

Early Childhood Mental Health Network Early Childhood Therapeutic Centers EHR Review

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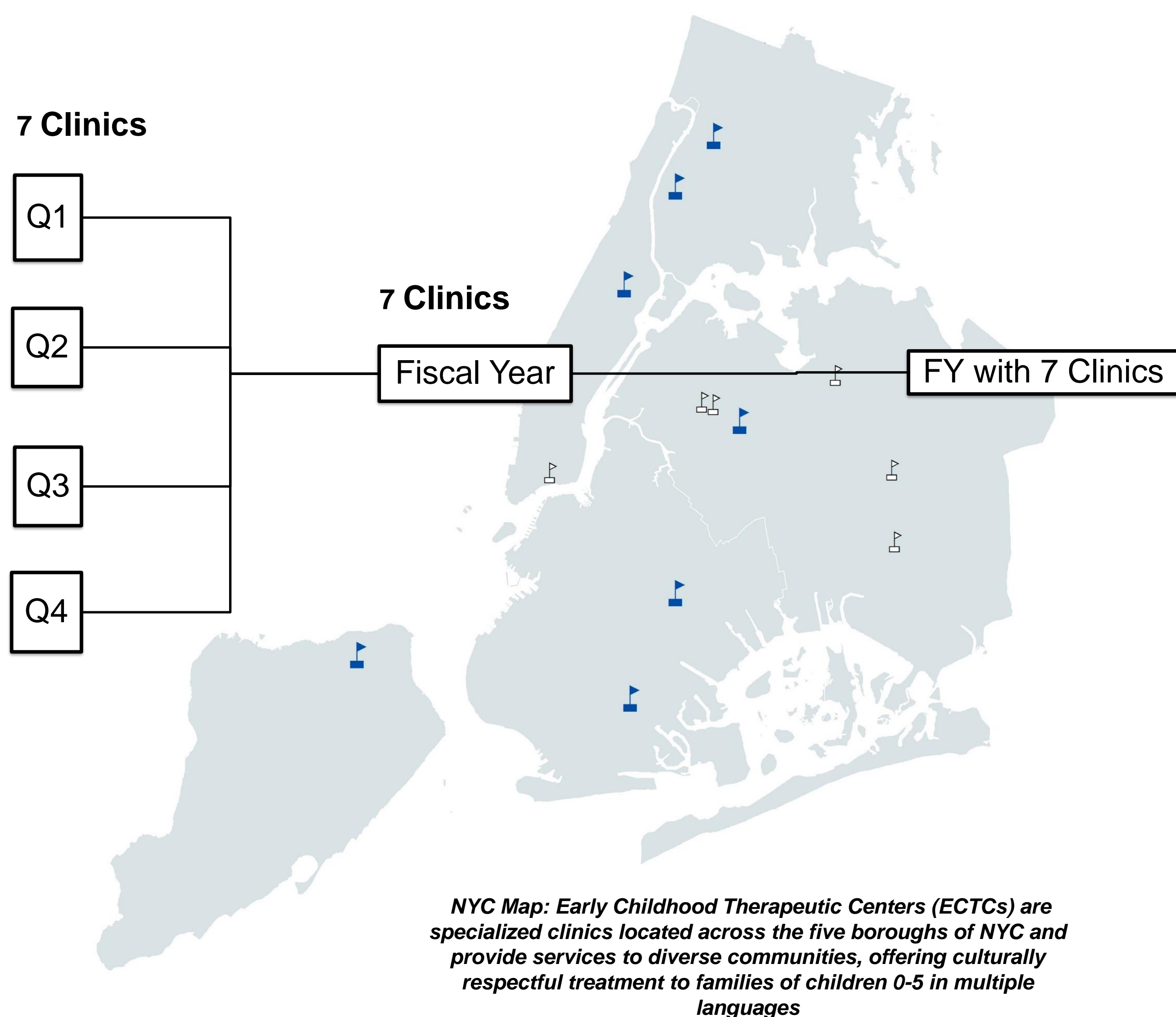
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BACKGROUND

In New York City, one in four children under the age of 5 has a parent or caregiver with concerns about their development (1). NYC Department of Health and Mental Hygiene (DOHMH) funds the Early Childhood Mental Health Network (ECMHN) to identify and address social and emotional challenges early in life to promote lifelong healthy development and success for New York City children (2) by expanding clinical services in all five boroughs and providing technical assistance and training in evidence-based practices. The target population is children birth to age five and their families (siblings, and caregivers/parents) who have sought out or been referred to family based therapy at one of seven Early Childhood Therapeutic Centers (ECTC). These clinics provide DOHMH with patient electronic health records (EHR) and mental health assessment data on a quarterly basis. Data are submitted to DOHMH from the EHRs as excel files through a secure system transfer.

METHODS

Data were collected on a quarterly basis from seven Early Childhood Therapeutic Centers between July 1, 2018 and June 30, 2019. Data mapping was conducted in ArcGIS ESRI Portal 10.5.1. The data analyzed in SAS were merged by four quarters for each individual clinic to relabel and clean data formats. Clinic EHR data were then deduplicated using SAS from clinic datasets of 1,200 – 1,500 total observations to 250 – 350 unique observations per clinic. Analyses were conducted on each clinic's fiscal year data to assess client sex, race, ethnicity, age, and insurance type for clinic utilization review.



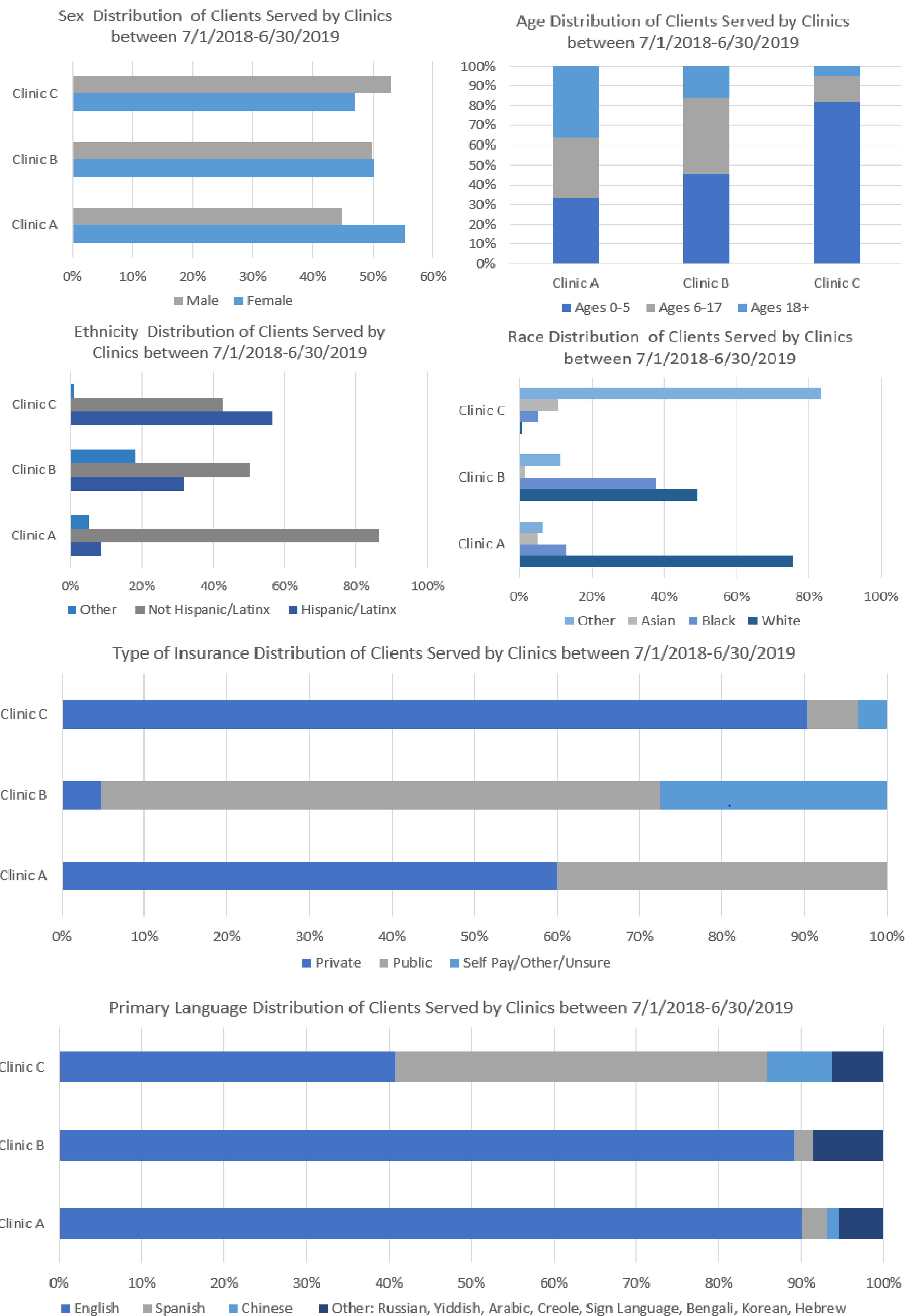
STUDENT CONTRIBUTION

- Use SAS code from previous data analyst to import and begin cleaning EHR data.
- Wrote SAS code to clean the EHR data of the seven ECTCs for FY19.
- Use SAS to standardize data from each quarter per clinic.
- Merge 4 quarters for each clinic to create one SAS data set for FY19 per clinic.
- Develop a data analysis plan and selected variables to accurately monitor clinic capacity and clients, served based on my knowledge of the existing program.
- Create data tables with descriptive analysis.

CHALLENGES

The publicly funded ECTCs have limited data entry support, and practitioners may find data collection and entry challenging based on the time it takes and client needs. Clinics use different EHR systems to collect data and collect varying amounts of data. The quarterly reporting to DOHMH leads to duplication of records or some data loss over time.

RESULTS



NEXT STEPS

EHR data from all 7 clinics will be merged to one data set and linked to the mental health assessment data. The data will be analyzed for process evaluations and clinic utilization. Using the EHR and assessment analysis, mental health status changes for children under 5 and their families will be better understood. The analysis of these data will inform future programming for ECMHN and other early childhood mental health interventions in New York City.

REFERENCES

- (1) NYC Early Childhood Mental Health Network [Internet]. Ttacny.org. 2019 [cited 30 August 2019]. Available from: <http://www.ttacny.org/files/misc/80/ecmhn-trifold-en-web.pdf>
- (2) New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System –Child Health, Emotional Wellness and Development Survey 2014. June 20, 2019.<https://nyc.gov/health/epiquery>