



Should Berkholtz Medical Clinic Adopt a Cloud-based EHR System?

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AGENDA

1. Controversy
2. Recommendation
3. Benefits and Evidence
4. Conclusion
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“In today's world, businesses must stay up to date with cloud technology to stay agile and remain competitive”

-Joe Black, CEO, Sales-i



Controversy

Should Berkholtz Medical Clinic adopt a cloud based Electronic Health Records System?

Pro: Save on hardware and IT support costs, get access to data from any location, and easily expand in the future

Con: Possible security and connectivity issues, more control over software and data



What is the Cloud?



Cloud applications store user's data and software at a remote location. All access to the data and application is through the internet.



Recommendation

BMC should adopt a cloud based EHR

- 1) Lower costs for hardware and IT support
- 2) Adapts to future business expansion
- 3) Easy access to data from any location
- 4) Reduced errors in claims and coding
- 5) Less worry about security and access issues



1) Lower costs for hardware & support

Lower IT costs

- No or low cost local server hardware
- No downtime due to local hardware failure
- Smaller hardware footprint
- Licensing costs are less than traditional client-server systems
- Software support is supplied by the vendor, no need to hire in-house or consultants



1) Lower costs for hardware & support

26%

Estimated savings over three years

	Internal IT	The Cloud
Capital Investment	\$40,000	\$0
Setup Costs	\$10,000	\$1000
Monthly Services/Month	\$0	\$2400
Monthly Labor/Month	\$3200	\$1000
Cost Over Three Years	\$165,200	\$122,400

Estimated costs of infrastructure for two application servers, two database servers, and a load balancer across internal and cloud applications. (Source 12)



2) Adapts to future business expansion



- Capacity planning is taken care of by the vendor
- No downtime for a new office
- New hardware does not have to be purchased and housed to fit data growth
- No need to pay for special connectivity (such as “dark fiber”) to connect the two offices
- No new IT hires



2) Adapts to future business expansion

New offices can offer a less restrictive environment

- ✓ A variety of devices can be used to access the EHR in the office, such as phones, laptops, and tablets
- ✓ Office spaces can be free form without the need for elaborate workstations
- ✓ Secured wireless connections mean no need for fixed workstations



Flexible Work Environment



Photo credit - www.futuristarchitecture.com



3) Easy access to data from any location

Simpler remote access for doctors and staff away from the office

- ✓ Doctors and staff have access to support away from the office
- ✓ Doctors and staff can easily set up home offices
- ✓ Staff is more easily able to telecommute
- ✓ Updates to information are in real time across devices



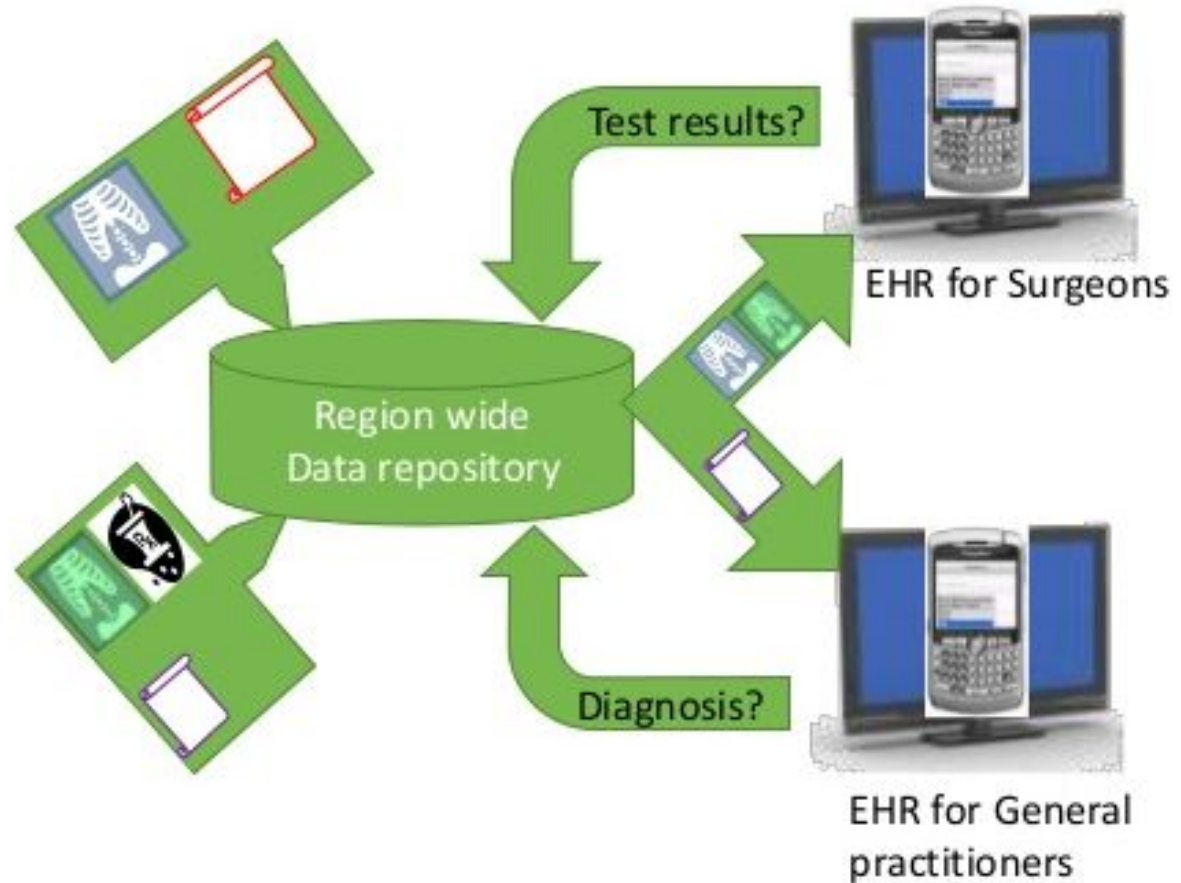
3) Easy access to data from any location

Faster and easier access for patients and other providers

- ✓ Support for patient healthcare data portals
- ✓ 24/7 access for providers and patients
- ✓ Medical information can be easily and securely transmitted from one provider to another
- ✓ Updated data is visible to all users in real-time

Cloud services can decrease:

1. Time to serve.
2. Tele-medicine
3. Prescription filling
4. Medicine cross referencing





4) Reduced errors in billing and claims

Software stays up to date with Meaningful Use and ICD 10 coding changes

- ✓ Rapid changes in healthcare regulations are handled by software vendor
- ✓ Less chance of government and insurance audits
- ✓ ICD coding changes are taken care of by vendor

91%

of businesses said
the cloud makes it
easier to meet
government
compliance
requirements





4) Reduced errors in billing and claims

Easier and more accurate uploads to payors

- ✓ Real time integration with payors
- ✓ Payment time is reduced because of automated claim submission and increased accuracy
- ✓ Data integration means less claims research for staff
- ✓ Real-time data changes mean more accurate patient and payor information for the claims



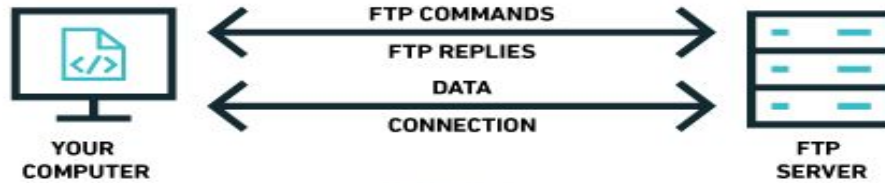
5) Less worry about security issues

Cloud systems are up to date on security

- ✓ HIPPA compliance is kept up to date by vendor
- ✓ Data is automatically backed up and stored
- ✓ Disaster recovery planning is easier

CLOUD SYSTEMS USE STATE OF THE ART SECURITY

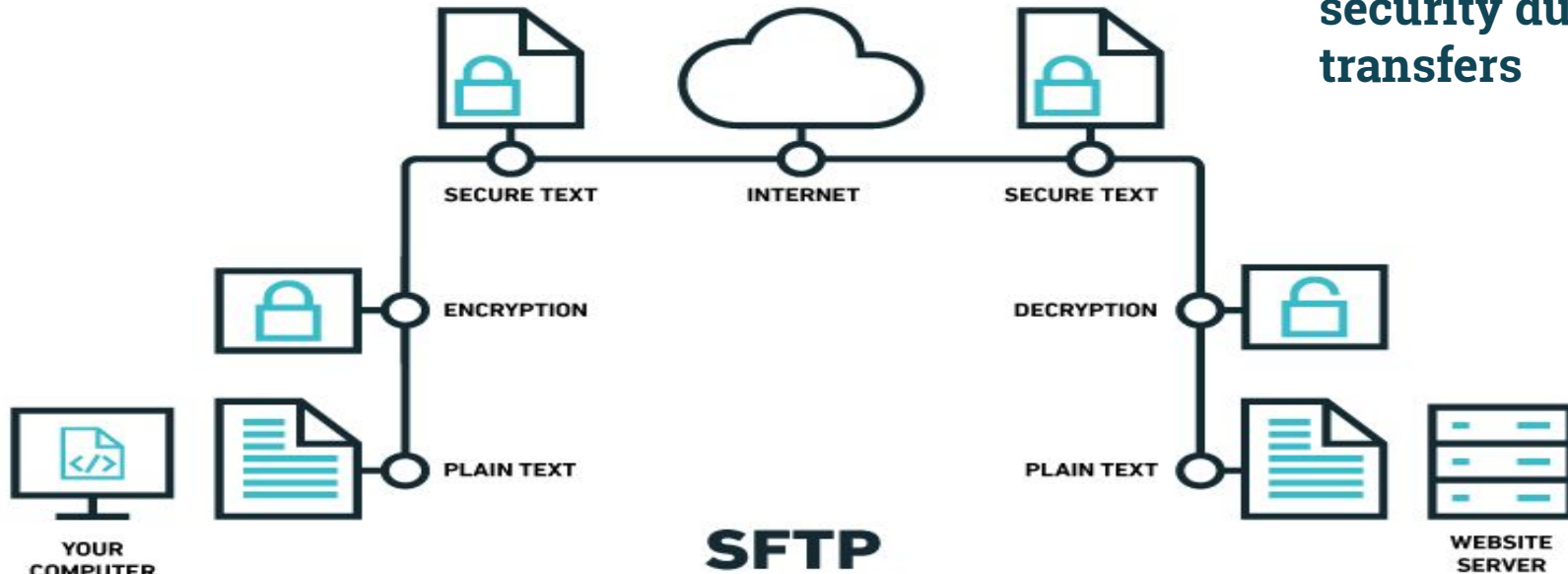
- Access control lists
- Whitelisted IP addresses
- Two factor authentication for all connections
- SFTP – state of the art security for file transfer protocol
- Single sign on (SSO) programs for ease of user sign on between programs
 - Increases user compliance with security measures
 - No more passwords on sticky notes



FTP

FILE TRANSFER PROTOCOL

SFPT uses file encryption for more security during data transfers (source 18)



SFTP

SECURE FILE TRANSFER PROTOCOL



5) Less worry about security issues

Redundant internet connections can overcome internet downtime

- ✓ In-office phones or laptops with 4G mobile hotspots can overcome internet downtime
- ✓ Connect with an alternate internet provider for a backup
- ✓ Backup systems must be tested



Conclusion

Berkholtz Medical Clinic should adopt a cloud based EHR System because of:

- ✓ Cost savings
- ✓ Future expandability
- ✓ Automatic software updates
- ✓ Portable access
- ✓ Modern security



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