

Utilization of an Electronic Information System to Evaluate and Enhance Practice at a Medication-Assisted Opioid Treatment Program

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AIMS

START Treatment & Recovery Centers (formerly Addiction Research and Treatment Corporation) is an outpatient medication-assisted opioid treatment program that also provides primary medical care, including HIV/AIDS care for approximately 3,000 predominantly minority adults in New York City.

We received National Institute on Drug Abuse (NIDA) R01 research funding to evaluate the implementation of an electronic health information system integrating counseling, social services, medical services, case management, HIV services, methadone dispensing, and administrative/fiscal data.

After completing the research, the focus turned to utilizing the electronic medical record to improve agency operations.

METHODS

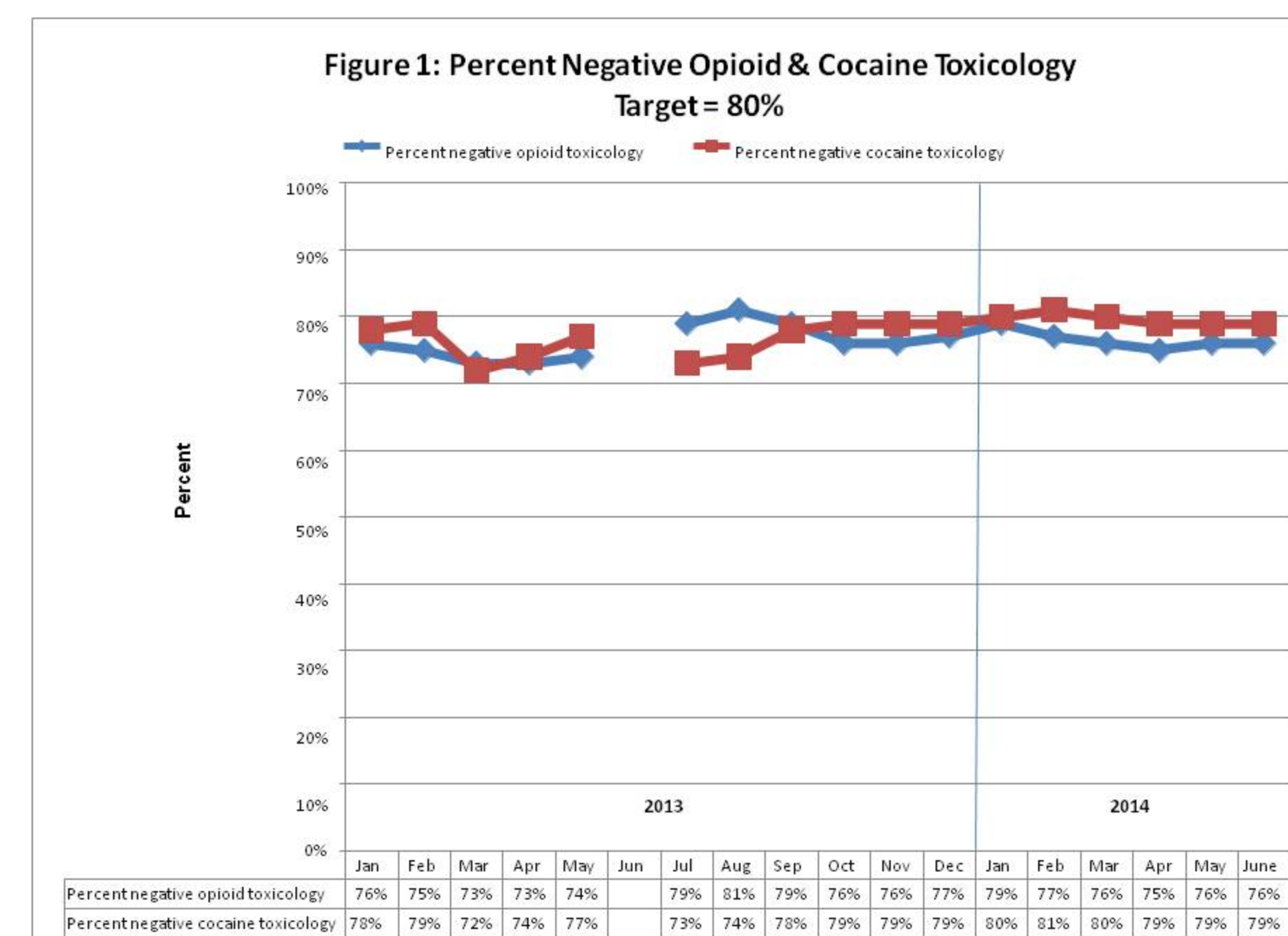
For the research aspects of this project, four domains (Quality, Satisfaction, Productivity, and Financial Performance) were evaluated utilizing a pre and post-implementation research design. A fifth domain, Risk, was dropped from the analysis due to insufficient numbers for valid statistical comparison. Once the research project was completed, the capabilities of the electronic system were utilized to better evaluate Quality Outcomes, Regulatory and Contractual Compliance, and Productivity in all disciplines. This was particularly timely, given that OASAS (the Office of Alcoholism and Substance Abuse Services) in New York State instituted APGs (Ambulatory Patient Groups) as their new payment methodology.

RESULTS: RESEARCH

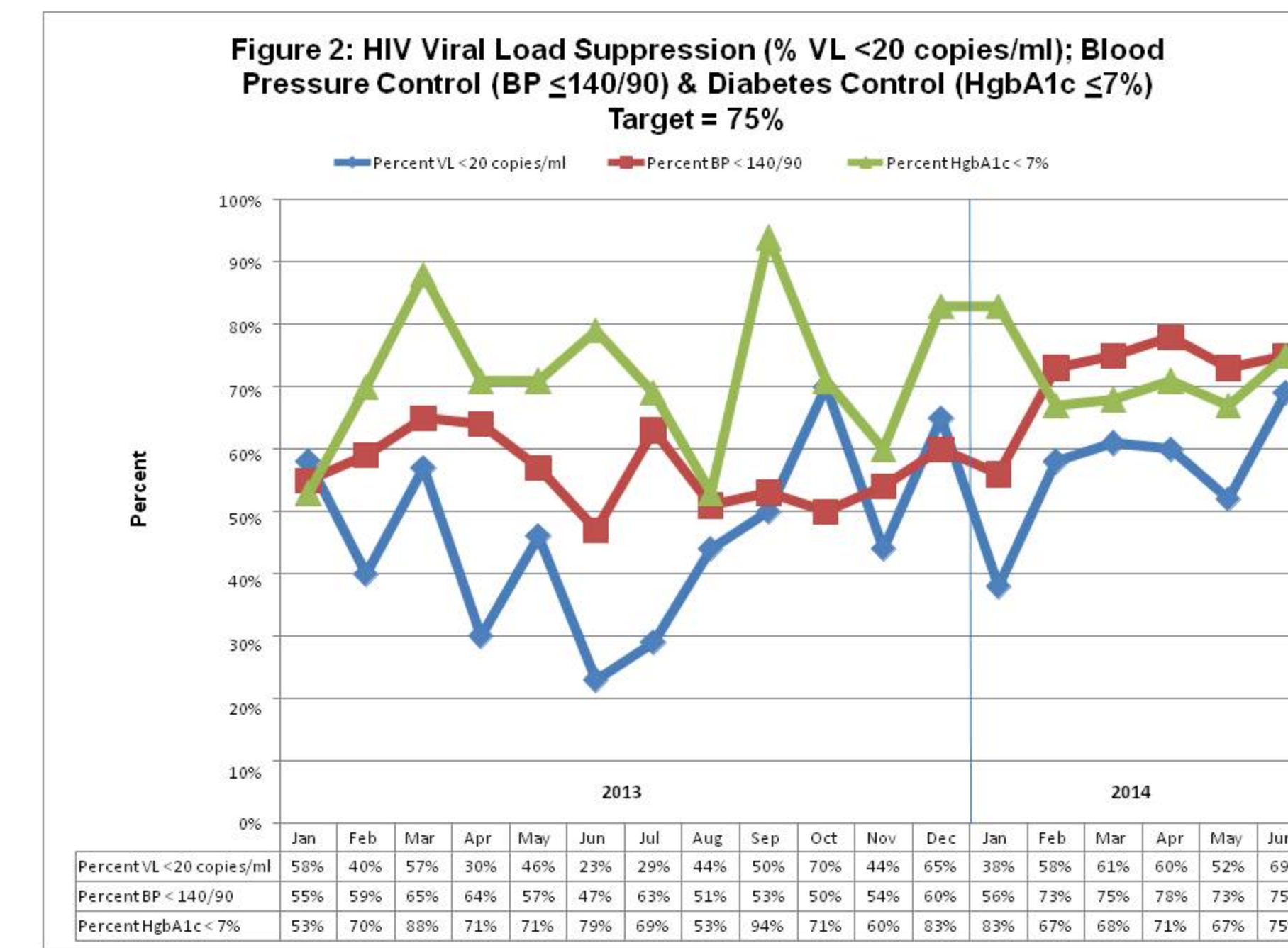
For the research aspects of this project, the following was found: (1) For Quality, pre-implementation annual medical assessments and annual, 30-day, and 90-day multidisciplinary assessments were timely for 83% and 70%, 72%, and 42% of cases, respectively. Post-implementation, the timeliness of annual medical and multidisciplinary assessments was 97% and 96%, 87% and 70% respectively, all highly statistically significant improvements. Hepatitis C viral load blood testing was appropriately performed in 85% of cases pre-implementation and in 81% of cases post-implementation; a non-significant difference; (2) for Satisfaction, there was no change for patients and a non-statistically significant upward trend post-implementation for staff; (3) Productivity tended to decline post-implementation; reaching statistical significance for counselors; and (4) Financial Performance (revenue per capita staff; cost per patient visit) did not change significantly.

Detailed findings were recently published in the March/April 2014 issue of the *Journal of Addiction Medicine*: 8(2) 96-101. Brown LS, Kritz S, Lin M, Zavala R. Evaluation of an Electronic Medical Record System at an Opioid Agonist Treatment Program.

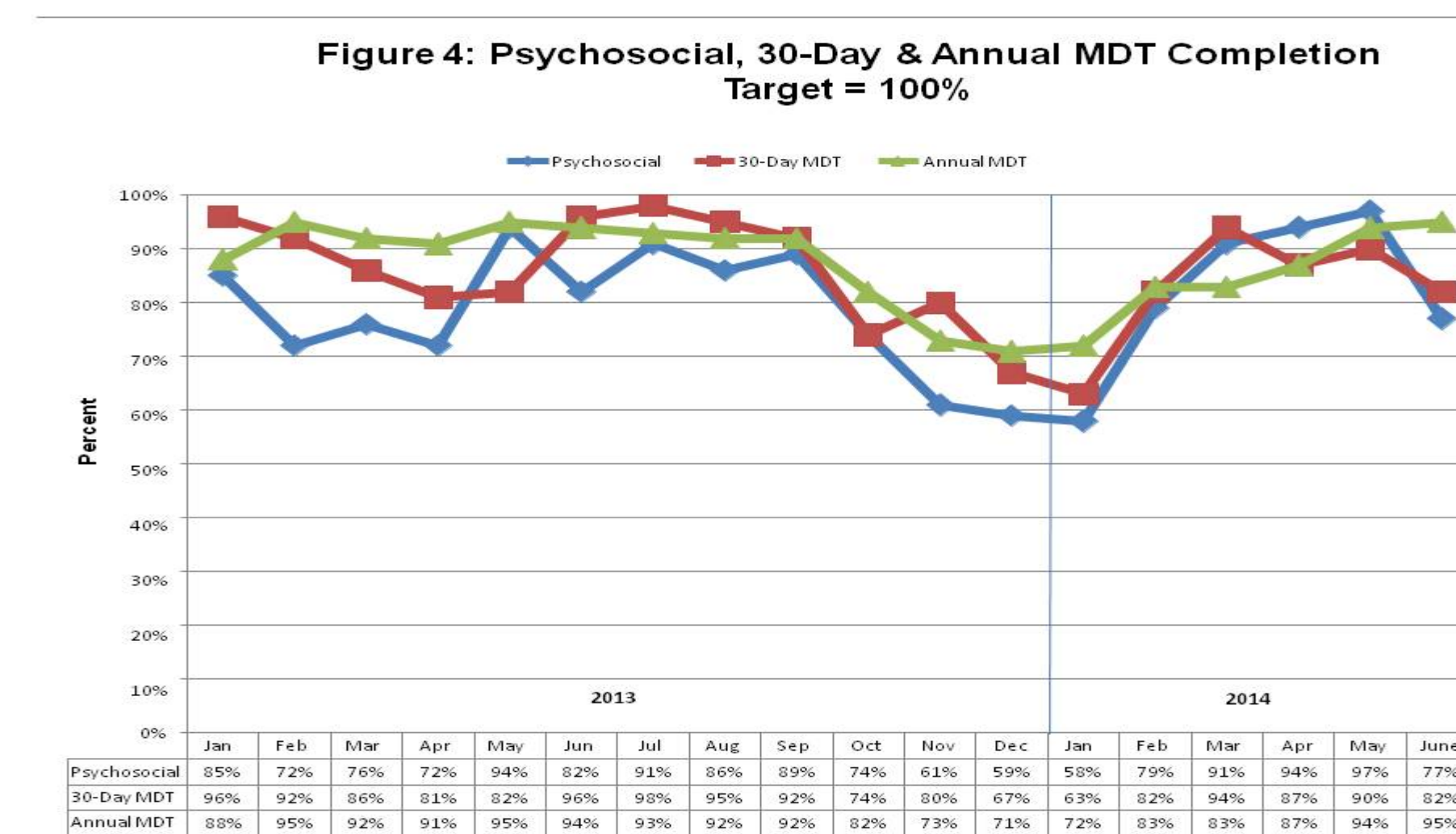
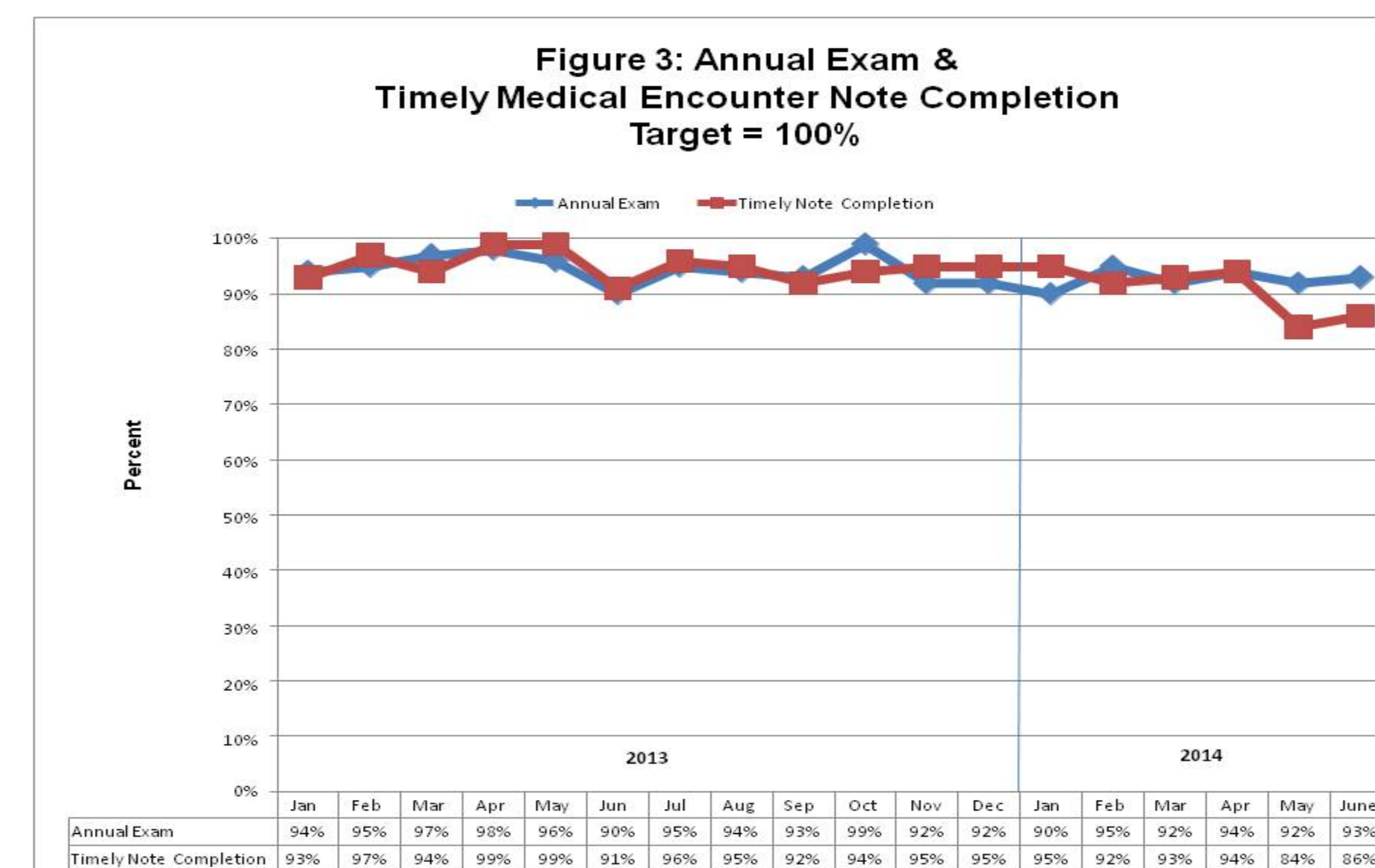
RESULTS: OUTCOMES



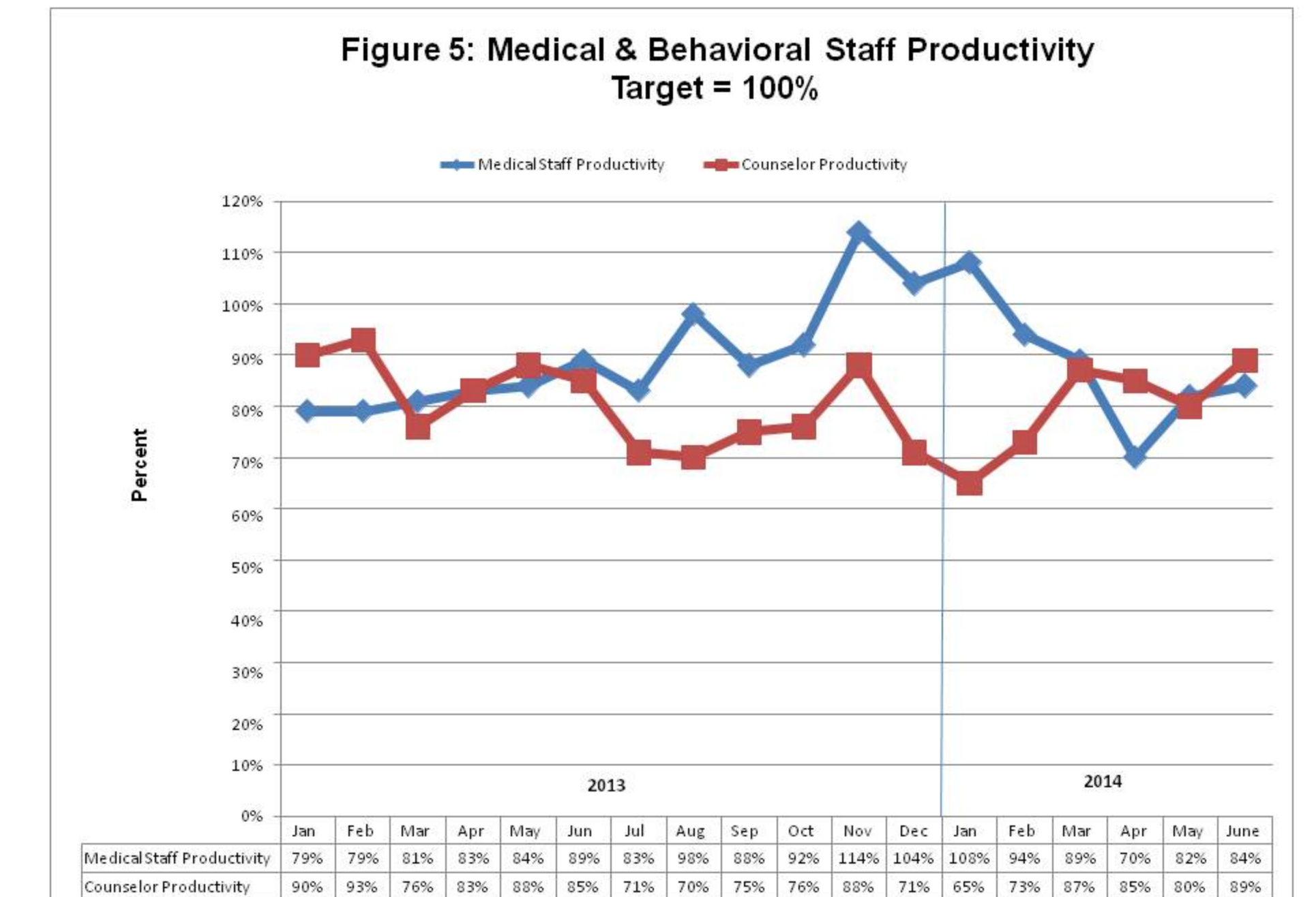
RESULTS: OUTCOMES



RESULTS: COMPLIANCE



RESULTS: PRODUCTIVITY



DISCUSSION

The electronic health information system has allowed us to provide clinicians with comprehensive and timely performance data for the first time in the 45-year history of our agency. We believe that this capability motivates clinicians to improve. As the standards for providing substance abuse treatment continue to escalate, the electronic system will be indispensable.

CONCLUSIONS

Despite serving a racially, ethnically, and economically disenfranchised population that has historically experienced significant disparities in access to and quality of healthcare services; given the right tools, high performance targets can be set, measured, and in many instances met for even the most challenging patients.

ACKNOWLEDGMENTS

PATIENTS AND STAFF
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A COMMUNITY-BASED
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