## Michigan Medicine University of Michigan

&





## Communications and Patient care in a Pandemic

Maithili Vadula



## Purpose of the project

- Increase service availability and decrease costs
- Improve interpreter productivity
- Partner with vendor and Interpretive Network
- Use department interpreters for existing languages
- Minimize use of dept. in-person interpreters
- Cost savings must exceed \$0.15 per minute to offset setup costs and provide return on investment (ROI)



## What is the problem?

- Covid pandemic disrupted communications
- Wearing a mask and social distancing was a challenge
- Additional challenge when patients cannot communicate in English. Federal law requires interpretation for limited English proficiency patients (LEP)
- Audio interpretive services has existed for 25years. However, providers were requesting video over audio interpretation
- Requirement for 54 different language (audio + video)



## Scope and objectives

- Identify on-site areas for video services
- Establish 3-way interpretation from triage to discharge
- Utilize existing devices for application deployment
- Provide video as primary service followed by phone
- Participate in the National Healthcare Interpreters Network (HCIN)



### Engaging vendor experts towards solution

#### **Recommendation:**

Contract with a vendor that uses organizational interpreters as first line of service, followed by vendor resources

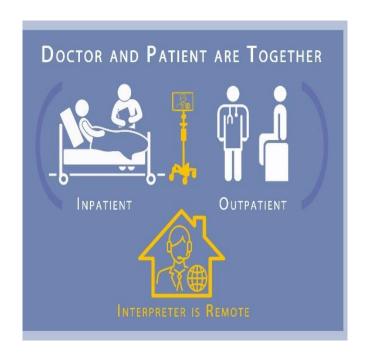
Reduce in-person interpreters to certain days of the week at satellite locations

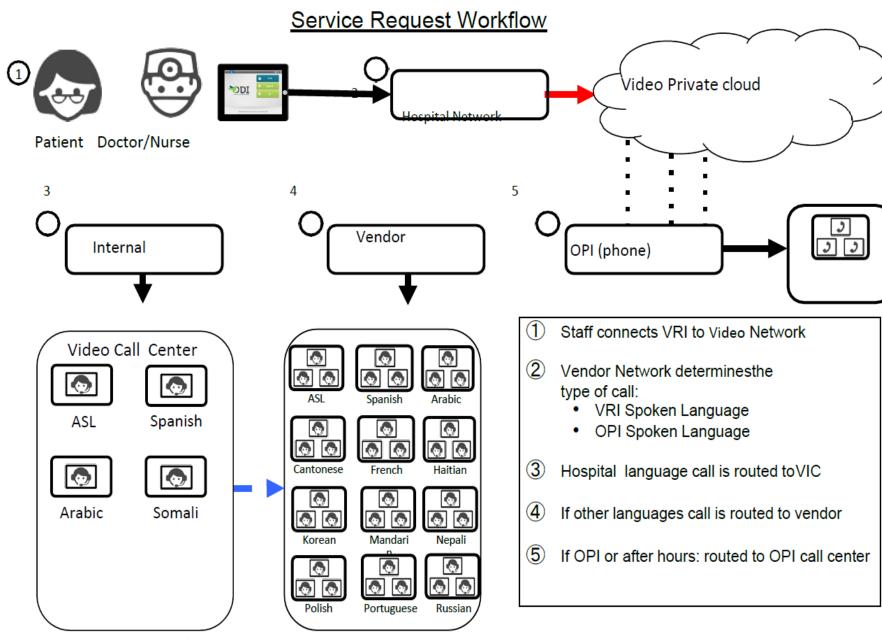
#### **Dependencies:**

Organizational support to manage cybersecurity, app setup and device maintenance including software updates and replacement



# Process Flow for interpretive service request





Hospital VRI Languages supported on Vendor with overflow to OPI



## Technology setup



Devices with SOC type 2 and HIPAA security



App access via jabber with no browser function



Videophones setup using secure VPN connection



Enterprise setup with a dedicated T1 line



Calls setup to seamlessly connect to video in 30 secs or less



Reference guide for quick tech issues resolution



## Summary and results

- Enterprise implementation in the form of "big bang" not feasible due to cost and resources
- Timing with other projects to utilize existing devices provided smaller windows of opportunity
- Limited geographical ambulatory roll-out is the most satisfactory option
- Utilization reports that monitors risks, costs, usage and productivity for best indicators of success



## Benefit realization of the project

- Participation in HCIN and revenue of 80cents/minute
- Reduction in phone interpretation by 15% or \$51,000
- Increased service expected revenue 80,000 per annum
- Cost savings reduction of in-person service
- Application for other healthcare delivery



### Application in other industries

- Auto dealership- video interpretation for sales, repairs, setting up Wi-Fi tools such as GPS, emails etc. as more cars have electronic connectivity
- Interpretive services for government services, banking, investment etc.
- Videos for "how-to" can benefit many industries that sell DIY (do it yourself) kits
- Global commodities trading

#### Future directions for the healthcare sector:

- 1) Voice recognition
- 2) Artificial Intelligence
- 3) Robotic surgery