



AURORA FOR IVF CASE STUDY

THE CUSTOMER

A leading Boston-based IVF center with a main hospital site and four satellite offices, manages 1600 infertility cycles per year. The staff includes over 40 nurses and 15 doctors in addition to a dozen embryologists.

THE PROBLEM

Medicated infertility cycles are complex and emotionally challenging for patients. Close monitoring of patients and daily medication adjustments is required. The infertility cycles were being managed on a single copy paper flow sheet for each patient with manual recording across nursing staff at each site. This raised concerns around potential transcription errors due to legibility and lag time of data entry and ultimately whether this might negatively impact patient outcomes. Staff were also burdened by inefficiencies associated with the time required to manually input data.

Data entered manually by nurses from multiple sources includes

- » Demographics
- » Insurance information
- » Clinical information and alerts
- » Daily test results

Multiple transcriptions often required, for example oocyte fertilization results were

- » Recorded at the microscope by hand on paper
- » From there, typed in an email
- » From email, hand copied onto the paper flow sheet
- » From the flow sheet, relayed to the patient by phone

THE SOLUTION

The clinicians looked at two leading competitors in the IVF software space but these solutions did not provide all the desired features and would mean adoption of new workflows. The decision was made to use Aurora software to replicate their manual flow sheets.

A designated team worked with Boston Advanced Analytics for 60 days to analyze the current processes and how data was entered into flow sheets to determine what was needed. After three months of usage testing with real patients and iterative development based on feedback from the clinical site, Aurora for IVF was rolled out to the hospital and all satellite offices.

THE RESULTS

Time Savings

- » Information automatically drawn from existing databases
- » Automated SART upload of cycle data
- » Non-cycle specific data automatically transferred to subsequent flow sheets
- » Tables and views organize flow sheets for specific tasks
- » Whiteboard shows patient cycle schedule driven by embedded procedure protocols

Accuracy and Safety

- » Data entered at the point of generation
- » Warnings and alerts are integrated into the program

Accountability and Privacy

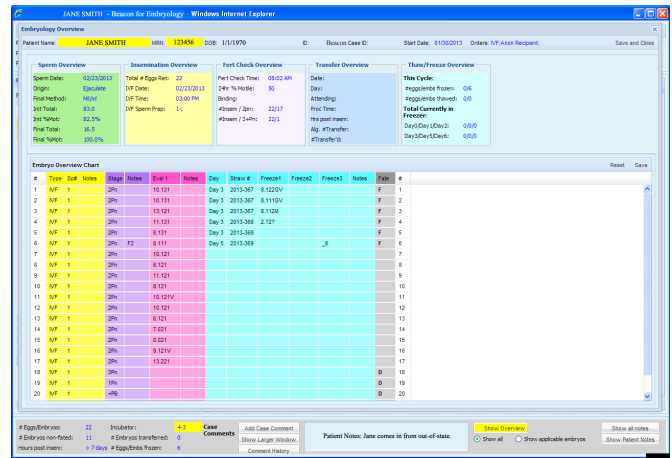
- » Physicians' orders require an electronic sign-off
- » Nurse cycle instruction calls are electronically signed off
- » Computer maintains the history of each field's data by user, date, time, and entry
- » Flow sheets can be printed or sent in HIPAA mode, with deidentified patient data

Access and Reporting

- » Embryology data from hospital is integrated into flow sheet
- » Authorized users and read/write access for specified fields
- » On call doctor, nurses, and embryologists have remote access to the flow sheets to write orders, report results to patients and see schedules

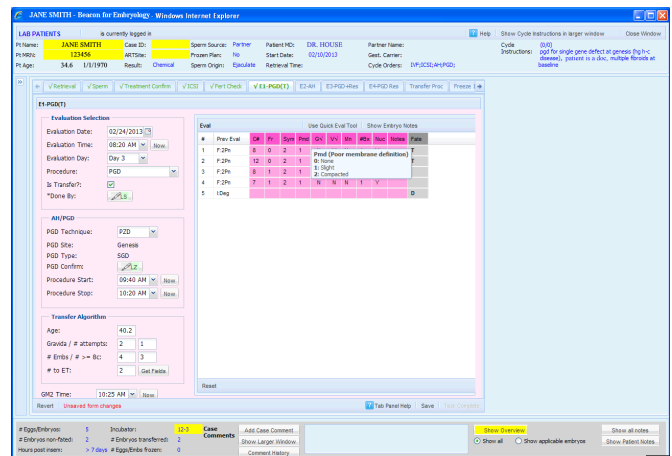
Research and Quality Control

- » Flow sheets and tables easily sorted and searched for QA projects and research
- » All comments are coded to support research on specific characteristics, for example age, quality of embryo etc.
- » Frozen embryo inventory is managed



AURORA IVF EMBRYOLOGY LAB DASHBOARD

Example Embryology Lab dashboard including color coded stats on embyo, fertility check, transfer, freezes and more.



AURORA IVF EVALUATION AND PGD DASHBOARD

Example evaluation and PGD dashboard including PGD technique and evaluation chart.

About Boston Advanced Analytics

Boston Advanced Analytics specializes in workflow and data analysis software for the healthcare industry, transforming the way practitioners are managing patient populations and researchers are advancing the science of disease cure and management. For over 10 years, we have provided top hospitals, clinics and researchers on three continents, with a 360 degree view of patient data to support a precision medicine approach. Our technology platform blends cloud technology, deep operational expertise, and advances in genetic testing and medical wearables to build a network of care communities and streamline clinical operations.



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