


Children's Outcomes Research Program




Evaluation of Colorado's Cavity Free At Three (CF3) Program—A Preventive Oral Health Training

Patricia A. Brown MD, MPH, Katina Widmer MA, Karen Savoie RDH, BS, Misoo Ellison PhD, Dennis Lewis, DDS, Jack Westfall MD, MPH
University of Colorado Anschutz Medical Center





Financial Disclosures

The authors do not have any significant financial interest or relationship with either the manufacturer of any commercial products or services or any commercial supporters of any activity.





Background-Colorado

- 2007-2009: CF3 Technical Assistance Team comes together to build initiative
- 2008-2009: First 10 trainings takes place
- July 2009: Colorado Medicaid begins reimbursing medical providers for provision of basic preventive dental services to children well child care visits (up to age five)
- Medicaid mandates that providers must receive oral health training (CF3 or Smiles for Life online)


Background-Colorado

- 2009-2010: 100's requests for CF3 training
- CF3 training refined to ½ day training
 - 1-2 hour infant oral health
 - 1-2 hour perinatal oral health
 - Hands-on
- Trainings include community stakeholders

Background-Colorado


- Cavity Free at Three Infant Oral Health Curriculum
 - Examination of teeth
 - Demonstration of brushing
 - Risk Assessment
 - Anticipatory guidance on oral health
 - Fluoride varnish application
 - Caregiver self management goals


Methods

RE-AIM Planning Tool (Glasgow)


- Reach
- Effectiveness
- Adoption
- Implementation
- Maintenance




Methods - Reach



- CF3 Training
 - Training logs
 - Oral health kits
 - Survey





Methods - Reach




- Reach of CF3 Care
 - Administrative records
 - Risk assessment forms
 - Survey

Methods - Reach

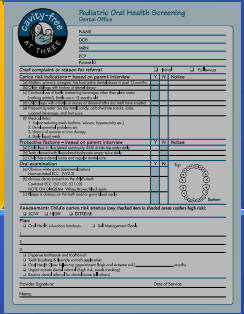


- CF3 Care
 - Administrative records
 - Denver Health – Denver's largest safety net health care system
 - Fluoride Varnish (1206) + Well Child Check (V20.2)
 - Risk Assessment Forms
 - Survey

Methods - Reach



- CF3 Care
 - Administrative records
 - Risk Assessment Forms
 - Collected from sites
 - Survey




Methods - Reach



- CF3 Training
 - Administrative records
 - Risk Assessment Forms
 - Training logs
 - Oral Health Kits
 - Survey
 - on-line
 - year one trainees
 - one year after trainings
 - validated questions (BRFSS)
 - piloted, refined

Results - Reach



- CF3 Training
 - 45 completed trainings
 - 907 trainees

Results - Reach

- CF₃ Care
 - Administrative records (Denver Health) – 7,322 visits
 - Risk Assessment Forms (non-Denver Health) – 1,538 collected (stopped collecting summer '10)
 - 8,498 oral health kits distributed with trainings
 - 10,878 additional oral health kits subsequently ordered by trainees
 - Some sites assembling own kits

Effectiveness of Training

- Survey
 - Subjects-Training
 - Year one trainees- 332 (medical, dental, public health nurses, home health nurses)

Effectiveness of Training

- Survey - 70% response rate
 - Gender - 80% female
 - Year of profession graduation – 1967-2008
 - Provider type
 - 24% medical providers
 - 16% dental providers
 - 17% public health nurses
 - 21% RNs/medical assistants
 - 22% administrative/other roles
 - Workplace
 - 37% public health clinic
 - 20% federally qualified medical health center
 - 8% medical school/university setting
 - 4% private dental
 - 2% federally qualified dental clinic

Attitudes and Beliefs

Statement	Dental (%)	Medical (%)
I have a role in preventing ECC	~95	~90
ECC is a problem for my patients	~95	~90
Fluoride varnish is safe	~95	~90
I can change the oral health behaviors of my patients	~95	~90

p = ns

Effectiveness of Training

How confident do you feel with examination of teeth?

Group	Already Confident Before Training (%)	Confident After Training (%)
Dental	~70	~70
Medical	~15	~15

p < 0.0001 (Already Confident Before Training)

p = 0.44 (Confident After Training)

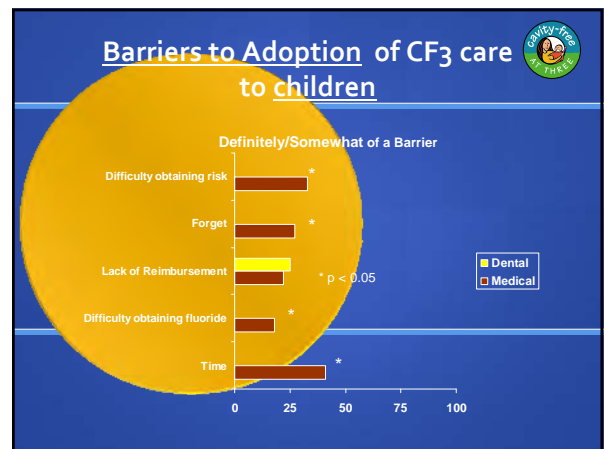
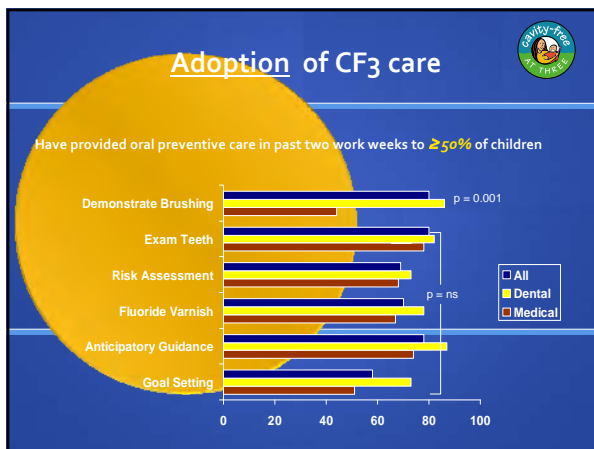
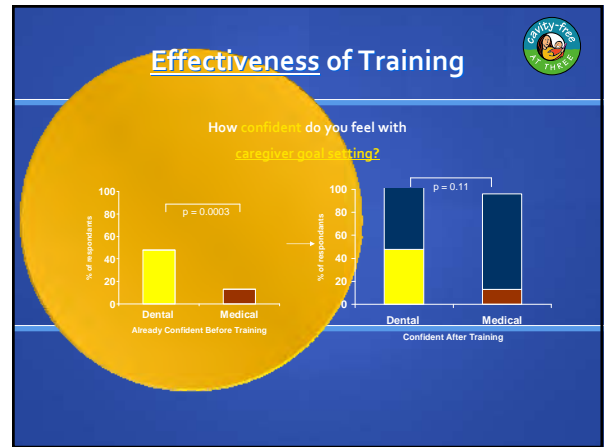
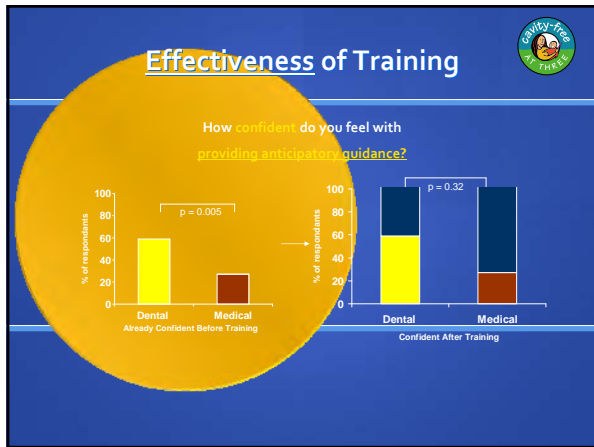
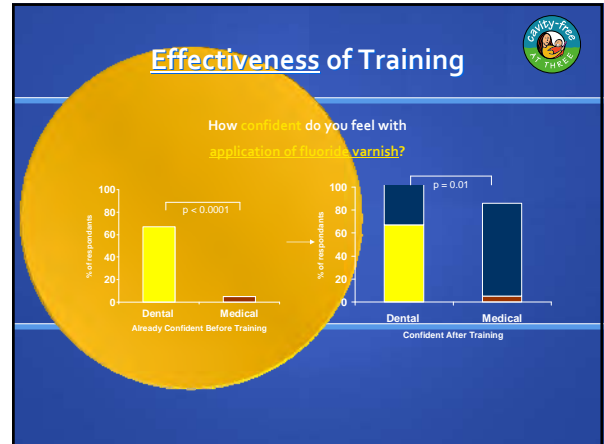
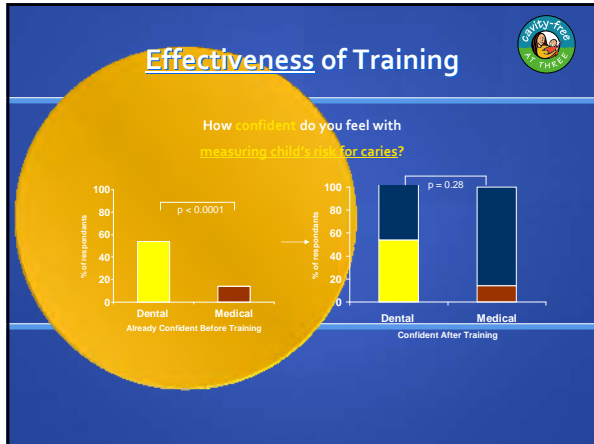
Effectiveness of Training

How confident do you feel with demonstration of brushing of child's teeth?

Group	Already Confident Before Training (%)	Confident After Training (%)
Dental	~75	~70
Medical	~20	~15

p < 0.0001 (Already Confident Before Training)

p = 0.18 (Confident After Training)



Implementation/Maintenance of Training

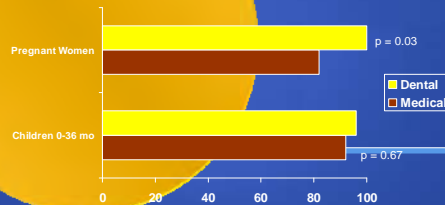


As a result of CF3, has your workplace done any of the following?	YES %
Changed medical record/billing	51
Billed Medicaid	60
Planned for future training	58
Made arrangement for getting own fluoride	67
Made arrangement for getting own oral health supplies	75
Established referral system to dental home	79

Maintenance of Training



In the future....very/somewhat likely to provide oral preventive care to



Conclusions



- CF3 care reached over 10,000 children in its first two years.
- The CF3 training model is effective at providing necessary confidence in skills.
- Variety of providers are willing to adopt new behaviors.
- Providers can assess a child's risk for caries.
- Lack of time to provide care is most reported barrier to adoption and implementation.
- Provision of basic preventive dental services by a medical provider expands access to preventive dental care for young children.

Cavity Free at Three Program Evaluation



Thanks to

- Funders
 - Caring for Colorado Foundation
 - Delta Dental Foundation of Colorado
 - Rose Community Foundation
 - The Colorado Trust
 - The Colorado Health Foundation
 - Kaiser Permanente Foundation of Colorado
- CF3 Technical Assistance Team
- Co-investigators
 - Matt Daley
 - Katina Widmer
 - Misoo Ellison
 - Elaine Morrato
 - Sarah Ling

