

TEST AUTOMATION

CHALLENGES & OPPORTUNITIES

JUNE 17, 2019



DISCUSSION TOPICS

- **Market Challenges**
 - **Program Focus and Approach**
 - **Implementation Approach**
- **Test Automation Value**
- **Open Discussion**

Testing has long been one of the greatest challenges for Health Systems in support of EHR implementations, upgrades and surround technologies.

A LACK OF...

- Time
- Budget
- Ownership & Accountability
- Capacity to Test More
- Formal Test Plans
- Qualified Test Resources
- Integrated Testing

A NEED TO...

- Manage Change
- Optimize and Protect your EHR investment
- Eliminate the "I Love Lucy" syndrome
- Have formal Test plans that
 - Increased Test Capacity and Frequency
 - Have defined Outcomes to Assure Quality
 - Tangible results matching expectations
 - Negative Test Scenarios
- Complete Scope of Testing
 - Technology (Epic/Cerner/MEDITECH)
 - Surround Environments/Ecosystem
 - Performance

Santa Rosa has developed a full service Test Solution that assures Test Success from initial Go Live through Upgrade Management

RESPONSE: COMPREHENSIVE TESTING PROGRAM

A full service 'End to End' Test solution that couples advanced test technology with industry certified resources who understand the Health System Eco-system

People

- Experienced & Certified Test Resources
- Knowledge of Hospital Operations
- Technology and Ecosystem familiar
- We know Testing

Ready Script Library

- Foundational Pre-Defined Scripts
- Defined by Category of Scripts
- The Value of many client input
- Continued Maintenance for Upgrades

The Proven
Path to Test
Success

Tool

- Comprehensive Tool
- Mimics your workflow
- Non Obstructive Software
- Streamlined Error Correction

Expedited Results

- Success in Months vs Years
- Assess the Current State
- Develop Automated Test Charter
- Build custom Script Library
- Test & Repeat

Solution Components

An EHR centric script library that is advanced by adding client specific scripts and maintained by released based enhancements

Deliver, Build, & Maintain

Initial Scripts Library

- Patient Access
- Emergency Department
- Clinical Inpatient & Outpatient
- Clinical Ancillary
- Revenue Cycle

Client Customization

- Develop Test Charter
- Identify Gaps
- Conduct Turbo Capture Sessions (Your workflows)
- Add client customized scripts
- Support for on-request projects

Release Enhancement

- Develop scripts to address new module function
- Additions to Core scripts library
- Supports existing modules

One-time Fee

Custom Development

Annual Fee

Performance Management & Reporting

- Executive Dashboards
- Script Performance Metrics (Pass/Fail)
- Error Detection and Escalation



IMPLEMENTATION APPROACH

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Test phases that will allow you to see the vast capability of our tool and the practical application within our Test Automation factory



Scope Creation

- Which applications?
- Which modules?
- Which Workflows?



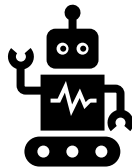
Workflow Capture Sessions (Turbo Capture)

- On-Site
- SME/Analyst walk through WF steps
- SRC Tester captures WF



Compare to Development Library Entries

- Client WF compared to library
- Reducing development effort



Create Custom Automated Workflows

- Unit/Functional
- Integrated
- Available to Client to run at click of a button



Maintain Customized Workflows

- Upgrades
- Patient Safety/Financial Code Changes

SESSION EXPLANATION

TURBO CAPTURE SESSIONS

Delivering Expedited Results through Process and Experience

Pre-Arrival

Identify Workflows
within each of the
Modules

Arrival

Turbo Capture
Sessions

Post-Arrival

Execute Automation of
Turbo Session and
Project Validation

Continuous
Advancement of
Functional Scripts

- **ROI**–Which workflows make the most sense to automate
- **Workflows are not always included in integrated testing**
 - Repetitive things you do to clean out TST for example
- **Important to know step by step**
 - **Written or well known**

- **SR on-site 1 to 4 weeks depending on scope**
- **Scheduling “in order” is preferred**
 - If not, then patient prep will be needed
- **SME/Analyst asked to walk thru WF in EMR**

- **SR Team will take captured sessions and create automated workflows**
- **Limited engagement needed**
- **Validation video sent to SME/Analyst**

- **At the ready team to support updates necessitated by release or upgrade changes**
- **Develop additional scripts or scope**
- **All functional/Unit scripts that can be tied to SIT/Integrated are used**

VALUE – TURBO CAPTURE SESSIONS

Delivering Expedited Results through Process and Experience

- **Does not replace manual testing 100%**
 - **Does replace repetitive testing 100%**
- **Availability of other team workflows**
 - **Registration**
 - **Staging of patient workflow to get to your workflow**
- **Data for Reporting Team**
- **Speed of accomplishing repetitive tasks**
- **Timings of not only entire workflow but each step**
- **Errors come with screen shots and description of error e-mail to responsible party for vetting**
- **Training standardization**




VALUE OF AUTOMATON

HARD TO QUANTIFY ROI IMPACT

ROI that can only be Quantified Based on After the Fact Events

Category	Value of Testing	Impact of Non Automation
Patient Safety	<ul style="list-style-type: none"> ▪ Repeatable scripts for critical clinical workflows. ▪ Ensures patient safety is realized for even the smallest of code changes 	<ul style="list-style-type: none"> ▪ Patient Satisfaction ▪ Legal Challenges
Revenue Integrity	<ul style="list-style-type: none"> ▪ Critical revenue streams are tested to ensure work queues and processes are always challenged and validated ▪ Dynamic data assures claims are not interrupted during processing 	<ul style="list-style-type: none"> ▪ Lost Revenue ▪ Lengthy Recovery Process
User Adoption	<ul style="list-style-type: none"> ▪ One shot at a first impression ▪ Higher adoption rates with fully tested EHR's by clinicians and physicians 	<ul style="list-style-type: none"> ▪ Negative Clinical Experience ▪ Lengthy Acceptance Period
Increased Morale	<ul style="list-style-type: none"> ▪ Resources assigned to manual testing teams do not like to perform repeatable/mundane workflows ▪ Only 20% manual effort required through automation so resources with a passion for testing can take a deeper dives into scenarios 	<ul style="list-style-type: none"> ▪ Lack of actual testing ▪ Less attention to detail
Focused Remediation	<ul style="list-style-type: none"> ▪ Resources concentrate on the software fixes and enhancements. ▪ Maximizes value of the software 	<ul style="list-style-type: none"> ▪ Reduced Quality of Install ▪ Longer Remediation
Work Reduction	<ul style="list-style-type: none"> ▪ Resources extracted from the business to test are not replaced ▪ Challenges to find/get commitment for test support 	<ul style="list-style-type: none"> ▪ Patient Satisfaction (ER) ▪ Lost Revenue



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QUESTIONS

**OPEN
DISCUSSION**