THINGS TO CONSIDER WHEN EVALUATING AN ENTERPRISE SINGLE SIGN-ON SOLUTION

Single sign-on (SSO) has risen to the top of healthcare information technology executive’s minds as a healthcare technology priority. Much of this concern is due to the heterogeneity that has been created from best of breed IT strategies and the need to extend the life for many legacy IT applications as long as possible. According to the Annual HIMSS Leadership Survey¹, 79% of information technology executives ranked SSO/Identity Management as the highest priority for the next two years. However, only 22% of hospitals report having an enterprise SSO solution in place. This low rate of adoption may stem from a number of factors but it is clear that there is a limited source of reference material to aid in the selection process. The purpose of this article is to provide a concise reference guide as to what to consider when planning to evaluate, purchase and implement an SSO solution in a healthcare setting.

What problems are you trying to solve?
At the highest and broadest level, protecting patient health information (PHI) from unauthorized access and making it as easy as possible for providers to authenticate to the network are the primary objectives of SSO. These objectives do not have to be mutually exclusive if approached with the right set of requirements when evaluating vendor solutions. In addition, don’t take your eye off the ball. Your tactical objectives related to SSO may only be a starting point leading to full Clinical Context Object Workgroup (CCOW) deployment as part of an overall electronic medical record adoption strategy. CPOE, PACS integration, closed-loop medication administration, and the majority of clinical initiatives will require fast, secure and coordinated access of provider and patient identifiers.

Can an SSO acquisition be cost justified?
What percentage of Help Desk calls are for password resets and what are the costs associated with these calls on an annual basis? If 25% of your Help Desk calls are related to password issues and you factor in the number of end users, the number of applications and associated passwords, the Help Desk costs alone, to an organization with 2000 end users, can range between $170k and $300k per year. Do the math. Even with implementation and maintenance costs, an investment in SSO can demonstrate a positive ROI in less than 24 months.

What is the best way to evaluate a vendor?
A quick web search for single sign-on will provide you with a number of vendors who specialize in this area. Some vendors provide software-based solutions while others provide (hardware) appliance-based options. The following table outlines some of the key business needs associated with SSO and lists system requirements to consider during the system selection process. Using this table, you can prioritize the requirements against your specific needs and then score each vendor you are considering.

¹ 17th Annual HIMSS Leadership Survey sponsored by ACS
## Business Needs and SSO Requirements Guide

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<th>Business Need</th>
<th>SSO Requirement</th>
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| Manage single user-id and password for all applications | • Centralized password management  
• Support stronger password policies  
• Ability to easily add applications |
| Quick network authentication                           | • Fast login and logout capability |
| Ability to integrate with existing directories          | • Ability to integrate with multiple directories (e.g., eDirectory, Active Directory) |
| HIPAA compliance                                       | • Easy policy creation and management  
• Audit trails |
| Ability to support strong and multi-factor authentication methods | • Support for smart cards, digital certificates, biometrics, tokens, proximity cards |
| Security and failover support                          | • Support for 168-bit Triple DES encryption  
• Ability to support multiple options for log off, lock down and other job specific requirements  
• Failover support |
| Multi-platform support                                 | • Ability to support heterogeneous environments (e.g., thin client, fat client, Citrix) |
| Easy to implement, support and upgrade                 | • Easy administration tools  
• Minimal vendor assistance for upgrades |
| Scalability                                             | • Solution must scale to support organization growth and expansion |
| CCOW/Context Management capable                        | • Ability to support CCOW enabled applications |
| Vendor expertise and support                            | • Single sign-on experience with a broad range of healthcare and non-healthcare applications  
• Extensive 24x7 support |
| Training                                                | • Minimal time to train end users and administrators |

## Conclusion

The demand for SSO will continue to increase as access to more and more specialized applications are required for care providers to treat their patients. Compliance, reduced operating expense, improved customer service and productivity are key requirements when evaluating vendor solutions. Evaluate your primary clinical applications and strategy against the expertise of the vendors you are considering, to ensure that the vendor has expertise with different types of applications; including Web, Windows, Java, terminal emulators and legacy applications. Selecting a vendor that provides a solution only to the healthcare industry has no advantage, as it is more important to find a vendor with a proven solution that seamlessly integrates both healthcare and non-healthcare applications into a centrally managed enterprise directory and who can partner with healthcare organizations to build a firm foundation to support efficient clinical workflow which is critical to the success of CPOE, EMR and other key clinical and patient safety initiatives. This quick reference guide will aid in addressing the most salient features to consider when evaluating a potential SSO vendor.

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