A wide-angle photograph of a desert landscape. A two-lane asphalt road with a yellow dashed center line and white edge lines stretches from the bottom of the frame towards the horizon. The road is flanked by dry, scrubby vegetation in shades of green and brown. In the background, several large, flat-topped red rock mesas or buttes rise against a clear, bright blue sky. The overall scene conveys a sense of vastness and a journey into the desert.

Stephen A. Klotz, Cesar Egurrola, and Lawrence York

Desert Expertise: DIY; How to make an Efficient and Highly Effective HIV Telemedicine Clinic

Improving Access to Quality Medical Care Webinar Series

Presented by

Southwest Telehealth Resource Center,
Arizona Telemedicine Program & Arizona
AIDS Education & Training Center and
Petersen Clinics, Tucson, AZ



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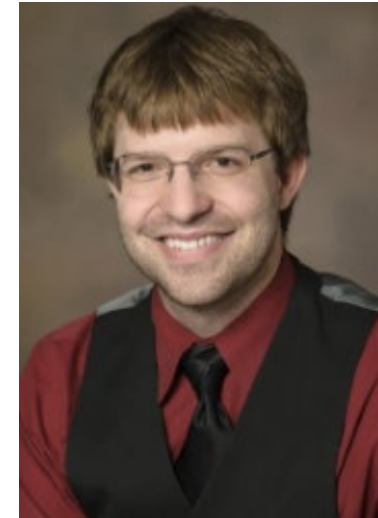
Desert Expertise: DIY; How to make an Efficient and Highly Effective HIV Telemedicine Clinic



Stephen Klotz, MD
Professor of Medicine and
Community and Family
Medicine



Cesar Egurrola
Program Coordinator



Larry York
Clinical Infectious Diseases
Pharmacist

Objectives of Webinar



1 DESCRIBE A SUCCESSFUL
HIV TELEMEDICINE CLINIC 14
YEARS IN THE MAKING



2 DESCRIBE THE PRINCIPAL
PARTICIPANTS IN THE
TELEMEDICINE CLINIC



3 DESCRIBE HOW PATIENTS
GET MEDICATIONS REFILLED
AND LABORATORY TESTS
PERFORMED



4 DESCRIBE PATIENT
REACTION TO A HIV
TELEMEDICINE CLINIC

Quick-start Menu



HIV PHYSICIAN



HIV CLINICAL COORDINATOR



HIV PHARMACIST



EMR OPEN AND READY TO
GO



HIPAA COMPLIANT ZOOM
OR SIMILAR CONNECTION
HANDLED BY CLINICAL
COORDINATOR



LINK TO PATIENT; EITHER
PHONE OR INTERACTIVE
VIDEO

Conduct of Clinic for Returning Patients



Clinic coordinator controls all connections and brings the patient on the screen or telephone



Physician greets patient and asks general health questions followed by a review of any recent labs or x-rays and when the next visit is to occur (5 minutes)



Pharmacist goes over medication list ; renews ART and determines compliance and explains how to take ART; orders vaccines if needed (5 minutes)



Clinic coordinator asks questions about mental health and sexual practices; orders labs as needed; reviews patient's contact information; makes next appointment (5 minutes)

Physician's Goals

- Determine if stable living conditions exist for the patient
- Every patient on ART
- Every patient undetectable for HIV-1 RNA
- Depending upon patient's age, preventive health measures are suggested
- Return on Telemedicine as needed (usual visit time for compliant patient, 1/year)

Pharmacist's role

Prior to Telemedicine Visit:

- Returning patient: Update medication list
- New patient: Review any documents available for a new patient, update medications/vaccines


During Telemedicine visit:

- If Returning Patient: assess adherence and risk of drug/drug interactions, identify vaccination needs
- If New Patient: additional time spent reviewing all relevant labs, answering all questions, setting up medication pick up


Last item: Order review



Prior to Visit

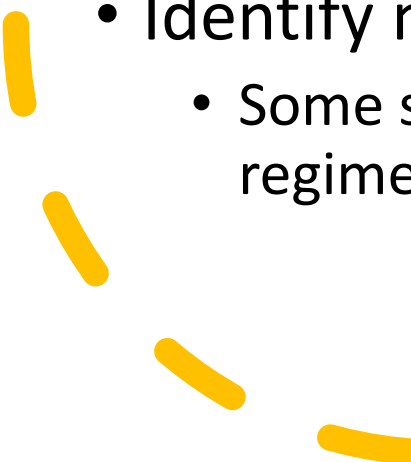
- Complete medication and lab review
 - Anticipate vaccination needs
 - If timely or possible, check with pharmacy to assess fill history
 - Ultimate Goals:
 - Optimize visit
 - Support diagnostic stewardship
- 

Prior to Visit – Medication Review

- Compare medication to potential lab changes
 - Focus on SCr, LFTs
 - May also consider lipid panel, weight, CBC depending on medications
 - Assess need for opportunistic infection prophylaxis
 - CD4 absolute count and percentage, HIV RNA
 - Evaluate need for chronic HBV coverage
 - DHHS guidelines recommend dual coverage for those coinfecting with HIV/HBV
- 



During Visit – Medication Review


- Evaluate adherence
 - If < 95%, identify strategies to improve adherence
 - May refer to pharmacy-run adherence clinic for additional counseling as needed
 - Identify new medications and OTC/herbal supplements
 - Some supplements including multivitamins may affect commonly used ARV regimens
- 

During Visit – Common Drug Interactions

- PPIs/H2RAs/antacids
 - Major interactions/contraindications with rilpivirine regimens
 - Odefsey, Juluca
- Steroids including inhaled and intranasal
 - Major interaction with boosted regimens (ritonavir, cobicistat)
 - Recommend beclomethasone or flunisolide
- Birth control/gender-affirming therapies
 - Often have major interactions with boosted regimens (ritonavir, cobicistat)
 - IUDs, injectable agents generally fine with common first line regimens



During Visit - Adherence

- Generally recommend use of a phone alarm or app
 - Offer free pillboxes, keychain pill holders
 - Pharmacy-managed treatment adherence clinics offered
- 

During Visit – Vaccination Review

- Pneumococcal, tetanus/diphtheria/pertussis, meningococcal
 - Easy to overlook later doses/boosters due to lengthy timing
- Check hepatitis A and B serologies
 - DHHS guidelines recommend confirming immunity after at least HBV vaccine
- HPV, shingles, seasonal influenza as needed

During Visit – Rapid ART

- Obtain medication or arrange for drop off prior to visit
 - Hand deliver to patient for first dose
- Once physician visit has concluded, answer all remaining questions
 - Often in-depth discussion about HIV, expectations, next steps



After Visit

- Obtain prior authorizations as needed for medications
- Follow up in 2-3 days with rapid ART patients to review results, answer questions






Pharmacist's Goals

- Ensure all patients can easily access medication
- Ensure medication is appropriate in regards to comorbidities and past resistance
- Address barriers to adherence
- Identify and mitigate any possible drug/drug interactions
- Administer necessary vaccinations
- Review orders to ensure accuracy

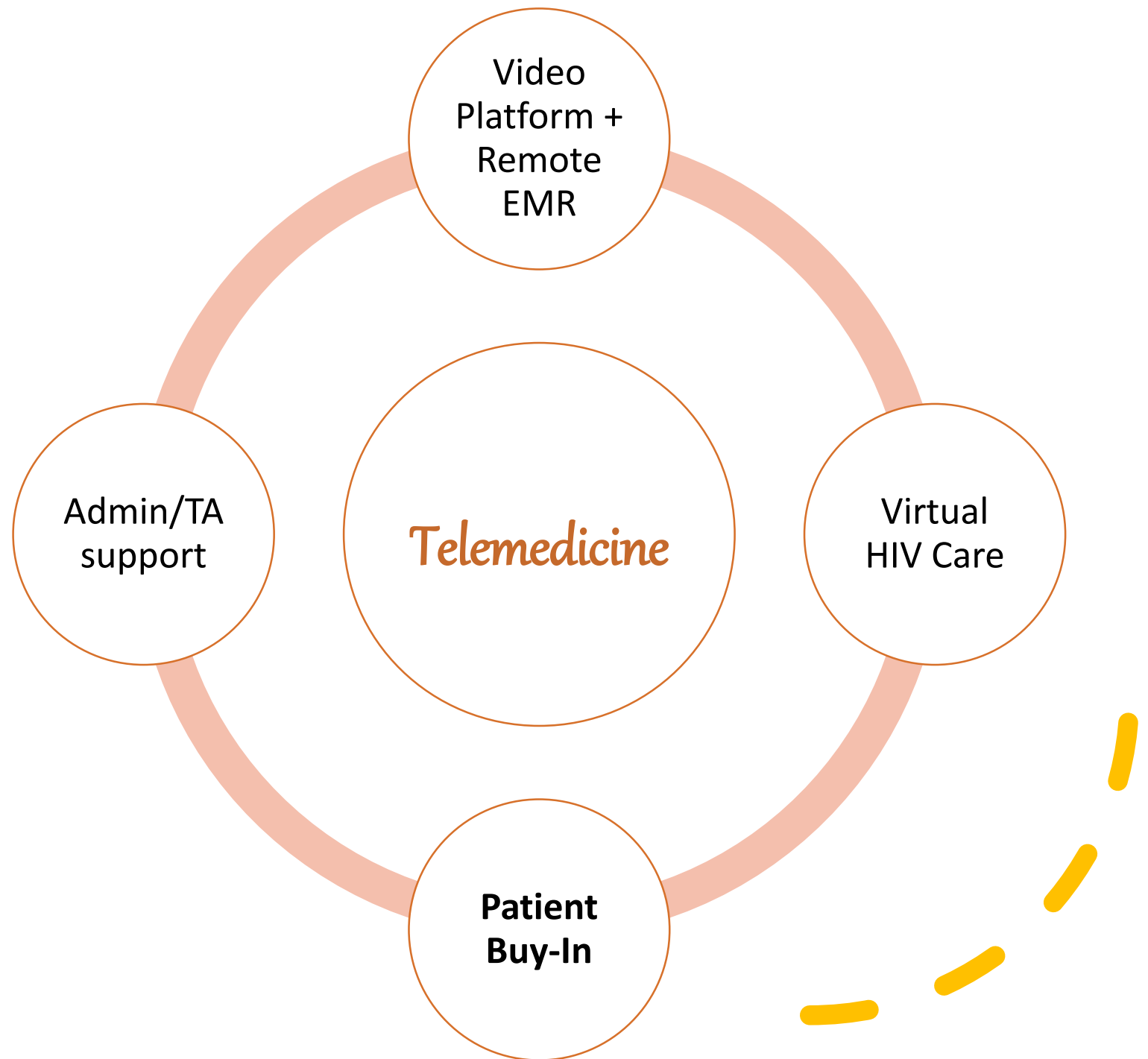


Telemedicine Clinic Director



- Background- 14 years in the making
 - Research other Telehealth programs- “Frankenstein” approach
 - HIPPA compliant virtual consult platform
 - Clinic Buy-in
 - Patient Buy-In
- 
- 
- 

Successful Telemedicine Components



Telemedicine Clinic Structure

- Patients are scheduled for virtual consult
- Link to Zoom or phone number provided to patients a week prior to appointment
- Reminder call day of (or before) appointment
- Follow up appointment and care plan determined during consult



Clinical Coordinator's role

Prior to Telemedicine Visit:

- Determine visit type
- provide instructions for access to virtual consult
- Assure patient's necessary clinical data is available

During Telemedicine visit:


- Complete Ryan White healthcare access assessment
- Order follow up lab work as directed by Physician or Pharmacists
- Summarize follow up care plan

After Telemedicine visit

- Emails patient follow up plan
- Assures patients are linked to any referral services determined during clinical assessment
- Serve as point of contact between appointments



Prior to Visit

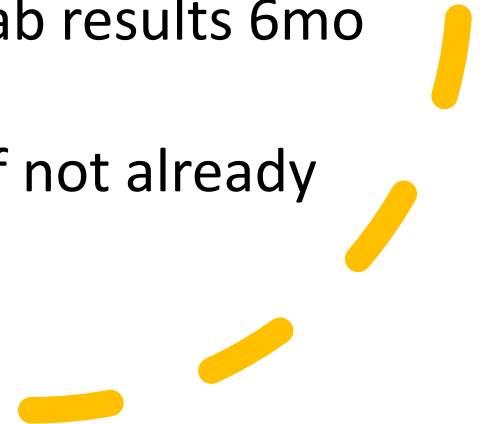
- Determine visit type (Video/Phone call) and provide instructions for access to virtual consult.
 - Provide TA to patients, as needed
 - Assure patient has lab orders to complete prior to visit; remind patients as needed
 - Collect clinical data from outside sources; provide to care team for review prior to appointment
 - For high-acuity patients: coordinate care with other entities
 - ASO Case Managers
 - BH Care Managers
- 

During Visit

- "Check-in" patients once they connect to consult; check patients out.
 - Call patients who do not connect
- Make sure clinic flow is running smoothly
 - Keep track of time
 - Inform other patients if consult is running late
- Complete HRSA required patient assessments focusing on Behavioral Health, Sexual Health and access to social services needed to supplement HIV care
- Order follow up lab work as directed by Physician or Pharmacists
- Summarize follow up care plan for care team and patient; assure patient has a clear understanding of next steps
 - Determine date of next appointment if possible

After Visit — Follow Up Plan

- Email patient's follow up plan, lab orders and next appointment information
 - Including STI Swab Kits when necessary
- Ensures patients are linked to any referral services determined during clinical assessment
- Ensure follow up lab work or orders are completed in accordance to patient's care plan
 - For patients seen yearly, collects lab results 6mo after appointment
 - Schedule follow up appointment if not already scheduled



Clinical Coordinator's Goals

- Ensure all patients can easily access HIV medical care
 - Ensure patients have instructions and access to telemedicine consult
- Ensure patients in need of behavioral health, substance use, or social services are connected to resources they need
- Link collaborating agencies and providers to assure patient's needs are being met
- Ensure patients have a clear understanding of their care plan
- Serve as a patient advocate, as needed to successfully navigate their medical care


Describe the principal participants in the Telemedicine Clinic

In an HIV Telemedicine Clinic it is necessary to have at minimum 3 participants:

1. Physician
2. Pharmacist
3. Coordinator

Each clinical participant has a specific role in order to conduct a successful and efficient virtual consults

Duties must be divided among the three in such a way the the interview flows smoothly and is terminated by the Clinic Director following a “wrap up.”



Q & A

