

Metrics Matter: Proficiency for the Healthcare Professional

Going Beyond Basics in Measurement for Healthcare

PROGRAMME DESCRIPTION

As healthcare systems become increasingly complex, measurement must move beyond basic data collection to enable deeper insight, systems-level thinking, meaningful benchmarking and the ability to translate data into strategic decision-making and action.



DURATION: 1 DAY

Designed for participants who have completed the basic measurement training programme, this programme builds on foundational principles to equip healthcare professionals with the skills to analyse performance across interconnected processes, departments, and care pathways. Participants will develop the confidence and analytical depth required to lead improvement initiatives, evaluate impact at scale, and drive sustainable change at both departmental and system levels.

Participants will learn how to apply systems thinking to measurement, align indicators with organisational priorities, and benchmark performance internally and externally. They will learn how to analyse quantitative data using run and control charts, understand values, trends and variation, while also integrating qualitative insights to understand context, culture and patient experience. Emphasis is placed on distinguishing meaningful variation from noise, ensuring data validity, and translating findings into actionable improvement strategies.

All modules include interesting activities and hand-on sessions. The key features and topics of this course include the following with their respective learning objectives.

PROGRAMME CONTENT

This workshop covers:



MODULE 1: Revisiting Basics

- Revise basics: why measure, what to measure, how to use measures, how to analyse and report data, use of simple charts such as run charts



MODULE 2A: Reliability, Validity and Accuracy of Data

- Learn how to use scientific methods to ensure data accuracy, reliability, validity and consistency



MODULE 2B: Concepts and Measures of Variation - Spread/Dispersion:

- Learn and apply analytic tools to understand measures of spread/dispersion: e.g. Range, Interquartile Range, Standard Deviation etc
- Understand the principles of confidence levels/intervals and commonly used tests of significance



MODULE 3A: Statistical Process Control(SPC) Charts and its Use

- Understand how to diagnose and manage variation including common and special cause variation
- Learn how to use SPC charts to depict variation using commonly used statistical process control (SPC) charts.
- Understand different types of SPC charts for different data types and other, other charts and graphs to study variation.



MODULE 3B: Benchmarking and its Role in Healthcare

- Understand the role of benchmarking in healthcare - definition, how and when to use different types of benchmarking
- Understand how to select an appropriate source of benchmarking comparative data and how to apply a step-by-step process for benchmarking



MODULE 4: Using Qualitative Data in Healthcare

- Understand the different methods to collect, analyse and report qualitative data



MODULE 5: Performance Measurement at Systems Level

- Learn and understand system performance measures
- Learn how to create metrics, scoring systems
- Learn and understand how to use the Clinical Value Compass, develop Balanced Score Cards (BSC) and Dashboards
- Learn how to improve system performance using Driver Diagrams



TARGET AUDIENCE

- Doctors
- Nurses
- Allied Health Professionals
- Pharmacists
- Administrators (Sr Exec & above)
- Quality Management Professionals

Pre-Requisites

- Participants should have completed the Metrics Matter: Fundamentals for the Healthcare Professional Course or equivalent.

ABOUT THE ORGANISER

Officially established on 19 July 2002, the NHG College plays an instrumental role in facilitating the continuous learning and development of our workforce, as well as, promoting systems improvement and driving leadership development in NHG Health. NHG College collaborates with renowned institutions and industry partners to build the pipeline and collective capacities of our leaders, educators, healthcare professionals and staff to support NHG Health in serving and managing the health of our patients and the population.

For enquiries on patient safety and quality improvement courses, please visit our website by scanning the QR code below or email us at: nhggroup.ihq@nhghealth.com.sg

