Edison™ Datalogue™ Connect Overview
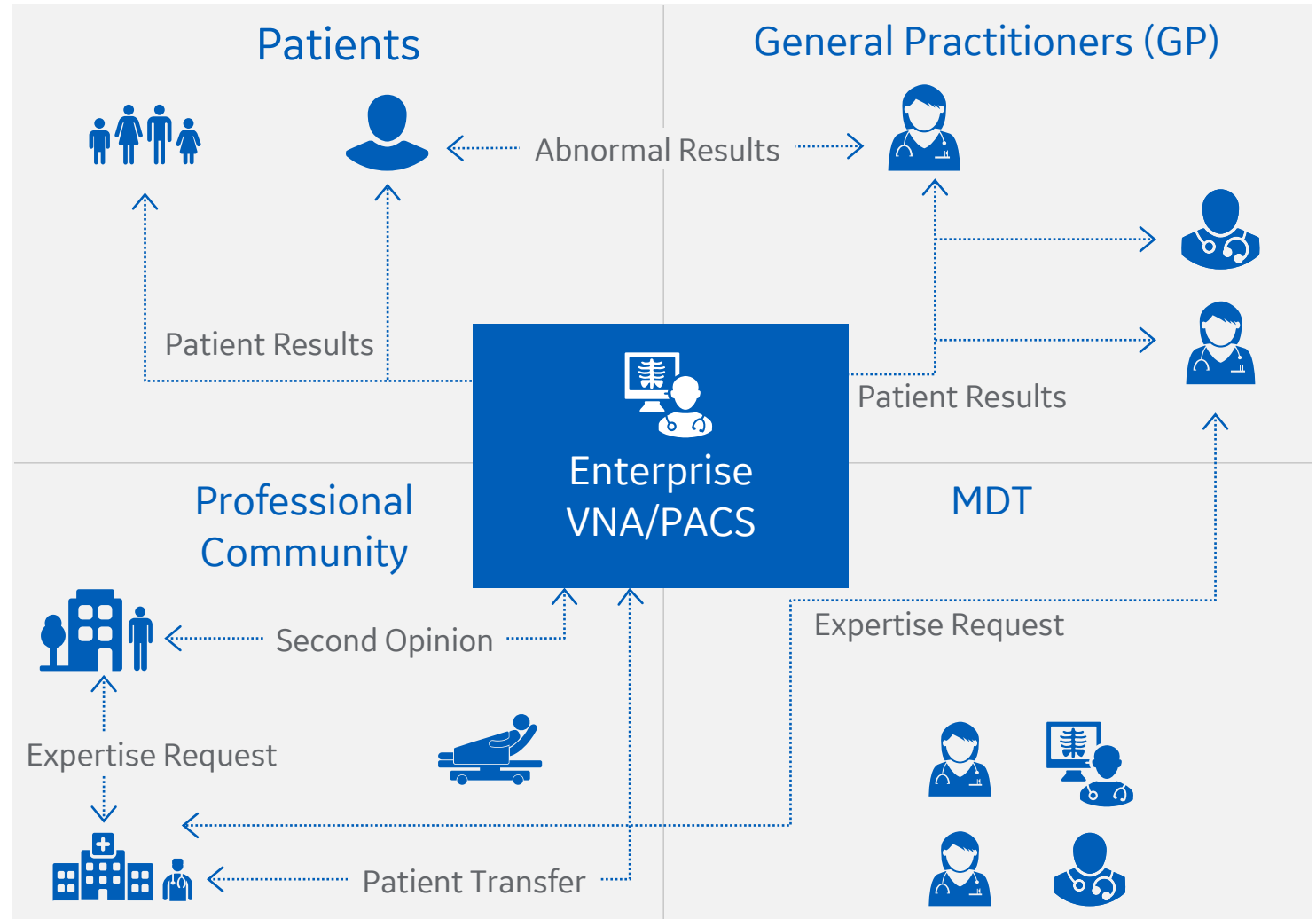
JB69324US

Patient centric collaboration and advanced care coordination

● How do you:

- Go beyond Image Exchange and foster Collaboration?

- Share patient cases inside and outside your network

- Collaborate with multi-disciplinary care teams

- Provide physician access to patient images

- Better involve patients in their care and share images/reports quickly and easily

Patients

General Practitioners (GP)

Abnormal Results

Patient Results

Enterprise VNA/PACS

Patient Results

Professional Community

MDT

Second Opinion

Expertise Request

Expertise Request

Patient Transfer

Edison Datalogue Connect

More than Image Exchange - Collaboration

Connect the community through patient centric collaboration and advanced care coordination

Edison Datalogue Connect

1 Tool │ 4 Applications │ Advanced Workflows │ Customer ROI │ Enhanced Patient Outcomes

Case Exchange	**Multi-Disciplinary Team Meeting**	**Physician Access**	**Patient Access**
Easily share and collaborate on patient images and data	**Simple organization and management of care team meetings**	**Provide both affiliated and non-affiliated physicians access to longitudinal patient imaging data**	**Enable patient ownership of their own reports and data**
Easy to dynamically share and collaborate on patient images and data	Set-up, schedule and run multi-disciplinary care teams	Access to patient results, images and reports	Easy and secure access to images & reports
Automated workflows and easy access to other advanced 3D visualization tools to share images	Centralized, easy-to-navigate case lists with connectivity to PACS	Collaboration with peers	Download capabilities
Secure, standards based foreign study management	Summarize meeting outcomes and notes for efficient follow up	Connect with patient	Control of access rights for other physicians

Edison Datalogue Connect │ Applications

Patient Access
Provide patients access to their imaging data

Patients

General Practitioners (GP)

Physician Access
Referring physician access to patient records and images

Abnormal Results

Patient Results

Enterprise VNA/PACS

Patient Results

Professional Community

MDT

Case Exchange
Share and collaborate on images, cases and reports quickly and easily

Second Opinion

Expertise Request

Expertise Request

Patient Transfer

MDT
Set up and run care team meetings

Edison Datalogue Connect | Outcomes

Case Exchange	Multi-Disciplinary Team Meeting	Physician Access	Patient Access
Easily share and collaborate on patient images and data	**Simple organization and management of care team meetings**	**Provide both affiliated and non-affiliated physicians access to longitudinal patient imaging data**	**Enable patient ownership of their own reports and data**
According to ACR, the average cost to burn a cd is between $15-25 dollars when you take all the costs into consideration[1]	Physicians spend 30 – 120 minutes preparing for each MDT meeting[3]	*Dr. Deible from UPMC has said that having the Physician Access functionality is a differentiator for a hospital and will help grow their referral business from individual and smaller GP practices. This is something 'he would market' to grow the UPMC referral business[5]*	[Patients see significant value in medical imaging results](#) – Radiologybusiness.com, Nov 2:
EMRAD (East Midlands Radiology) has stated that Case Exchange saves them $23K per month on POSTAGE alone. That does not consider administrator costs, etc.[2]	48% of hospitals have staff specifically dedicated to organizing and running MDT/care team meetings[4]		New research published in the Journal of the American College of Radiology suggests that patients place great importance in learning about their imaging results, even if the findings do not directly impact their healthcare. The knowledge obtained from these tests is viewed as "a valuable outcome."[6]

1. ACR Imaging IT Reference Guide: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4255288/pdf/nihms628147.pdf
2. EMRAD TWEET, 10/31/2018
3. MDT Research, MarketVision Research, July 2017
4. MDT Research, MarketVision Research, July 2017
5. Dr. Deible quote, Chicago, January 2019
6. Patients see significant value in medical imaging results – Radiologybusiness.com, Nov 2

Case Exchange | Peer to peer collaboration

Share and collaborate on images, cases and reports quickly and easily

Dynamically share and collaborate on patient images and data

Automated workflows and easy access to other advanced 3D visualization tools to share images

Secure, standards-based foreign study management

Multi-Disciplinary Team Meeting | Care team collaboration

Set up and run care team meetings

Set-up, schedule and run multi-disciplinary care teams	Centralized, easy-to-navigate case lists with connectivity to your organization's PACS, EA or VNA	Summarize meeting outcomes and notes for efficient follow up with the referring clinician

Physician Access | Referring physician collaboration

Provide referring physicians access to patient images and records

Electronically share patient images and records with referring physicians quickly and easily

Grow referral network by making it easier to partner with clinicians

Patient Access | Patient Collaboration

Provide patients access to their images and records

Enables patients to become involved in their care pathway by giving them access to their images and report(s) via a user friendly and secure web portal with access code login

Provide a better experience by saving them the time and effort that is required to collect imaging and record data

Images and reports can be viewed on a PC or mobile device or downloaded from the web
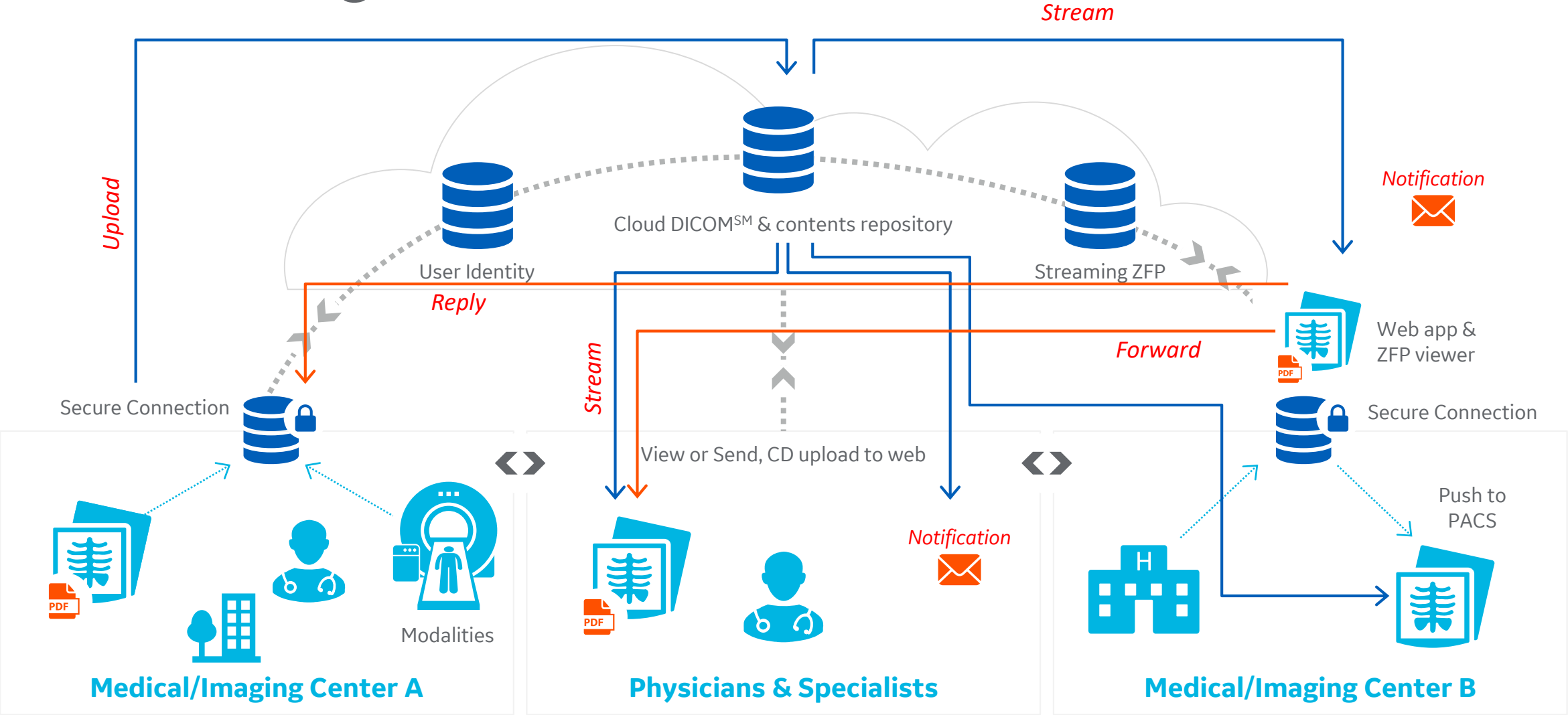
Patients can easily grant access to other health care professionals to obtain a second opinion
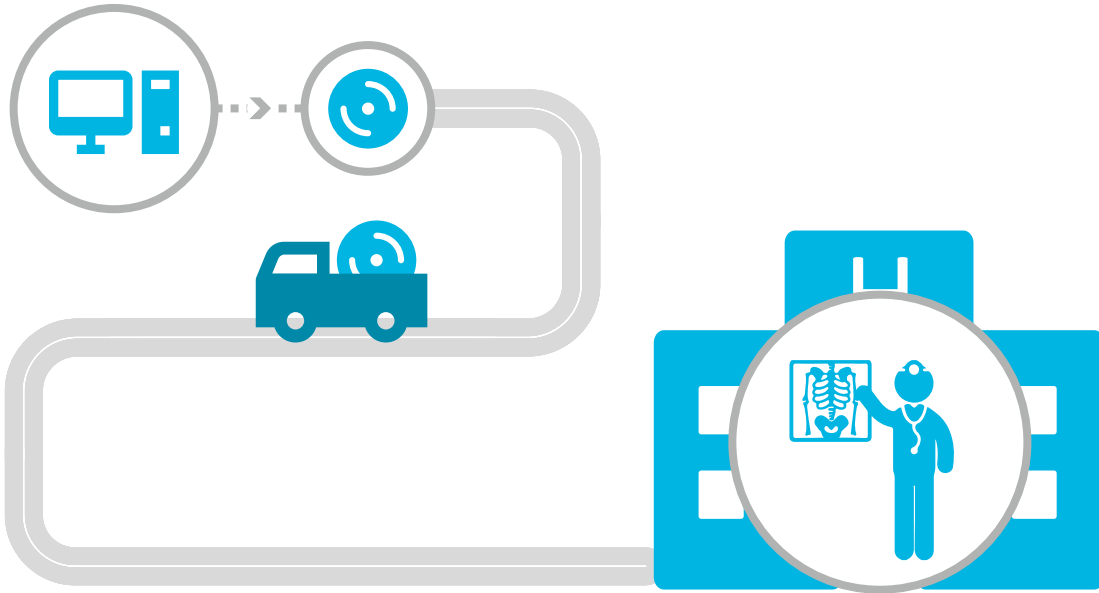
Case Exchange Use Cases

Case Exchange Workflow

Foreign Study and CD Ingestion

Previous Workflow

Diagnostic exams taken at non-affiliated site were burned onto a CD and physically driven by technologist to Hospital for radiologist interpretation

Case Exchange Workflow

Technologist uploads diagnostic exams into Case Exchange from non-affiliated site. Images retrieved from cloud by Hospital imaging assistant and uploaded into PACS for radiologist interpretation
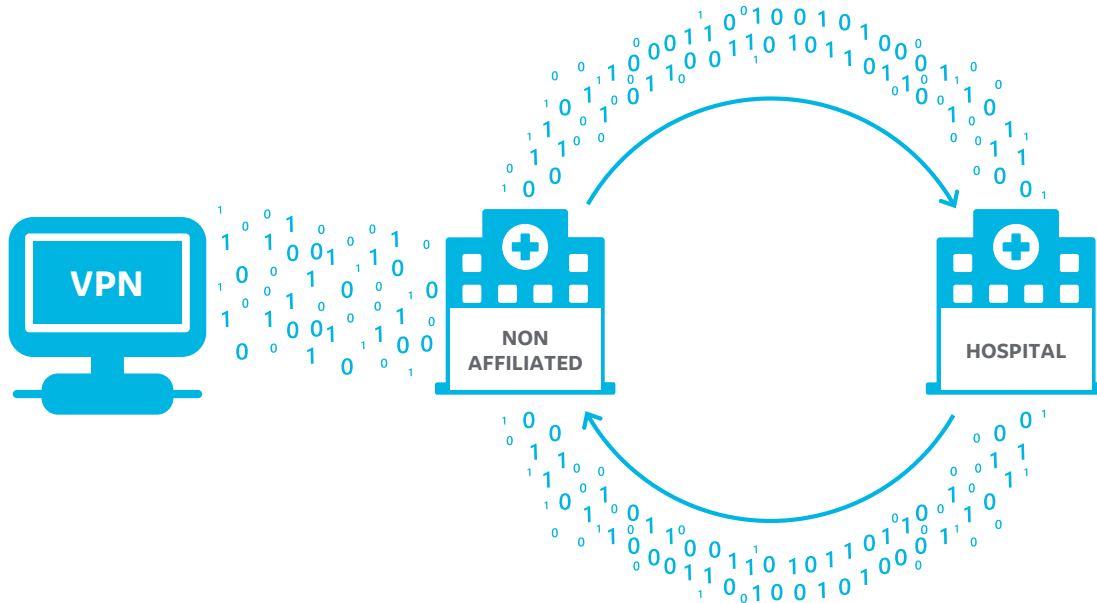

PACS
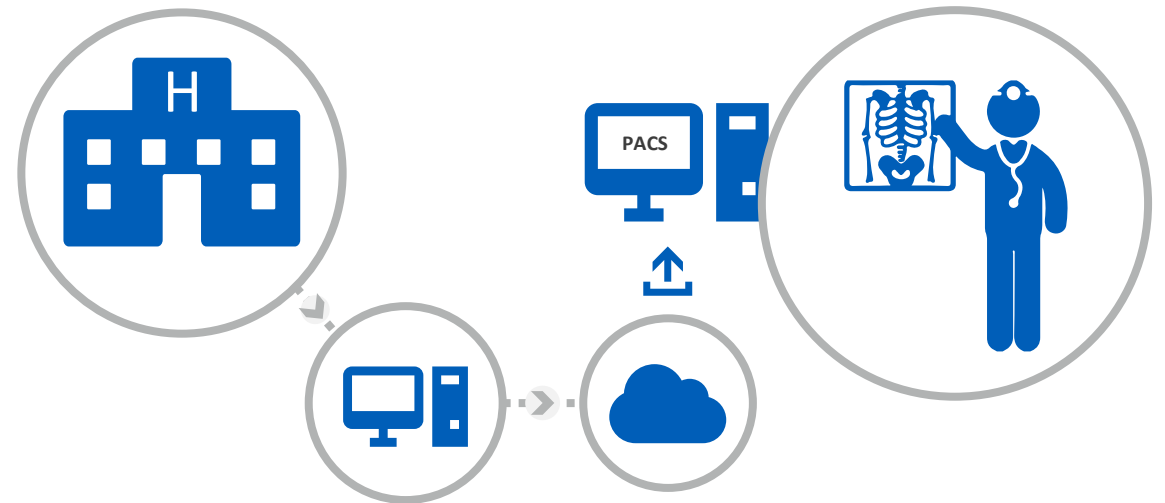
ADVANTAGES
- Physical drive to Hospital eliminated, reducing personnel cost
- Radiologist interpretation available more quickly

Subcontracting with Non Affiliated Sites

Previous Workflow

VPN utilized to push studies from non affiliated site to hospital and from hospital back to non affiliated site (round trip)

Case Exchange Workflow

Case Exchange Gateway put into place at non affiliated site. Non Affiliated site pushes exams to cloud for download by hospital radiology. Exams sent to hospital are auto created in hospital RIS/PACS. Hospital radiology pushes exams to non affiliated site using Case Exchange

Exams are auto created by RIS/PACS

Case Exchange

NON AFFILIATED
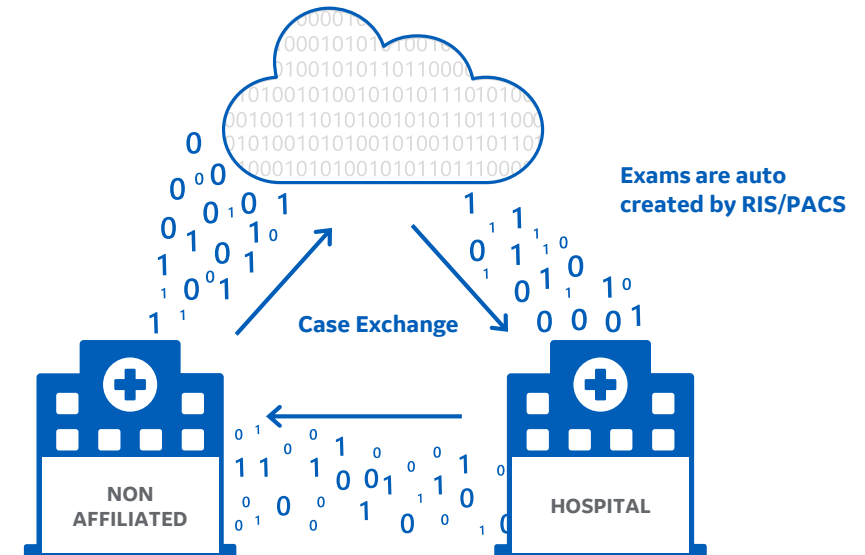
HOSPITAL

ADVANTAGES
- On prem VPN can be retired – support team no longer need to maintain in security plan or as updates are made
- Clerical team time savings due to auto exam creation

Network Downtime Solution

Previous Workflow

If hospital network is down, radiologists physically drive to imaging locations to interpret exams from modality
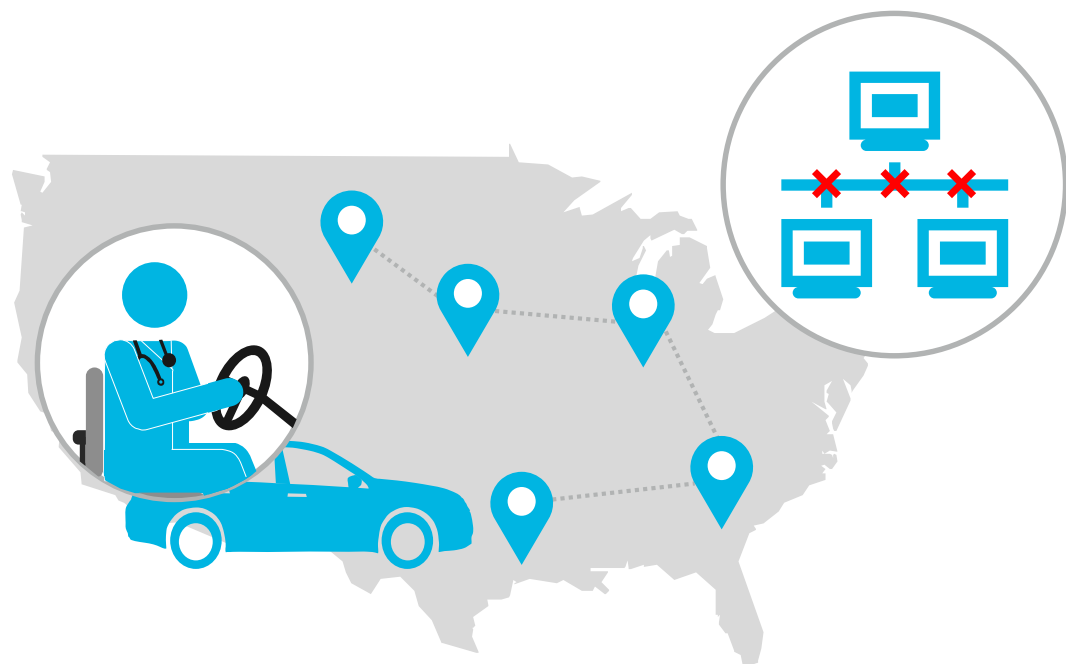
Case Exchange Workflow

Images from more remote hospital locations are copied to a thumb drive and sent to Case Exchange using a hot spot. Images from remote locations viewed by radiologists who are physically remote from modality

ADVANTAGES
Reduced number of radiologists required during network downtime

Trauma Workflow Improvement

Previous Workflow

Patients transferred from stabilizing community hospital to Hospital trauma center with image CD taped to chest. Trauma surgeon needs to take time to review external CD while patient inhouse
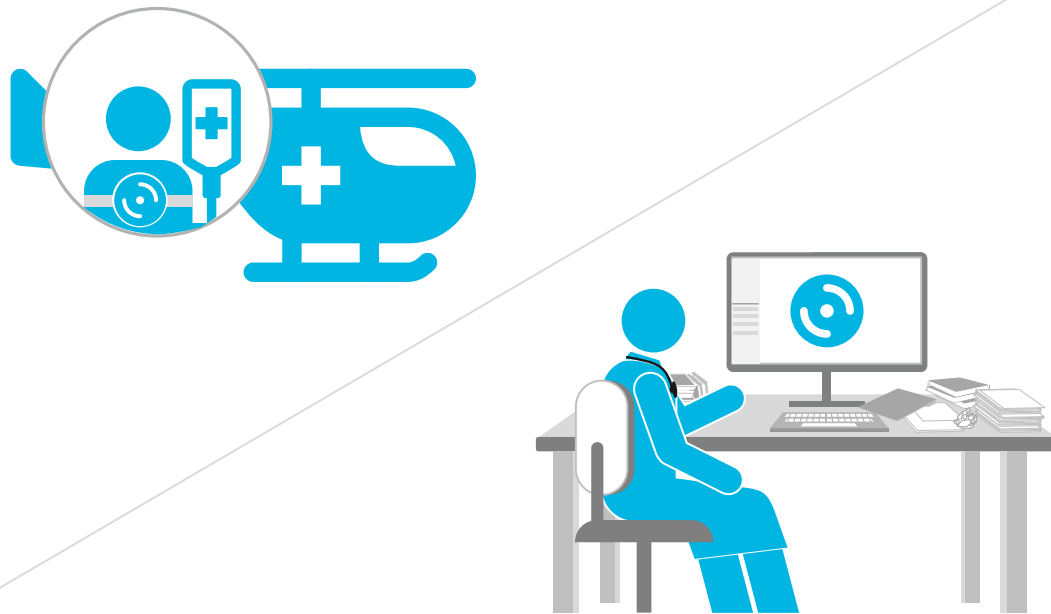
Case Exchange Workflow

Trauma surgeon receives and reviews images from stabilizing community hospital during discussion to accept the patient transfer. Surgeon begins formulating plan of care prior to patient entering trauma center. Radiologists consulted for image review before patient arrives
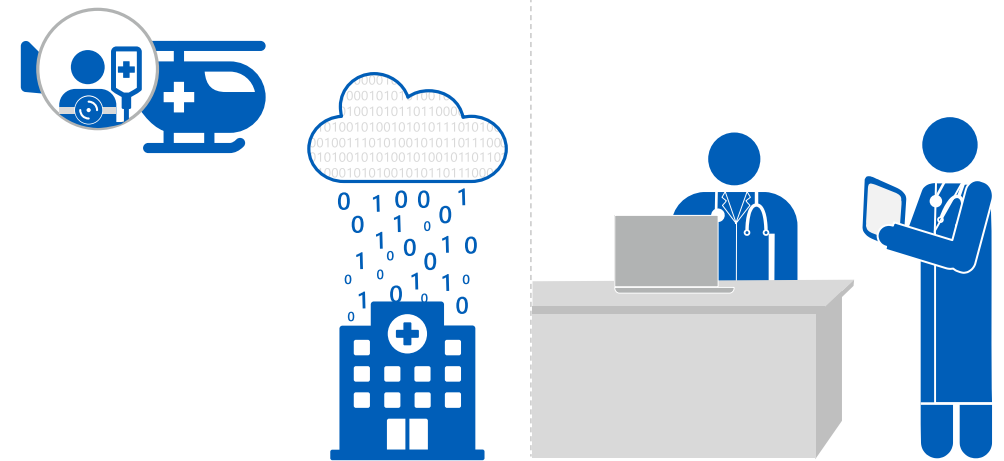
ADVANTAGES
- Reduces need to repeat imaging if CD's are not viewable.
- Allows trauma surgeon and radiologist to review images and formulate next steps for care prior to patient arrival

Definition of a Case

A case on Case Exchange may contain attachments (such as one or more DICOM studies and associated reports for a patient), or no attachments. If a case contains studies, each study can have multiple series of image data

Here are some Case characteristics:

- Annual volume numbers are based on new Cases created.
- Cases can be sent to an individual user, multiple users, departments/groups and combinations of users and departments/groups
- Cases can contain comments only if desired
- Cases can include one to many studies
- Once a study have been added to a case, the Case becomes patient centric and only additional studies for the same patient can be added
- Cases can include one to many non-imaging files
- Cases can contain a combination of imaging studies and non-imaging files
- Adding content (comments, imaging studies, non-imaging files) are considered transactions and are not counted against the organization's annual Case volume
- Adding users or departments/groups are considered transactions and are note counted against the organization's annual Case volume
- Content will be removed from the case once the case has not had any transactions for the organizations defined retention period
- Content will be visible, but grayed out and have an "expired" tag with the date and time
- **Rule of thumb is 10% of annual study volume = Case Creation Pricing Tier**

MDT Use Cases

Multi-Disciplinary Team Meeting – Complex workflows

Send Cases from on-prem viewers

Add to Cases from on-prem viewers[1]

Set up MDT Groups

Regional MDT Coordinator(s)

Add to cases from local file system

Prepare for MDTs

Regional MDT Coordinator(s)

Referring Clinicians

Review patient cases

View images in cloud ZFP or via on-prem viewers

MDT Clinicians

Run sessions and create outcome reports

PDF & DICOM reports created

MDT Clinicians

Regional MDT Coordinator(s)

View images in cloud ZFP or via on-prem viewers

PACS

A physical process now transferred into an online, easy to access collaboration environment
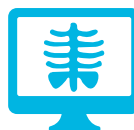
MDT Application – Workflow

	1. Establish Groups		2. Send to MDT	3. Prepare for sessions		4. Conduct Sessions	
Workflow	**Create MDT Group**	**Configure MDT Group**	**Send Case to MDT Group**	**View & Update Case**	**Prepare MDT Session**	**Conduct MDT Session**	**Close session & prepare Report**

MDT Functions	Assign Group Admin	Assign Group Co-Admins & members	Reviews Patient case	Receives email Reminder	Reviews Upcoming Sessions Worklists	Open MDT Session	Create Report (optional)
		⬇	⬇	⬇	⬇	⬇	
		Configure email settings	Selects MDT to send case	Reviews case(s)	Sends Email Reminders	Manages Patient list	
		⬇	⬇	⬇	⬇	⬇	
		Schedule sessions	Adds Comments	Updates cases (content & notes)	Update Cases (opt)	Displays Patient Case Content	
		⬇	⬇		⬇	⬇	
		Configure meeting settings	Selects a specific session opt.		Updates Worklist (Reorder/Sort/Move)	Captures Notes for patient	
						⬇	
						Marks case as Reviewed	

■ MDT Member/Referring Physician   ■ MDT Coordinator

Physician Access Cases

Physician/Patient Access workflow

Transfer

Cloud DICOM^{SM} & contents repository

User Identity

Streaming ZFP

Web app & ZFP viewer

Secure Connection

Stream

View or Send, CD upload to web

Push to PACS

PDF

Modalities

Imaging Center's VNA

Physicians & Specialists

Medical/Imaging Center B
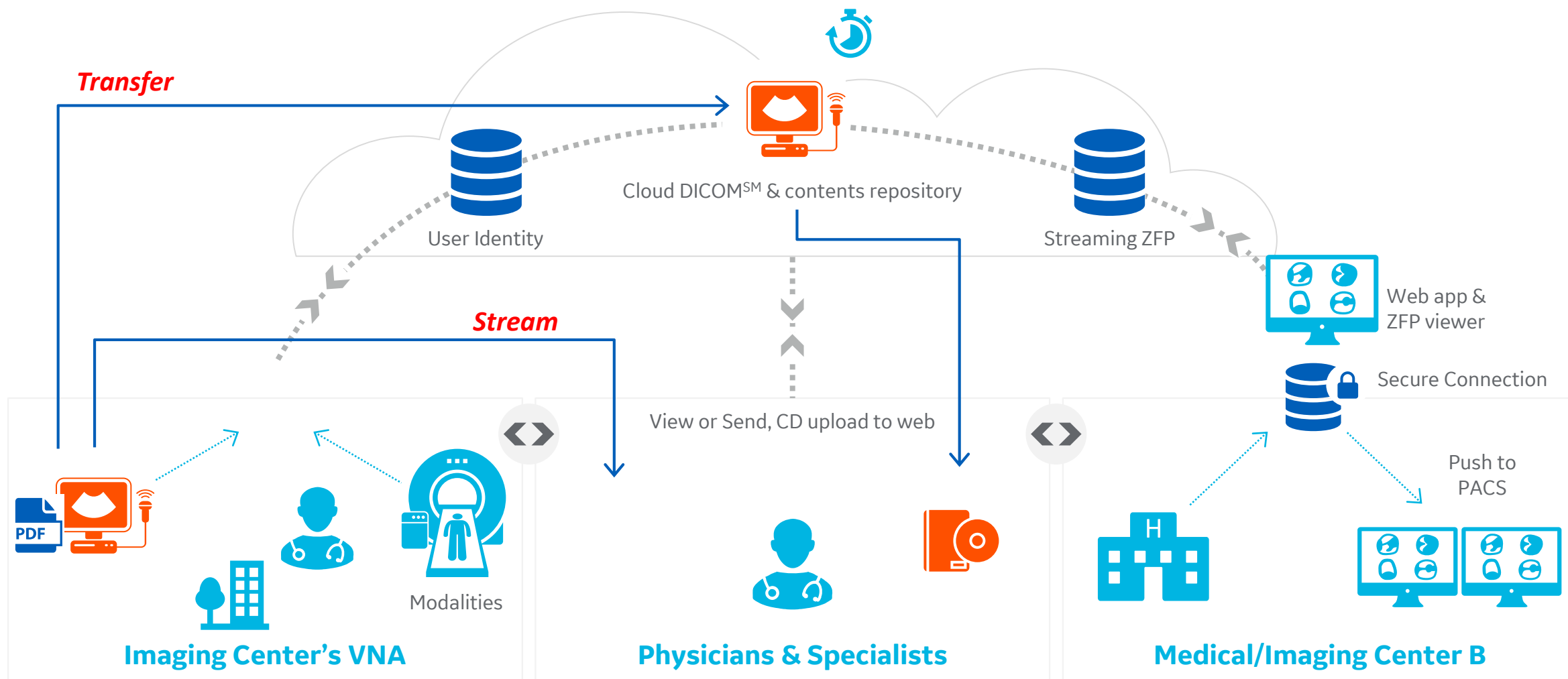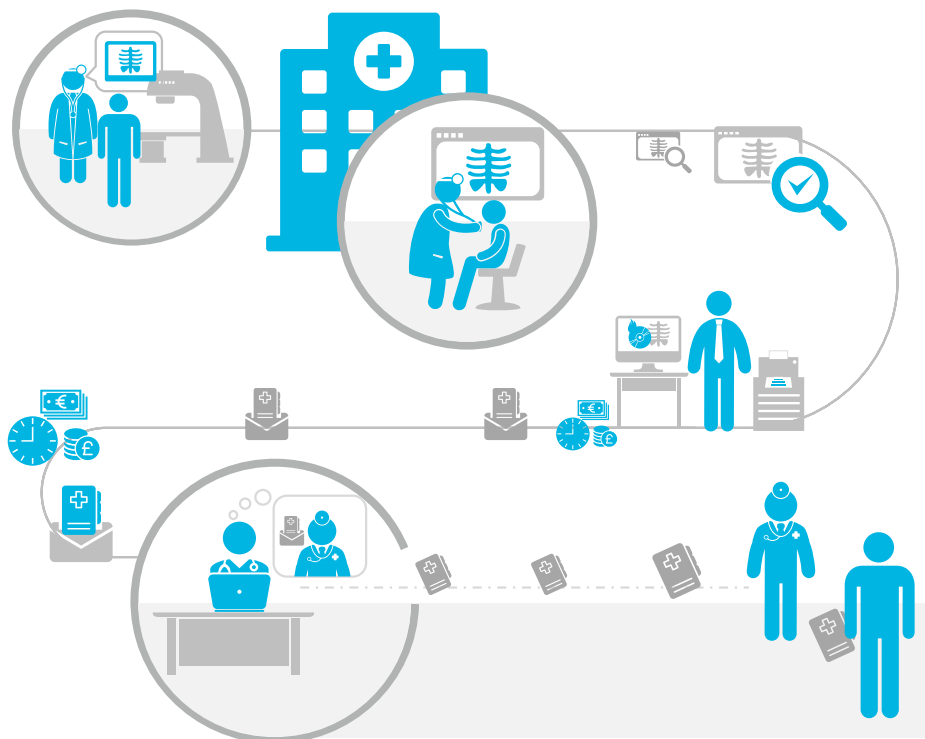
Physician Access Use Case

Previous Workflow

- General Practitioner (GP) refers patient for an imaging study
- Patient checks in for the diagnostic exams at Hospital.
- When study is complete, technologist need to 1.) print the report, 2.) burn the study to a CD/DVD and 3.) mail/fax to the GP's office
- When the GP receives the info, they want to refer the case to specialist, they now need to send the physical media to the specialist or the patient needs to deliver it themselves

Patient Access Workflow

- GP refers patient for an imaging study
- Patient checks-in for the diagnostic exams at hospital
- When study is complete, Physician Access automatically create a case for the GP and Patient in the Physician/Patient Access solution and send both the GP and the patient email notification about its availability – Available immediately, no delay
- When the GP receives the info, they review the data online and if required download the data to their local computer
- If the GP wants to refer the case to specialist, they simply use the linked Case Exchange to share the study with the specialist or alternatively print/email an Access Code for the patient to share with the specialist. No physical media required and everything is performed immediately and intuitively patient arrives
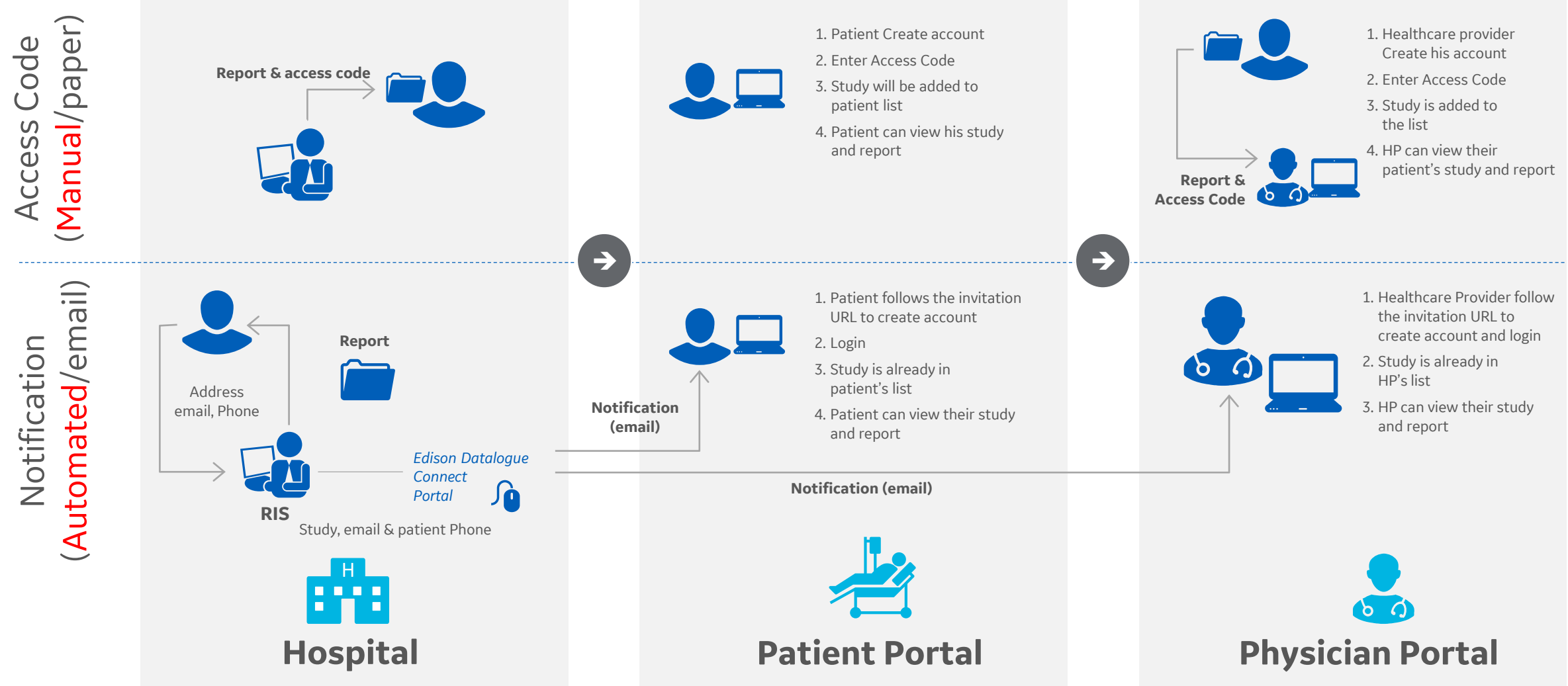

ADVANTAGES
- Overall simplification in study and image access for the GP and healthcare provider.
- Saves time and money.
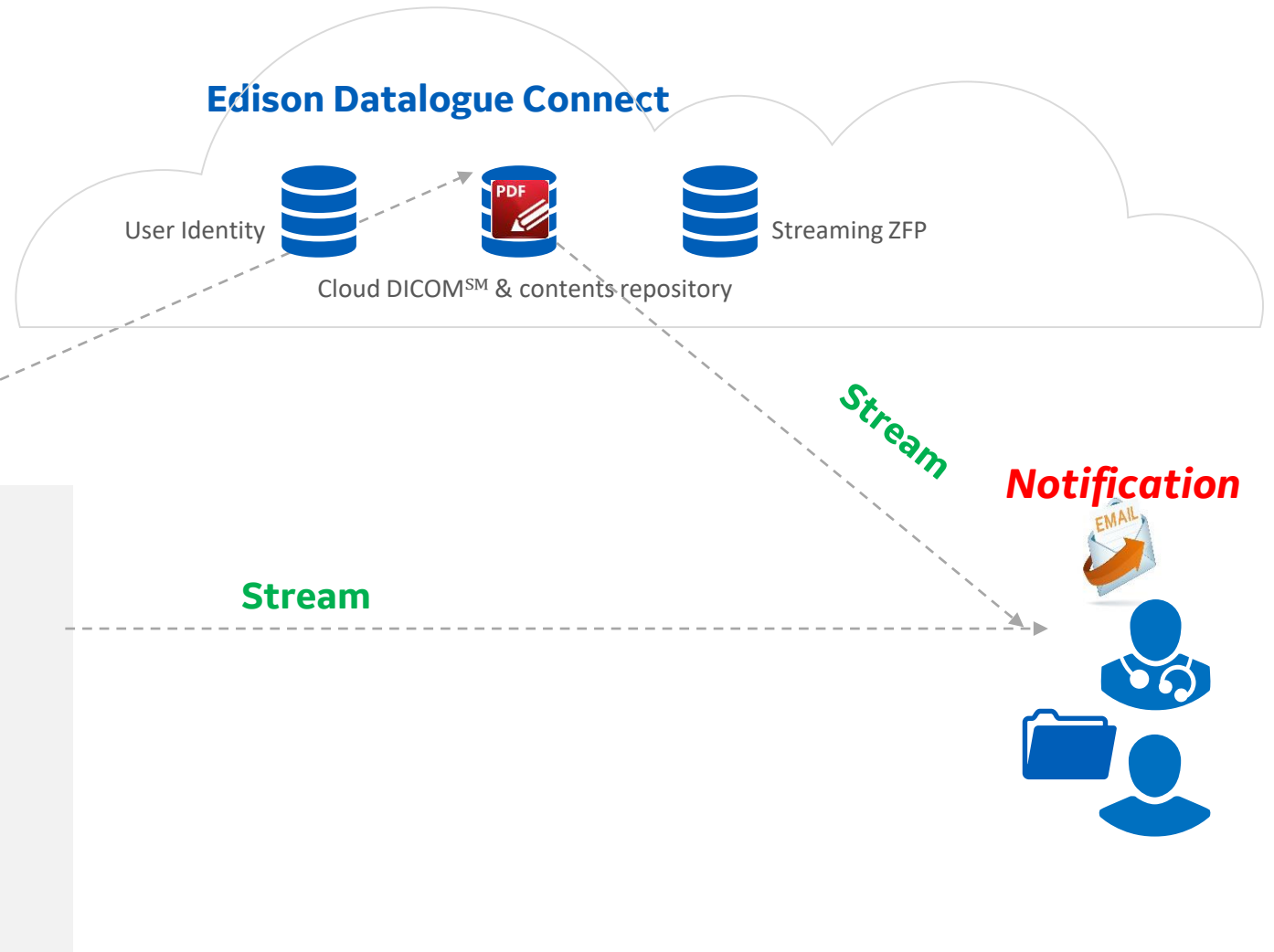- Allows for easier sharing of the images, data, and reports.

Physician Access & Patient Access process

Access Code (Manual/paper)

Report & access code

1. Patient Create account
2. Enter Access Code
3. Study will be added to patient list
4. Patient can view his study and report

1. Healthcare provider Create his account
2. Enter Access Code
3. Study is added to the list
4. HP can view their patient's study and report

Report & Access Code

Notification (Automated/email)

Address email, Phone

Report

Edison Datalogue Connect Portal

RIS

Study, email & patient Phone

Notification (email)

1. Patient follows the invitation URL to create account
2. Login
3. Study is already in patient's list
4. Patient can view their study and report

Notification (email)

1. Healthcare Provider follow the invitation URL to create account and login
2. Study is already in HP's list
3. HP can view their study and report

Hospital

Patient Portal

Physician Portal

Physician & Patient Access – Studies & Reports

1. DICOM sent to PACS/VNA

2. VNA/PACS listens to Observation Result (ORU) messages

3. "Final Report" ORU

4. ORU databased and converted by Edison Datalogue Connect to .TXT or .PDF file

5. Access Code or email Notification triggered

6. User stream study & report

Edison Datalogue Connect

User Identity

Cloud DICOM^SM & contents repository

Streaming ZFP

Stream

Notification

EMAIL

CCG

Stream

PACS VNA

DICOM

RIS

ORU

Modalities

Physician Access User Interface

Patient Access Cases

Physician/Patient Access workflow

Transfer

Stream

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Modalities

Imaging Center's VNA

Physicians & Specialists

Medical/Imaging Center B

Patient Access Use Case

Previous Workflow

- Patient checks in for diagnostic exams at hospital.
- If the patient wants a copy of their study, it takes 3 days to a week following the procedure
  Study is burned onto a CD and picked up by the patient or mailed to patient

3 DAYS...

Patient Access Workflow

- Patient checks in for diagnostic exams at hospital and requests to receive the study online
- When study is complete, Patient Access automatically creates a case for the patient in the Patient Access solution and sends the patient an email notification about its availability
- Patient arrives home, receive the email, logs-in to Patient Access.
- Review the images with the built in DICOM viewer and if want download the DICOM study and offline DICOM viewer to their local computer

ADVANTAGES
- Patient has faster and easier access to he their medical images and data.
- Hospital/care provider saves money by providing online access and not burning CDs.

Physician Access & Patient Access process

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Report & access code

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3. Study is added to the list
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Report & Access Code

Notification (Automated/email)

Report

Address email, Phone

Study, email & patient Phone

RIS

Edison Datalogue Connect Portal

Notification (email)

1. Patient follows the invitation URL to create account
2. Login
3. Study is already in patient's list
4. Patient can view their study and report

1. Healthcare Provider follow the invitation URL to create account and login
2. Study is already in HP's list
3. HP can view their study and report

Notification (email)

Hospital

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Physician Portal

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