Regulatory and Law Conference
Florida Pharmacy Association
September 9, 2017

**Telepharmacy:
Path to the Telehealth Future**

Christopher B. Sullivan, PhD

Introduction to Speaker

Your speaker for this session is:

Christopher B. Sullivan, PhD

Statement of Disclosure:

"I have no vested interest or affiliation with any corporate organization offering financial support of grant money for this continuing education program, or any affiliation with an organization whose philosophy could potentially bias my presentation."

Learning Objectives for This Session

1. Explain how Telepharmacy and Telehealth services are part of a single continuum of telecommunication opportunities

2. Describe the type of communication systems required for Telehealth versus Telepharmacy solutions

3. Identify key Telehealth and Telepharmacy rules and regulations at the state and national levels

4. Compare specific use cases that demonstrate different approaches to Telepharmacy

5. Describe some key business examples for Telepharmacy

6. Summarize how Telepharmacy might change pharmaceutical practices in the future

Baseline Question 1

Are Telehealth and Telepharmacy the same?

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Baseline Question 2

Telehealth is limited to two-way video interactions between a doctor and patient.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Baseline Question 3

Telepharmacy is strictly regulated across the United States.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Baseline Question 4

Prescriptions for controlled substances can be dispensed as long as a doctor has met with a patient over a telemedicine connection.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Baseline Question 5

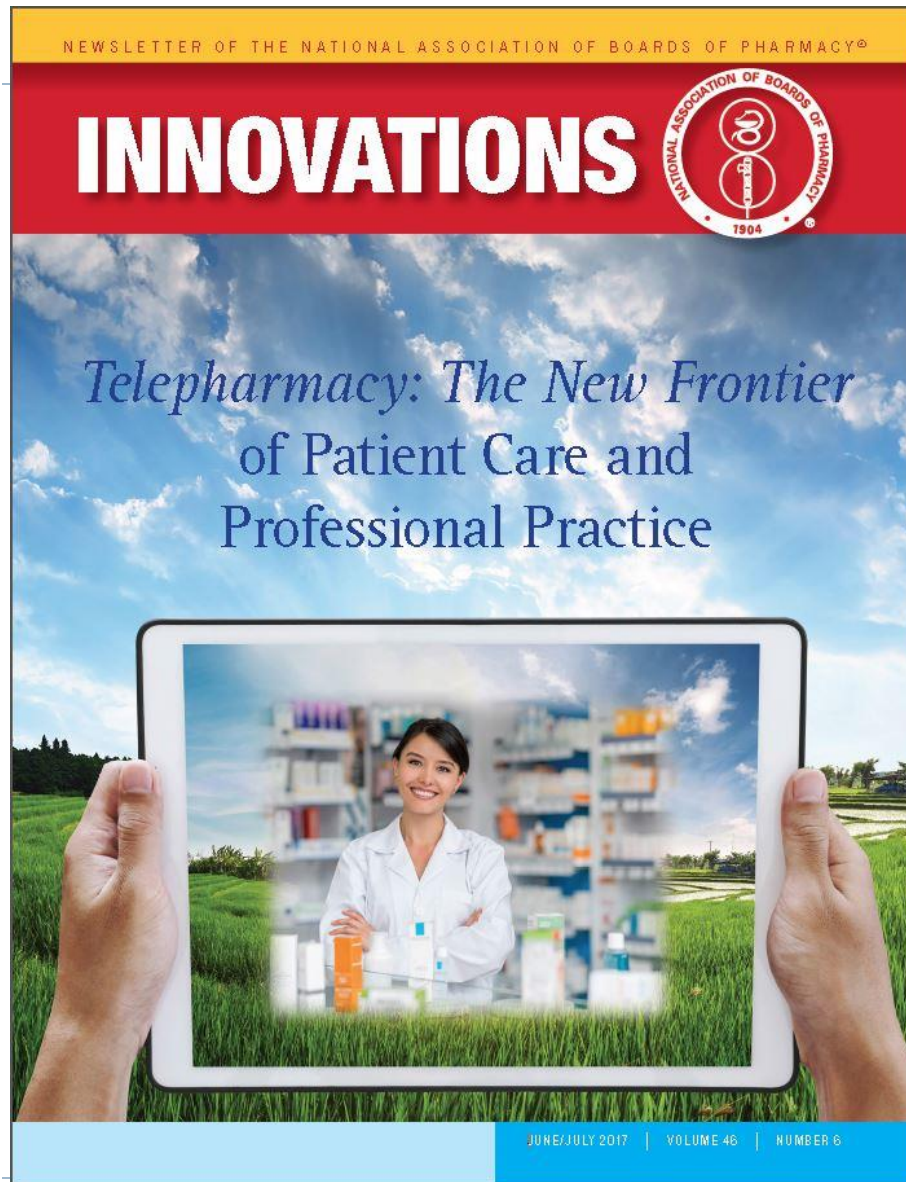Telemedicine can occur with any electronic telecommunications device.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Florida Pharmacy Association Regulatory and Law Conference

Introduction

Telepharmacy: The New Frontier

Telepharmacy: Path to the Telehealth Future

Communication Responsibilities of Pharmacists

Your pharmacist would like to speak with you today...

The importance of your new medication

There are several reasons why it is important for you to take this medication as prescribed.

- Taking the medication regularly helps you better manage your health, even if your condition has no symptoms
- Some medications take days or even weeks to achieve their intended effect
- It may take time for your body to adjust to a medication
- Stopping this medication without first consulting with your physician may negatively affect your health

As your Pharmacist, I am here to discuss any questions about your medication and provide direction on how to avoid potential side effects. Please call anytime if I can be of assistance.

Message Center

Transition from Face-to-Face to Telemedicine

Valid Patient-Practitioner Relationship
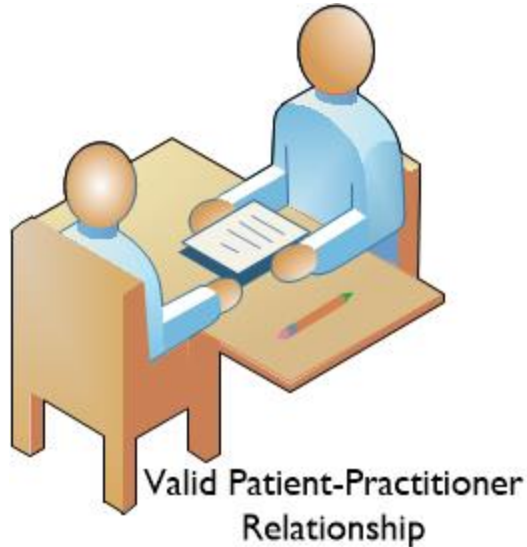
"Telemedicine involves… secure videoconferencing or store and forward technology to provide or support healthcare delivery by replicating a traditional, face-to-face encounter." (FSMB, 2014)

The social expectations of interpersonal communication shift with telehealth to include an electronic interface in a treatment setting

Patient-Practitioner Relationship via Telemedicine
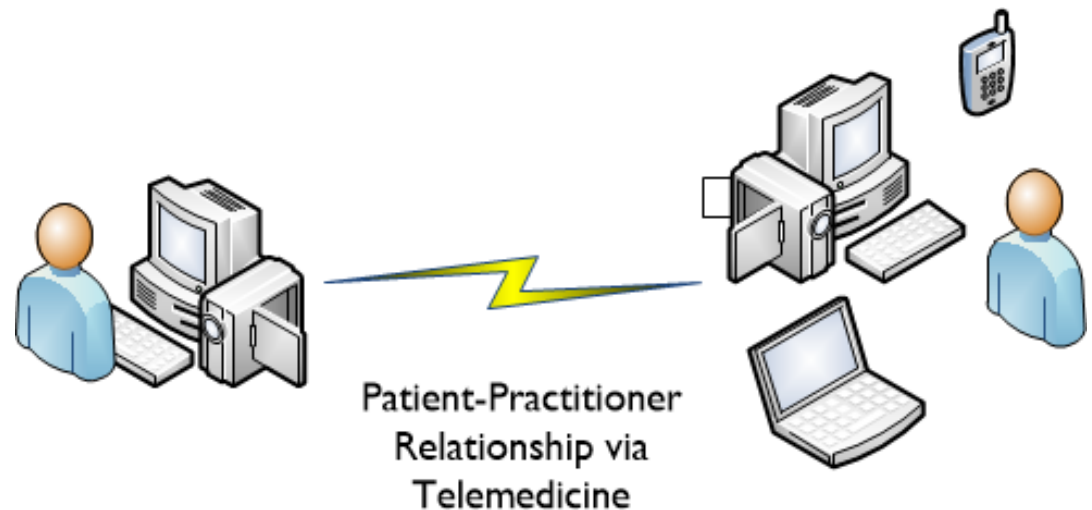
Early Telemedicine

"The busy doctor, fifty years hence, will not be able to visit his patients as he does now. .. on the other hand, his patients cannot always come to him.
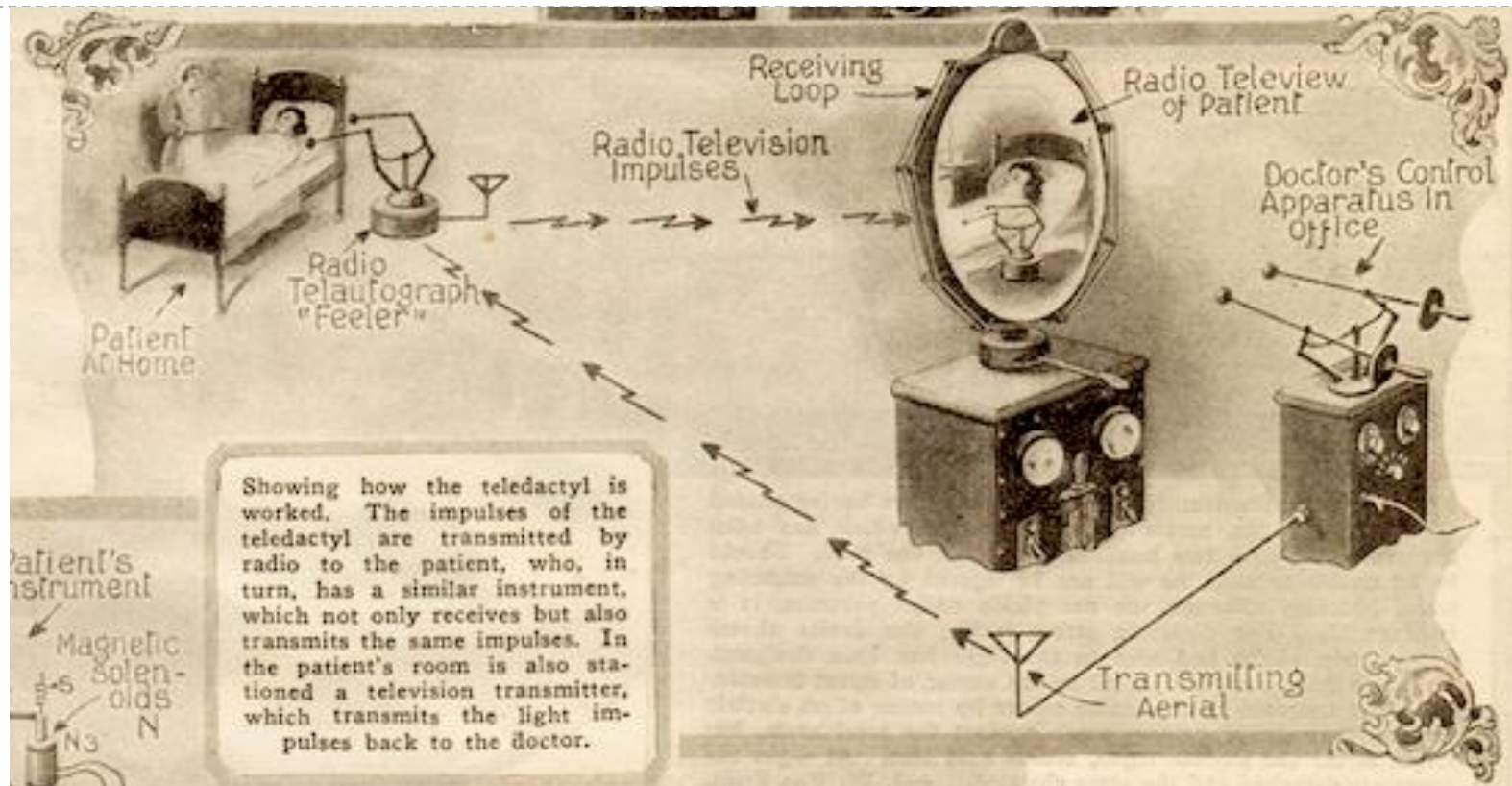
This is where the teledactyl and diagnosis by radio comes in."

Telemedicine Predicted in 1925
With video screens and remote control arms, any doctor could make a virtual housecall
By Matt Novak, March 14, 2012

Retrieved from: http://www.smithsonianmag.com/history/telemedicine-predicted-in-1925-124140942

Early Telemedicine – The Teledactyl

Showing how the teledactyl is worked. The impulses of the teledactyl are transmitted by radio to the patient, who, in turn, has a similar instrument, which not only receives but also transmits the same impulses. In the patient's room is also stationed a television transmitter, which transmits the light impulses back to the doctor.

"The Teledactyl (Tele, far; Dactyl, finger — from the Greek) is a future instrument by which it will be possible for us to "feel at a distance."
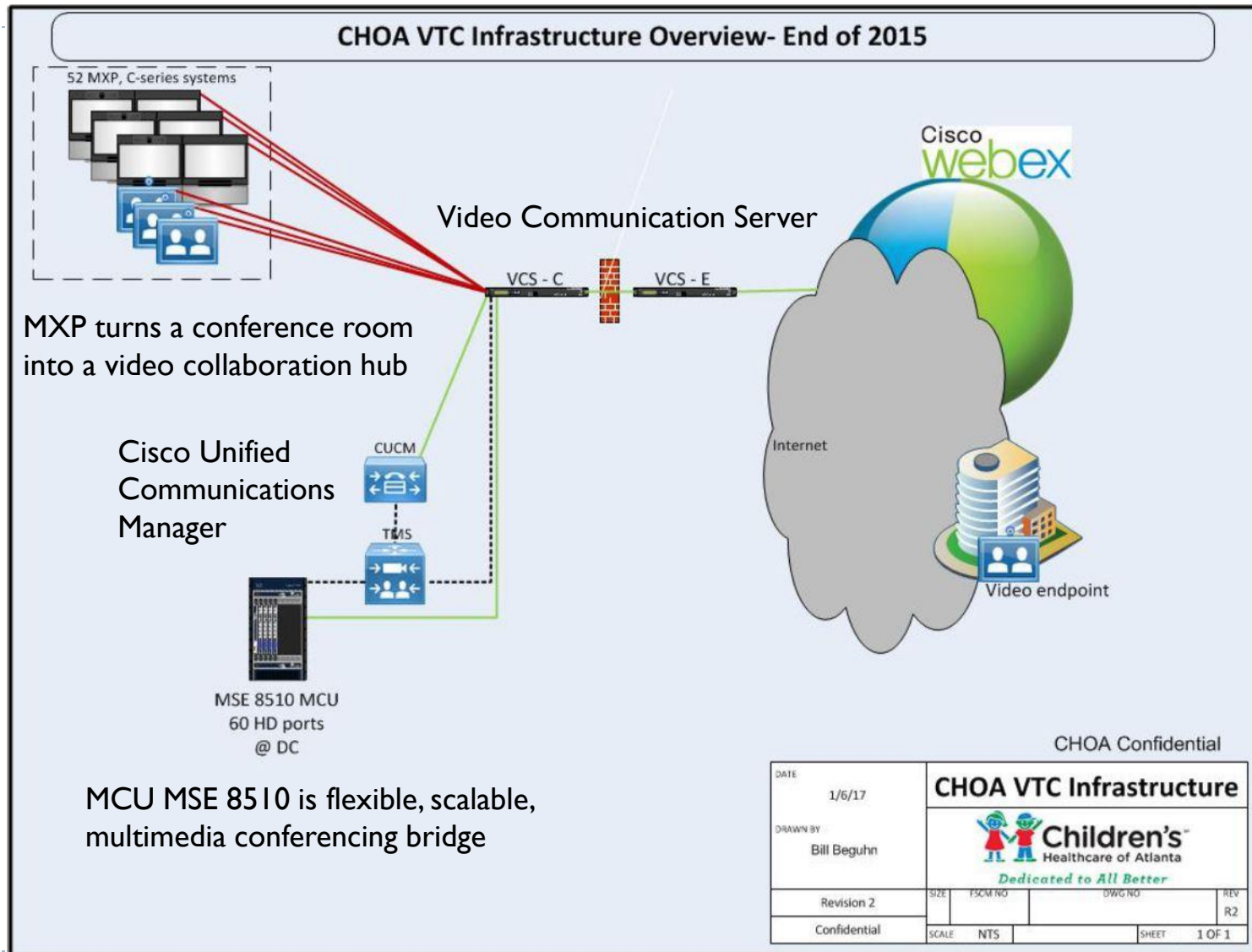
Diagram of a Telemedicine Project
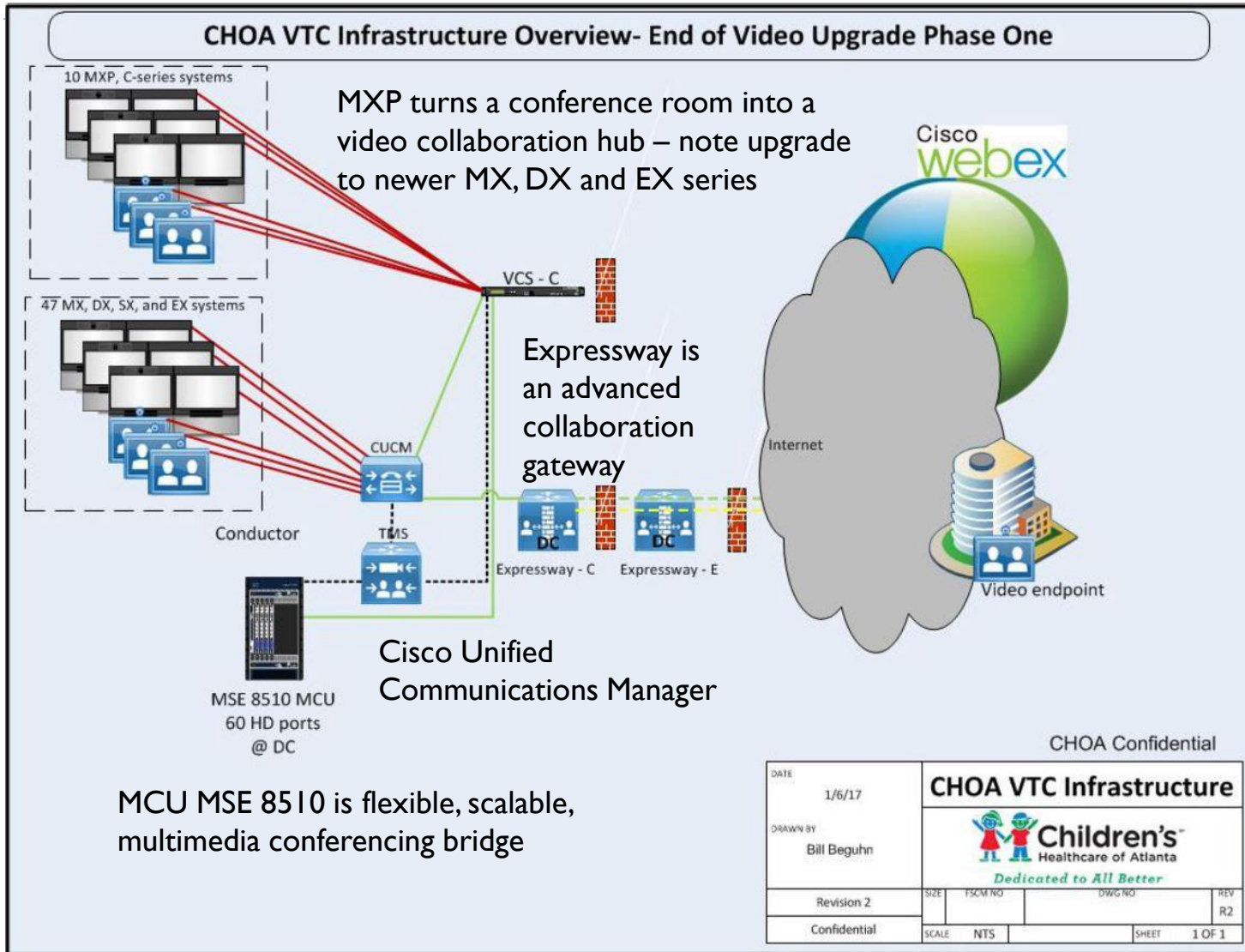
Children's Healthcare of Atlanta

- 48 telepresence conference rooms

- 13 rooms provide wireless Avizia dual screen mobile carts

- Multipoint videoconferencing available for three or more sites to meet

- Secure connectivity for outside-facing videoconference systems

- Telepresence-enabled WebEx meetings

- **The system keeps expanding with new telemedicine capabilities**

CHOA VTC: End of 2015

CHOA VTC Infrastructure Overview- End of 2015

52 MXP, C-series systems

Video Communication Server

VCS - C   VCS - E

Cisco webex

MXP turns a conference room into a video collaboration hub

Cisco Unified Communications Manager

CUCM

TMS

Internet

Video endpoint

MSE 8510 MCU
60 HD ports
@ DC

MCU MSE 8510 is flexible, scalable, multimedia conferencing bridge

CHOA Confidential

DATE	**CHOA VTC Infrastructure**			
1/6/17				
DRAWN BY	Children's Healthcare of Atlanta			
Bill Beguhn	Dedicated to All Better			
	SIZE	FSCM NO	DWG NO	REV
Revision 2				R2
Confidential	SCALE	NTS		SHEET 1 OF 1

CHOA VTC Infrastructure Overview- End of Video Upgrade Phase One
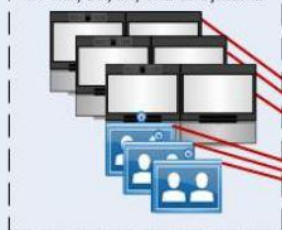
CHOA VTC Infrastructure Overview – End of Video Upgrade Phase Two

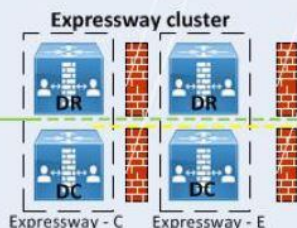MX, DX and EX series use multifunction touchscreens to turn any room into a video collaboration hub
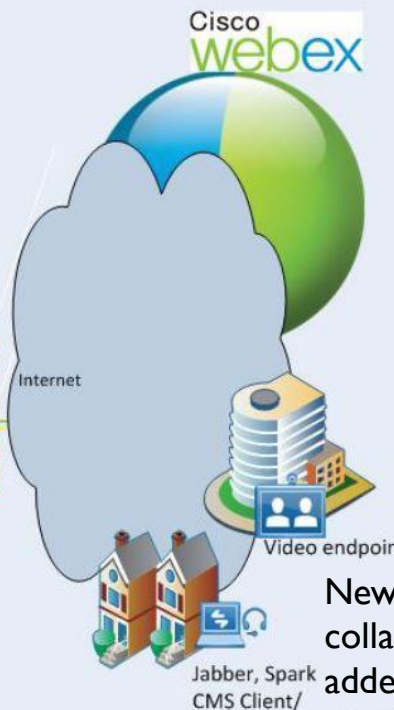
57 MX, DX, SX, and EX systems

Cisco Unified Communications Manager

Expressway capacity doubles

New collaborations added

MCU MSE 8510 is flexible, scalable, multimedia conferencing bridge

MSE 8510 MCU
60 HD ports
@ DC

CHOA VTC: Video Capacity 2017

CHOA VTC Infrastructure Overview – End of Video bridge Expansion

MX, DX and EX series use multifunction touchscreens to turn any room into a video collaboration hub

Expressway capacity increased again

57 MX, DX, SX, and EX systems

IM & Presence

Jabber Mobile

Cisco webex

Internet

CUCM

DR
Expressway cluster
DC

Conductor

TMS

Expressway - C   Expressway - E

CMS 1000   CMS Edge
CMS Core

Video endpoint

New collaborations added

Connectors

Edge allows collaboration with multiple end-points

Jabber, Spark
CMS Client/
Acano Client/
WebRTC

CHOA Confidential

MSE 8510 MCU
60 HD ports @ DC

CMS 1000 Video telepresence server
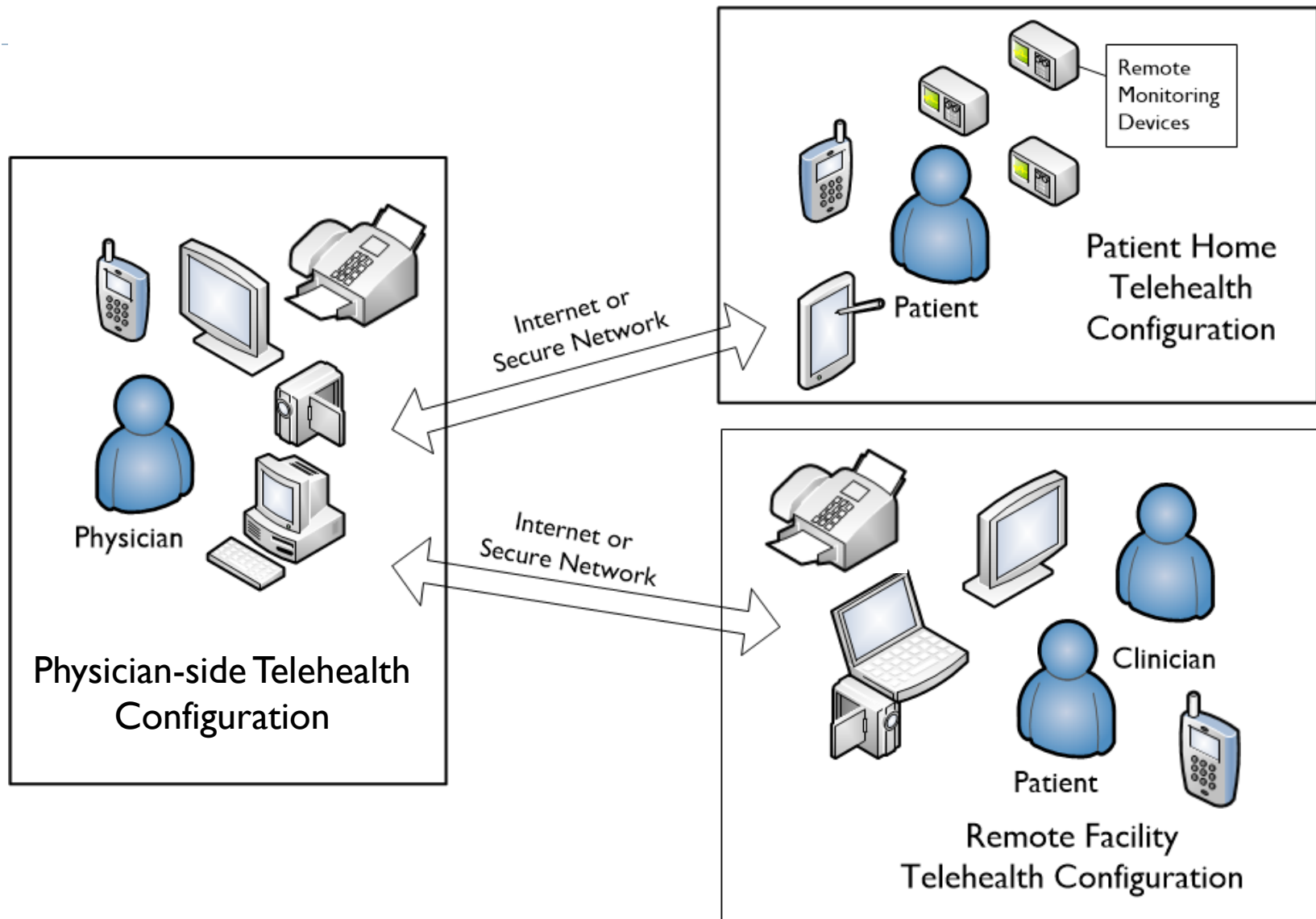60 HD ports @ DR

Cisco Meeting Server 1000

DATE 1/6/17	**CHOA VTC Infrastructure**		
DRAWN BY Bill Beguhn	Children's Healthcare of Atlanta *Dedicated to All Better*		
Revision 2	SIZE	FSCM NO	DWG NO	REV R2
Confidential	SCALE NTS		SHEET 1 OF 1

Telehealth Technical Details

Internet or Secure Network

Internet or Secure Network

Patient Home Telehealth Configuration

Remote Monitoring Devices

Patient

Physician

Physician-side Telehealth Configuration

Clinician

Patient

Remote Facility Telehealth Configuration

Physician Office – Telehealth Technology

http://www.intechopen.com/books/telemedicine/telemedicine-reducing-trauma-in-evaluating-abuse

Clinical Facility Telehealth Equipment

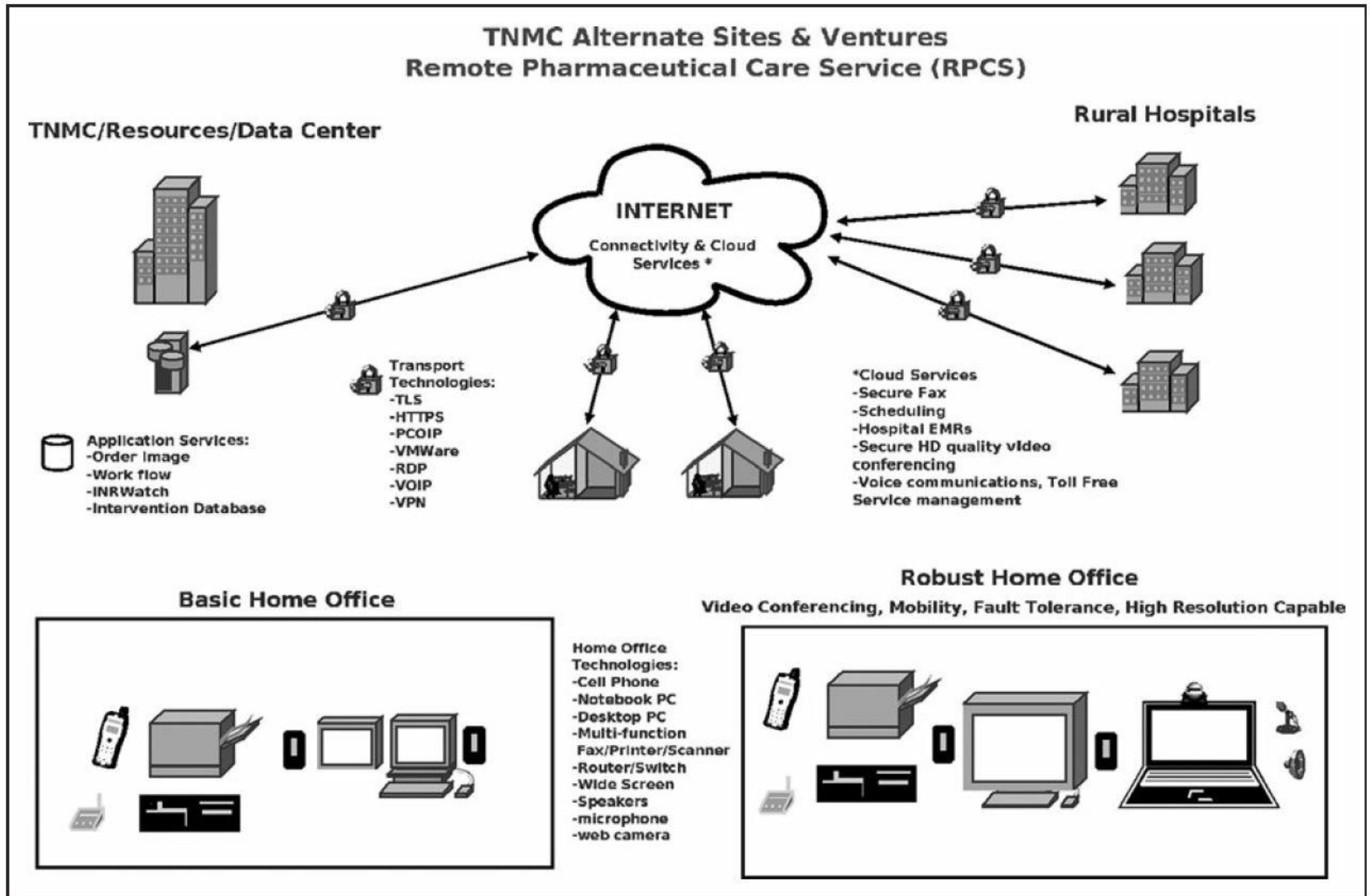Telemedicine Hardware and Software – AMD Global Telemedicine

See: http://www.amdtelemedicine.com/corporate/index.html

At Home – Telehealth Monitoring Technologies

Telehealth Monitoring Equipment

http://www.connectorsupplier.com/101612-cs-medical-bieksha/

https://www.veesag.com/telehealth-remote-patient-health-monitoring/

The Nebraska Medical Center Telepharmacy Model

TNMC Alternate Sites & Ventures
Remote Pharmaceutical Care Service (RPCS)

TNMC/Resources/Data Center

Rural Hospitals

INTERNET
Connectivity & Cloud Services *

Transport Technologies:
-TLS
-HTTPS
-PCOIP
-VMWare
-RDP
-VOIP
-VPN

Application Services:
-Order Image
-Work flow
-INRWatch
-Intervention Database

*Cloud Services
-Secure Fax
-Scheduling
-Hospital EMRs
-Secure HD quality video conferencing
-Voice communications, Toll Free Service management

Basic Home Office

Robust Home Office
Video Conferencing, Mobility, Fault Tolerance, High Resolution Capable

Home Office Technologies:
-Cell Phone
-Notebook PC
-Desktop PC
-Multi-function Fax/Printer/Scanner
-Router/Switch
-Wide Screen
-Speakers
-microphone
-web camera

Telepharmacy Technical Details

Patient Home Telehealth Configuration

Patient

Internet or Telephone Line

Pharmacist

Internet or Secure Network

Pharmacy Configuration for Telepharmacy

Clinician

Pharmacy Technician

Remote Pharmacy Telepharmacy Configuration
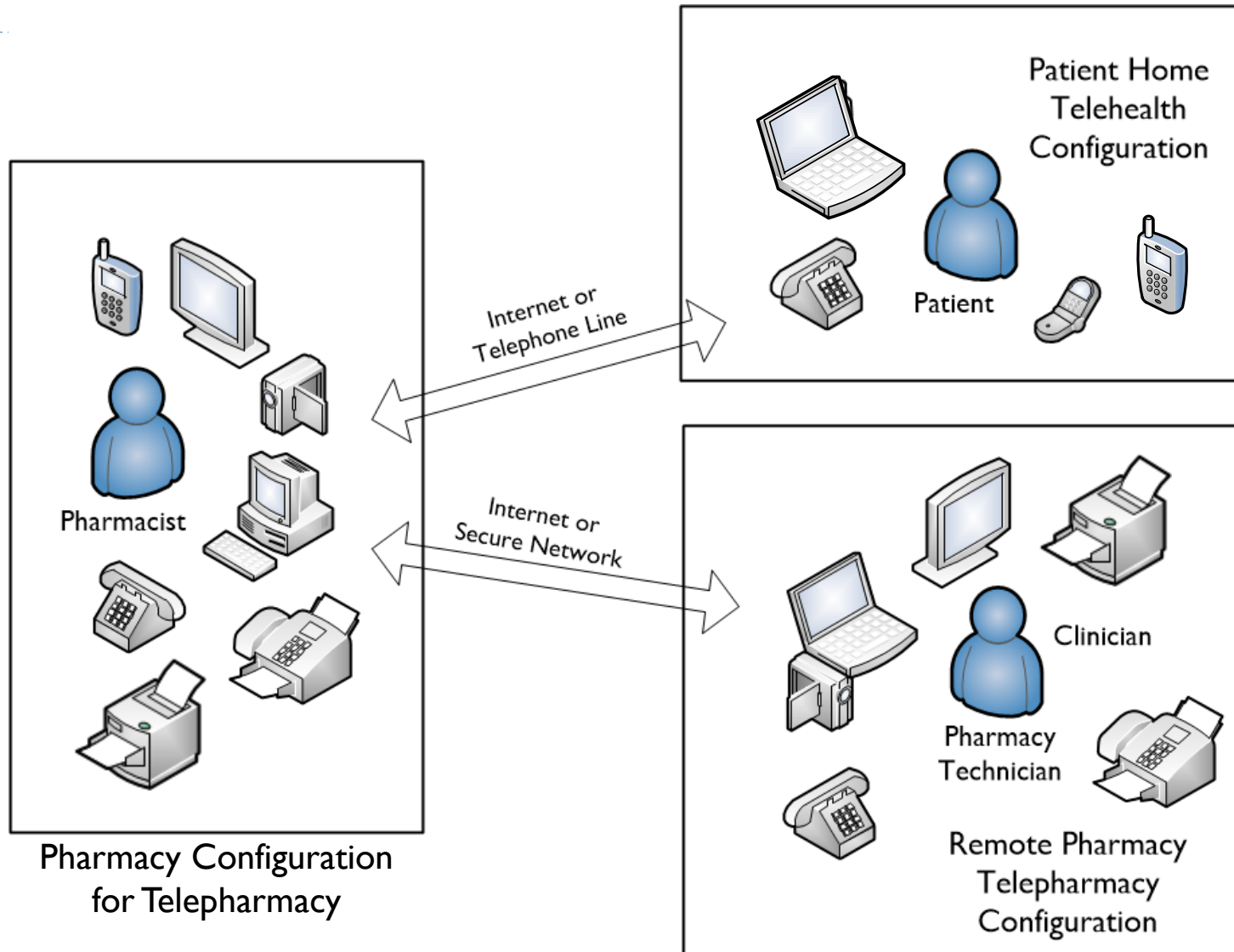
Example of Telepharmacy Vendor Products

Telepharmacy technologies used for remote pharmacy support

- Pharmacist Remote Inspection and Verification

- Patient Remote Counseling and Patient Education

- Technician Remote Pharmacy Management

See: http://www.scriptpro.com/About/Company-Information/

Remote Telepharmacy Technologies

Bringing pharmacies back to rural Iowa

https://www.iowafarmbureau.com/Article/Bringing-pharmacies-back-to-rural-Iowa

North Dakota Telepharmacy Project

https://www.ndsu.edu/telepharmacy/

Telepharmacy Technology in the Home

Phoning it in: Telepharmacy connects rural patients

http://magicvalley.com/news/local/phoning-it-in-telepharmacy-connects-rural-patients/article_2d27e4d6-efc3-5059-9dc9-23ef84dfe8b9.html

Technical Scope of Telepharmacy vs Telehealth

Telepharmacy: Path to the Telehealth Future

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Definition and Scope of
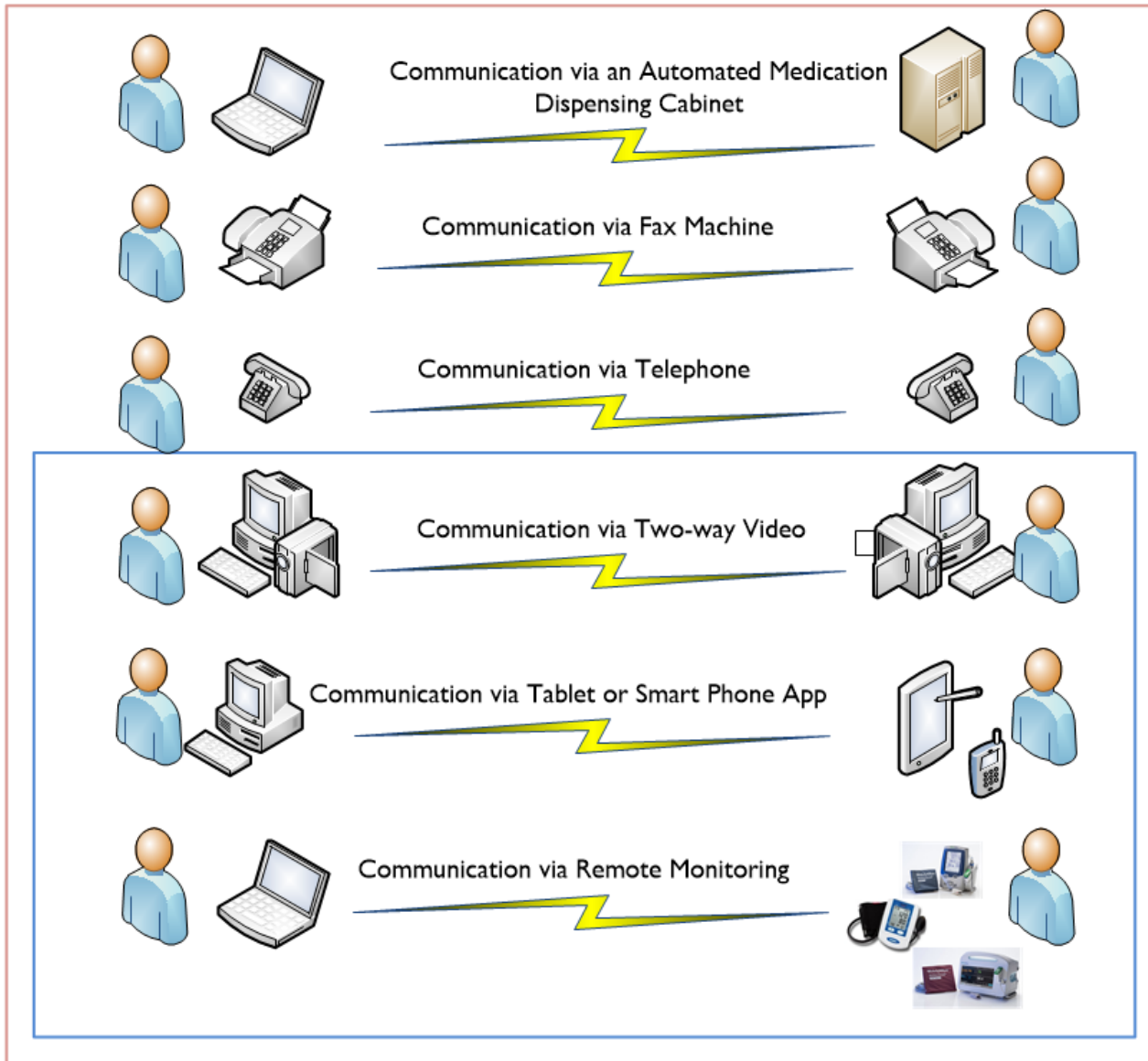
Telehealth, Telemedicine and Telepharmacy

Definition of Telemedicine

The American Telemedicine Association

- "…telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status."

The World Health Organization

- Telemedicine often associated with "service delivery by physicians…"

- Telehealth refers to services "provided by health professionals in general…"

- For WHO <u>telemedicine and telehealth are synonymous</u> and used interchangeably.

Telehealth and Telepharmacy are Synonymous

Figure 1. Telemedicine, ehealth, telehealth, telecare and mhealth.
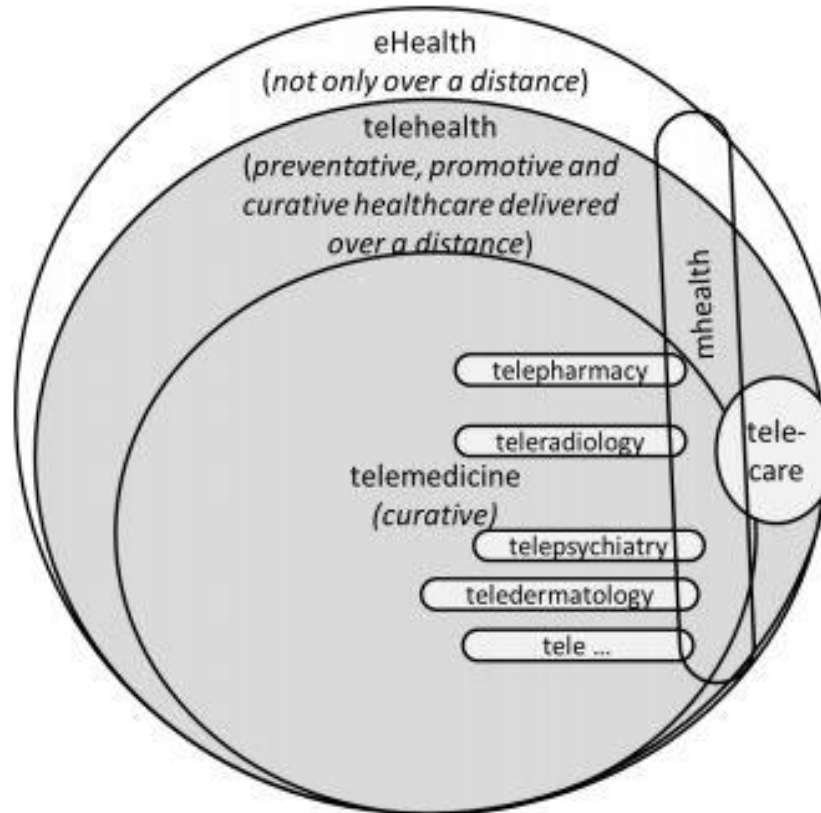
Figure reprinted from A Review of Telehealth Service Implementation Frameworks by van Dyk under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/)

Definition of Telemedicine by Medical Boards

Federation of State Medical Boards, 2014

- "Telemedicine" means the practice of medicine using <u>electronic communications</u>, information technology or other means between a licensee in one location, and a patient in another location

Federation of State Medical Boards, 2014

- Telemedicine is <u>not</u> an audio-only, telephone conversation, e-mail/instant messaging conversation, or fax.

Definition of Telemedicine by FL Medical Board

Florida Board of Medicine, 2016

- "Telemedicine" means the practice of medicine by a licensed Florida physician or physician assistant where patient care, treatment, or services are provided through the use of medical information exchanged from one site to another via <u>electronic communications</u>.

Florida Board of Medicine, 2016

- Telemedicine <u>shall not include</u> the provision of health care services only through an audio only telephone, email messages, text messages, facsimile transmission, U.S. Mail or other parcel service, or any combination thereof.

Definition of Telemedicine by CMS

Florida Medicaid - 59G-1.057 Telemedicine

- Florida Medicaid reimburses only for telemedicine services that use <u>interactive telecommunications equipment:</u>
    - o Audio/video connectivity with video monitors
    - o Two-way, real time, interactive communications
    - o Between a patient and a doctor

Medicare

- Medicare reimburses communication between the patient and physician at a distant site <u>using two-way, real time interactive audio and video equipment</u>.

    - o The patient's facility must be located in a rural area to qualify for payment.

Definition of Telepharmacy

Florida Administrative Code

Practice of Pharmacy

- Does not address Telepharmacy

National Association of Boards of Pharmacy

"Practice of Telepharmacy" means the provision of Pharmacist Care Services by registered Pharmacies and Pharmacists located within US jurisdictions through the use of telecommunications or other technologies to patients or their agents at distances that are located within US jurisdictions.

- The Practice of Telepharmacy does not restrict the pharmacist to interactive, two-way telecommunications.

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Regulatory Oversight of Telehealth and Telepharmacy

Regulatory Environment for Telepharmacy

Regulation of Telehealth and Telepharmacy is uneven across the fifty states.
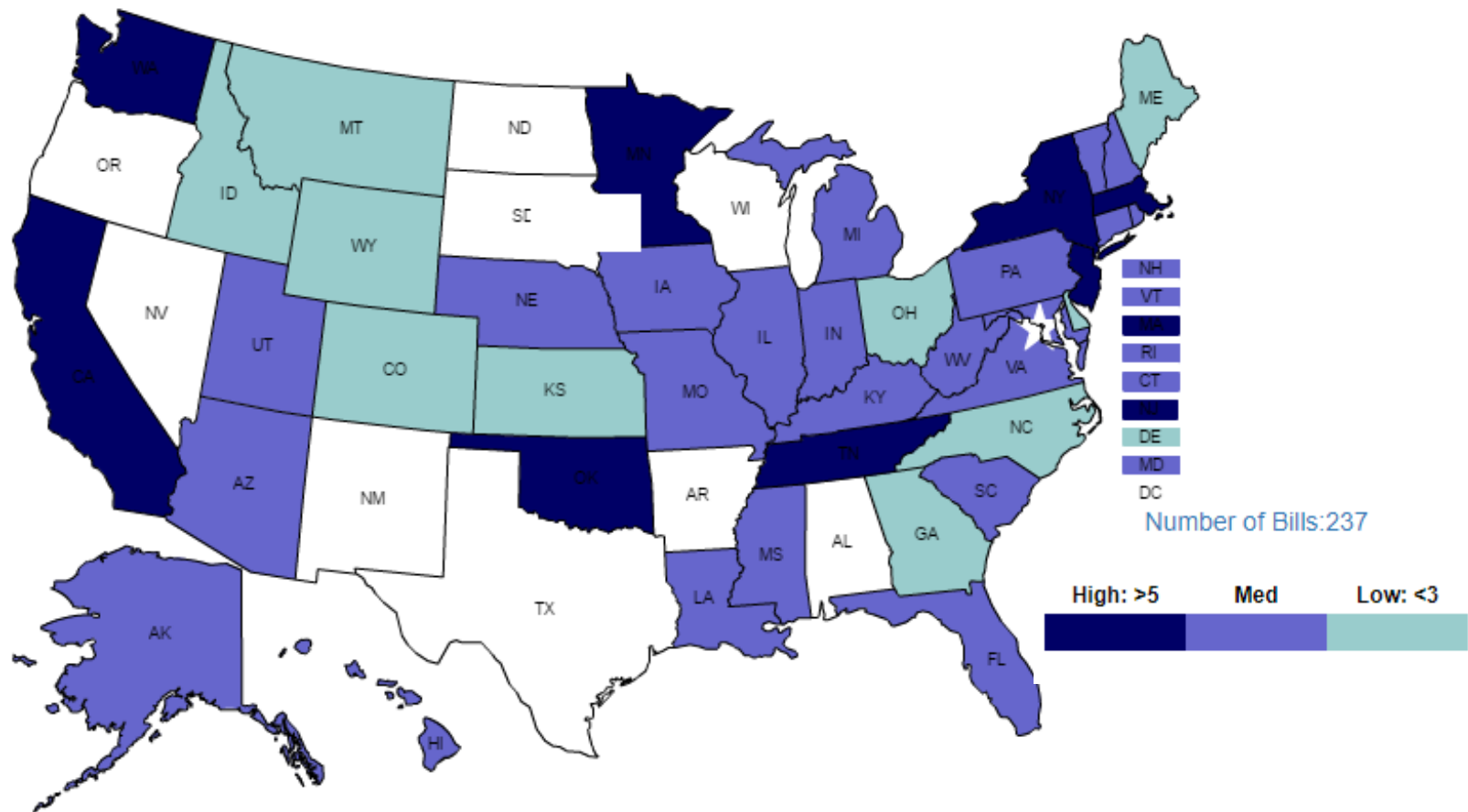
In an article published in March 2016 in the Pharmacy Times, the authors comment that:

- "…as the scope of pharmacy practice and telecommunication technology continues to evolve, the breadth of telepharmacy services makes them difficult to regulate uniformly."

- "Therefore, when states craft their telepharmacy laws, they often impose varying requirements."

State Regulation of Telepharmacy, Anne Compton-Brown, JD, and Serj Mooradian, JD. Published by Pharmacy Times Wednesday, March 23, 2016. Retrieved from http://www.pharmacytimes.com/news/state-regulation-of-telepharmacy.
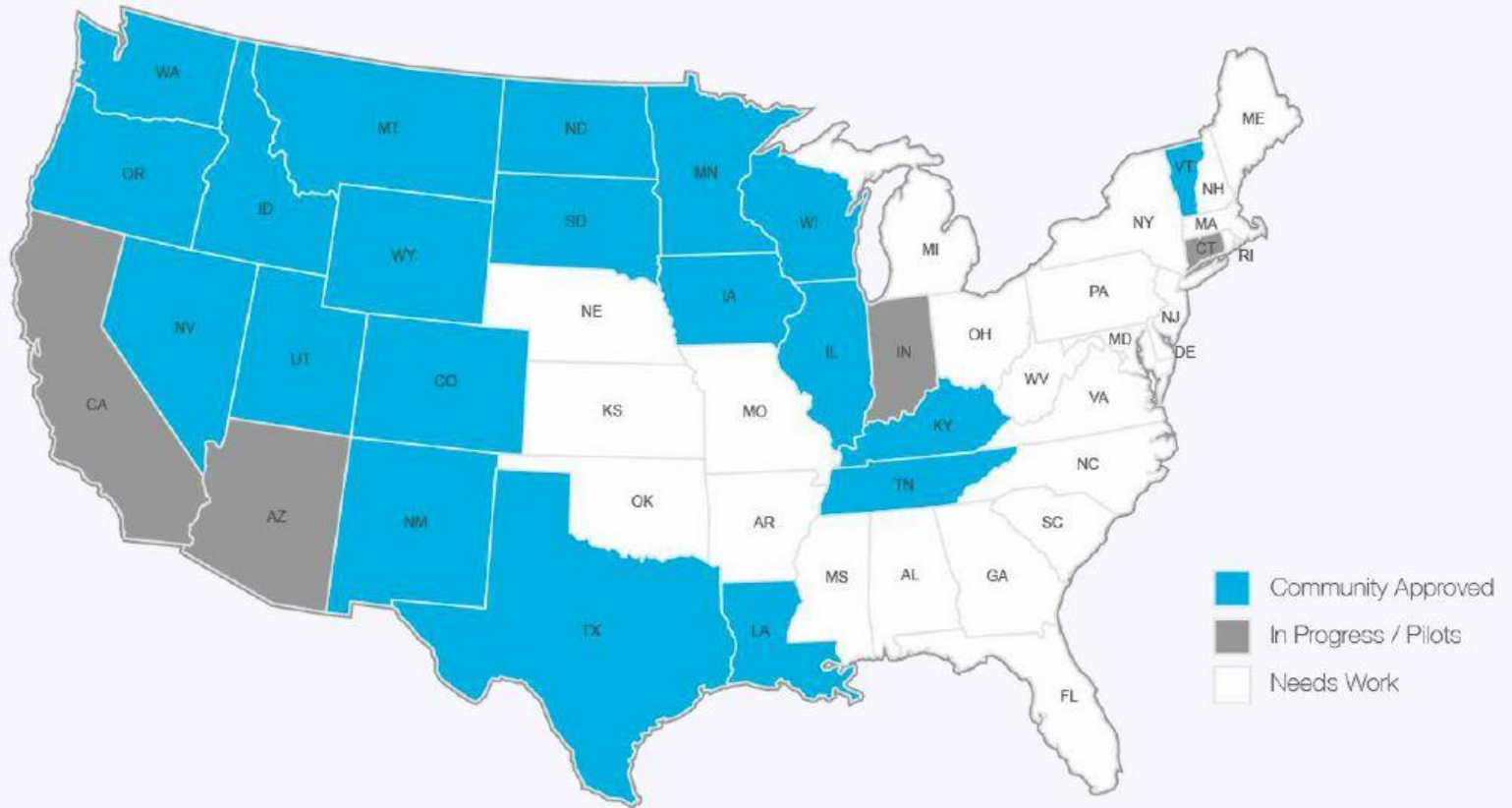
Regulatory Environment for Telehealth

The American Telemedicine Association publishes reports on the state telemedicine regulations, such as parity laws.

States with Parity Laws for Private Insurance Coverage of Telemedicine (2017)

Legend:
- Telemedicine Parity Law
- Partial Parity Law
- Proposed Parity Bill
- No Parity Legislative Activity

http://www.americantelemed.org/policy-page/state-policy-resource-center

Regulatory Environment for Telehealth

The Federation of State Medical Boards monitors legislation affecting regulation of medicine, such as the number of telemedicine bills introduced in 2016 in all 50 states.

http://services.statescape.com/Search/GetReport.aspx?pageid=legis

Telepharmacy: Path to the Telehealth Future

States with Telepharmacy Rules and Projects

2016

Legend:
- Community Approved (blue)
- In Progress / Pilots (gray)
- Needs Work (white)

http://www.telehealthresourcecenter.org/node/764

Source: Quarles & Brady LLP analysis & report, July 2016

Model State Pharmacy Act

National Association of Boards of Pharmacy

A "Valid Patient-Practitioner Relationship" exists between a consulting Practitioner or Board-approved telemedicine Practitioner <u>providing that a physical examination was previously performed</u> by the patient's primary Practitioner.

- The prescribing Practitioner is issuing a prescription through a telemedicine practice approved by the appropriate state agency by means of audio, video, or data communications.

- Standard telephone, facsimile transmission, or both, in the absence of other integrated information or data, <u>do not constitute telemedicine practices.</u>

https://nabp.pharmacy/publications-reports/resource-documents/model-pharmacy-act-rules/

National Association of Boards of Pharmacy

Task Force Recommends Expanding Telepharmacy Regulations:

- Add a new section for telepharmacy to the Model Act

- Define telepharmacy to recognize that it is the practice of pharmacy both within and across state lines.

- Define telepharmacy technologies broadly, encompassing future technological developments.

- Address restrictive telepharmacy regulations based on geographical or distance-related parameters

- Exempt the requirement of a face-to-face examination in instances of third-party prescribing of certain drugs.

Florida Restriction on Prescription of Controlled Substances via Telemedicine

Florida Board of Medicine, 2016

- Controlled substances shall not be prescribed through the use of telemedicine except for the treatment of psychiatric disorders.

- This provision does not preclude physicians from ordering controlled substances through the use of telemedicine for patients hospitalized in a licensed facility.

- Physicians must not issue a prescription, via electronic or other means, unless a documented patient evaluation exists to establish the diagnosis for which any drug is prescribed.

Federal Regulation: Ryan Haight Online Pharmacy Consumer Protection Act of 2008

Sec. 2. Requirement of a Valid Prescription for Controlled Substances Dispensed by Means of the Internet

- "No controlled substance that is a prescription drug… may be delivered, distributed, or dispensed by means of the Internet without a valid prescription."

- A "valid prescription" is a prescription written by a medical practitioner for a "legitimate medical purpose."

- The prescription can written only following at least one in-person medical evaluation, in "the physical presence of the practitioner."

Federal Regulation: Ryan Haight Online Pharmacy Consumer Protection Act of 2008

Telemedicine Requirements

The term 'practice of telemedicine' means… the practice of medicine in accordance with applicable Federal and State laws by a practitioner (other than a pharmacist) who:

- Is at a location remote from the patient

- Is communicating with the patient or with a health care professional who is treating the patient

- Is using a telecommunications system physically located in a hospital or clinic registered with the DEA

- Is working in the usual course of his or her professional practice, according to state law

HIPAA Security Rule

§ 164.312 Technical safeguards

Standard: Transmission security.

Implement technical security measures to prevent unauthorized access to Electronic Protected Health Information (ePHI) transmitted over an electronic communications network.

Encryption - <u>Addressable</u>

Encrypt ePHI whenever appropriate

- Under the HIPAA Omnibus Rule, ePHI that is **not encrypted** is considered "Unsecure" and liable for penalties if breached

- **Encrypted** ePHI is "Secure" and not liable for penalties if breached

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Examples of Telepharmacy Projects

Telepharmacy Applications

There are numerous Telepharmacy services employed for remote pharmacy activities in rural areas:

- Electronically supervising remote technicians who are providing full-service pharmacy dispensing

- Conducting remote consultations with another pharmacist

- New pharmacist mentoring and consultation

- Patient assessment and counseling and Medication Therapy Management (MTM)

- Reviewing new medication orders transmitted by fax or electronically and remotely releasing medication from an automated medication dispensing cabinet

North Dakota Telepharmacy Project

North Dakota

Three rural definitions based on Census Urban Areas

Rural locations are those outside Census Urban Areas with a population...

...greater than or equal to 2,500

	Outside Census Urban Areas >= 2,500

...greater than or equal to 10,000

	Outside Census Urban Areas >= 2,500
	Census Urban Areas: 2,500 - 9,999

...greater than or equal to 50,000

	Outside Census Urban Areas >= 2,500
	Census Urban Areas: 2,500 - 9,999
	Census Urban Areas: 10,000 - 49,999

Urban locations under all three definitions:

	Census Urban Areas: >= 50,000

Rural Areas in North Dakota
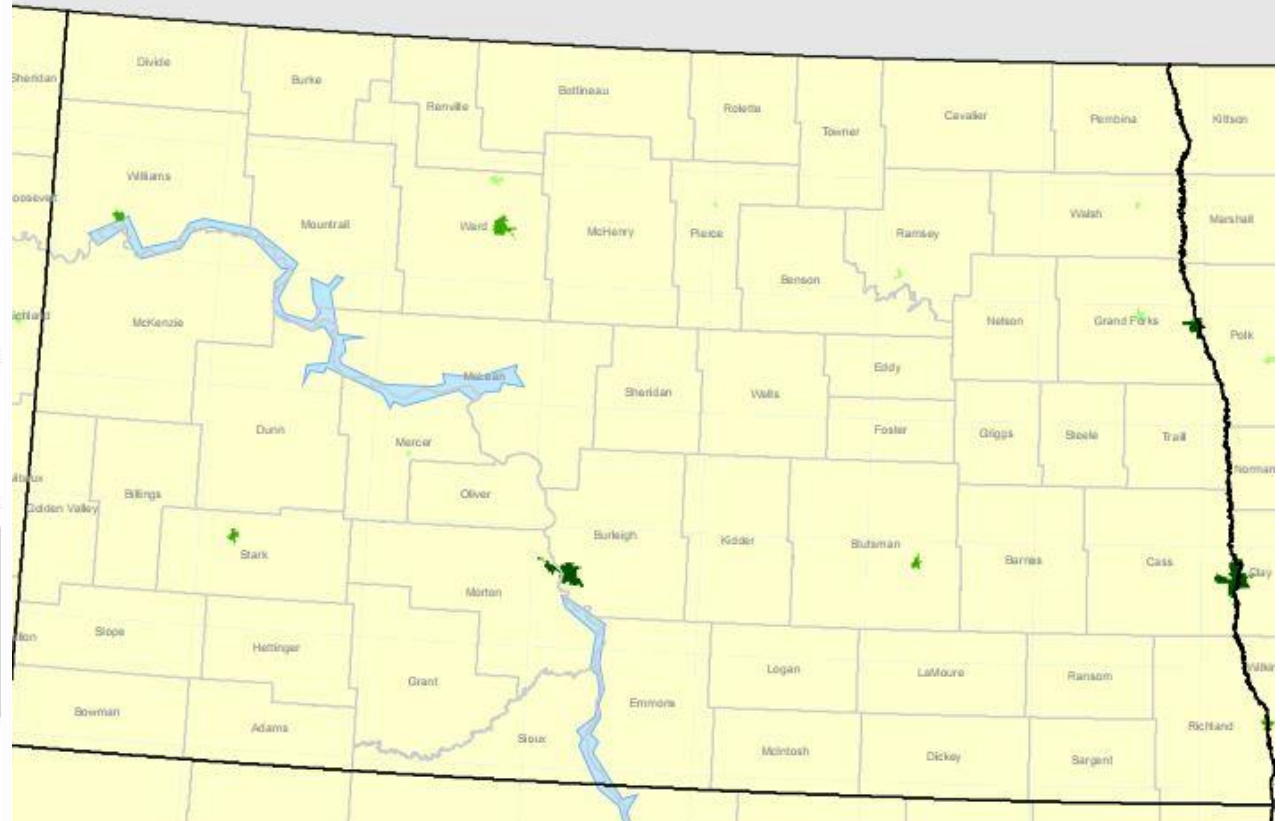
https://www.ers.usda.gov/webdocs/DataFiles/Rural_Definitions__18009/25588_ND.pdf?v=39329

ND Telepharmacy Project – Rural Need

Exhibit 2. North Dakota Health Professional Shortage Areas, Critical Access Hospitals, and Network Affiliates
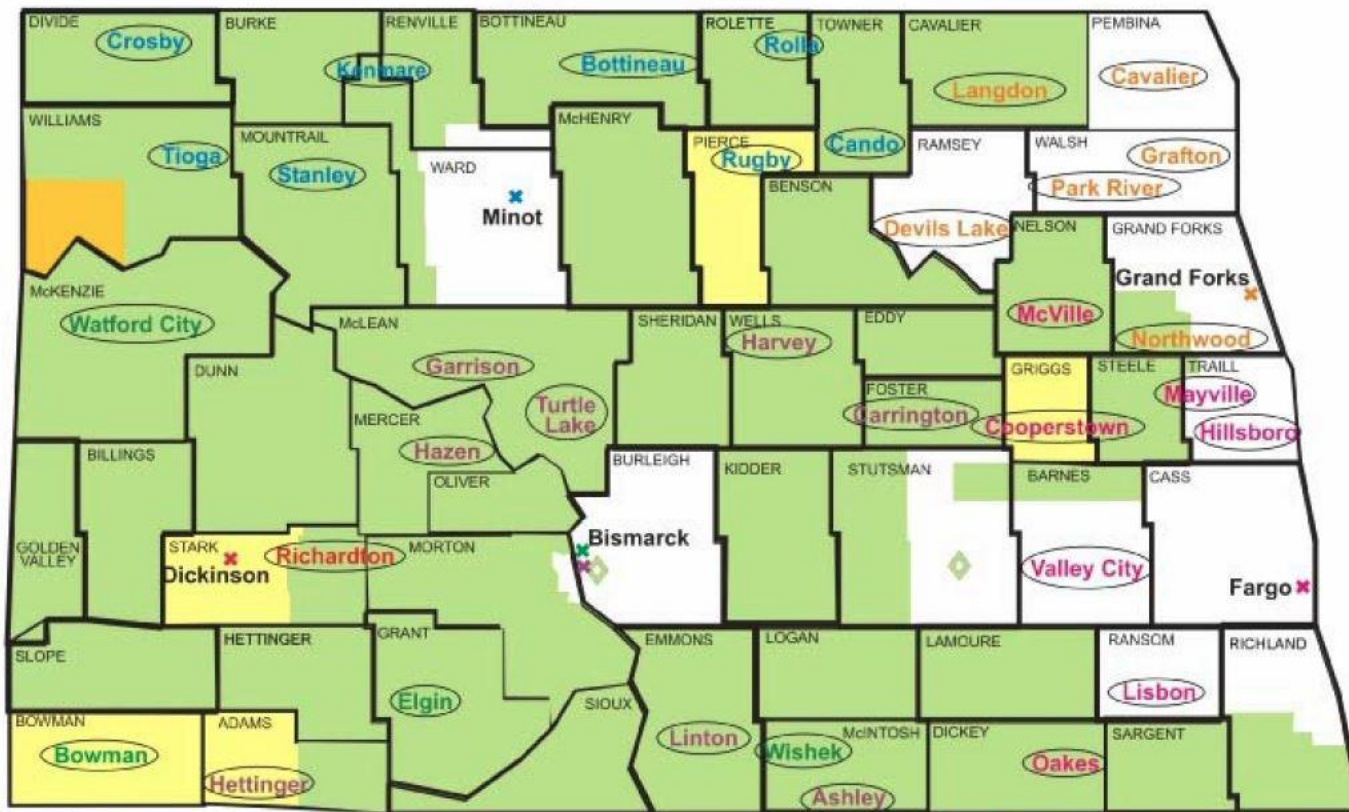
Telepharmacy: Path to the Telehealth Future

ND Telepharmacy Project – Initial Drivers

- In 2001 the North Dakota State Board of Pharmacy established Pilot Telepharmacy Rules to restore and retain pharmacy services in medically underserved remote rural communities

- In September of 2002, the NDSU College of Pharmacy received a HRSA grant to implement a state-wide telepharmacy program to prevent rural pharmacies from closing

- In June 2003 the North Dakota State Board of Pharmacy established permanent rules allowing telepharmacy to be practiced on a broader scale in North Dakota

ND Telepharmacy Project – Pharmacy Rules

The North Dakota Telepharmacy rules allow for the following:

- Retail pharmacies can operate in remote areas of the state without a licensed pharmacist being physically present

- A licensed pharmacist supervises a registered pharmacy technician at a remote telepharmacy site:

  o The pharmacy and remote site are connected by a computer, video, and audio links

  o A registered pharmacy technician is physically present at the remote site

  o The pharmacist compares medications via the video link, checking the label checked for accuracy

  o The pharmacist can counsel the patient on prescriptions using the video and audio links

ND Telepharmacy Project – Technician Education

North Dakota State College of Science Certified Pharmacy Technicians Program offers three pharmacy technician training program options:

- One and two year <u>Associate in Applied Science</u> degrees.
  - o Both of these include an internship of eight weeks in community and hospital pharmacies.
- <u>Pharmacist-Assisted Technician Self-Instructional Modules</u> (PATSIM) are ASHP-accredited for pharmacy technicians .
- A Grandfathered technician who registered in 1994 but did not complete a formal training programs in North Dakota.

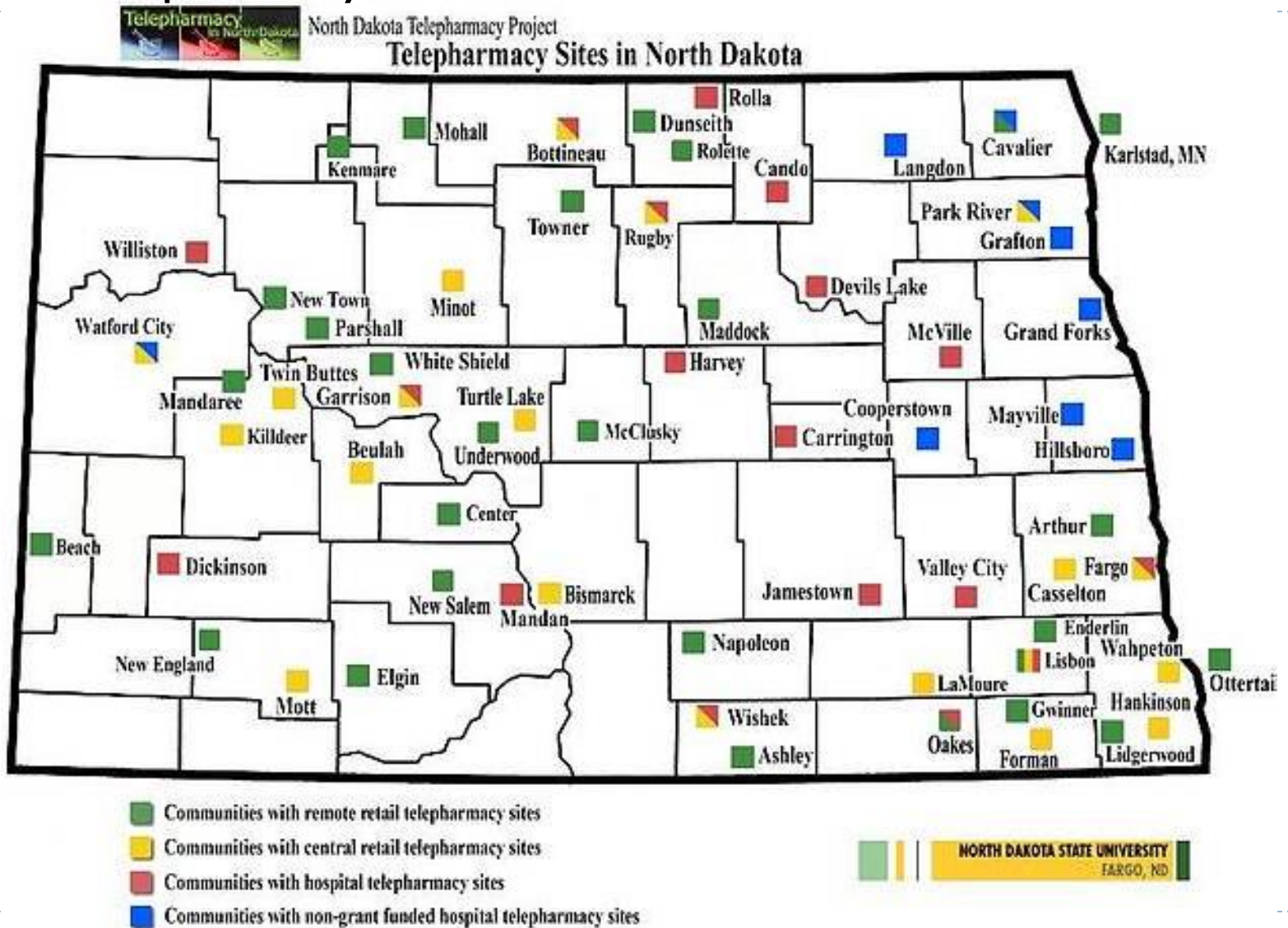All pharmacy technicians are registered with the North Dakota Board of Pharmacy.

ND Telepharmacy Project - Remote Technicians

Technician Responsibilities

- Retrieve product from stock
- Count solid dosage forms
- Fill routine stock supplies
- Pour liquid dosage forms
- Receive written prescription from patient
- Input prescriptions into computer
- Affix prescription label to a container
- Request refill authorization from the prescriber
- Obtain patient medication history information
- Order from wholesaler to maintain adequate stock
- Work with inventory, checking in and filing medication order
- Responsible for outdated drug products

ND Telepharmacy Project Partners

Remote telepharmacy locations in North Dakota

North Dakota Telepharmacy Project
Telepharmacy Sites in North Dakota

Legend:
- Communities with remote retail telepharmacy sites
- Communities with central retail telepharmacy sites
- Communities with hospital telepharmacy sites
- Communities with non-grant funded hospital telepharmacy sites

NORTH DAKOTA STATE UNIVERSITY
FARGO, ND

Telepharmacy: Path to the Telehealth Future

ND Telepharmacy Project - Outcomes

The North Dakota Telepharmacy Project current status:

- 81 pharmacies involved in the project
- Partnering pharmacies include central, remote, retail and hospital pharmacy sites
- 38 counties covered in North Dakota
  - o 2 in Minnesota
- 80,000 rural citizens affected
- $26.5 million in economic development
- 80-100 new jobs added
- Overall medication error rate at 1% versus 1.7% nationally
- North Dakota telepharmacy permits have increased with no decline in traditional pharmacy locations

Telepharmacy in a Rural Alberta Community Cancer Network

Telepharmacy services initiated in the absence of a pharmacist in rural cancer centers.

- Pharmacy technicians at two remote community cancer centers connected with pharmacists at a coordinating center

  - A video camera let the pharmacist observe preparation of drugs based on checklists
  - Intravenous preparations were compounded for 47 cancer patients over the course of 109 treatment visits

- The project estimates it avoided about 27,000 miles of patient travel for treatment

Deployment of Telemedicine/Telehealth Technologies in Rural Alaska

Five different telemedicine technologies used to provide primary care services to patients throughout the Anchorage Service Unit

- Alaska Federal Health Care Access Network (AFHCAN) Telemedicine Cart
  - o Mobile telemedicine workstation equipped with diagnostic devices to collect clinical data
- Video Teleconferencing (VTC) Cart
- *Medication Dispensing Unit*
  - o *Automated medication dispensing machine*
- Home Health-Monitoring Unit
- Teleradiology Image Capturing System

Baptist Health South Florida - Telehealth

BHSF telehealth programs include:

- eICU LifeGuard covering 147 ICU and step-down beds
    - Telehealth equipment linked to remote monitoring site
    - Computers programmed for each patient's medical needs
    - Tele-ICU intensivist can talk with both patient and nurse in the ICU using video and two-way audio

Other Programs Include:

- Home health programs and remote monitoring
- Telepsych on cruise lines

- ePrimary care
- Virtual Urgent Care
- eSitter program
- ePharmacy services

Baptist Hospital South Florida Telepharmacy

ePharmacy Scenario

A home health nurse feels a patient should talk to a pharmacist about medications that she is prescribed.

- The nurse contacts Baptist South Telepharmacy to discuss the patient's medications with a pharmacist over a video connection

- The patient and home health nurse talk to a Baptist South ePharmacist over the computer - as this 96 year old woman is doing in the picture
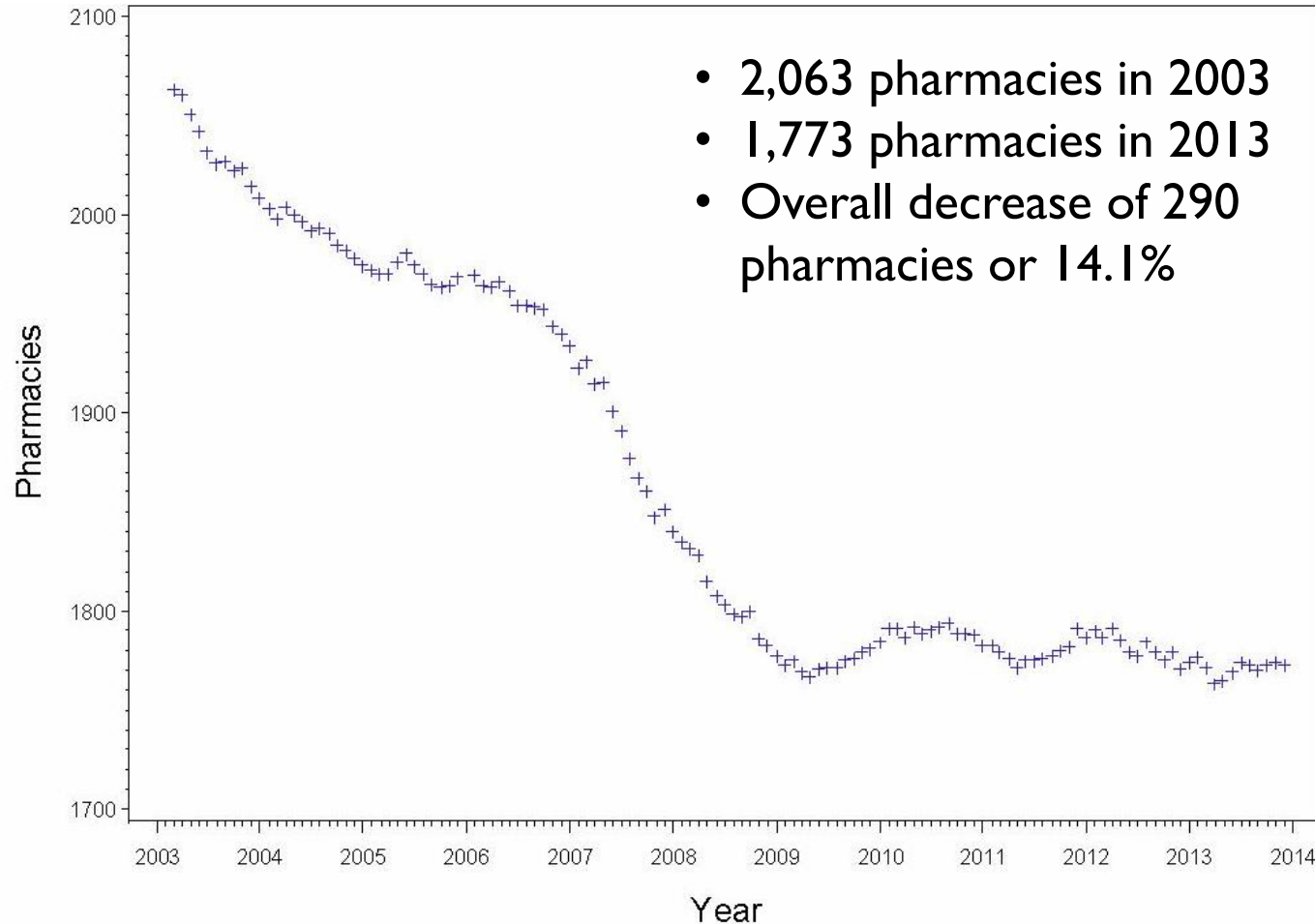

Tele-pharmacy

Clinical pharmacist reviewing medications at home with the patient

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Business Drivers for Telepharmacy

The Decline of Rural Independent Pharmacies

Monthly Count of Rural Independently Owned Pharmacies That Were the Only Pharmacy in a Community, 2003-2013

- 2,063 pharmacies in 2003
- 1,773 pharmacies in 2013
- Overall decrease of 290 pharmacies or 14.1%

Telepharmacy Startups in Rural America

Phoning it in: Telepharmacy connects rural patients

For the first time in 15 years, Shoshone residents don't have to travel to another town to get their prescription medications.

- Shoshone Pharmacy opened Dec. 22, 2016 as the first telepharmacy in Idaho to open that is not affiliated with an existing hospital or clinic.

    o Shoshone Pharmacy allows an on-site pharmacist to approve orders remotely and do consultations with patients using live video conferencing.

    o "It's bringing pharmacy back to rural Idaho."

Telepharmacy Startups in Rural America

Illinois village loses pharmacy, gains telepharmacy

The pharmacy in the central Illinois village of Dieterich closed several years ago. But residents will be able to fill prescriptions locally again through a new tele pharmacy.

- Telepharmacies allow off-site pharmacists to help patients via a secure video link.

  - A pharmacist in the nearby city of Newton. will provide tele pharmacy services at the Dieterich clinic from her pharmacy.

  - The telepharmacy will help patients who have been driving to Effingham or Newton to fill their prescriptions.

Telepharmacy Startups in Rural America

Implementation of a Telepharmacy Service to Provide Round-the-clock Medication Order Review by Pharmacists

Seven critical access hospitals in Idaho implemented an EHR and pharmacy information system to support around-the-clock medication order review by pharmacists.

- Around-the-clock medication order review was achieved by partnering with remotely located pharmacists.

- CAHs pay $4 per medication order reviewed via this system but the additional costs for the pharmacists' reviews are directly reimbursed for Medicare patients.

- Overall, about 58% of the total reviews were conducted by the remote pharmacists.

Telepharmacy Startups in Rural America

Around-the-Clock Review Via Telepharmacy

In 2012 the North Canyon Medical Center, a critical access hospital in Gooding, Idaho, had pharmacist coverage only from 7:30 AM to 4:00 PM each day.

- In 2013 the pharmacy director launched a telepharmacy service for five hospitals in which five pharmacists working from home provide 24/7 coverage.

  o Review and verify medication orders

  o Enter orders in patients' EHRs,

  o Check for drug interactions,

  o Review medication strength

  o Consult with physicians as needed
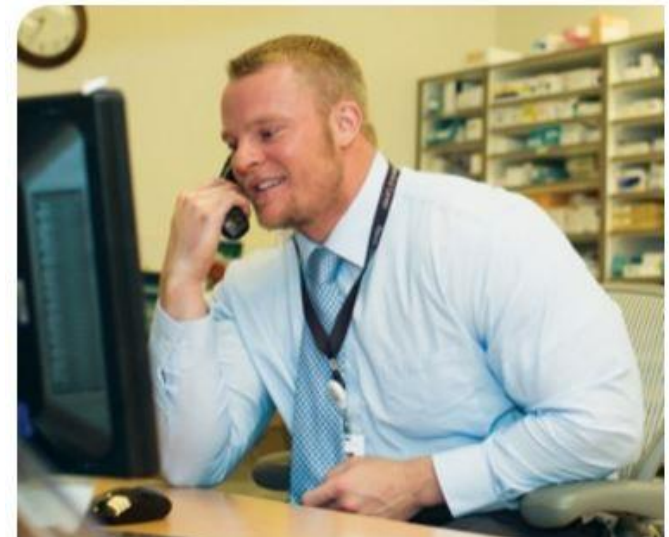
Telepharmacy Startups in Corporate America

Cardinal Health buys Iowa telepharmacy startup

Cardinal Health, a large provider of health care services, has purchased a four year old Iowa startup, TelePharm, that sets up telepharmacies across rural parts of the state.

Corridor startup TelePharm snapped up by Cardinal Health

Mr. Miller and his team developed a web based platform that allows pharmacists at a central location to communicate with customers and oversee the dispensing of pharmaceuticals at remote locations.

Telepharmacy Startups in Rural America

Telepharmacy expansion could help rural pharmacies survive

Newly enacted legislation in Idaho expanded a pilot project that will let so called telepharmacy services go statewide in communities with more than 500 residents, Radio Iowa reported.

- Telepharm, an Iowa City company, makes a licensed pharmacist available to remote locations in the state's first telepharmacy pilot project.

  o TelePharm provides web-based way pharmacy services, such as approving prescriptions.

  o The company's platform offers a video conferencing system

Telepharm - Telepharmacy Marketing Website

GET STARTED WITH TELEPHARM

TelePharm
A Cardinal Health company
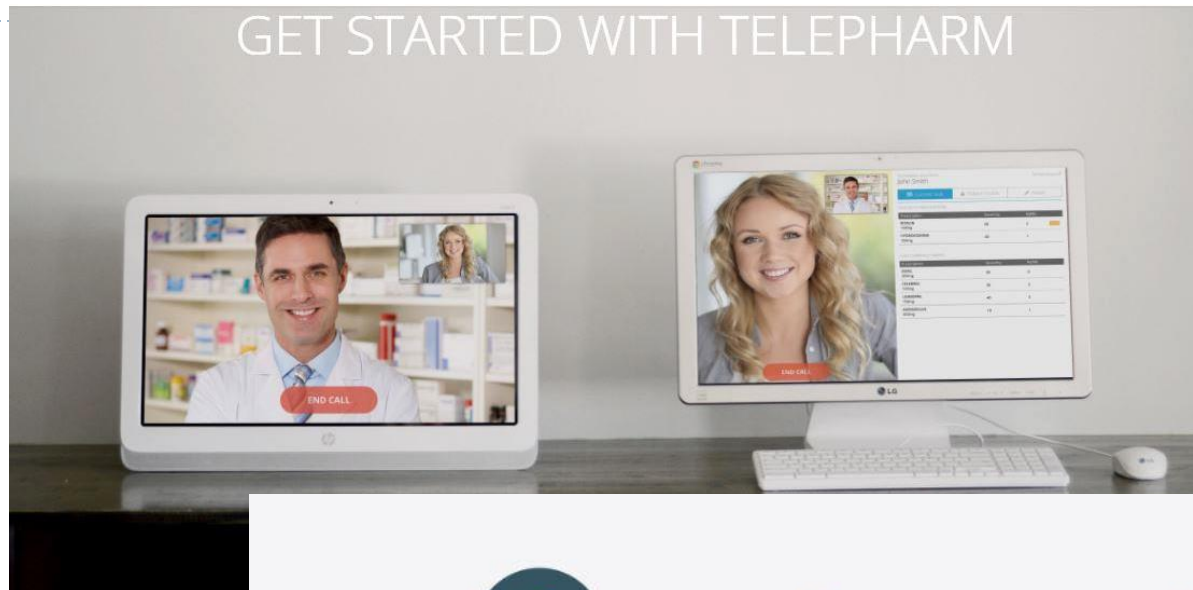
Open new or convert underperforming locations to telepharmacy stores

Telepharmacy locations allow you to expand your business with small-footprint stores where it is convenient for your patients. It also enables you to extend or avoid cutting back hours and services by converting an existing store. This leads to better access, improved outcomes, and a better patient experience.
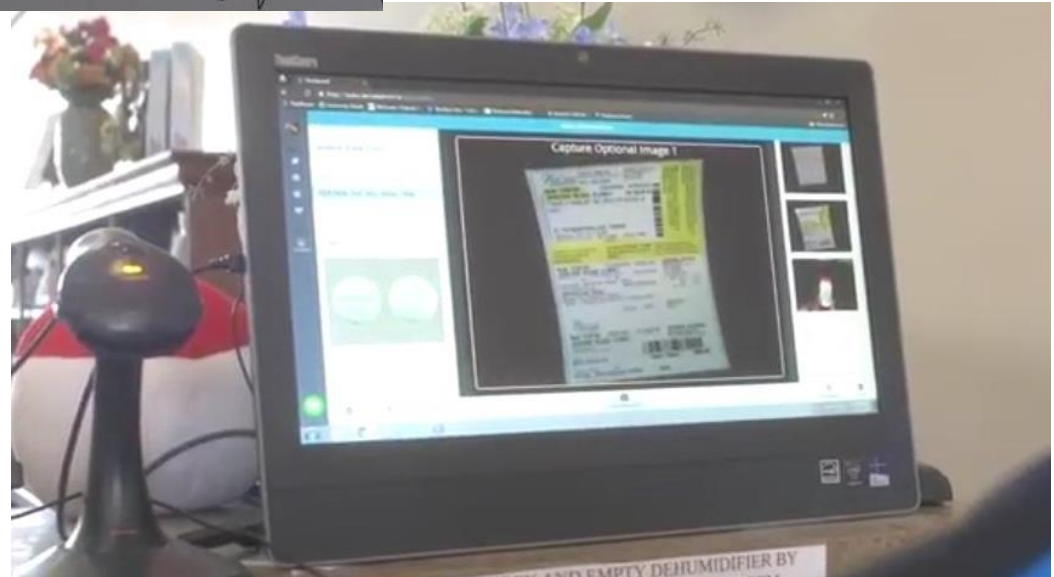
- Rural communities

https://www.telepharm.com

Telepharm Promotional Video

"How Telepharmacy Works"
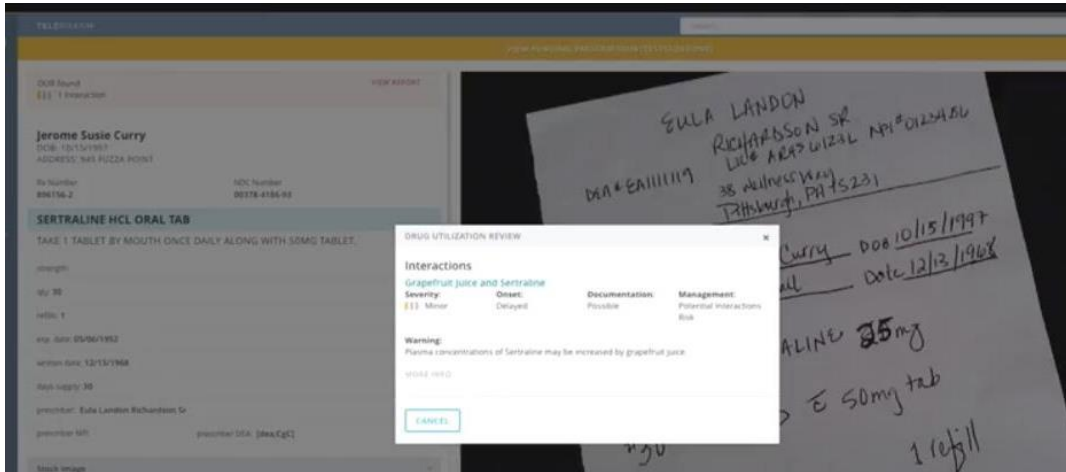
Pharmacist checks prescription accuracy and drug interactions

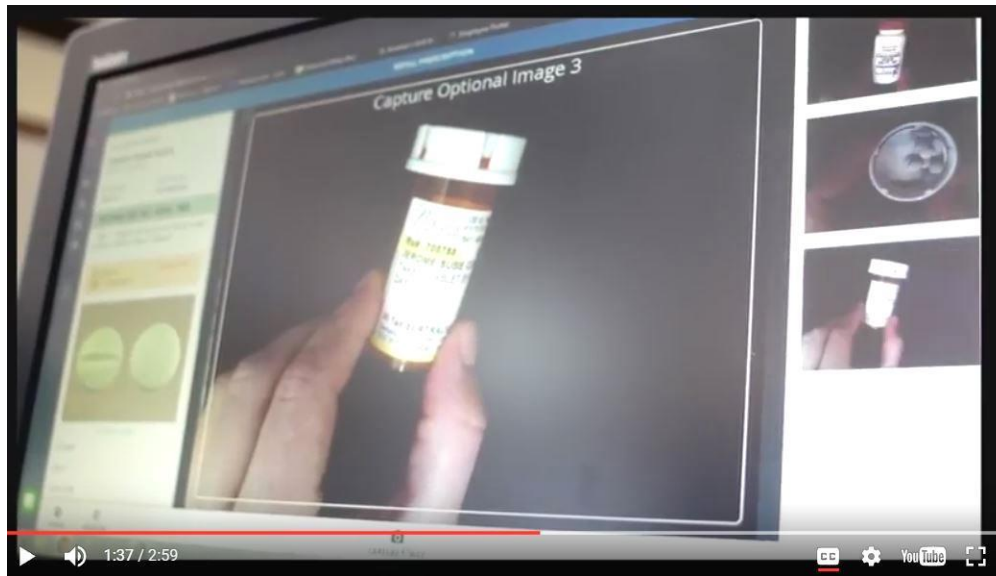Technician receives medication instructions from the pharmacist

https://www.telepharm.com/how-telepharmacy-works

Telepharm Promotional Video

"How Telepharmacy Works"

The Technician sends a video of the medication for dispensing

The Pharmacist can talk one-on-one with the customer

https://www.telepharm.com/how-telepharmacy-works

Telepharmacy Startups in Corporate America

The business case for telepharmacy: Remote dispensing of medications — tomorrow's telepharmacy.

PipelineRx offers a telepharmacy technology platform called PowerGridRx.

- "This HIPAA-compliant solution is a remote telepharmacy service for next-generation medication order queue management. It's an industry-first telepharmacy technology platform."


PipelineRx

Telepharmacy Startups in Corporate America

Dartmouth-Hitchcock Center for Telehealth goes live with PipelineRx telepharmacy solutions

- "To help optimize pharmacy workflow and improve patient care."

CPSI and PipelineRx Bringing Telepharmacy Services to Community Hospitals

- "To offer a cutting edge telepharmacy solution designed to help small and rural community hospitals provide first class care."

☑️**PipelineRx**

● Currently doing business
● Coming soon
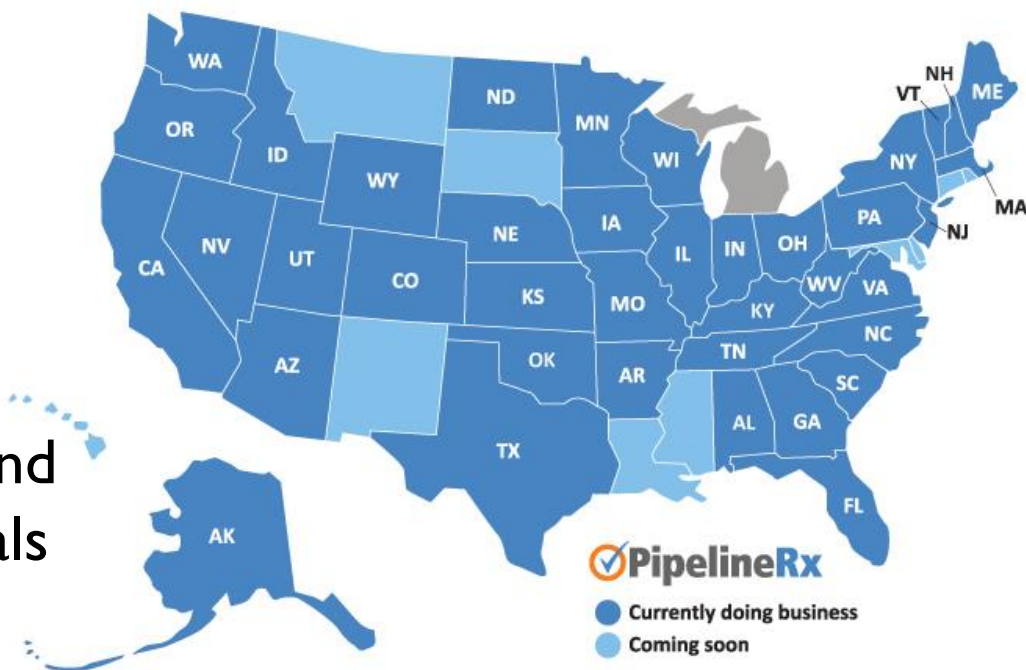
Is Telepharmacy a Benefit to Pharmacists?

Telepharmacy Now: A Look at Telepharmacy for Independent Pharmacies

Question: Does Telepharmacy eliminate pharmacists' jobs?

- According to Adam Chesler, Director of regulatory affairs at Cardinal Health:

  o "Rural pharmacies are closing at an alarming rate, and when a rural pharmacy closes, that's the loss of a job."

  o "When you add a telepharmacy, you're not only helping the overall economy of that town, but you're actually increasing the amount of pharmacists' jobs there; you're increasing access to the pharmacists."

  o "Every time you open a telepharmacy you're creating jobs."

Florida Pharmacy Association Regulatory and Law Conference

Some Telepharmacy Takeaways

Telehealth/Telepharmacy Takeaways

Telehealth and Telepharmacy projects develop out of health care need, typically the delivery of care to remote populations.

- Many telehealth projects start with grant funding and involve a university or other health care organization to create the initial technical system.

- Regulatory oversight and legislation is often required before the Telehealth or Telepharmacy project can begin.

- Many Telehealth and Telepharmacy projects are anchored in medical centers that can afford the overhead of the project and its telecommunication infrastructure.

- With the success of initial Telehealth and Telepharmacy projects, larger health care corporations are realizing the value of investment in Telepharmacy and Telehealth.

Telehealth/Telepharmacy Predictions

1. With the headlong technology rush to mobile communications, the two-way interactive video features of Telehealth and Telepharmacy applications will become a standard means of health care communication.

2. With more access to secure Internet connections via smart phones, tablets, computers and even "wearable" technology and home monitoring systems, demand will increase for interactive access to health care professionals.

3. With the ongoing creation of applications for mobile communications and interoperability, Telepharmacy and Telehealth systems will be on the front end of health care development.

Follow-up Question 1

The Ryan Haight Online Pharmacy Consumer Protection Act of 2008 was passed to shut down all sales of controlled substances over the Internet.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Follow-up Question 2

A Valid Patient-Practitioner Relationship requires at least one in-person meeting between doctor and patient.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Follow-up Question 3

HIPAA Security regulations make it almost impossible to implement Telepharmacy projects.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Follow-up Question 5

Telepharmacy projects can create jobs and income for people in rural areas.

A. Yes

B. No

C. Sometimes

D. Maybe

E. Don't Know

Questions?

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This presentation, with notes, is available at:
www.imageresearch.com/telepharmacy