How should we Manage Information and Information Technology in Transfusion Medicine

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• Improve healthcare in terms of patient safety and wellness

• Ease business process management

• Cost efficiency

• Traceability

• Standardizing & regulated processes

• The increasing of donor & patient population

• Relation with donor & patient is changing

• Networking requirements

• Rapid scientific evolution

Why technology in our business?
Blood Transfusion business applications

Client management (billing, advising, ordering, ...)

Facilities Patient files management

Reporting

Each application: Backup system – eventually archiving system

Apheresis management

Whole blood collection management

« Donors » Laboratory Management

Blood Unit & Components Management

Donor Management

Facilities accounting system

« Patients » Laboratory management
Technology and the future

Graph showing trends in various telecommunications indicators:
- Mobile cellular telephone subscriptions
- Internet users
- Fixed telephone lines
- Mobile broadband subscriptions
- Fixed broadband subscribers

Source: ITU World Telecommunication/ICT Indicators Database.
* Estimates.
Automated systems evolved linearly with business expectations (ex. new test, new methods, ...)

While information technology is in its growing age we have at first to identify clearly business needs and expectations.

20 century
In millions of years

21 century
In < 15 years
Cabling VS Wireless network

Yesterday

Mix of Cabling and Wireless

Today

Today

Tomorrow
Datacenter – Cloud Computing

Today & Tomorrow

Yesterday

Today
Social network – Collaborative environment

Old ↔ new Generation
Applications

Licences = Product oriented

Open source = Service oriented
Business Management Culture

Economic

Regulation

Ethics

Standards

Drugs - Healthcare

Environment
IT Service Management

IT management /Governance
- IT strategy aligned with Business strategy
- ITIL, ISO, Regulation, Project management, Validation, Information security policy

Business IT Management Expertise
- IT Business processes, Input/Output Technology & Standard
- IT operational support

Technical IT Management Expertise
- Hardware, Network, Internet, Intranet, Cabling, Data center, Middleware, Application performances, Security
- Technical support

Quality Management System

Business Requirements

Application data structure & functionality
Why Standards / Benefit of standards

- Share knowledge on a common concern
- Help to structure the management processes
- Assuring interoperability between systems & organization
- Assuring information portability between processes concerned by patients' security
- Improve the link between IT management and quality management
- Aligning IT service strategy with business strategy
- Optimizing the required information for assuring business quality and reliability
- Optimizing cost related to IT management
- Improve relationship between stakeholders (including supplier)
What are the needed standards for management

- QMS => ISO 9001:2000 & Business best practices (e.g. GMP)

- IT management => ITIL, CobiT, ISO 20000

- Project management => PMP, Prince 2, BPM

- Validation => ISBT guidelines on validation*, GAMP

- Blood and blood products identification: => ISBT 128

- Interfaces within hospital => HL7, ISO TC 215

- Information security => ISO/IEC 27000:2009, HIPPA
  ISBT Guidelines on Information Security *

* [http://www.isbt-web.org/documentation/]
Summary – IT Transfusion Medicine

• Focus on core business

• Get IT competency – interface between the business and expert stakeholders

• Get the technology culture

• Get control of the information in the business

• Keep an eye on technology trend – for a better understanding of client expectations

• Use the standard technology in term of Cost/Efficiency/Security

• Use standard for IT management to align IT strategy and business objectives

• Use standard to improve relations with internal/external partners
“Information technology and business are becoming inextricably interwoven. I don't think anybody can talk meaningfully about one without talking about the other”

Bill Gates