Diabetic Retinopathy: Annual Retinal Examination Rate

4 December 2014

Mark B. Horton, OD, MD
Director, IHS-JVN Teleophthalmology Program
DR GPRA Measure

- Annual examination rate of qualifying DR examinations
  - Active DM pts without bilateral blindness
  - Qualifying retinal examinations
    - Dilated eye exam by OD or MD
    - ETDRS study
    - Validated telemedicine retinal study
IHS-JVN Teleophthalmology Program

- Centrally funded
- Primary care based Tmed
- Non-invasive- ad hoc workflow
- ATA Category 3 validation
  (equal or better than live eye exam for DR dx)
- Reading Centers- PIMC, Flagstaff
Diabetic Retinopathy Surveillance

IHS-JVN Teleophthalmology Program

94 Fixed/Hybrid sites + 7 Portable Sites in 25 States

- Phoenix, AZ
- Sacaton, AZ
- Polacca, AZ
- San Carlos, AZ
- Salt River, AZ
- Ft. Yuma, AZ
- Whiteriver, AZ
- Sells-, AZ
- Tuba City, AZ
- Tucson, AZ
- Parker, AZ
- Phoenix, AZ
- San Xavier, AZ
- Kayenta, AZ
- Chinle, AZ
- Flagstaff, AZ
- Inscription House, AZ
- Navajo Mountain, AZ
- Elko, NV
  - Goshute, NV
  - Ely, NV
  - Duckwater, NV
  - Owyhee, NV
- Reno Sparks, NV
- Pyramid Lake, NV
- Fallon, NV
  - Schurz, NV
  - Yerington, NV
  - Yamba, NV
- Claremore, OK
- Wewoka, OK
- Eufaula, OK
- Okmulgee, OK
- Oklahoma City, OK
- Tahlequah, OK
- Lawton, OK
- Miami, OK
- Anadarko, OK
- Lawrence, KS
- Mayetta, KS
- Portland, OR
- Warm Springs, OR
- Salem, OR
- Cow Creek, OR
- Klamath, OR
- Pendleton, OR
- Nespelem, WA
- Yakama, WA
- Wellpinit, WA
- Tacoma, WA
- Ft. Hall, ID
- Lapwai, ID
- Plummer, ID
- Pine Ridge, SD
- Rosebud, SD
- Ft. Peck, SD
- Ft. Thompson, SD
- Lower Brule, SD
- Sisseton, SD
- Eagle Butte, SD
- Spirit Lake, ND
- Ft. Yates, ND
- Belcourt, ND
- Ft Belknap, MT
- Crow Agency, MT
- Lame Deer, MT
- Browning, MT
- Ft Washakie, WY
- Red Lake, MN
- Minneapolis, MN
- Cass Lake, MN
- White Earth, MN
- Shiprock, NM
- Santa Fe, NM
- Albuquerque, NM
- Mescalero, NM
- Crown Point, NM
- Jicarilla, NM
- San Fidel, NM
- Pinon, NM
- Dallas, TX
- Winnemucca, NE
- Hayward, WI
- Mt Pleasant, MI
- Oneida, NY
- Charlestown, RI
- Fairbanks, AK
- Bristol Bay, AK
- Rock Hill, SC
- Cherokee, NC
- U&O, UT
- Presque Isle, ME
- Philadelphia, MS

Portable Deployments
- Alaska- EAT, APIA
- Ketchikan
- Metlakatla
- North Carolina

Planned Deployments
- Santa Domingo
Clinical Outcome

Annual DR Examination Rate

IHS DR Annual Exam Rate (1992-2014)
Clinical Outcome

Access to Care

NCQA 2014 Report
State of Health Care Quality
http://www.ncqa.org/Directories/Health Plans/
StateofHealthCareQuality.aspx
Clinical Outcome

IHS-JVN Exams vs IHS DR Exam Rate
Clinical Outcome

IHS DR Exam Rate pre/post JVN Ramp-up

~10 year doubling rate of DM prevalence
Lost Opportunities

Other Ocular/Visual Public Health Targets

• Survey of eye care providers- Oct 2013
  – 42% of providers reported the burden of DR eye exams compromised their ability to address other important eye care needs
    • School aged children eye exams- 86%
    • Uncorrected refractive error- 76%
    • Glaucoma- 57%
    • Preventative preschool exam- 43%
    • Age related macular degeneration- 38%
Telemedicine-DR: A better tool to address this universal public health problem

- **VHA**
  - 1.3 million veterans with DM (25%)
  - ~90% annual DR exam rate

- **UK**
  - ~2.9 million with DM
  - ~82% annual DR exam rate
  - 2014- For the first time in 5 decades of survey, DR is no longer the leading cause of new blindness among working age adults in UK

IHS-JVN Implementation

• IHS HQ requirement, 16 May 2012
  – All agency hospitals
  – All agency facilities with DM prevalence >500
  – All agency facilities with IHS-JVN must meet or exceed the GPRA goal AND ≥ 125% of pre-deployment rate
  – All agency facilities will report their JVN performance in bi-monthly Accomplishment Meetings
This is not a problem with eye doctors, or even an eye doctor problem

A primary care diabetes management problem
Diffusion of Innovation

HQ programmatic direction
(facilitated corporate will)

E Rogers, Diffusion of Innovation
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