

# Real-Time Telepathology in VISN 8



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The Effects of Telepathology on Veterans Health: VISN 8

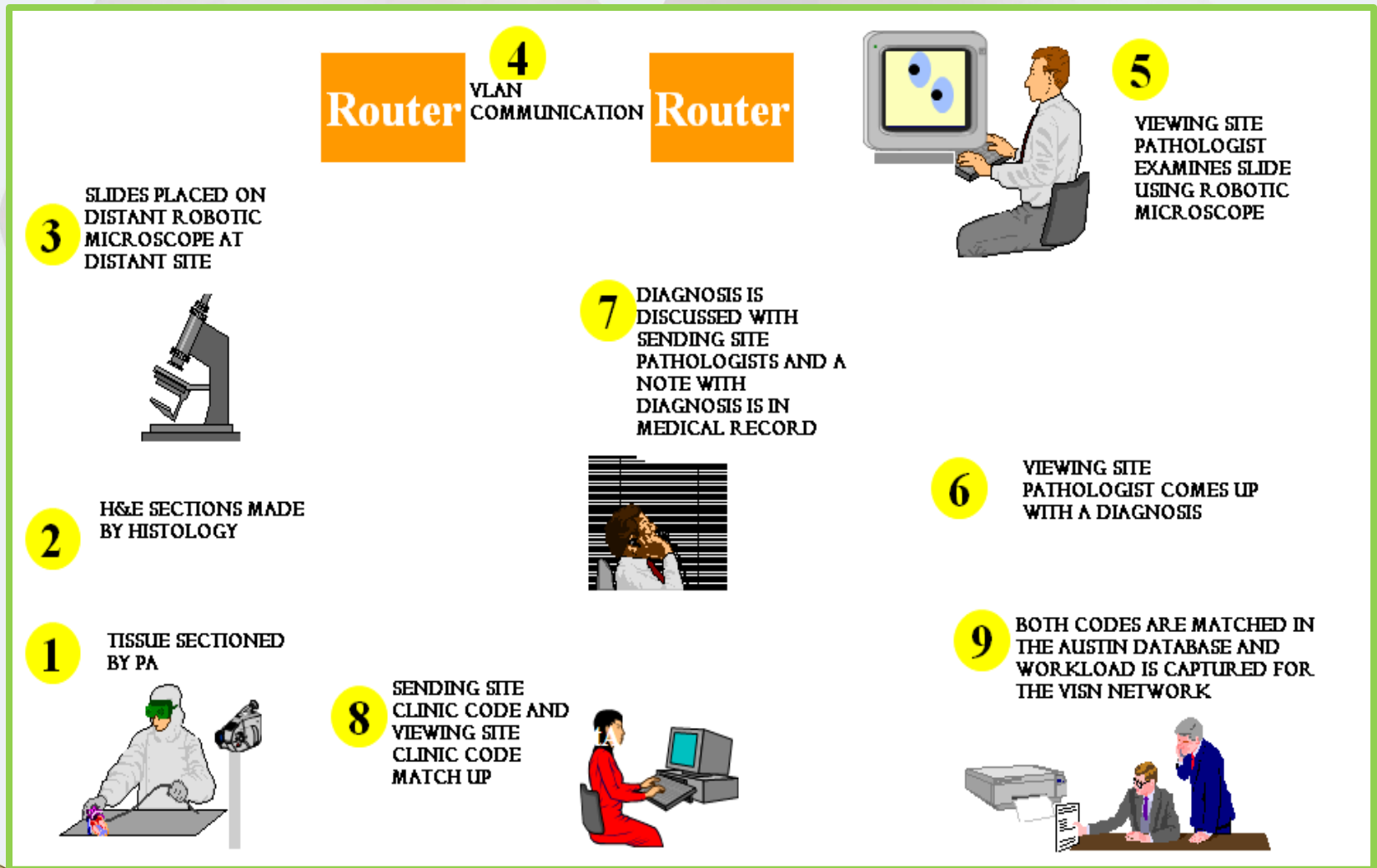
# VISN 8 Telepathology

Sharing cases and seeking consultations for purpose of second opinion is an important aspect to everyday pathology practice in the Veterans Health Administration (VHA).

Digital pathology can reduce costs and geographic barriers in the VHA, allowing pathologists to share specialty cases across the VISN network. Telepathology is carving its niche in direct patient care.



# Overview of Telepathology Process



# Telepathology Benefits

- Brings the patient/provider/specimen together
- Simultaneous look for second-opinion consultations
- “Glassless” analysis, referral, consultation and storage
- A seamless capture, storage, retrieval, and display capability



# Benefits Cont'd

- Virtual Classroom
- Tele-Tumor Board Potential
- Access to the limited specialty pathologists expertise
- Increases efficiency of the VISN 8 Pathology Department



# Implementation Barriers

- Justify the technology for pathologists
- Justify the technology for hospital administrators

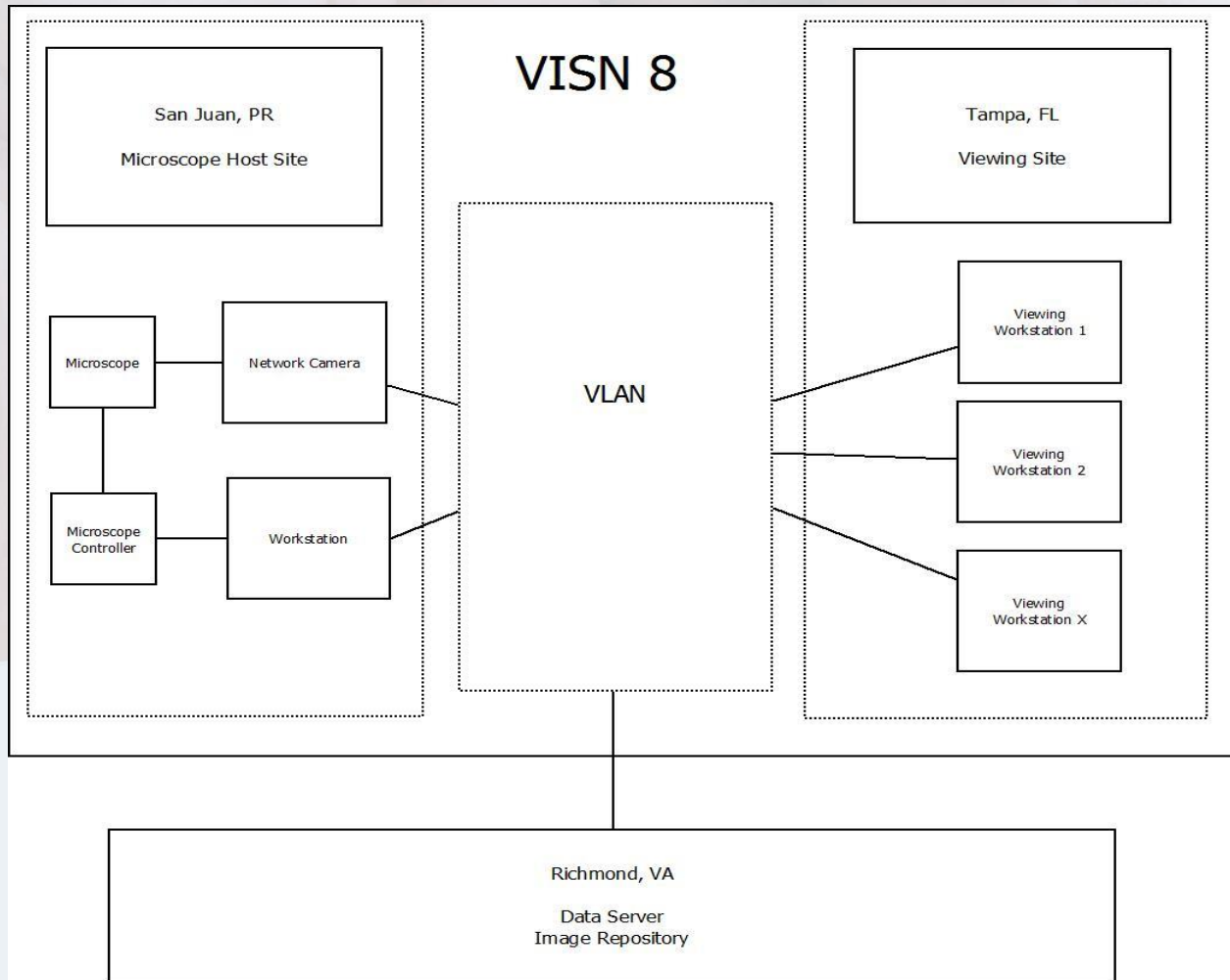


# VISN 8 Business Implementation

- Coding is now nationally sanctioned for telepathology clinic profiles using national stop codes
- Equipment in all VISN 8 Medical Centers
- Inter-Facility Consult (IFC) Pathways unique for each provider
- Expediting referrals to experts and specialists, enhance secondary reading for diagnostic verification

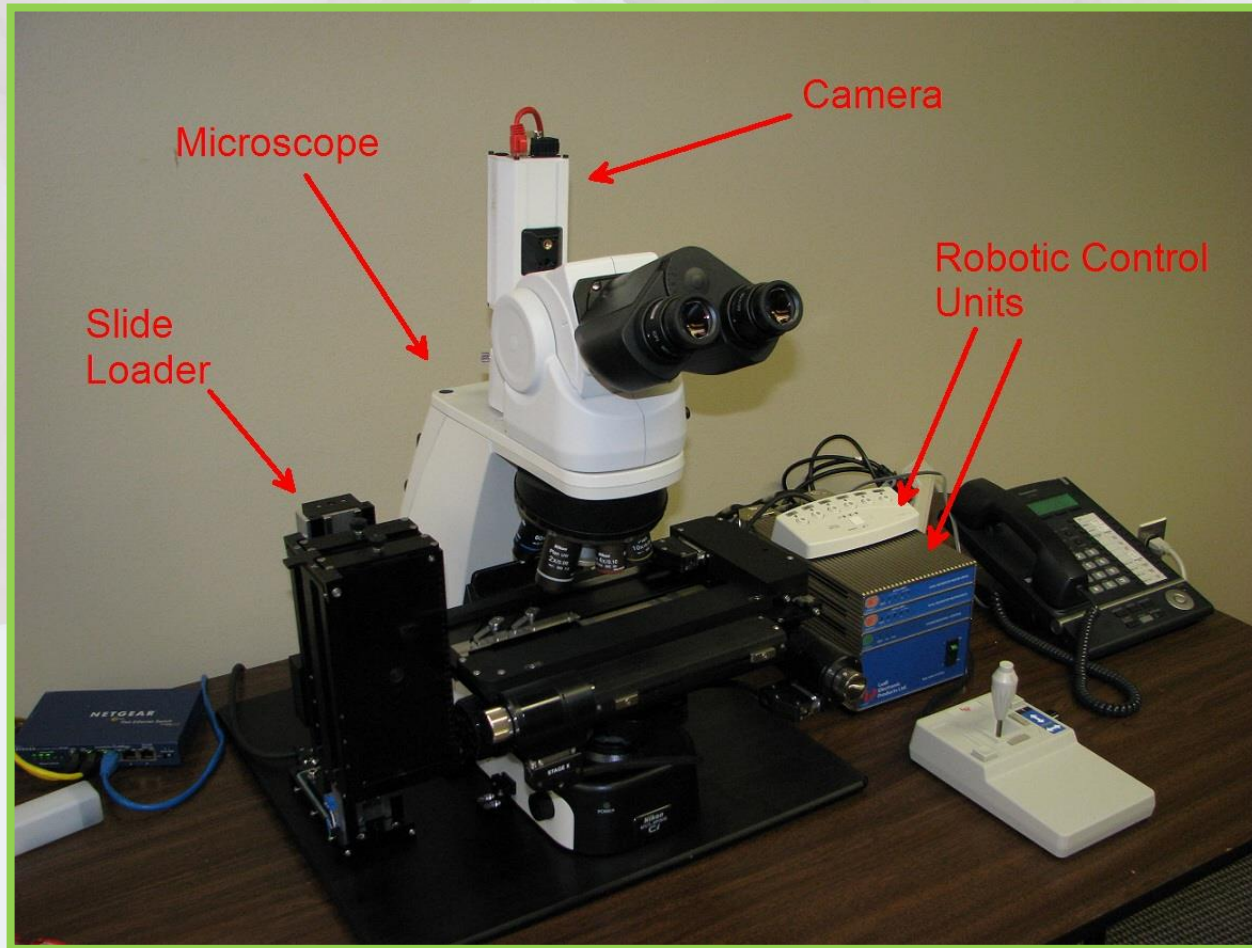


# Microscope and Workstation: Data Flow





# Robotic Telepathology Workstation



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# Couriers and Storage

- Cost Savings:
  - Courier costs -
    - \$27,150.00
  - Slide retrieval and filing costs-
    - ~\$60,000.00
  - Viable for in-house couriers, as well as nation-wide couriers



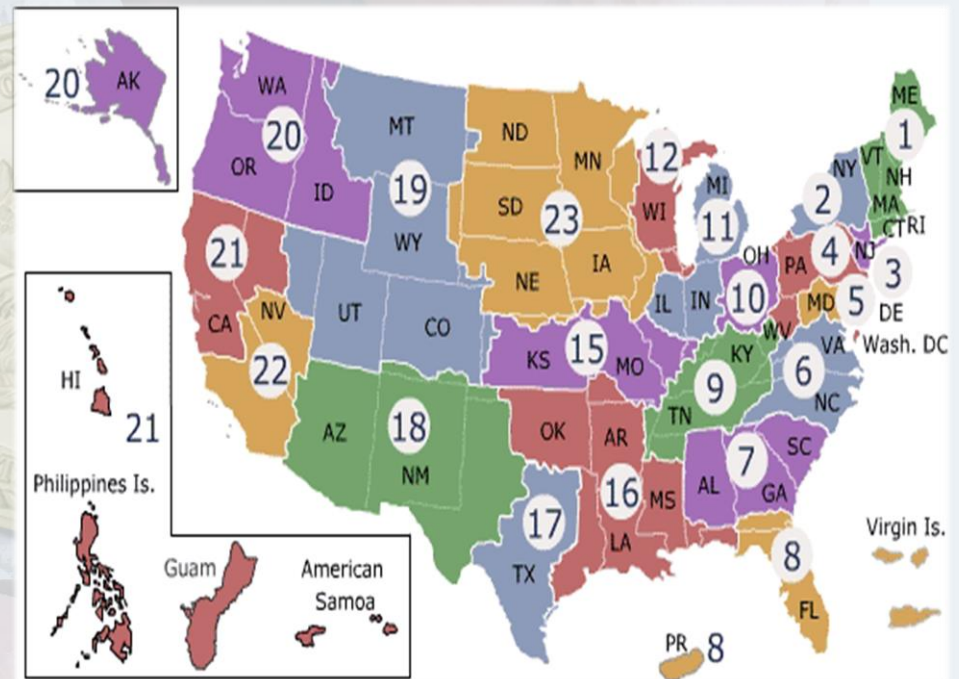
# Telehealth Workload Credit

What is the motivation in gaining workload credit...

-Workload translates to VERA dollars (Veterans Equitable Allocation Fund)

VERA allocates resources to 21 VA VISNS and 90% of the dollars are attributed to patient care workload.

--Strategic plan and performance standards passed down from National VA Leadership



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# Comparison of Pathology Services

	On-site Pathologist	Telepathology	Courier
Frozen Section Diagnosis	Yes	Yes	No
Turn Around Time (TAT)	Days*	Minutes*	Days-Weeks
Live Consults with clinicians & slides	Yes	Yes	No
Second Opinion consultations	Delayed or Impossible	Immediate	Delayed



Agha Z, Weinstein RS, Dunn BE. Cost minimization analysis of telepathology Am J Clin Pathol 1999 Oct; 11 2:470-8

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# Virtual Telehealth Patients

- Teledermatology and Telepathology

## Puerto Rico

Atlantic Ocean



Patient from Utuado VA Rural Outpatient Clinic, Puerto Rico

Patients never left rural outpatient clinic

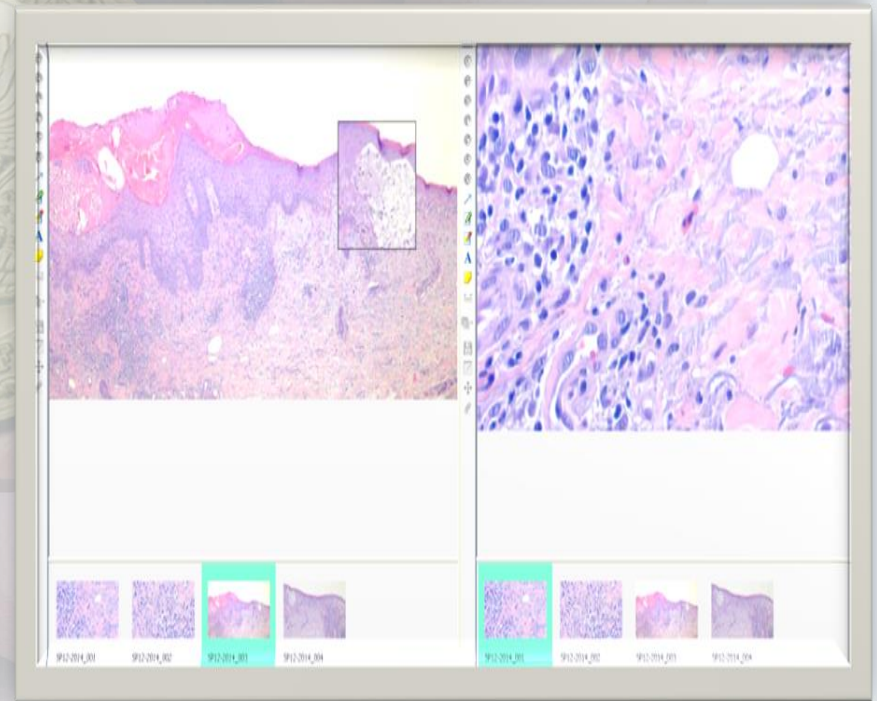
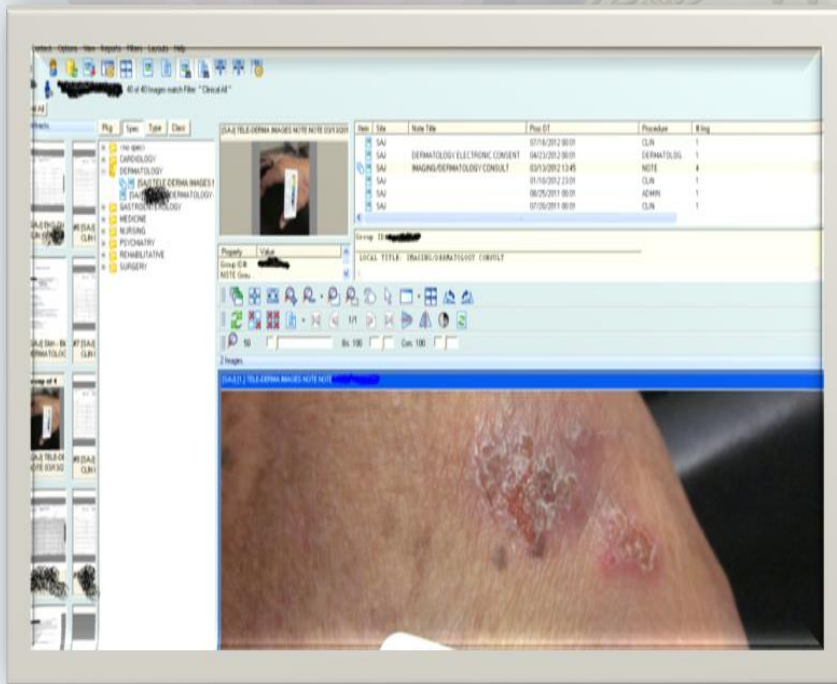
Diagnostic turnaround time was decreased by 75% with the use of telehealth services (teledermatology and telepathology)



# Telehealth Virtual Patient

Teledermatology in San Juan, PR

Telepathology in Tampa, FL



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# Telehealth in VISN 8



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# Future Expectation in VISN 8

1. Remotely connect VISN 8 via Apollo robotic telepathology
2. Continue to improve diagnostic turnaround time with second opinion remote telepathology
3. Involve different pathology specialists from Tampa (head neck specialists, breast cancer specialist)
4. Telepathology VISN 8 Directory- access to all pathology specialists for second opinion consultations
5. Expand to VISN 2, New York

