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**COMMUNICATIONS ARCHITECTURE - THE KEY TO
HEALTHCARE TRANSFORMATION**

Presented by
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- BACKGROUND
- CHALLENGES AND OPPORTUNITIES
- ARCHITECTURAL APPROACH
- CLINICAL INTEGRATION
- SUMMARY

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CHALLENGES AND OPPORTUNITIES



- Removal of duplication, consolidation of Estate
- Economies of scale, collaborative service delivery



- Stakeholder evolution, commercial relationships
- 'Borderless' communication – any device, anywhere



- Short and Long Term cost savings
- Streamline use of expensive, specialist resource

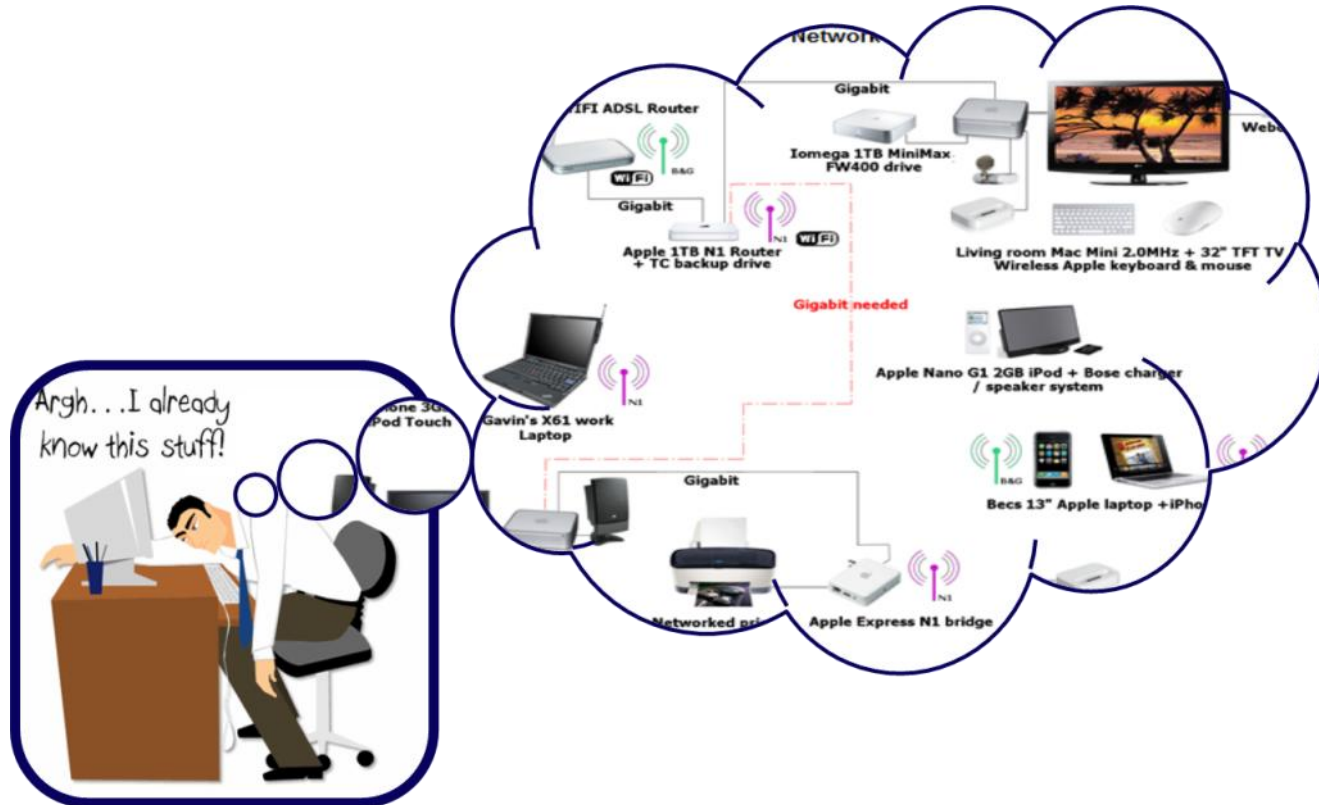


- Flexible and efficient working
- Care at a distance – remote expertise 'on demand'



- CCG support and enablement
- Competition - Any Willing Provider

CONSUMERISATION OF I.T.



HEALTHCARE IT IS CHANGING - AND FAST!

HEY DOC!!! The patient
you operated on, just DIED.



WHAT??
I told you to
create a restore
point. Now we
can't even bring
him back in last
known good
configuration.

CHRISTMAS IS COMING!



Bring Your
Own



ARCHITECTURAL APPROACH



ARE YOUR FOUNDATIONS SECURE?

- Fit for purpose datacentre?
- Scalable virtualisation platforms in place?
- Virtual Desktop Infrastructure in place?
- Pervasive wireless network?
- Fully converged infrastructure?
- Security and governance policies established and agreed?
- Data management policies and future backup requirements understood and documented
- Scalable videoconferencing systems and strategies?
- Server standardisation and storage requirements assessed?
- Infrastructure resilience requirements assessed and agreed
- Business continuity plans and disaster recovery processes in place (and tested!)

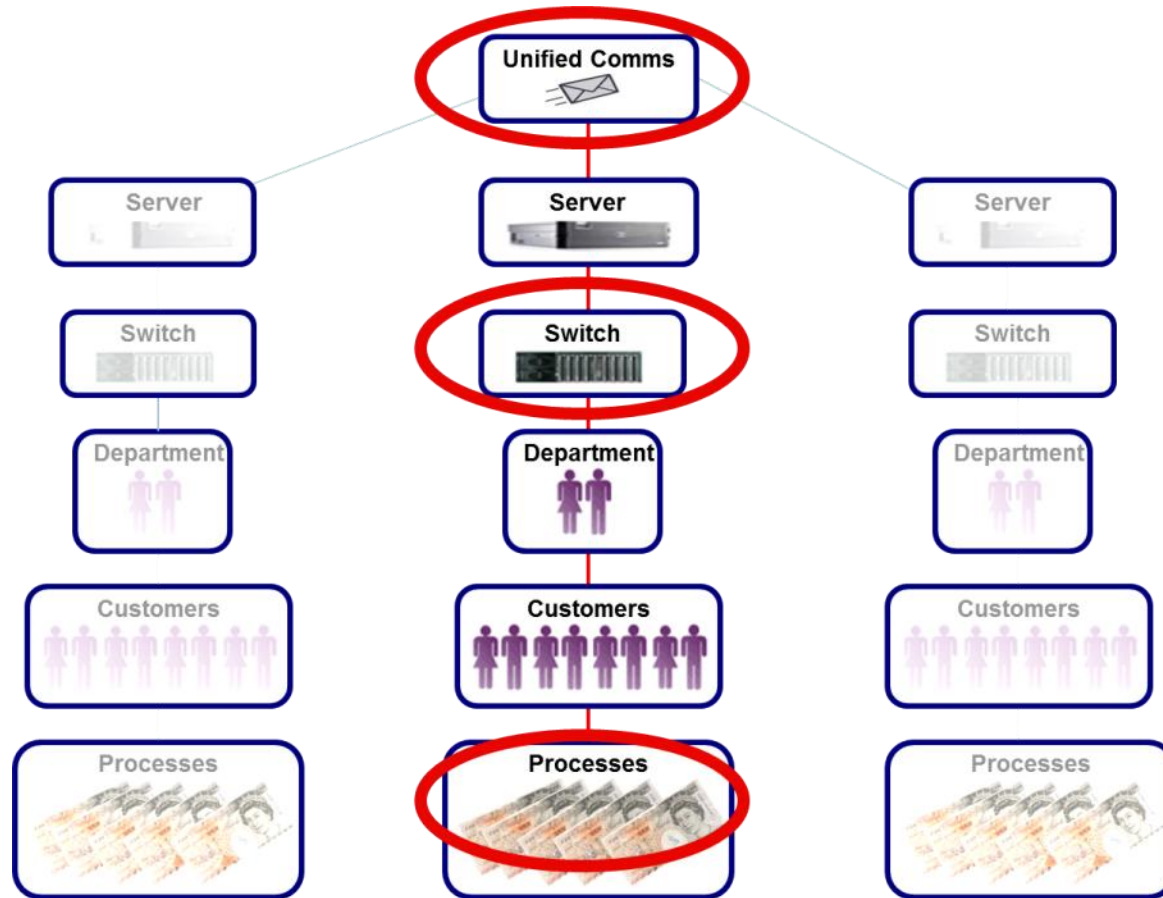


EXAMPLE ACUTE TRUST

- Turnover of £720m+
- Over 13,000 staff
- 1,600 beds
- 800,000 first and follow-up outpatients
- 90,000 day case/elective inpatient admissions
- 95,000 emergency admissions
- 170,000 emergency attendances



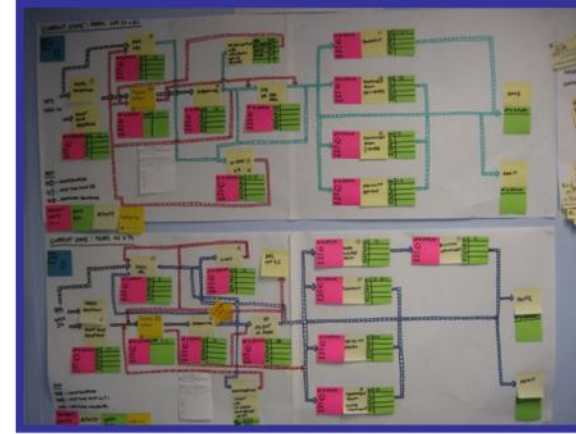
INTEGRATED, NOT JUST ALIGNED



ALIGNMENT?



INTEGRATION



CLINICAL INTEGRATION - EMERGENCY DEPARTMENT RESULTS

Medical Grade Network foundation and architectures to enable:

Wireless data access to information at the point of care

Wireless telephony, unified communications & presence to show real-time availability of staff, contact staff anywhere

Cisco Unified Application Environment, a messaging system linking departments to notify when results and patients are ready

RFID and tracking to locate equipment

Patient journey time reduced: 23% adults, 33% children

Waiting time reduced: 28% adults, 40% children

Patient satisfaction increased by 11%

Increased patient satisfaction

Doctor productivity increased by 40 mins. per doctor per shift - 7 hours per day

Assistant response time improved from 30% in 4 mins., to almost 100% in 8 seconds

Cost containment allows full ROI in 14 months

Increased Productivity

EMERGENCY DEPARTMENT RESULTS

'The department is working much more efficiently as the Stores Manager now delivers stock immediately it is requested.'

Kathryn Cox, Sister, ED

'The new phones enable staff to find who they want, when they want them. Once you have it, you can't imagine how you got by without it.'

Sam Clunie, Nurse in Charge

'The new phones have made a significant improvement to the department. A huge time saving'

Demas Esberger, Head of Service, ED Consultant

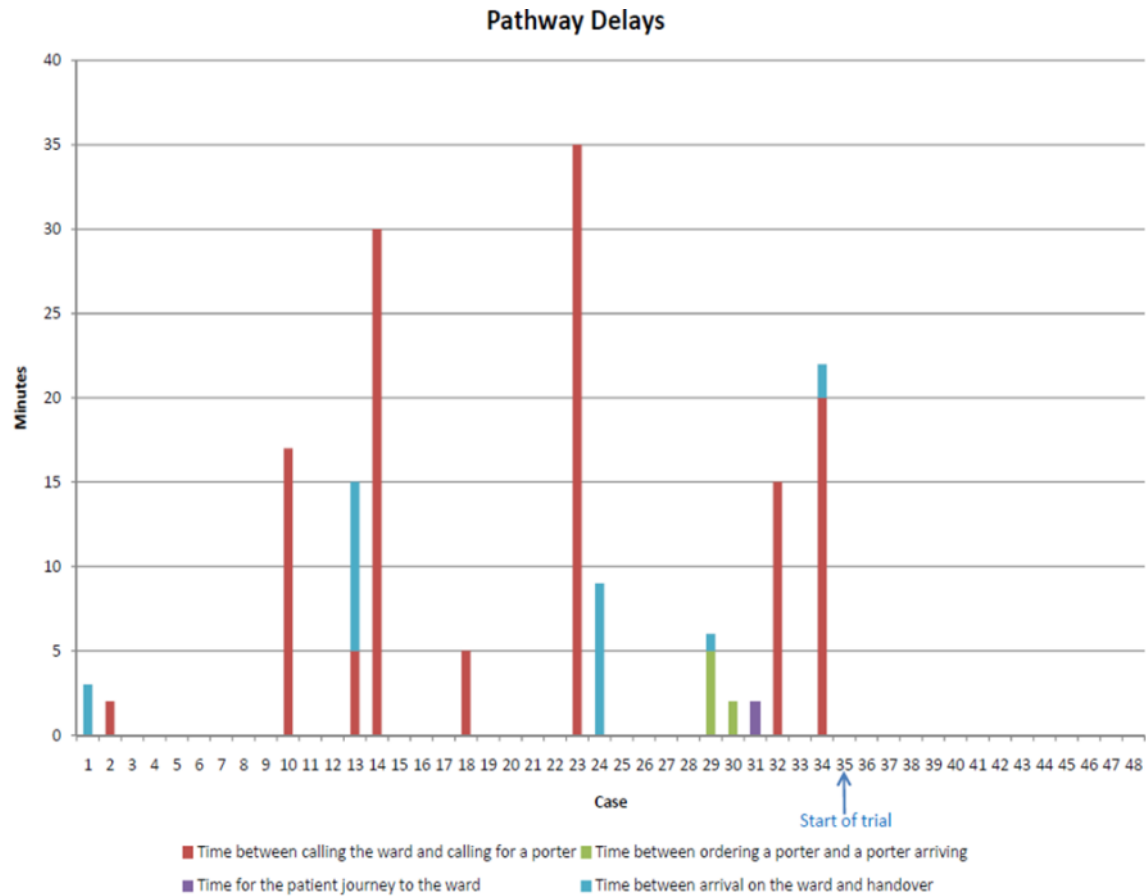
'Surprisingly, the installation of the new technology has actually increased human interaction. The new system has the human factor...This human element mixed with technology supports a more collaborative working environment.'

Richard Tucker, Superintendent Radiographer

'Patients want to get in and out as quickly as possible; our phones improve patient throughput so patients will benefit.'

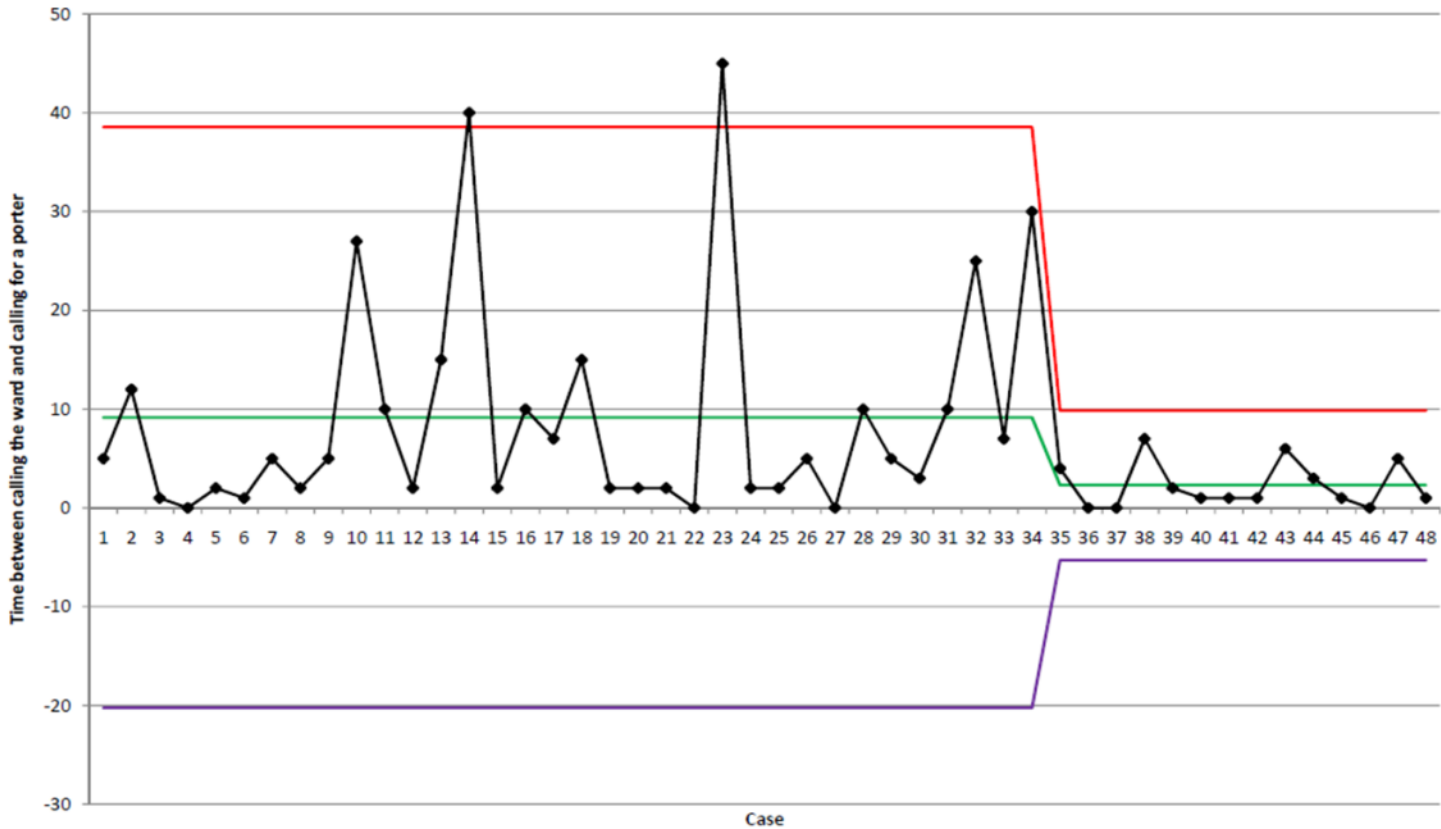
Navin Bedi, ED Consultant

CLINICAL INTEGRATION - THEATRES RESULTS

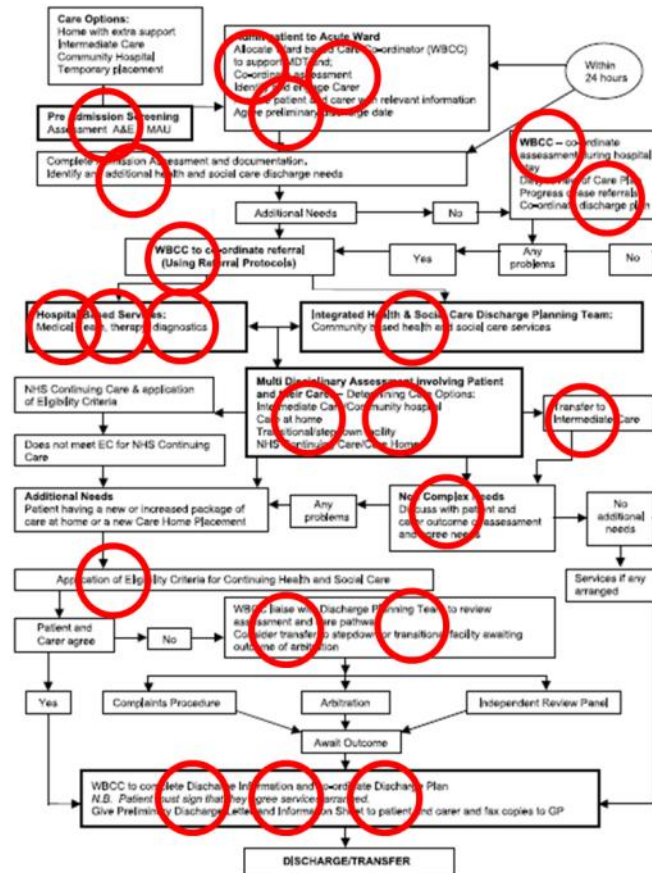


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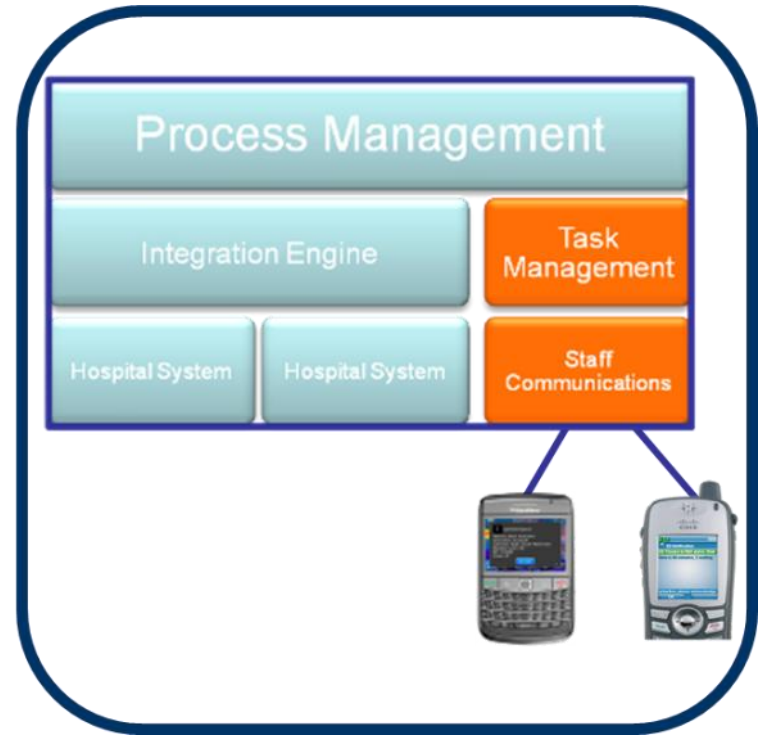
Time between calling the ward and calling for a porter (SPC Chart 1)



COMMUNICATIONS - HOSPITAL DISCHARGE PROCESS



CLINICAL INTEGRATION - HOSPITAL AT NIGHT



HOSPITAL AT NIGHT - AUDIT AND REPORTING

Reporting



Reporting

Automated reporting on hospital processes and workforce



Workforce Optimisation

Distributes activities and governs execution of activities



Event Notification

Cuts delay out of hospital processes through event notifications

Cisco IPT

Blackberry
/ FMC

Wi-Fi

RTLS

Presence

HOSPITAL AT NIGHT RESULTS

Qualitative benefits;

- Patient safety enhanced by ability to prioritise care of acutely ill patients
- Staff satisfaction increased due to improved team communication
- Significantly improved both information and clinical governance

Financial benefits;

- Better utilisation of resource
- Cash releasing savings of €113,000 per annum
- Reinvestment of €412,000 (8,000 hours) of clinical support to patient care
- A reduction in patient lengths of stay in hospital
- A forecast return on investment in less than four months.

CLINICAL INTEGRATION - EVIDENCE



SUMMARY

- A service is a means of delivering **value** to customers by facilitating **outcomes** customers want to achieve without the ownership of specific costs and risks.
- **Service Value**: defined in terms of the customer's perceived business outcomes, and described in terms of the combination of two components:



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THANK YOU

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