# The Value of Broadband at Essentia Health

Dennis Smith – Director, Technology Systems
Steve Altendorf – Manager, Networks

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Essentia Health
Here with you

Geography of Essentia Health
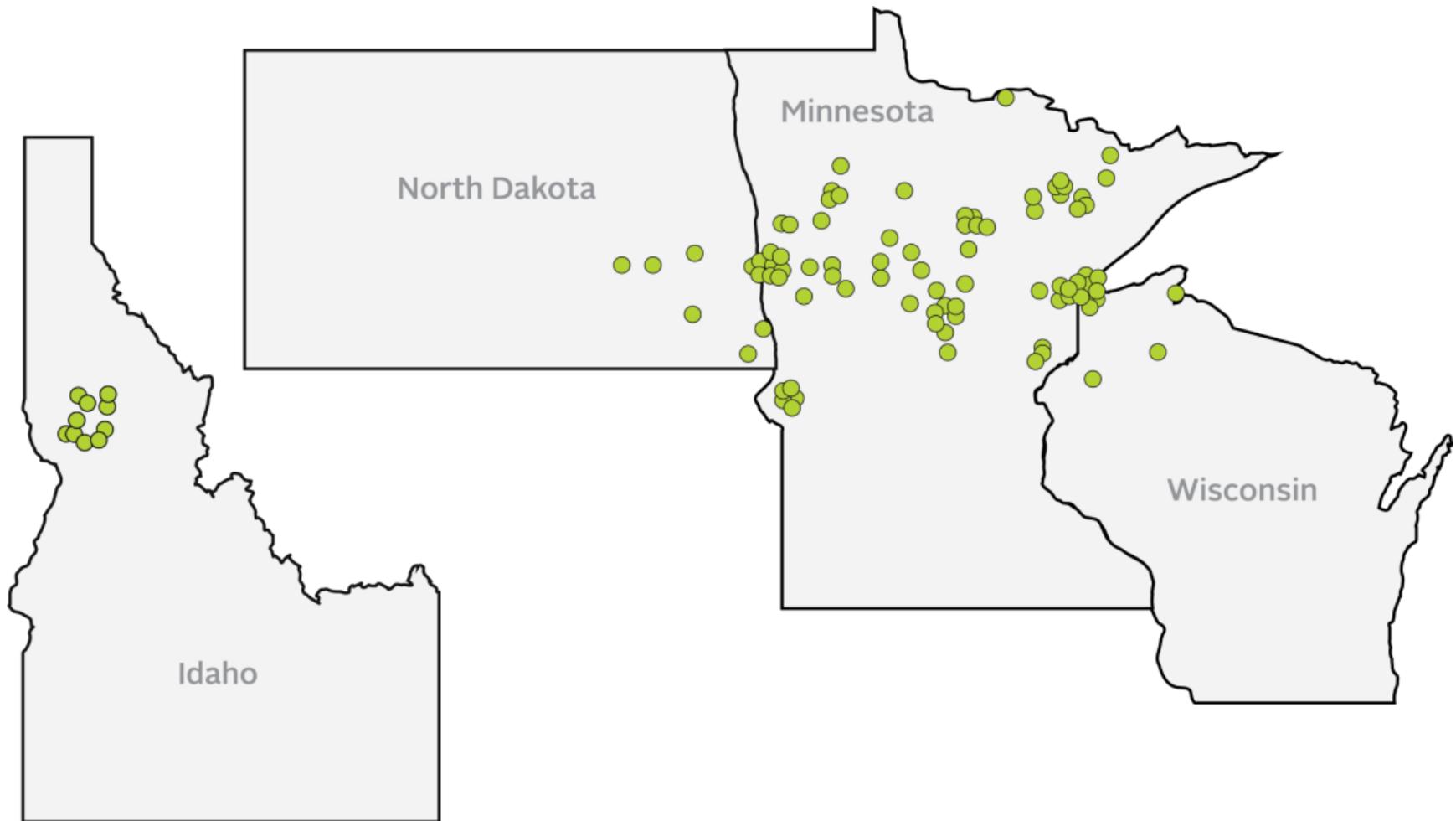
A Bit of History

Electronic Medical Record (EMR) – An Epic Journey

- Clinic Rollouts: 2002-2003
- Hospitals & Acquisitions: 2008-2014
- Community Connect Program: 2013

# Applications Leveraging Broadband

- Epic EMR (Lab, PACS, Pharmacy, Personal Portal)

- Building Security & Control

- Collaboration: Meeting Conferencing & Training

- Cloud Applications: Office365, Training, Human Resources

Broadband Benefits

- Health Record Portability and Access
- Cost Savings: Centralized EMR, Ancillary, Business and Building Control & Security Systems
- Cost Savings: Centralized Functions and Virtualized Teams
- Mergers and Acquisitions – Remote Talent
- Remote Support – IT, Facilities, Etc.

Involta

Technology Architecture

LTC

CLINIC

Clinician

Patient

Family

Wide Area Network

Internet

Cloud Based Services

Involta Tech Drive Data Center

6th Avenue Data Center

Buried Fiber Ring
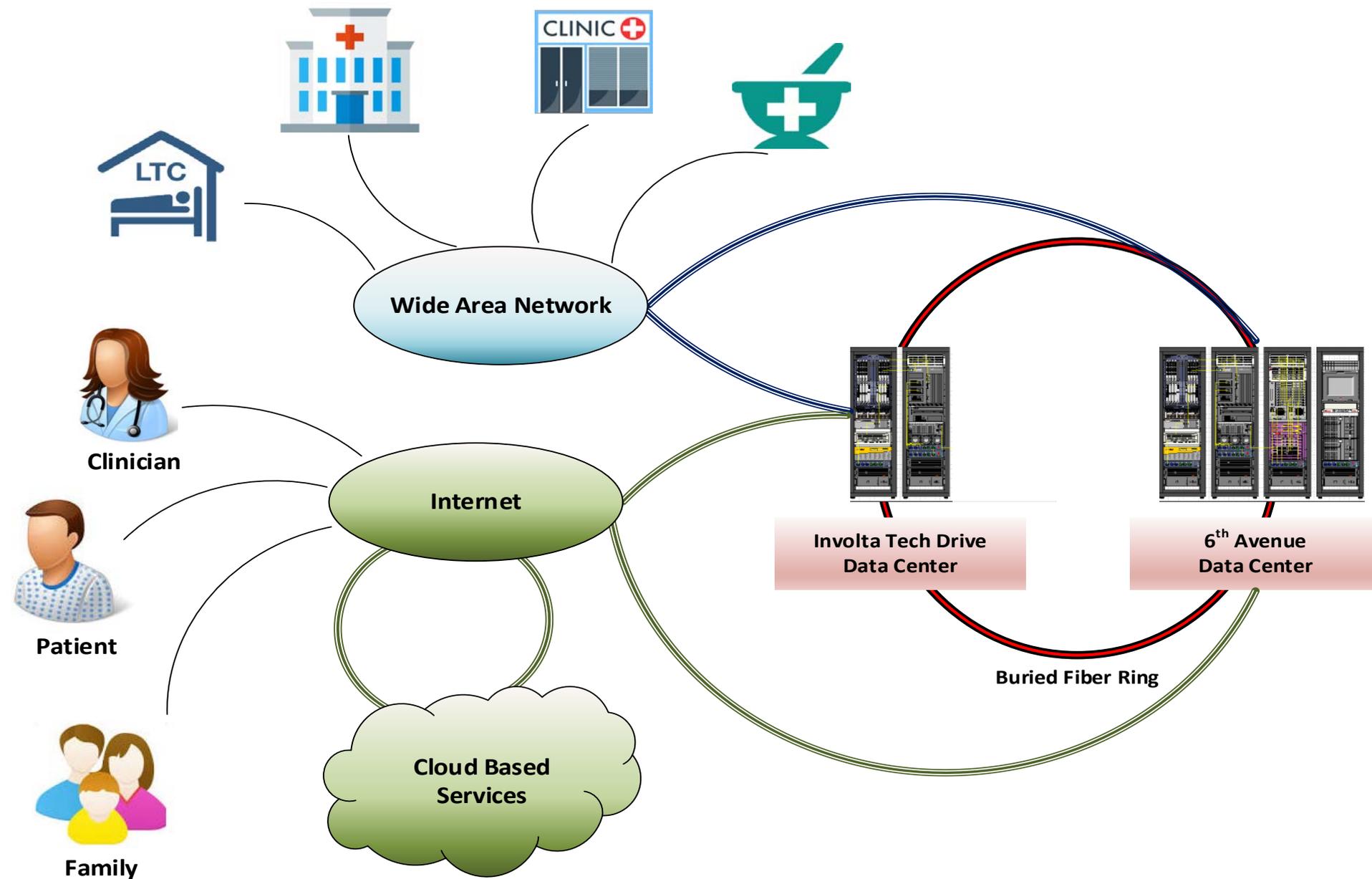
Wide Area Network Architecture

Circuit speeds range from 1GB on the Iron Range to as little as 6MB at rural clinics

Data Center

Data Center

Local Fiber Campus Ring

East Market

Regional Clinic

Essentia Health MPLS WAN

Regional Clinic

Regional Clinic

Central Market

Local Fiber Campus Ring

Regional Clinic

Regional Clinic

West Market

Local Fiber Campus Ring
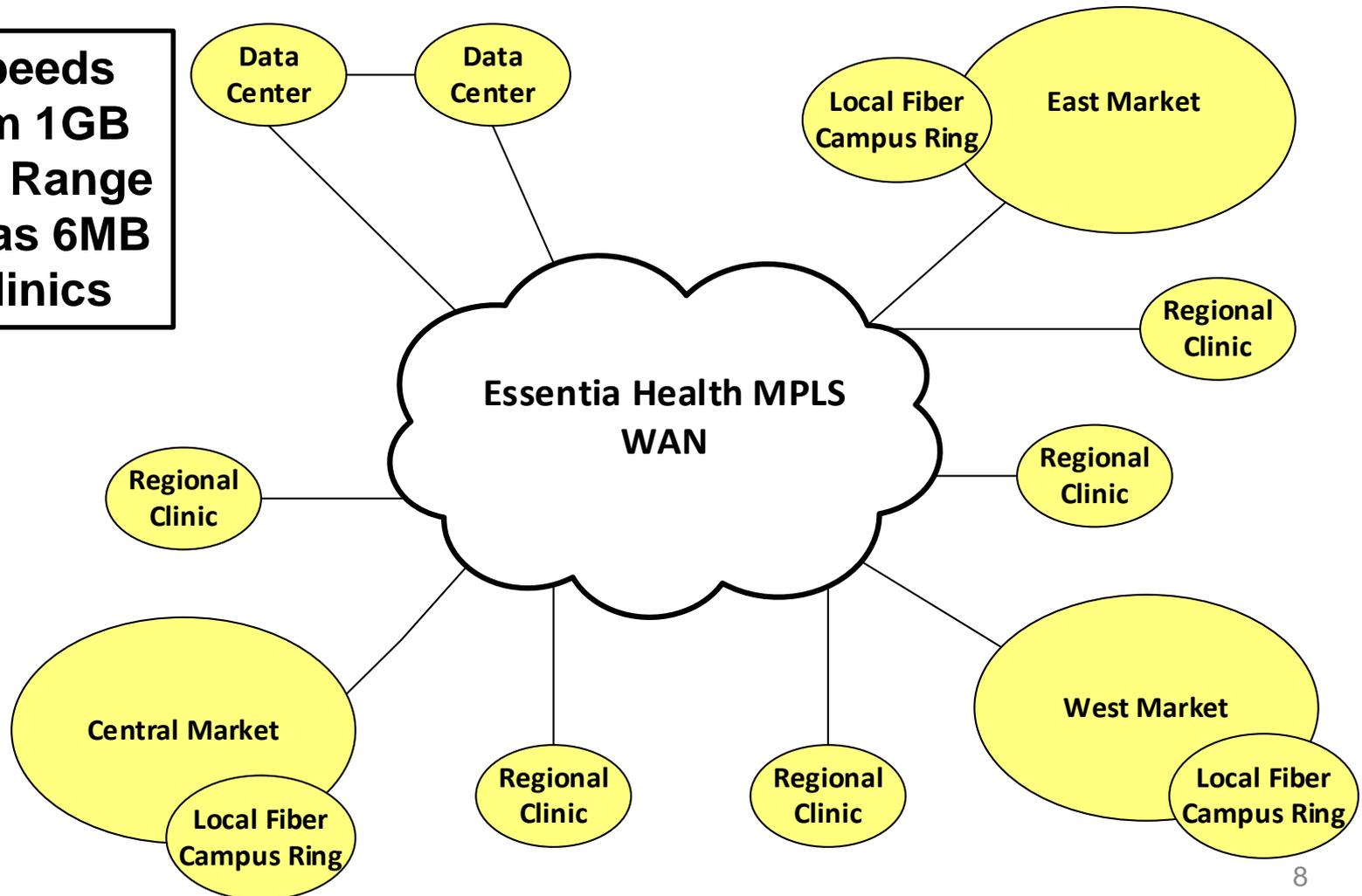
Building the Highway

GMTBI Pilot (2012) FCC Pilot

- Greater Minnesota Telehealth Broadband Initiative
- FCC Pilot valued at $5.4M over 5 years
- 7 other healthcare entities across MN
- 30 Essentia Health sites participated
- Included discounted hardware for circuit terminations
- Estimated savings of $260K over 3 years

Building the Highway

HCF (2015- Present)

- Healthcare Connect Fund (Current FCC Program)
- Formed our own Essentia Health Consortium
- Completed an RFP for all sites
- 48+ Essentia Health sites participate
- Cost ranges by 5 carriers submitted RFP's
  - 10MB $734 to $2,600 (Ada)
  - 100MB $500 to $1,057 (Grand Rapids)
  - 1GB at $1,330 to no bids (Hibbing)
- Monthly Spend
  - 114 total circuits from carriers
  - $125K per month (Actual cost after program incentives)

Underserved Areas in MN

- Graceville (Big Stone County)
- Ada (Norman County)
- Fosston (Polk County)
- These locations are examples of where local service providers have limited bandwidth and availability
- Limited to single route options. No diverse route to ensure uptime during carrier maintenance or failure of hardware.
- Service pricing is higher in these locations

Questions?