



EHR Selection Education



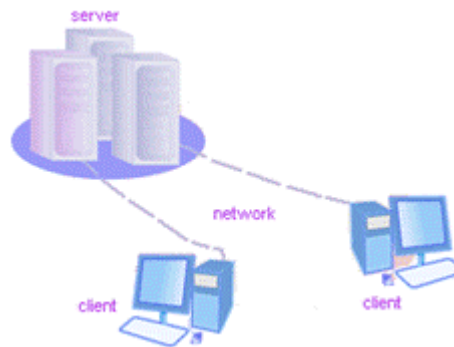
Common (Healthcare) IT Acronyms Explained

- **ASP – Application Service Provider**
 - » A software delivery model where the license is either bought or leased, and the solution is hosted and served remotely either by the vendor or a third-party hosting service provider. In this model, the practice or the third-party provider is responsible for non-vendor maintenance and upgrades.

- **SaaS – Software-as-a-Service**
 - » Similar to the ASP model, SaaS is more of a leased software license solution where the vendor is typically responsible for both hosting and maintaining the software solution. The emergence of cloud computing (virtual clusters of super computers) and expanded Value Added Reseller services is blurring the distinction between ASP and SaaS, perhaps rightly so. As such, ASP and SaaS

- Client/Server Architecture

- » A model of application service/delivery that relies on centralized (server) deployment of software solutions with distributed access (for the clients).



- Encryption

- » The use of cryptographic means to scramble (encrypt) information (plain text) into unreadable (cipher text) form to assure safe storage or transmission of data. Information is scrambled (encrypted) and unscrambled (decrypted) using keys known only to the source and the target.

- **HIE – Health Information Exchange**
 - » A platform for the electronic exchange of healthcare information across several care settings to facilitate the coordination of care through the continuum of care, while eliminating duplication of efforts.

- **VAR – Value Added Reseller**
 - » An IT Service provider that also sells software licenses, as well as other services such as Application hosting, software related training and support, software/system maintenance, etc.

Hardware Considerations

- Informed by:
 - » Software Delivery Model (Onsite Hosting vs. Remote Hosting)
 - » State of current technology in use at the location
 - » Requirements of the software solution
- Categories of Hardware
 - » Servers (application, database, exchange, fax, file, image, etc)
 - » Network (Routers, Switches, Wireless Access Points, etc)
 - » Data back-up/Storage
 - » Desktops (standard, Thin, Wall-Mounted)
 - » Point-of-Care technologies (Computers-on-Wheels – CoWs, Tablets, Laptops, Thin Clients, etc.)
 - » Other peripherals (Printers, Scanners, Digital Pads, iPads, Medical equipment - EKG, Electronic Scales, etc)
 - » Uninterruptible Power Supply (UPS)

Hardware Cont'd.



Tablet PC



UPS



Server



Tape Library



Server Rack



Wireless Access Point device



Thin Desktop



Computer-on-Wheels

Software Delivery Considerations

- **Self Hosting**
 - » Application is hosted onsite by the practice.
 - » Requires all necessary hosting equipment/resources:
 - Servers (application, DB, Terminal, Image/Fax, Interface, etc)
 - Server Room Equip. (Server Rack, UPS, Data backup, Cooling, Networking)
- **ASP/SaaS**
 - » Vendor or Third-party Hosting and appropriate services for a set fee (including software license and maintenance and support services).
- **Regional Offerings**
 - » ASP offerings by Regional Health Systems, PO, PHOs, etc.
 - » May require membership/affiliation

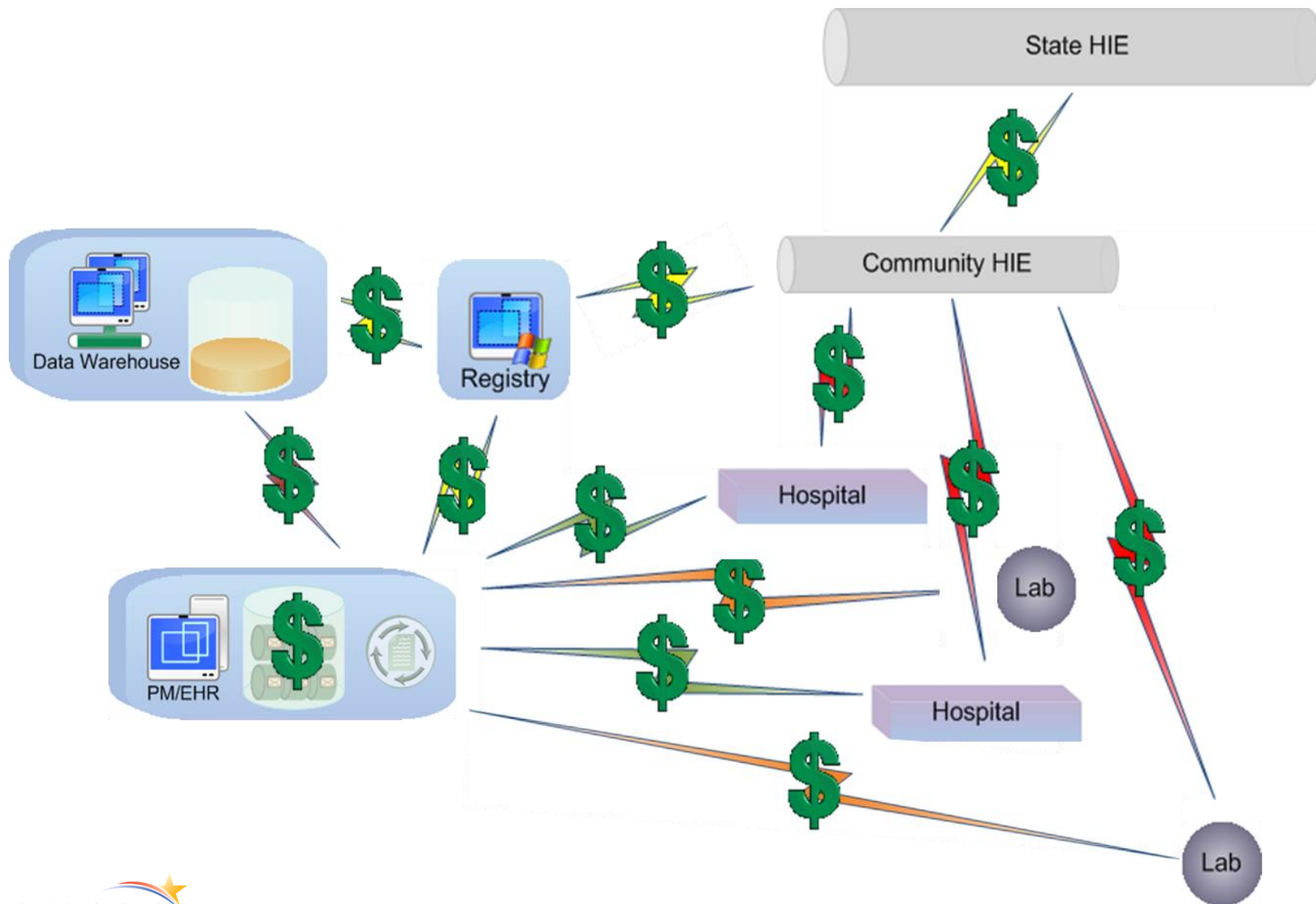
Pros & Cons of Self-Hosting vs. ASP/SaaS

Self Hosted (Client-Server or Turnkey)	ASP Hosted or Software as a Service (SaaS)
The server is in your location and in your control	The server is not at your location and not in your control
In the event of a server hardware or software failure, you may not be able to get your problem resolved right away. Typically, 4 Hr response (a phone call), next day service, 8x5 availability	In the event of a server hardware or software failure, ASPs tend to provide more fault tolerant systems. Typically, 24x7 x365 support, and a 99.99% availability guarantee.
You can access your information from a secure VPN connection or from any computer on the Internet with additional software	You can access your information from any computer on the Internet, at anytime, and from anywhere
You maintain the data and provide for data backup	You are not responsible for making daily backups
Access to your data is faster and there is no need to worry about loss Internet connection.	Without a proper service level agreement (SLA), access to your data may be slower, and you may experience interruptions in information access and to your workflow due to Internet connectivity issues
If you terminate the relationship with your vendor you own the software and it is accessible to you	If you terminate the relationship with the vendor you do not have access or ownership of the software. You need to get contractual issues in place to define who owns the data
Without proper investments in security measures, risks for breaches in security, and data leakage (PHI) are higher	Many ASP vendors provide better levels of security than most practices would be able to afford. An ASP should clearly define responsibilities ,and describe how they are protecting the data
	Hardware requirements are fewer with an ASP system - a web-browser and a decent workstation is pretty much all that you need to get up and running
	Many ASP vendors provide a variety of other products and services to augment your office staff further reducing your labor costs

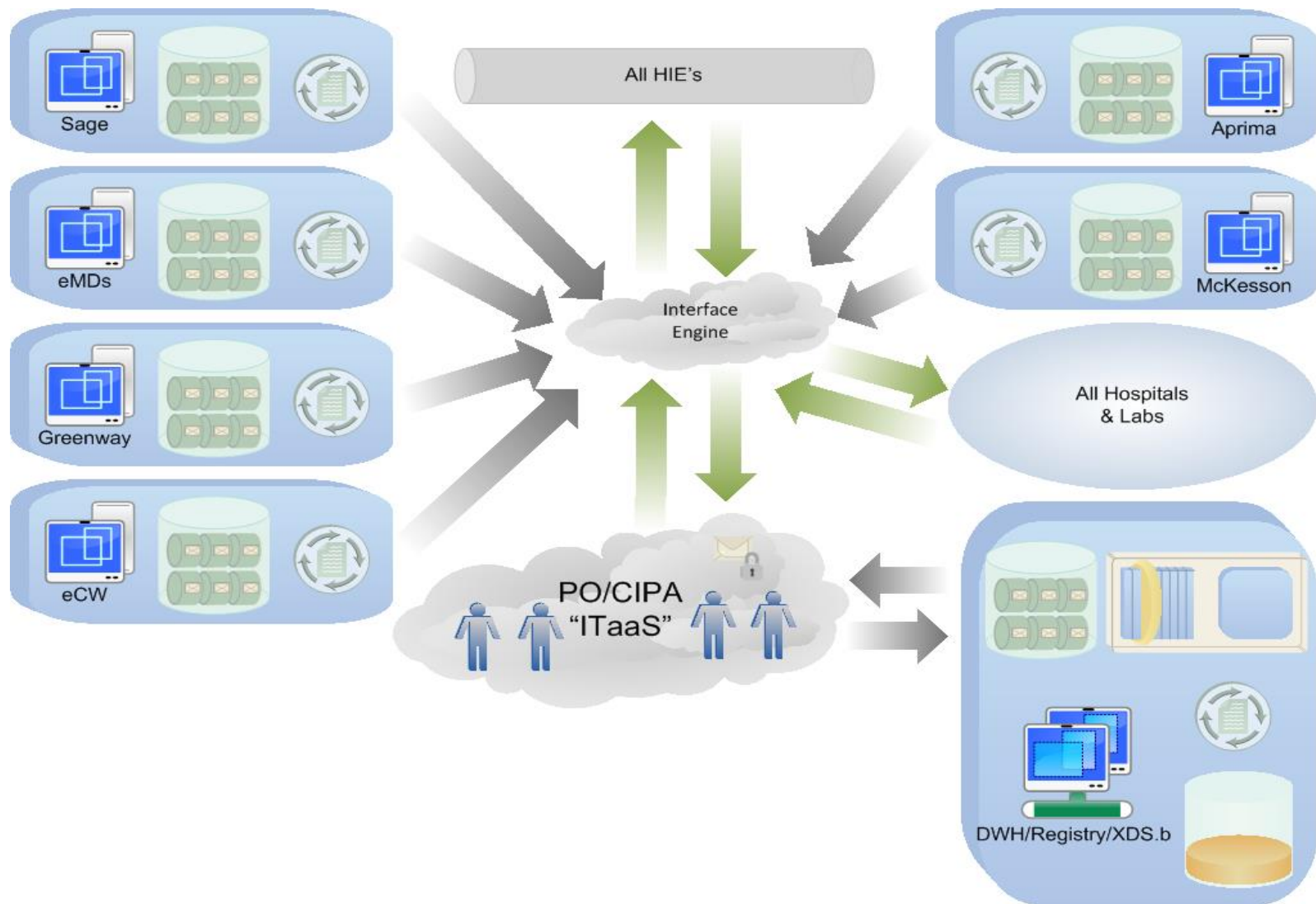
Interface/Interoperability Considerations

- Interface means the ability to exchange data electronically with:
 - » Labs
 - » Radiology
 - » Health Information Exchanges
 - » Public Health Registries and Syndromic Surveillance Systems
- Interoperability requires the ability of solutions to work seamlessly across several platforms and technologies (such as the Interoperability of Apple technologies and Microsoft-based hardware/software solutions)

Interoperability Dilemma



DWH Interoperability Development





The Office of the National Coordinator for
Health Information Technology 



END



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