

Electronic Transmissions White Paper

Introduction:

Clinics are using technology to their advantage to

- Minimise data entry errors with patient records
- Minimise transcription errors with test results
- Protect patient privacy and exchange data securely
- Increase operational efficiency and decreasing the time it takes to receive patient results
- Introduce initiatives & services that help improve the overall patient experience

Computer Frameworks have developed a Reporting System that uses standard messaging protocol for the health industry and has been implemented at a leading IVF company with clinics based in Canberra, Sydney and Perth. It has helped these clinics with the process of generating and distributing accurate results through a number of delivery channels.

Clinicians and staff now have more bandwidth to focus their time and attention on clinical activities and provide greater patient care.

The Problem:

The IVF clinic did not have the flexibility to effectively distribute reports, nor did they have the agility to deliver accurate reports in an auditable, timely and secure manner.

Our system replaced a legacy system that:

- Did not have the ability to track recipient or the date and time delivered
- Was not compliant with accreditation requirements
- Required a lot of manual processes for generating and delivering reports
- Had no archiving capability
- Delivery status was not known
- Had limited options for delivery

The Approach:

Computer Frameworks met with key client staff and collected information to ensure the problem was understood, and all requirements were captured. This information allowed us to develop a high level solution design which covered the underlying system architecture, system functionality, business processes, system

integration and report delivery strategies.

Using the latest Microsoft .NET technology, our team was able to develop a bespoke solution that addressed the following requirements:

- Automatic consolidation and generation of reports
- Automatic validation and transmission of reports
- Reports delivered using a number of methods (Post, Fax, Electronic Data Exchange)
- Electronic tracking of the report delivery status, including delivery time and recipient
- Handling exception cases, where reports are reissued or resent
- Comply with strict NATA requirements on auditability

The system was rigorously tested, and all requirements were accounted and verified against the traceability matrix. An incremental approach to rollout was taken to ensure the transition was smooth and to minimise any business disruption. The Reporting System was successfully deployed at all three sites (Sydney, Canberra & Perth).

The Benefits:

The following outlines immediate benefits gained from the new reporting system.

Improved manageability of reporting

- Reports are stored in a centralised location
- Reports are validated prior to distribution
- Reports can be rapidly printed and sent to recipients
- Reports are transmitted using HL7, which allows for greater interoperability
- Users are notified of any failed deliveries
- Recipient information is easily managed

Greater traceability

- Reporting activity monitoring
- Users can clearly identify when reports have been re-issued or re-sent

The reporting tool has increased the clinic's maturity and has moved it one step closer to a unified messaging standard within the Health Industry in Australia.