



# The McKinsey Hospital Institute Whole Hospital Diagnostic Scanner

Example Trust

v2.0  
January 2011

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## Executive summary

The McKinsey Hospital Institute (MHI) is a global initiative whose mission is to work with hospital leaders to build capacity for their hospitals to become high-performing organisations. The main areas of support are; diagnostic and benchmarking, partnering in delivery, building capability and knowledge and networking.

As part of our diagnostic and benchmarking service, we have developed a hospital-wide performance scanner which looks at hospital performance against four main areas; quality, operations, finance and organisational health. This tool draws on the many publicly available sources to create a comparative picture of hospital performance.

In this second version of the tool, we have extended it to specialty-level (still based on publicly available data). This document provides an overview of what the tool can do as well as some sample analyses for your hospital. We have not yet discussed or validated these analyses with you.

We would stress that although they are a hugely valuable source, there are limitations to the national data sets and what they can be used for. However, our experience is that this tool provides an excellent basis to develop a deep understanding of hospital performance and to identify and quantify priority areas for improvement.



# The benchmarking analysis covers 4 dimensions of the hospital



## Quality

Patient safety, clinical outcomes and patient experience including links to operational metrics and underlying drivers



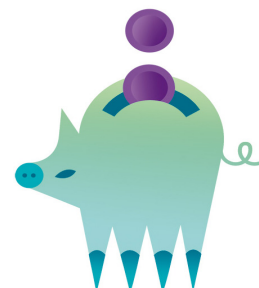
## Operations

Key clinical operational areas, with a focus on patient flow through specialties, utilisation in theatres, outpatients and diagnostics, and staff productivity



## Organisational health

Effectiveness of management practice and outcomes, with options to review change readiness, top team effectiveness and physician alignment



## Finance

Key financial metrics, from both a historical perspective and future scenarios as well as assessment of coding, procurement and overheads

## Benchmarking: What it is and what it is not

### What it is...

- Analysis using **major, nationally-published data sources** (e.g., HES, Department of Health, etc)
- **Indication of areas of strength and potential areas of improvement** within the Trust
- Opportunity to **build a platform for change** within the Trust to improve current practices
- Fact base on **potential improvement opportunities that need to be validated**
- Data based on national datasets, cleaned of outliers, with **data quality restricted by the quality of data source**

### What it is not...

- **Internal analysis using Trust data** that is NOT published or publically available
- **Root cause analysis** of all the factors underpinning the current performance levels
- The basis for **attributing inefficiencies on specific specialties or parts of the organisation**
- A **clear cut improvement roadmap** and **definitive improvements lever**
- Benchmarking with the **most up to date, individually verified or internal data** from all Trusts

## Key points on the diagnostic

- The analysis in this document primarily compares your Trust with standard peer-groups – typically other hospitals within the SHA or of similar size/scale nationally, as agreed by yourselves
- The sources of data used in this analysis are the major nationally published data sets (e.g., HES, FIMS, ERIC, etc.)
- We have developed and weighted a selection of these metrics to develop summary compound metrics for each dimension of Trust performance (quality, operations, finance or organisational health)
- The diagnostic assesses the improvement opportunity that would be realised through changing the performance levels of the underlying drivers in each dimension

# It is important to carefully consider the peer group

## EXPLANATION SLIDE – SAMPLE DATA

1

The peer group used for comparison with Trust's performance is listed here

3

We can choose an appropriate peer group according to hospital size, type, and geographical area

2

The greater the number of trusts in the peer group the more robust the peer benchmarking

**Selected peers for your Trust**  
2009/10

Trust name	FT	Trust type	Trust income £m	Number of spells* '000	Non-elective spells %	Total Beds
Dummy Trust	✓	Custom	788	149	47.0%	1,249
University Hospitals Bristol NHS Foundation Trust	✓	Teaching	535	132	38.5%	997
Royal Free Hampstead NHS Trust	✗	Teaching	504	177	17.3%	664
Cambridge University Hospitals NHS Foundation Trust	✓	Teaching	630	173	25.8%	1,106
Southampton University Hospitals NHS Trust	✗	Teaching	501	117	49.8%	1,133
Sheffield Teaching Hospitals NHS Foundation Trust	✓	Teaching	868	272	26.2%	2,073
Guy's and St Thomas' NHS Foundation Trust	✓	Teaching	1,054	193	24.4%	1,109
St George's Healthcare NHS Trust	✗	Teaching	489	115	39.3%	946
King's College Hospital NHS Foundation Trust	✓	Teaching	620	120	45.6%	752
University Hospital of South Manchester NHS Foundation Trust	✓	Teaching	362	81	46.4%	859
Salford Royal NHS Foundation Trust	✓	Teaching	357	118	32.9%	795
Barts and The London NHS Trust	✗	Teaching	708	107	44.4%	1,011
Royal Liverpool and Broadgreen University Hospitals NHS Trust	✗	Teaching	401	111	35.5%	980
Chelsea and Westminster Hospital NHS Foundation Trust	✓	Teaching	337	73	52.4%	431
Leeds Teaching Hospitals NHS Trust	✗	Teaching	911	224	48.8%	2,196
University Hospital Birmingham NHS Foundation Trust	✓	Teaching	543	113	32.4%	1,018
University College London Hospitals NHS Foundation Trust	✓	Teaching	790	106	29.5%	901
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	✓	Teaching	821	189	36.5%	1,709
Oxford Radcliffe Hospitals NHS Trust	✗	Teaching	636	199	35.7%	1,340
Central Manchester University Hospitals NHS Foundation Trust	✓	Teaching	721	169	34.9%	1,169
University Hospitals of Leicester NHS Trust	✗	Teaching	698	226	54.2%	1,914

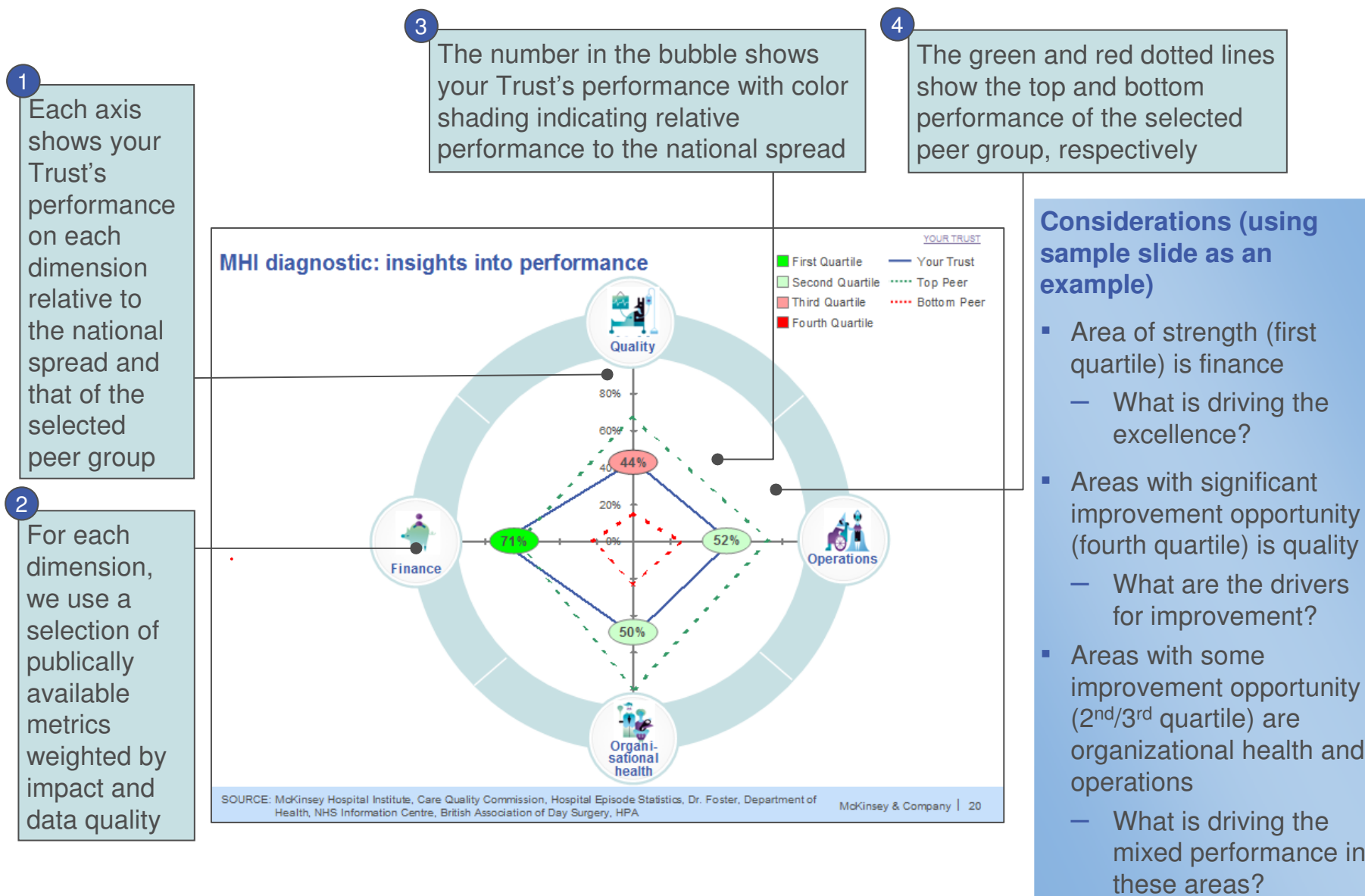
\* Outpatients excluded

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### Considerations (using sample slide as an example)

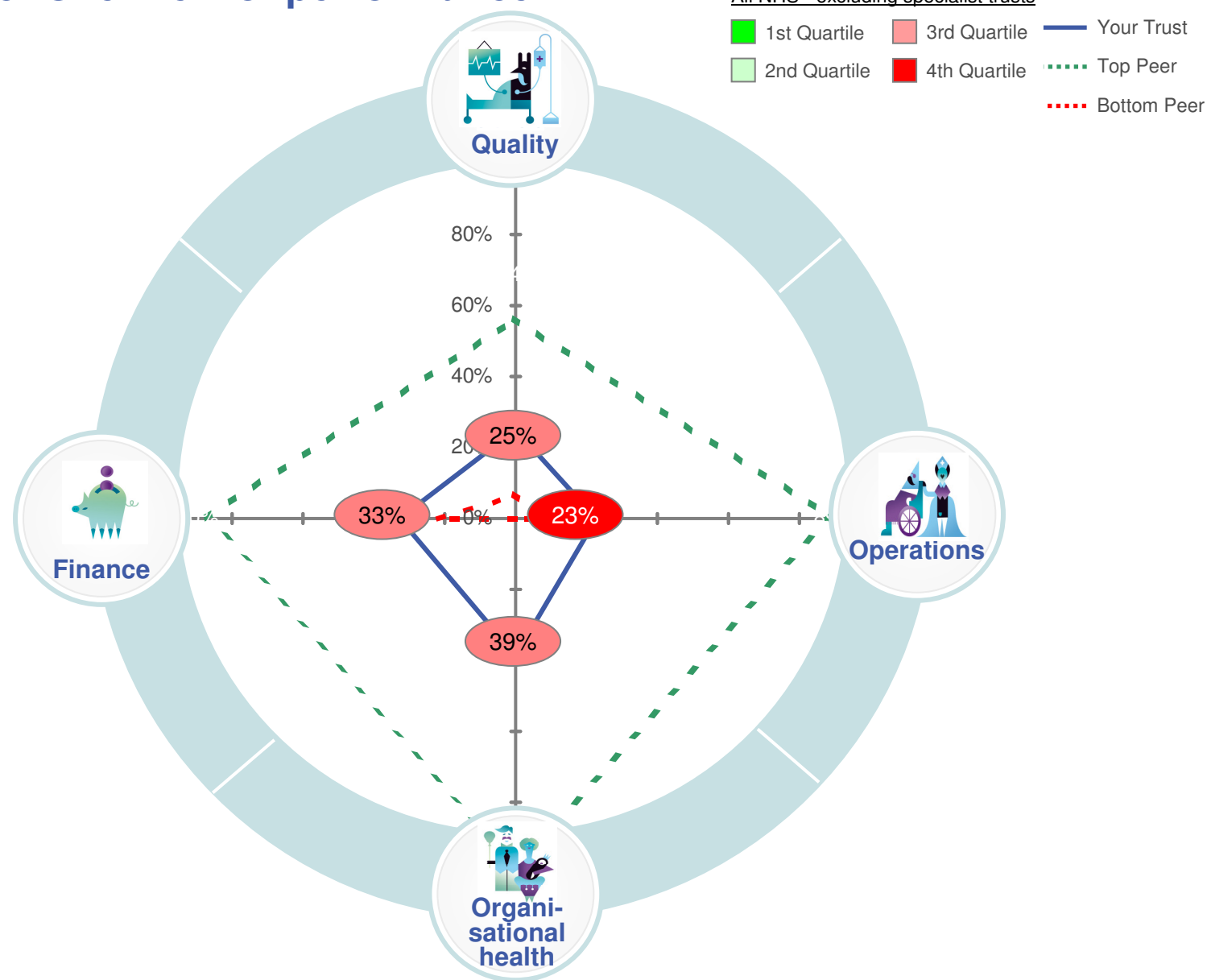
- What other criteria are important to you when selecting the peer group?
- Are there trusts not on this list that you specifically want to be compared with?
- Are there trusts on this list that you don't want to be compared with?

# We can provide an overview of performance vs peer and NHS





# MHI diagnostic: Overview of performance





# We illustrate strong performance in each dimension

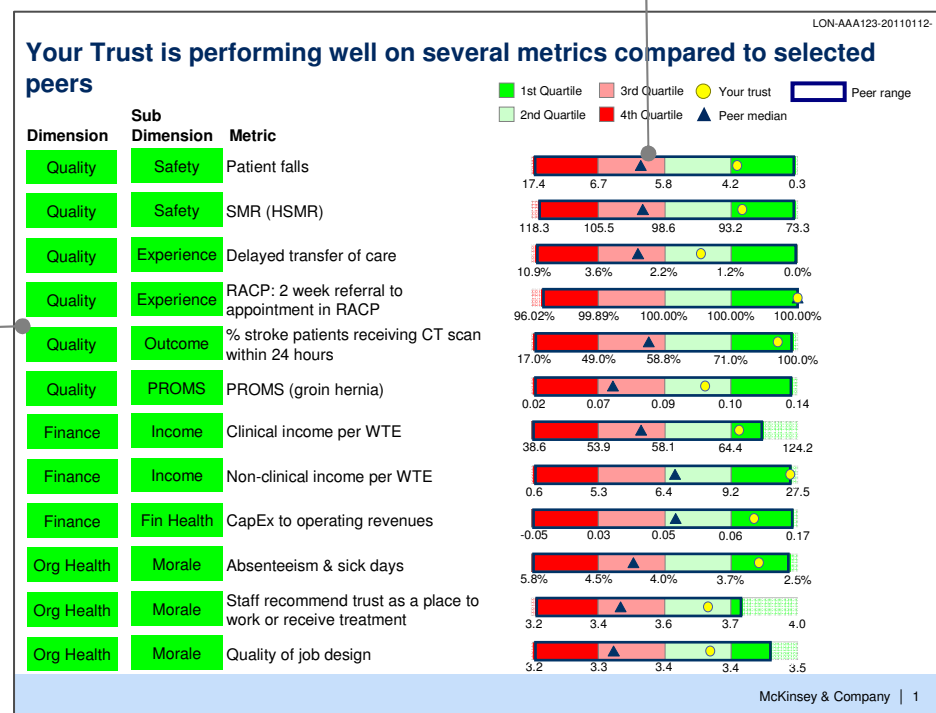
2

For each metric, we have benchmarked Trust performance against the peer median within the selected peer range

## EXPLANATION SLIDE – SAMPLE DATA

1

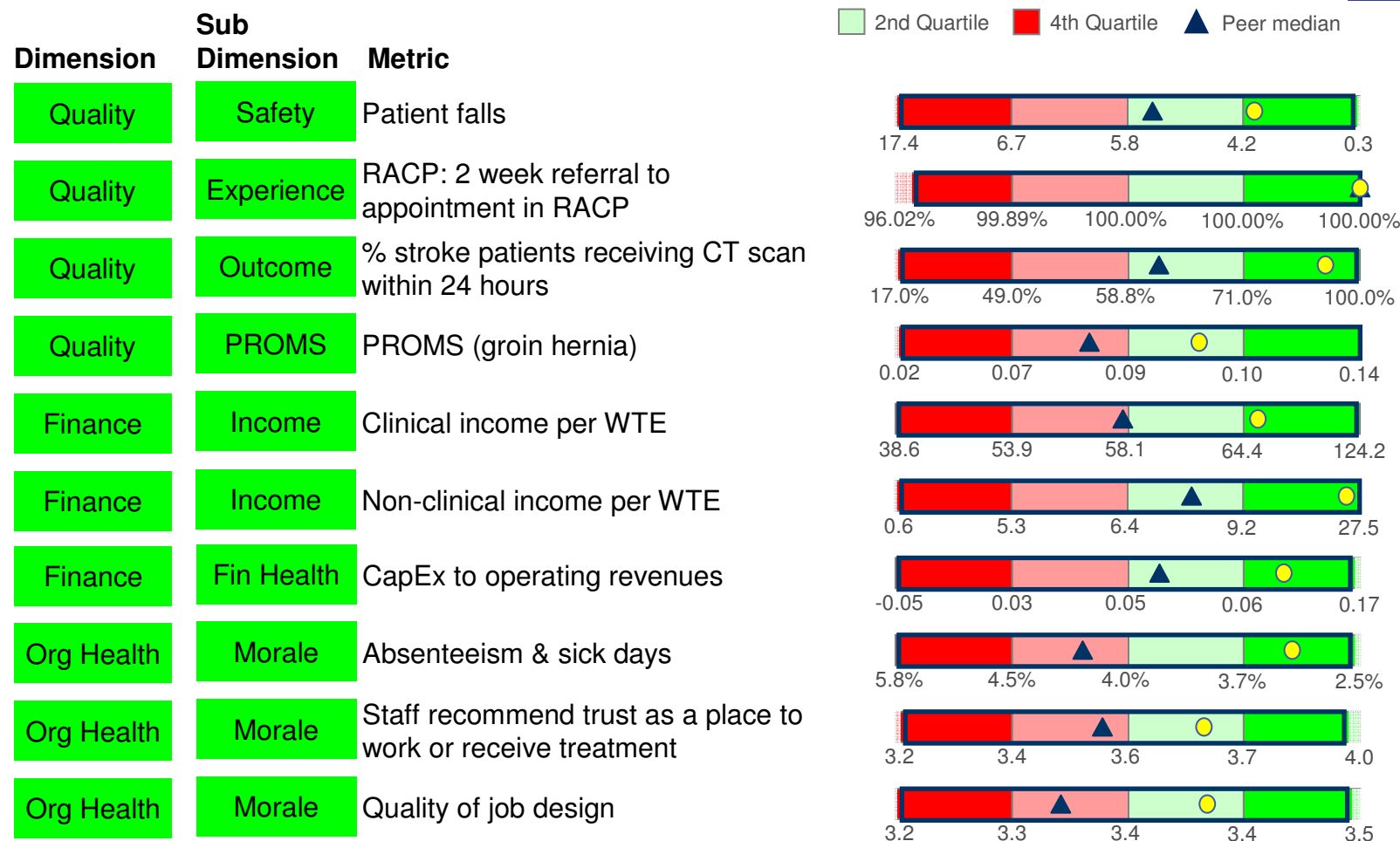
We have listed here all the metrics where your Trust is performing in the first quartile relative to the national spread



## Considerations (using sample slide as an example)

- What are the drivers of excellence?
- Are these areas of continuous strength?
- How do the areas of strength map to areas in the bottom quartile?
- What is driving the differences in performance?

# Your Trust is performing well on several metrics compared to selected peers



# We illustrate where there is improvement opportunity

2

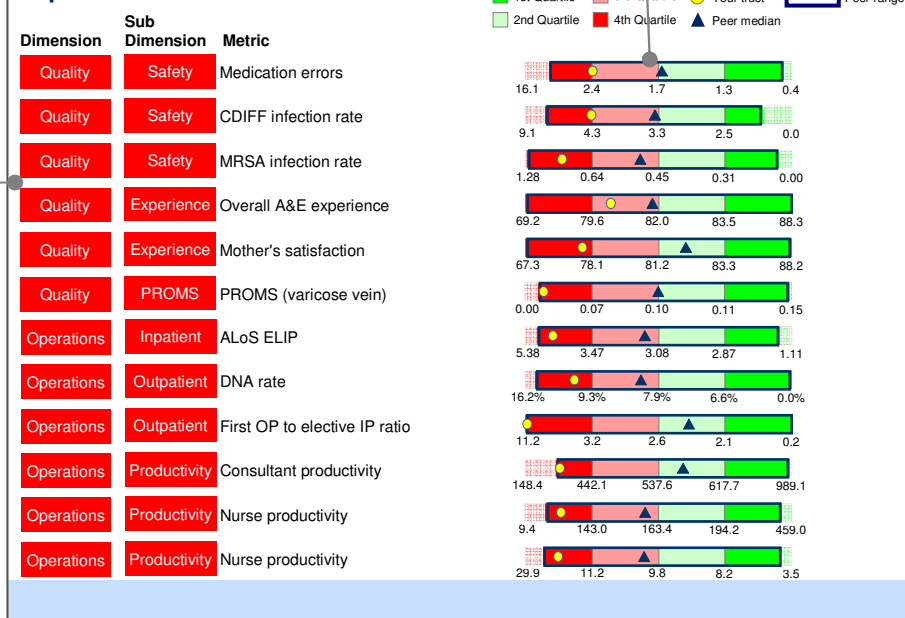
For each metric, we have benchmarked Trust performance against the peer median within the selected peer range

## EXPLANATION SLIDE – SAMPLE DATA

1

We have listed here all the metrics where your Trust is performing in the fourth quartile relative to the peer spread

### However there is a significant opportunity for improvement on some metrics

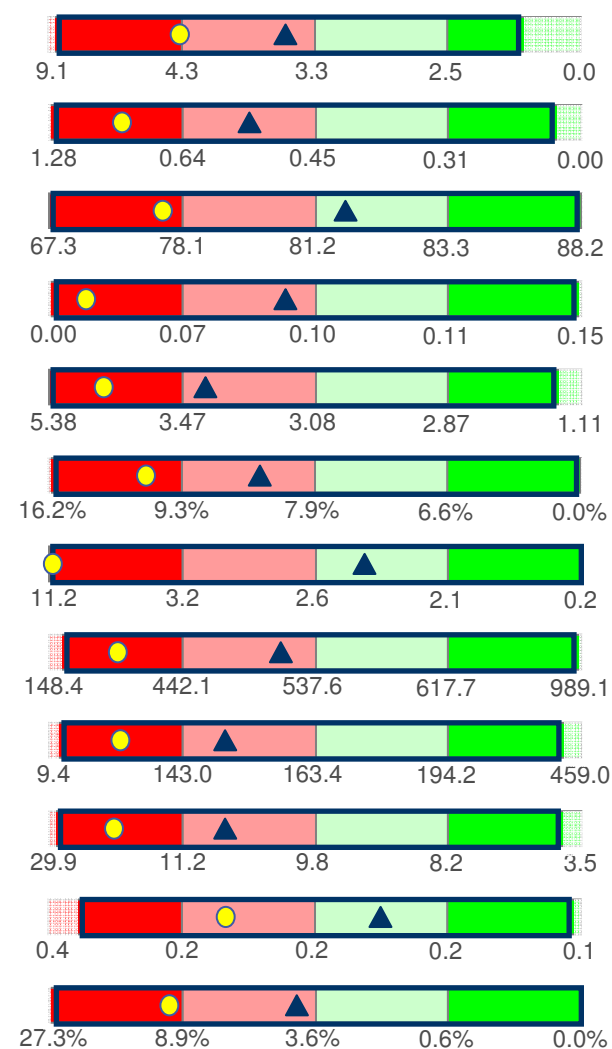


### Considerations (using sample slide as an example)

- What are the root causes of weak performance?
- What are the key drivers of improvement?
- Are these areas of continuous weakness?

## However there is a significant opportunity for improvement on some metrics

Dimension	Sub Dimension	Metric
Quality	Safety	CDIFF infection rate
Quality	Safety	MRSA infection rate
Quality	Experience	Mother's satisfaction
Quality	PROMS	PROMS (varicose vein)
Operations	Inpatient	ALoS ELIP
Operations	Outpatient	DNA rate
Operations	Outpatient	First OP to elective IP ratio
Operations	Productivity	Consultant productivity
Operations	Productivity	Nurse productivity
Operations	Productivity	Nurse productivity
Operations	Productivity	Non-clinical staff to total staff ratio
Operations	Productivity	Non utilised space

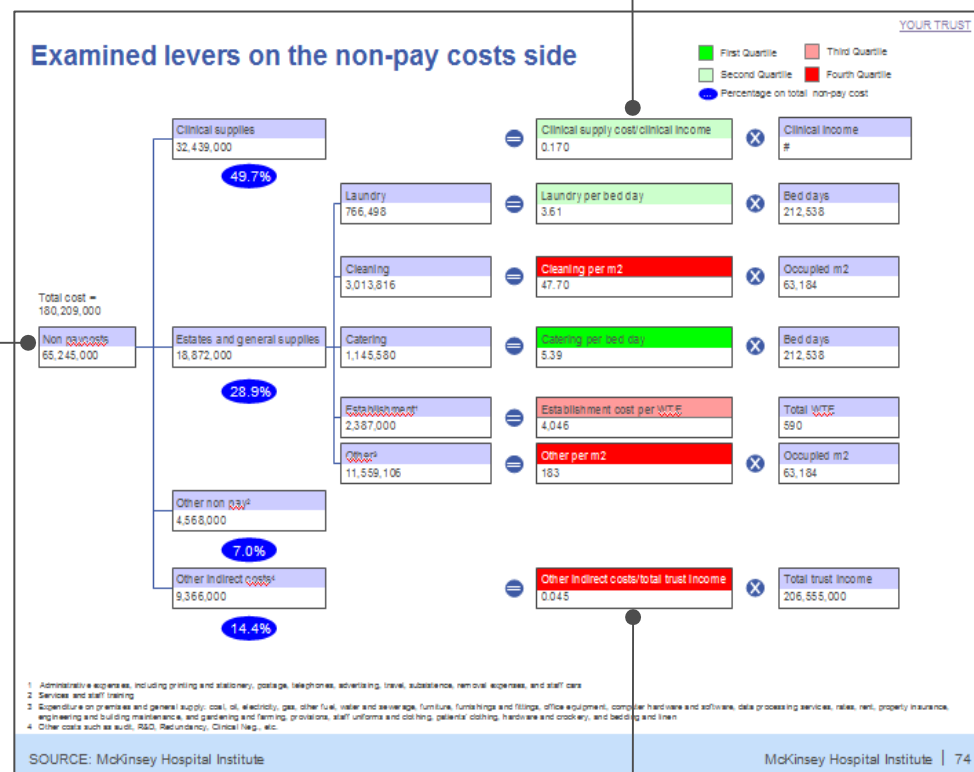


# We look to identify the drivers behind financial performance

In order to identify drivers for cost savings, we have broken down non-pay cost further and compared them to the national spread

## EXPLANATION SLIDE – SAMPLE DATA

Non-pay cost is shown broken down into a driver tree for your Trust



## Considerations (using sample slide as an example)

- What are the drivers of high/low relative cost?
- What actions can the Trust take to reduce cost and maintain quality of care at the same time?

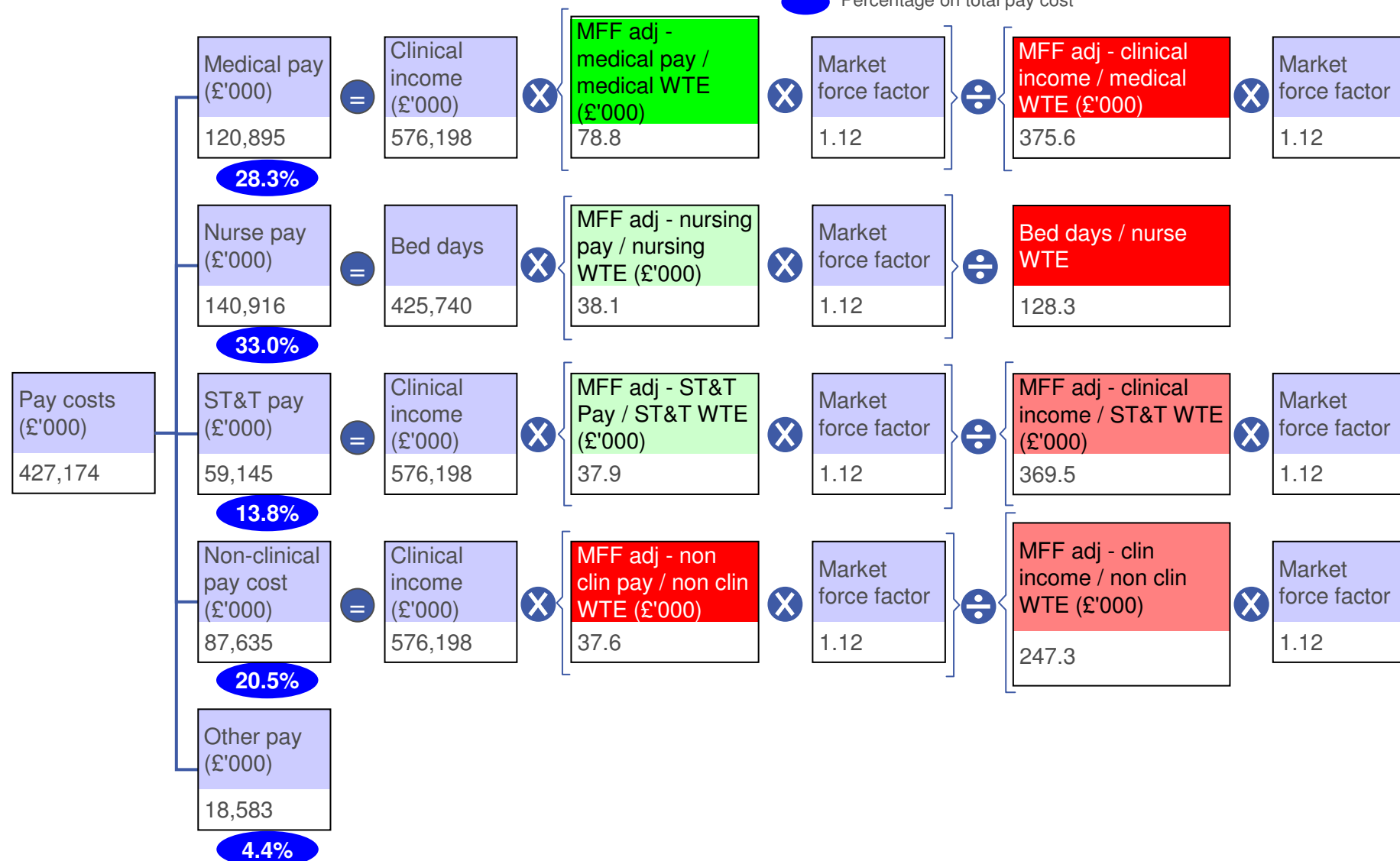
Areas in the third or fourth quartile indicates potential cost savings opportunities; however, further understanding of the data and the Trust's context is required in order to validate the savings opportunities

# Examined levers on the pay costs side

All NHS - excluding specialist trusts

■ 1st Quartile    ■ 3rd Quartile

■ 2nd Quartile    ■ 4th Quartile

● Percentage on total pay cost


# How to read the page below?

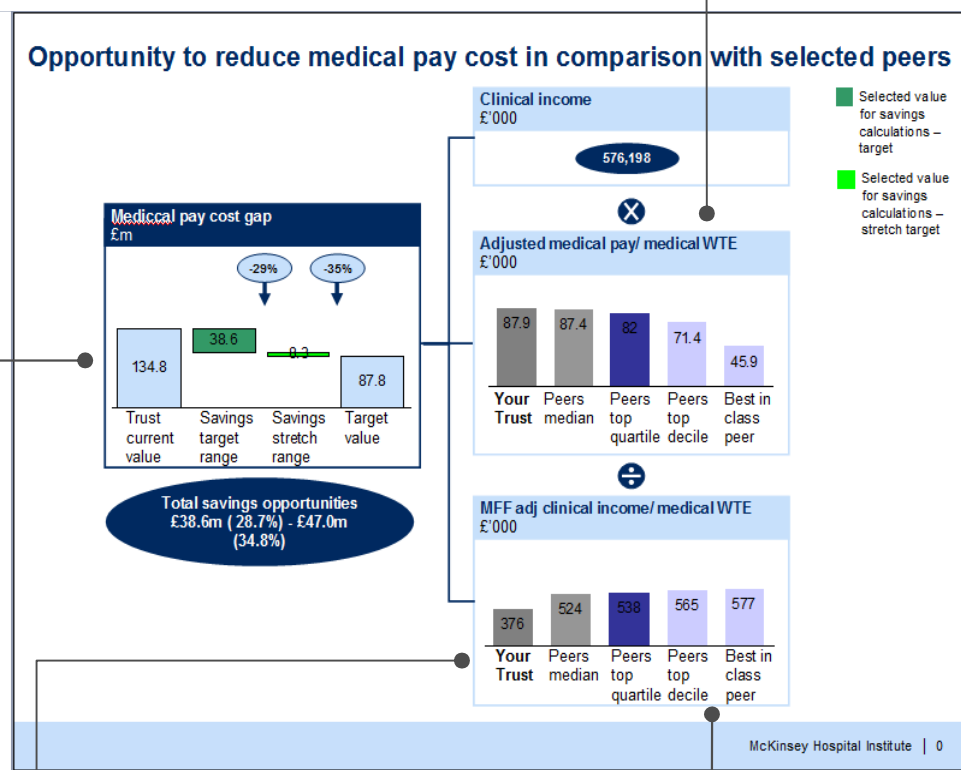
## EXPLANATION SLIDE – SAMPLE DATA

2

In order to identify drivers for improvement, we have broken down medical pay cost into pay per medical WTE compared to the Trust's peer median, top quartile, top decile and best in class ...

1

The medical pay costs are shown broken down into a driver tree for your Trust



### Considerations (using sample slide as an example)

- What are the drivers of high/low income per medical WTE?
- What are the drivers of high/low pay cost per medical WTE?
- Does the Trust's staffing level match the variation and/or change in patient demand?

3

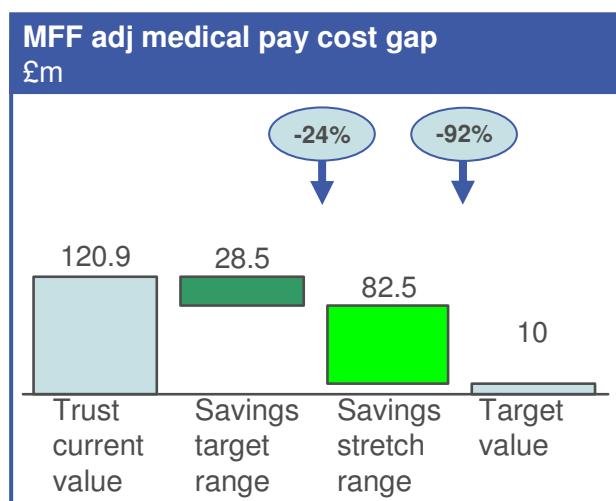
... as well as clinical income per medical WTE, compared to your peer median, top quartile, top decile and best in class

4

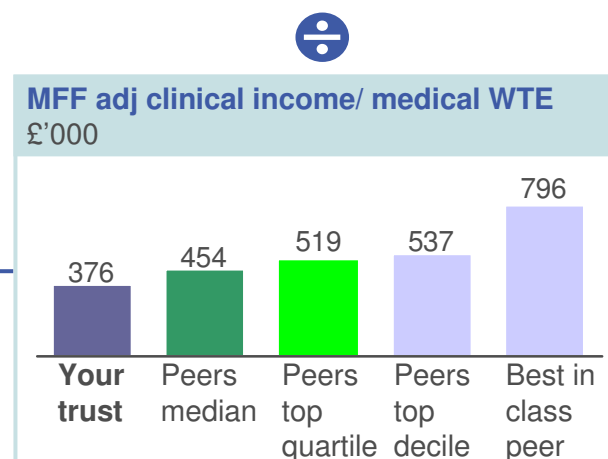
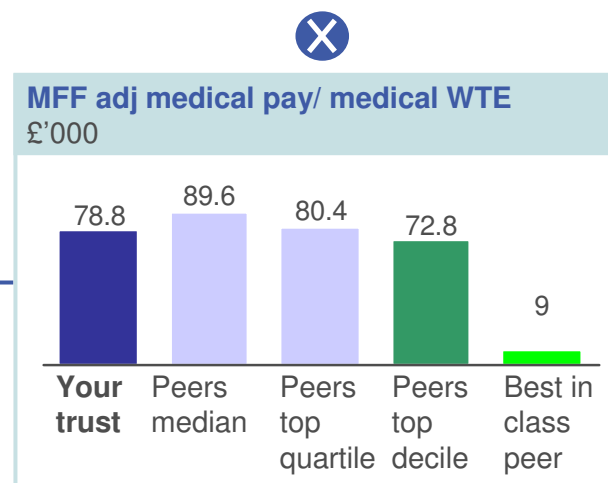
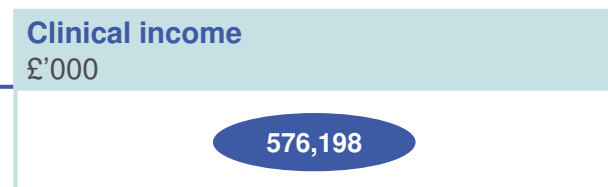
Higher income per medical WTE may indicate higher productivity whereas low income per WTE could indicate lower productivity, or potentially mis-managed staffing levels



# Opportunity to reduce medical pay cost in comparison with selected peers



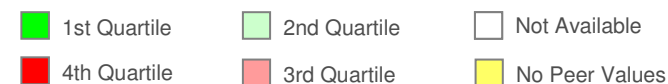
**Total savings opportunities**  
£28.5 - 110.9m (23.5 - 91.8%)



- Selected value for savings calculations – target
- Selected value for savings calculations – stretch target

# Overview of top specialty performance

2009/10, peer group comparison



		Operations										Finance				
		OP					IP		Day Case							
		Relative size compared to peers	% Total Trust spells	18 week target	First OP to elective IP ratio	OP cancellation rate	DNA Rate	First to follow up ratio	ALoS ELIP	ALoS NEIP	Day case rate	DOSA	IP income/bed day <sup>1</sup>	OP income/OP appointment <sup>1</sup>	Daycase income/day cases <sup>1</sup>	Coding quality
Total Number of spells: 222,135		Rate	%	%	#	%	%	#	Days	Days	%	%	£	£	£	%
Obstetrics		1.51	7.3%	NA	97.60	6.1%	10.1%	0.5	NA	NA	48%	54.7%	722	95	695	3.87%
General Medicine		0.67	7.1%	99%	20.32	7.2%	10.7%	1.1	6.4	7.5	67%	29.3%	230	136	400	2.90%
Clinical Haematology		2.35	4.3%	NA	0.65	7.3%	9.4%	0.1	8.3	11.6	69%	14.9%	191	120	418	7.69%
Trauma & Orthopaedics		1.27	3.6%	96%	0.44	11.5%	11.4%	0.4	3.4	11.0	92%	30.1%	198	110	386	9.93%
Gastroenterology		0.70	3.2%	78%	4.00	5.8%	12.7%	0.5	4.3	9.9	43%	61.0%	540	99	1295	4.01%
Urology		0.89	2.8%	93%	1.16	11.6%	11.2%	0.4	2.5	4.6	71%	61.3%	427	100	507	3.26%
Cardiology		1.99	2.8%	95%	1.91	8.1%	9.5%	0.5	2.1	5.6	61%	62.6%	678	127	1247	3.27%
Gynaecology		0.87	2.7%	90%	4.59	7.4%	9.6%	0.9	2.6	2.2	58%	66.1%	559	105	558	4.89%

1 Represents tariff activities only (e.g. tariff IP income/tariff IP spells)

## Moving from diagnosed opportunities to validated opportunity and implementation for change

- In scope for MHI Diagnostic
- In scope for traditional McKinsey engagements

Diagnostics	Validate opportunity	Drive delivery	Build culture for “change”
<ul style="list-style-type: none"> <li>A. Evaluate performance through benchmarking with comparable peers</li> <li>B. Understand gaps and opportunities</li> <li>C. Assess capabilities required for change</li> </ul>	<ul style="list-style-type: none"> <li>A. Understand root causes of gaps and opportunities</li> <li>B. Determine the change management requirements and strategy</li> </ul>	<ul style="list-style-type: none"> <li>A. Set targets and establish trajectories for improvement</li> <li>B. Produce delivery plans</li> <li>C. Establish routines to drive and monitor performance</li> <li>D. Sustain and continually build momentum</li> </ul>	<ul style="list-style-type: none"> <li>A. Build continuous system capacity</li> <li>B. Communicate “change” message</li> <li>C. Empower department heads and other leaders to drive change</li> </ul>

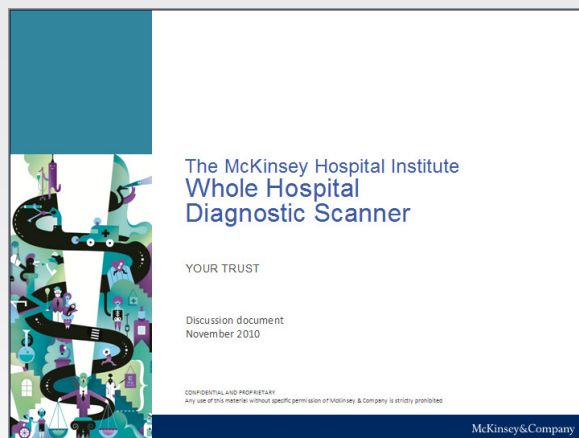
# Moving from diagnosed opportunities to validated opportunity and implementation for change (1/2)

- In scope for MHI Diagnostic
- In scope for traditional McKinsey engagements

## Diagnostics

## Validate opportunity

...



### Cost driver trees were also used as a tool to capture insights on improvement potential

EXAMPLE OF TOOL USED

#### What are cost driver trees?

- A way of showing how the operational actions and decisions along the pathway determine the overall cost of caring for a patient

#### Why are they important?

- Allow hospitals to gain a deeper understanding of the costs incurred along a patient pathway and to estimate the effect of changes they may have on the total cost of the pathway
- Indicate which operational "levers" will have the greatest impact on the cost of care provision

#### When should they be used?

- Construction of a cost driver tree can be part of a hospital's diagnostic work; the tree can then be used to understand the financial implications of a proposed future-state design

#### How can we use it?

- Break down issues to the level of individual decisions
- Understand implications of each decision and how it affects overall cost structure

#### What support might we need?

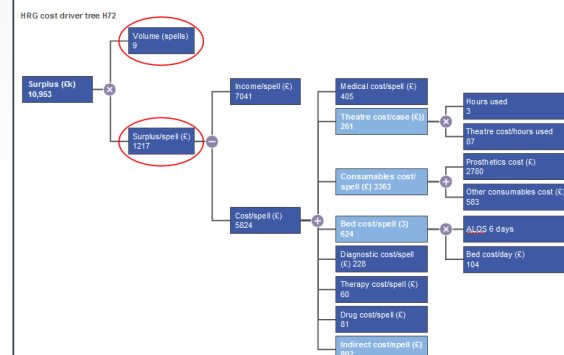
- Finance team, support for the Excel modeling if needed



SOURCE: NHS Delivering Through Improvement 2008

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### Revision knees are profitable, but we don't do very many of them

Current Trust  
Major cost drivers

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# Moving from diagnosed opportunities to validated opportunity and implementation for change (2/2)

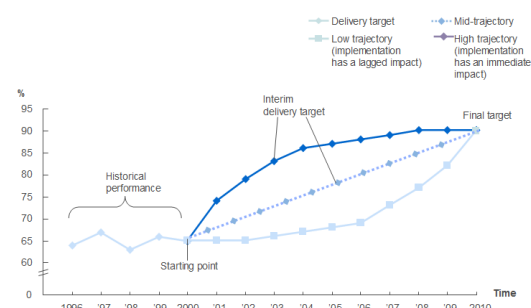
In scope for MHI Diagnostic

In scope for traditional McKinsey engagements

... Drive delivery

Build culture for “change”

## Building a trajectory requires that the Trust set interim and final delivery targets



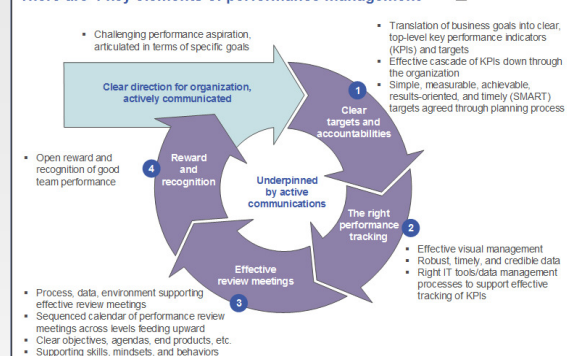
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## The key steps in setting targets and trajectories

Process step	Description	Why important
1 Establish a baseline	<ul style="list-style-type: none"> <li>For the key metrics, develop an understanding of where the target metric would be if no changes were made</li> </ul>	<ul style="list-style-type: none"> <li>Defining metrics is essential in determining which target to focus on</li> <li>A baseline clarifies the starting point and helps to determine where the target metric should be set</li> </ul>
2 Set a target	<ul style="list-style-type: none"> <li>Agree on system targets, whether set "top-down" or "bottom-up," and communicate broadly</li> </ul>	<ul style="list-style-type: none"> <li>A target sets expectations for the system; can serve as a galvanizing force</li> </ul>
3 Estimate the target trajectory	<ul style="list-style-type: none"> <li>Develop a realistic and ambitious path to the final target based on benchmark data or estimates of the impact a given intervention will have</li> </ul>	<ul style="list-style-type: none"> <li>A trajectory illustrates when and how the system will achieve its target, allowing the system to assess whether it has chosen the right interventions and outlining a clear sense</li> </ul>
Negotiate subtargets and subtrajectories if necessary	<ul style="list-style-type: none"> <li>Set sub-targets and sub-trajectories, allocating a share of the overall system target to individual performance units and manage each unit toward its sub-target. Sub-targets/trajectories can be set via the top-down, bottom-up, or hybrid methods</li> </ul>	<ul style="list-style-type: none"> <li>Subtargets and subtrajectories help increase the reliability of the overall system target and trajectory, both by establishing an accountability mechanism and creating buy-in</li> </ul>

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## There are 4 key elements of performance management



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## The influence model covers all elements needed to change mindsets, capabilities, and consequently behaviors

### Influence levers to address action themes

#### Role modeling

"... I see my leaders, peers, and reports behaving in the new way"

#### Understanding and conviction

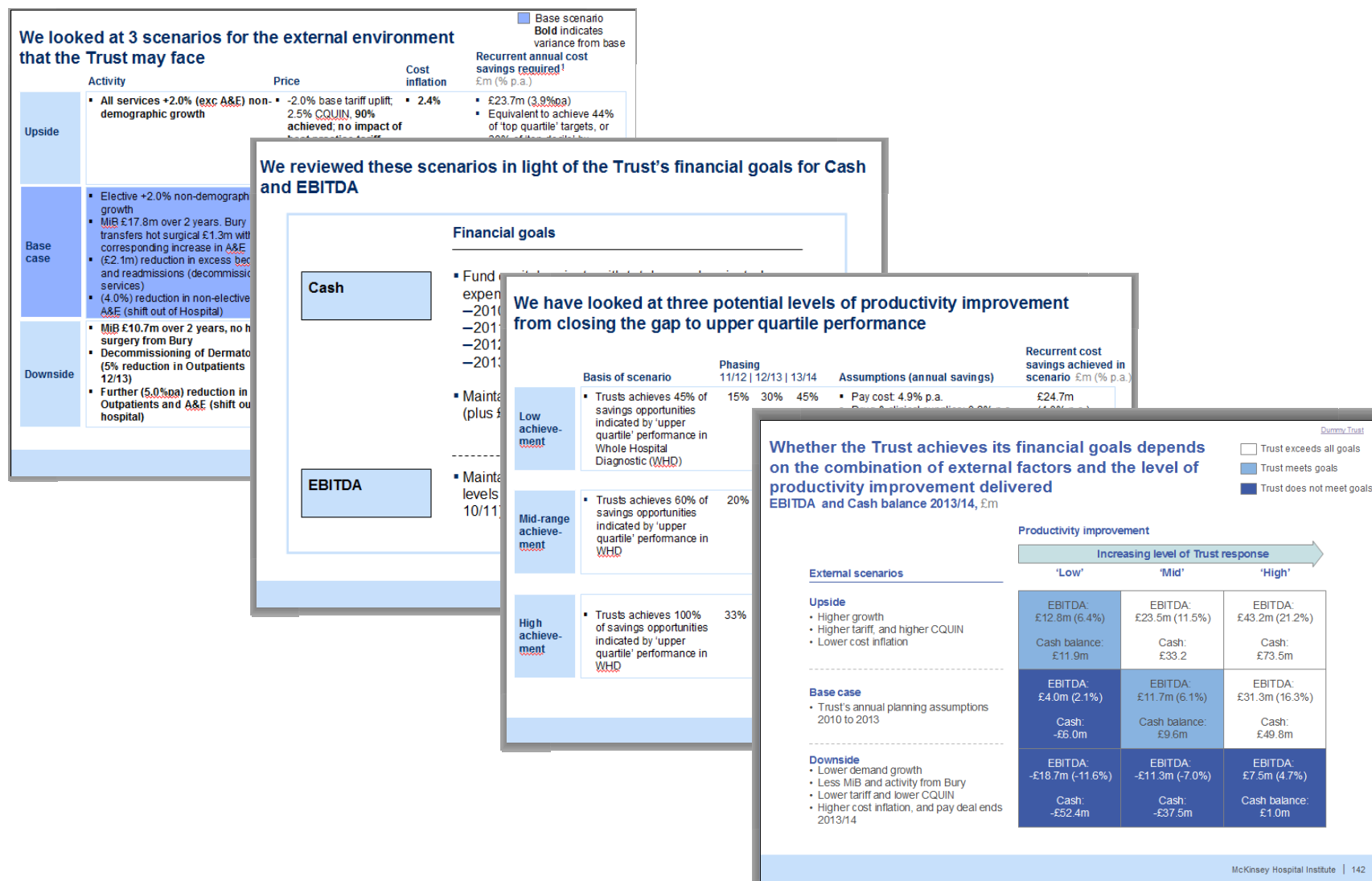
"... I know why I need to change – I agree with it, and it is meaningful to me"



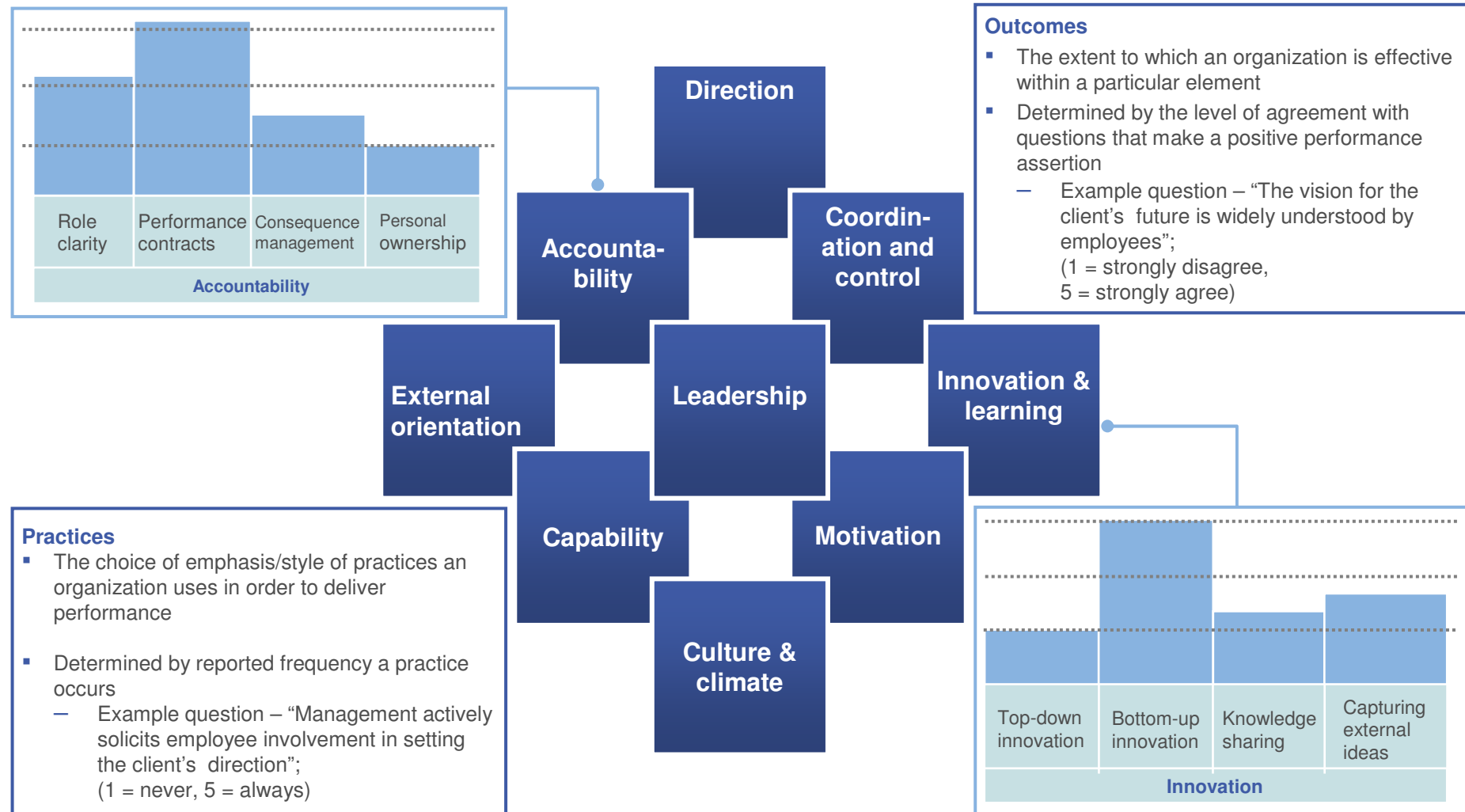
Skills and capabilities

Formal mechanisms

# 3 year scenario planning modelling can quantify the financial challenge that Trusts face as well as levers of improvement

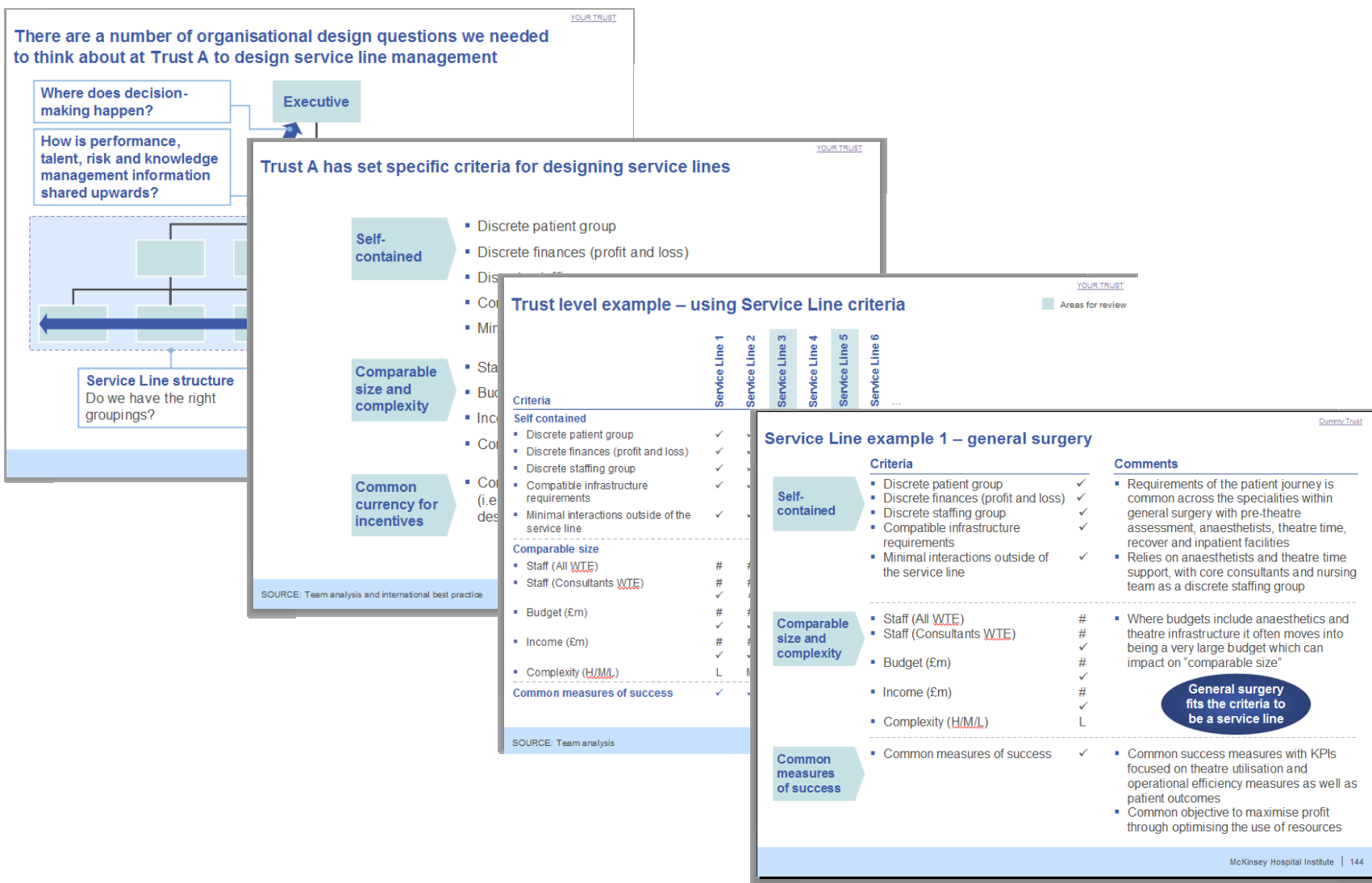


# The Organisational Health Index measures outcomes (effectiveness) and management practices (frequency) which can be benchmarked vs. other organisations





# We can help organisations design and implement service lines to improve performance at the specialty level



# MHI is a global initiative developing support for hospitals in four main areas

## Diagnostics

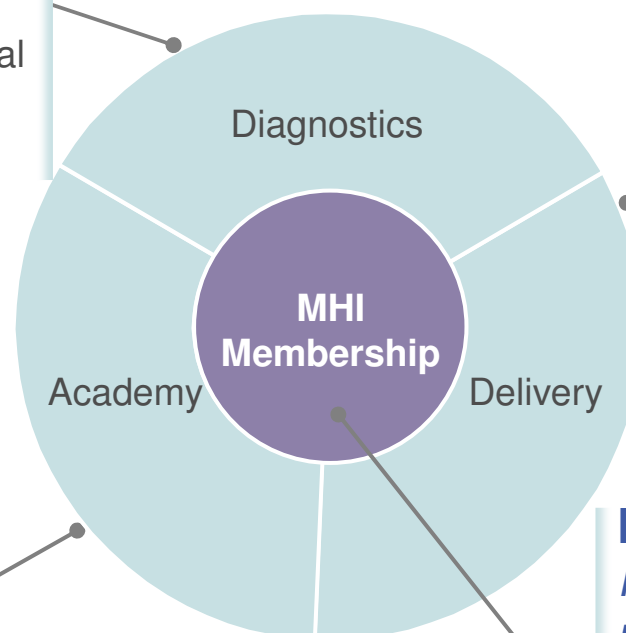
*Understanding where you are today:*

- Whole hospital overview
- Growing database of individual specialties & services
- 1 day on the ground expert assessment

## Academy

*Building capabilities for delivery in organisational leaders:*

- BU strategy
- BU management
- Improvement leadership



## Delivery

*Making change happen through improvement programmes and networks:*

- Benchmarking & improvement networks (based on FTN methodology)
- Delivery Partnerships with individual trusts to deliver change in high priority area(s)
- Draws on knowledge base in critical areas such as productivity & workforce high value specialties, overheads and procurement

## MHI Membership

*Full annual membership offers a package of member benefits:*

- Annual health check
- Invitations to member conferences, dinners and events
- Online peer networking and knowledge bank (Spring 2011)