

# Hardware, Software, Aware:

The Process of Using  
Technology to Advance  
Migrant Health & Healthcare  
Access



The background is a solid orange color. In the top-left corner, there are three vertical bars of varying heights, each composed of several overlapping circles. In the bottom-right corner, there are four vertical bars of varying heights, also composed of overlapping circles.

# Hardware

# Great Lakes Bay Health Centers (GLBHC) Agricultural Health Program

- Company founded in 1968 with grant for farmworker health in Saginaw County
- Expanded in the 1970s with additional seasonal migrant clinics
- Mobile medical program for migrants began in 1988



# GLBHC Migrant Services in Transition



- Numbers of migrant and seasonal agricultural workers served dropped significantly
- Many of the founding leaders retired
- Program was becoming irrelevant and in danger of extinction
- New leadership hired
  - Passion and vision
  - Identify barriers and trends - Why isn't this working?
  - Unconventional approach to solving - How can we change?

# Revitalization – Bringing New Life

“Part of the problem is that the core properties of life—growth, change, reproduction, active resistance to external perturbation, and evolution—involve transformation or the capacity for transformation. *Living processes are thus antithetical to a desire for tidy classification or final definition*”, (emphasis added)

- (Encyclopedia Britannica Online)

- Criteria for keeping services alive and healthy

<https://www.britannica.com/science/life>



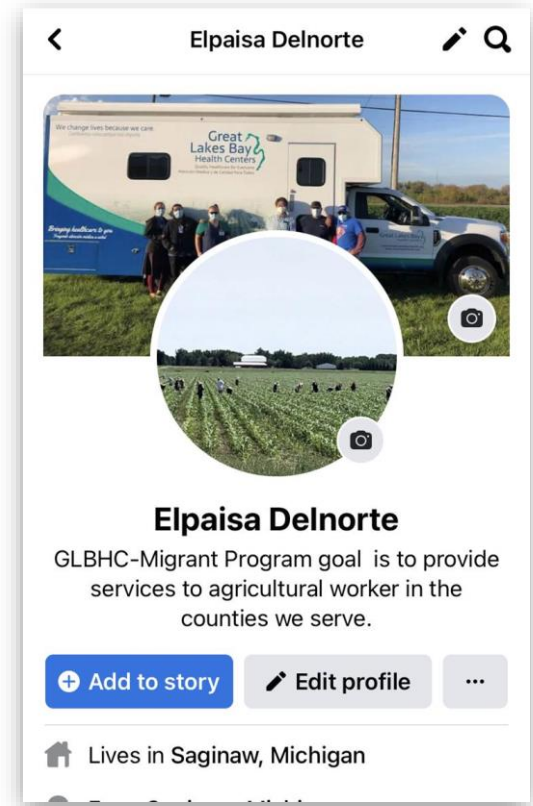


# Role of Technology

- Fundamental to normative system functioning
  - Mandatory transition to EHR
  - Communication with other players (farmers, DHHS, etc.)
- Ubiquitous in daily life cell phones – voice, text, and video
  - GPS, internet
  - Social media
- Decision to use evolving technology as part of providing care
  - Familiarity with tech in daily life (or desire to learn)
  - Improved quality and ease of communication
  - Incorporated healthcare with daily living

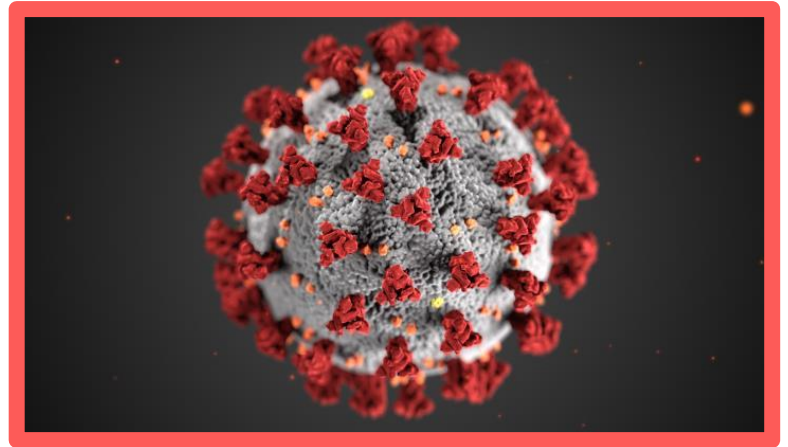
# Tech Wins for GLBHC Migrant Services

- Texting
  - GLBHC cell phones for employees
  - Worked well but required a U.S. number and data
- Facebook
  - Familiar technology
  - Needs data but not a U.S. phone number
  - Immediately popular
- Monitoring what is being used
  - Devices
  - Apps/programs
- Knowing what would *not* fit well
- Learning from mistakes/losses (allowance is critical in the framework)



# “Then COVID Happened...”

- Additional barriers to healthcare
  - Physical health (limited face-to-face consults)
  - Emotional/mental health (isolation)
- Need to creatively promote health in this population
- Technology seemed an obvious tool to help





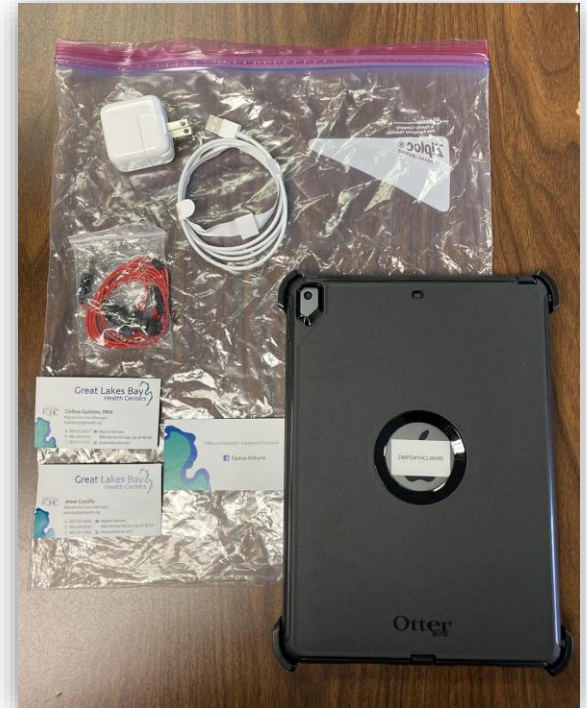
# Tech Opportunities During COVID



- Grant to provide migrant healthcare during COVID-19 pandemic
- Proposal to purchase 200 iPads and cellular data
- Dual purpose
  - To provide access to telehealth during the pandemic
  - To provide social connection and emotional support while promoting physical distancing
- Sharing the vision
  - Required board approval
  - Required working closely with IT dept

# Implementing Ingenuity

- IT Dept
  - Deciding on appropriate devices and accessories
    - OtterBox case,
    - Cheap earbuds
    - ZipLoc bag
  - Appropriate links on the home screen
- Distribution
  - Sharing the device among those in a single housing unit
  - Contracts
- Responsibility
  - One person assigned to distribution and tracking
  - One person in IT helped with activating/deactivating cell service





# Response

- Overcoming initial reticence
  - Concern about signing the contract
  - “What’s the catch?”
- Wildly popular
  - Gave away as many as we brought along
  - Requests from people who missed us
  - Requests to purchase the tablets
- Relational
  - Connected with family and friends
  - Connected to GLBHC with any questions – healthcare, technology, etc.
  - Farmers-workers-GLBHC
- Confianza



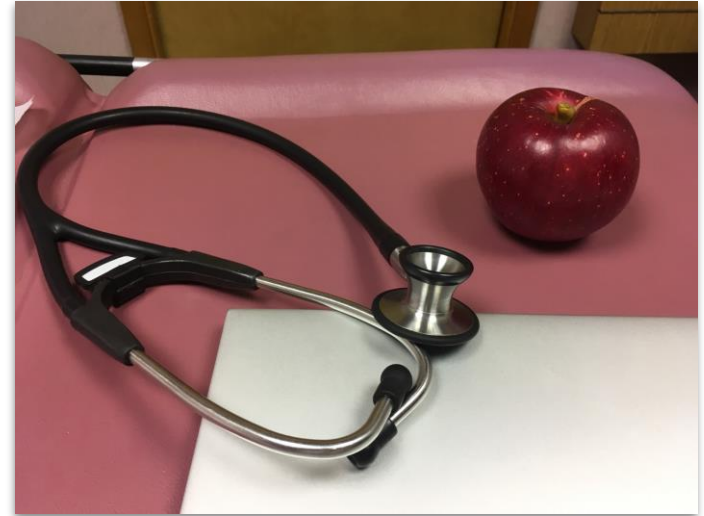
# What We Did Not Anticipate

- Unfamiliarity with tablets
- Unwillingness to share devices
- Resistance to telemedicine
- Time-intensive nature of program



# Learned in After Hours Clean-Up

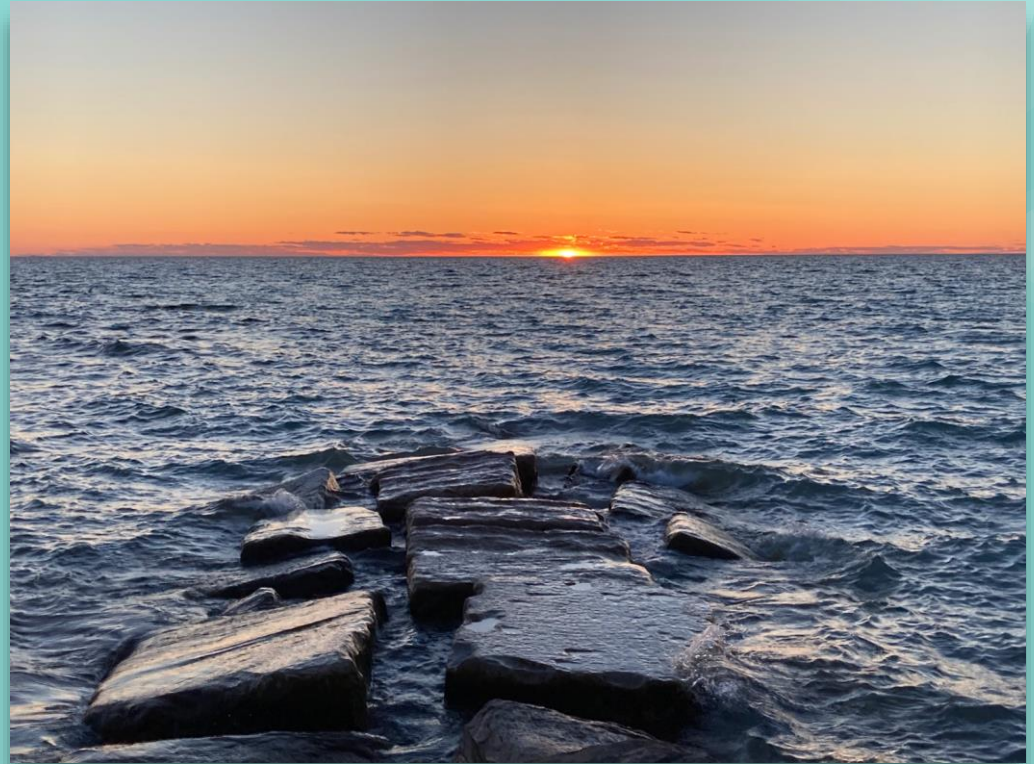
- Clearly well-used (dirt, some cosmetic scratches)
- Otterbox cases worth the expense (only 1 cracked screen)
- Every iPad returned
  - Not all Apple chargers
  - Some even had the original 2 gallon ZipLoc bag



# Motivated

We can all learn.

We can all connect.



The image features a solid orange background. In the top-left corner, there are three vertical bars of varying heights, each composed of several overlapping semi-transparent orange circles. In the bottom-right corner, there are four vertical bars of varying heights, also composed of overlapping semi-transparent orange circles. The word "Software" is centered in the middle of the image in a large, bold, white sans-serif font with a subtle drop shadow.

**Software**

# Choosing Platforms for Communication

- Text
- Call
- Facebook Messenger
- WhatsApp
- Knowing what *not* to use (Snapchat)







# The Power of Social Media

- Facebook
  - Became a primary method of communication with patients
  - They were very familiar with and using it already
  - Convenient
- WhatsApp also played a big part in communication
  - Many patients have Mexico numbers - no cell service to text
  - WhatsApp allowed texting, calls, video on WiFi

# Use of Software in the iPad Project

- Communication
  - Facebook
  - Telehealth video app
- Internet access
  - COVID-19 information in Spanish
  - GLBHC website
- Our business cards in each bag with contact information
  - Facebook and cell phone numbers
  - Eventually added QR codes





# Collaboration with IT Specialists

- Changed default language to Spanish
- Decided which apps and links to push to the homescreens
  - Initially did *not* include Facebook Messenger or YouTube apps (log-ins)
  - Multiple requests for these and they were added later by IT
- Restrictions on content access
  - Explicit content restrictions?
  - Disabled the camera to avoid inappropriate use

# Challenges & Misuse

- **“Word of Honor”**
  - Patients signed contract but it was non-binding
  - \$400 charge for lost/misplaced device had no legal “teeth”
  - Outlined our expectations for appropriate use
- **Logging out of Facebook accounts**
  - Some had multiple accounts logged in
  - Factory reset did not log accounts out
  - Working with IT to find solution to this
- **Explicit Content and Etiquette**
  - Expectations were defined in the contract (no pornography or bullying)
  - We did not have sanctions for this occurrence

Great Lakes Bay Health Centers

ACUERDO PARA EL USO DE LA TABLETA ELECTRÓNICA

INFORMACIÓN PERSONAL DEL PACIENTE

NOMBRE DEL PACIENTE: \_\_\_\_\_

FECHA DEL NACIMIENTO: \_\_\_\_/\_\_\_\_/\_\_\_\_ TELÉFONO: \_\_\_\_\_

DIRECCIÓN DEL CAMPO: \_\_\_\_\_ CIUDAD: \_\_\_\_\_ ZIP: \_\_\_\_\_

El uso de la tecnología de la computación de Great Lakes Bay Health Centers (GLBHC) es un privilegio, no es un derecho. El privilegio de usar la tecnología de GLBHC termina cuando un paciente se la devuelve y/o de la tabletta electrónica, salga al final de la temporada migrante en Michigan. El propietario de este acuerdo es informar a los receptores de las responsabilidades éticas y legales de usar las tabletas electrónicas. Si una persona viola cualquiera de las siguientes reglas, GLBHC tiene el derecho para revocar la tabletta electrónica asignada a la persona nombrada.

Se aplican las siguientes reglas:

- Usar la tabletta electrónica solamente para los usos apropiados. Los usos apropiados son de la recuperación de información médica y comunicación con GLBHC, consultas de Telesalud, comunicación con la familia y los amigos, sitios de web para clases de inglés, o cualquier uso aprobado por GLBHC.
- Abstenerse de los comportamientos abusivos, de la intimidación por el Internet, y de la pornografía.
- No presentarse como otra persona en el Internet.
- Seguir todas las regulaciones federales, estatales, y locales concernientes al uso del Internet.
- Tratar la tecnología/tabletta electrónica con respeto.
- Devolver la tabletta electrónica en buenas condiciones antes del final de la temporada agrícola en Michigan y notificar a GLBHC antes de partir de mi lugar de empleo.

AVISO: EN EL CASO DE NO DEVOLVER LA TABLETA ELECTRÓNICA, EL/LA RECEPTOR/A DEBERÁ LLEVAR FACTURA POR EL COSTO TOTAL DE \$400.00 PARA EL REEMPLAZO DE LA TABLETA ELECTRÓNICA. AL IGUAL, GLBHC ESTABLECERÁ RESTRICCIONES EN LA TABLETA ELECTRÓNICA PARA QUE SEA INUTILIZABLE.

Soy, \_\_\_\_\_, acepto los términos y condiciones para utilizar la tabletta electrónica de Great Lakes Bay Health Centers.

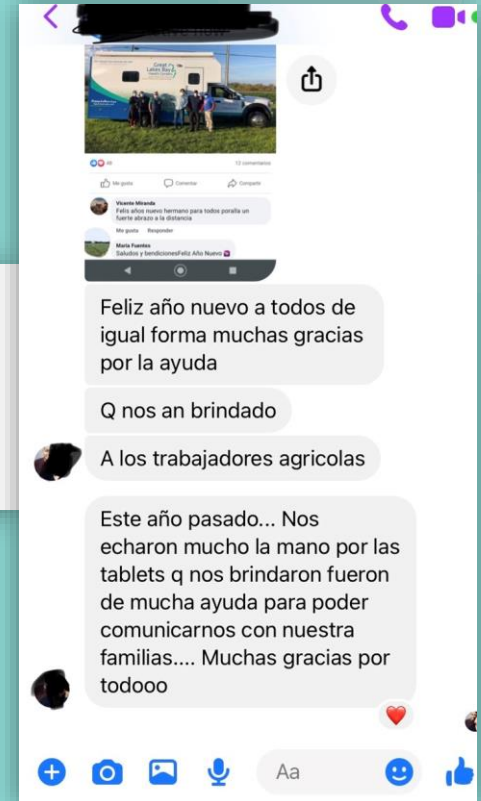
FIRMA \_\_\_\_\_ FECHA \_\_\_\_\_ NÚMERO DE TABLETA \_\_\_\_\_

# *“Changing Lives Because We Care”*

**Overall we are pleased with the outcomes despite the challenges and our patients definitely agreed**

DEC 12, 2021, 10:58 AM

Hola buenos días, antes que nada le quiero agradecer por apoyo que me dio a prestarme la tableta me fue de mucha ayuda.



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**Aware**

# Building a Sense of Community

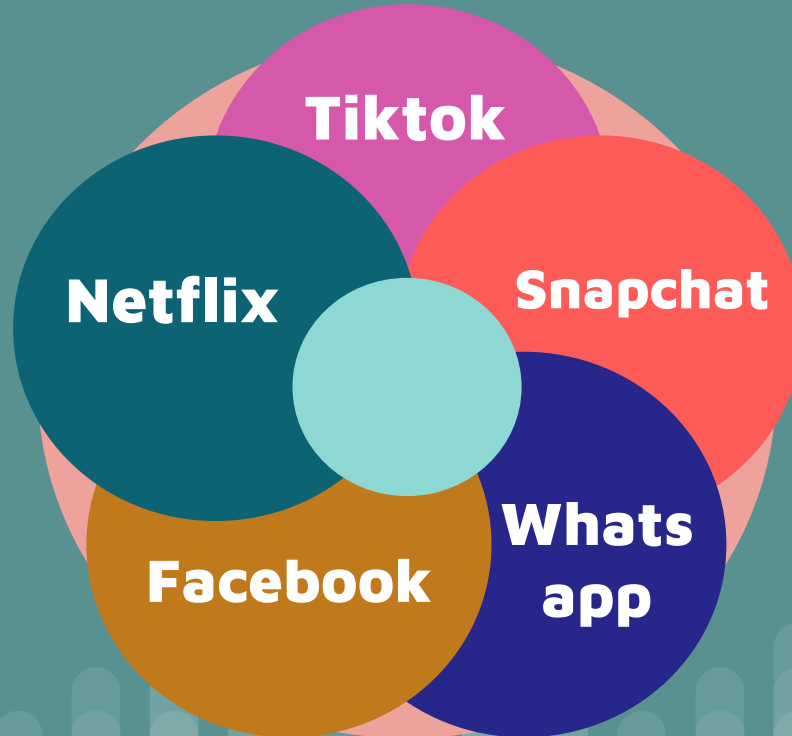
- Establishing connection with families
  - Introducing facebook to the iPads, Facebook Messenger
- Communication with each other during the pandemic
- Mental health
- Confianza / building Rapport with our medical team (GLBHC)







# An Informal Poll



# Duolingo: A Learning Opportunity

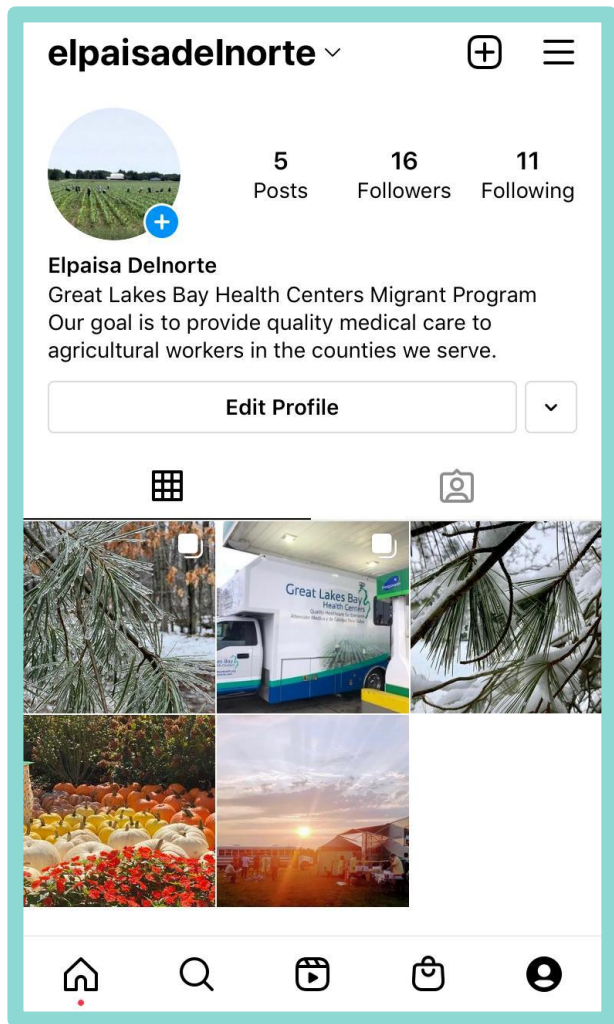
- We were receiving requests for an opportunity to learn English
- Free resource
- Easy-to-use interface
- Major success
  - English, Portuguese, Japanese and other languages
  - Could continue to use their free account and keep their progress after we collected the iPads



# Looking to the Future

- Program was approved to run this upcoming agriculture / migrant season (2022)
  - Looking to distribute a greater number of iPads
- Expanding apps based on patient input
- Resolve the glitches
- Telehealth education
- Continue to incorporate new technology





# New Platforms: Instagram & YouTube



- A new Education YouTube channel in the works
  - Public Health education
    - Diabetes, cholesterol, COVID-19
  - Improved access to other resources
    - Department of Human Services
- Instagram
  - A snapshot into migrant work

# Incorporating New Technology Near You- Considerations for Introducing a Pilot Program

- Establish a need in the community
  - Telehealth?
  - Communication
- Know your workers
  - What is the best way to communicate with them?
  - What apps do they use?





**“Perfection is  
the enemy of  
progress.”**

**- Winston Churchill**

**Questions?**