

Technical quality assurance in hospitals: The challenge of defining and maintaining quality

IHS annual conference 2016

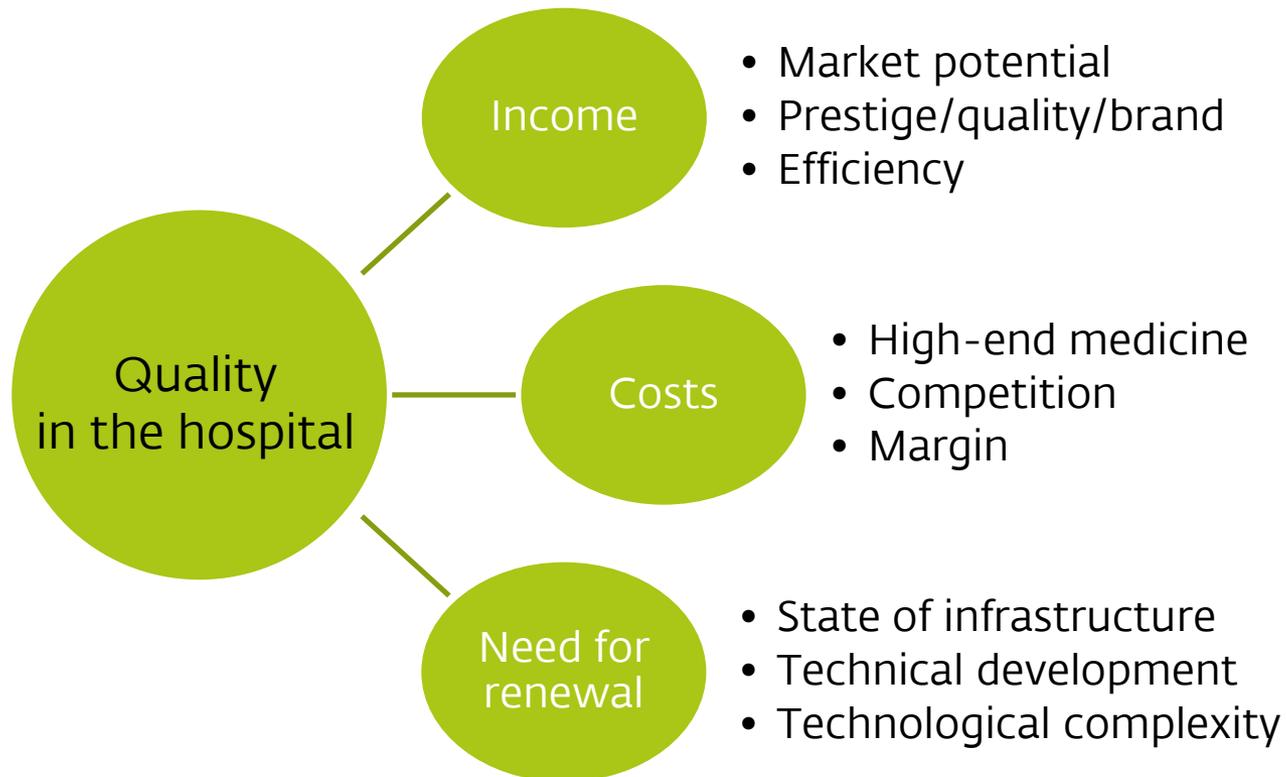
Christian Schneider (degree in Nat. Sci. ETH / postgrad. in Energy Engin.)
Lemon Consult AG – Zürich - Switzerland

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Initial situation

Technical development, a major need for renewal and more intense competition are placing heavy demands on those in charge of hospitals.

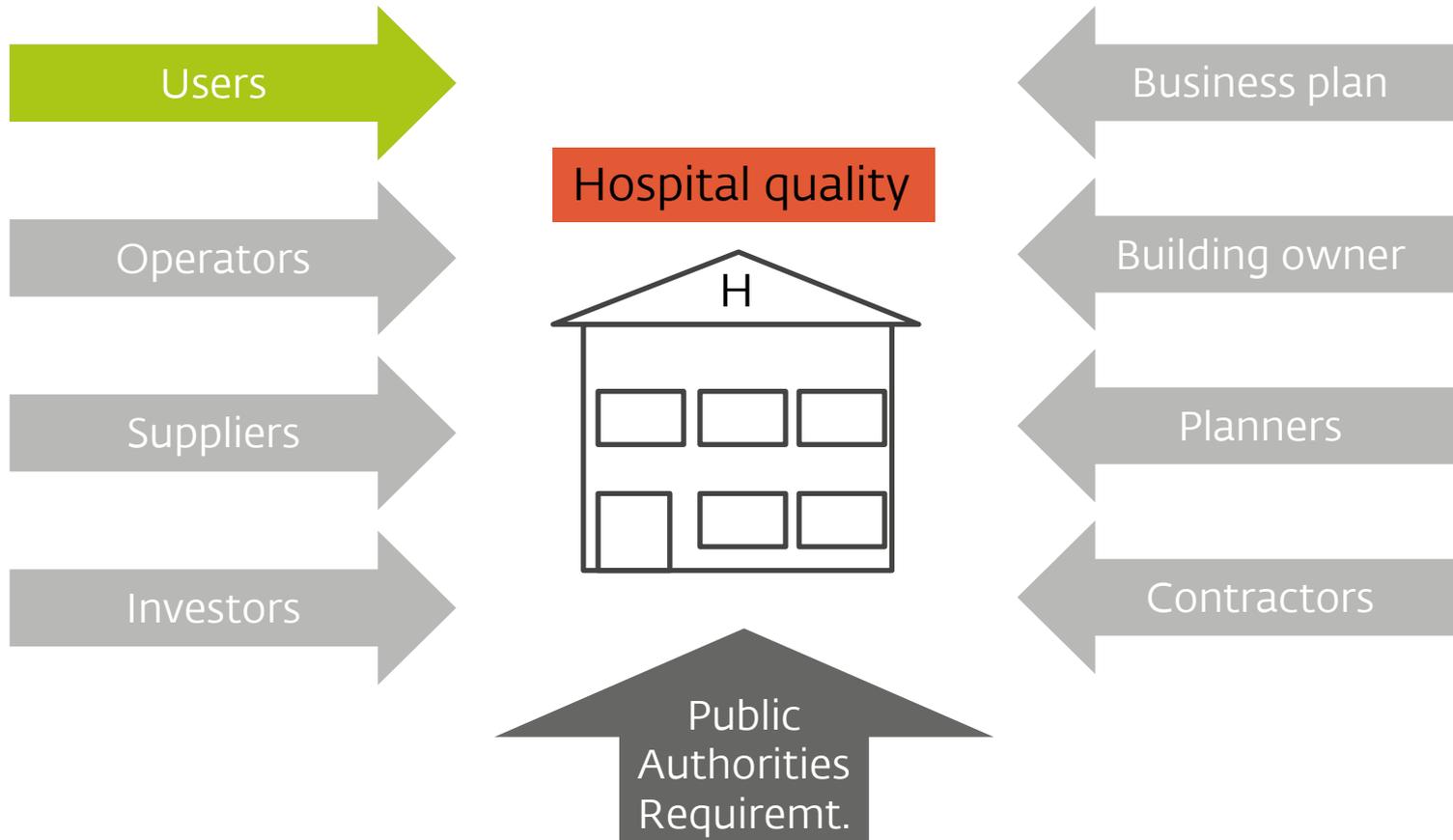
Finding a balance



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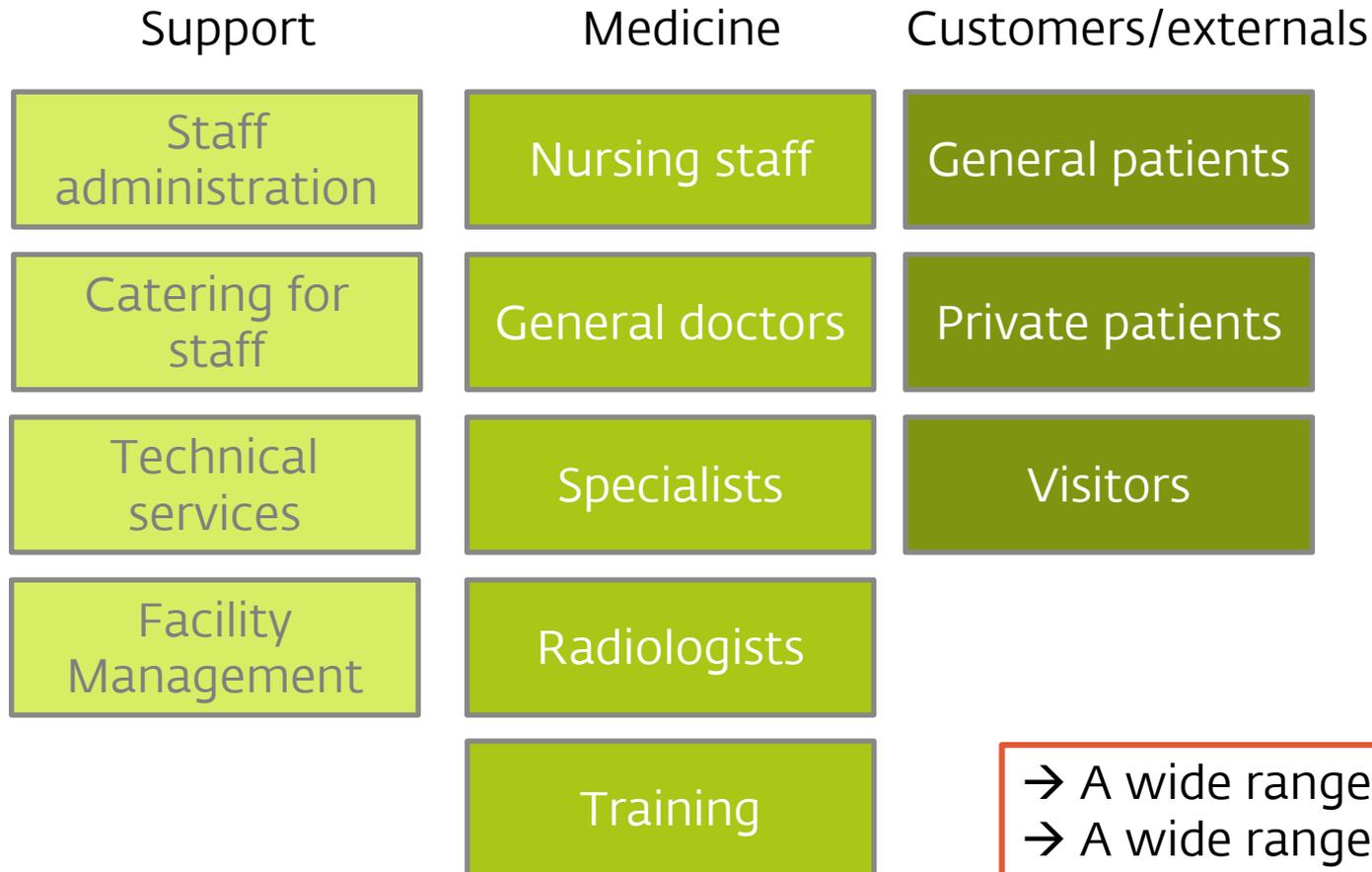
Hospital construction project:

Many people involved – different views



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Many user groups – different needs

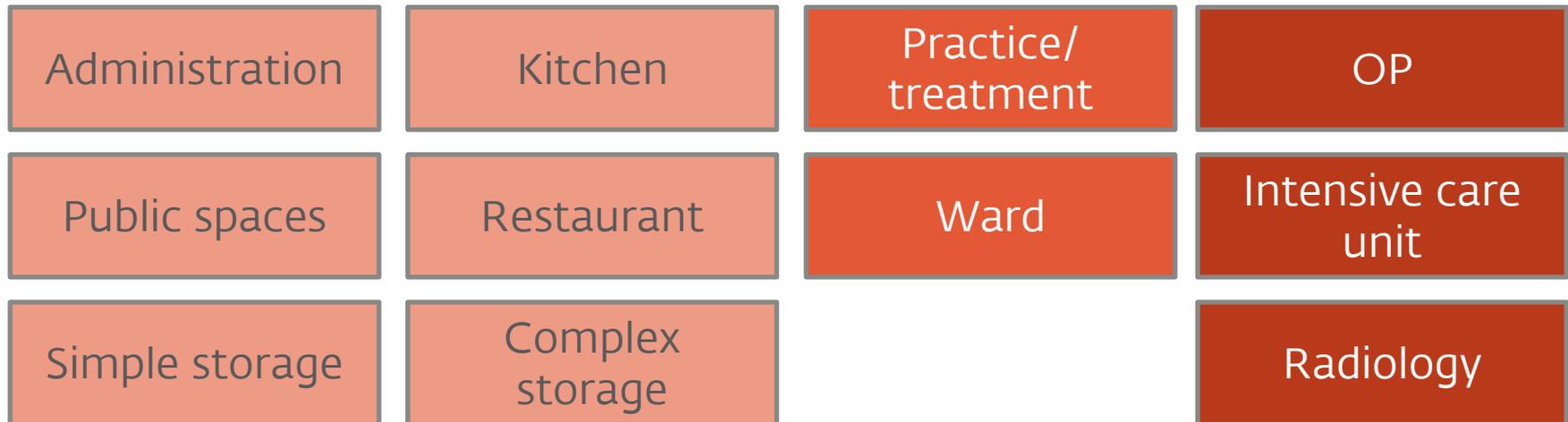


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Numerous utilisation units – different requirements

Support

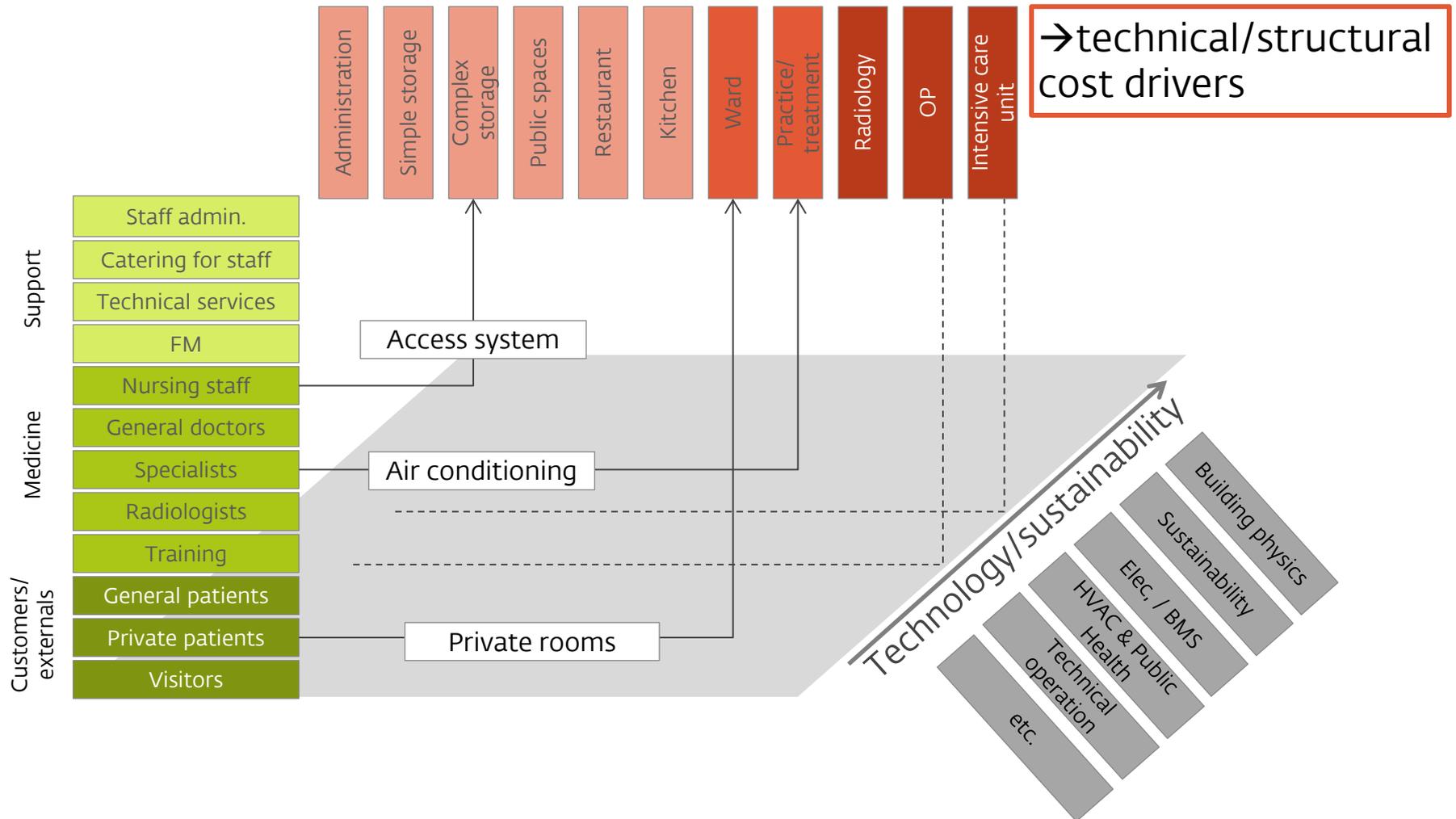
Core process



→ Complex requirements

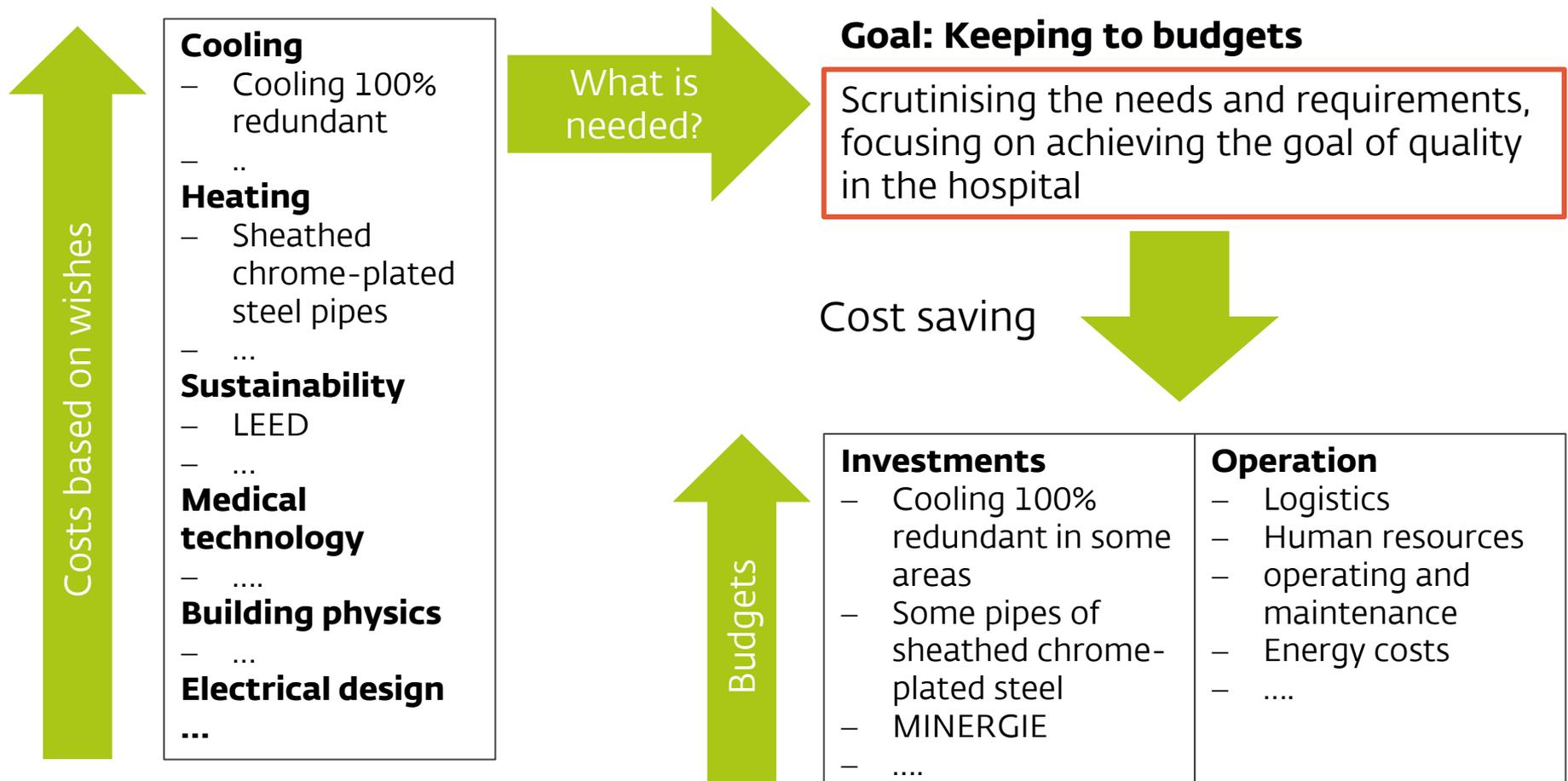
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High demand for functionality – great need for communication



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Long wish list – strict budgets



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Definition of the qualities

Process:

- Hospital strategy: Overriding goals, product quality
- Market analysis, risks and clarifying the budget situation
- Surveys and workshops with users and experts
- Overview and analysis of needs/requirements
- Definition of technical quality and sustainability goals: technical specification, room book, etc.
Note: life-cycle costs for operating and framework conditions (laws, etc.)

Where necessary, categorisation according to: whole building, utilisation units, types of room

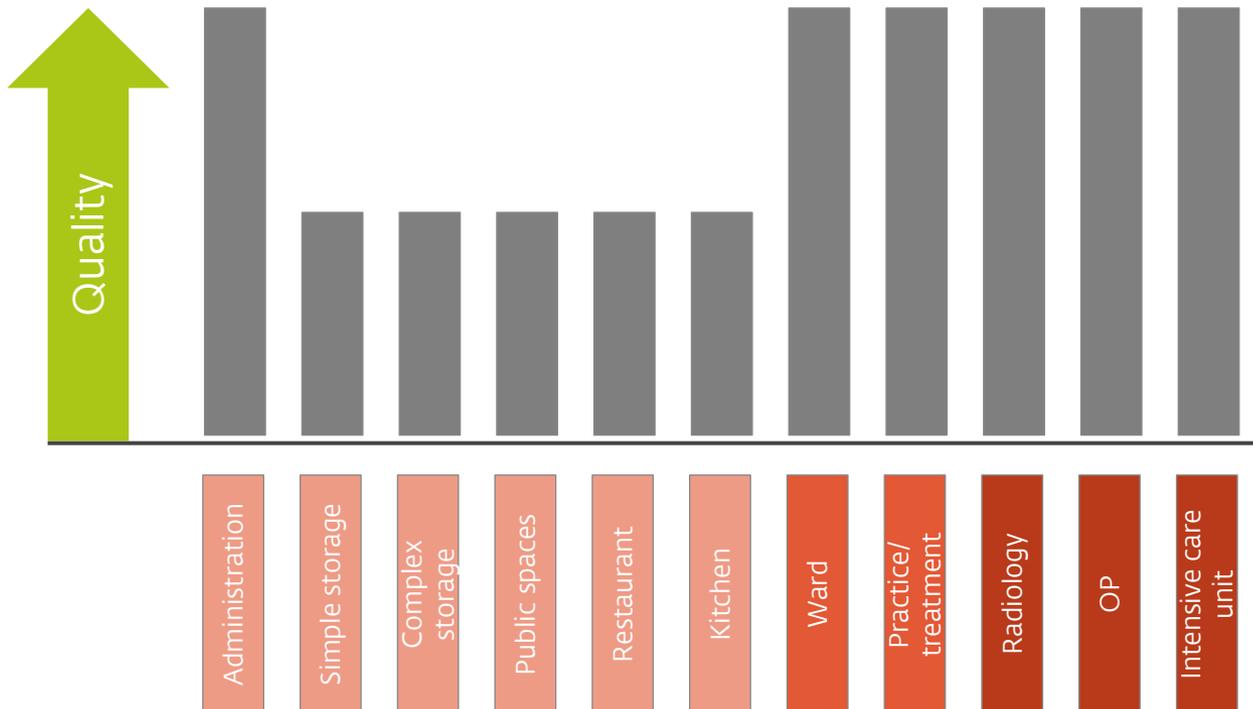
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Scrutinise quality level SIA phase 1-2

SIA: swiss society of engineers and architects

Example: BIM organisational requirements vs. revision drawings

Building/utilisation unit level (possibly also by discipline)

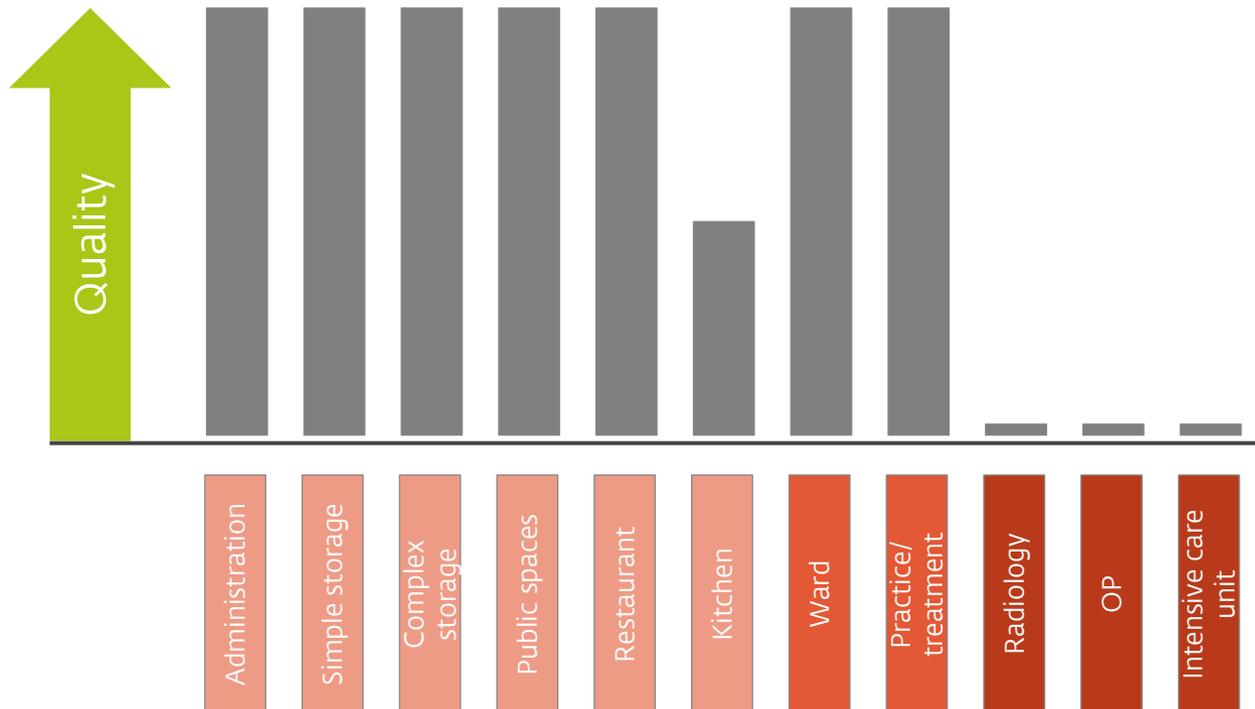


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Scrutinise quality level SIA phase 1-2

Example: Sustainability label for construction project?

Building/utilisation unit level

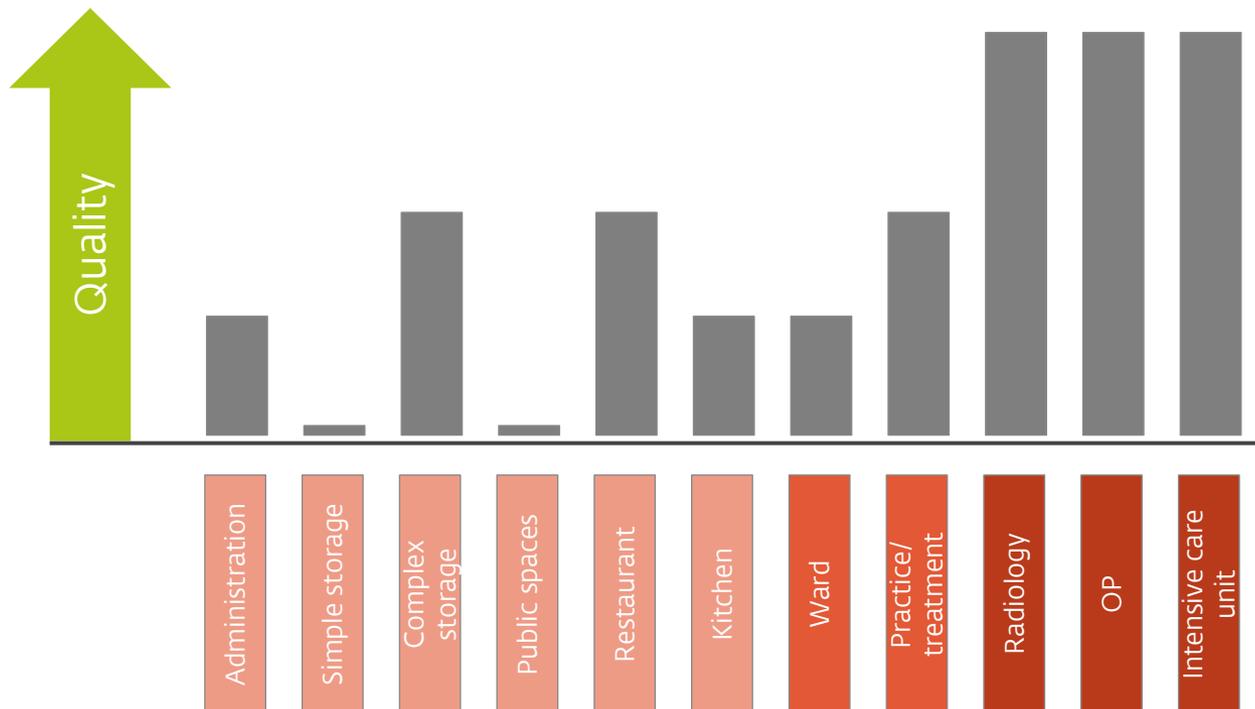


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Scrutinise quality level SIA phase 2-3

Example: Requirement for cooling (redundancy)

Utilisation unit level

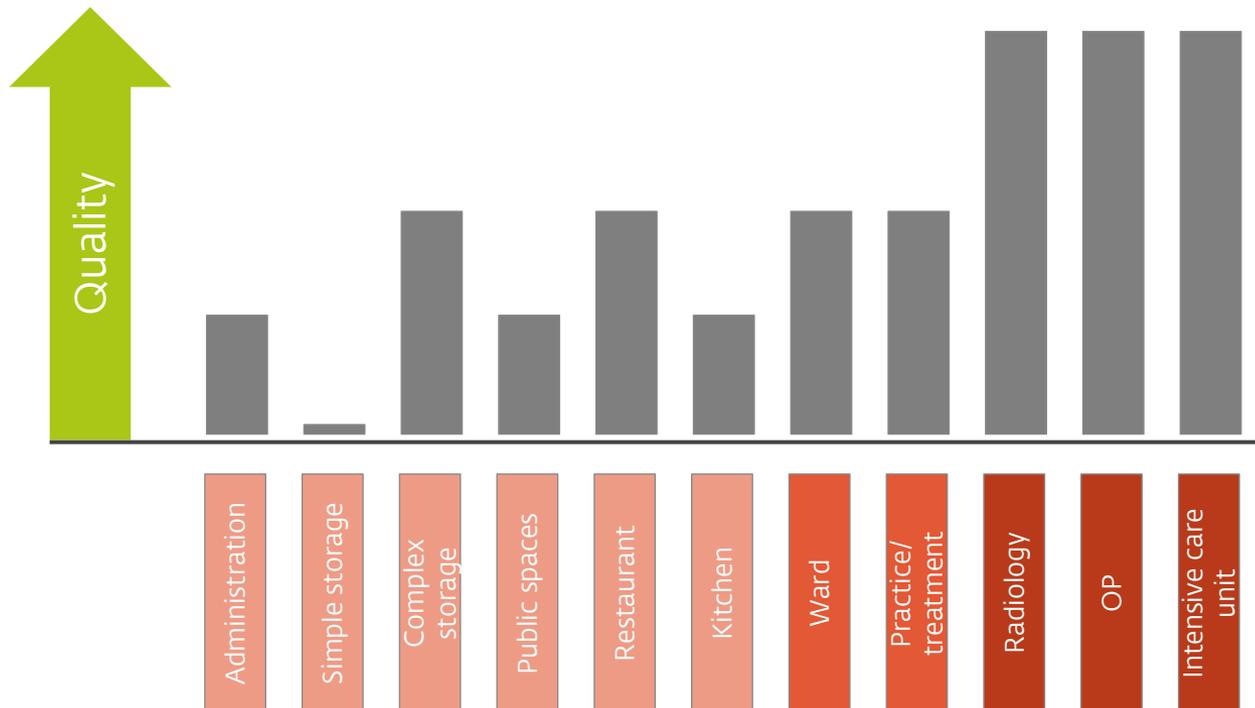


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Scrutinise quality level SIA phase 4

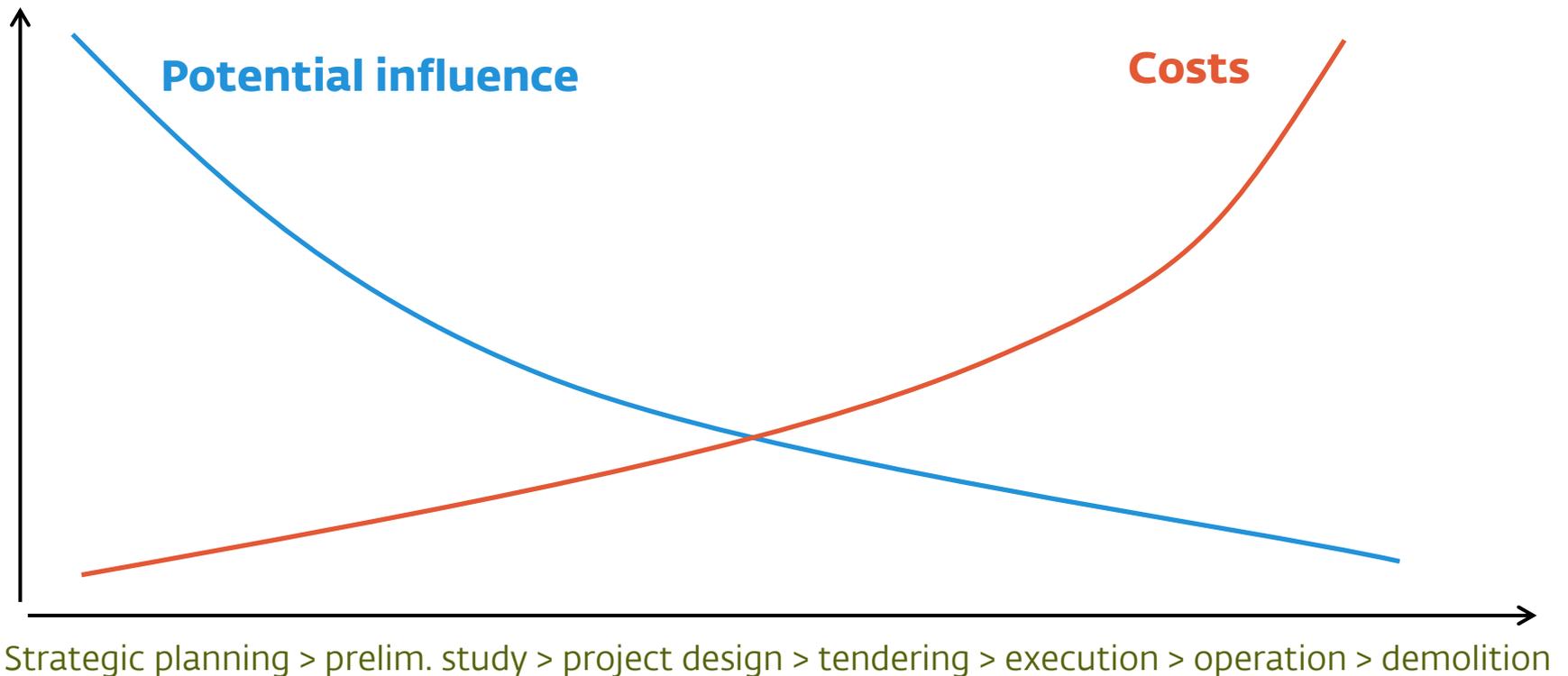
Example: Requirement for sheathing heating pipes

Utilisation unit/cost position level



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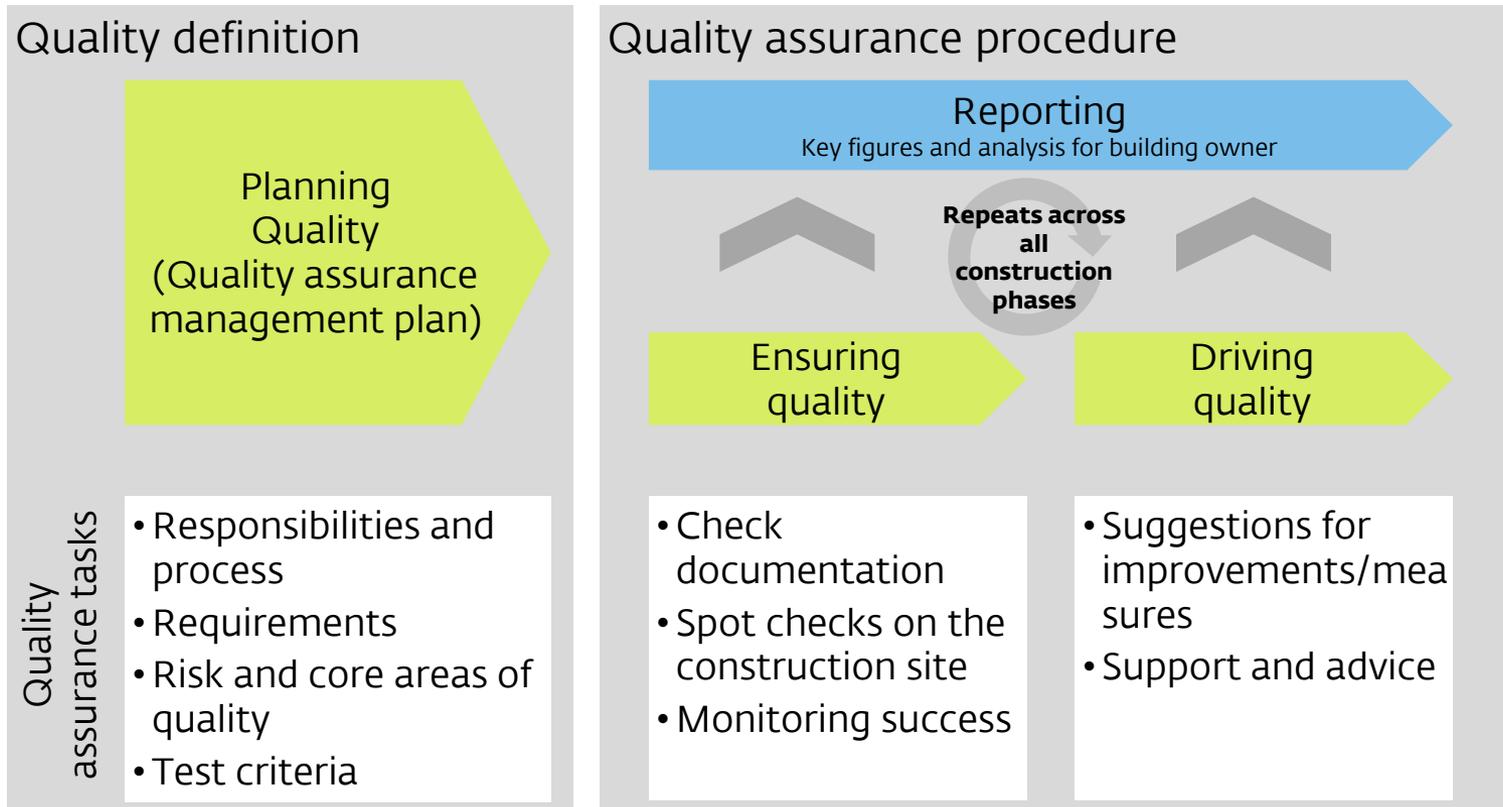
Cost leverage depends on implement. time



→ Analyse the quality level early on and define goals

Quality assurance process

Quality assurance as a means of achieving goals



In conformity with standard: SIA MB 2007

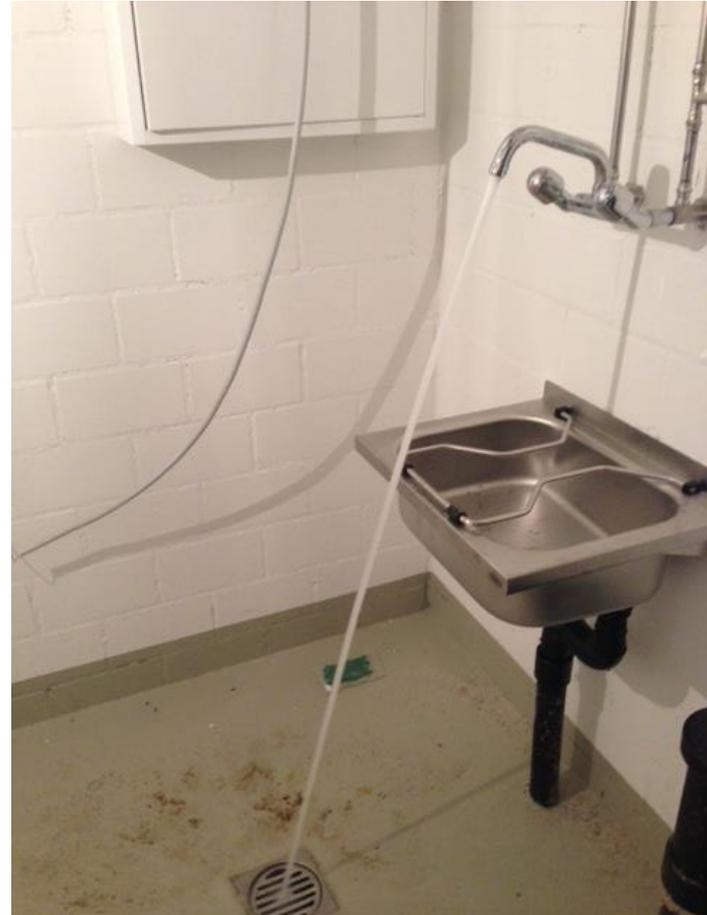
Well-organised quality assurance is only possible with sufficiently defined requirements and functionalities

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Example

DO NOT FORGET:

Even technically superior solutions aren't always high quality and functional.



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Summary

- Determine hospital strategy
- Framework conditions and definition of processes
- Ascertain wishes and demands
- Analyse quality level in good time → Cost leverage
- Define technical quality (Differentiate buildings, utilisation units, types of room)
- Quality assurance: Carry out planning and implementation measures at the correct phases, allow for enough time in process.

Thank you for your attention