



**CIC** BUILT ENVIRONMENT  
PROFESSIONS TOGETHER



Design  
Quality  
Indicator

# DQI for Health 2- What it is and why design appraisal is essential to your project

September 2020

- The Construction Industry Council (CIC) was established in 1988 and occupies a key role within the UK construction industry.
- CIC is the representative forum for the professional bodies, research organisations and specialist business associations in the construction industry.
- CIC provides a single voice for professionals in all sectors of the built environment through its collective membership of 500,000 individual professionals and more than 25,000 construction consultant companies.
- CIC's mission is to improve the UK construction industry by collectively representing and supporting the built environment professions and as part of this has developed and manages Design Quality Indicator processes for Health, Education and Generic designed buildings.



- In 1999 the CIC and industry leaders met to address the issue of poor quality design in buildings and unanimously agreed that a design appraisal tool to assess the quality of buildings was necessary.
- At this time designers and constructors recognised there was a gap in the way building design was approached with no agreed design quality metrics for evaluating and improving the design and construction of new buildings and the refurbishment of existing buildings.
- In developing this early DQI the CIC were supported by the Commission for Architecture and the Built Environment, the Department of Trade and Industry, the Office of Government Commerce, Constructing Excellence and the Strategic Forum for Construction.
- The first DQI was launched in 2002.
- The DQI introduced an open process for all project key stakeholders that enabled every aspect of design quality to be assessed at each stage of the design process, from inception to post occupancy analysis.



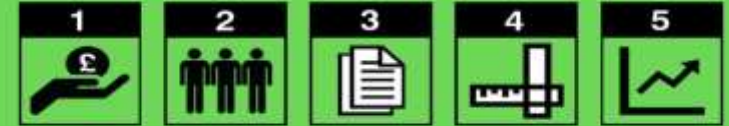
- DQIfH was developed by the Construction Industry Council (CIC), as a design quality evaluation tool for all types of healthcare projects whether new or refurbishment.
- In 2010 the CIC was commissioned by the Department of Health (DH) to develop a DQIfH to replace the Achieving Excellence Design Evaluation Tool (AEDET)
- The first DQIfH was piloted by NHS London (the then Strategic Health Authority) between 2010 and 2013 and was launched at the beginning of 2014 by the NHS Trust Development Authority (now NHS Improvement) and the NHS England Project Appraisal Unit.
- DQIfH is designed to follow the NHS's business case process through Strategic Outline Case, Outline Business Case, Full Business Case, Construction and Post Occupancy Evaluation.
- The DQIfH process has been used in more than 70 health projects since its inauguration in 2014.

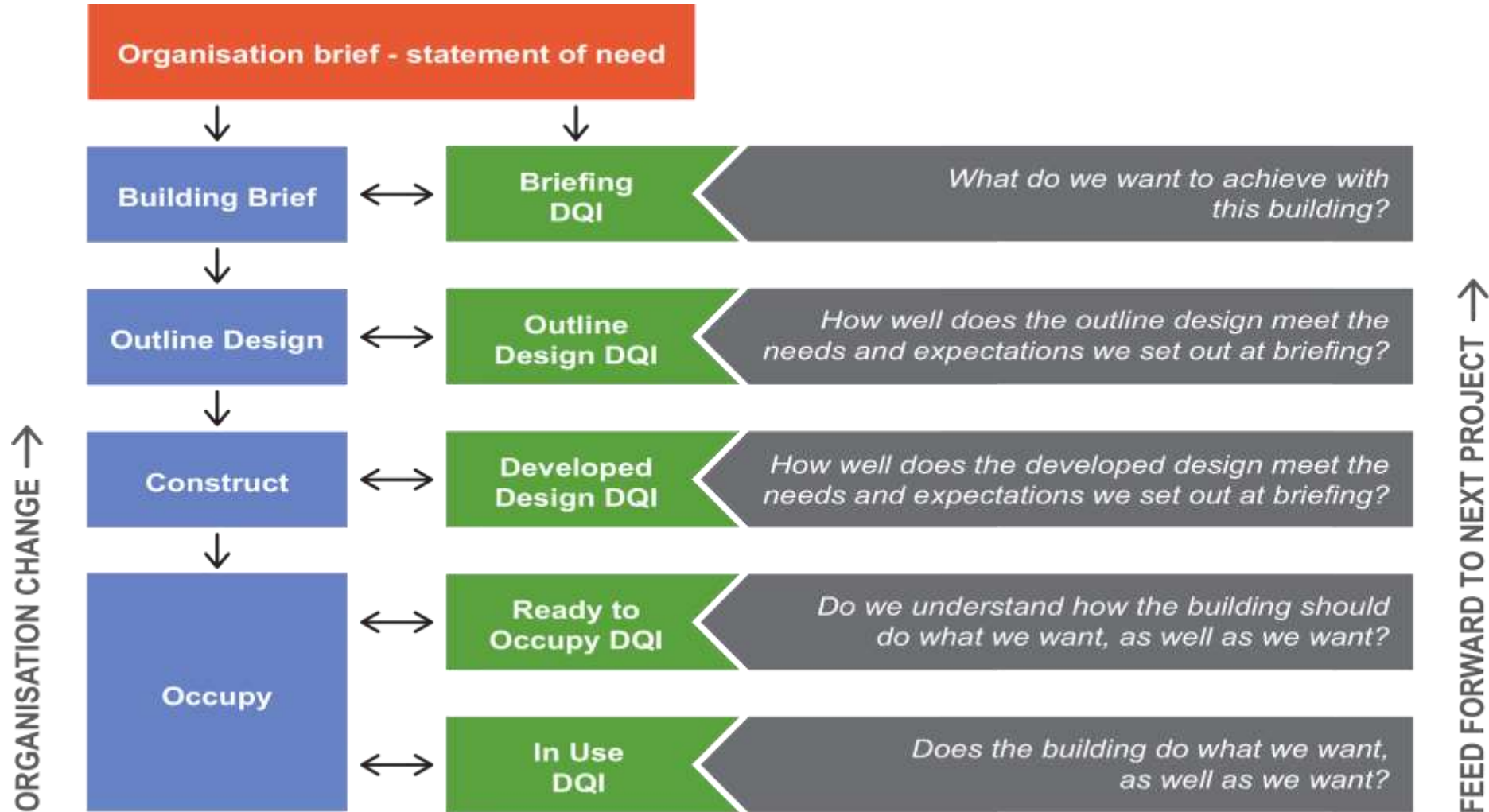


- In September 2020 the CIC launched an updated version of the DQIfH (DQIfH2)
- The DQIfH2 is still founded on professionally facilitated workshops with healthcare organisations and their key stakeholders engaging in all stages of the projects consultation and design process.
- Since the launch of this first DQI for Health in 2012 NHS England & NHS Improvement have continued to provide assistance to CIC to improve the DQI workshop and reporting processes
- The DQIfH tool and the questionnaire have been updated to perform better with the latest NHS England & Improvement requirements and whilst still aligned to the current business case process can be adapted to be used on accelerated project programmes.
- DQIfH2 is now designed to become the vehicle for not only design appraisal but also staged review of other NHS estates assurances processes covering impact on the procurement process at an early stage e.g. Carbon Reduction and Sustainability, Infection Prevention & Control, Fire Safety, Planning, Budget, Travel Plan etc.

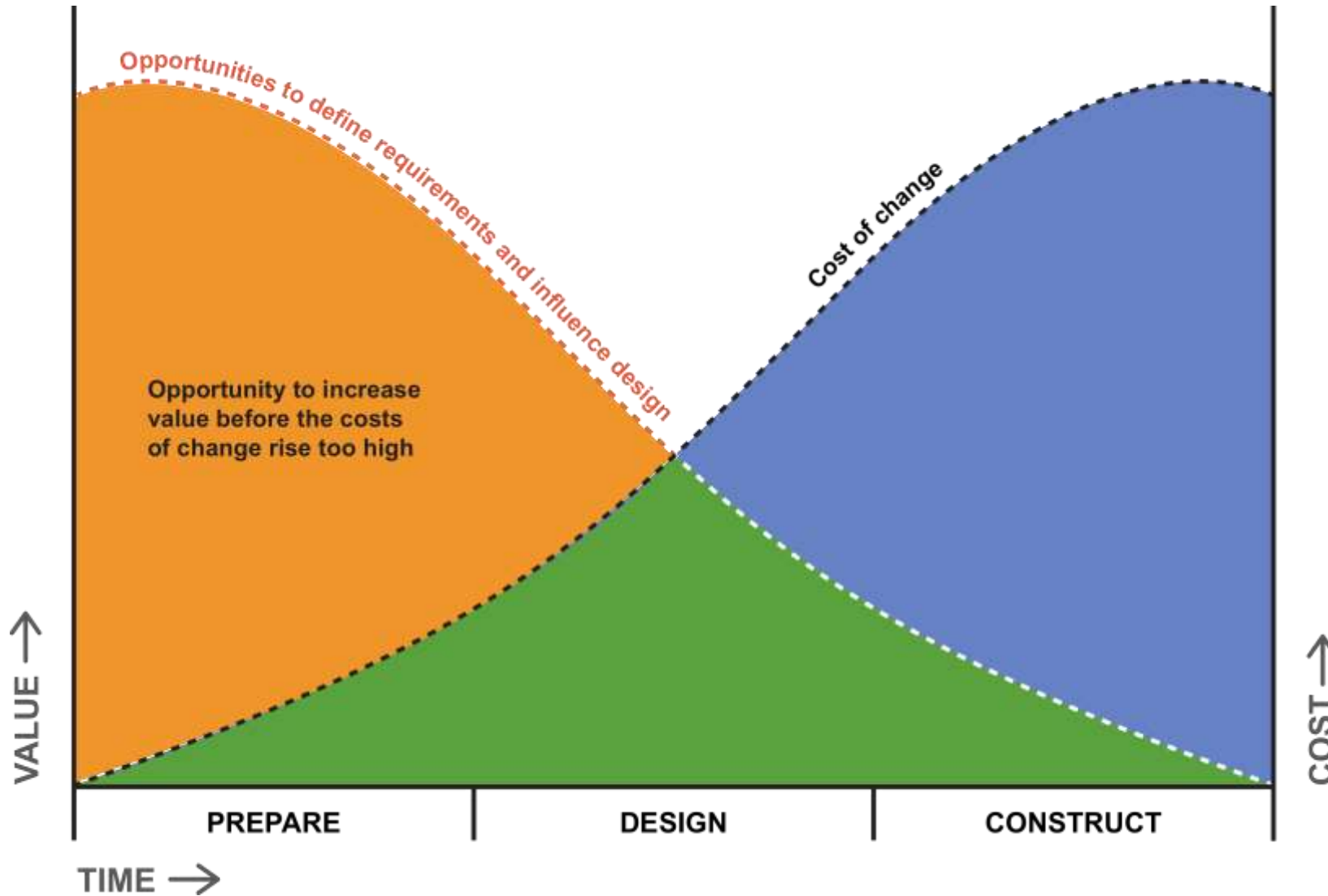


# The DQI 'Trinity'







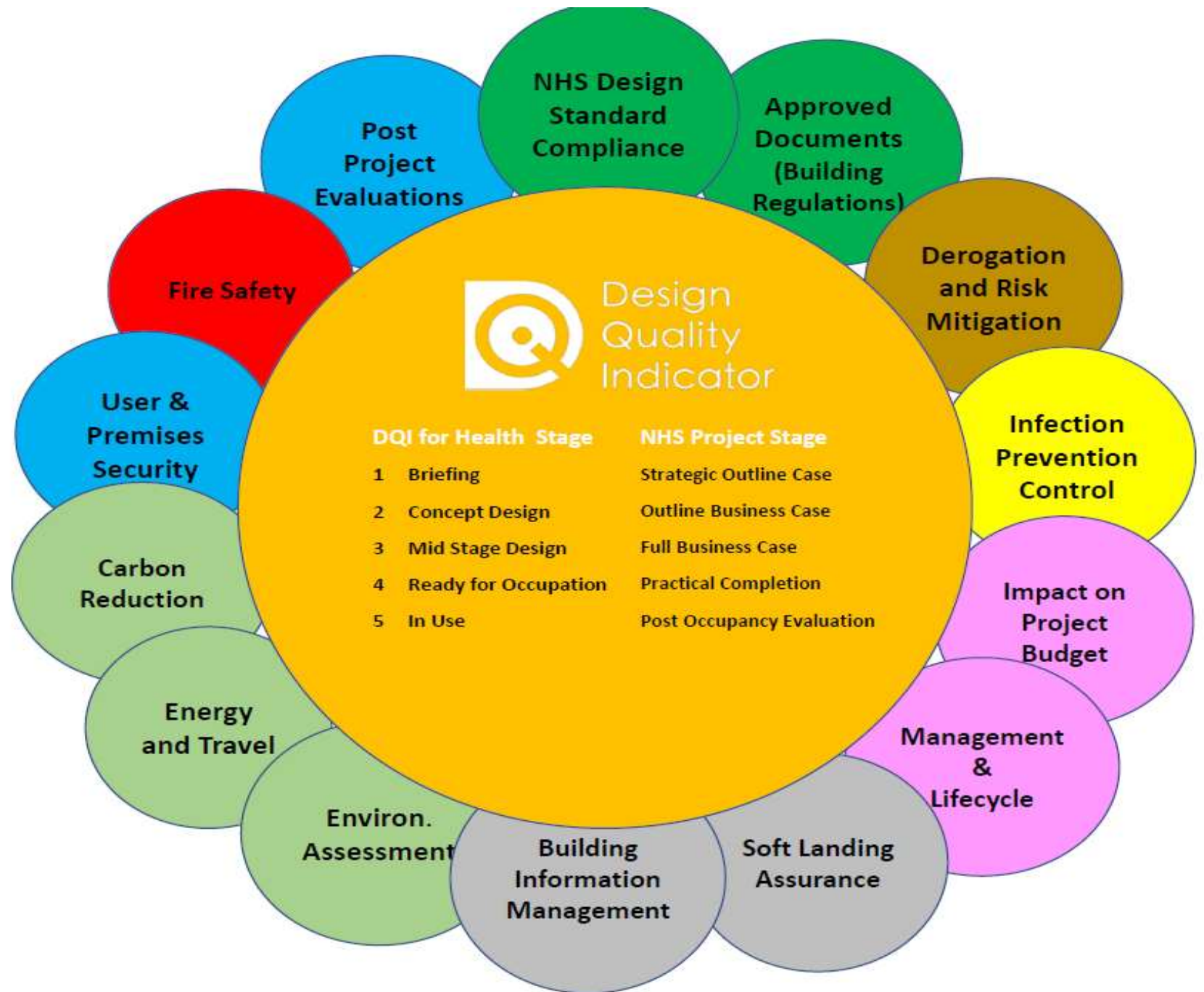
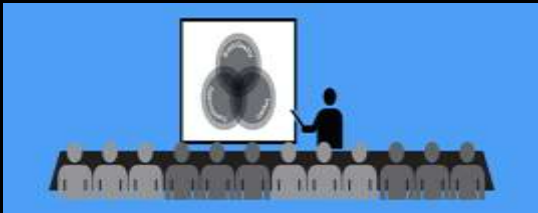






Design Quality Indicator

# How DQIfH2 links with other key project objectives



# Key objectives now captured in the DQIfH2 assurance log and supplementary performance schedule

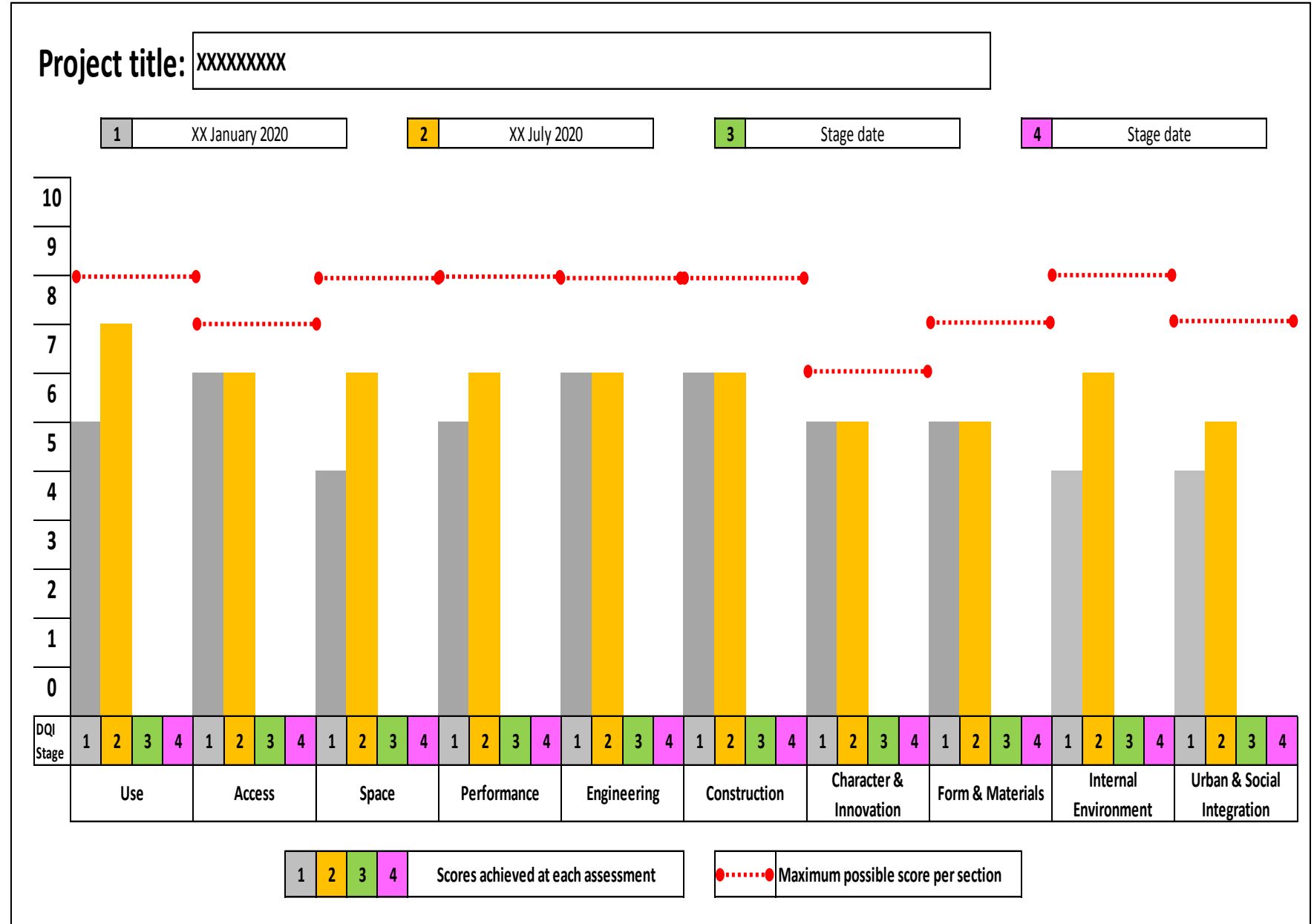


## Design Quality Indicator for Health: Supplementary review

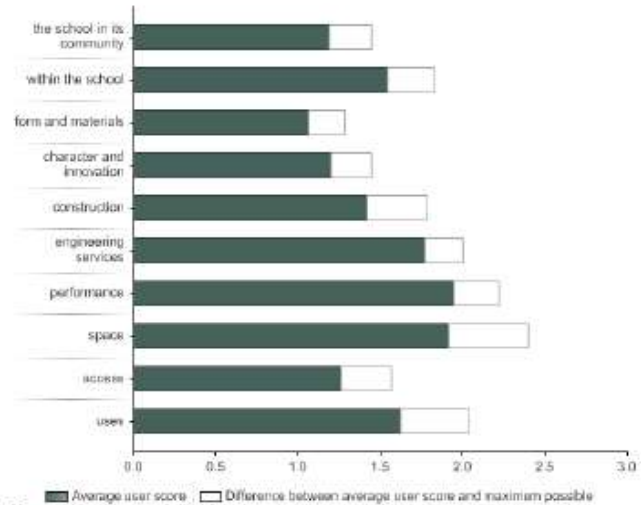
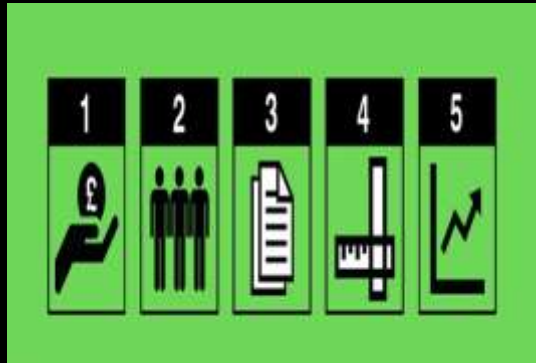
Project name / location	
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#	Heading	Detail	Value	The Design Quality Indicator Stage (NHS Project Stages)					
				Stage 0 (Briefing)	Stage 1 (SOC-OBC)	Stage 2 (OBC)	Stage 3 (FBC)	Stage 4 (Construction /Ready to Occupy)	Stage 5 (Post Project Appraisal)
				insert date	insert date	insert date	insert date	insert date	insert date
	<b>Cost</b>	What is the estimated outturn cost of the investment proposed including Optimism Bias, Inflation and VAT?	<b>£m</b>						
	<b>Cost</b>	By what percentage has the estimated outturn cost of the investment proposed changed since the last review ?	<b>%</b>	<b>100%</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>		<b>#DIV/0!</b>
	<b>Project Brief</b>	Has the owner organisation provided a clearly written service and design brief?	<b>Y or N</b>	*	*	*	*	*	*
	<b>Strategy: Estates</b>	Has the owner organisation a service and estates strategy, approved by its Board within the last 12 months, to support the investment proposal?	<b>Y or N</b>	*	*	*	*	*	*
	<b>Strategy : Sustainability</b>	Has the owner organisation a Sustainable Development and Carbon Reduction strategy, approved by its Board within the last 12 months, to support the investment proposal?	<b>Y or N</b>	*	*	*	*	*	*

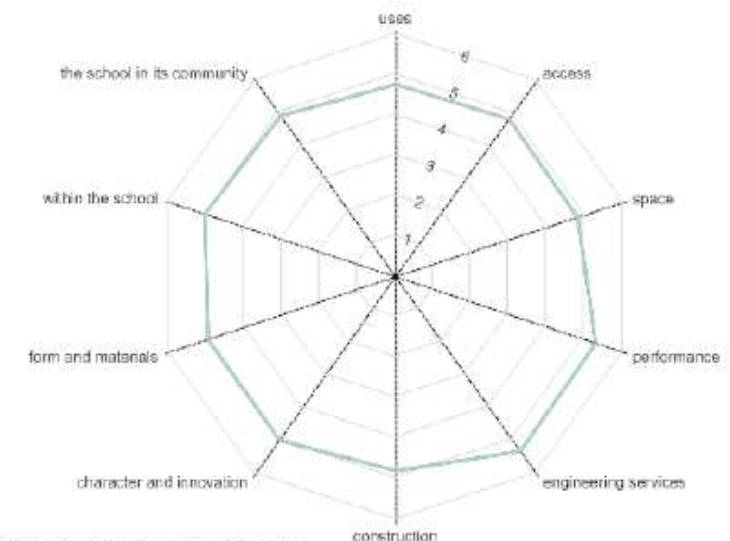
# Charting stakeholder impact on improved design quality throughout the business case and project programme



# Other outputs measured and reported

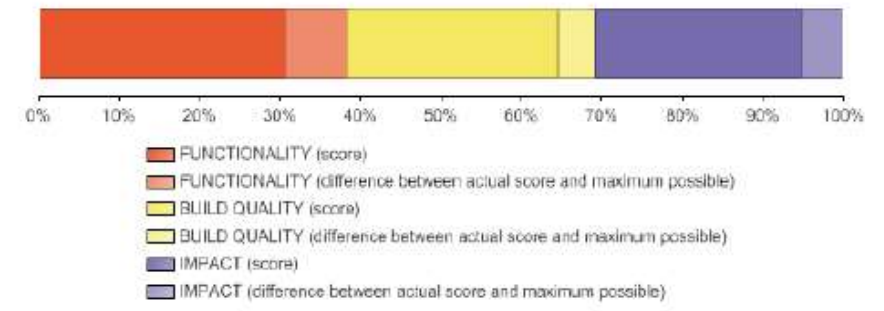


**Section Scores, weighted**  
 Respondent overall gave priority to sections Space, Uses and Performance all these and the other sections were assessed 80% of maximum or better

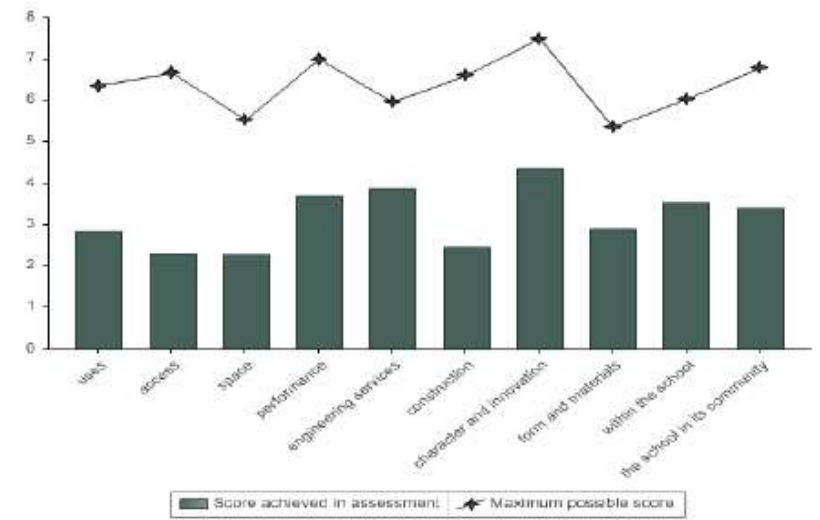


**Section Scores spider diagram**  
 The diagram shows a very good balanced assessment assessed at 5 for all sections

## All respondents



**Quality Dimensions**  
 Overall respondents gave slightly more emphasis to Functionality (40%) than Build Quality or Impact (both 30%)



**Briefing record output**  
 This shows a good overall profile, well matched to the Briefing Stage priorities. The relatively poor score for Construction probably reflects the high proportion of Don't Know responses to this section

# Where DQI/H2 fits into the programme

## NHS England & Improvement Business Case and Project Activities Guide

Version: September 2020

Standard project/business case phasing	PID	Strategic Outline Case (SOC) [Project Initiation Document -PID- for smaller schemes]	Pre OBC procurement option review (NHSPS/CHP only)	Outline Business Case (OBC)	Full Business Case (FBC)	Construction Phase	Post Project Evaluation (PPE)	
Combined Outline and Full business cases	May have been produced	May have been produced		Content of a combined OBC/FBC must be agreed with approving body prior to commencement				
Building Information Modelling (BIM) (As 2013/14 BIM Level 2 became mandatory for NHS projects)		DATA EXCHANGE 1 Requirement & Constrain Model		DATA EXCHANGE 2 Outline Solution Model	DATA EXCHANGE 3 Construction Information Model	DATA EXCHANGE 4 Operation and Maintenance Information Model	DATA EXCHANGE 5 Post Occupation	
Design (Quality Indicator) assessments (DQI) New DQI for Health v.2 launched September 2020		Stage 1 Briefing		Stage 2 Mid Design	Stage 3 Detailed Design	Construction Phase	Stage 4 Ready for Occupation	
Royal Institute of British Architects (RIBA) Stages	RIBA Stage	0 Strategic Definition	1 Preparation & Brief	2 Concept	3 Definition	4 Technical Design	5 Construction	6 Handover
	Additional notes			Check drawing requirement with approving body	1:200 drawings for preferred option. Possibly greater detail for novel, contentious, derogated designs			

### DQI stage 0 Client orientation

DQI Stage 1 Briefing ▪ PID / Strategic Outline Case (SOC) Approval

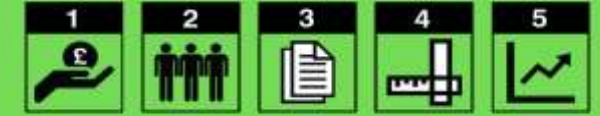
DQI Stage 2 Concept Design ▪ Outline Business Case (OBC) approval

DQI Stage 3 Mid Design ▪ Full planning approval ▪ Full Business Case (FBC) Approval ▪ Commence on site ▪ Practical completion

DQI Stage 4 Ready for occupation

DQI Stage 5 POE





- Workshops and reports are managed and produced by CIC accredited and independent facilitators.
- Workshop stages match the NHS business case and project programmes with reports produced to provide assurance at each approval stage i.e. a design audit trail.
- DQIfH2 assists in monitoring design aspirations throughout the process and managing stakeholder expectations for the project as a whole
- Enables benchmarking of cost and quality
- Provides regular and usable feedback to improve design quality of healthcare projects and increase VFM across the investment lifecycle