

DNO Objectives, Definition and Key Principles and Approach

The diagnostic network optimization is an exercise that aims to redesign the **diagnostic network set-up** in order to **increase access, maximize impact, and generate efficiencies**.

It aligns testing demand and capacity in the most cost-effective way by **defining the optimal instruments mix, identifying the most appropriate locations** where instruments should be placed, and **designing the referral network linkages** across that revised network. U

DNO aims to:

- **Increase access to testing, and generate greater public health impact**, as improved device placement and integrated specimen referral network aim to bring capacity where it lacks, and shorten TAT
- **Increase network efficiencies**, through the implementation of integrated supporting systems, such as sample transportation, results delivery and data management
- **Decrease total cost per test**, as the increase in instrument utilization reduces the contribution of fixed costs over the total cost per test

- **Create greater visibility leading to more effective allocation of funding**, increasing the value of money spent by the range of donors supporting diagnostics services in country
- **Unlock MoH capability to generate continuous improvement**, as long-term visibility into lab network improves and supporting systems are strengthened
- **Create a more competitive and dynamic marketplace**, as data visibility and increased competition increase bargaining leverage with suppliers

Direct
impact

Indirect
impact

DNO Guiding Principles

DNO should:

Be Led by Ministry of Health	The Ministry of Health is actively engaged throughout the DNO process, and supported by partners to drive optimization, to make final decision on optimal new network and lead implementation
Be Patient-centric and Achieve Improved Public Health Impact	DNO must be centred around patients, and lead to greater public health impact. It should help MoH more efficiently and effectively deliver its diagnostics services, so more health is achieved for every \$ spent
Be Comprehensive	National is better than regional, and including multiple assays - based on MoH's priorities - is preferable, so DNO becomes an integrated national exercise that leads to impact and cost improvements across disease areas
Lead to a Sustainable Network	MoH should be able to sustain diagnostics services provided by the new network over time, under funding available, and in spite of potential demand peaks. Systems should be in place to enable continuous improvement through iterative network optimization exercises
Build Accountability	Clear targets must be set, and a robust M&E process established to ensure DNO leads to positive change once implemented, informing continuous improvements
Not penalize any disease area in scope	No disease program in scope of a DNO exercise should land in a worse scenario than the baseline, in terms of access, impact and/or cost, and all disease programs should benefit overall.
Be Collaborative and Transparent	All key stakeholders act together, in a close and coordinated partnership, sharing resources and expertise, and communicating with transparency

DNO is a four-step process that starts at a strategic level looking at impact targets against funding constraints, before aligning with operational feasibility

