Creating a New Health Profession: DENTAL HEALTH AIDE THERAPIST

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MEDEX Model - Dr. Richard Smith

- Howard University Medical School
- Public Health Training
- Peace Corps Medical Director
- Leader, Johnson Administration, Hospital Desegregation
- UW School of Medicine PA Program Founder
- MEDEX International, University of Hawaii
MEDEX Model

- Collaborative Model
- Competency Based Training
- Receptive Framework
- Community Specific Recruitment
- Structured Deployment/Retention
- Practitioner Involvement/Supervision
- CME
MEDEX Model

- MEDEX Northwest Physician Assistant Program, University of Washington
- Regional Training Program (WWAMI)
- Midlevel Training Expertise
- New Definitions of Supervision
- Trained & deployed First PA’s to Alaska
- Links with Alaska Community Health Aide Training Programs
- Long Term Relationships with Alaska Native Health Corporations
Relative Size of Alaska to the Contiguous U.S.

Alaska: 663,267 sq. mi.
Texas, California, and Montana: 567,264 sq. mi.

SRTM World RADAR image courtesy of
NASA Jet Propulsion Laboratory
<http://www2.jpl.nasa.gov/srtm/world_radars_images.htm>
The Health Status of Rural Alaska Natives is Related to:

- Low socioeconomic status
- Subsistence lifestyle
- Physical Barriers
- High cost of transportation
- Rapid social change
- Harsh climate and terrain
- Community isolation
- Nutritional “marketing”
Getting Around: The High Cost of Transportation

- “Off the Road” System
- 200 villages
- MD’s, PA’s, NP’s located in sub-regional centers accessible only by air and water
Office of Equal Opportunity
Principles for Native Health Corporations

- Rural Alaska is, in essence, a developing country
- The format for health care would be vastly different from anything developed in the lower 48 states
- The duplication of services and competition in the delivery of health care is a luxury that cannot be provided in this rural setting
The First Alaska Community Health Aide: A response to the TB Epidemic

Betty Guy
Initial Community Health Aide (CHA) Expectations

• Provide diagnosis and treatment of common medical conditions
• Emergency dental procedures, including extractions
• Minor surgery, simple suturing, initial treatment of major trauma
• Mental health - recognition and treatment of life threatening psychiatric disorders
• Prompt recognition of patients with medical and surgical problems requiring immediate consultation or transport
• Health Screening and health promotion activities
• Immunizations
• Maternal and child health (planned deliveries at regional medical centers)
• Simple laboratory procedures
Key Concepts

• Active involvement of village residents in education and implementation of health-oriented efforts
• Affiliation with the University in the education of village assistants
• Modifying educational methods for use in bilingual/bicultural settings
• Utilization of the strengths of the Eskimo (i.e. hands on activity) to accomplish the goals
• Close daily association between the students and instructors to show and tell how to protect from the spread of disease
The Village Clinic: Multiple Functions

- Primary health care clinic
- Public health clinic
- Dental office
- Pharmacy
- Laboratory
- Counseling center
- Patient travel center
Alaska Natives suffer dental caries at 2.5 times U.S. national rates

- More than 1/3 of rural Alaska school children have missed school because of dental pain
- Dentists visit villages once a year, for a week or two at a time - weather permitting
Dental Therapist History

W.H.O. cites 42 countries that utilize Dental Therapists

New Zealand: 88 years
Canada: 38 yrs
Dental Therapists

- Function as part of the dental team under the supervision of a dentist
- Equipped to help provide the educational, preventive and safety net services that are most needed
- Exceptional safety record under general supervision for children and adults
DENTEX Training Program

• Collaboration
  – UW School of Medicine – Seattle
  – Alaska Native Tribal Health Consortium (ANTHC) – Anchorage

• Two year program based on models:
  – New Zealand
  – UK
  – Canada
  – Singapore
  – Others
Mission Statement

• DENTEX is an Alaska-based program that educates dental health aide therapists to provide dental care to Alaska Native communities in the Alaska bush.

• DENTEX, the University of Washington School of Medicine’s Dental Health Aide Therapist Program, is committed to training Alaska Native dental health professionals to practice dental therapy with dentist supervision.

• The program provides a narrowly focused, competency-based, primary care curriculum that emphasizes community level dental disease prevention for the underserved Alaska Native populations.
The Alaska Dental Health Aide Therapist Model

**Traditional Dental Education**
- University Based
- High cost investment
  - 4 + 4 Years DDS/DMD
  - General Practice
    - Specialty +2 years
- Mostly urban practice

**Midlevel Education**
- Community recruited
- Low cost investment
  - 2 years Certificate
- Independent practice, with dentist supervision
- Rural Practice location
Requirements-Application

• HS diploma or GED
  – Preference given to applicants with some college level academics
• Tribal Association sponsorship
• Prior experience in dental or medical setting preferred
Selection

- References
  - Tribal Association
  - Employer or community leader
- Personal statement
  - “Why I want to be a Dental Health Aide Therapist”
- Admission interview
Curriculum Features

• Competency based training with frequent exams and feedback

• Supervision Model: full-time onsite clinic director Mary Williard, DDS
  – NRHA Educator of the Year, 2008
Curriculum Features

• Modular lectures by dental school faculty
  – University of Washington
  – University of Minnesota
  – Baylor College of Dentistry
  – University of Florida
  – University of Alaska
  – Dental hygiene faculty

• Culturally respectful and sensitive
Class One Graduation 12/12/08
Class 2
with US Senator Murkowski and faculty
Class 3
January, 2009
Prevention Based Curriculum

• Focus on behavior change
  – Motivational interviewing
  – Risk assessment for dental disease
  – Triage
DENTEX Curriculum
Year 1: Anchorage

- Anatomy & Physiology – online course
- Basic dental clinical environment skills
- Development of a high level of practical clinical skills
  - Simulation
  - Direct patient contact
- General health sciences
- Oral health sciences
- Community dentistry and behavioral management techniques
DENTEX Curriculum Year 2:
Bethel, Alaska

- 39 weeks of clinical instruction (1600 hrs)
- Working with a supervising dentist
- Community dentistry and prevention
- Village practice rotations
  - Fly into rural Bush location
  - 200-400 people
- Telemedicine communication training
- Special topics:
  - Maternal oral health
  - Diabetes
  - Geriatrics
  - Equipment repair
  - Research
DHAT Practice Continuum

• Independent practice with remote dentist supervision
• Primary care team approach
  • Integrated part of the delivery system
  • Work with dentists, physicians, PA’s, NP’s and community health aides
DHAT Practice Continuum

- Biological approach to oral disease
  - Reduce infectious caries and periodontal bacteria in the oral cavity

Clinical practice focus
- Basic pediatric dentistry
- Adult palliative care

- Community based prevention

- Limited specific scope of practice
Practice Continuum Complexity

Quality equivalence
Supervision Model
Reduced cost

DHAT

Dentist

Extraction

Implant
Practice Model Dental Therapist

- Living and practicing in a village
  - Retention Priority
- Itinerant regional practice
- Emphasis on prevention
- Strong links to schools and community
- Opportunity for continuity of care
Nontraditional Worksite
Quality Control and Safety

• Quality Control performed by dentists
  – Case discussion: pre/post (prospective supervision)
  – Direct observation (concurrent supervision)
  – Chart review (retrospective supervision)

• Oversight and authorizing entity
  – Community Health Aide Program Certification Board (CHAP-CB)
Certification after Graduation

• Additional 400+ hours of preceptorship
  – Direct supervision at tribal base location

• Scope of practice
  – Based on demonstrated clinical skills
  – Guided by tribal base location needs
Recertification Requirements

• Twenty-four hours continuing education, annually
• Recertification every 2 years
WHAT WE’VE LEARNED: Community Based

- RECRUITMENT
- STUDENTS
- DENTAL THERAPISTS
WHAT WE’VE LEARNED:
Redefining Supervision
(The Medical Model)

- PROSPECTIVE
- CONCURRENT
- RETROSPECTIVE
WHAT WE’VE LEARNED:
Lessons from mid-level models

• Economic Benefit
• Patient Acceptance
• Adaptability
• Public vs. Private
NEW IDEA:

Controversial

OBVIOUS