

White Paper



Hospital Performance Management: From Strategy to Operations

Every hospital wants to be on top in terms of revenue and quality of care. It is tough enough to get to the top, but tougher still to stay there.

Hospital Performance Management (HPM) allows management to identify areas for performance improvements, plan systematic performance improvement initiatives, set targets, and continuously track metrics. It is the next generation of reporting, where data from different sources can be collected in a data warehouse, cleansed and then presented in logical and actionable manner on a dashboard using KPIs/metrics.

This paper proposes how hospitals can successfully implement HPM to meet their growth and quality care objectives.

Hospital Performance Management simplified

The primary responsibility of hospitals across the globe is to ensure that patients are treated in the most effective manner and, during their stay in the hospital, are provided with finest of quality care. Meanwhile, a healthy competition is driving hospitals to provide quality care at a reasonable cost. Hence the challenge for hospitals is to provide quality care for enhanced patient satisfaction while achieving this at lower costs and higher efficiencies.

Hospital Performance Management (HPM) solutions are an answer to this challenge. The solution bridges the gap between conceptual planning of organizational goals and the physical monitoring of the status of daily operations. This allows organizations to determine if they are on track toward common enterprise goals. These solutions allow for information to flow from operational staff to managers and back again in a circular manner. Actionable information seamlessly progresses through multiple layers of an organization in a carefully guided manner. Thus all participants get the insight they need to recognize and resolve issues quickly, efficiently and effectively.

This paper shows how successfully implementing an HPM solution can help measure, monitor and improve the quality of healthcare.

Organization Vision

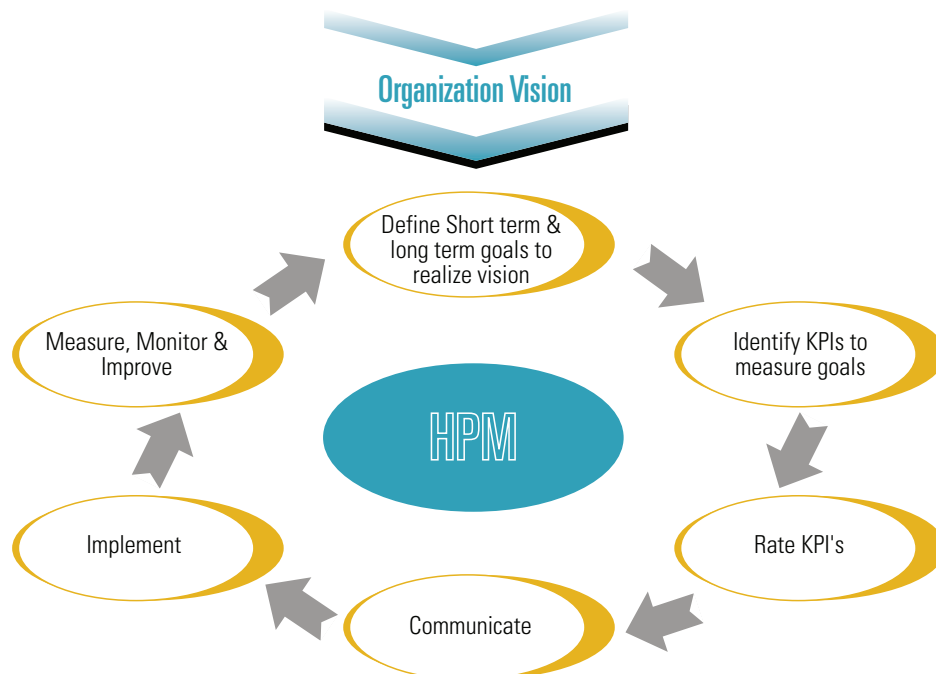
The implementation of an HPM strategy must be top-down, driven by management in alignment with the organization's vision. For a large hospital, an inspiring vision statement could read:

“To lead the region/state/country/world as a healthcare team by exceeding patient expectations through the advancement of quality medical services.”

Define Goals (Short- and Long-term)

In order to realize the vision, you need to set strategic goals. Set short-term and long-term goals ensuring that the former are closely aligned with the latter. Long-term strategic goals could be:

- Quality - Provide healthcare excellence through patient-centered care
- People - Regional healthcare provider and employer of choice
- Finance - To be a \$10 billion enterprise by 2012
- Market Growth - Increasing market share by expanding the reach of medical services



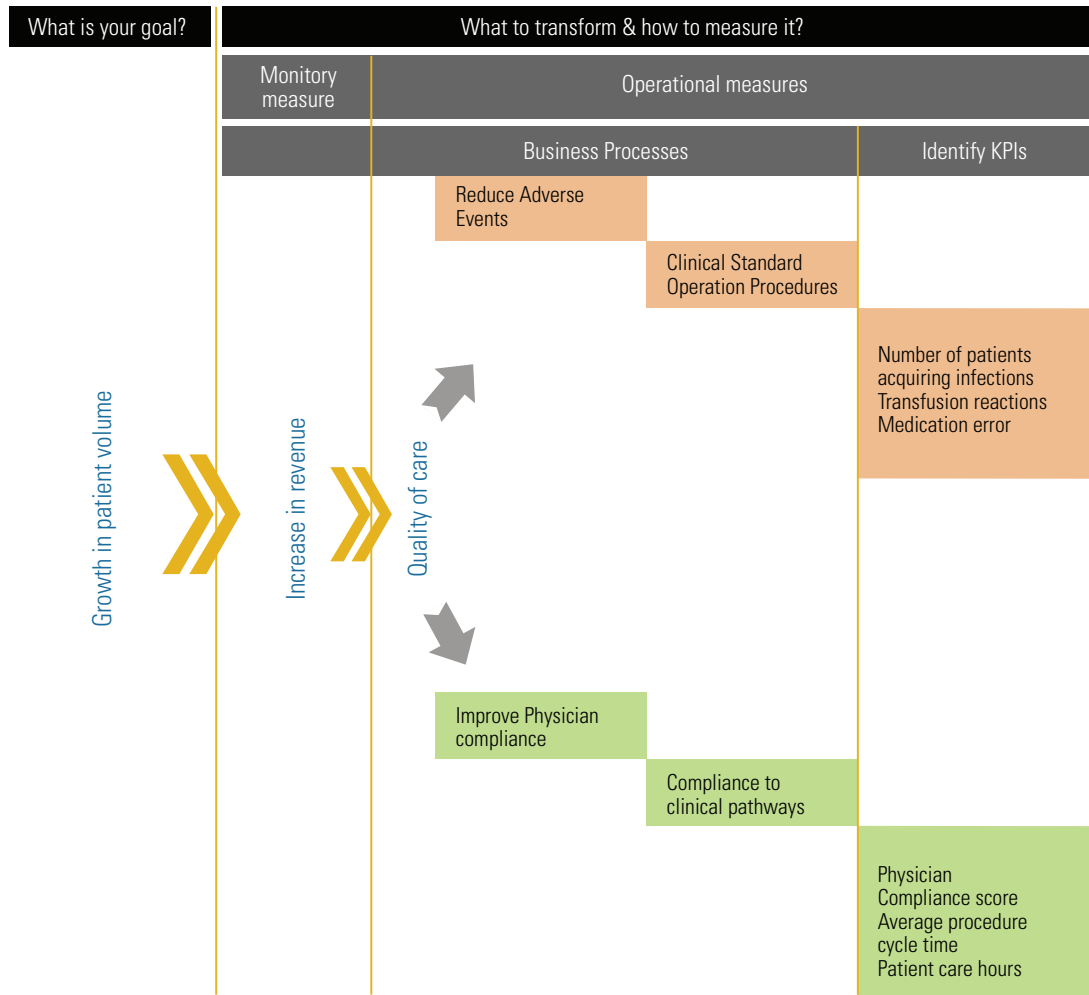
Choosing the right KPIs for identified goals

It is critical to select the right key performance indicators (KPIs) to get a measure of how you are progressing toward your short and long-term goals.

Let us say your long-term goal is “Market Growth - Increasing market share by expanding medical services” and the short term goal is “Growth in patient volume”.

You now need to drill this goal down across the hospital business processes where you need to identify KPIs that directly affect patient turnarounds. Assigning a monetary value to each KPI will enable tracking ROI of the HPM implementation at a later stage.

The figure below illustrates typical KPIs as a sample to explain the holistic approach for KPI identification.



KPIs can be identified by:

- A thorough study of the ‘AS-IS’ model
- Current perceived/experienced pain points across business processes

Techniques like motion analysis, work break-down analysis, and swim lanes diagrams of AS-IS can be deployed to identify the stakeholders involved and potential bottlenecks.

It is important to keep the following points in mind while identifying KPIs:

You will need to brainstorm with key stakeholders on the KPIs that need tracking and the infrastructure you have or are willing to invest in gathering the data to measure those KPIs. When this is effectively done, you allow managers at every level to monitor the KPIs that their respective teams impact. The term ‘effectively’ needs to be elaborated for a KPI.

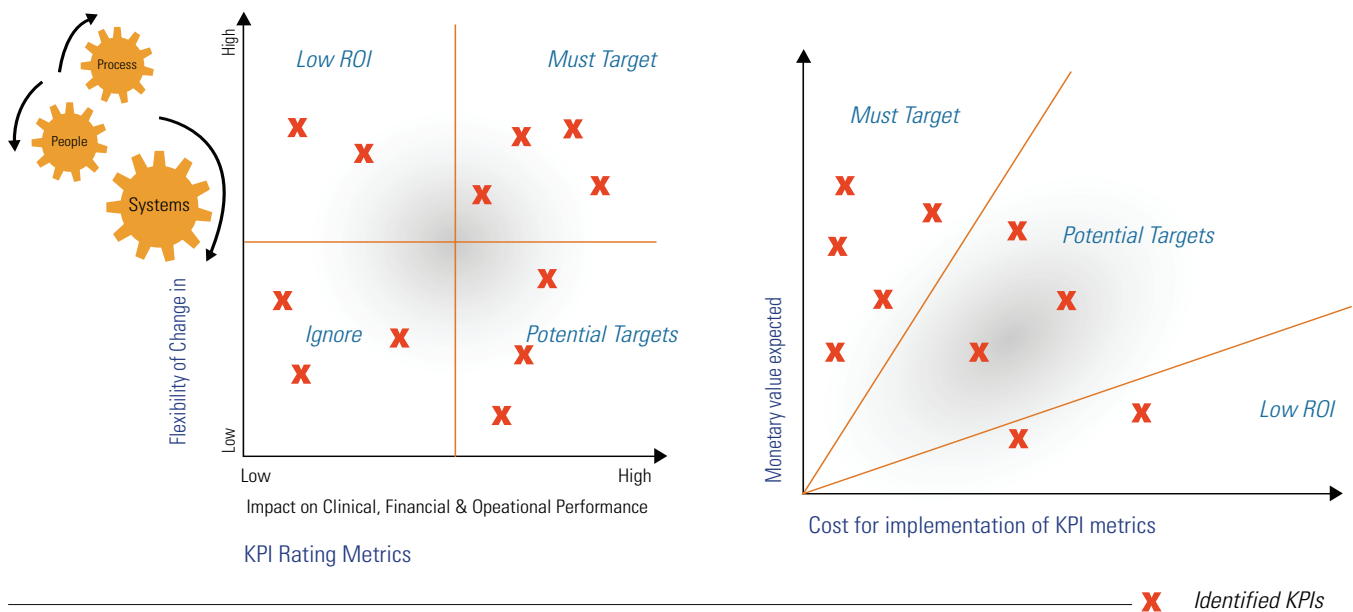
Each KPI identified should be subjected to the SMART test, i.e.:

- **Specific:** Clearly indicate the item getting evaluated
- **Measurable:** Data capture points need to be available
- **Achievable:** Should not require change in regular workflow
- **Result-oriented:** Change in the KPI value should have significant impact on output
- **Time-based:** How long before data on specific results is available

Rating identified KPIs

Too many KPIs can defeat the purpose of capturing data. Hence the next step is to focus entirely on **high-impact and less rigid** processes and KPIs for those.

Each KPI identified should get rated on a 2-dimensional scale revolving around the impact on clinical excellence, operational efficiencies, and financial health around the identified goals.



KPI selection metrics

It is also critical to work out the cost associated with measuring the KPI vis-à-vis the results expected.

KPIs with high flexibility and high impact on organizational goals but low cost of implementation are the low-hanging fruit that must be targeted right away for implementation.

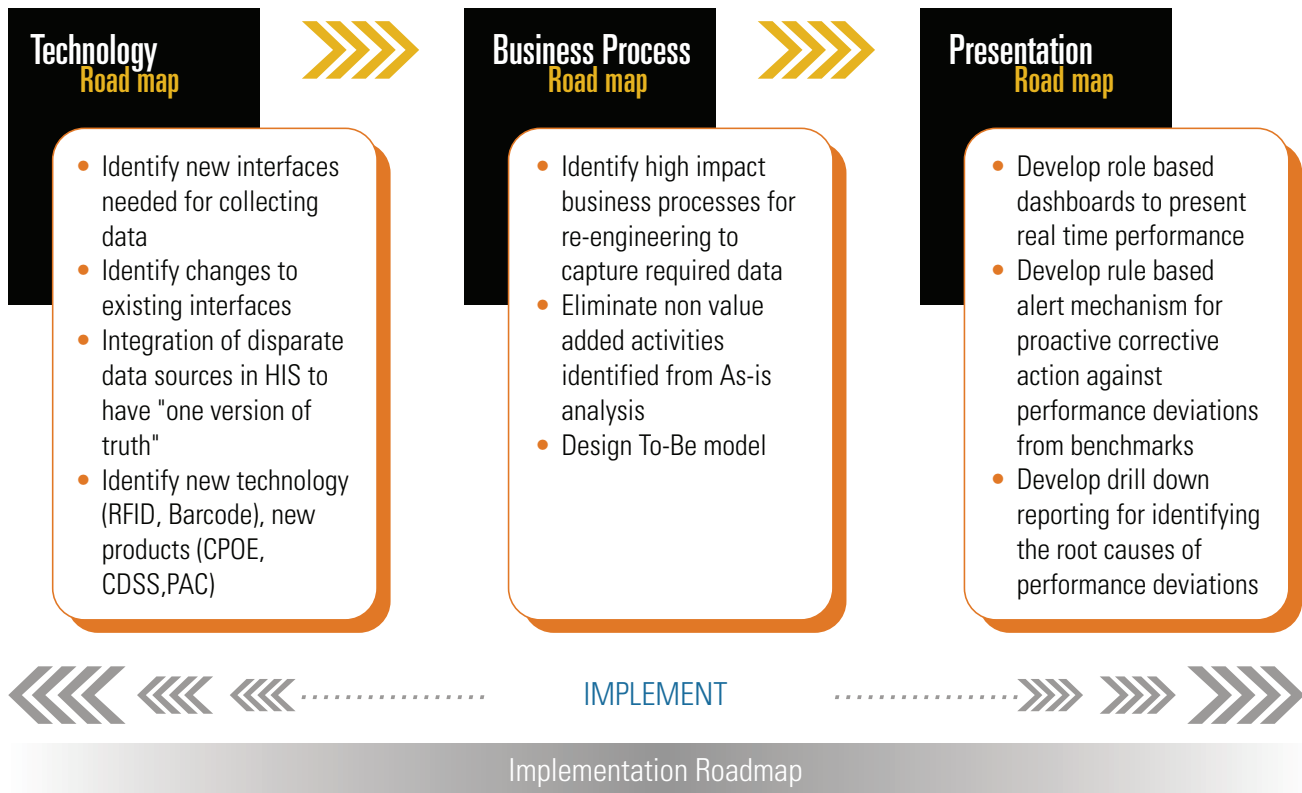
- Establish KPI definition, hierarchy and ownership
- For each KPI identified, a hierarchy needs to be established around organization roles. An executive KPI should be at an aggregate level whereas KPIs for line managers should be at a granular day-to-day operations level.
- No KPI should have dual ownership. This will prevent confusion over responsibilities.
- During measurement and monitoring, the owner of the KPI should get notified automatically on any deviations beyond the set tolerance levels. The HPM tool should help executives utilize their time productively by improving organizational performance rather than micro-managing the status of each KPI. The maintenance of status quo should be left to the operational staff that owns the KPI.
- Detailed definitions for each KPI with formulae for calculated KPIs need to be established
- A list of all data sources for operational and calculated KPIs needs to be identified
- Baseline and target values for KPIs need to be set

Effective communication

For each KPI, the AS-IS analysis provides potential touch points for data capture and the stakeholders involved. It is critical to explain to all stakeholders involved in the process the objectives and the long and short-term goals, and their role in achieving the same. This will help them adapt to change. You must also plan for training in line with their requirements.

Implement

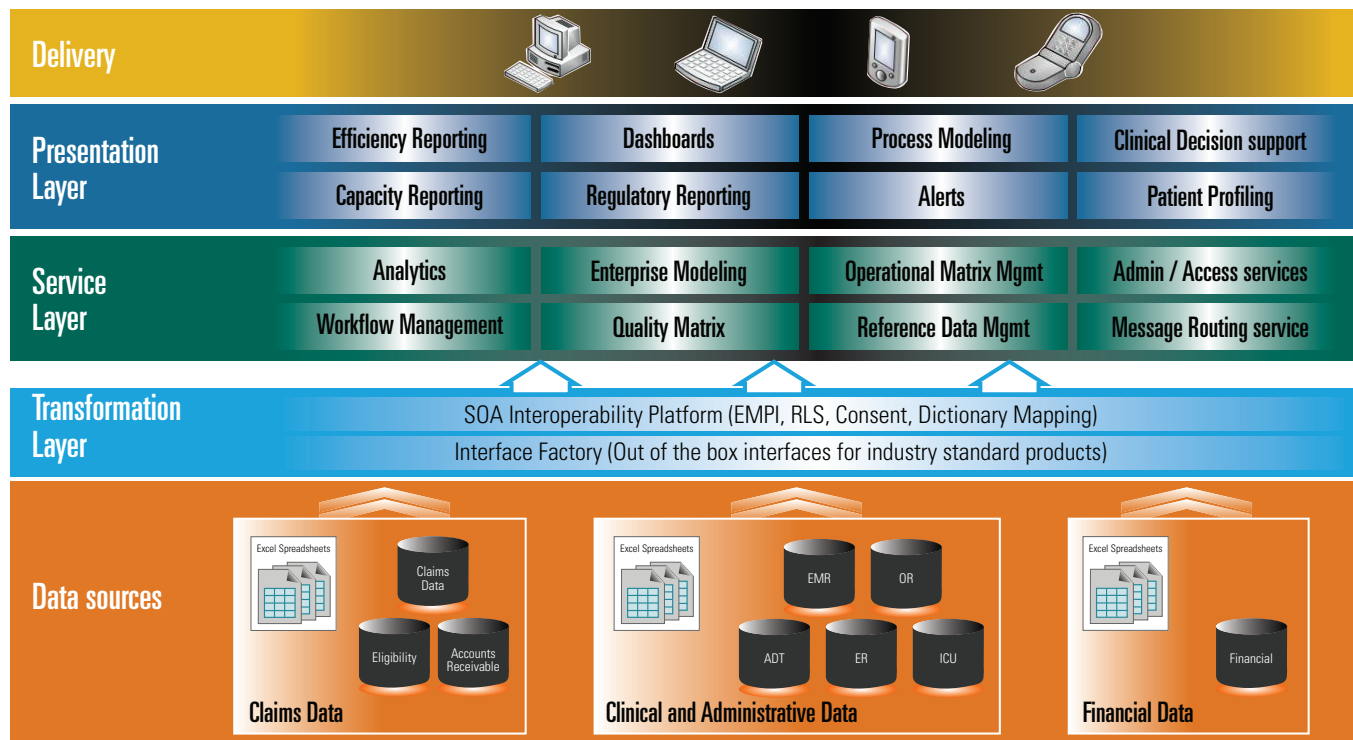
Once you reach a consensus on the KPIs you want to measure, the next step is to chalk out the implementations roadmap. You can plan implementation around three tracks as depicted below:



Leveraging today's technology

Real-time dashboards, alerts and dynamic reports built on a consolidated source of data are the best mechanism to ensure that everyone in the hospital is focused on the same targets and looking at the latest numbers.

A typical IT landscape for an HPM implementation is depicted in the diagram below:



Hospitals can either build this architecture in-house or outsource it. The ideal solution is a hosted, Software-as-a-Service (SaaS) model. However, for SaaS it is critical to leverage a vendor that understands the business of healthcare and has a core competency in turning healthcare data into meaningful information. This is the key to getting a usable hospital performance management system implemented in a matter of weeks.

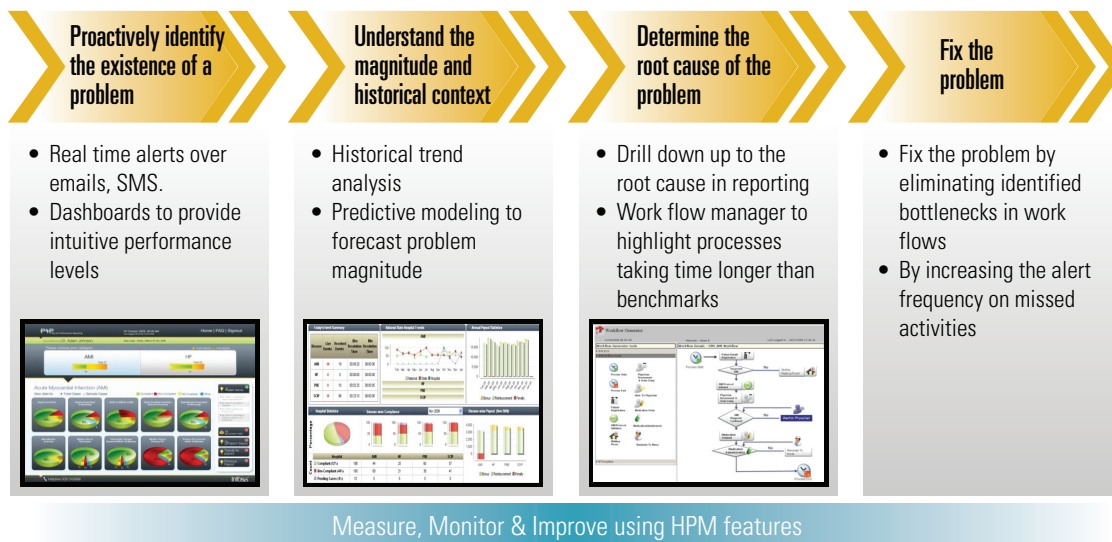
With technology, infrastructure and data management taken care of, hospital management can then focus on the more important tasks of establishing meaningful metrics, setting appropriate targets, and driving improved performance. Implementation details are managed by the vendor who brings in expertise and industry best practices along with the technology.

Measure, Monitor & Improve

When outliers or areas of interest are identified, it is important to continuously monitor and be able to drill down to the underlying detail to perform root-cause analysis and fix problems. For example, let's say hospital incidents were a high-level KPI being measured. It should get drilled down into:

- Transfusion reactions
- Bed sores
- Postoperative respiratory failure
- Postoperative pulmonary embolism or deep vein thrombosis
- Postoperative sepsis
- Postoperative hip fracture
- Postoperative hemorrhage or hematoma

An executive would get a quick snap shot on how his hospital is performing on quality of care. The drill-down information would provide insights into the factors that need immediate corrective action. E.g.: If transfusion reactions are high, you may want to look at the revising the blood transfusion policy by adding a checklist or improving compliance to SOPs (Standard Operating Procedures).



An HPM tool with these capabilities effectively causes the behavioral change of encouraging proactive involvement. It empowers employees to actively make decisions to optimize resources across objectives and look for creative ways to achieve goals. Further, clear communication and feedback processes are established around objectives and measures.

Potential Pitfalls around Hospital Performance Management

Beware of potential pitfalls around hospital performance management implementations:

- Too much data on the dashboard can defeat the purpose. Dashboards need to be information rich, not data rich.
- Risk of manipulation of performance data
- Overly aggressive targets/benchmarks
- Difficulty validating your data around KPIs
- Inappropriate responses to performance shortfalls
- Failure to regularly reassess your objectives and measures

Conclusion

Effective hospital performance management focuses on quickly achieving results and changing behavior, rather than being a complicated planning and data management exercise.

With the right technology, SaaS implementation, use of effective reporting tools, and the selection of meaningful metrics, a hospital dashboard system can become functional and start driving results in a matter of weeks. Prior to embarking on the HPM journey, hospitals must consider the following success factors:

- Align HPM strategies with the organization's vision
- Set short and long-term goals
- Identify KPIs that will measure performance vis-à-vis objectives
- Pick high impact KPIs to generate maximum ROI
- Take a holistic approach that integrates People, Process and Systems to meet common goals
- Continuously measure, monitor and improve



For more information, contact askus@infosys.com

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