Five key performance indicators for healthcare organizations: 

People, quality, time, growth & financial performance
Bio

At Roche Healthcare Consulting our talented professionals are committed to optimising patient care. Our diverse range of strengths and experiences creates a balanced team with a wide range of expertise. The following individuals at Roche Healthcare Consulting have contributed their insights on the future of healthcare solutions.

Patrice Doisne
Senior Project Manager
Roche Healthcare Consulting,
EMEA – LATAM Region

Patrice Doisne graduated from Angers University with a doctorate in Pharmacy and has a Master in Biotechnology. He joined Roche in 2000 as Key Account Manager and has more than a decade of commercial experience in marketing, consulting and project management. As Senior Project Manager for Roche Healthcare Consulting, Patrice is responsible for looking after our long-term customers across the EMEA-LATAM region (Europe, Middle East, Africa and Latin America).

Mah Sam Yew
Consulting Team Manager,
Lab Workflow Solutions

Mah Sam Yew joined Roche Diagnostics’ Asia Pacific Regional team in June 2008 and currently holds the position of Consulting Team Manager in Roche Healthcare Consulting. Sam leads a team of Lean Six Sigma Black Belt & Green Belt Practitioners who support laboratories in the Asia Pacific region in workflow assessment, consultancy and customizing solutions that fit laboratories’ needs and goals. Previously, he worked with Roche Diagnostics Malaysia in the marketing, product and project management of laboratory IT and workflow solutions, including installation, training and technical support.
Executive summary

Performance indicators play a vital role in the management and transformation of a hospital or laboratory. It is essential to have the right key performance indicator (KPI) information at your fingertips, whether you are providing insights to managers for developing teams and assuring quality standards, or to executives to help plan their strategic investments. Working with Roche Healthcare Consulting to transform your clinical diagnostic infrastructure, organization and processes, can ensure KPI reporting stays clear and simple, and that strategic decision-making is informed by the most accurate, up-to-date information.
KPIs are defined as factors by which the performance, development, or position of any organization can be measured effectively. Specifically, these are factors that can be influenced or controlled by the organization itself, so while some aspects of an organization’s performance could be quantified by, for instance, commodity prices or supply/demand data, they would not be considered KPIs in this context as these are not factors that management can control.

It is important to note that KPIs are unable to form a meaningful component of change in isolation, and only become useful when built into a clearly defined and purposeful strategy. For any KPI to be included in a strategy, its function as part of that strategy must be clearly understood among all stakeholders. In other words, anyone requesting the inclusion of a KPI must be able to simply justify its inclusion.

KPIs offer real value to hospitals and laboratories. A 2015 study on clinical laboratory performance indicators observed that “Data and facts are not simply, easily or passively picked up and collected. They can only be understood and measured through an underlying conceptual framework, which defines relevant facts, and distinguishes them from background noise.”

Financial pressures on hospitals and laboratories driven by aging societies and the increasing burden of chronic disease have created a high demand for innovation in healthcare organization management. Tools are needed that can aid intelligent decision-making around managing financial performance, resources, orders and time.

KPIs can help to meet this need as part of an underlying conceptual framework that filters signal from noise in the streams of data outputted by hospitals and laboratories.

Research conducted by Roche Healthcare Consulting identified the KPIs that were most important to Roche Diagnostics’ clients - categorized below by segment and stakeholder.
### Most important KPIs by segment

<table>
<thead>
<tr>
<th>Private lab chains</th>
<th>University hospitals</th>
<th>Blood banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA (earnings before interest, tax, depreciation &amp; amortization)</td>
<td>Employee satisfaction</td>
<td>Solution reliability</td>
</tr>
<tr>
<td>Financial performance</td>
<td>Solution reliability</td>
<td>Lead time</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>Lead time</td>
<td>Employee satisfaction</td>
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<tr>
<td>Test menu growth</td>
<td>Customer satisfaction</td>
<td>Cost per test</td>
</tr>
<tr>
<td>Lead time</td>
<td>Percentage yield of process</td>
<td>Cost per patient case</td>
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</tbody>
</table>

### Most important KPIs by stakeholder

<table>
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<tr>
<th>CEO/Procurement</th>
<th>Lab managers</th>
<th>Chief Medical Officer</th>
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Importance of KPIs in organizational excellence

KPIs are now well-accepted across healthcare as a toolkit for driving improvements and boosting performance.

A 2015 study into the use of KPIs across hospitals noted that "Healthcare managers are aware of the effect of using measures on monitoring and improving performance, yet they rarely use measurement as an essential part of their strategies and tactics. [...] It is very essential to develop strategic key performance indicators that reflect the actual performance of healthcare organisations."5

This uncertainty around the proper applications of KPIs and data analytics is also apparent in the findings from Managed Healthcare Executive's 2018 'Data analytics challenges facing healthcare organizations' survey, which found that:

- 33% of respondents' pressing IT problem is a difficulty in turning data into actionable information; and that
- 30% of respondents' do not have enough members of staff with adequate expertise in data analytics.

Consultants can help hospitals and laboratories to implement and monitor KPIs as part of a wider, long-term improvement strategy. Importantly, rather than to try and impose an inflexible set of KPIs onto a customer, a good consultant will tailor KPIs to the individual needs of that laboratory and project. It also important to bear in mind that what might constitute a KPI to a laboratory manager may be very different to what might be a relevant KPI to a laboratory technician.

Consultants therefore must be adept at drilling into the granular detail of what matters most to different stakeholders within that organization and how they define success. The KPIs that arise out of these analyses must then correspond to these definitions and drive forward this balance of stakeholder ambitions.

For example, Roche Healthcare Consulting does not only engage with senior management when defining which KPIs will be applied to measuring transformation in an organization. Instead, consultants get the buy in from employees at every level, reating a project-specific KPI framework that ensures all members of an organization are aligned and equally invested in driving transformation. Roche's research also identified which KPIs its clients consider to be most relevant to their organizations.

100% of survey respondents agreed that these KPIs are correct for their organization:

- Solution reliability
- Customer satisfaction
- Profit contribution
- Sales growth
- Cost per patient case
- Earnings before interest, tax, depreciation and amortization

50% or more of survey respondents agreed that these KPIs are correct for their organization:

- Lead time
- Cost per test
- Percentage yield of process
- Employee satisfaction
- Financial performance
KPIs in developing regions

Accreditation of well-recognized and evidence-based international standards – such as ISO 15189 – has been linked with improvements in patient safety and outcomes in diagnostic laboratories. However, many laboratories in developing countries are unable to obtain these accreditations, and in their absence, KPIs form a particularly important system for driving continuous improvement in regions such as Asia Pacific (APAC). The results of Roche Diagnostics’ 2017 survey report that 81 out of 643 diagnostic laboratories (around 13%) in APAC currently measure KPIs, with the following being the most widely used KPIs in this region:

- 79% Turnaround time
- 65% External quality assurance
- 61% Customer satisfaction
- 53% Cost reduction
- 41% Employee satisfaction
- 22% Lean six sigma
- 38% Employee productivity
- 23% Work space utilization
- 15% Sigma value

Only 13% of diagnostic laboratories in APAC measure KPIs.
Roche Healthcare Consulting takes a unique approach to KPIs, mapping them onto the client’s transformation strategy across five dimensions: people, financial performance, quality, growth and time. This method allows consultants to take into account market conditions and other outside determining factors when considering whether a particular organization is looking to expand, defend their position or pursue other avenues of change. The bespoke KPIs that emerge can cover everything from turnaround time to levels of noise pollution, from customer satisfaction to staff retention rates.

By building KPIs around people, financial performance, quality, growth, and time into every project, we ensure a balance for clients between key business perspectives, how the organization sees itself and how others see it, its business needs now and how these might change over time. In doing so, our consultants help to focus their client on what steps they need to take in partnership to deliver breakthroughs in performance.

People, financial performance, quality, growth and time are uniting factors that can also help to integrate a variety of projects with disparate aims that may be running simultaneously. This holistic approach breaks down organizational silos, translating strategy into measurable targets and providing managers and employees alike with a clear understanding of how organizational transformation goals interface with their day-to-day working.

Our approach to measuring success and mapping the progress of transformation is scientific and works on the principle that managers need to be as forensic with KPI data as scientists are with clinical data.

How can laboratory managers and consultants expect to diagnose organizational and strategic problems together and propose timely, appropriate solutions without a strong base of reliable evidence?
Another important element of the KPI process is benchmarking – comparing the laboratory’s performance with that of its competitors. A ‘benchmark’ is the best-in-class performance that can be achieved for a specific business process, and the analysis of benchmarks provides consultants with the answers to crucial questions, including which organization performs better in their client’s field, what makes them better, and what actions need to be taken to match this performance? With the information generated through benchmarking, consultants are able to develop performance indices that enable the identification of internal targets and industry norms. From this, they can then set internal performance targets and measure progress towards strategic goals.

As global providers of diagnostic consultancy services, Roche Healthcare Consulting possesses a unique overview of the worldwide performance of diagnostic laboratories. This empowers consultants to reliably advise healthcare organizations on how their performance and progress in achieving their goals corresponds to the reality of peers facing comparable challenges. In APAC alone, we draw on data compiled from more than 1,000 individual laboratories as part of its annual KPI-related benchmarking process.
Conclusion

Roche Healthcare Consulting takes a slightly different approach from other consultants in applying KPIs to our clients’ improvement initiatives. Our consultants do not impose a rigid framework of KPIs on our clients, instead tailoring KPIs to the specific needs of each project and map them across the core functions of people, financial performance, quality, growth, and timeliness.

Roche also does not limit client engagement to C-suite. Our consultants work with employees at every level to define the KPIs that will help them to drive improvement across their organization. This approach ensures that the organizations Roche works with are fully aligned on how they approach KPIs and that everyone working in that environment is fully aligned and equally invested in the transformation.

Across a spectrum of healthcare organizations, Roche Healthcare Consulting has experience in building KPI frameworks and translating their outputs into specific action points. By combining this deep knowledge with extensive global benchmarking operations, our consultants are confidently able to identify what the gold standard for your business should be and guide you in achieving this.

7. Badrick TC, Gutscher A, Sakamoto N, Chin D. Diagnostic laboratories in Asia Pacific region: Investigation
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