

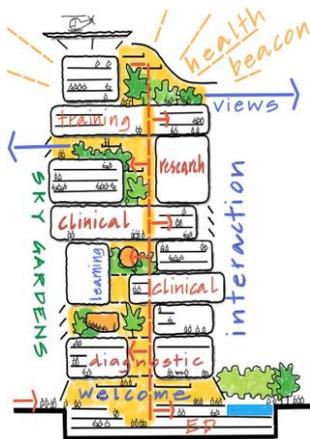
How can a vertical hospital function?



GOING TALL IN LONDON

For years Londoners resisted vertical expansion. Now, tall buildings are becoming prevalent in London, with hundreds in construction and in planning. 62% of the tall buildings pipeline are 20–29 storeys tall, and 38% are 30 to 60+ storey buildings.

"The Royal London Hospital in Whitechapel has a computerised lift system where you input your floor on a touch screen and then it designates a specific lift for you to go straight to that floor."
Lewis Thomas (CTG)



"Should one have lifts specific for the lower floors for the ED, UTC and primary care areas? - would keep access to the main parts of the hospital separate and freer."
Neville Pursell" (CTG)

TALL HOSPITALS

The majority of tall hospitals are outside of the UK. Hospitals in the UK are typically rely on horizontal adjacencies. Internationally, many tall hospitals are just over 30 storeys but at 36 floors, the current tallest hospital in the UK is Guy's tower, only the second tallest in the world.

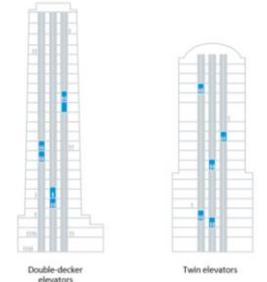
DESIGN STRATEGIES

A range of design features such as atria, double height lobbies, sky gardens and sky lobbies, stacking of 'villages' or 'neighbourhoods' improve visual and functional connections between parts of a building, improve experience and make tall buildings better places in which to work or heal.



LIFT SYSTEMS, & TECHNOLOGY

There are many types of lift other than the traditional single lift car per lift shaft: double decker cars, twin lifts per shaft, and paternosters as well as ropeless lifts and lifts combining vertical and horizontal travel.



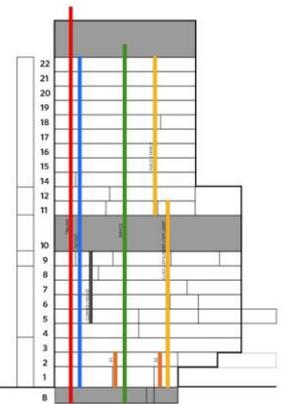
"I used a paternoster at St Thomas'. It was terrific."
Mando Watson (CTG)

"Could a Paternoster be updated to account for a range of access requirements?"
Owen Bray (CTG)

"Fast lifts to midway / top points would be important for flow."
Sarah Elkin (CTG)

20+ STOREY HOSPITALS

Key to tall hospitals' functional design are the transportation and vertical communication connections. Chicago's Lurie Children's has its Emergency vehicle access at a lower level, an intermediate drop off entry and an upper (ground) pedestrian access, and midway up the lower, a 'sky lobby' for inpatient units.



STACKED ACCESS

Tall skinny hospitals can have stacked access points with main entrance and emergency department and logistics accesses on different levels or facades.

"My main questions (...) are around the role of stairs & escalators, both for fast movement between key floors."
Bob Klaber (CTG)

Smart strategies and technologies

Images clockwise from top:
(1) London's Shard towers above GSTT's Guy's tower, and in the foreground its Cancer Centre. (2) Rope-less lifts plus high speed lifts, ThyssenKrupp
(3) Lurie Children's (Chicago) section drawing highlighting key lift shafts – colours depict type of use (4) BDP illustration from the presentation.