

Points to Consider

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Healthcare Landscape

- Thousands of independent provider businesses of all sizes
- Hundreds of medium and large enterprise providers
- Dozens of regulatory and administrative bodies
- Mix of private businesses and publicly-funded organisations

- No central control over the entire constituency
- No clear, quantifiable mutual benefit
- No acceptable coercion mechanism
- Vast differences in technical capability and funding models
- Business pragmatism often dictates technology decisions

- Numerically, small businesses are the largest constituency

Business-to-Business Communication

- Based on “Return on Investment” commercial pragmatism
- Clear mutual benefit or dominant party coercion
- Standard Business Document Exchanges
- Peer-to-Peer Partnership Agreements
- Explicit or Implicit Trust and Security
- Shared communication infrastructure
- Diverse, independent platforms and applications
- Clear distinction between the ‘what’ and the ‘how’

- The proven model for Business-to-Business communication

Business Issues

- Dependency of Service Consumer on Service Providers
- Peer-to-Peer vs Value Added Network models
- Free for all or fee for service model
- Service provider cost recovery

Security

- Privacy, Authenticity, Integrity, Non-repudiation
- Message- or channel-centric?
- Human- or application-centric?
- National infrastructure for mass creation, distribution and maintenance of cryptographic objects
- National infrastructure for certificate validation
- What role will the Health eSignature Authority play?
- National infrastructure for participant registration
- Will all participants be expected to expose any of their applications' functionality as services?

Privacy and Authority

- Consent
- Authority to use service
- Authority to access information the service provides
- Privacy and Confidentiality of Service-provided information

Technical Issues

- Resource implications of XML-based technologies
- Intermittently Connected Computer
- Service interface and implementation versioning

Web Service – Invoker Implementation

- At the Practice
 - Embedded in PMS'?
 - PMS to Web Services 'Agent' through the File System?
- At the Community Health Centre
 - ?
- At the rural health provider/community nurse practice
 - ?
- At the Diagnostic Service Provider
 - Embedded in local applications?
 - Orchestrated through Enterprise-wide SOA implementations
- Who deploys, configures and supports service infrastructure in small businesses and small organisations
 - General Practice Divisions?
 - Non-GP practitioner organisations?
 - Third-party providers?
 - States and Territory authorities?

Web Service – Invoker Implementation

- At the Hospital
 - Embedded in Vendor-provided applications?
 - Orchestrated through Enterprise-wide SOA implementations?
- At the health region/area health service
 - Embedded in Vendor-provided applications?
 - Orchestrated through Enterprise-wide SOA implementations?
- At the state/territory centralised IT facility
 - Embedded in Vendor-provided applications?
 - Orchestrated through Enterprise-wide SOA implementations?
- At regulatory and administrative oversight agencies
 - ?

Web Service – ‘Exposer’ Implementation

- What services are contemplated
 - National Provider Identifier Service
 - National Consumer Identifier Service
 - ?
- Service provenance
- Service registration and discovery
- Quality of Service
 - Availability
 - Redundancy
 - Performance

Standards Maturity Model

Level 5 – “Functionally adequate” version is ubiquitous.

Level 4 – Many apps use “functionally adequate” version.

Level 3 – “Functionally adequate” version of standard is approved.

Level 2 – Version 1.0 of the standard is proposed.

Level 1 – Many recognize the problem.

Level 0 – Few realize that there’s a problem.

Web Services Standards Maturity

Level 5 – TCP/IP, HTTP, SSL

Level 4 – XML , S/MIME

Level 3 – SOAP, WSDL, WS-Security, WSRP, XMLDSIG, XMLEnc

Level 2 – WS-BPEL, WS-Reliability, WS-Eventing, WSDM

Level 1 – Data semantic standards

Level 0 – Transactional semantic standards