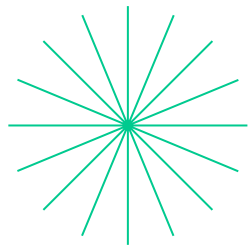


Reimagining a healthier future for all

NASEM Workshop

November 18, 2024



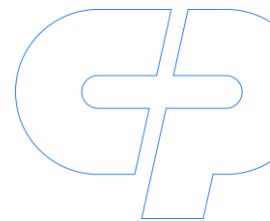


Maria Emanuel Ryan, DDS, PhD

Executive Vice President
& Chief Clinical Officer

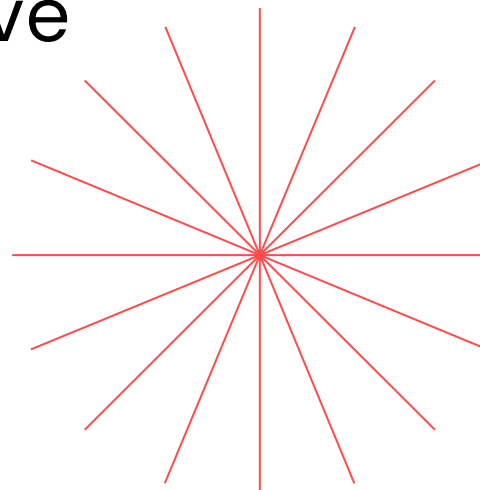
Colgate-Palmolive Company



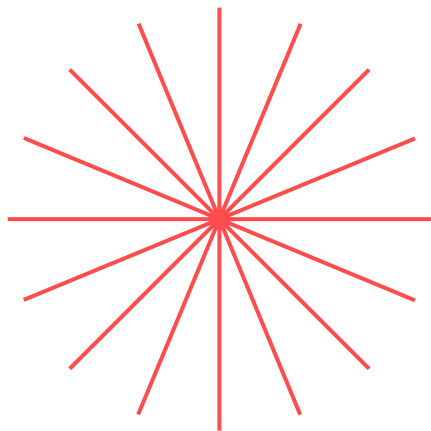


Today's question

What would it take for patients and their communities to be empowered to **improve their oral health** and have equitable access to oral health services?



Getting oral health on the global health agenda



01.

Colgate-Palmolive x World Economic Forum: Get oral health on global health agenda



Business leaders across industries

Healthcare providers and business leaders from pharma, MedTech, and insurance sectors, organizations across other industries such as professional services, consumer goods, and others.



Governments and International Organizations

Government leaders and Health Ministers across all geographies, including G7 and G20 country leaders, local governmental leaders and heads of international organizations such as WHO, UNICEF, UNAIDS, and others.



Academia

World-renowned academics from international universities and schools of public health such as Harvard T.H. Chan, Johns Hopkins, LSE and others, scientists and researchers across different disciplines.



Civil Society

Leaders from Civil Society organizations on international and national levels such as GAVI, CEPI and The Global Fund, PATH, as well as public health activists.



Philanthropy

Foundations and other philanthropic organizations across continents, with the purpose to solve global public health issues, such as Bill & Melinda Gates Foundation, the Wellcome Trust, Novo Nordisk Foundation, The Rockefeller Foundation and others.



Experts

Outstanding experts from business and public sector such as the National Academy of Medicine, former heads of state and government leaders, members of the Global Future Council on Synthetic Biology.

Global Health Equity Network (GHEN)

+30 partners across industries and geographies contributing to the network's vision by developing and piloting multi stakeholder actions and tools to advance health equity impact and measurement, sharing best practice, and raising health equity onto global agendas.



Deloitte.



Google

TheGlobalFund



HENRY SCHEIN®

Medtronic



CVS
Health.



cencora



HUMA



HOLOGIC®



RioTinto



PHILIPS

ThermoFisher
SCIENTIFIC



OmnicoPublicRelationsGroup



Oral Health Affinity Group

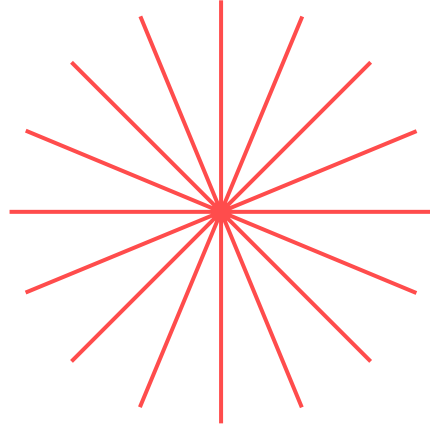
First objective accomplished



Moving forward: Four action areas

- Adopting health financing policies that improve coverage, access and affordability of oral healthcare services, particularly for deprived, disadvantaged and vulnerable groups.
- Promoting healthcare service delivery models that integrate oral healthcare services into primary, secondary and tertiary care.
- Developing innovative health and oral health workforce models, including training and remuneration, that allow for flexibility in addressing oral health needs.
- Implementing policies that promote upstream interventions focusing on prevention, health promotion and healthy behaviours, versus costly downstream treatment of oral disease.

Addressing the root cause: Low oral health literacy & promoting self care



02.

Colgate Bright Smiles, Bright Futures®



*Colgate Bright Smiles, Bright Futures® is a far-reaching, impactful education initiative with the goal of improving oral health and wellbeing of **children & families** around the world.*

- CP's flagship corporate responsibility initiative for **>30years**
- In over **100 countries**
- Translated in **40 languages**
- Reached approximately **1.7 billion children & families** worldwide (since 1991)
- **+2,000** Partnerships with government, dental profession, NGOs and the community
- Goal: **2 billion children & families by 2025**





2021 – A kernel of an idea emerges

“Dental diseases do impact overall health.”

The journalist Frank Sesno and the U.S. FDA Commissioner Rob Califf ask, “Why doesn’t anyone know about this, Maria?”

Oral Health Literacy is low globally - Colgate as a world leader is addressing this

ResearchAmerica
@ResearchAmerica

You might think [#oralhealth](#) is 90% cosmetic & 10% making pain go away. But dental diseases do impact health. On Sept. 13, [@franksesno](#) will lead former [@FDACommissioner](#) Rob Califf & [@Colgate](#) Chief Clinical Officer, Maria Ryan, in a discussion on [#oralhealth](#). bit.ly/21ForumReg

FIRESIDE CHAT:
A Surprising Key to Better Health
SEPTEMBER 13, 2021 @ 4:05 P.M. ET

Frank Sesno
Robert Califf, MD, MACC
Maria Ryan, DDS, PhD

2021 NATIONAL HEALTH RESEARCH FORUM
Advancing Health, Improving Quality, Transforming Lives

#RAFORUM
#FIGHTFASTER

3:30 PM · Aug 30, 2021 · Hootsuite Inc.



Launched during February's Oral Health Month
New website with OQ assessment



www.KnowYourOQ.com

- A free, interactive assessment people can take to find out their Oral Health Quotient
- Information/resources for people to learn about oral health and how to improve their OQ score

The banner features the 'Know Your OQ' logo at the top left. The main headline reads 'Do You Know Your OQ™?' in large red font. Below it, a paragraph states: 'You might know your IQ and EQ, and now we want the world to know your OQ™ — your oral health quotient — because oral health is connected to overall health and wellbeing in ways most people don't know.' This is followed by the tagline 'Your healthier future STARTS with a healthy mouth.' At the bottom left, there is a red button labeled 'Take the quiz' and a circular icon with a downward arrow next to the text 'Brush up on the facts'. On the right side of the banner is a photograph of three diverse young women smiling and hugging. The bottom right corner of the banner includes the text 'By Colgate-Palmolive' and the company logo.



Know Your OQ™ Impact Study



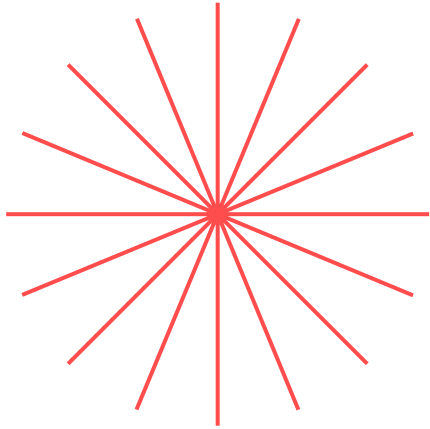
Significant improvements in knowledge, attitudes, and practices

Knowledge	Pretest % of correct answers (N=296)	Posttest % of correct answers (N=296)	% change
Caries most common disease	21%	46%A	+25%
Relationship between oral and systemic health	56%	90%A	+34%
Symptoms of dental disease	70%	90%A	+20%
Link between oral and mental health	77%	94%A	+17%
Attitudes			
Attitude towards fluoride importance for teeth	71%	86%A	+15%
Practices			
Brushing twice a day	65%	75%A	+10%

Letter indicates statistical difference at the 95% CL

Now translated to several languages- 3 additional impact studies completed in Mexico, Brazil and India

The Power of We: The Power of Partnerships



03.

Personalized Care Suite at University of Penn



Serving ~70 patients in a week

Adult disabilities Oral health Registry (wide range disabilities)



Colgate Laboratory for Innovation

WHAT IS THE RESEARCH STUDY?

We are inviting you to participate in a **Registry** where we would like your feedback on oral care products. The purpose of this "Consumer Oral Health Registry" (COHR) is to conduct studies on oral care products to assess your ability to provide feedback on the products and gather feedback on the overall usage experience for a period of time. Your participation in this Registry will allow the research team at Penn Dental Medicine to invite you to participate in future studies. Some of the studies that we will be conducting will ask you to try different oral care products such as toothpastes, toothbrushes, mouthwashes and dental cleaning devices.

JOIN THE REGISTRY

If you are interested in learning more about this REGISTRY, please contact study team at:
215-573-6258
pdmtranslationalmed@dent.upenn.edu

OUR TEAM

Principal Investigator
Dr. Patricia Carley, DMD, MS

This project is funded by the Colgate-Palmolive

Consumers' Feedback in Oral Health Research

WHAT AM I BEING ASKED TO DO?

You are being invited to participate in a **Consumer Oral Health Registry (COHR)** that will allow you to be a part of research studies to test oral health products such as toothpastes, toothbrushes, mouthwashes, and others. In all the studies within this registry, the involvement will be focused on improving oral care products or developing new ones that will better align with patients' needs, increased acceptability and targeted oral care education on the use of these products.

WILL I BE PAID FOR BEING IN THIS STUDY?

If you or your family members, or your child caregiver are qualified to participate in this study, you will be asked to attend study visits that usually occur at the start of each study and a few follow-up visits may also be scheduled where you will be attending an in-person and/or a virtual visit. You and/or your child might be compensated for your participation. If your child has a caregiver, we may also ask this person to participate to provide feedback on the use of the products and he/she may also be compensated. You must meet all attendance requirements. If you do not complete the study of your own free will, you may receive a pro-rated portion of the compensation at the discretion of the Study Investigators.

HOW CAN I BE PART OF THIS STUDY?

You may be eligible to participate if:

- You are a male or female age + 5 years
- You are in good general health and oral health as determined by the investigator
- You must be available for the duration of the study and are willing to be audiotaped during the interview phase of the study
- You are willing to comply with the study procedures
- Have a range of physical and/or mental disabilities (e.g. autism, arthritis, muscular dystrophy, Parkinson's, etc.)
- Are not undergoing orthodontic treatment or have obvious signs of oral disease that might interfere with study procedures at the PI's discretion
- Are not concurrently participating in other clinical studies that involve oral health, or studies that could impact oral health, at the PI's discretion

JOIN THE REGISTRY

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215-573-6258
pdmtranslationalmed@dent.upenn.edu

Consumers' Feedback in Oral Health Research



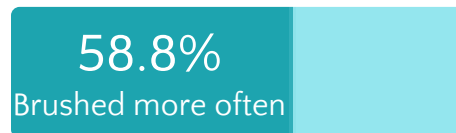
Smart Brush and Children with ASD



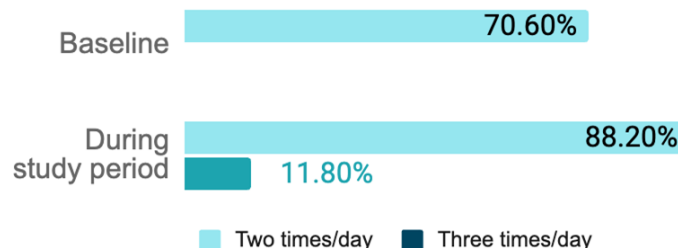
Augmented reality tracking & gamification to engage younger users to form good brushing habits



100% used electric brush during entire study period



Frequency of smart electric toothbrush use





Assessment

Project Tom - Making OC More Accessible

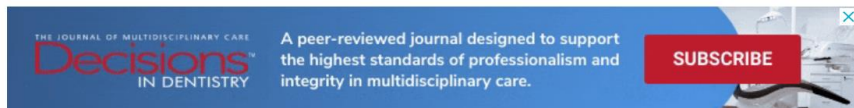
Dentistry Center for Patients with Disabilities - Brazil

- **Site/Partnership:** University of São Paulo
 - Founded in July 1989
 - Approx. **1,000 appointments** per month
 - Site specialized in dental care for patients with disabilities, in the development of teaching activities for undergraduate and graduate students, and also in the development of clinical and laboratory scientific research.
- **Objective:** Assess the perception of functional prototypes developed for patients with disabilities
- **Audience:** Users, Professionals and Caregivers





Workforce Development



News

National Dental Association Foundation and Colgate-Palmolive Establish Scholarship Program

In a continuing commitment to address racial disparities in oral health, the National Dental Association Foundation (NDAF) and Colgate-Palmolive Company have announced the creation of the "Audacity to Dream" scholarship program for African Americans pursuing careers in dentistry.

By the editors — On Mar 3, 2021

Colgate has long been committed (over 30 years) to developing the next generation dentists. Programs such as the NDA "Audacity to Dream" scholarship program, the Freeman, Grant, Franklin Scholarship program at Harvard, and the Theodore E. Bolden Scholarship at Rutgers are a few examples of this commitment.

The Freeman, Grant, Franklin Scholarship



The Freeman, Grant, Franklin Scholarship supports underrepresented minority students, with financial need, pursuing their predoctoral (DMD) program at the Harvard School of Dental Medicine. The scholarship pays tribute to prominent African American figures in HSDM's history—Robert Tanner Freeman, DMD1869, George Franklin Grant, DMD1870, and Dolores Mercedes Franklin, DMD1974. In January 2021, the scholarship was activated with a [capstone gift from Colgate-Palmolive Company](#) making it possible to begin providing financial support to a student in this year's incoming class. The scholarship will be awarded on an annual basis.

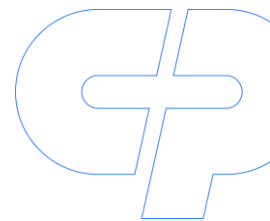


Diversity in Research

Colgate and the NDA Foundation have awarded over \$4.5 million in scholarships which have benefited student dentists and hygienists as well as those pursuing post-graduate training. We recently launched the Colgate / NDAF “TORCH” (Trailblazer in Oral Health Research Scholars of African Heritage) Post-Doctoral Fellow Program, to address racial disparities in oral health research.

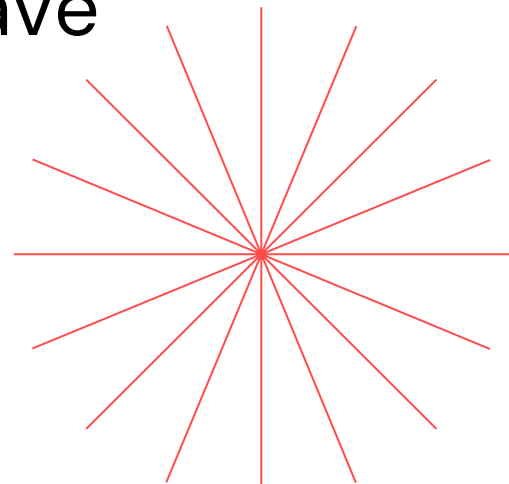
Colgate has also joined with the NDA Foundation to fund research on the impact of oral health-related diseases in African-American communities. Partnering with Howard University and Meharry Medical College Schools of Dentistry, Colgate and the NDA Foundation have worked to expand the academic research of these institutions by providing students with research opportunities, which in turn will position them to be better academicians, public health advocates and dental practitioners.

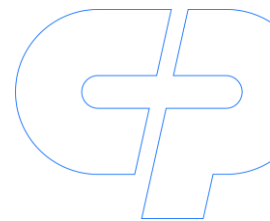
These efforts and others will help increase access to oral care, mitigating the impact of oral health related diseases on African Americans and minimizing health disparities.



Returning to today's question

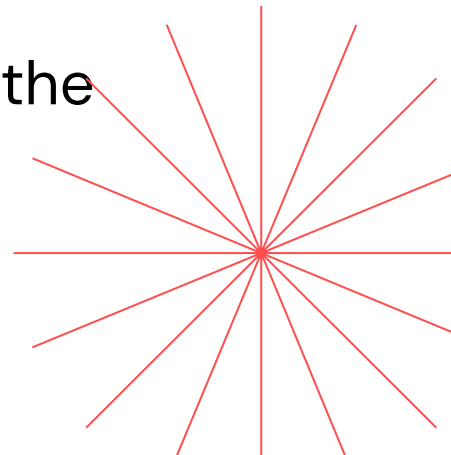
What would it take for patients and their communities to be empowered to **improve their oral health** and have equitable access to oral health services?

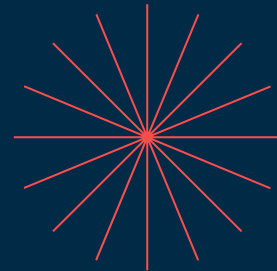
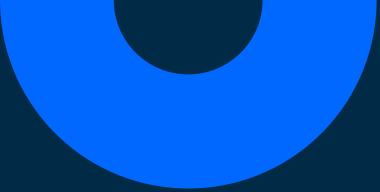




It's going to take us all...

- Getting oral health on the global health agenda
- Address the root cause: low oral health literacy
- The Power of We: working together to create the right programs, partnerships and products





Let's get started

