



March 31 - April 2, 2019  
Williamsburg Lodge, Williamsburg, VA

# Learning from the Pioneers

## April 2, 2019

Chris Budig, Tower Health

Rob Sprang, University of Kentucky

Gene Sullivan, University of Virginia

Joe Tracy, Lehigh Valley Health Network



**UK**HealthCare®



A convergence of technologies in the digital connected care revolution.



# In the Beginning

- **Non Existent:**

- Reimbursement
- Delegated Credentialing and Privileging
- Licensure Compacts (Nursing and Physician)
- No FCC Discounts on Communications
- HIPAA and HITECH

- **Technical/Equipment/Communication**

- \$89,000 for a Video System
- Telehealth Carts were BIG and Heavy
- No Internet (T1 Lines/ISDN/Frame Relay)





# Welcome to Today!

- **Reimbursement**
- **Mergers and Acquisitions**
- **Competition**
  - New Players via Partnerships
  - Direct to Consumer
  - Unusual Suspects
- **EMRs**
- **Analytics and Metrics**
- **FCC**
- **Technology**
  - 5G
  - AI



# Today – Reimbursement

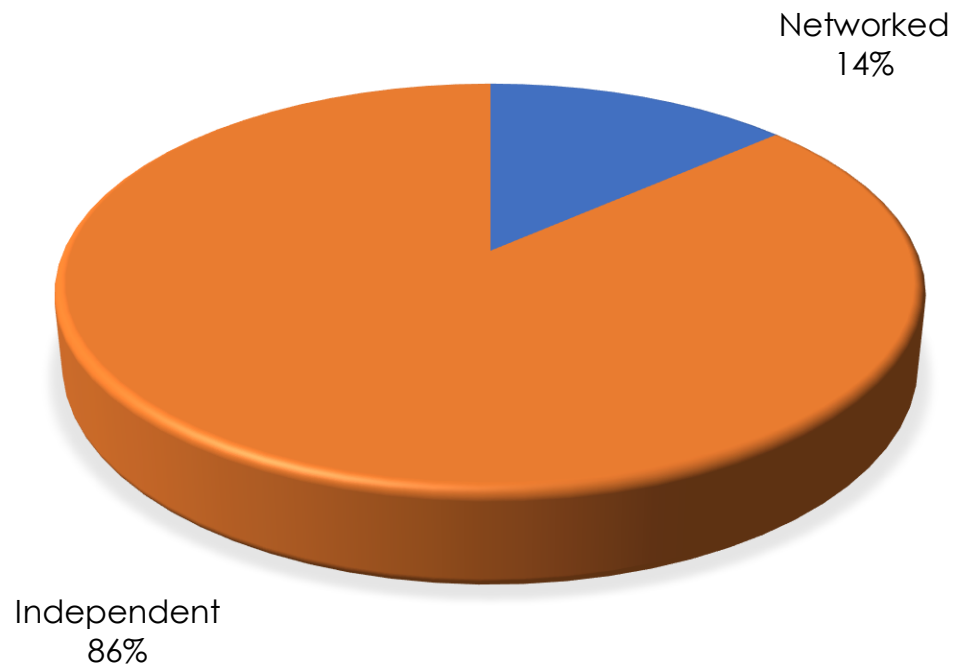
- **Fee for Service**
  - Fading, but how fast?
- **Fee for Value**
  - At-Risk Contracts
  - Bundles



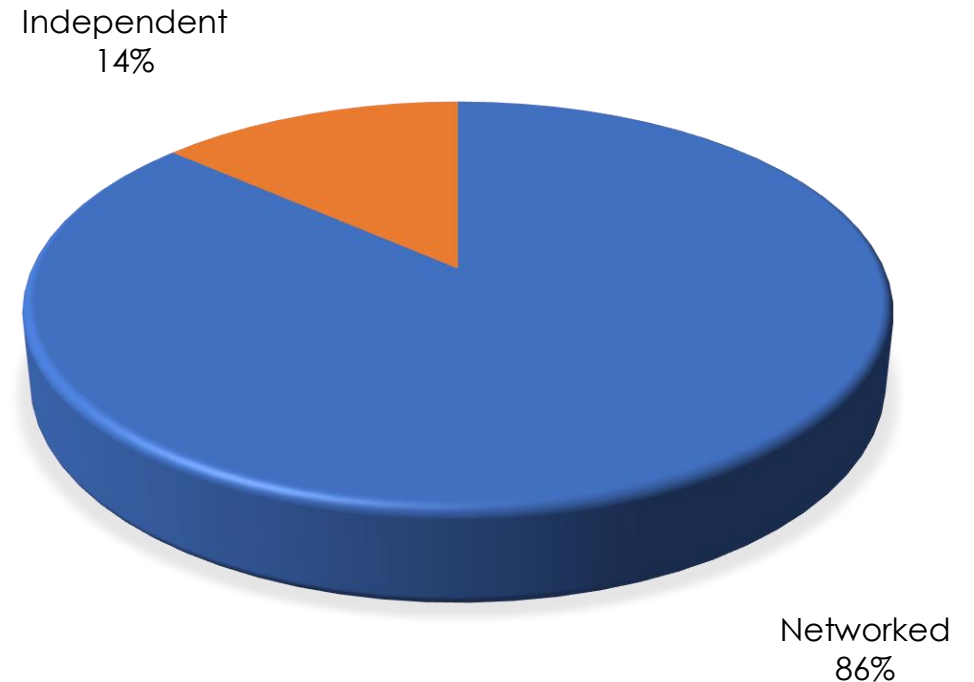
# Today – Mergers and Acquisitions

## LVHN TeleBurn<sup>SM</sup> – 2008-2018

TELEBURN HOSPITALS 2008



TELEBURN HOSPITALS 2018



N = 74



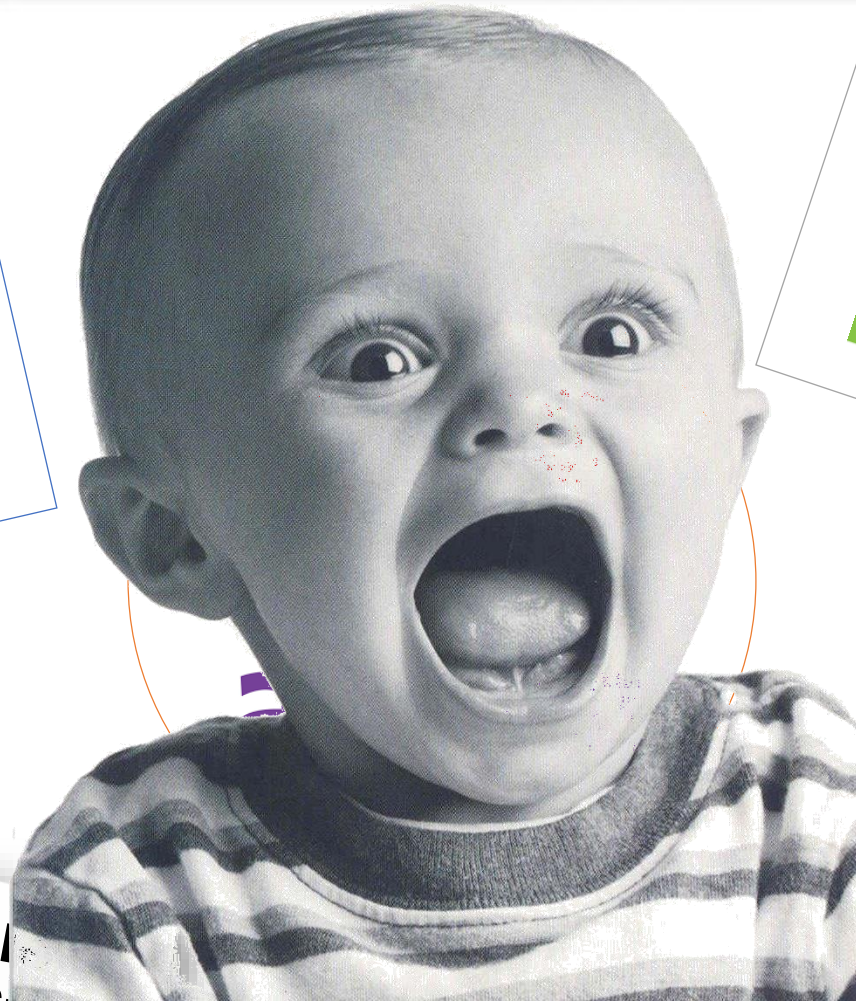
# Today - Competition

*J.P. Morgan*  
BERKSHIRE HATHAWAY INC.  
amazon

Walmart  
Humana

Amazon Holds Wholesale  
Pharmacy Licenses in 12 States

Cigna  
EXPRESS SCRIPTS





# How valuable was experience? Direct to Consumer (DTC)

- 20+ years experience in telehealth
- Make Telehealth “as good or better” to convince providers & payers
- DTC met a consumer need, but some went to war against the model, with legal battles in some states
- Health plans and employers adopted DTC
- Cerner partners with AmWell
- Epic has an integrated DTC in MyChart
- DTC is here to stay





# Today – Who are your competitors?

- **Insurers** – United Healthcare, Anthem, Aetna, Cigna, Humana, Highmark...
- **Employers** – Walmart, Home Depot, State of KY, U of KY...
- **Retailers/pharmacies/public spaces**
  - Walmart (*Mucinex, Delsym, Airborne, others*) = free Doctor on Demand consult
  - CVS, Walgreens, Rite Aid
  - Kiosks in grocery stores (Publix, Giant, Hy-Vee) and airports...
- **UberHEALTH** – vaccines in the home
- **Any healthcare provider using a DTC platform**

**and your newest potential competitor or partner...**





# *Haven*

**amazon**

**\$232B**

*J.P. Morgan*

**\$131B**

**BERKSHIRE HATHAWAY INC.**

**\$247B**



# Today – FCC/USAC-RHCD

- UNIVERSAL SERVICE ADMINISTRATIVE COMPANY
- RURAL HEALTH CARE PROGRAM
- FY 2019 funding \$593,782,000.
- Telecommunications Program Urban Rural difference
- Healthcare Connect Fund 65% of eligible expenses
- Funding year is July 1, 2019 to June 30, 2020



# Today – Eligible Health Care Providers

- Post-secondary educational institutions offering health care instruction, teaching hospitals and medical schools
- Community health centers or health centers providing health care to migrants
- Local health departments or agencies
- Community mental health centers
- Not-for-profit hospitals
- Rural health clinics
- Dedicated emergency departments of rural for profit hospitals
- Part-time eligible entities
- SNFs
- Consortia of the above entities





# Today – Healthcare Connect Fund

- **65% support for broadband communications including hardware**
- **Consortia can:**
  - Include urban health care providers (over 50% must be rural)
  - Off site data centers and administrative offices are supported
  - Can request multi year funding support



Today – FCC/USAC-RHCD

## **Rural Health Care Program**

**Filing Window closes May 29, 2019**



# Today – Technology

- New Advances in Technology are Propelling Interest in the industry of Medicine and in Telehealth
- Reality check: If Hospitals stop leading the way in Telehealth growth, Tech Giants will.
- Fertile ground for profits are shrinking.
  - Who would have thought 20 years ago State supported growth and use of marijuana would not get you a lengthy jail sentence?
- Amazon, Apple, Google, Microsoft, IBM, Facebook, UPS all are seeing the potential of Telehealth and advances in AI as fuel for future profits





# Today – Technology – FDA

- **Notable 2017 Telehealth FDA Clearances**

- **KardiaBand:** Medical device accessory that uses Apple Watch to capture an EKG
- **Cochlear Nucleus Implant System:** Remote programming capabilities for cochlear hearing implants
- **Abilify MyCite:** Ingestible “smart pill” with digital sensors designed to monitor medication compliance
- **IDx-DR:** Via a kiosk with a tech, anyone can have their eyes photographed to diagnose for Diabetic retinopathy. FDA approved and currently only allowable “non practitioner” way for payment in CMS history



# Today – Analytics

- **The future of Health IT will be driven by Data**
  - Personal data is fueling the potential for AI
  - As more products for Telehealth combine personal data with predictive analytics, that mixture will fuel the engine of change
  - Cheap/passive/easy/autonomous the buzz words of AI
  - 2.2 Billion invested in AI development in 2018 - Dr. David Brailer
  - Will technology innovations make health care better for all of us?

# Original Cost - \$89k


AT&T 1:54 PM 68%  
ebay.com

cli codec

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i Did you mean: cli code (140 items)?

 CLI ECLIPSE CODEC NTSC 446-60000 CAMERA RCU CONTROLLER WITH REMOTE

Pre-Owned  
**\$15.99**  
or Best Offer  
+\$50.00 shipping



# Back To The Future

## ITSR Goals

*Year 1*

- Create an organizational infrastructure to effectively deliver telemedical services
  - Clinical scheduler
  - Technical help desk
  - Needs-based research and development





# Principles That Have Held True

- **Passion** for doing it the right way
- **Open for innovation** and making telemedicine a tool
- **Had to push** forward telehealth process and technologies so Telemedicine adoption across the country would continue to grow.
  - Federal and State policies
  - creation of needed infrastructure, resources
  - research, publications
  - a lot of grant writing and reporting
  - while tending to our own gardens to assure we all remained employed! (kids got to eat!)



# A Few Final Thoughts

- Is it healthy for your EMR to be a one stop shop for telehealth?
- Protect what intellectual property you have!
- Is it less expensive and more efficient to outsource than build it internally?
- Analytics/Metrics/Data – are we reducing patients to numbers?





# Moving Forward

- Understand your Environment
- Anticipate Change
- Evaluate and Plan Out your Options
- Think Partnership(s)
- Execute on your Strengths

# See The Bigger Picture



*Picture – courtesy of Robert Schosser, MD, East Carolina University*

# See The Bigger Picture



*Picture – courtesy of Robert Schosser, MD, East Carolina University*





# Discussion

Let's Talk