

Trends: implications for clinical, operational and facility planning

“Command centre conversations is hugely relevant of Covid-19, so we are learning lots here. Mathematicians, epidemiologists, data visualisation experts very key”
 Deirdra Orteu (CTG)



“There is an overriding layer which is communication and improving patient experience as well as patient empowerment.”
 Tanya Hughes (CTG)



“From the point of view of designing a hospital, how much do we assume that things are going to go in the direction they’re now going? Things can change almost overnight. We could get it horribly wrong. We cannot lag behind - we need to improve adoption of digital prior to the move.”
 John Black (CTG)

COMMAND CENTRE

Command centres utilise predictive and real time data to empower clinicians. Initially associated with managing flows, increasingly command centres integrate more direct support to clinical activity incl. telemetry support and virtual hospitals.



MANAGING WORKLOADS, FLOWS & DEMAND

Digital supports centralised booking, self scheduling, flow coordination, remote advice and real-time results. AI can provide valuable support to diagnostic imaging. It is suited to automated analysis tasks. By taking some of the workload it helps to improve accuracy, reduce fatigue and error.



“One of the interesting new ideas is using LiFi to locate the position of medical equipment. This cuts down on duplication and assists routine preventative maintenance”
 Neil Cadenhead (CTG)

IT ENABLED PATIENTS & CLINICIANS

Systemwide integration of operational, core clinical support and advanced clinical support systems is now achievable. It supports better medication coordination, redundant testing and care coordination. Integrating platforms improves systemwide collaboration, and patient recruitment for clinical trials.



AR & VR

Augmented reality and virtual reality are driving transformation in training and education. This alters relationships between places for training and hospital departments. Technologies for image guided procedures are changing how operating theatres work.



“the tele-ICU at Intermountain (Salt Lake City) and it was really amazing, but also feels achievable”
 Bob Klaber (CTG)

EVIDENCE

The immense speed of innovation is a challenge. Assessment may lag and meaningful improvements have often failed to materialise. With robust evaluation of digital health technologies we can understand what solutions will deliver the best outcomes for patients, safely and securely.



VIRTUAL HOSPITAL

E-ICU, e-home: more patients can be managed at home, including. critical care and complex care reducing unnecessary ED traffic, and avoiding patient admissions.



Digital transformation needs to be a part of the redevelopment story

Images clockwise from top: (1) Command centre (2) AI in radiology stock image (3) image guided procedure example. (4) Home care support from Mercy Virtual Care Centre, MO – USA; (4) stock photo, care at home ; (5) Sensium wearable vital signs monitor;