Innovation Through Collaboration-An Overview of the University of the Pacific, Arthur A. Dugoni School of Dentistry Virtual Dental Home Program

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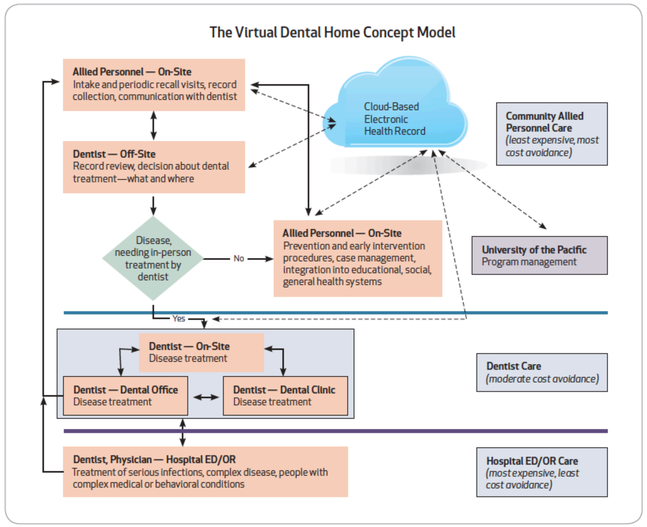
ABSTRACT:
Large and increasing oral health disparities in the U.S. population led the Institute of Medicine to call for expanded research and demonstration of delivery systems that test new methods and technologies.

These new methods include delivering oral health services in nontraditional settings, using allied dental professionals and incorporating telehealth technologies. The Virtual Dental Home is a system that demonstrates the characteristics called for by the IOM.

INTRODUCTION:
- In 2011, only 27% of eligible children received any dental service compared to 34% in 2009
- Almost 25% of all Children in California have never seen a dentist
- About 40% of California African American, Latino, and Asian preschoolers report needing dental care
- 65 % of elementary schoolchildren in these groups are in need of basic dental care
- 2000 US Census reported 49.7 million people with a long standing disability
- Research indicates the number one needed health service that is not received is dental care

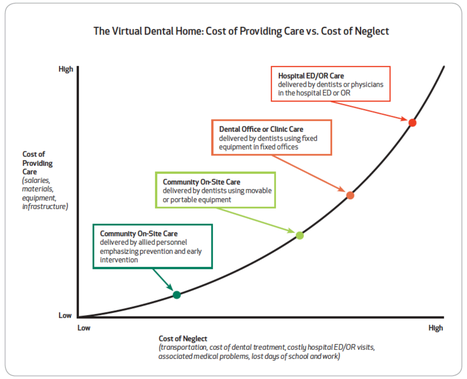


ADVANTAGES OF HAVING HEALTH HOMES:
- Care management over time
- Health promotion activities
- Access to specific dental services when needed
- Emphasis on early intervention
- Ongoing relationship between dental care provider and the patient, inclusive of all aspects of oral health care delivered in a continuously accessible, coordinated way.

TELEDENTISTRY:
The use of technologies to share records between dentists and allied dental professionals in the field.
- RDHAP gathers all patient records on-site:
  - Health, dental, social, dietary histories
  - Digital radiographs
  - Intraoral photographs
  - Periodontal charting
  - Hard tissue charting
  - Disease risk assessments
- RDHAP transmits all records to off-site dentist
- Dentist reviews all records, formulates diagnoses and treatment plan
  - Dentist decides what care RDHAP can provide on-site
  - Dentist decides what care needs to be brought into the dental office or specialist referrals

VIRTUAL DENTAL HOME:
Community-based oral health delivery system in which people receive preventive and early intervention therapeutic services in community settings where they live or receive educational, social or general health services. It utilizes the latest telehealth technology to link practitioners in the community with dentists at remote office sites.

SERVICES PROVIDED UNDER GENERAL SUPERVISION BY A DENTIST:
- Health promotion and prevention education
- Dental disease risk assessment
- Radiographs (By the RDHAP without DDS prescription per additions to the California Dental Practice Act via bill AB 1174)
- Digital photographs
- Preventive procedures including:
  - Fluoride Varnish
  - Sealants
  - Prophylaxis
  - Periodontal Scaling
- Placement of Interim Therapeutic Restorations by RDHAP to stabilize patients for future definitive care (Now allowed by the California Dental Practice Act via bill AB 1174)



OUTCOME:
- The VDH is demonstrating a new system of care that is more likely to improve oral health of underserved and vulnerable populations at a lower cost than other systems of care.
- 9 sites throughout California
  - Headstart Programs
  - Elementary Schools
  - Skilled Nursing Facilities
- Thousands of patients treated, with ongoing case management
- Over 1,500 Interim Therapeutic Restorations Placed without incident
- Results of the Health Workforce Pilot Project completed by Pacific helped support passage of California Assembly Bill 1174. Signed into law by Gov Brown in 2014, this changed the California Dental Practice Act to allow for RDH/AP to
  - Decide on what radiographs to take in the field
  - Place Interim Therapeutic Restorations in the field per collaborating dentist recommendations
- Pacific is beginning a new Teledentistry rotation for all senior dental students starting Summer 2016

EXPERIENTIAL LEARNING OPPORTUNITIES – TECHNOLOGY ENHANCED INTRAPROFESSIONAL COLLABORATION
- Teledentistry rotation for dental and dental hygiene students – starting summer 2016
- Dental hygiene students join RDHAP in Community Health Home to gather records and provide preventive care
- Dental students join dentist, at school clinic, to receive records via telehealth technology and create treatment plan
- Patient seen in dental school clinic for restorative/surgical care as needed