Experience gained in implementing and supporting a Clinical Information System which includes a Medical IT Network.

Fran Hegarty
Principal Physicist, St James’s Hospital Dublin
Clinical Information System
Clinical Information System.
Clinical Information System.

- Application / Software
- Technology (incl Medical IT Network)
- People & Processes
Clinical Information System.
Clinical Information System.

Clinical Workflow
Clinical Information System.
Clinical Information System.
Clinical Information System.

Safe and Effective Patient Care

Clinical Workflow

Drugs Prescribed  Drugs Delivered  Fluid Balance  Lab Results  Nursing Notes  Ventilator Data  Physiological Measurement Data
Clinical Information System.

Safe and Effective Patient Care

Clinical Workflow

- Drugs Prescribed
- Drugs Delivered
- Fluid Balance
- Lab Results
- Nursing Notes
- Ventilator Data
- Physiological Measurement Data

Application / Software

Technology
- incl Medical IT Network

People & Processes
Clinical Information System.
Commissioning & Implementation - working towards Go Live
Clinical Information System.
Commissioning & Implementation - working towards Go Live

Unit Hardware
PCs Interfaces

Servers / Databases
Integration Engines
Clinical Information System.
Commissioning & Implementation - working towards Go Live

- Unit Hardware
- PCs Interfaces
- Network
- Servers / Databases
- Integration Engines
Clinical Information System.
Commissioning & Implementation - working towards Go Live

Application
Configuration

Unit Hardware
PCs Interfaces

Network

Servers / Databases
Integration Engines
Clinical Information System.
Commissioning & Implementation - working towards Go Live

Application Support
Application Configuration
Unit Hardware PCs Interfaces
Network
Servers / Databases Integration Engines

Saturday 31 August 13
Clinical Information System.
Commissioning & Implementation - working towards Go Live

- Application Support
- Application Configuration
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Director of ICU
Project Executive/Manager
Clinical Information System.
Commissioning & Implementation - working towards Go Live

- Application Support
- Application Configuration
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- PCs Interfaces
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Director of ICU
Project Executive/Manager

- Intensivists
- Nursing
- Pharmacy
- Laboratory
- Radiology

- Clinical Engineering
- IT
- Medical Records
- Risk & Legal
- Finance

Saturday 31 August 13
Clinical Information System.
Commissioning & Implementation - working towards Go Live

Director of ICU
Project Executive/Manager

Intensivists
Nursing
Pharmacy
Laboratory
Radiology

Clinical Engineering
IT
Medical Records
Risk & Legal
Finance

System supplier
System manufacturer
Hospital network supplier
Existing system suppliers
Medical device suppliers

Philips
Maquet
Datascope
GE
Gambro
Roche
Cisco
Cerner
Dell
HP

Application Support
Application Configuration
Unit Hardware PCs Interfaces
Network
Servers / Databases Integration Engines

Saturday 31 August 13
Clinical Information System.

On Going Management

Application Support
Application Configuration
Unit Hardware PCs Interfaces
Network
Servers / Databases Integration Engines

Acquire
Clinical Information System.

On Going Management

- Application Support
- Application Configuration
- Unit Hardware PCs Interfaces
- Network

Servers / Databases Integration Engines

Acquire | Use | Maintain | Replace

Manage Assets

Saturday 31 August 13
Clinical Information System.

On Going Management

- Application Support
- Application Configuration
- Unit Hardware
- PCs Interfaces
- Network
- Servers / Databases
- Integration Engines

Manage Asset Systems
Sustain performance
Control cost and risk

Acquire
Use
Maintain
Replace

Manage Assets
Clinical Information System.

On Going Management

- Application Support
- Application Configuration
- Unit Hardware
- PCs Interfaces
- Network
- Servers / Databases
- Integration Engines

Corporate Management

Manage Asset Portfolio

Manage Asset Systems
Sustain performance
Control cost and risk

Acquire
Use
Maintain
Replace

Manage Assets

PAS 55:2008
British Standards Institute
Multidisciplinary health care team

a group of health care workers who are members of different disciplines, each providing specific services to the patient.

Clinical Information System.

On Going Management

- Application Support
- Application Configuration
- Unit Hardware PCs Interfaces
- Network
- Servers / Databases Integration Engines

Multidisciplinary health care team
Clinical Information System.

On Going Management

- Application Support
- Application Configuration
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Project Executive/Manager

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Multidisciplinary health care team

Healthcare Technology Management
&
Clinical Care Team
Clinical Information System.
On Going Management

Application Support
Application Configuration
Unit Hardware
PCs Interfaces
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Manage Asset Systems
Sustain performance
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Clinical Information System.
Clinical Information System.
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Technology
incl
Medical IT Network

People & Processes
Clinical Information System.

Safe and Effective Patient Care

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People & Processes

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Application / Software

Technology
 incl
Medical IT Network

People & Processes
Medical Device incorporating a PC running Microsoft Windows

E.E.G.
Medical Device incorporating a PC running Microsoft Windows
Medical Device incorporating a PC running Microsoft Windows part of a Medical IT Network
Medical Device incorporating a PC running Microsoft Windows part of a Medical IT Network
Medical Device incorporating a PC running Microsoft Windows part of a Medical IT Network
Medical Device incorporating a PC running Microsoft Windows part of a Medical IT Network

<table>
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Medical Device incorporating a PC running Microsoft Windows part of a Medical IT Network

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Medical IT Networks.

1. Critical Data Gaps - as a result of changes to interfaced systems

2. Slow Performance - Security patch

3. System Crash - Lack of change control process

4. System Crash - Broadcast storm over the network

5. Delay in accessing patient data - computer virus

6. Loss of system function - installation of anti virus software
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People & Processes

IEC 80001 - 2010