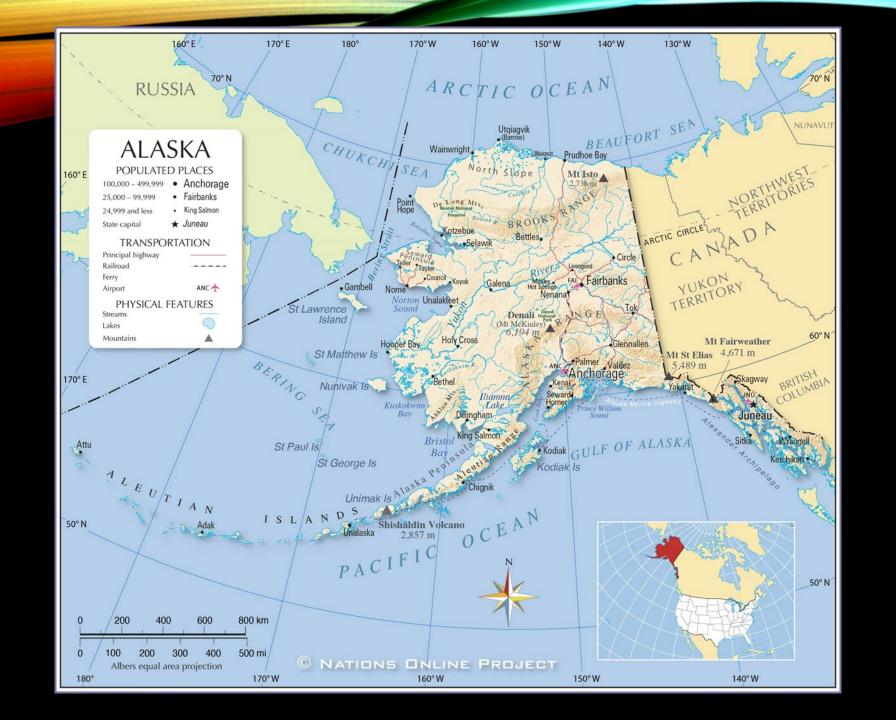
# STRATEGIES TO IMPROVE DIAGNOSTIC ACCURACY IN THE ALASKAN FRONTIER

Shawn Vainio MD FAAFP October 14, 2025

### NO DISCLOSURES

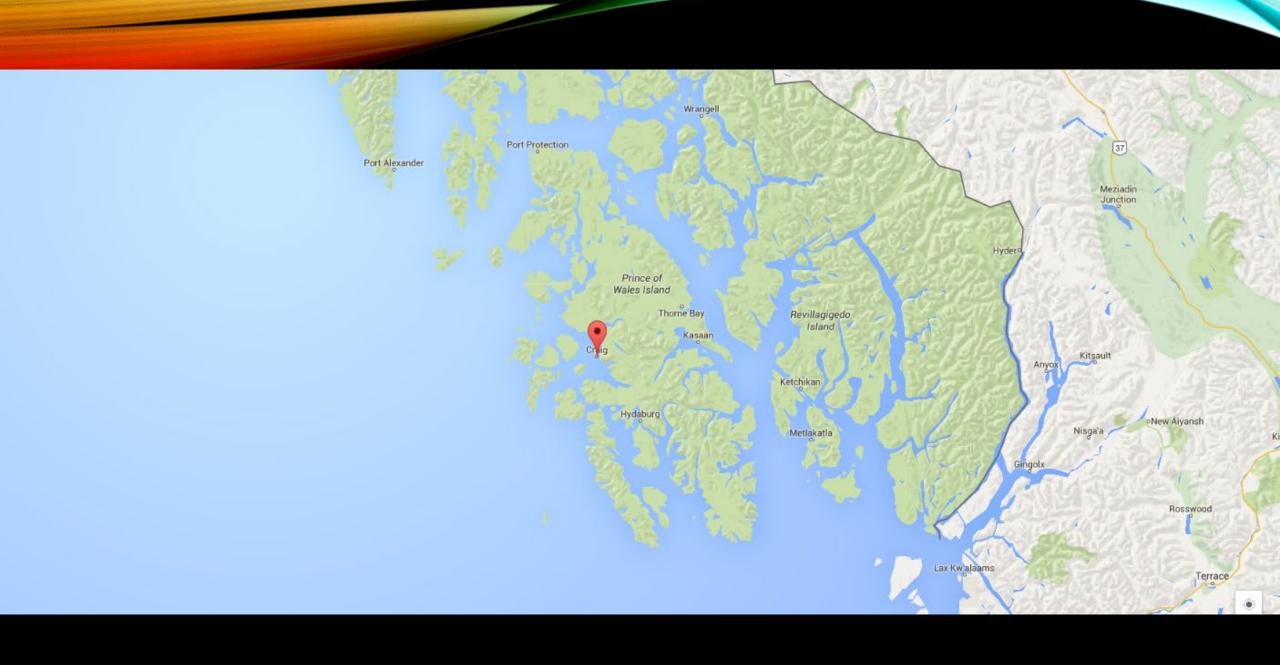
I WOULD LIKE TO ACKNOWLEDGE THE INDIGENOUS PEOPLES OF ALASKA, THE TRADITIONAL CUSTODIANS OF THE LANDS UPON WHICH WE ARE ON, WHERE OUR HEALTHCARE INSTITUTIONS STAND AND WHERE WE WORK TODAY.

I ACKNOWLEDGE AND GIVE MY RESPECT TO ELDERS PAST, PRESENT AND FUTURE; FOR THEY CONTINUE TO CARRY THE MEMORIES, TRADITIONS, CULTURE AND GROWTH OF THE NATIVE PEOPLES OF ALASKA.

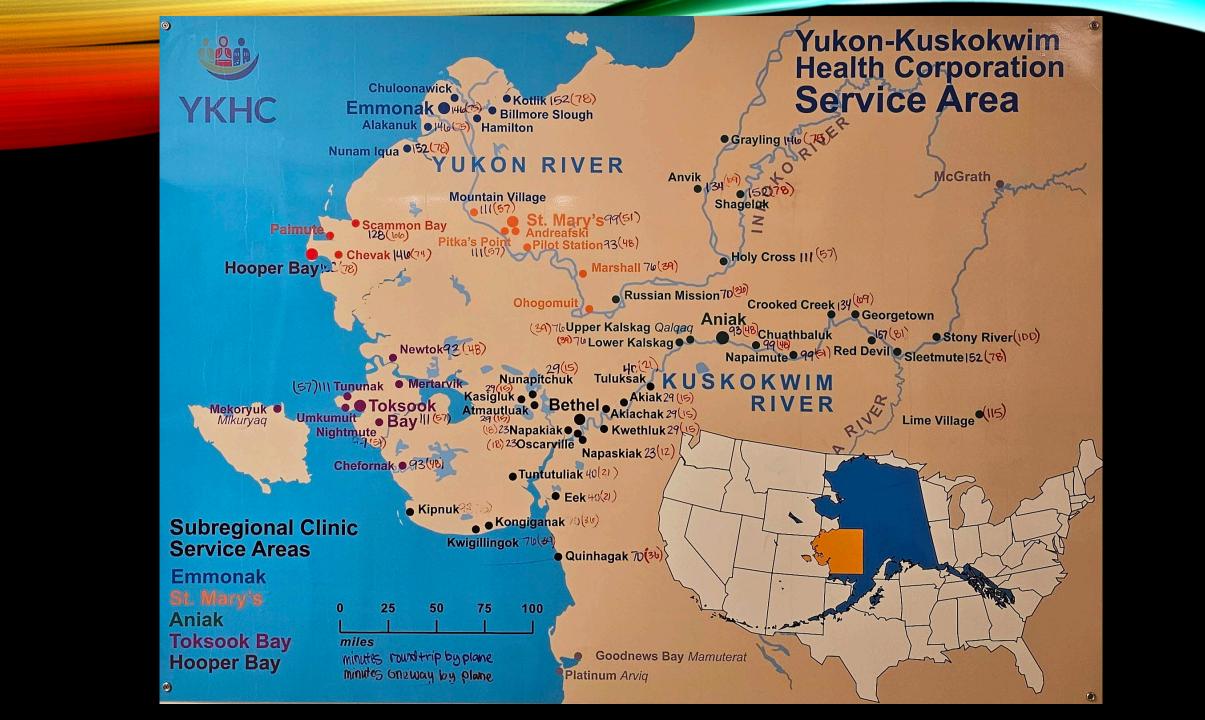




### FIRST PROVIDENCE SITE TO USE E-ICU AND TELESTROKE, DATING BACK TO PRE2010



2015-2017
FORMIDABLE OUTPATIENT CAPABILITIES
\*CLIA CERTIFIED POC (POINT OF CARE) IN-HOUSE LAB
(CBC, CMP, TSH, LIPID, A1C, LACTATE, TROPONIN, CRP,
UA, HCG, ETC)
\*POCUS AND POC XRAY
\*TELEHEALTH WITH SYSTEM SPECIALISTS



## AND THE SYSTEM OF HEALTHCARE DELIVERY BLEW MY MIND

- \*APPROXIMATELY THE SIZE OF THE STATE OF OREGON
- \*26,000 RESIDENTS
- \*85% NATIVE ALASKAN
- \*50% LESS THAN 18 YEARS OLD
- \*LIVING IN SMALL, ELEVATED, MULTIGENERATIONAL HOMES
- \*AT LEAST 33% WITHOUT RUNNING WATER AND SEWER (HAUL WATER AND HONEY BUCKETS)
- \*NO ROADS
- \*400 MILES FROM NEAREST REFERRAL HOSPITAL (BY PLANE ONLY)
- \*ALL ACCESS BY PLANE, OCCASIONALLY FOR THE LUCKY BY SNOWMACHINE OR BOAT

AS YOU CAN IMAGINE, THIS CREATES SIGNIFICANT ISSUES:

- \*DISPROPORTIONATE AMOUNT OF SKIN,
- RESPIRATORY AND GI ILLNESSES
- \*HIGH RATES OF TUBERCULOSIS
- \*RESPIRATORY SEASON REGULARLY FINDS REFERRAL
- ICUS FULL OF PATIENTS FROM THE YK REGION
- (ESPECIALLY PEDIATRICS)

#### HEALTHCARE STRUCTURE

- \*NATIVE HEALTH CORPORATION
- \*ESSENTIALLY UNIVERSAL HEALTHCARE
- \*1 HUB COMMUNITY WITH HOSPITAL (40 BED, 10 OB, 10 ER, NO ICU, NO
- SPECIALISTS/SURGEON/SURGICAL SUBSPECIALISTS)
- \*5 SUB REGIONAL CLINICS (MOSTLY STAFFED BY NP/PA)
- \*OVER 50 VILLAGE CLINICS (MOSTLY STAFFED BY COMMUNITY HEALTH AIDES)
- \*UNIVERSAL ELECTRONIC HEALTH RECORD
- \*MOSTLY FAMILY PHYSICIANS/NP/PA
- \*SOME PEDIATRICIANS, 1 OB GYN,
- \*TELERADIOLOGY (READ FROM OHIO)
- \*PSYCH SERVICE RUN BY PA/NP AND OVERSEEN BY REMOTE PSYCHIATRIST
- \*DENTAL
- \*OPTOMETRY
- \*BEHAVIORAL HEALTH
- \*LONG TERM CARE/ELDERS HOME
- \*PREMATERNAL HOME
- \*OFFICE OF ENVIRONMENTAL HEALTH
- \*ETC

### NOW WITH THAT BACKGROUND:

\*FEW MONTHS TO YEARS OF TRAINING
\*USE MANUAL FOR HISTORY AND PHYSICAL EXAM
GUIDANCE AND THEN REPORT TO OVERSEEING MEDICAL
PROFESSIONAL VIA EMR OR VIDEO (HISTORICALLY BY
RADIO/FAX/PHONE)
\*CULTURALLY CONGRUENT CARE AT HOME

\*LEARNING MEDICAL CULTURE: WEEKLY CONFERENCES INCLUDING MORBIDITY AND MORTALITY

\*CLINICAL GUIDELINES (MEDICAL STAFF WITH SUPPORT OF ADMINISTRATION HAVE DEVELOPED OVER 100 GUIDELINES BASED ON NATIONAL/INTERNATIONAL EVIDENCE LOCALLY TWEEKED TO FIT OUR RESOURCES AND POPULATION

- \*TUBERCULOSIS PROJECT (BRINGING DIGITAL XRAY TO VILLAGES)
- \*ULTRASOUND PROJECT (TRAINING MEDICAL PROFESSIONALS IN ULTRASOUND TO IMPROVED TIMELY AND ACCURATE DIAGNOSIS)
- \*ALASKA MEDICAL LIBRARY FREE ACCESS FOR ALL EMPLOYED MÉDICAL PROFESSIONALS, INCLUDING ONLINE DERMATOLOGY AI EMBEDDED DIFFERENTIAL DIAGNOSIS GENERATION)
- \*ENCRYPTED TEXT COMMUNICATION WITH PHOTO AND VIDEO CAPABILITY WITHIN OUR ORGANIZATION AND WITH REFERRAL HOSPITAL
- \*ALASKA IMPROVING DIAGNOSTIC ACCURACY IN MEDICINE CONFERENCE

#### HEALTH AIDES OF ALASKA | CHAP ALASKA

THE ROLE OF ALASKA'S TRIBAL HEALTH WORKERS IN SUPPORTING FAMILIES.

CHERNOFF M, CUEVA K.

JOURNAL OF COMMUNITY HEALTH. 2017;42(5):1020-1026. DOI:10.1007/S10900-017-0349-0.

IMPROVED ACCESS TO WOMEN'S HEALTH SERVICES FOR ALASKA NATIVES THROUGH COMMUNITY HEALTH AIDE TRAINING.

SOX CH, DIETRICH AJ, GOLDMAN DC, PROVOST EM.

JOURNAL OF COMMUNITY HEALTH. 1999;24(4):313-23. DOI:10.1023/A:1018798406751.

<u>CULTURALLY-RELEVANT ONLINE EDUCATION IMPROVES HEALTH WORKERS' CAPACITY AND INTENT TO ADDRESS</u> CANCER.

CUEVA K, CUEVA M, REVELS L, DIGNAN M.

JOURNAL OF COMMUNITY HEALTH. 2018;43(4):660-666. DOI:10.1007/S10900-018-0465-5.

<u>FACTORS INFLUENCING THE RETENTION AND ATTRITION OF COMMUNITY HEALTH AIDES/PRACTITIONERS IN ALASKA.</u> LANDON B, LOUDON J, SELLE M, DOUCETTE S.

THE JOURNAL OF RURAL HEALTH: OFFICIAL JOURNAL OF THE AMERICAN RURAL HEALTH ASSOCIATION AND THE NATIONAL RURAL HEALTH CARE ASSOCIATION. 2004;20(3):221-30. DOI:10.1111/J.1748-0361.2004.TB00032.X.

CATEGORY: YKHC GUIDELINES - GUIDE TO YKHC MEDICAL PRACTICES

ALL GUIDES - UAA/APU CONSORTIUM LIBRARY