

Perspectives in Rural Health: HIT & Rural

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Topics for Today

- HIT, in general
- Regulatory Programs, grants
- Broadband
- EMR/EHR
- Reporting & Payment
- HIE
- Workforce
- Telehealth

Health Information Technology

- Promise of HIT
 - Improve Care (alerts, advice, guidelines, recommendations, health education)
 - Reduce duplication (prior tests, labs, etc)
 - Share data (notes, test results, visits, history, rx)
 - Coordinate Care

- Reality
 - Silos / Not sharable (duplicate anyway, not shared notes, fax!)
 - Expensive! (set up, training, maintenance)
 - Documentation is time consuming (screens, windows, clicks)
 - Quality reporting (right place, reimbursement, layers of personnel)

FCC / Universal Service Fee

- Telecommunications Act of 1996
 - Collects fees on telecommunications services
 - Expands access where lagging
- Connect America Fund
 - Mobility Fund
- Low income (Lifeline)
 - Obamaphone!
- Rural Health Care Program
 - Telecommunications Program—specific to providers
 - Health Care Connect Fund (HCCF)—Focuses on consortia
 - Health Care Pilot Program—statewide or regional networks

The Telecommunications Program

- ❑ Established in 1997
- ❑ Goal: eligible rural providers pay no more than their urban counterparts for telecommunications services.
- ❑ Through this program, eligible rural HCPs can obtain rates for supported services that are no higher than the highest tariffed or publicly available commercial rate for a similar service in the closest city in the state with a population of 50,000 or more people, taking distance charges into account.

The Rural Health Care Pilot Program

- Began in 2007
- State or regional broadband networks
- 85 % subsidy to 69 projects to:
 - Construct a state or regional broadband network and the advanced telecommunications and information services provided over that network
 - Connecting to Internet2 or National LambdaRail
 - Connecting to the public Internet.
- SC = one of the largest
 - The Palmetto State Providers Network, telepsychiatry
 - Saved \$18 million dollars in Medicaid costs over 18 months program. Psychiatric consults are now available 24/7. Previously, patients
- Results:
 - Improved quality
 - Reduced costs
 - Urban hubs = key

The Healthcare Connect Fund

- ❑ Next phase of the Pilot Program
- ❑ Provided support for high-capacity broadband connectivity to eligible health care providers (HCPs)
- ❑ Encouraged the formation of state and regional broadband HCP networks
- ❑ Must be 50% rural HCPs
- ❑ 65% discount / subsidy
- ❑ \$400 million annual cap, trying to increase

Other HIT Programs

- ❑ **USDA Farm Bill Broadband Program**
 - ❑ Provides loans for funding for the costs of construction, improvement, and acquisition of facilities and equipment to provide broadband service to eligible rural communities.
 - ❑ Underserved, rural areas only
- ❑ **Recovery Act Broadband Initiatives Program (BIP) (inactive)**
 - ❑ Provided grants and loans to provide access to broadband services
- ❑ **Community Connect program**
 - ❑ Grants to expand, construct, purchase, or lease an expansion of broadband Internet access
 - ❑ Provides access to both residential and business
 - ❑ Access to critical community facilities (hospitals, schools, libraries)
 - ❑ Up to ten computer access points to be used in a community center

Other HIT Programs

- Distance Learning and Telemedicine Loan and Grant Program
 - Grants and loans for technology purchases
 - Focus areas:
 - Instructional programming
 - Technical assistance
- Telecommunications Infrastructure Loan Program
 - Long-term direct and guaranteed loans
 - Improvement, expansion, construction, acquisition, and operation of telephone lines, facilities, or systems
 - Goal is to enhance and support broadband

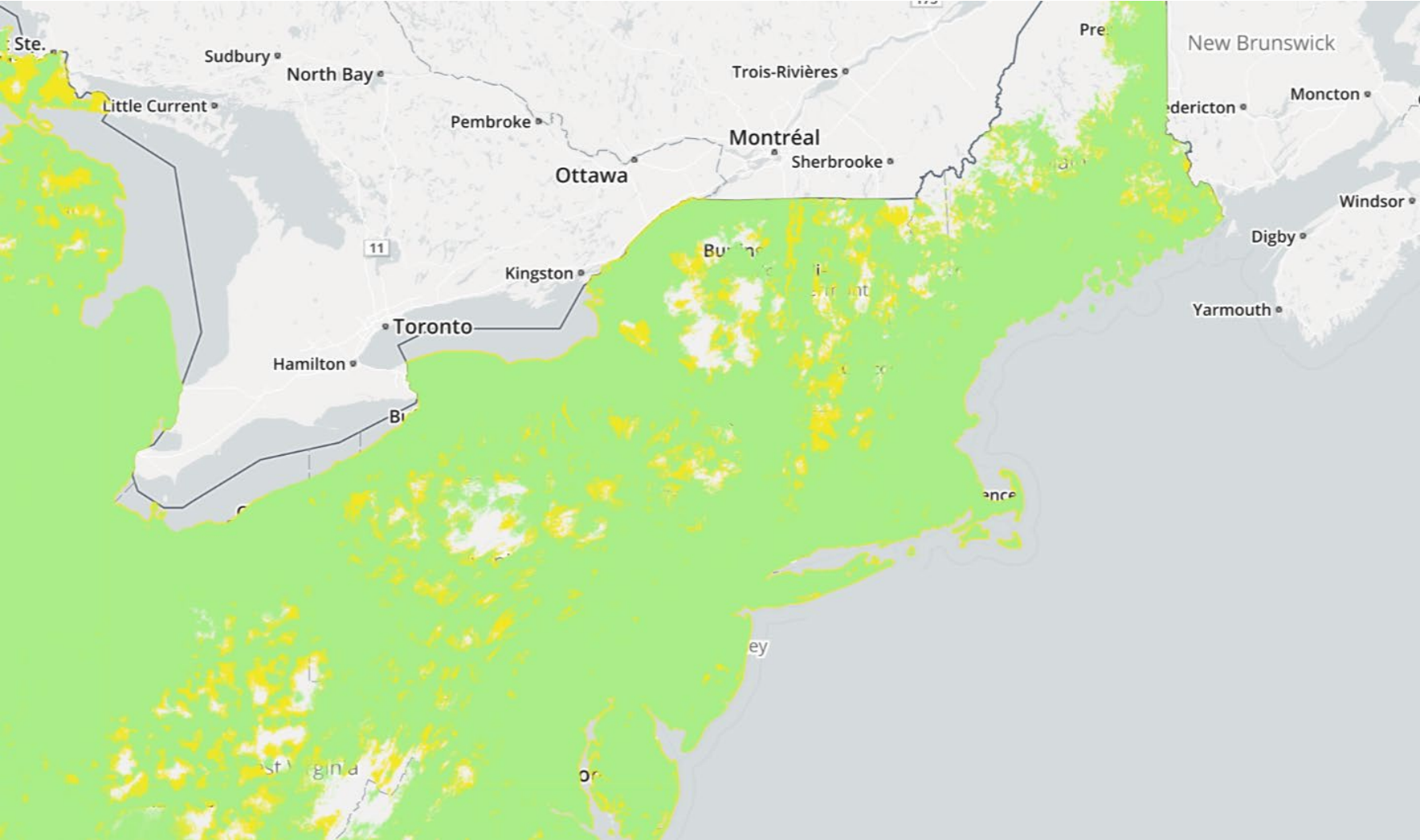
Broadband

- High-speed, always-on internet access.
- Key for:
 - Electronic health records
 - Health Information Exchange
 - Telemedicine
- Significant gaps remain, particularly rural

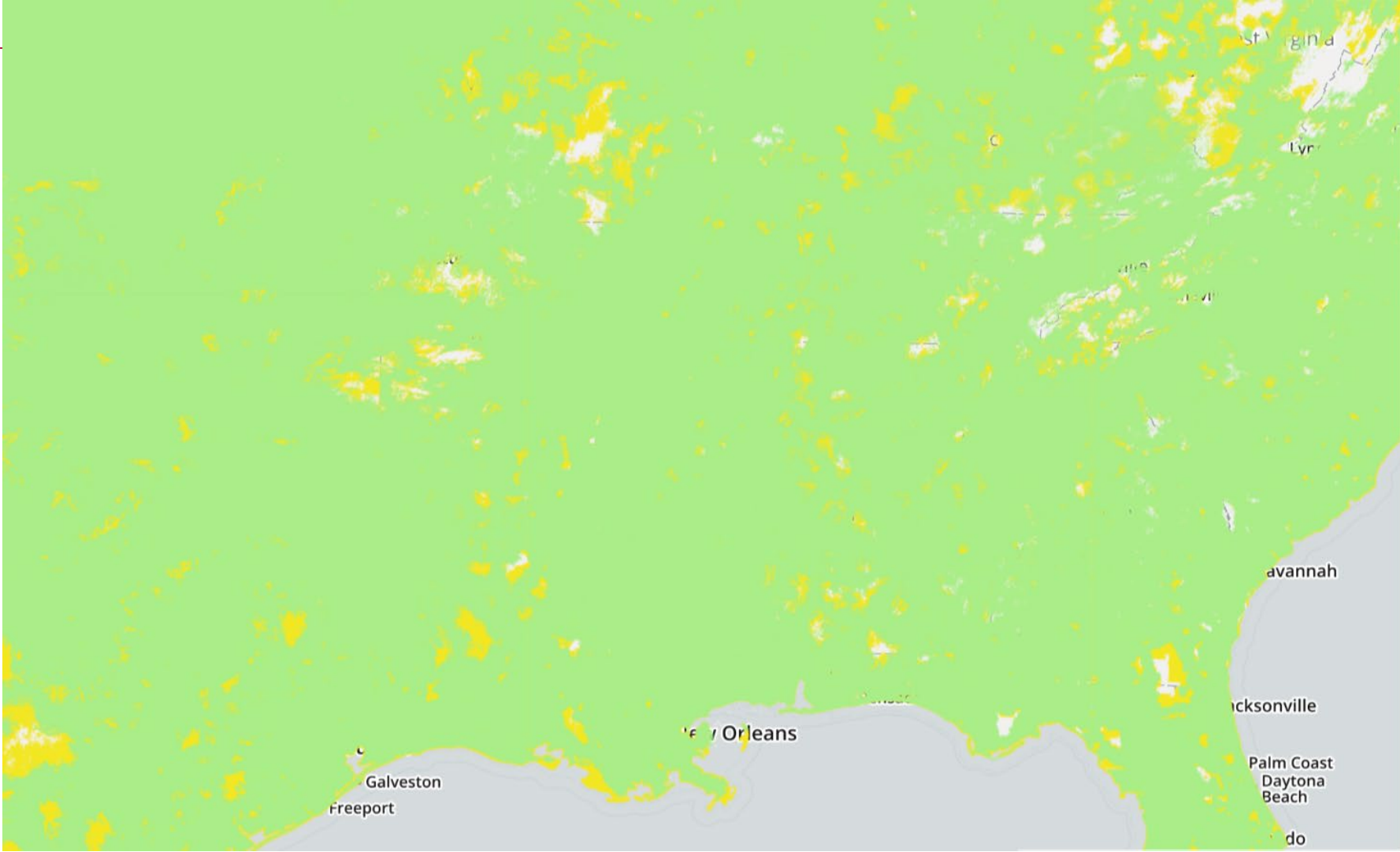
Fiber



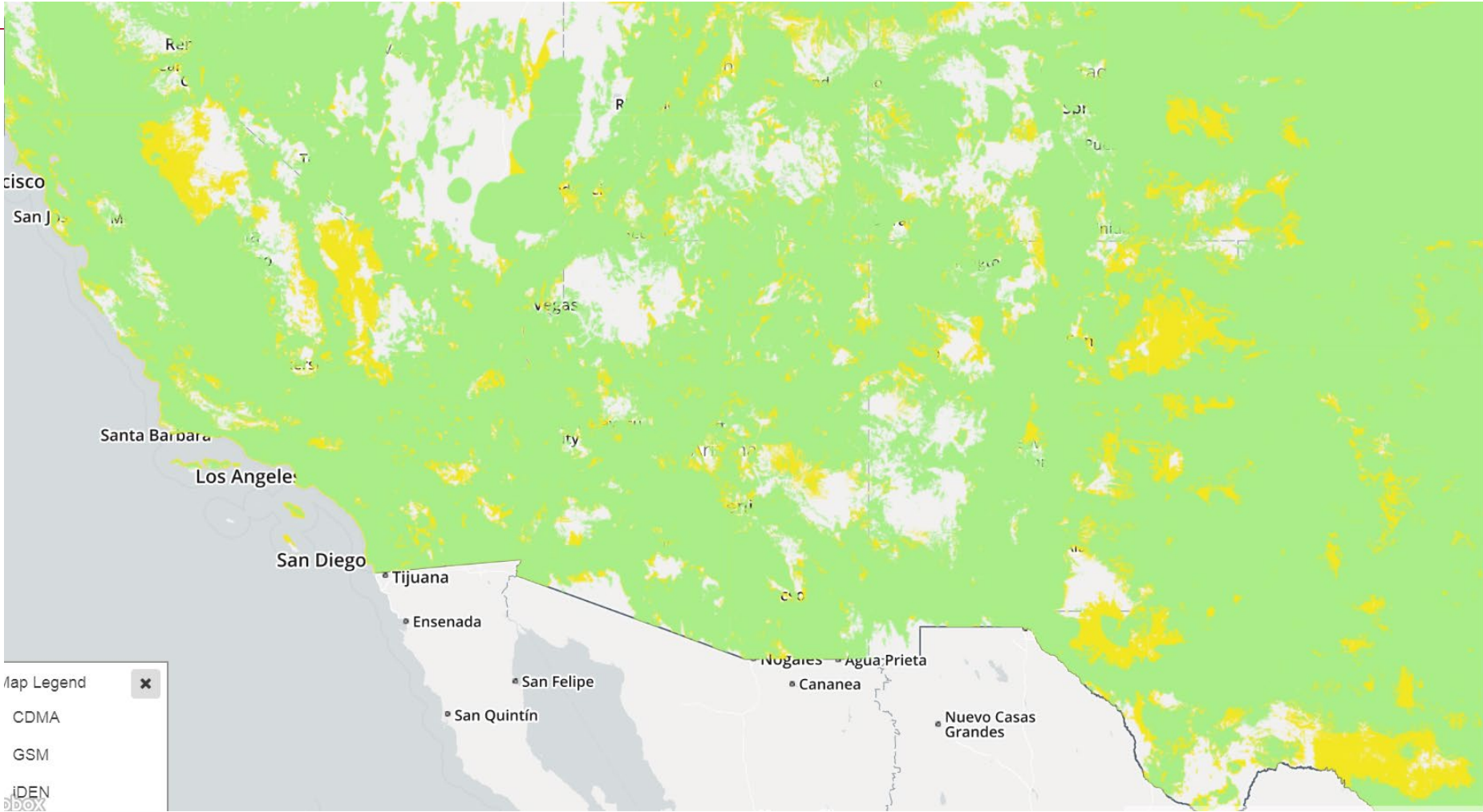
Terrestrial Mobile Coverage



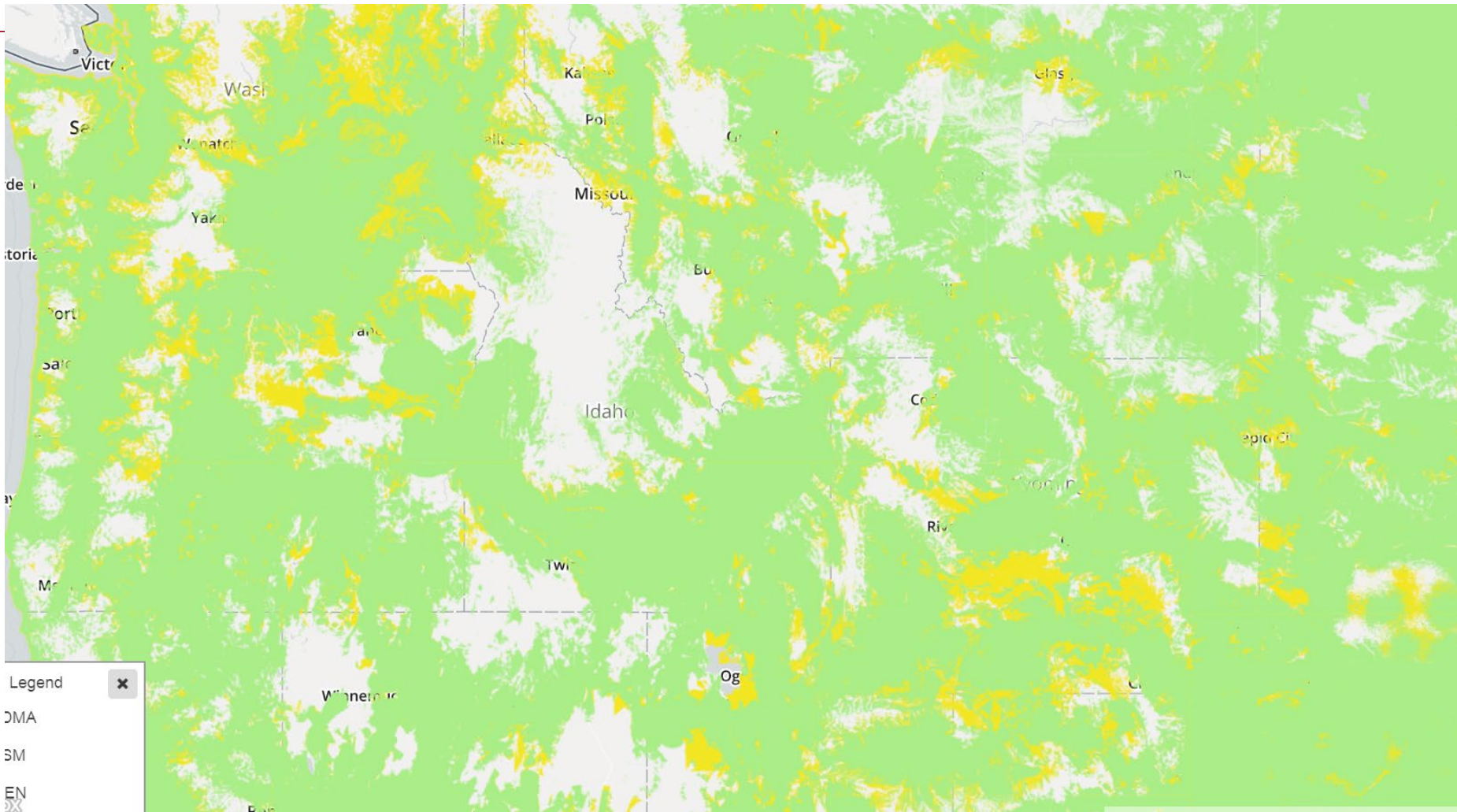
Terrestrial Mobile Coverage



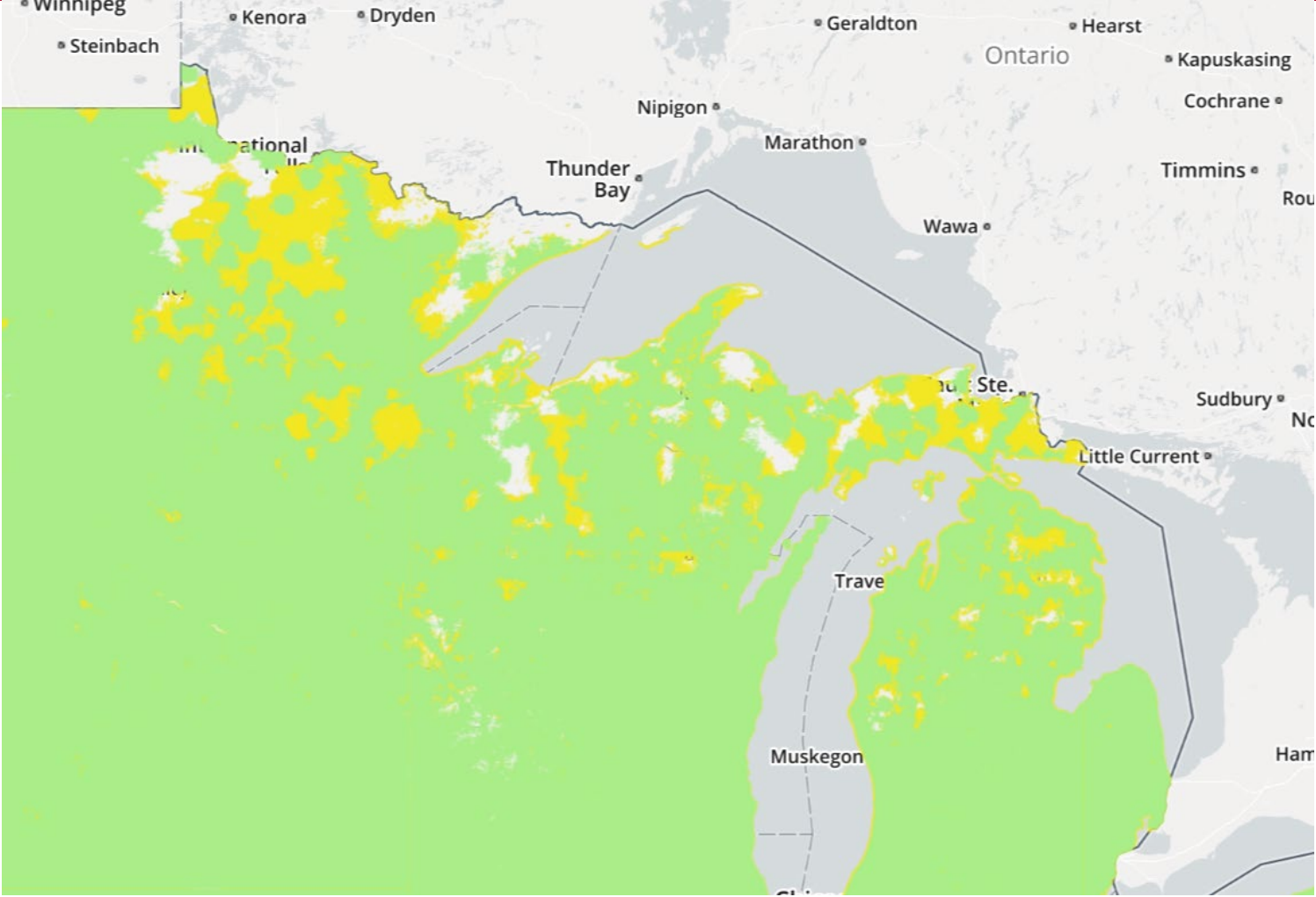
Terrestrial Mobile Coverage



Terrestrial Mobile Coverage



Terrestrial Mobile Coverage



Gaps in Access

- 7.7% of Americans do NOT have access to broadband
 - ~80% of those live in rural areas
- 70% of rural and 64% of tribal areas do not have access to either fixed or mobile broadband
- HUGE gap in ACCESS and USE
 - Microsoft Study
 - HUGE differences in access to and uptake
 - FCC says ~24 million without access
 - Microsoft says ~163 million without connection
 - TV White Spaces Spectrum / Rural Airband Initiative
 - Why?
 - Cost of the service
 - Need / hardware

EMR/EHR

- Not necessarily the same thing!
- EMR
 - Digital version of a paper chart
 - History, diagnoses, prescriptions, visit notes, labs/tests results
 - Point of care reminders
 - Recommendations
 - Interaction warning
 - Not necessarily intended to be outside the setting
- EHR
 - Shareable
 - More context—social determinants, health behaviors

EMR/EHR in Practice

- Connectivity and sharing remains an issue
- Allied health access, read/write ability
- Practice management software
 - Appointments
 - Billing
 - Interfaces!
- Provider use
 - Alert fatigue
 - Clicks and windows
 - Documentation for reporting vs. pt care
- Provider/Pt interaction
- Personal Health Records / patient portals

EMR/EHR Incentive Programs

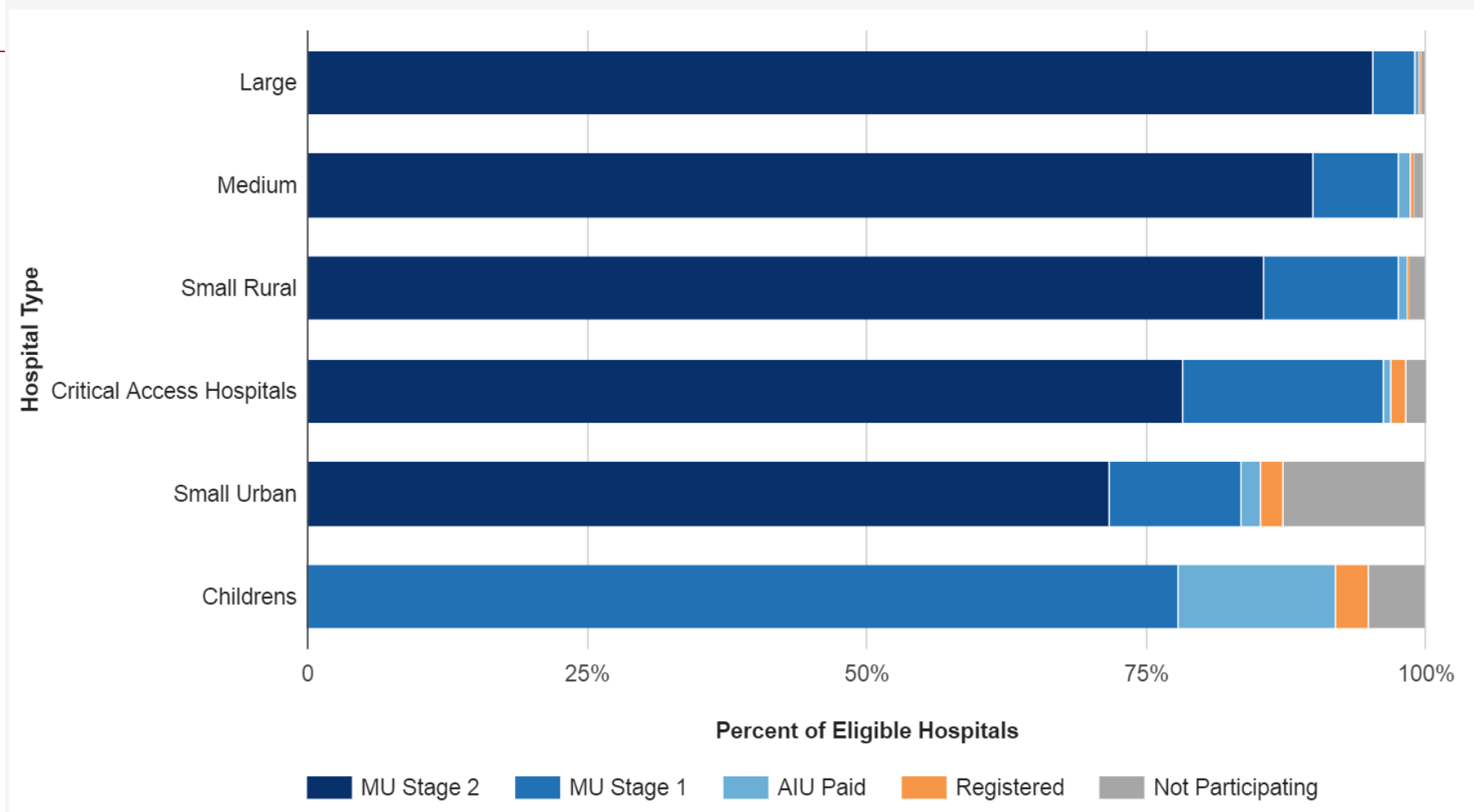
- The American Reinvestment & Recovery Act (ARRA), 2009
 - Health Information Technology for Economic and Clinical Health (HITECH) Act
- Medicare and Medicaid Electronic Health Record (EHR) Incentive Program
 - Key phrases:
 - Meaningful use
 - Certified EHR technology (CEHRT).
- '5 pillars' for Meaningful Use
 - Improving quality, safety, efficiency, and reducing health disparities
 - Engage patients and families in their health
 - Improve care coordination
 - Improve population and public health
 - Ensure adequate privacy and security protection for personal health information

Meaningful Use

- Incentive payments
 - \$44,000 over 5 years for the Medicare providers
 - \$63,750 over 6 years for Medicaid provider
 - 1-3% reductions if choose NOT to participate
- The EHR Incentive Programs consist of three stages:
 - Stage 1 (2011): requirements for the electronic capture of clinical data
 - Stage 2 (2013): expanded upon the Stage 1, focus on quality measures and information exchange
 - Stage 3 (2015): eased Stage 2 requirements, focused on health outcomes
- Reporting, reporting, reporting!

Hospital Progress to Meaningful Use by Size, Type, and Urban/Rural Location

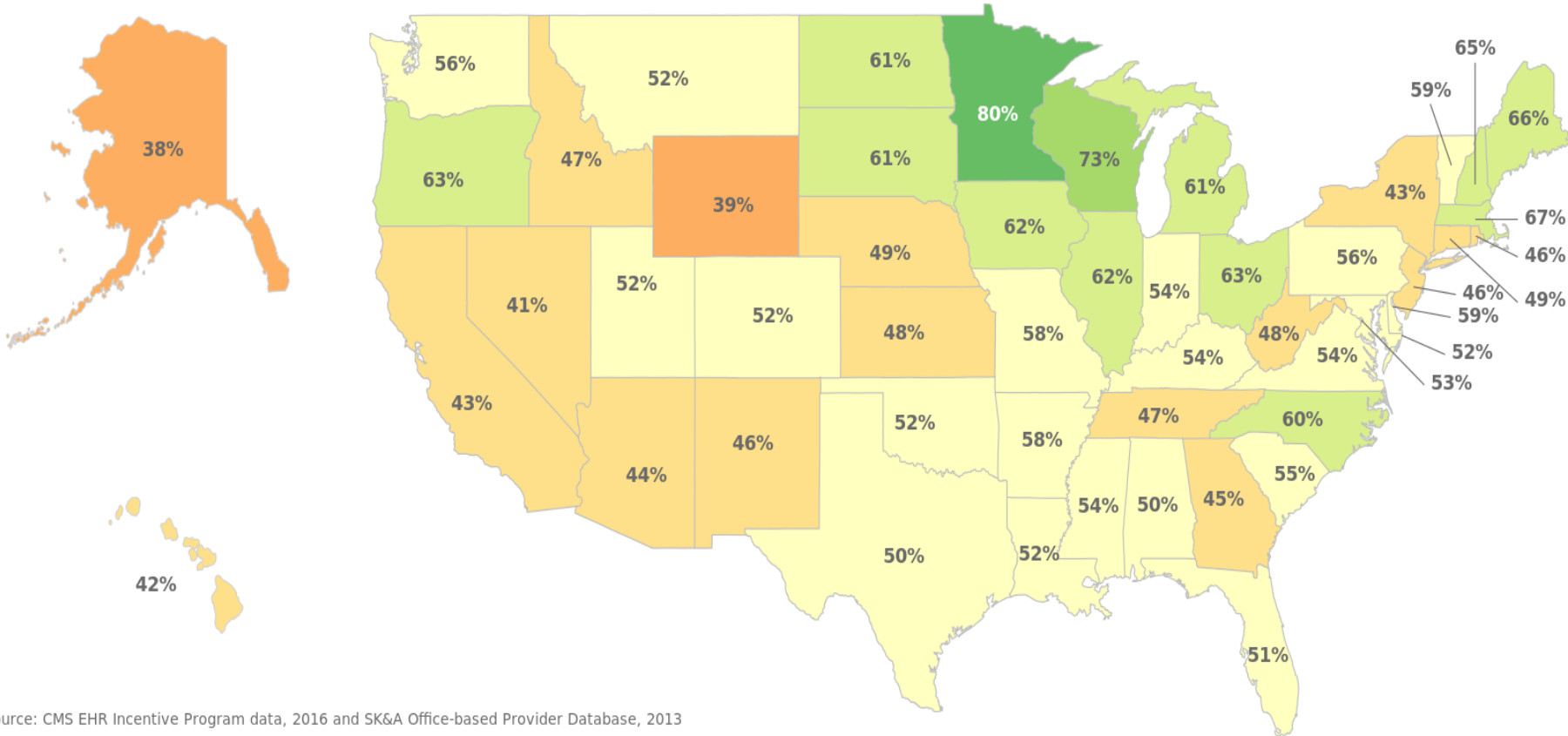
2016



Percent of Physicians, NPs, and PAs that have Demonstrated Meaningful Use of Certified Health IT | 2016

53% of Physicians, Nurse Practitioners, and Physician Assistants have Demonstrated Meaningful Use of Certified Health IT

■ 0% ■ >0-9% ■ 10-19% ■ 20-29% ■ 30-39% ■ 40-49% ■ 50-59% ■ 60-69% ■ 70-79% ■ 80-89% ■ 90-99% ■ 100%



Source: CMS EHR Incentive Program data, 2016 and SK&A Office-based Provider Database, 2013

Regional Extension Centers (REC)

- ❑ Mission: to health care providers select, implement, and become adept and meaningful users of electronic health records
- ❑ Part of the HITECH Act
- ❑ 62 throughout US
- ❑ Provide:
 - ❑ Technical assistance
 - ❑ EMR Selection
 - ❑ Maintenance / support
 - ❑ Reporting/Meaningful Use / QPP
- ❑ Qualify for assistance
- ❑ South Carolina Regional Extension Center—Center for IT Implementation Assistance in South Carolina (CITIA-SC)

Percent of REC Enrolled Providers by Practice Type Live on an EHR and Demonstrating Meaningful Use

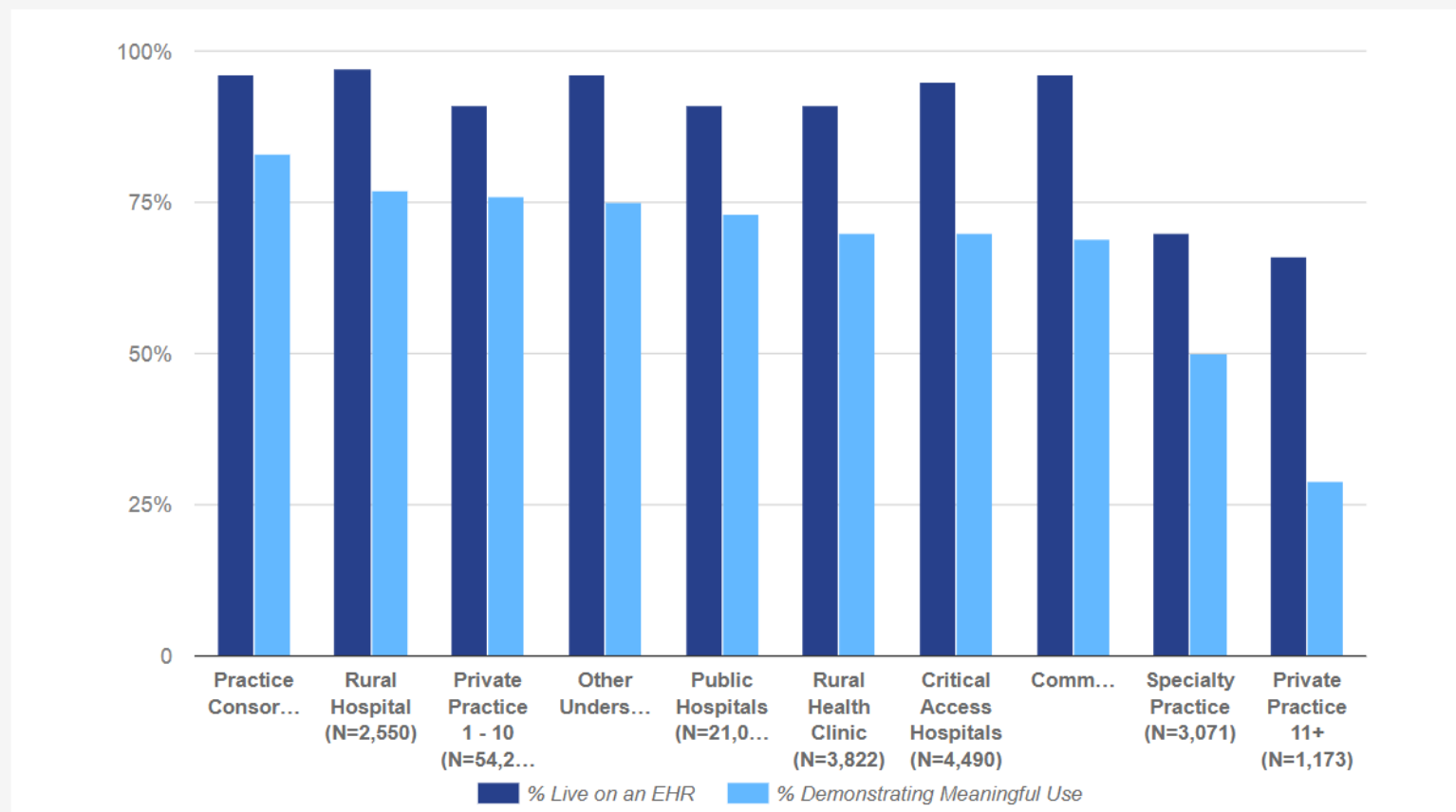
Over 95% of enrolled providers in under-served settings are live on an EHR

January 2016

93% of all providers live on an EHR

75% of all providers demonstrating meaningful use

Percent of Providers by Practice Type



Quality Payment Program

- ▣ The Medicare Access and CHIP Reauthorization Act (MACRA), 2015
 - ▣ Repealed the sustainable growth rate (SGR)
 - ▣ Established the Quality Payment Program (QPP)
 - ▣ The Merit-based Incentive Payment System (MIPS)
 - ▣ Advanced Alternative Payment Models (AAPM)

Merit-based Incentive Payment System (MIPS)

- Voluntary, 2017 data reporting
- Adjustments begin in 2019 (-4% for not reporting)
- MIPS adjusts payment based on performance in four performance categories
 - Quality – Choose 6 / 217 measures, derived from PQRS
 - Advancing Care Information (ACI) – based on the Meaningful Use
 - Improvement Activities – care coordination, beneficiary engagement, and patient safety.
 - Cost – replaces the Value-based Payment Modifier (VBPM)
- Performance categories carry different weights; will shift as the program progresses.
- Accommodations for rural, low volume providers

Alternative Advanced Payment Models (AAPM)

- AAPMs available for primary care include:
 - Comprehensive ESRD Care (CEC) - Two-Sided Risk
 - Comprehensive Primary Care Plus (CPC+)
 - Next Generation ACO Model
 - Shared Savings Program - Track 2
 - Shared Savings Program - Track 3
 - Oncology Care Model (OCM) - Two-Sided Risk
 - Comprehensive Care for Joint Replacement (CJR) Payment Model (Track 1- CEHRT)

Alternative Advanced Payment Models (AAPM)

- For 2018 an AAPM must do one of the following for all of its eligible clinicians to be qualifying participants (QPs):
 - Receive at least 25% of its Medicare Part B payments through the AAPM, or
 - See at least 20% of its Medicare patients through the AAPM
- Can have partial qualifiers as well
- QPs will be excluded from the MIPS reporting requirements.
- QPs will receive an annual 5% lump-sum bonus for years 2019-2024.
- 0.75% increase to their Medicare physician fee schedule (PFS) beginning in 2026.

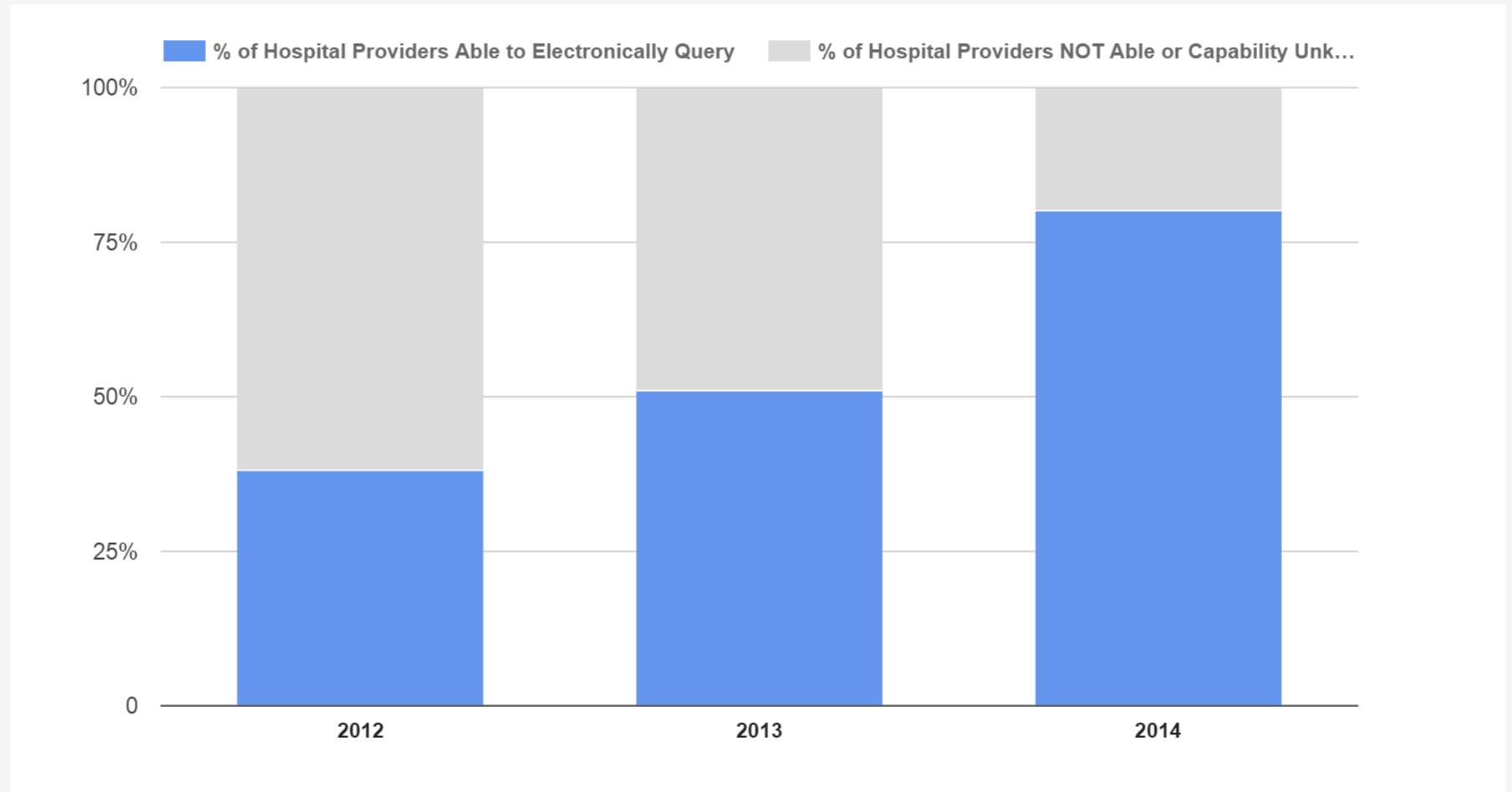
Health Information Exchange (HIE)

- Directed exchange
 - Secure messaging / document transfer
- Query-based exchange
 - Data repository vs. federated model
 - Record Locator
- Consumer-mediated exchange
 - Patient initiated
 - E.g. glucose, surveys, etc.
- Faxes remain!

Hospital Capability to Electronically Query

Percent of U.S. Hospitals' with Capability to Electronically Query Patient Health Information from Outside Their Organization or System

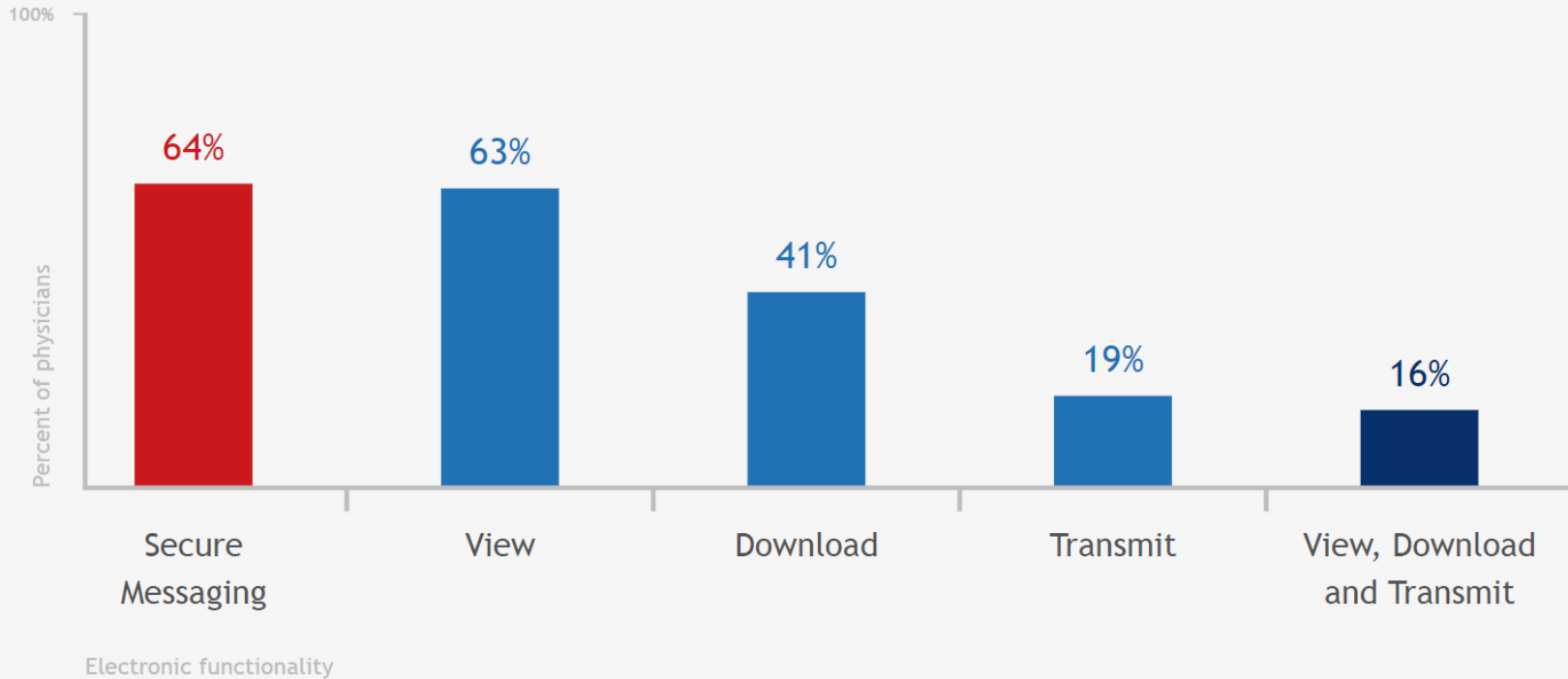
2014



Office-based Physician Electronic Patient Engagement Capabilities

Percent of physicians that have electronic capabilities to exchange secure messages with patients and for patients to view, download and transmit their online medical record

2015



SCHIE_x

- Launched in 2008
- Significant funding from USDHHS
- Joined National Health Information Network (NHIN) in 2011
- Fee schedule for subscriptions
 - Providers
 - PAs/APRN
 - Facilities/ Beds

Rural IT Workforce Issues

- Recruitment
- Training
- Retention
- Cost / upkeep

- Strategies
 - Cross-train multiple staff members in health IT.
 - Provide opportunities for additional training in health IT for clinical staff
 - Seek new staff who will likely stay in the community and provide them with support for IT education.
 - Coordinate programs with local high schools, technical schools, community colleges and universities.

Health IT Workforce Development Program

- Office of the National Coordinator for Health Information Technology (ONC)
- Focuses on training for health workers now employed in rural practices and facilities, includes use of distance learning.
- Programs include:
 - Community College Consortia to Educate Health Information Technology Professionals:
 - Five regional groups of more than 70 community colleges in all 50 states
 - Develop or improve non-degree health IT training programs that can be completed in six months or less
 - Practice workflow and information management redesign specialists
 - Clinician/practitioner consultants • Implementation support specialists
 - Implementation managers • Technical/software support specialists
 - Trainers

Health IT Workforce Development Program

- Program of Assistance for University-Based Training:
 - Nine grants totaling \$32 million
 - Colleges and universities to quickly establish or expand health IT training programs for health IT professional roles requiring training at the university level.
 - Trains students for the following professional roles:
 - Clinician or public health leader
 - Health information management and exchange specialist
 - Health information privacy and security specialist
 - Research and development scientist
 - Programmers and software engineer
 - Health IT sub-specialist

Telehealth/Telemedicine

- Telehealth is defined as the use of electronic information and telecommunication technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health and health administration.
 - Technologies include:
 - Video conferencing
 - Store-and-forward imaging
 - Streaming media
 - Terrestrial and wireless communications.
- The Office for the Advancement of Telehealth (OAT), HRSA, promotes the use of telehealth technologies for health care delivery, education, and health information services.

Telehealth & Rural

- ▣ Typically used as access to specialists, including:
 - ▣ Radiology
 - ▣ Psychiatry
 - ▣ Ophthalmology
 - ▣ Dermatology
 - ▣ Dental care
 - ▣ Audiology
 - ▣ Cardiology
 - ▣ Oncology
 - ▣ Obstetrics

Telehealth Settings

- ❑ Chronic care management interventions
- ❑ Emergency care
- ❑ Home monitoring
- ❑ Intensive care units (ICU)
- ❑ Long-term care Online therapy and remote
- ❑ Telepharmacy services
- ❑ Interpreter services
- ❑ School-based settings

Benefits to Rural

- Patients
 - Access to specialists
 - Reduce burdens (time, expense)
 - Real-time interactions
 - Timely interventions (e.g. mental health, stroke)
- Providers
 - Enhanced support / professional integration
 - Improved retention / lower burnout
 - Team-based care with specialists
 - Outsourced diagnostic analyses
 - In-home monitoring of patients for follow-up care
 - Continuing education and training, reducing travel and out-of-practice time

Current Issues

- Scope of Practice
 - E.g. APRN in SC, supervision
 - Crossing state lines / licensure reciprocity (only 9 allow out of state)
 - Reimbursement
 - Medicare—covered via part B when meeting certain conditions, not store and forward
 - Medicaid—varies by state
 - Most reimburse for video consults
 - Some for store and forward, remote monitoring
 - Payment for encounter, facility fees
 - Originating location
 - Broadband, again!

SC Telehealth

- ❑ Reimburses for video consults and remote monitoring, not for store and forward
- ❑ Must have SC license
- ❑ Referring site gets a facility fee
- ❑ APRN must have a waiver, plan of supervision (law pending)
- ❑ SC Programs:
 - ❑ South Carolina Telehealth Alliance
 - ❑ MUSC Health Center for Telehealth
 - ❑ ICARED Telehealth support programs
- ❑ Blue CareOnDemand
 - ❑ State Health Plan
 - ❑ Copay, on demand

Telehealth Resource Centers (TRCs)

- Funded by the Office for the Advancement of Telehealth
- Assist healthcare organizations, healthcare networks, and healthcare providers in the implementation of cost-effective telehealth programs to serve rural and medically underserved areas and populations.
- 14 Telehealth Resource Centers (12 regional and two national).
 - Southeastern Telehealth Resource Center (SETRC)

Useful Resources

- <https://www.ruralhealthinfo.org/topics>
- <https://www.ruralhealthinfo.org/topics/health-information-technology>
- <https://www.ruralhealthinfo.org/topics/telehealth>
- <https://www.healthit.gov/>
- <https://www.rd.usda.gov/programs-services>
- <https://qpp.cms.gov/>
- <https://www.fcc.gov/general/rural-health-care-program>

Q&A

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