

Disclosures

The presenter has consulting arrangements with the following entities:

- DentaQuest Partnership, Inc.
- Virtual Dental Care
- · Idaho Department of Health
- · Rhode Island Department of Health
- · University of Iowa

HPI Health Policy Institute

· Multiple dental care providers

PERCENTAGE OF POPULATION WHO VISITED A GENERAL DENTIST IN THE PAST 12 MONTHS

● CHILDREN ● ADULTS ● SENIORS

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Dental Care Utilization in the U.S.

43.7%

2





Health Care Systems

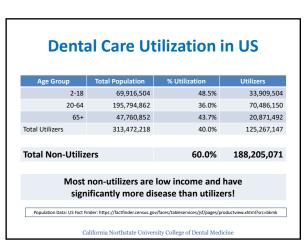
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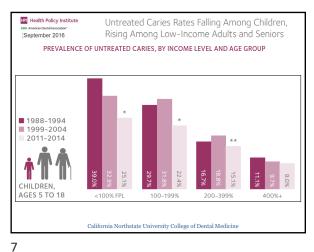
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- · Increasing focus on health vs health care
- No longer enough to provide late stage repair
 - We need to intervene in the "social determinants of health"
- The population is changing
 - Older, more diverse, more complex
- Increasing interest in community as the level of focus
- Increased use of "big data", value, and collaboration

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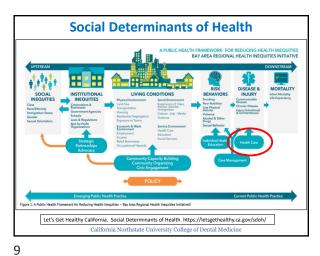




CDC 24/2: Straight Lives Protecting Records T Disparities in Oral Health Oral health disparities are profound in the United States. Despite major improvements in oral health for the population as a whole, oral health disparities exist for many racial and ethnic groups, by socioeconomic status, gender, age and geographic location. Some social factors that can contribute to these differences are lifestyle behaviors such as tobacco use, frequency of alcohol use, and poor dietary choices. Just like they affect general health, these behaviors can affect oral health. The economic factors that often relate to poor oral health include access to health services and an individual's ability to get and keep dental insurance. al health disparities/index.htm#:~:text=Some%20of%20the%20oral%20health,Children% California Northstate University College of Dental Medici

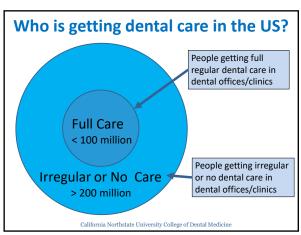
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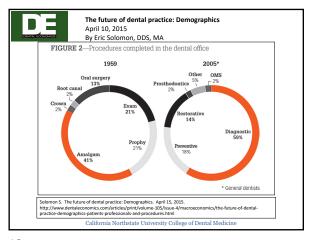
The current dental care system primarily serves the wealthiest and healthiest segments of the population

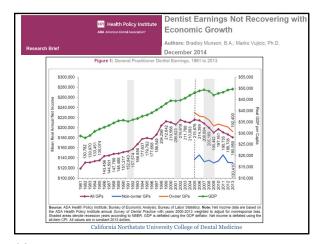
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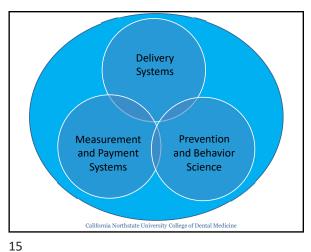


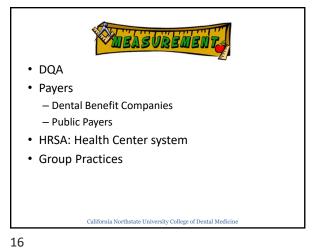
Minority groups, rural, disabilities People getting full regular dental care in dental offices/clinics Full Care < 70 million People getting irregular Irregular or No Care or no dental care in dental offices/clinics > 230 million California Northstate University College of Dental Medicine

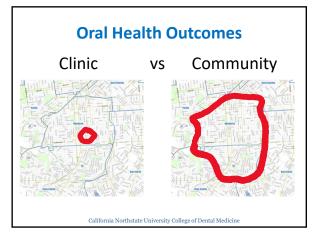
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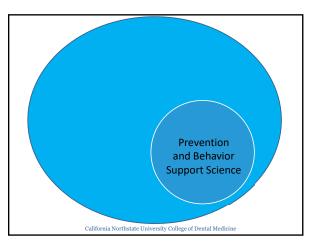
















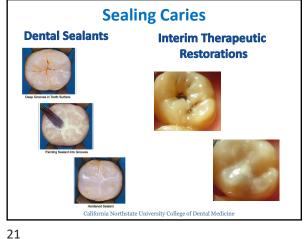


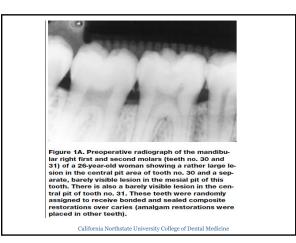
Figure 1. Patient case. Registrations at baseline in 2008. Clinical assessment: dentin lesion without cavity formation in distal fossa of tooth #61. No clinical photo available. Radiographical assessment: less than one-third in dentin. Treatment after randomization: resin sealing. Registrations during 6 y follow-ups. Clinical assessments: infact sealing. Radiographical assessments: no caries progression. Treatment: none. Tooth #61 Boy - 13 years old at baseline in 2008 Qvist V, Borum MK, Moller KD, et. al. Sealing Occlusal Dentin Caries in Permanent Molars: 7-Year Results of a Randomize Controlled Trial. JDR Clinical & Translational Research. January 2017:2(1):73-86 California Northstate University College of Dental Medicine

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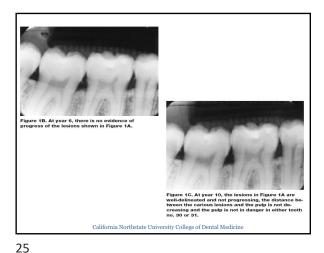
Incomplete Caries Removal ULTRACONSERVATIVE AND CARIOSTATIC SEALED RESTORATIONS: RESULTS AT YEAR 10 EVA J. MERTZ-FAIRHURST, D.D.S.; JAMES W. CURTIS JR., D.M.D.; JANET W. ERGLE, C.D.A.; FRED A. RUEGGEBERG, D.D.S., M.S.; STEVEN M. ADAIR, D.D.S., M.S. - This 10-year study evaluated bonded and sealed composite $\,^{\rm JADA,\,Vol.\,129,\,January\,1998}_{}\,$

- restorations placed directly over frank cavitated lesions extending into dentin vs. sealed conservative amalgam restorations and conventional unsealed amalgam restorations.
- The results indicate that both types of sealed restorations exhibited superior clinical performance and longevity compared with unsealed amalgam restorations.
- Also, the bonded and sealed composite restorations placed over the frank cavitated lesions arrested the clinical progress of these lesions for 10 years.

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CLINICAL REVIEW

F. Schwendicke*, C.E. Dörfer, and S. Paris

Department for Conservative Dentistry and Periodontol

Incomplete Caries Removal: A Systematic Review and Meta-analysis

- Increasing numbers of clinical trials have demonstrated the benefits of incomplete caries removal, in particular in the treatment of deep caries.
- Teeth treated with incomplete caries removal showed risk reduction for both pulpal exposure and pulpal symptoms.

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Interim Therapeutic Restoration (ITR)

REFERENCE MANUAL V 30 / NO 7 08 / 09

Policy on Interim Theraneutic Restorations (ITR)

Originating Council
Council on Clinical Affairs
Review Council
Council on Clinical Affairs
Adopted
2001

Revised

27

29

AAPD Policy on Interim Therapeutic Restorations (ITR)

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The Changing Standard of Care¹

- 1923 Frye vs United States (community standard)
 - Supreme Court ruling "Locality rule" originated in the late 1800s, accommodated clinicians living in rural and urban areas who had differing education, training and access to information.
- 1993 Daubert v Merrell Dow Pharmaceuticals Inc
 - Required judges to act as gatekeepers to ensure that only sound scientific knowledge is admitted in court
 - Scientific knowledge, in this context, derives from human clinical trials that involve implementation of the Baconian scientific method to identify valid and reliable outcomes. Furthermore, sound scientific knowledge is not excluded simply because it may not be accepted by the local community.
- Conclusion: Clinicians who do not know, or do not follow, practices based on the best evidence-based guidelines may be placing themselves at risk.

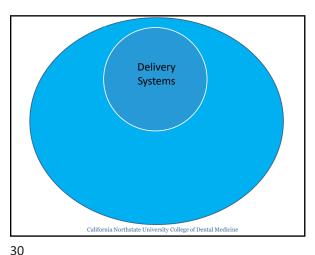
Niederman R, Richards D, Brands W. Guest Editorial: The Changing Standard of Care. JADA 2012:143(5):434-437.
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Behavior Change Principles: Supporting Adoption of "Mouth Health Habits"

- Messages delivered by trusted members of the community
- Multiple people delivering the same message
- Small incremental behavior changes
- Ongoing reinforcement, coaching
- · Peer support
- -> Integration with community organizations

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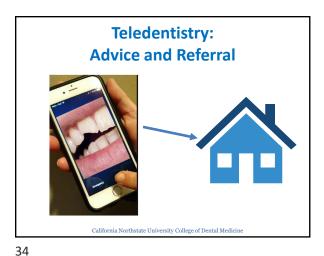


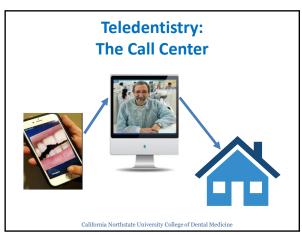
Teledentistry Use Cases:

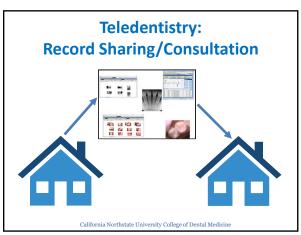
- · Advice and referral
- The Teledentistry call center
- · Record sharing/consultation
- Increased office efficiency
- · Limited community care

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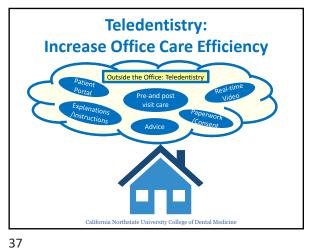
• Full-service community care

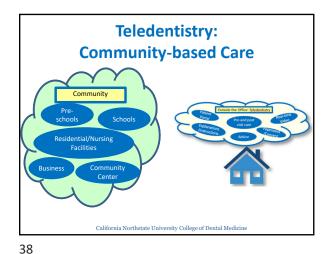


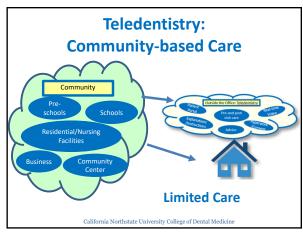


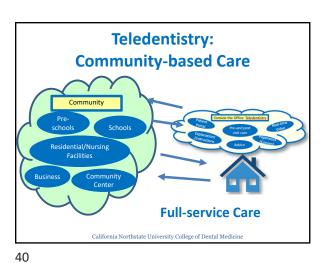


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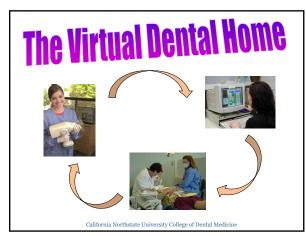














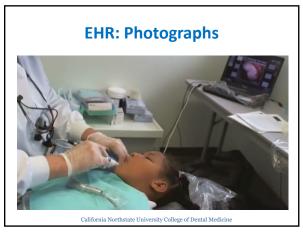






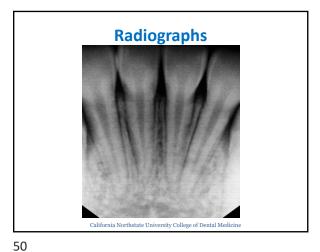
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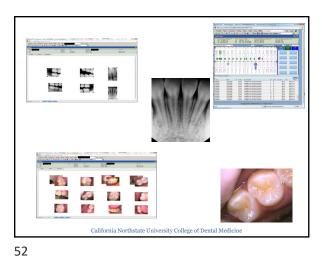


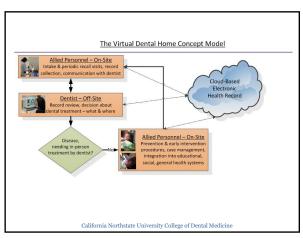
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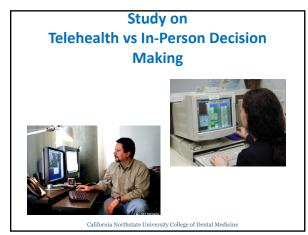


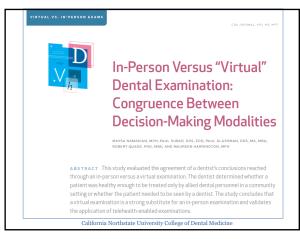












DIAGNOSTIC ACCURACY OF
TELEDENTISTRY IN THE DETECTION
OF DENTAL CARIES: A SYSTEMATIC REVIEW

Conclusions

Teledentistry has an acceptable diagnostic performance in the detection of dental caries.

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Dentist Examination

- ADA Definition
 - (CDT) defines a dental examination. It is a "thorough evaluation and recording of the extra oral and intraoral hard and soft tissues. It may require interpretation of information acquired through additional diagnostic procedures."
 - There is additional definition of "Clinical Oral Evaluations" which is "the codes in this section recognize the cognitive skills necessary for patient evaluation. The collection and recording of some data and components of the dental examination may be delegated; however, the evaluation, which includes diagnosis and treatment planning, is the responsibility of the dentist."

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Dentist Examination

Study

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- Experience
- · Range of possibilities
- Calibration and communications

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ADA American Dental Association®

America's leading advocate for oral health

ADANews

House passes guidelines on teledentistry

Washington — It's similar to visiting a bricks and mortar dental office only the dentist may be on a computer screen instead of in person.

Or the treating dentist could have securely emailed their patient care instructions to a specialist or dental hygienist at a community dental care event. Dentists could also virtually supervise the oral health care of nursing home patients, residents in rural areas or others who don't have access to a dentist in their area.

Teledentistry can take many forms and the ADA now has specific guidelines and expectations for dentists interested in delivering their services virtually.

The ADA House of Delegates passed Resolution 45H-2015, Comprehensive ADA Policy Statement on Teledentistry, in November at ADA 2015 – America's Dental Meeting. Having ADA policy is certainly critical for the profession to accept and implement teledentistry because the Association can now support dentists to do it, said Dr. Paul Glassman, a consultant to the ADA Council on

indentistry as an aparasion of the agransion of the distincted detail practice, ere patients can have a usal dental home teat of a physical one, rovides easier access musing homes or those on the in treal area's patients incur a dentist.

entists can also develop plan for patients to Cherive cleanings fluoride

varnishes, sealants and other treatment at a community site from allied dental personnel, under the dentist's virtual supervision.

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ADA HOD Resolution 2020: Teledentistry

While in-person (face to face) direct examination has been historically the most direct way to provide care, advances in technology have expanded the options for dentists to communicate with patients and with remotely located licensed dental team members. The ADA believes that examinations performed using teledentisty can be an effective way to extend the reach of dental professionals, increasing access to care by reducing the effect of distance barriers to care.

Teledentistry has the capability to expand the reach of a dental home to provide needed dental care to a population within reasonable geographic distances and varied locations where the services are rendered.

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ADA HOD Resolution 2020: Teledentistry

In order to achieve this goal, services delivered via teledentistry must be consistent with how they would be delivered in-person. Examinations and subsequent interventions performed using teledentistry must be based on the same level of information that would be available in an in-person environment, and it is the legal responsibility of the dentist to ensure that all records collected are sufficient for the dentist to make a diagnosis and treatment plan.

As the care provided is equivalent to in person care, insurer reimbursement of services provided must be made at the same rate that it would be made for the services when provided in person, including reimbursement for the teledentistry codes as appropriate.

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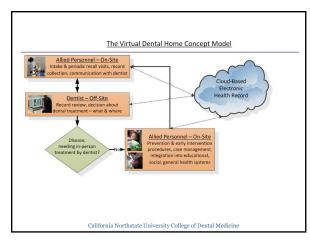
ADA HOD Resolution 2020: Teledentistry

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Community-based Prevention and Early Intervention Procedures



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Silver Diamine Fluoride (SDF)

Advartage
Archiver Prince P

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Virtual Dental Home Sites California

Oral Health Systems for Underserved Populations **Telehealth-Connected Teams**

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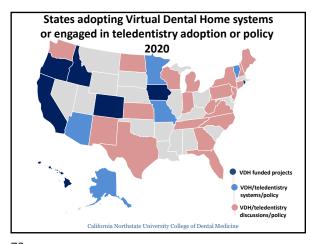
Telehealth-Connected Teams and Virtual Dental Homes **Key Outcomes**

- Reach people, emphasize prevention, and lower costs
- Majority of people kept and verified healthy on-site
 - About 2/3 of children had all needed services completed by dental hygienist
 - Now estimate 80-85%
- Continuous presence
- · Community organization integration
- · Dentist integration

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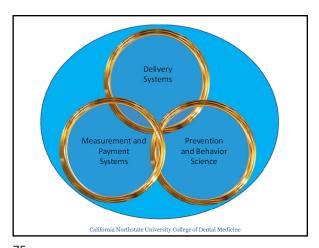
States adopting Virtual Dental Home systems or engaged in teledentistry adoption or policy VDH/teledentistry California Northstate University College of Dental Medicin

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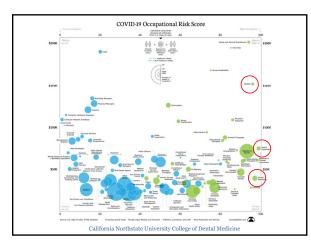
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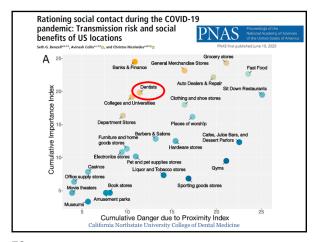


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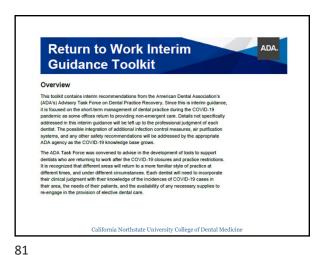


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Rationing social contact during the COVID-19 pandemic: Transmission risk and social benefits of US locations В General Merchandise Sto importance—Risk Tradeoff Favorability
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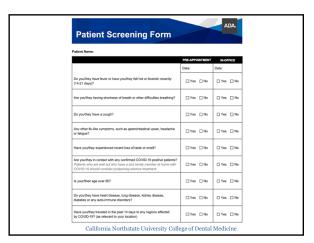


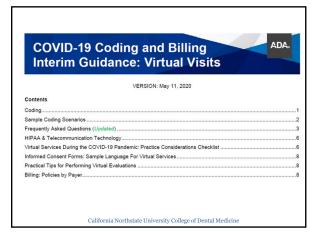
Return to Work Interim ADA. **Guidance Toolkit** Welcome Back Reassurance Sample Letter reassures patients of your office's commitment to maintaining up-to-date infection control procedures Pre-Appointment Screening Process explains how to screen patients for symptoms of COVID-19 before the appointment and upon arrival. It also includes a patient screening form.

In Office Patient Registration Procedures are for dental teams to implement at the front-desk before reopening the practice. Reception Area Preparation Strategies explain how to reduce the risk of COVID-19 transmission during patient visits. Chairside Checklist includes procedures for dentists and staff while in the operatory rooms and until the patient's room is cleaned and disinfected.

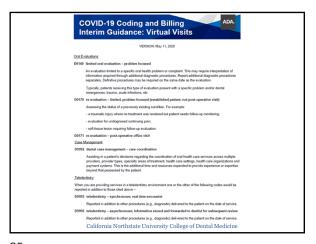
<u>Staff Protection Strategies</u> includes recommendations for in-office clothing, pregnant staff, and a daily COVID-19 screening log for office staff and associates to use before entering the practice. Page 12 Shopping List Page 13 Appendix California Northstate University College of Dental Medicine

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Video-teleconferencing and Cybersecurity during COVID-19

The Office for Civil Rights (OCR) may waive penalties for dentists who fail to fully comply with HIPAA requirements when communicating with patients via video-teleconferencing during the pandemic providing they act in good faith and do not use public-facing video communication applications.

Dentists using video-teleconferencing to communicate with patients during the COVID-19 public health emergency will not be subject to penalties for HIPAA violations by the Office for CNIR Pights (OCR) even if the communications do not fully comply with HIPAA requirements, provided the dentists act in good faith and do not use public-facing video communication applications. See (CAVID-19 Interim Coding and Billing Interim Guidance. State law restrictions may continue to apply.

The Substance Abuse and Mental Health Services Administration (SAMHSA) has also released guidance on the confidentiality of certain information related to substance use disorder treatment when using video-elecconferencing during the COVID-19 pandemic. See (COVID-19 Pandemic Health Emergency Resistence and 3 2 CFR Part 2 Guidance.

To help address potential risks associated with wideo-teleconferencing applications, no April 4 CCR shared an update from the Cybersecurity and Infrastructure Security Agency (CISA) encouraging users to take these steps to help improve video-teleconferencing cybersecurity.

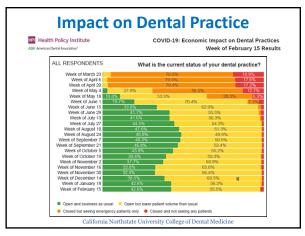
• Ensure meetings are private, either by requiring a password for entry or controlling guest access from a waiting room.

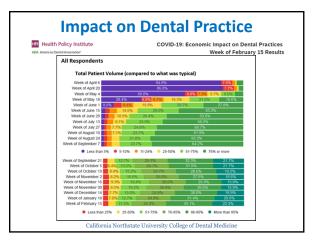
• Consider security requirements when selecting vendors. For example, if end-to-end encryption is necessary, does the vendor offer it?

• Ensure VTG software is up to date. See <u>Understanding Patches and Software Undates.</u>

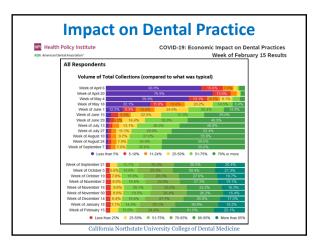
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Impact on Dental Practice

COVID-19: Economic Impact on Dental Practices
Week of February 15 Results

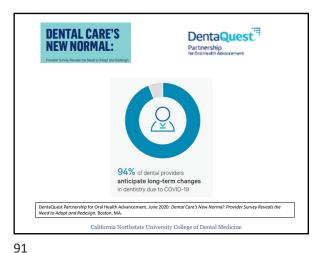
In the last heart heart team any of the following measures to maintain the financial sustainability of your dental practice?

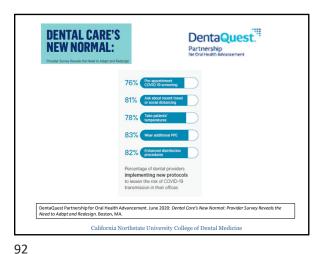
All Respondents

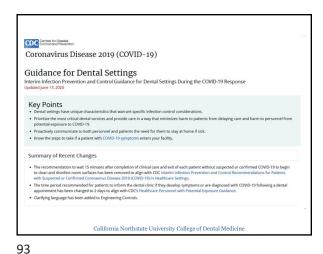
Downsized dental team bours
Reduced employee wages / Dentifis | 2.9%
Disserrolled from dental benefits plans | 7.7%

Changed dental materials supplier / lab
Raised fees
Borrowed money from a bank
Sold my practice | 1.3%
Joned a DSO or large group practice | 0.5%
Refreed | 0.5%
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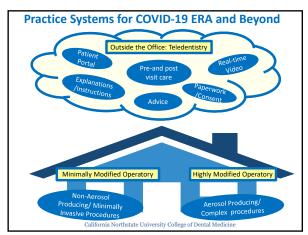
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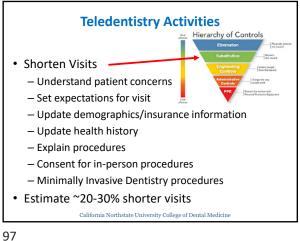






Teledentistry Activities Hierarchy of Controls • Eliminate Visits • Replace the hazard - Post-operative evaluation - Problem focused evaluation - Treatment plan presentation - Evaluation of a problem that does not need a visit - Guided oral care instructions • Daily Mouth Care • Minimally invasive procedures (FI – Varnish, toothpaste) - Recall visits on healthy patients • Estimate ~20-30% fewer in-office visits California Northstate University College of Dental Medicine

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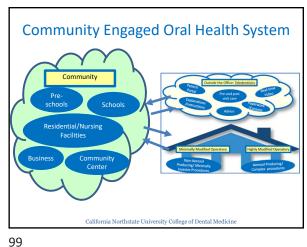


Teledentistry Activities • 20-30% fewer in-office visits • 20-30% shorter visits • Results - Less invasive procedures Less PPE - Less crowded appointment book - Lower in-office costs - Less infection risk - Patient appreciation

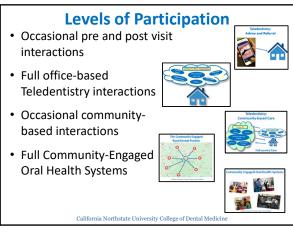
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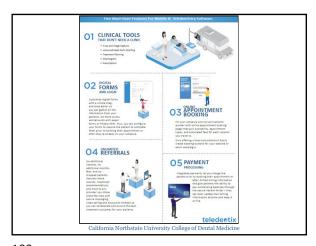


The Community Engaged Rural Dental Practice California Northstate University College of Dental Medicine



Optimized Systems for Teledentistry: All-in-One California Northstate University College of Dental Medicine

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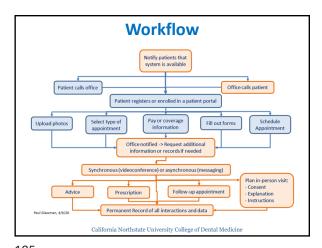
Optimized Systems for Teledentistry: All-in-One

- Integrated imaging
- Local storage
- Networking
- Scheduling
- On-line forms
 - Form writer general and linked to procedures
- Video waiting room
- Single full record of all data and interactions

teledeetix

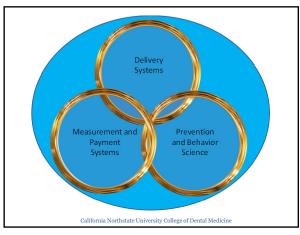
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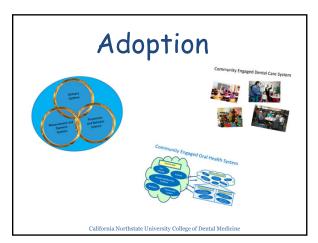
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Addressing Barriers to Adoption

- Awareness
- Policy

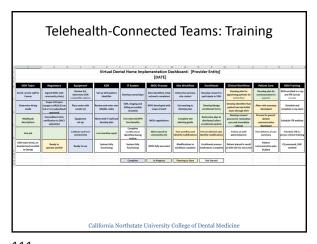
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- Can it be done
 - Licensure/scope of practice?
- Is it paid for?
- Implementation challenges
 - even if people are aware, and it is allowed, and it is paid for, there are still numerous implementation challenges in doing something different than what is now the mainstream approach to oral health.

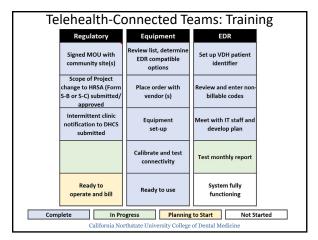
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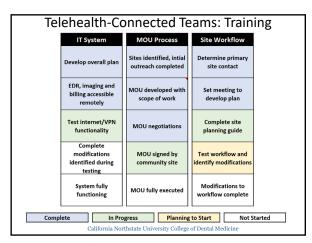
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Telehealth-Connected Teams: Training Clinical Workflow **Patient Care** Develop plan for Develop plan for Develop consent to appointing patients fo participate in VDH restorative Develop identifier that Develop/design patient has had initial developed exam through VDH Determine plan to cess for restorativ dentist distribute/collect care and immediate developed Test enrollment plan Follow up with Test delivery of care Patient Enrollment process Patient placed in recall in place In Progress Planning to Start Not Started California Northstate University College of Dental Medicine

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Teledentistry Training

Webinars

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- On-demand, on-line education
- Individual consultation
- Group consultation

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