# Syphilis testing

#probability of having received a HIV test in the last year (used to approximate syphilis screening rate)

#needs a functional form

#assuming X% of people with genital ulcer/rash will seek care, now the quesiton is what proportion of people develop genital ulcer/rash

# 40% have ulcer, 90% seek care = 36% of people with syphilis will seek care

# duration 4 monts -> rate: 36% = 1- e-rt

# look for time to diagnosis for people who are diagnosed, and the look for proportion not diagnosed

Improving efficiency and equity

* Drone operation: medical supply delivery

US department of transportation, NSF

* Deployment telehealth kiosk

Focus on rural

Network design modeling

Identify the objectives and constraints

* Changes in demand distribution in relation with existing facilities

Hospitals and health centers are clustered at more populated areas

Rural areas lack access

Depending on the current state of the system, we can estimate the demand: any change in system’s condition can change the demand for the future