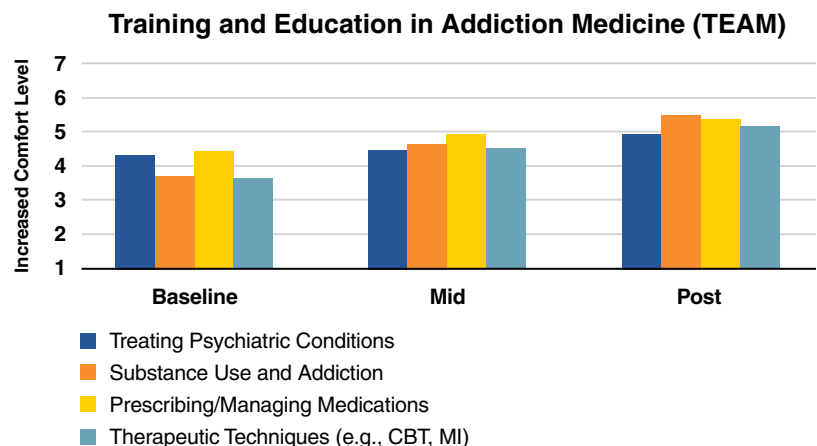
1 Taking Care of Patients with Behavioral Health Disorders and/or Substance Use Disorders: At the end of the fellowship, PCP fellows estimated that 50% of their patients had mental health disorders and 27% had substance use disorders. CAP fellows reported estimates of 42% and 20%, respectively, while TEAM fellows reported 53% and 30%, respectively.



2 Comfort in Assessing and Treating Specific Psychiatric Conditions: Results support the effectiveness of targeted training in specific tracks (PCP, CAP, PC-TEAM).



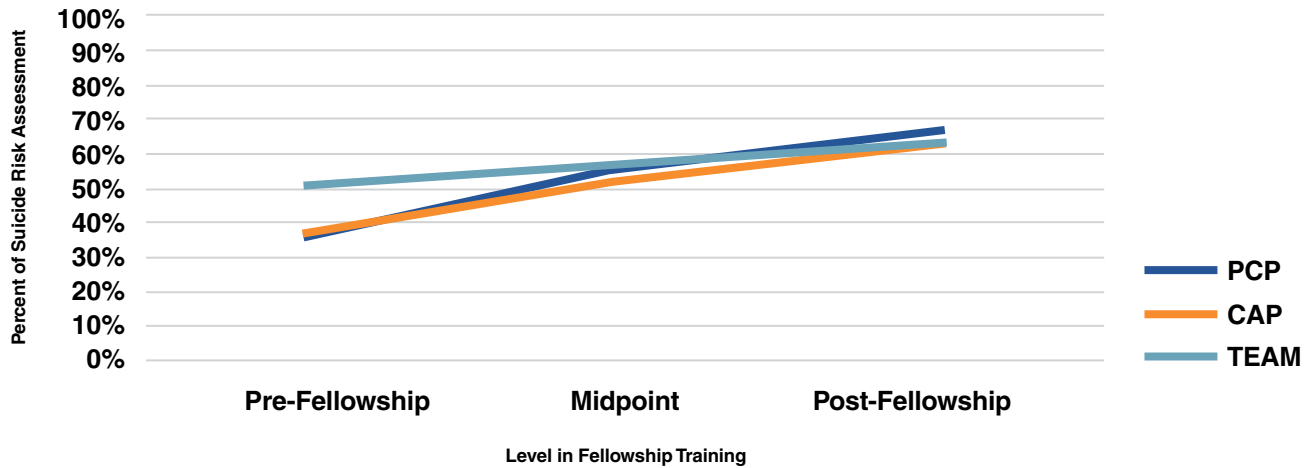
3 Comfort in Prescribing/Managing Specific Medications: Results suggest that fellows are more comfortable in effectively managing psychiatric and substance-related disorders.



4 Comfort in Utilizing Behavioral Techniques: Participants in all tracks report increased comfort levels in using non-pharmacological techniques, such as Cognitive Behavioral Therapy (CBT) for depression, anxiety, insomnia, substance use disorder, and motivational interviewing (MI).

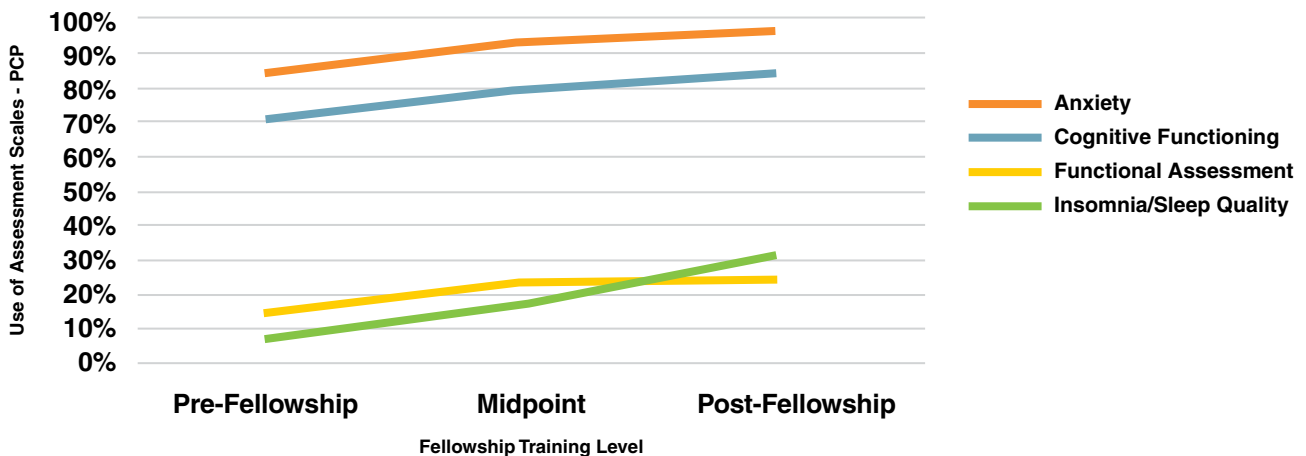
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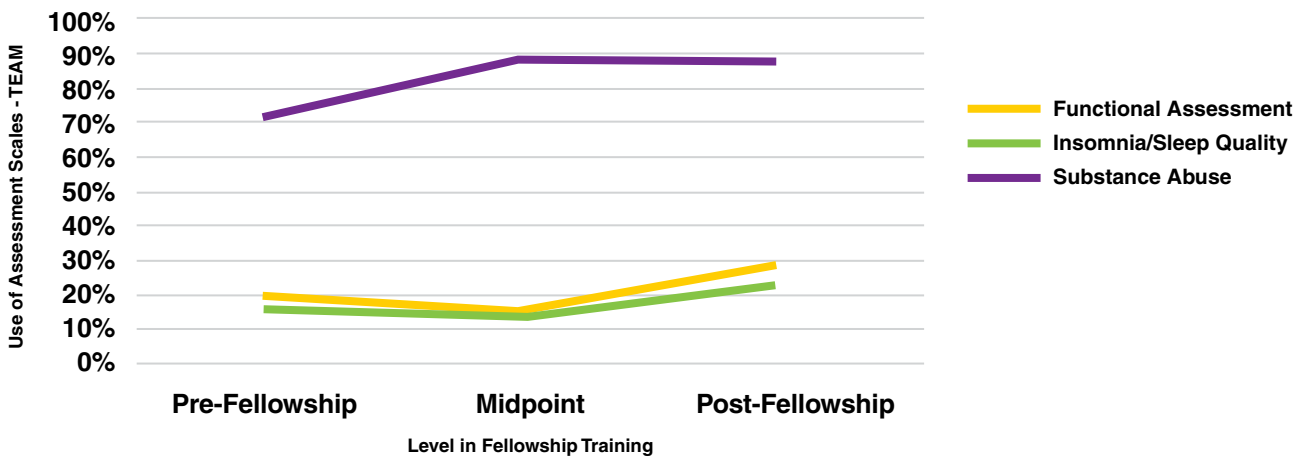
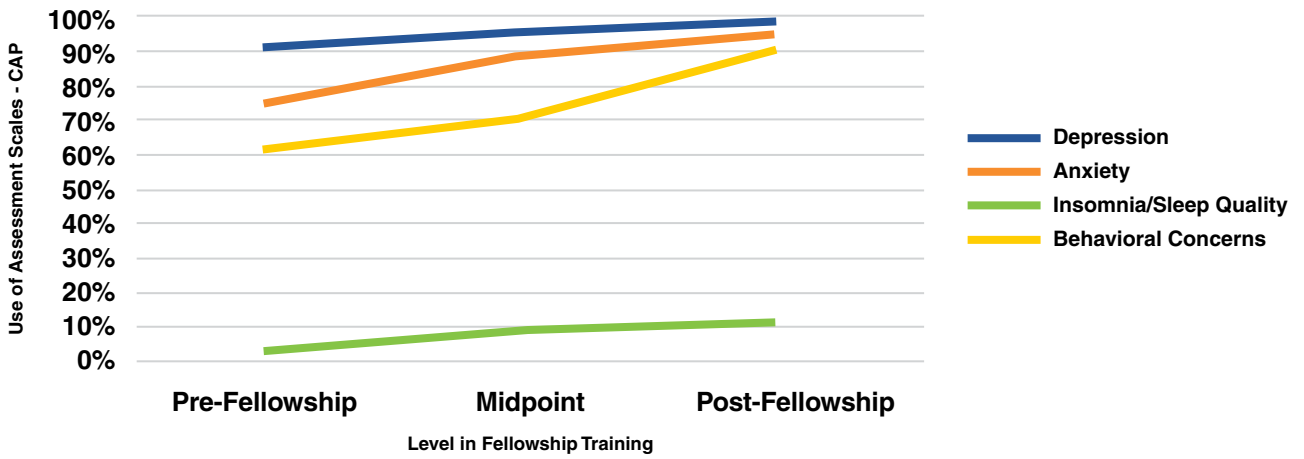
Suicide Risk Assessment: The targeted efforts of the TNT fellowship program to improve suicide risk assessment have been highly effective. All tracks within the TNT fellowship program showed increases in routine assessment of suicide risk, recognition of suicidal ideation (SI), were evaluated on fellows' evidence-informed suicide risk assessment, which is a critical goal of the program. The findings for suicide risk assessment indicate significant improvements across the different fellowships. Our key findings are:



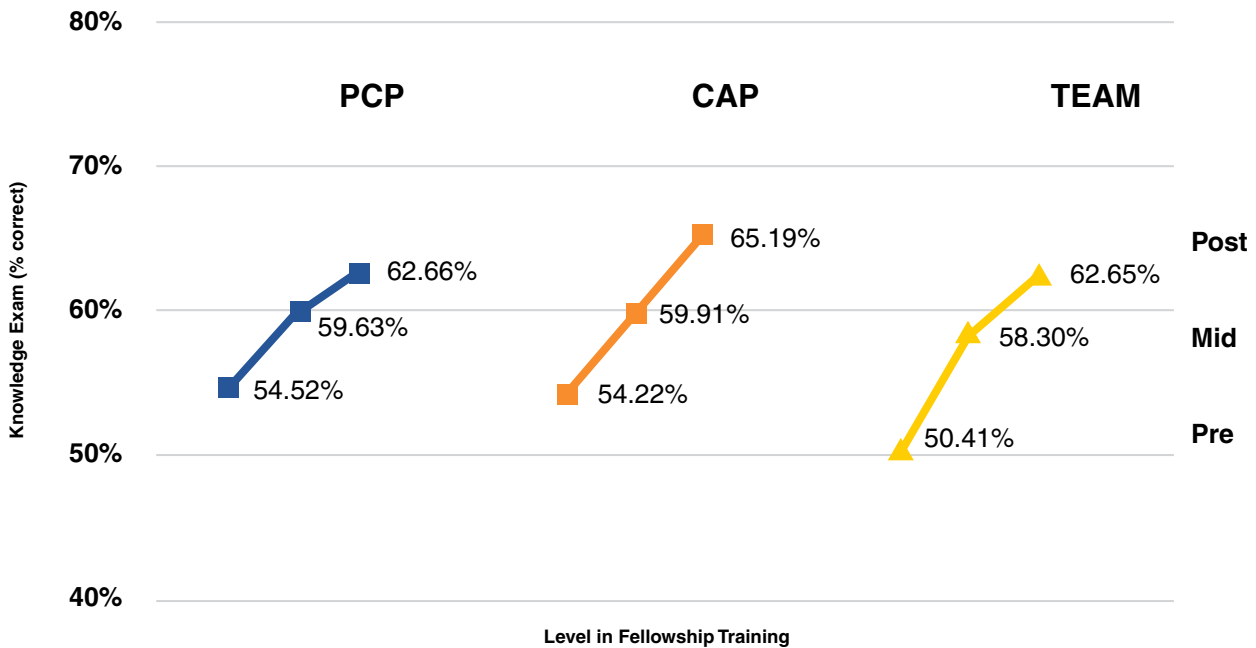
6

Routine Use of Screening Measures: Fellows participating in all tracks nearly universally reported utilizing routine screening for depression and anxiety (Depression: 99% for PCP, 100% for CAP, and 96% for TEAM; Anxiety: 97% for PCP, 96% for CAP, and 91% for TEAM)





Evaluation of Knowledge: Fellows demonstrated statistical improvement in performance on a test of knowledge from start to completion of the fellowship program.



PC-TEAM Inaugural Cohort



Graduate Testimonials

Participants were given the opportunity to provide open-ended feedback when completing their final evaluation. All comments were anonymous.

“An incredible experience. I’m shocked how much I now feel comfortable assessing and treating psychiatric conditions.”

“Great learning and a huge boost of my confidence in diagnosing/treating the low/moderate complexities of psychiatric conditions among my OBGYN patient population in a big community health clinic in San Fernando Valley. I truly appreciate the learning opportunities in the past year and will return for the 2024 Addiction Medicine Fellowship.”

“The TNT fellowship is an opportunity to witness and to discuss how psychiatry care is provided across the United States.... I look forward to the opportunity to continue to have guidance from mentors once the fellowship is complete.”

“In the UCI TNT Program, essential tools for caring for today’s patients’ needs are shared by a team of stellar practicing faculty across the nation, making for an accessible care model that is both professionally rewarding and benefits entire communities.”

“With TNT, I had a great learning opportunity...I am able to apply what I learned from this fellowship and I am able to teach my residents as well”

“TNT PCP really provided a different avenue to receive guidance on how to begin to serve patients with mental health issues. Outside of starting an initial dose of an SSRI or SNRI, now I feel more comfortable with trying alternative treatments when the first or second trial does not help, especially in situations where psychiatry referrals are difficult to access either due to systems issues or personal preference. This course has offered me an ability to approach a patient from an alternative point of view and gives the idea of meeting people where they’re at a different understanding.”

“Optimal environment that cultivates learning with regards to addiction medicine.”

“The TNT PC-TEAM Fellowship was instrumental in deepening my love for addiction medicine. The instructors and mentors were extremely knowledgeable and kind, and the experience solidified my desire to pursue a career in addiction medicine. Highly recommend!”

“The PC-TEAM Fellowship gave me the knowledge and confidence I need to help clients experiencing substance use disorder.”

“The support and education continues long after the program. Before starting any TNT programs, I would only treat depression, and mild anxiety. Referrals to psychiatrists really went nowhere. Now, I feel comfortable initiating treatments on most disorders and addictions. I’ve learned many new tools and share them with my colleagues.”



UCI School of Medicine