UNLOCKING THE POWER OF THE HIE: REVOLUTIONIZING DIAGNOSTIC IMAGE EXCHANGE

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- Explore the drawbacks of traditional image exchange methods
- Highlight the advantages of HIE systems
- Analyze the positive return on investment (ROI) associated with adopting HIE systems for diagnostic image exchange
- Describe and share survey findings

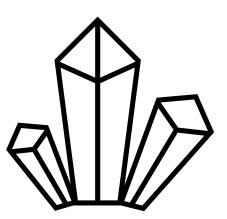
Diagnostic imaging plays a pivotal role in modern healthcare for accurate diagnoses and effective treatment planning.



DETERMINING ROI

HARD ROI

Quantifiable benefits of digital innovation



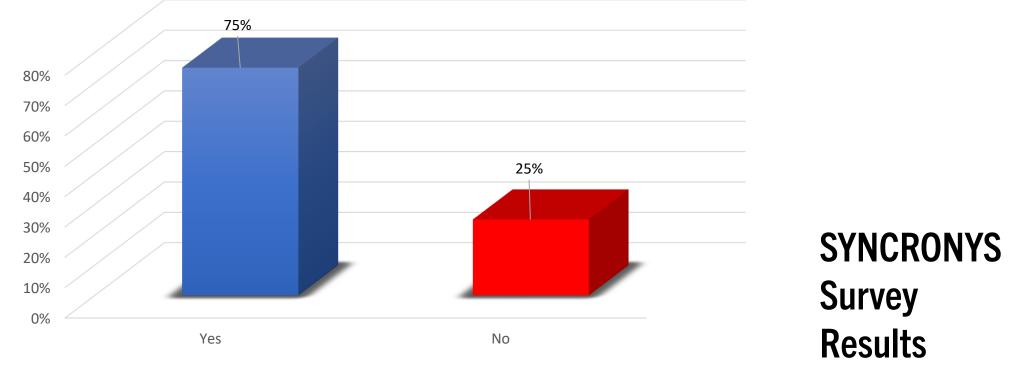
SOFT ROI

Intangibles (customer loyalty, brand strength)

Based in patient satisfaction



NEEDS OUTSIDE IMAGES TO TREAT PATIENTS



Yes No



TRADITIONAL IMAGE SHARING

• Loss

• Damage

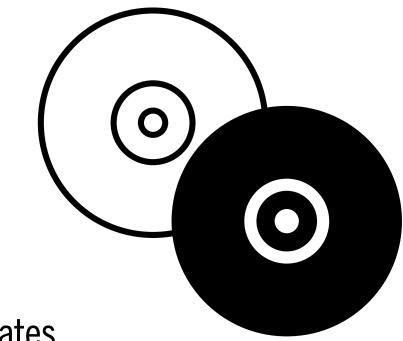
RISKS

- Delays
- Incomplete transfers
- Misplacement

COSTS

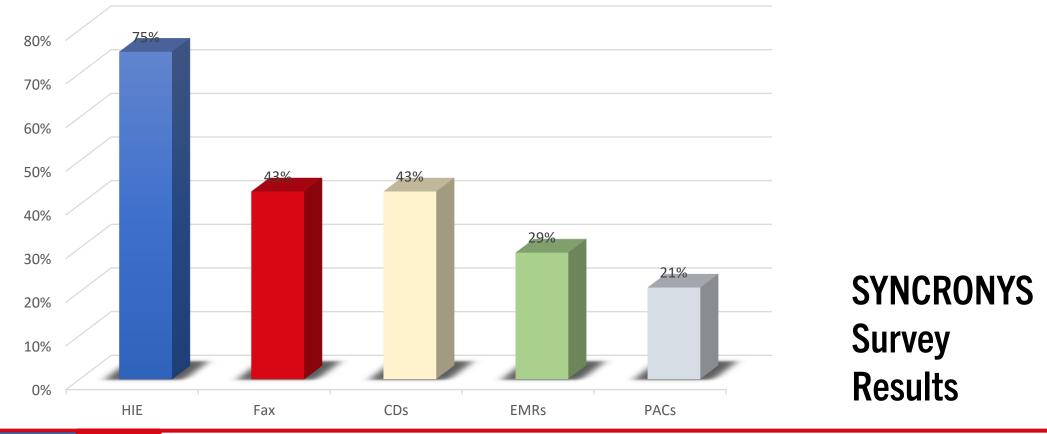
- Staff expenses
- Physical media
- Workload issues

- Staff burnout
- Increased turnover rates



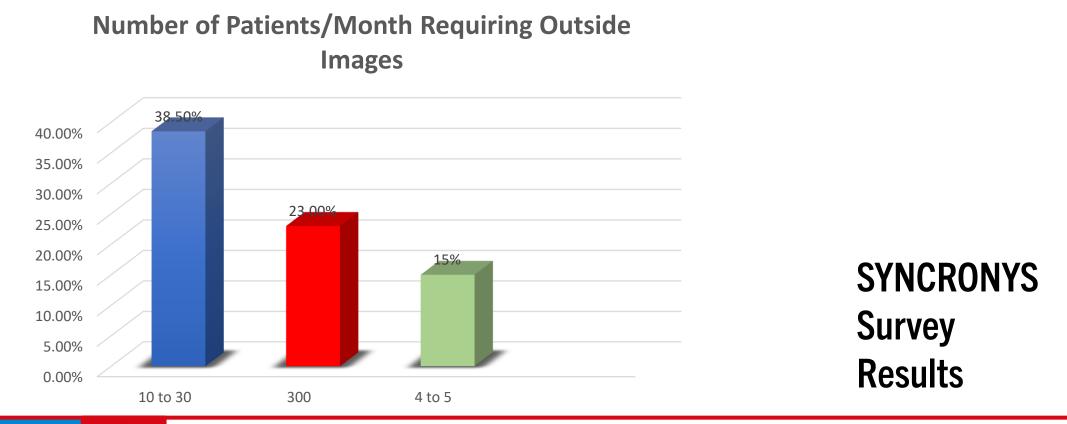
CURRENT METHOD FOR OBTAINING IMAGES

Method for Obtaining Images





ESTIMATED NUMBER OF PATIENTS/ MONTH REQUIRING OUTSIDE IMAGES





TRADITIONAL IMAGE SHARING

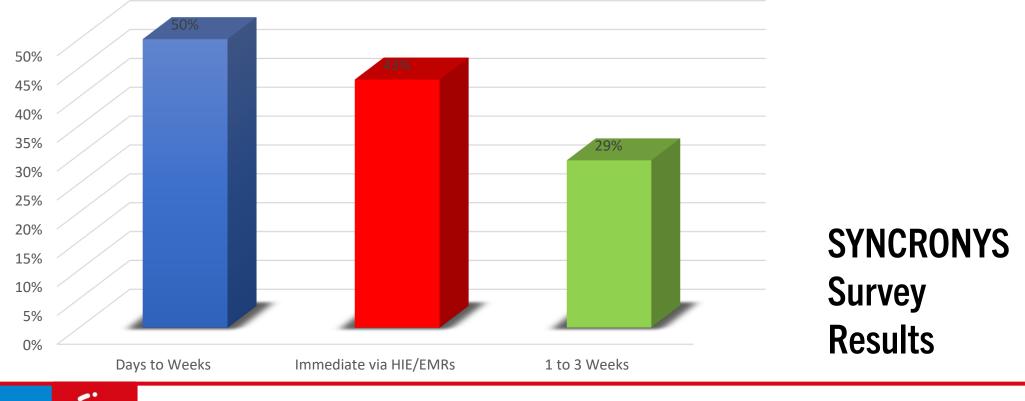
YALE CASE STUDY

- Yale burned 142,000 imaging studies to CDs or DVDs
 - At their average cost of \$3.95/ea, that's nearly \$550,000 **before** factoring in labor costs!
- Over the course of 2020, Yale sent 165,000 exams over an HIE
 - That saves more than \$650,000, again **before** accounting for labor!
- With an estimated 350,000 studies transferred in 2021, savings are forecasted to exceed \$1M



ESTIMATED AVERAGE TIME TO OBTAIN IMAGE REPORT

Average Time to Obtain Image/Report





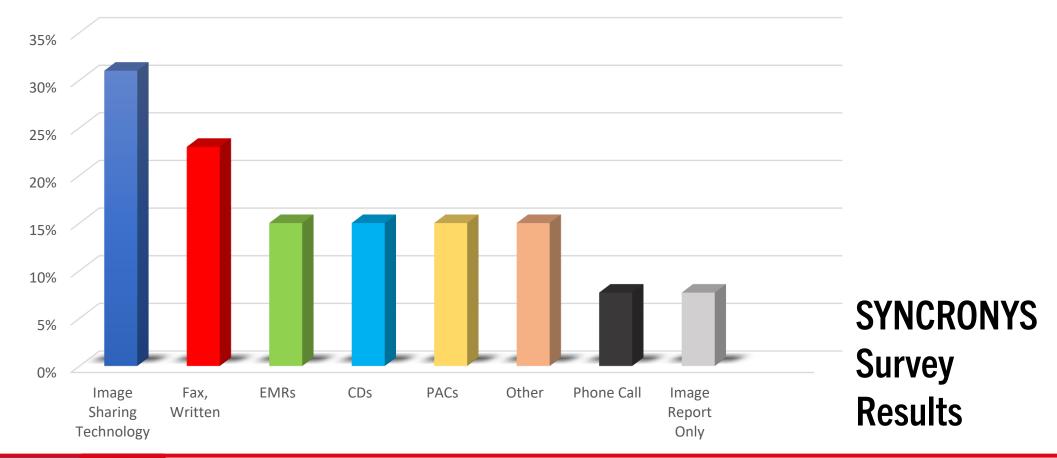
HIE IMAGE SHARING

- ENHANCED OPERATIONAL EFFICIENCY
- EFFICIENCY GAINS WITH HIE-ENABLED IMAGE EXCHANGE
- OVERCOMING VENDOR INTEROPERABILITY CHALLENGES
- STREAMLINED WORKFLOW INTEGRATION
- IMPACT OF ROBUST IMAGE SHARING IN CRITICAL MEDICAL SITUATIONS
- IMPACT OF ROBUST IMAGE SHARING IN CRITICAL MEDICAL

SITUATIONS

METHODS USED TO SHARE IMAGES WITH OTHER FACILITIES

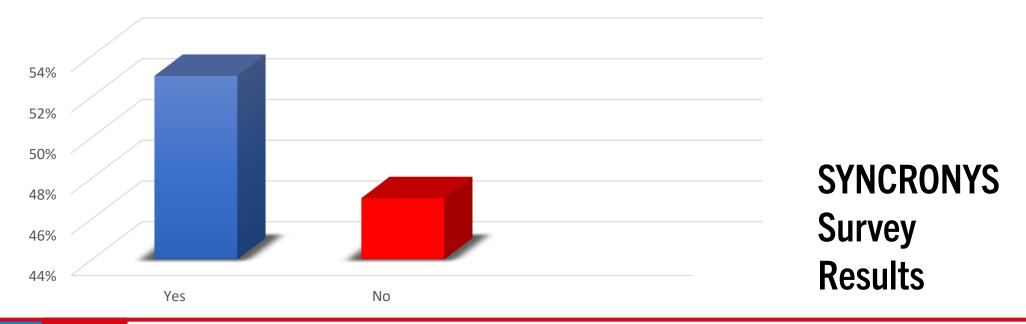
Methods used to share images with other facilities





REDUCED TIME AND COST BY NO LONGER NEEDING TO CREATE CDS FOR PATIENTS?



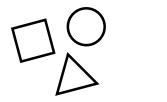




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MINIMIZING REDUNDANT IMAGES

- Importance of reducing duplicate imaging costs
- Cost saving through the HIE
- Study findings: HIE use associated with estimated annual savings in avoided repeat imaging
- Robust Image Sharing



REDUCING UNNECESSARY TESTING

ELECTRONIC IMAGE EXCHANGE BENEFITS

- Enables remote consultation for prospective transfer patients
- Empower receiving healthcare teams to provide transport recommendations and preparations in advance
- Significantly reduces avoidable patient transfers

REDUCING UNNECESSARY TESTING

UNM CASE STUDY

 In a separate case study conducted by UNM-H, the University of New Mexico Hospital's Level 1 Trauma Service demonstrated that allowing consulting doctors to see images before patient transfer allowed them to avoid more than 40% of potential transfers!





REDUCING UNNECESSARY TESTING

THE IMPORTANCE OF IMAGING REPORTS

- **15.6**% of radiologists felt imaging reports changed interpretations of new examinations
- 43.8% felt reports increased confidence in interpretation of new examinations.

HOWEVER...

• Only **23.5**% of radiologists and **5.3**% of Emergency Medicine physicians were confident in their ability to access reports efficiently.

REDUCING UNNECESSARY TESTING



OUR SOLUTION

- **40.6**% of radiologists felt outside reports reduced additional imaging recommendations
- Radiologists and EM providers placed a high value on sharing images from outside facilities
- The HIE grants access to patient's historical images

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REDUCING UNNECESSARY TESTING

COLLABORATION FOR WIDESPREAD ADOPTION

• There is an urgent need for collaboration between parties, including medical societies and influential physicians

THE GOAL?

- Achieving interoperability and standardization in image exchange
- Removing the requirement for patients to organize and send medical records for consultations
- Alleviating the burden on patients and their families

REDUCING UNNECESSARY TESTING

"The people who need to exchange images for consultation or clinical trials are people who are really sick and shouldn't be required to get their medical records organized and sent for opinions. What we're trying to do is remove that burden from patients and their families."

-David S. Mendelson, MD

Professor of diagnostic, molecular and interventional radiology at the Icahn School of Medicine, and diagnostic radiologist at Mount Sinai, both in New York. He is a co-author of the JACR paper, and is also co-chair of Integrating the Healthcare Enterprise (IHE), an initiative partnering health care professionals and industry to create security standards specific to healthcare IT.

KEY QUOTES ON HIE SHARED IMAGING BENEFITS FROM SURVEY RESPONDENTS

"Getting images from SYNCRONYS

enables us to schedule patients sooner as we don't have to wait to schedule them AFTER the image is received. Clinicians are more efficient as we don't have to spend time filling out fax forms or following up on status of an image. Clinicians save time as they don't have to go down to a facility and physically pick up a CD when we need a stat image if it is on SYNCRONYS."

"When an outside study is done, we can view the image not only for interpretation but to assess baseline quality. Many of studies performed at outside hospitals are not done to guideline and this can be directly determined by viewing. So, sometimes this allows us to know we do actually need to repeat the study and this may not have been obvious if a report alone is available."

OTHER SURVEY FINDINGS

- 92% of respondents said they do not have access to or have not collected data on cost reduction from using HIE Image sharing.
- 46% have seen a reduction in duplicate procedure
- 43% realized a positive impact on income by reducing duplicated images by having access to the HIE
- 72% said they have a VBC with a payor
- Opportunity?
- Any interested parties to work with us to find a concrete RIO using HIE to access images.



VALUE-BASED CONTRACTS:

PLACING PATIENT CARE AT THE FOREFRONT

- Value-Based Contracts
- Variation in provider metrics, placing patient care at the forefront
- Impact on healthcare provider compensation

CONCLUSION



Unlocking the Benefits of Health Information Exchange in Healthcare

- The power of HIE in Healthcare
- Replacing Outdated Physical Media
- Substantial cost savings through HIE
- Value Beyond Cost Savings
- Revolutionizing care delivery
- The future of healthcare

Thank you

A SPECIAL THANK YOU TO

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Nathalie Knowles

Administrative Coordinator SYNCRONYS



