MICHAEL ROYCE TAN, BSN, RN, MPH

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CLINICAL SKILLS

Care coordination, Clinical assessment, Discharge planning, Patient advocacy, health education, Multidisciplinary collaboration, Risk identification, Early intervention planning, Care transition, Resource navigation

TECHNICAL SKILLS

Programming Languages:
R (intermediate), SAS (intermediate), Python (basic)

Statistical Methods:
Descriptive statistics, Regression analysis (linear, logistic), Frequency distributions, Hypothesis testing

Data Visualization & Mapping:
ggplot2, Base R, SAS, ArcGIS (basic), Excalidraw

Healthcare Systems:
Epic, Allscripts, Clinical Trial Data Management

Knowledge & Workflow Tools:
Markdown, LaTeX (basic), Github, Excel (basic), Notion, Obsidian, Trello (basic), Git (basic)

EDUCATION

Master of Public Health (MPH) Population & Health Science
University of Michigan
Ann Arbor, MI 2025

Focus: Applied Epidemiology, Health Policy, Biostatistics

Bachelor of Science in Nursing (BSN)
University of Central Florida
Orlando, FL

PROFESSIONAL SUMMARY

BSN-RN meets MPH — a progressive journey from direct patient care to population health, now cultivating knowledge in biostatistics and health data science. Bringing unique perspective that bridges clinical insights and public health with emerging analytical skills in R, SAS, and Python. Where others see numbers, I see patients; where many see problems, I see patterns; where institutions seek efficiency, I engineer empathy. Seeking collaborative opportunities where this vision can flourish, where better data leads to better decisions and ultimately, better health outcomes.

DATA ANALYSIS PROJECTS & EXPERIENCE

Longitudinal Age Distribution Analysis — California Teachers Study, City of Hope *(2024)*
- Applied SAS to analyze 20+ years of data (2000-2022) from the California Teachers Study cohort (∼130,000 participants)
- Implemented reproducible statistical methods to compare teacher longevity with general population benchmarks
- Performed demographic trend analysis revealing potential increased life expectancy among study cohort
- Produced comprehensive statistical report with 5+ data visualizations illustrating age distribution changes over time
- Collaborated with senior researchers to refine methodological approach and interpretation of findings

GIS-Based Oral Health Disparities Dashboard — Alaska Department of Health *(2024)*
- Built interactive ArcGIS dashboard merging 4+ public health datasets to visualize oral health disparities across Alaska
- Mapped fluoridation status, provider availability, and access barriers
- Analyzed geographic and demographic factors affecting healthcare access and utilization
- Developed visualization tools that reduced stakeholder time to access critical regional information
- Learned practical techniques for data cleaning and integration, refining skills in handling diverse data sets

CLINICAL EXPERIENCE

Registered Nurse Orlando Health *(2012 − 2019)*

RN–Cardiac Stress Lab *(2017 − 2019)*
- Coordinated care for 15-20 high-risk cardiac patients daily, including discharge planning and follow-up appointment scheduling
- Identified patients at risk for complications through ECG rhythm interpretation and vital sign monitoring

SPECIALIZED TRAINING

Data Science Professional
Harvard University, 2023

Statistical Analysis with R for Public Health
Imperial College London, 2024

LICENSES

- Registered Nurse, BSN
  Nurse Licensure Compact
- Advanced Cardiac Life Support,
  American Heart Association
- Basic Life Support,
  American Heart Association

ASSOCIATIONS

- One Health Student
  Consortium
- Public Health Action
  Support Team
- Students Engaged
  in Global Health
- Student Emerging Leaders
  in Public Health
- American Nurses Association
- American Public Health
  Association

- Assisted cardiologists with nuclear, exercise, and pharmacological (dobutamine) stress tests
- Collaborated with multidisciplinary teams to develop comprehensive care plans based on patient outcome and safety
- Educated patients and families on post-procedure care, medication management, and warning signs requiring medical attention

RN–Cardiac Evaluation *(2013 – 2017)*
- Developed and implemented discharge plans for cardiac patients, reducing readmission rates through effective coordination with outpatient providers
- Facilitated care transitions between emergency, inpatient, and outpatient settings
- Managed complex cases requiring coordination with multiple specialists, procedures, and community resources
- Performed comprehensive cardiac assessments, cardiac monitoring protocols, and identifying critical patterns

RN–Neuroscience *(2012 – 2013)*
- Conducted thorough neurological assessments for stroke and TBI patients, developing systematic evaluation techniques
- Partnered with social workers to address barriers to care and ensure safe discharge planning
- Participated in multidisciplinary rounds to coordinate comprehensive care plans addressing medical, functional, and psychosocial needs
- Documented detailed care coordination activities to ensure continuity of care across transitions

SPECIALIZED PROFESSIONAL EXPERIENCE

Student Coordinator, University of Michigan *(2024 – Present)*
- Optimize LMS course sites (Canvas) for 200+ users, improving navigation and information architecture
- Apply data-driven approaches to course redesign, tracking engagement metrics to enhance user experience
- Collaborate with faculty to implement evidence-based instructional design principles

Clinical Device Training & Operations Specialist
Inovio Pharmaceuticals *(2021 – 2022)*
- Analyzed device performance data across 5+ clinical trial sites to identify operational improvements
- Developed training materials that improved clinician comprehension
- Ensured accurate data capture in Electronic Data Capture (EDC) systems for DNA medicine clinical trials
- Collaborated with cross-functional teams to standardize operating procedures based on performance analytics