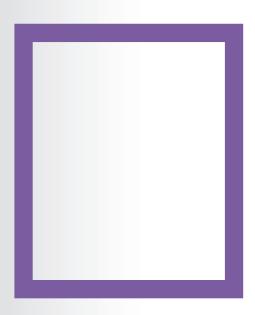
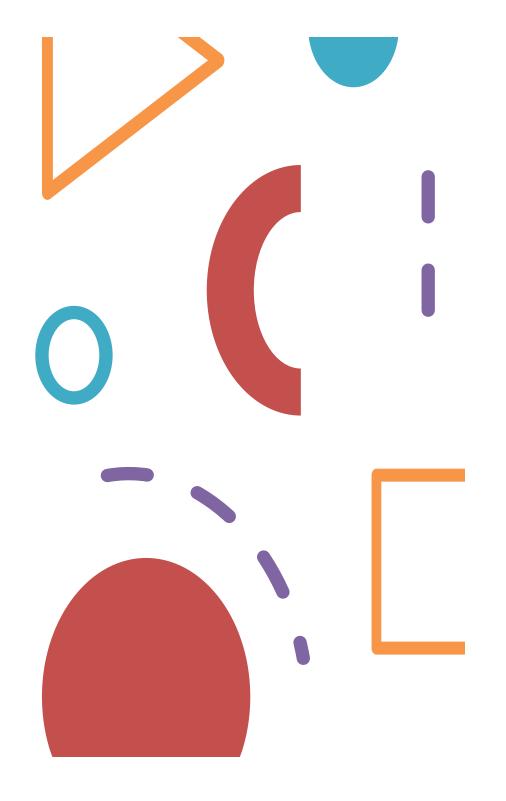
A Successful Tele-Infectious
Disease Practice

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### Objectives

- Explain why HIV is an ideal disease for Telemedicine
- A short summary of clinical HIV practice that lends itself to Telemedicine
- Describe our Arizona
   Department of Corrections
   HIV/Infectious Diseases
   Telemedicine Clinic Quest
- Questions



Bringing
Telemedicine
to your
Practice

Telemedicine is a tool/modality with as many applications as there are people using it

If you are just beginning on Telemedicine, I would suggest you think about some common patient problems you encounter and limit the scope to just several patient problems.

Adopt a team approach if possible—explained later

Determine what ancillary data is needed and how to retrieve it before the Telemedicine visit

Just get started! You will rapidly learn by trial and error what works

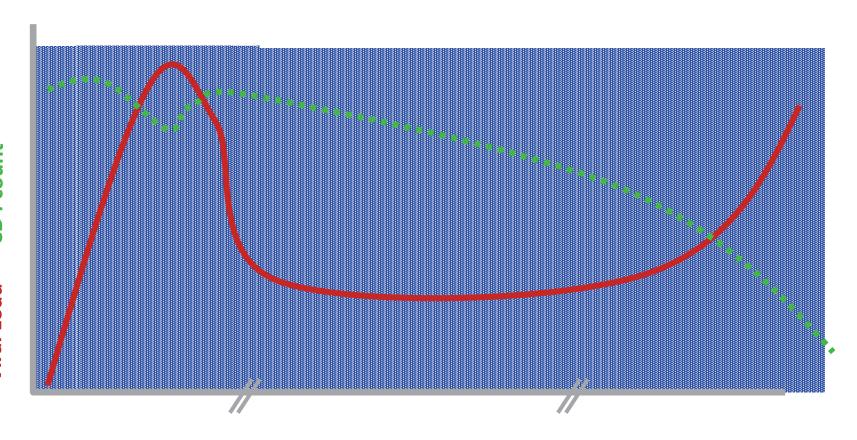
### My Disease Specialty is HIV

- I saw my first patient in 1981
- Director of first HIV Clinic in 1984, six others since; on 3 continents
- For all of this work it was absolutely necessary to physically encounter and examine the patient

Binh Thanh OPC:The First 200 Patients



### Natural History of HIV-1 Infection

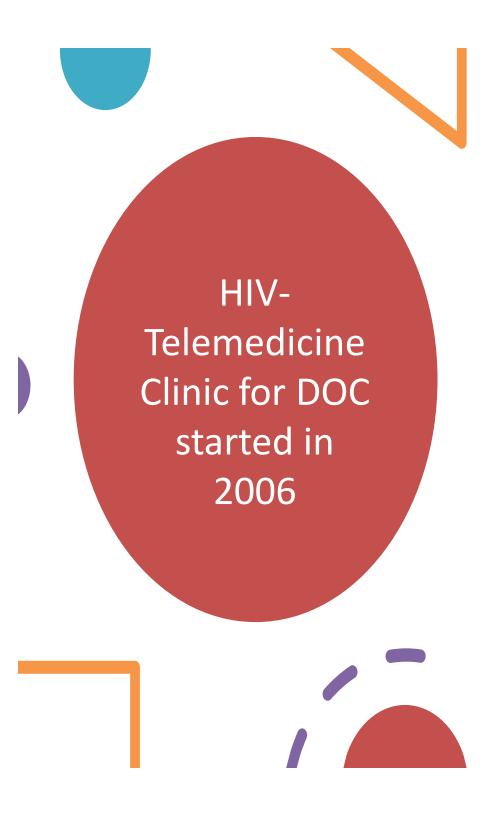


### HIV Treatment Today

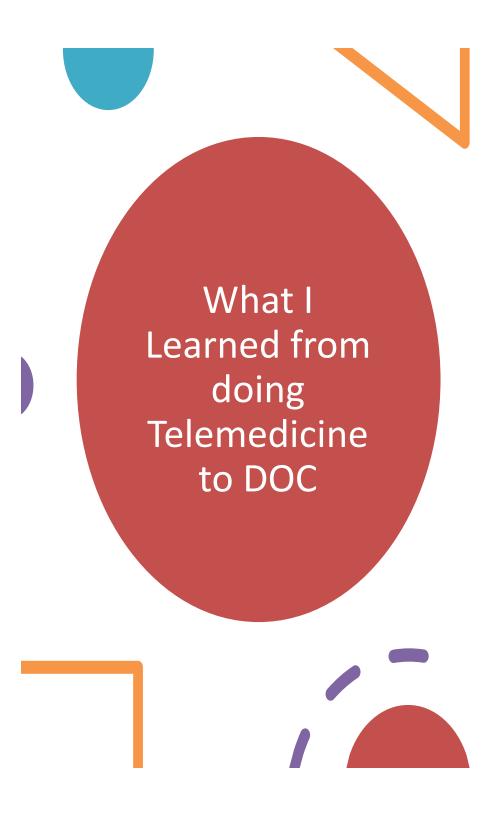
- Everyone with HIV is immediately placed on antiretroviral drugs
- With new drugs every patient is generally undetectable for HIV RNA within 1 month— disease is controlled
- This preserves (or restores) immune cells and prevents transmission of HIV

### Current HIV Therapy

- Antiretroviral therapy (early and daily)
- See HIV patient once a year
- Laboratory tests twice a year
- Having told you the above, you can perhaps envision how useful Telemedicine would be in taking care of these patients



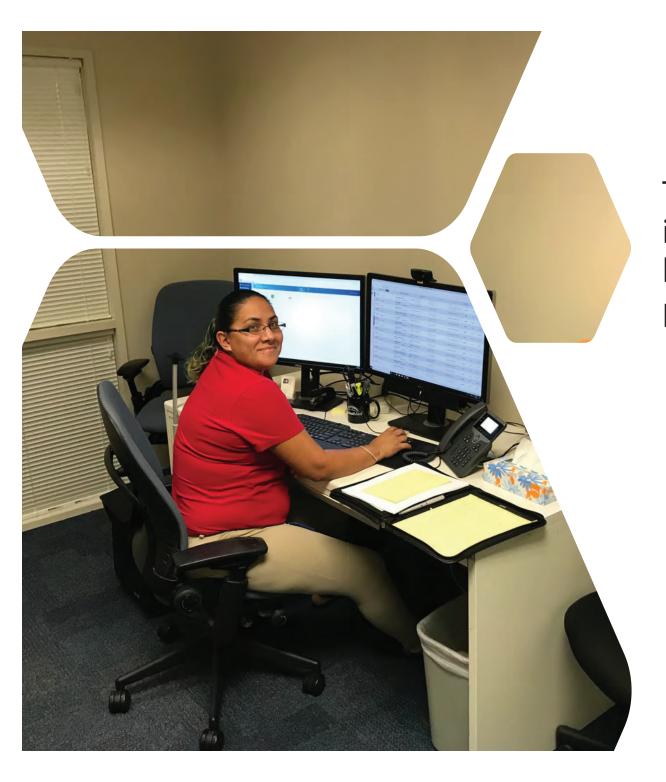
- We have provided HIV Telemedicine to Pima County Jail and Arizona Department of Corrections since 2006.
- Monthly communication with DOC allows for following laboratory and radiology results.



- Captive audience; no show rate practically zero
- Inmates pay attention; much more focused patient-doctor interaction than in "brick and mortar" clinics
- Excellent continuity of care; clinics conducted once a month since 2006; laboratory values and radiology results sent by FAX prior to the clinic date

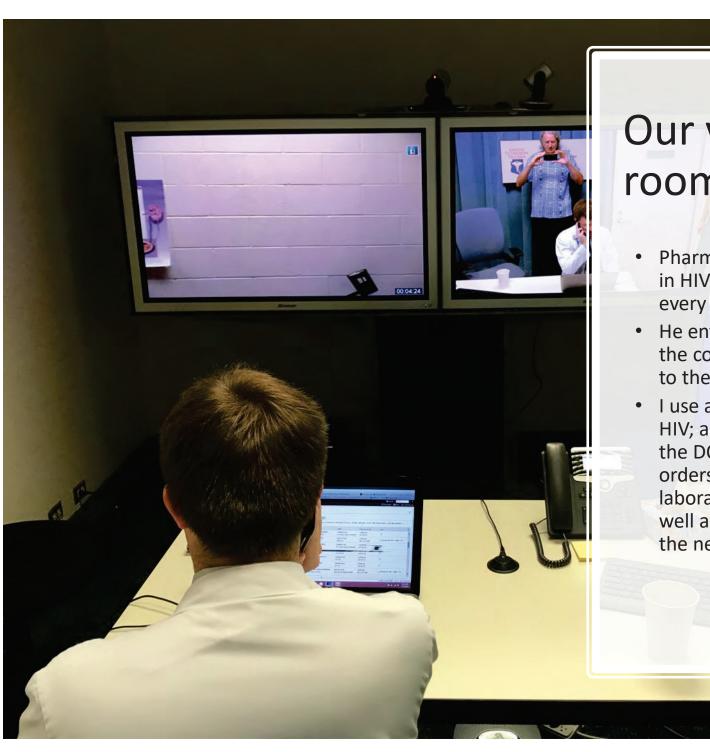
### How We Do It: Day Before Clinic

- We use a DOC database to retrieve the names and records of the patients and enter clinic slots into a Cerner EMR
- Krystal makes up the clinic list and enters the names and MRN into the database



# The DOC database is accessed and list of clinic patients pulled up

- Krystal lets me know which patient is coming next onto the screen and provides me a patient folder with copies of all the lab results and notes of DOC physicians
- She also visits patients in jail to insure transitioning to civilian life



## Our video room

- Pharmacist Larry specializes in HIV drugs and attends every clinic
- He enters separate notes in the computer which is sent to the DOC
- I use a clinic note specific to HIV; a copy is FAXED to the DOC. The note has orders for drugs and laboratory monitoring as well as a suggested time for the next clinic visit



## Actual clinic visit

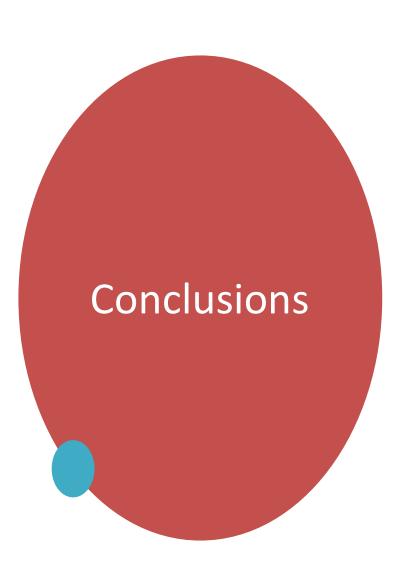
- There is a health care worker arranging the camera at the DOC site and patient flow
- Each clinic visit lasts from 10-15 minutes
- We can zoom in to some extent to visualize lesions

#### Private Patients with HIV

- Our direct marketing of care to our HIV patients (~2000 patients) is already ongoing along with the DOC Telemedicine.
- Team approach: physician, pharmacist and clinic coordinator who manages every encounter.
- If a team approach is adopted you can focus on patient concerns: medications, laboratory, behavioral referrals, etc.

# Plans for new Programs

- HIV TelePharmacy: twice per year
- HIV TelePrEP statewide



- HIV is a disease made for Telemedicine
- Telemedicine is the future of HIV care