

Better Care. Lower Costs.

Impacts and Outcomes of Telehealth in Alaska



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM

Stewart Ferguson, PhD
Chief Technology Officer (CTO)
Alaska Native Tribal Health Consortium

“**Telemedicine** is the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.”

Source: The American Telemedicine Association (ATA)

*The ATA treats **telemedicine** and **telehealth** as synonyms and uses the terms interchangeably.*



Types of Telemedicine

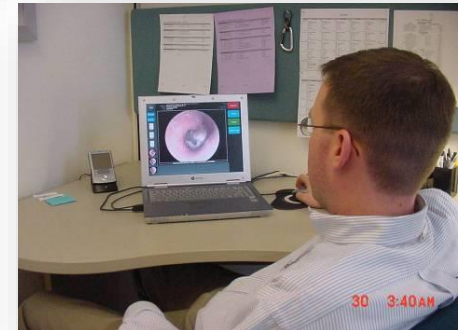
Video-Teleconferencing (VTC)

Synchronous Telemedicine
Video-Based
Live



Store-and-Forward (S&F)

Asynchronous Telemedicine



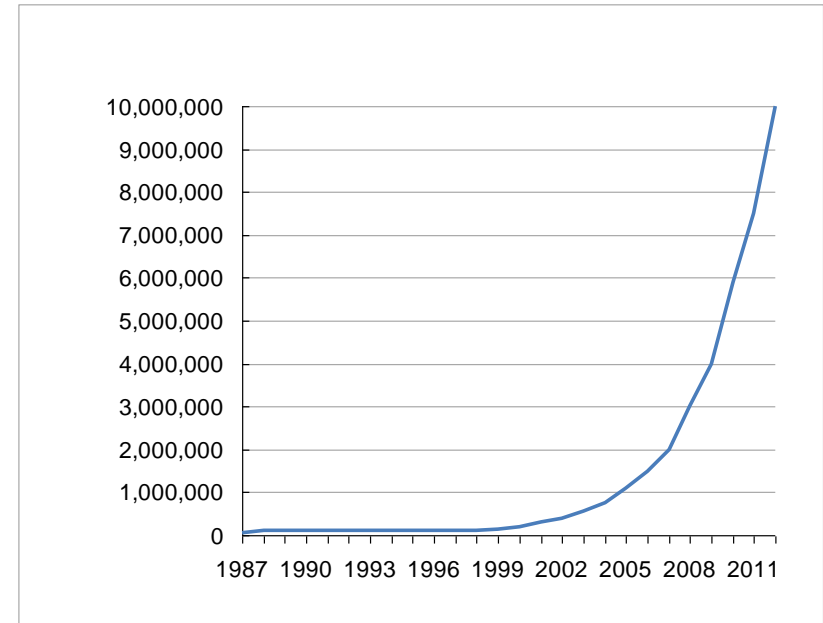
Home Telehealth (HTM)

Remote Patient Monitoring (RPM)
May be Live or S&F or both



How Typical is Telemedicine?

- Currently about 200 telemedicine networks in U.S.
- 3,500 service sites in the U.S.
- Over half of all U.S. hospitals now use some form of telemedicine.



***Patients Served by Telemedicine
in North America***

Source: The American Telemedicine Association (ATA)



Alaska Tribal Health System

Medical Care Service Levels

- Alaska Native Medical Center tertiary care
 - Referrals to private medical providers and other states for complex care
- 6 regional hospitals
- 4 multi-physician health centers
- 25 subregional mid-level care centers
- 180 small community primary care centers



AFHCAN “Store and Forward” Usage

FY15

- **43,000** Telehealth Cases
- **1,500** Providers
- **26,000** Patients

2001-2015

- **265,000** Telehealth Cases
- **4,300** Providers
- **99,000** Patients



Specialty Healthcare Clinics available by VideoTeleconference

- Oncology
 - Cardiology
 - Pediatric Endocrinology
 - Pediatric Speech Language Pathology
 - Adolescent Medicine (care delivered by **Seattle Childrens Hospital**)
 - Breast Cancer Screening (care delivered by **Mayo Clinic**)
 - Endocrinology
 - Pulmonology
 - HIV/Early Intervention Services
 - General Internal Medicine
 - Infectious Disease
 - Neurology
 - Dermatology
 - Emergency Department Services
 - Gastroenterology
 - Hepatitis
 - Nephrology
 - Diabetes
 - Rheumatology
 - ENT
 - OB/GYN
 - Primary Care
- Many others are in development*



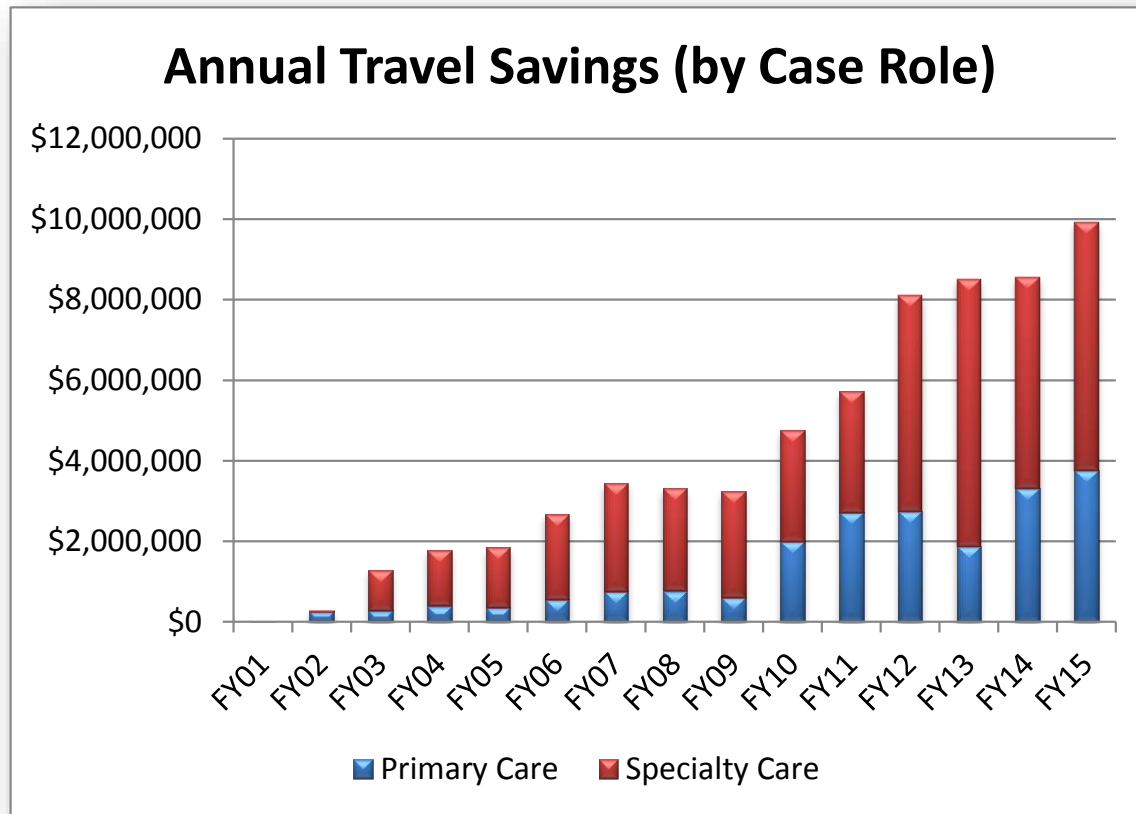
Provider Reviews

76% of encounters are rated as improving the quality of care for the patient (n=11,490).

67% of encounters are rated as improving patient satisfaction (n=11,477).



Estimated Travel Savings from Telehealth for **ALL** Patients

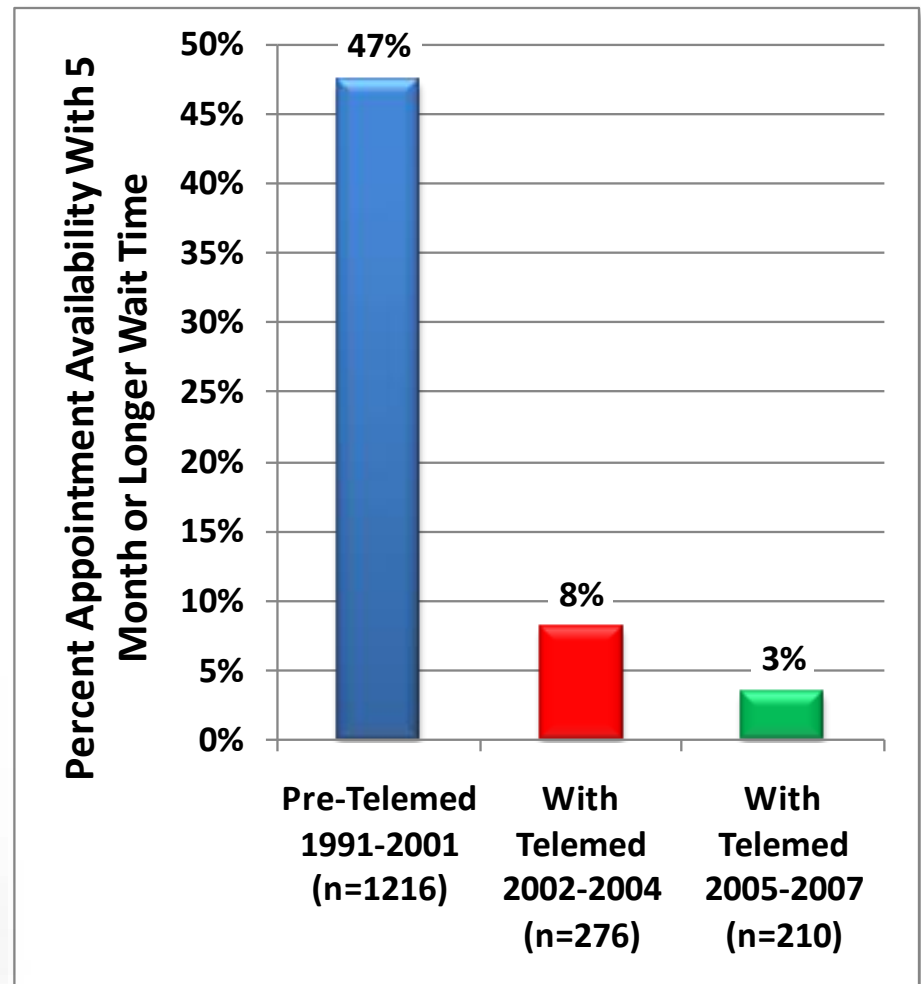
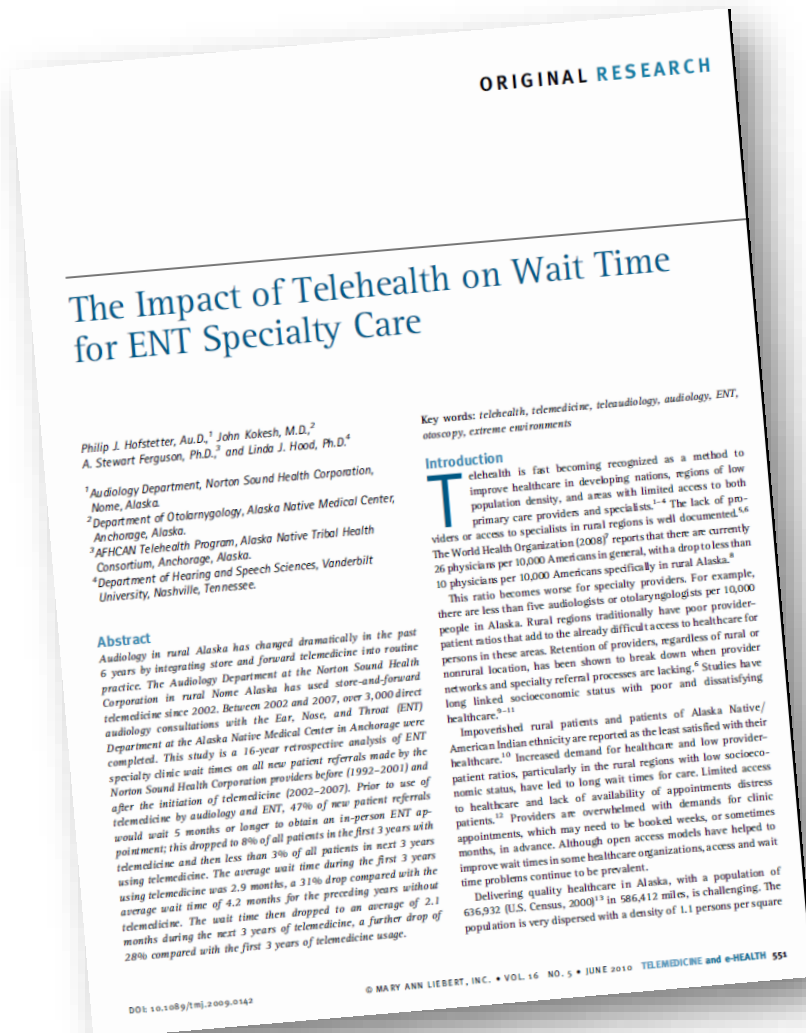


Medicaid now saves an estimated \$10 to \$11 for every \$1 spent on specialty telehealth consultations

Estimated annual savings from telehealth for all patients amounts to about \$10m with a total savings of \$63.4m since 2003.



Telehealth Impact on Extended Waiting Times (> 4 months)



Data courtesy of Phil Hofstetter



ANMC Turnaround Time

25% of cases are turned around in
60 minutes

60% of cases are turned around in
the same day

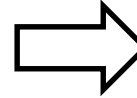


Segment Care Management Models Based on Patient Care Needs



High-Risk
Patients

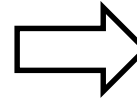
5% of patients.
Usually with complex
disease(s), comorbidities.



Shift from high-cost
services to lower-cost
management.

Rising-Risk
Patients

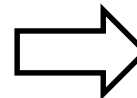
15% - 35% of patients.
May have conditions not
under control.



Avoid unnecessary
higher-acuity, higher-
cost spending.

Low-Risk
Patients

60% - 80% of patients.
Any minor conditions
are easily managed.

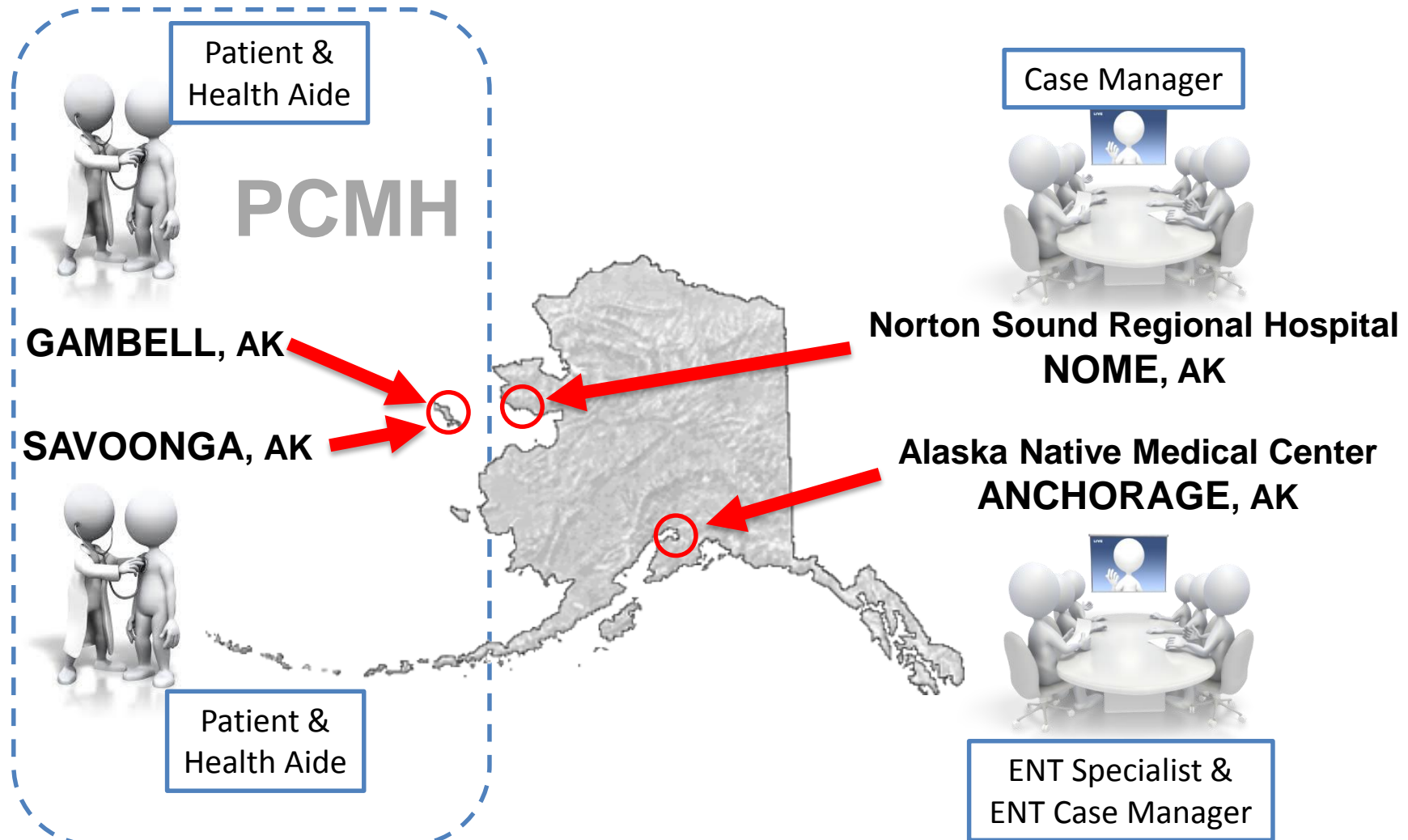


Keep patient healthy

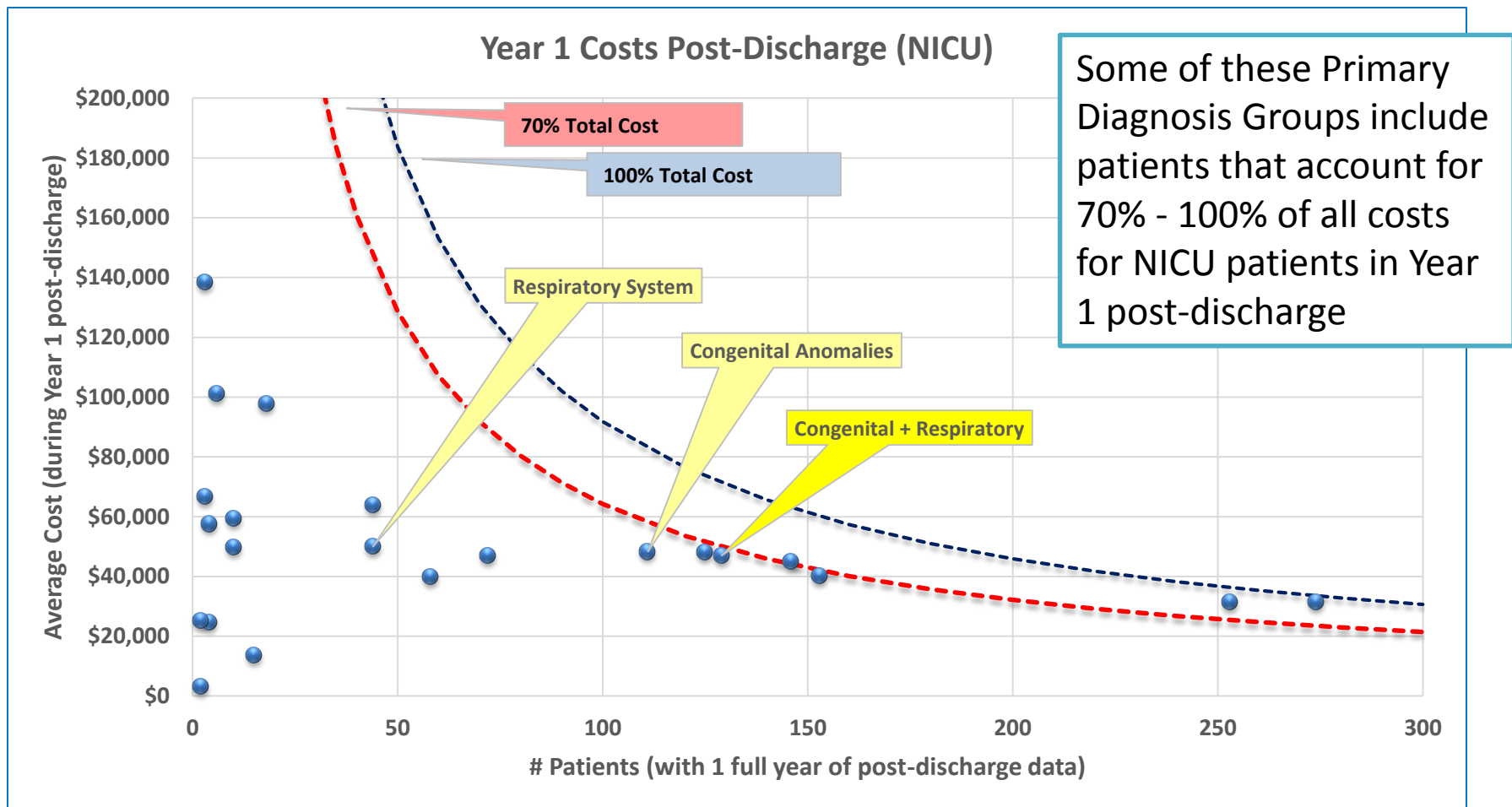
Source: Playbook for Population Health, © The Advisory Board Company 2013



Supports Provider Collaboration and Team-Based Care: Virtual Field Clinic



Caring for Our Most Expensive – and Most Vulnerable – Infant Population



Caring for Our Most Expensive – and Most Vulnerable – Infant Population

We estimate we would save 37% on the cost for care of these patients by:

- ✓ Reducing emergency visits and associated costs by 60%
- ✓ Reducing inpatient hospital admissions and associated costs by 50%
- ✓ Decreasing emergent travel and associated costs by 60%
- ✓ decreasing non-emergent travel and associated costs by 20%

Most importantly – this will improve access to care and improve the overall health of these children



Questions

Stewart Ferguson

Chief Technology Officer (CTO)

Alaska Native Tribal Health Consortium

4000 Ambassador Drive

Anchorage, AK 99508

sferguson@anthc.org

907-229-3685

