

RESEARCH BRIEF

# Teledentistry is an Effective Tool to Triage Patients and Save Money

## Authors

### **Eric P. Tranby, PhD**

Data and Impact Manager, Analytics and Evaluation  
CareQuest Institute for Oral Health

### **Madhuli Thakkar Samtani, BDS, MPH**

Biostatistician, Analytics and Evaluation  
CareQuest Institute for Oral Health

## Acknowledgments

### **Julie Frantsve-Hawley, RDH, PhD**

Director, Analytics and Evaluation  
CareQuest Institute for Oral Health

### **Kirill Zaydenman, MS**

Vice President, Innovation  
CareQuest Institute for Oral Health

### **Matt Jacob, BA**

Scientific Writer and Communication Consultant  
CareQuest Institute for Oral Health

### **Vuong K. Diep, MPH**

Health Science Specialist  
CareQuest Institute for Oral Health



Growth in the use of teledentistry benefits patients and providers and is an essential tool for ensuring access to care during the COVID-19 pandemic. Providers are using teledentistry for a variety of purposes, including prescribing medications, triaging patients, facilitating referrals to specialists, examining the mouth and teeth, and providing oral hygiene instructions. In particular, teledentistry can be used to help prioritize care to patients who urgently need to see a dentist, while providing oral hygiene advice, prescriptions, or other services to patients with conditions that can be managed at home. This could save money by reducing unnecessary in-person examinations and procedures, while also allowing dental practices to enhance chair capacity for additional patients or existing patients with more critical needs.

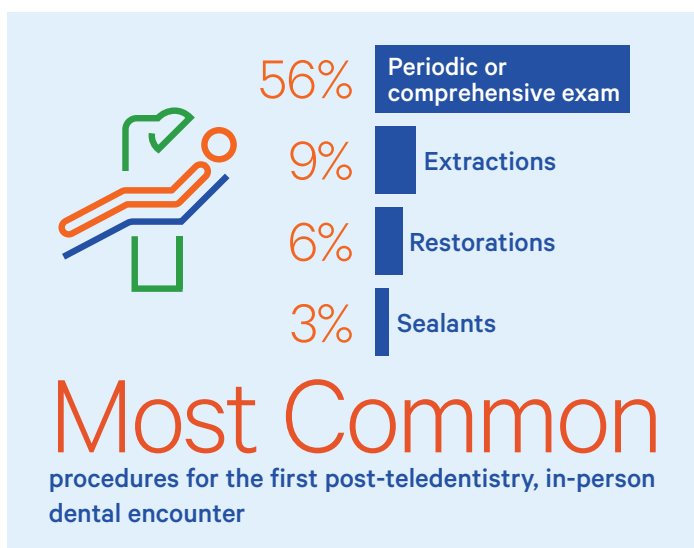
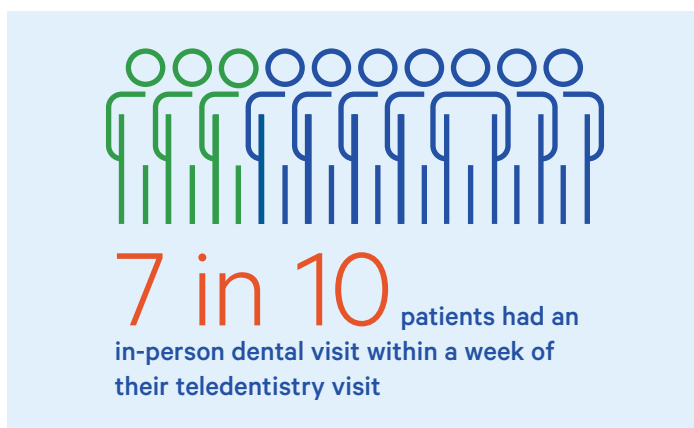
Teledentistry also provides a source of revenue, lending financial stability to dental clinics during periods where access is reduced due to the pandemic.

However, some dental providers might question whether using teledentistry to triage patients (without physically examining the patient's mouth and throat) could leave a patient more inclined to delay follow-up care and, therefore, leave them at risk for more severe dental conditions, including emergency visits to a dental clinic or hospital emergency departments (EDs). The DentaQuest Partnership for Oral Health Advancement sought to explore this issue.

Currently, little evidence exists regarding oral health outcomes for patients after a teledentistry visit. To address this gap, the DentaQuest Partnership used the IBM Watson MarketScan Medicaid Database to examine outpatient dental claims data for Medicaid enrollees. Data were obtained for all patients who had a teledentistry visit in the first six months of 2018 using the Current Dental Terminology (CDT) codes "D9995" and "D9996". Within this cohort, we examined dental services utilization patterns and rate of return following the teledentistry visit for the entire year of 2018.

# Findings

A sample of 543 patients, enrolled throughout the calendar year, had a teledentistry visit in the first half of 2018 (January–June) and 455 (84%) of these patients came back for an in-person dental visit following their teledentistry visit. Among patients who had a teledentistry visit in the first six months, 88 (16%) patients didn't come in for the rest of 2018.



## Among the patients who returned for an in-person dental visit:

- The average duration between the teledentistry visit and a subsequent in-person dental visit was 21 days.
- 7 in 10 patients had an in-person dental visit within a week of their teledentistry visit.
- The most common procedures for the first post-teledentistry, in-person dental encounter were:
  - Periodic or comprehensive examinations: 56%
  - Extractions: 9%
  - Restorations: 6%
  - Sealants: 3%

## Emergency dental visits and visits to the ED for dental conditions

Among patients who returned for an in-person visit following their teledentistry visit, only 1% of these patients returned for an emergency dental visit (CDT codes D0140, D0160, D0170). Overall, in 2018, 16% of patients had an emergency dental visit.

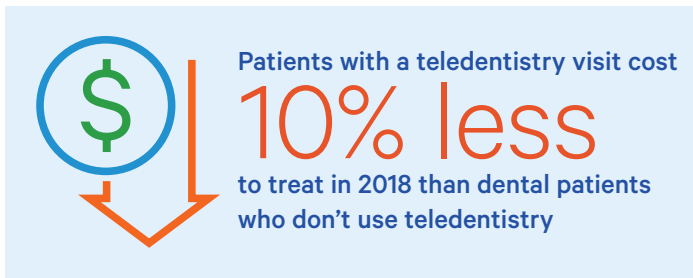
Among patients who returned for an in-person visit following their teledentistry visit, only one patient had an ED encounter for a dental condition. Overall, in 2018, 3% of patients had an ED visit for a dental condition.

## Dental cost per patient by teledentistry encounters

The average annual dental cost per patient was \$681 for those who had at least one teledentistry visit compared to \$756 for those without any teledentistry visit in 2018.

## Implications

These findings demonstrate that teledentistry effectively triages patients into necessary care; 84% of these patients had an in-person, post-teledentistry visit within the calendar year. In fact, 71% of them received such care within one week of the teledentistry encounter.



Importantly, teledentistry was not linked with increased emergency dental or hospital ED visits. In fact, there were lower rates for both among those with teledentistry visits. This strongly suggests that teledentistry did not delay needed care.

The distribution of procedure types demonstrates that teledentistry patients are receiving the care they need, while allowing them to have a scheduled visit that is more convenient for them and does not require practices to hold slots for emergency patients. Evidence from [practices with more experience with teledentistry](#) suggests that in time, dentists will become better at using teledentistry to prioritize definitive care to patients in need.

Finally, these findings demonstrate that patients with a teledentistry visit cost 10% (\$75) less to treat in 2018 than dental patients who don't use teledentistry, supporting the contention that teledentistry is an effective way to triage patients.

---

## CareQuest Institute for Oral Health

CareQuest Institute for Oral Health is a national nonprofit championing a more equitable future where every person can reach their full potential through excellent health. We do this through our work in grantmaking, research, health improvement programs, policy and advocacy and education as well as our leadership in dental benefits, care delivery and innovation advancements. We collaborate with thought leaders, health care providers, patients and local, state and federal stakeholders, to accelerate oral health care transformation and create a system designed for everyone. To learn more, visit [carequest.org](https://carequest.org).

---

This report and others are available at [carequest.org](https://carequest.org).