

RASTATEORALHE

Using Hospital Emergency
Departments in Florida for
Dental Problems: The
Magnitude of the Problem
and Promising Solutions

#### ORAL HEALTH FLORIDA



Moderator: Frank Catalanotto, DMD, Professor, UFCD Department of Community Dentistry and Behavioral Science

Speakers: Scott Tomar, DMD, MPH, DrPH, Interim Chair and Professor UFCD Department of Community Dentistry and Behavioral Science

Donna Carden, MD, Professor, UFCOM Department of Emergency Medicine

Jolene Paramore, DMD, Private Practicing Dentist, Second Vice President, Florida Dental Association

Reactor: Representative Cary Pigman, Florida Legislature, Emergency Medicine Physician

#### **ORAL HEALTH FLORIDA**



Dental Care Utilization Rate Highest Ever among Children, Continues to Decline among Working-Age Adults (ADA Health Policy Institute, October 2014)

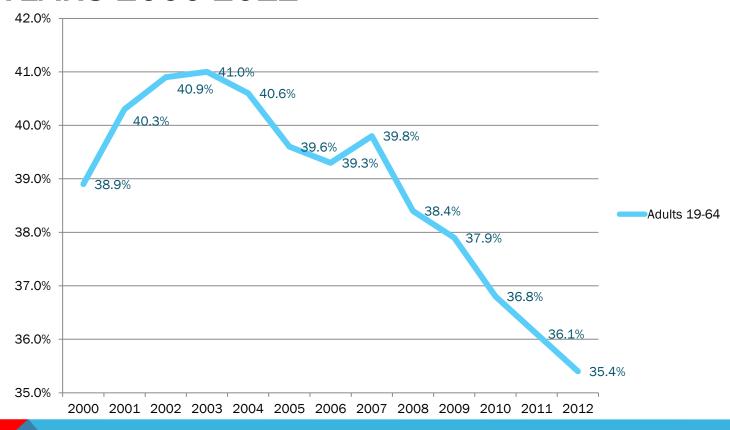
From 2011 to 2012 dental care utilization increased among children and decreased among working-age adults

Changes in dental care utilization patterns from 2011 to 2012 represent the continuation of multi-year trends.

Dental care utilization in 2012 was at its highest level among children and at its lowest level among working-age adults since the Medical Expenditure Panel Survey began tracking dental care use in 1996.

8/27/2015

### PERCENTAGE OF POPULATION WITH DENTAL VISIT IN YEARS 2000-2012



Source: http://www.ada.org/~/media/ADA/Science%20and%20Research/HPI/Files/HPIBrief\_1014\_4.ashx, pg 4



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#### ORAL HEALTH FLORIDA



Emergency Department Use for Dental Conditions Continues to Increase (ADA Health Policy Institute, April 2015)

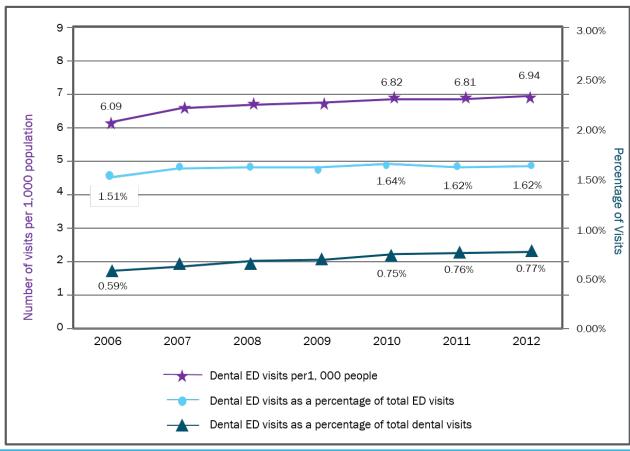
The number of emergency department (ED) visits for dental conditions in the United States continues to rise. In 2012, ED dental visits cost the U.S. health care system \$1.6 billion, with an average cost of \$749 per visit.

Emergency department use for dental conditions has declined among young adults ages 19 to 25, has remained relatively flat among children and has increased for other age groups, i.e., adults over 25. The share of ED dental visit costs paid for by Medicaid has also increased.

#### TRENDS IN ED VISITS BY DENTAL CONDITIONS

2006-2012

Trends in Emergency Department visits for Dental Conditions, 2006-2012



Source: http://www.ada.org/~/media/ADA/Science%20and%20Research/HPI/Files/HPIBrief\_0415\_2.ashx, pg 5



#### **ADULT MEDICAID BENEFITS**

JANE KOPPELMAN, DIRECTOR OF RESEARCH, CHILDREN'S DENTAL POLICY, THE PEW CHARITABLE TRUSTS FROM "INEFFICIENT MEDICAID SPENDING FOR DENTAL CARE" JULY 29, 2015

Medicaid spent more than half a billion dollars on dental-related ED visits in 2012. Providing patients early and preventive care would be a more cost-effective use of the \$520 million that Medicaid spent for emergency room visits—which tend to focus on pain management, not the underlying health issue.

Adults in only 15 states have access to comprehensive dental coverage through the program; Florida is one of the many states that lack comprehensive adult coverage. A lack of coverage can also be detrimental to states' budgets. California, for example, eliminated comprehensive dental coverage for adults in 2009 because of budget constraints. This policy change increased the average yearly costs of visits to the emergency room by 68 percent.

In the next presentation, Scott Tomar will share some Florida data with you that is equally distressing and should be discussed by policy makers in Florida.



# Trends in Dental-Related Use of Hospital Emergency Departments in Florida

Scott L. Tomar, DMD, DrPH
University of Florida College of Dentistry
<a href="mailto:stomar@dental.ufl.edu">stomar@dental.ufl.edu</a>

### Background

- Lack of access to routine dental services may lead to dental problems showing up at hospital emergency department (ED)
- EDs generally not staffed or equipped to provide definitive dental care
- Florida is large, diverse state with significant barriers to dental care
- Purpose: examine trends and patterns of hospital ED use for dental-related problems in Florida

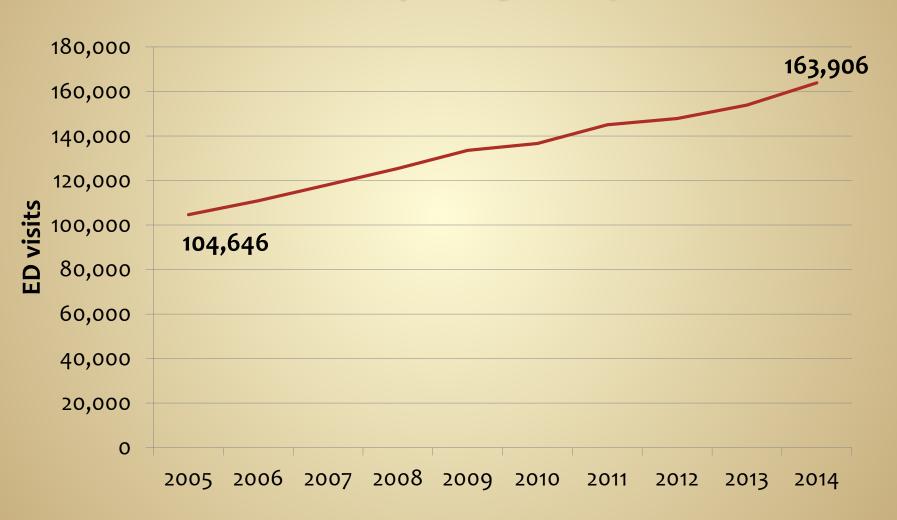
### Methods

- Florida Agency for Health Care Administration data on visits to emergency department for 2005 through 2014
- ICD-9-CM codes: 520 526.9, 528 528.9, 784.92,
   V52.3, V53.4, V58.5, or V72.2. as reason for visit or principal diagnosis
- Total costs billed for visit

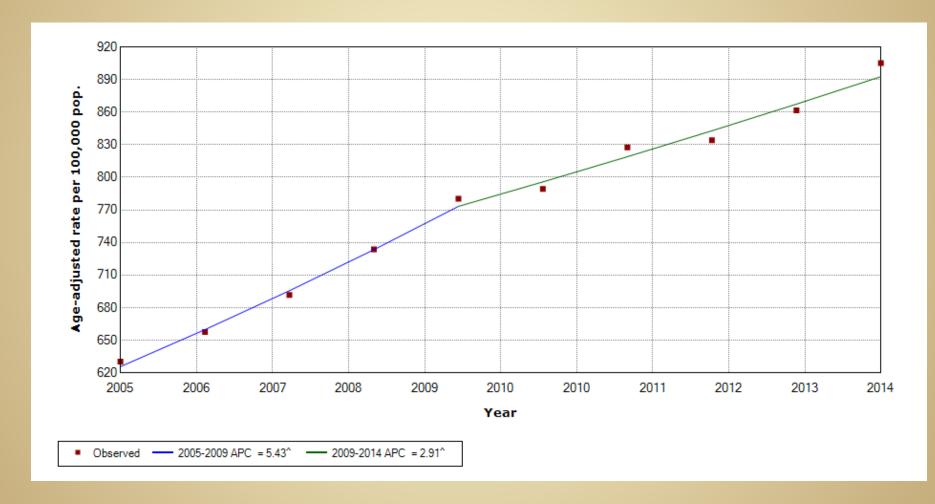
#### Methods

- Calculated crude, age-specific, and age-adjusted rates of dental-related emergency department (ED) visits
- Trend analysis using Joinpoint software
- Adjusted ED charges for general price inflation using Bureau of Labor Statistics CPI estimates
- Selected characteristics of 2014 visits

### Number of dental-related ED visits Florida, 2005-2014

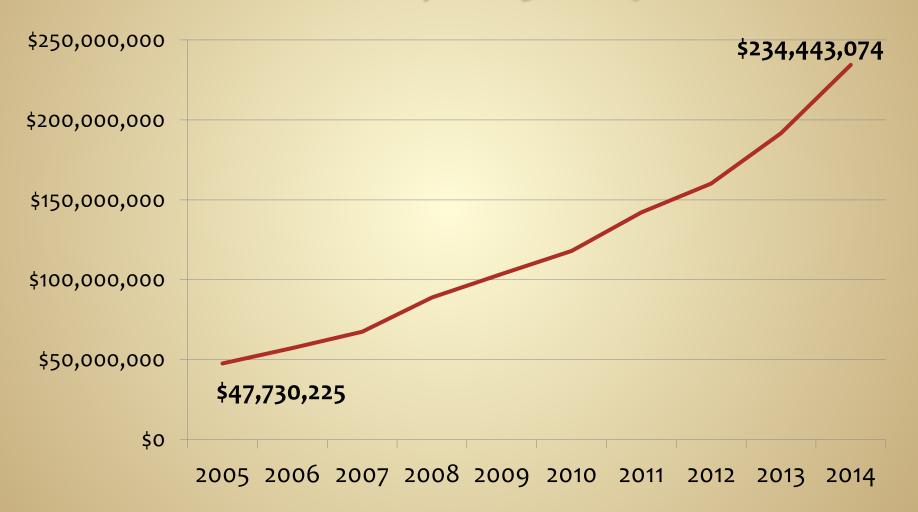


# Age-adjusted annual rate\* of ED visits for dental-related reasons. Florida, 2005–2014

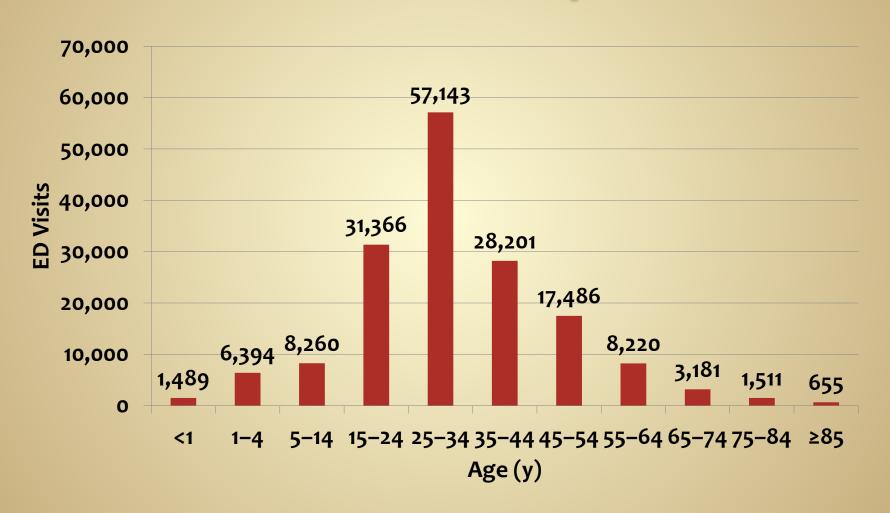


<sup>\*</sup>per 100,000, adjusted to US 2000 standard population

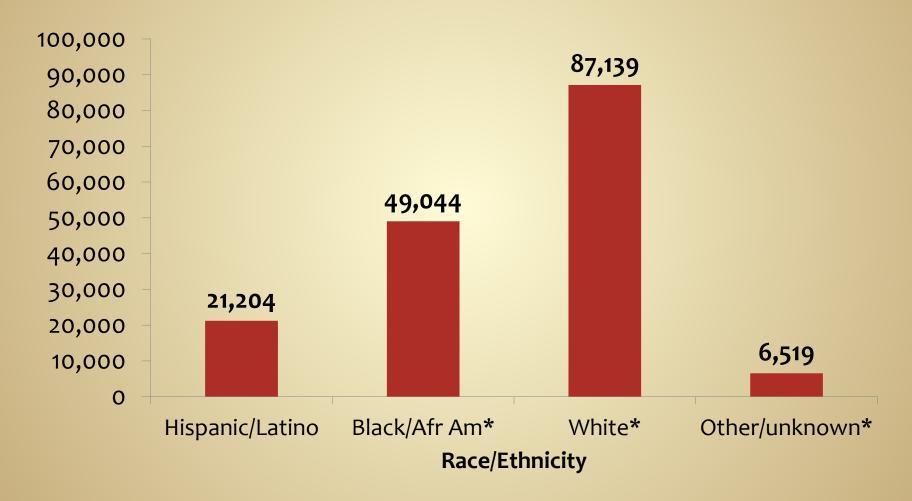
# Total charges for dental-related ED visits Florida, 2005-2014



# Dental-related ED Visits, by Age – Florida 2014

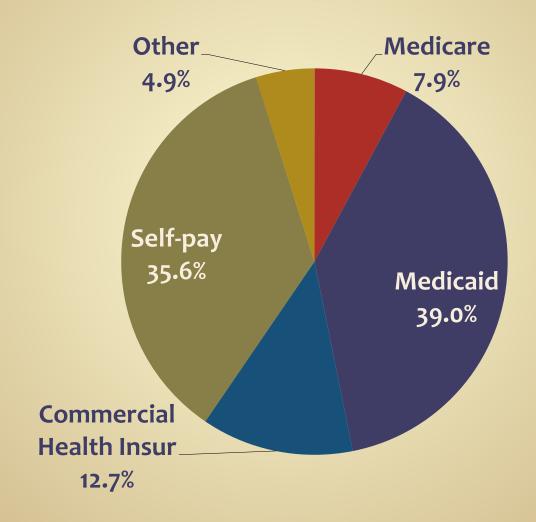


# Dental-related ED Visits, by Race/Ethnicity Florida, 2014



<sup>\*</sup>not Hispanic/Latino

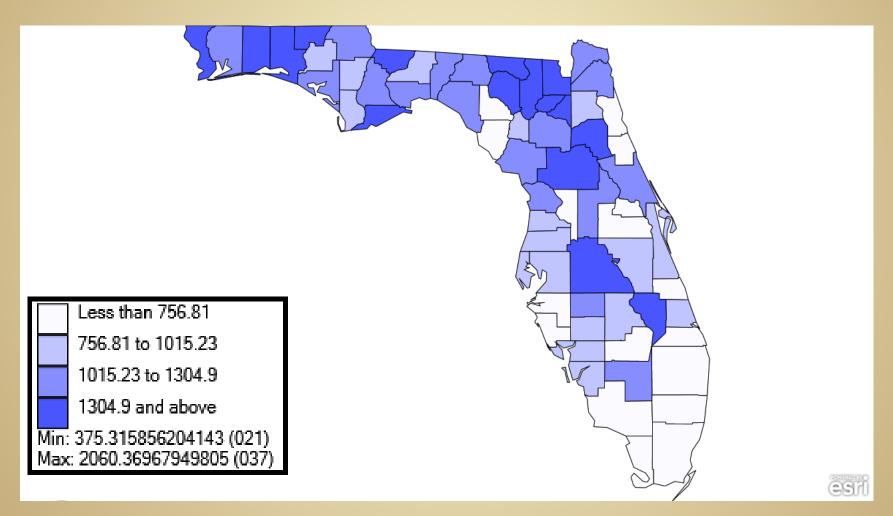
# Dental-related ER Visits, by Principal Payer Florida, 2014



### Dental-related ED visits, by arrival time. Florida, 2014



### Crude rate\* of dental-related ED visits, by County – Florida, 2014



<sup>\*</sup>per 100,000 population

### Summary

- Number of dental-related visits to Florida EDs increased each year, from 104,642 in 2005 to 163,900 in 2014
- Age-adjusted rate increased by 43.6%
- ED charges increased >4-fold, from \$47.7 million to \$234.4 million
- Most visits during business hours
- Large percentage paid by taxpayers

# Dental-Related Emergency Department Visits:

**Provider and Patient Perspectives** 

Donna L. Carden, MD, FACEP Professor, Emergency Medicine University of Florida, Gainesville

# **Emergency Departments (EDs) are Under Pressure**

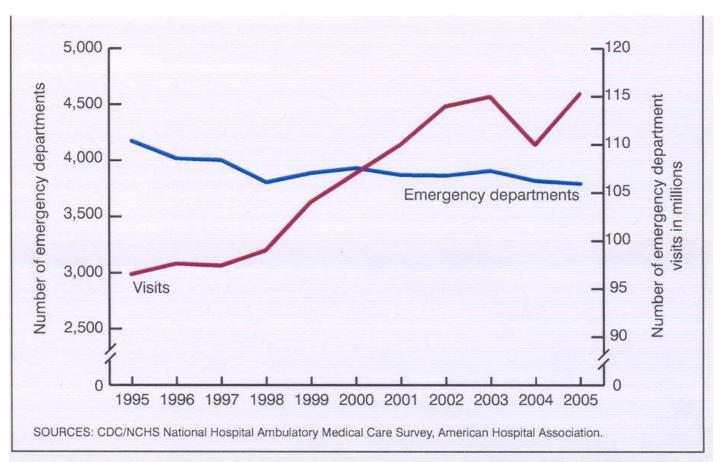
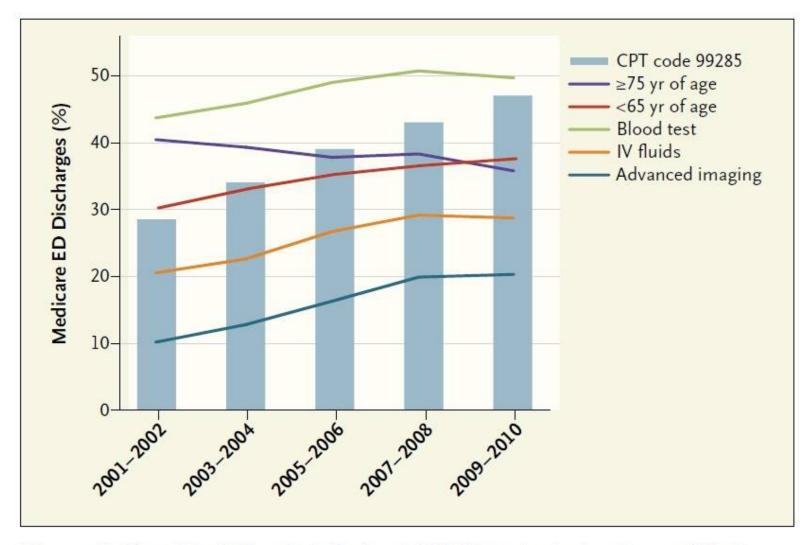
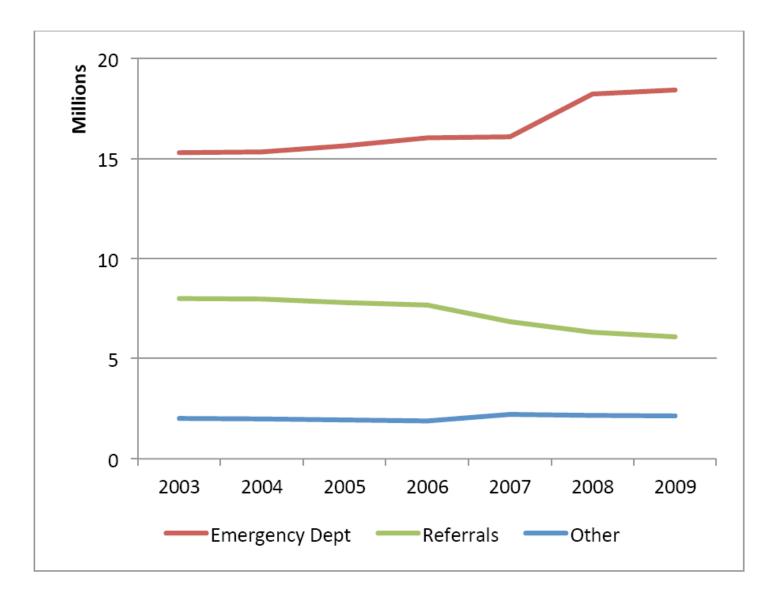


Figure 1. Trends in numbers of emergency departments and related visits: United States, 1995–2005



Changes in Use of the Billing Code for Level 5 ED Visits, in the Age Range of Medicare Patients Discharged from the ED, and in the Use of Diagnostic Technology and IV Fluids, 2001–2010.

gure 4.4. Trends in Non-Elective Hospital Admissions, by Source, 2003–2009



Source: National Hospital Discharge Survey

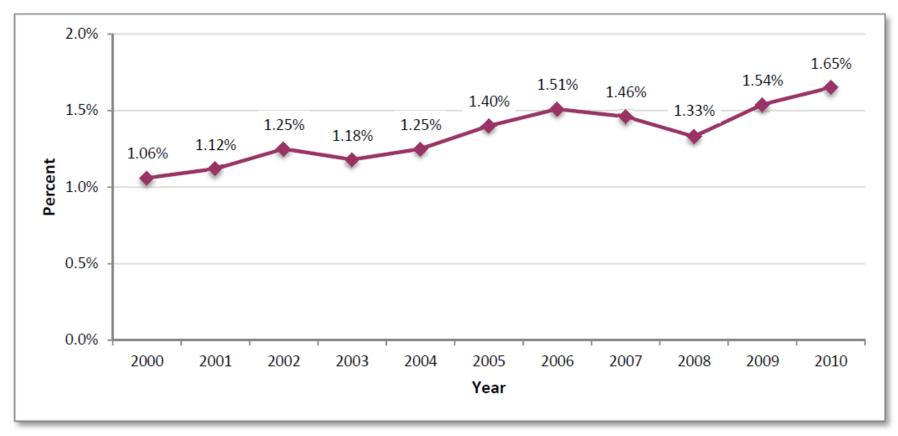
Morganti KG, *et al*, The Evolving Role of Emergency Departments in the United States. Rand Corporation, 2013

#### **EDs are Under Pressure**



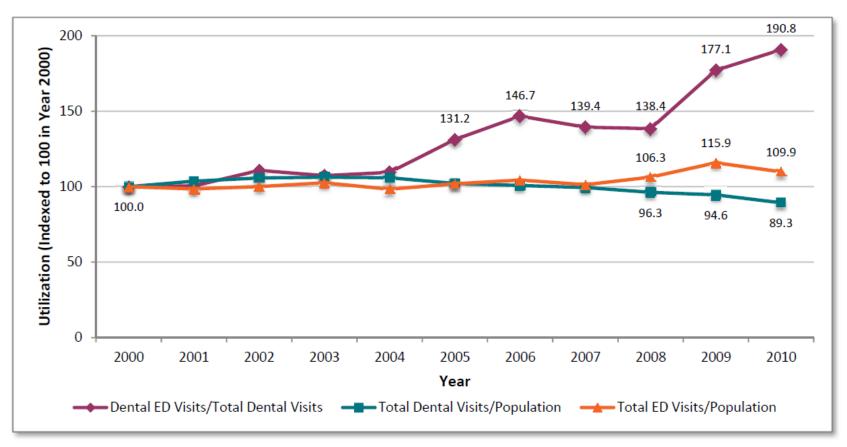
- ED Crowding
- Higher intensity of care
- Longer wait times
- Delays in treatment for patients with emergent conditions
- Worse health outcomes if treatment is delayed

Figure 1: Dental Emergency Department Visits as a Percent of Total Emergency Department Visits in the United States, 2000 to 2010



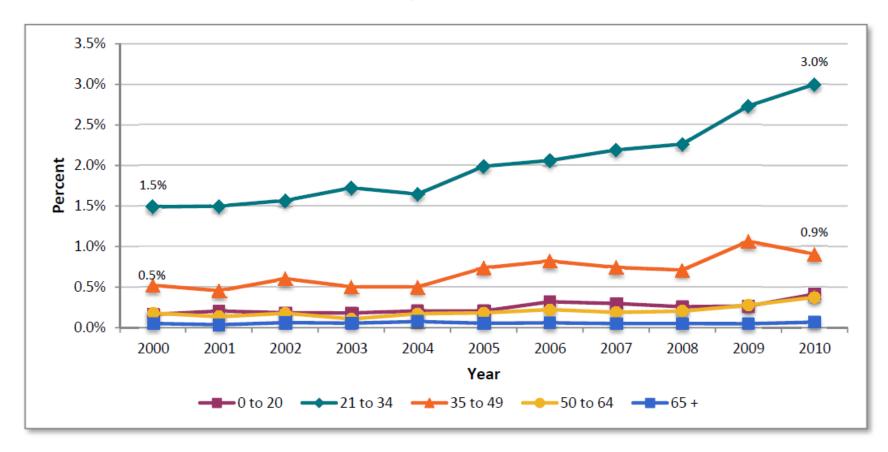
**Source:** National Hospital Ambulatory Medical Care Survey, NCHS. **Note:** Change from 2000 to 2010 is statistically significant at the 1% level.

Figure 2: Trends over Time in Various Components of Dental Emergency Department Use for Dental Services in the United States, 2000 to 2010 (Indexed to 100 in Year 2000)



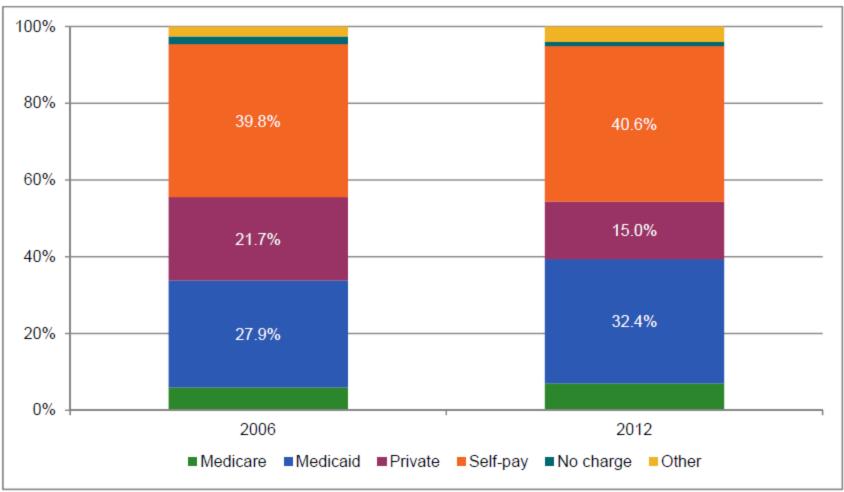
Sources: National Hospital Ambulatory Medical Care Survey, NCHS; Medical Expenditure Panel Survey, AHRQ; Census Bureau.

Figure 3: Dental Emergency Department Visits as a Percent of Total Dental Visits by Age in the United States, 2000 to 2010



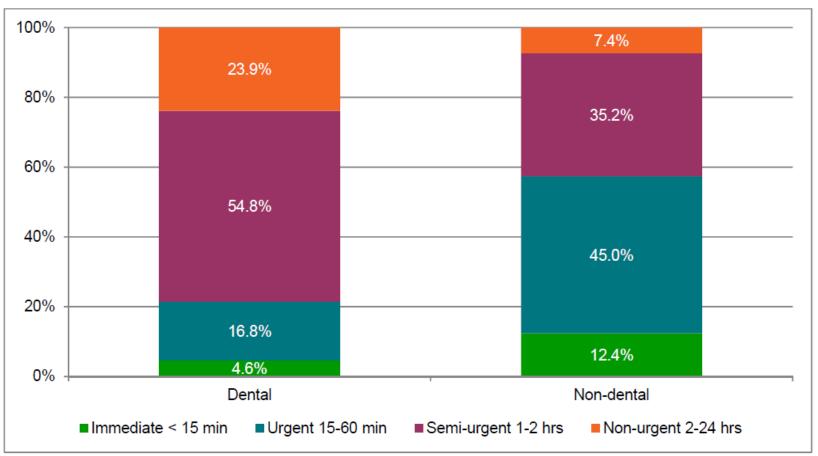
Sources: National Hospital Ambulatory Medical Care Survey, NCHS; Medical Expenditure Panel Survey, AHRQ.

Figure 5: Dental Emergency Department Visits by Primary Payer, Adults 21 to 64 Years Old



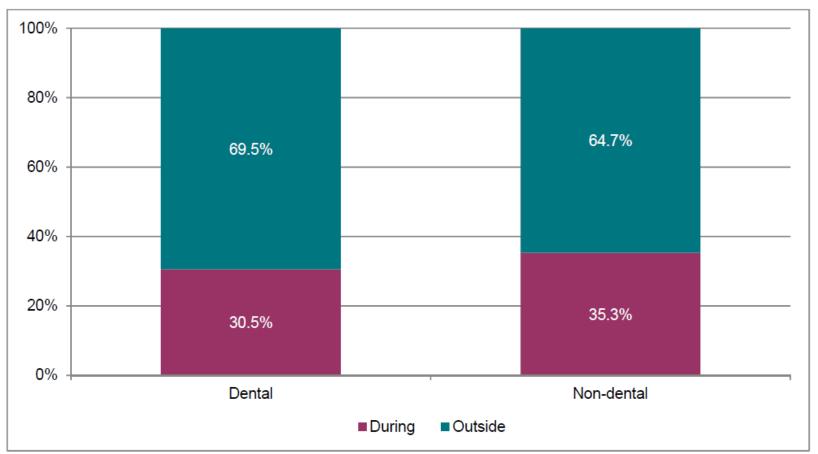
**Source:** ADA Health Policy Analysis of 2006 and 2012 Nationwide Emergency Department Sample and Centers for Medicare and Medicaid Services data.

Figure 1: Percentage of Emergency Department Visits by Triage Status



**Source:** 2009 and 2010 NHAMCS. **Note:** Differences in triage status by "Dental" and "Non-dental" are significant at the 1 percent level.

Figure 3: Percentage of Emergency Department Visits During and Outside of Normal Business Hours



**Source**: 2009 and 2010 NHAMCS. **Note**: Measured differences between the "Dental" and "Non-dental" emergency department visits categories are statistically significant at the 5 percent level.

# ED Care for Dental Complaints is Palliative but Costly

#### Palliative

- Lack of training
- Scarce and shifting resources
- Lack of feedback from dental providers
- Tension between obligation to treat pain and reluctance to contribute to epidemic of opioid abuse

#### Costly

- Median charge for a dental-related ED visit in 2014 in Florida was \$832.00 (mean \$1430.35)
- \$2.1 billion to the US healthcare system

### Feedback from ED Patients with Dental Complaints

- Decision to Seek ED
   Care
  - Pain is an emergency
  - -24/7
  - Assumption that definitive care is available



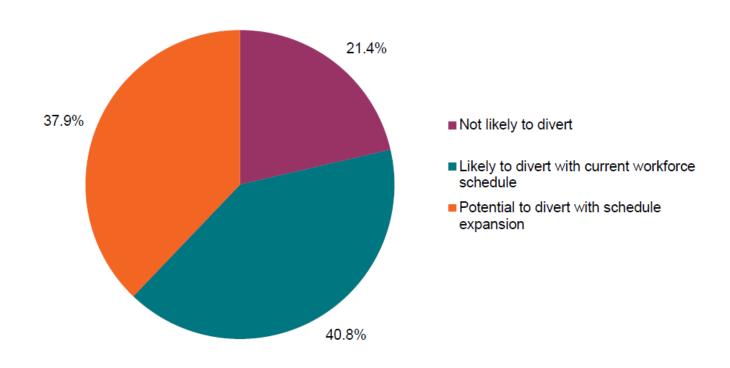
### Feedback from ED Patients with Dental Complaints

- Barriers to Office-Based Dental Care
  - Cost
  - Refusal to accept payment plan or cash
  - Inflexible hours
  - Lack of transportation
  - Insufficient availability or knowledge of other resources
  - The healthcare and dental care system can be intimidating and difficult to navigate



# ED Patients Who Might Be Diverted to Office-Based Dental Care

Figure 4: Dental Emergency Department Visits by Diversion Status



Source: 2009 and 2010 NHAMCS.

#### **Potential Solutions**

- Expanded access to dental care: Immediate
  - Flexible payment plans
  - Expanded hours of availability
  - Hospital-based urgent dental clinic
- Expanded access to dental care: Intermediate
  - Expanded Medicaid dental benefits
  - Increased dental workforce accepting Medicaid
  - Stable, well-publicized community-based clinics
- Longer-term Solution
  - Educational efforts

#### Summary

- ED visits for dental conditions are increasing
- ED dental care is palliative but costly
- Patients' reasons for choosing the ED for dental care are rational and based on resources available to them
- Diversion programs are unlikely to be successful unless patients' reasons for seeking ED care are considered

#### References

- Fingar KR et al, Health Affairs 2015; 34: 1349
- Sun BC et al, Am J Public Health 2015; 105: 947
- Wall T, et al, Health Policy Institute Research Brief.
   American Dental Association. April 2015
- Wall T, et al, Health Policy Institute Research Brief. American Dental Association. August 2014
- Morganti KG, et al, The Evolving Role of Emergency Departments in the United States. Rand Corporation, 2013

# Emergency Department Referral Progress and Programs

Oral Health Florida Annual Meeting
Friday, August 20
Dr. Jolene Paramore
Panama City, FL
Florida Dental Association 2<sup>nd</sup> Vice President

# EMERGENCY DEPARTMENT REFERRAL SOLUTIONS

- \* Knowing the numbers and significance of dental patients in the Emergency Department (ED).....
- \* What solutions have been developed?
- \* Where are the ED referral programs happening?
- \* What is their effect on the problem?
- \* How can we collaborate to address the problem?
- \* How can you implement an ED referral program in your community?

#### THE MISSION:

\*Address and reduce the increasing number of ED visits for dental pain.

\*Develop referral resources for EDs to use for dental patient care in facilities with capacity.

### Emergency Department Referral Models

\*The American Dental
Association has identified 5
models used to connect
patients who present at an ED
with definitive dental care and
preferably with a dental home.

## Emergency Department Referral Models

- \*1. Pay It Forward Model
- \*2. Specialty Model
- \*3. Private Practice Model
- \*4. Academic Model
- \*5. Retainer Model

#### PAY IT FORWARD MODEL

- ED refers the patient to the anchor organization that coordinates the care at a dental facility.
- \* The "pay it forward" is the uninsured and Medicaid ineligible patient performs community service in exchange for dental care received.
- \* Begins a tradition of volunteerism and affects the way patients feel about themselves and their ability to impact other people, often for the first time in their lives.

# PAY IT FORWARD MODEL Example Calhoun County Dentists' Partnership Calhoun County, MI

- Dentists, community leaders, low-income residents, local hospital ED and an FQHC partnered in 2006 to create a unique ED referral program that decreased ED visits for dental pain by 72% from 2006 to 2011.
- \* Staff determine Medicaid eligibility, assist with enrollment and refer patients who qualify to a local FQHC.
- \* Uninsured who qualify (200% poverty level) have a 2hr visit with an RDH, are scheduled in a private dental office, then volunteer 4 hours for every \$100 in dental care received. They are scheduled immediately with the dentist if they require emergent care.

# PAY IT FORWARD MODEL Example Calhoun County Dentists' Partnership EFFECTS: from Health Affairs, August, 2013

- Patients kept appointments: only 2.5% missed their appointments compared with 20% for commercially insured patients, the researchers found.
- Between 2007 and 2012, ED visits for dental pain declined 72%, from 26.5 visits per 1000 to 7.5 visits per 100 ED visits, which is statistically significant (P < .0001).
- Data shows patients were less likely to return to emergency rooms for dental care. The number of dental visits per patient did not change much in that time, so patients were getting care just as often but were more likely to get it in the right place.
- The patients participating has grown substantially from 228 in 2007 to 771 in 2012.
- The program has cost \$150,000 a year (\$900,000 during its 6 years), which included a full-time administrator and paying the hygienists. Local grants and private gifts paid these expenses. The dentists volunteered their time, staff and supplies.
- The care donated by dentists during this time is valued at \$943,053 and the value of the community service work donated by the volunteers (computed at \$25 per \$100 of dental charges) is worth \$1,443,650.

#### SPECIALTY MODEL

\* An alliance between a community health center (CHC), a hospital-based specialty dental clinic and a patient navigation organization.

\* Data is available to evaluate if there is a savings to the hospital from the collaboration in this model.

## SPECIALTY MODEL example

### Swedish Medical Center's Community Specialty Clinic Seattle, WA

- \*ED physicians triage dental patients, hospital-based GPR residents provide emergency dental care to ED patients.
- \*The patient navigation organization receives and screens the referrals, schedules the appointments, arranges transportation and translators.
- \*Non-emergency dental patients get a "Golden Ticket" to the collaborating CHC which guarantees them an appointment at the CHC the next morning.
  - \*CHC patients requiring advanced oral surgery services are referred to the Community Specialty Clinic for care then return to their dental home, the CHC.

# SPECIALTY MODEL example Swedish Medical Center's Community Specialty Clinic Seattle, WA

#### \* EFFECTS:

\* This model serves patients at 200% or below the federal poverty level for general and advanced oral surgical care.

\* In 2013, over \$1.6 million of care was provided and over 5,000 teeth were extracted, 40% of them surgical extractions.

#### PRIVATE PRACTICE MODEL

\*A state or local specific model with variability based on the resources of the community and the practitioner/ED design.

\* Data is often difficult to obtain.

### PRIVATE PRACTICE MODEL examples

- \* In 2013, Milwaukee dentists entered the Milwaukee Health Care Partnership to coordinate dental care for ED referrals via an online appointment system which resulted in over 500 ED patients receiving care in dental offices.
- In rural Montana, Grounds for Change provides voucher for care in private practices.
- \* In numerous communities, dentists who have hospital privileges treat ED referrals in their dental offices, as most hospitals do not have dental operatories or necessary instruments and supplies.

#### ACADEMIC MODEL

- \* ED and dental school or hospital-based dental residency program collaborations are common.
- Oral surgery departments often coordinate them and they are school-specific.
- \* Serves dual purpose of providing care for ED patients and educational experience for the students/residents.
- \* Inspires dentists to continue community service.

# ACADEMIC MODEL examples

- \* University of Missouri-Kansas City and Truman Medical Center began an ED referral program which has grown to include 3 other dental facilities (1 CHC and 2 FQHC's) to provide care. An online referral system aids in achieving their 24-48 hour ED to dental clinic goal.
- Nova Southeastern University's oral surgery residents have received dental emergency patients from 3 Broward County hospitals since 2002. This is a significant benefit to the uninsured and elderly living in the Ft. Lauderdale area.
- \* VCU published a 66% reduction in repeat ED dental visits after implementing an ED referral program to their oral surgery program.

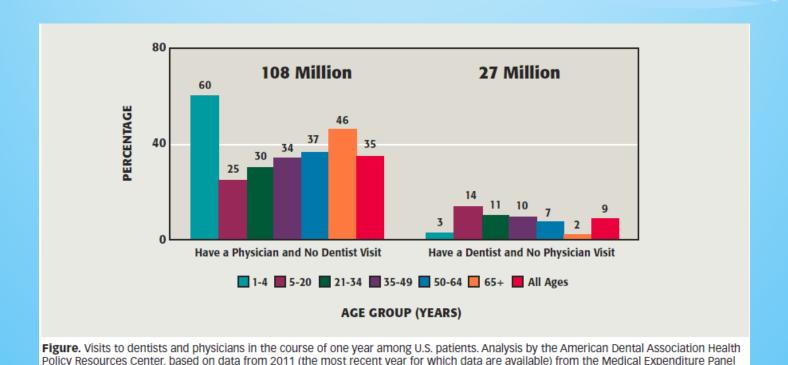
#### RETAINER MODEL

- \*The Hospital contracts with oral surgeons in private practice to provide ED coverage.
- \*A monthly retainer or stipend is paid to the provider.

### Collaborating to Provide Care in FL

- \* Expand ER Referral Programs: FDA, FHA, FACHC
- Increase Medical Dental Collaboration: FDA,
   FMA,FCEP
- \* Community Dental Health Coordinator starting at Mattia College in Miami this fall. CDHC's navigate patient into existing, but underutilized care and will play a key role in ED referral programs.

## Future of Dentistry – Intercollaborative Care



Survey of the Agency for Healthcare Research and Quality.

# Providing Care to ED patients in Florida – Brevard County Program

- Emergency Room Referral Programs
- \* Brevard County Dental Society and Holmes Regional Medical Center collaborated to reduce dental ER visits and received a national award in the process.
- \* From June 2011 June 2014, the ER Referral Dental Program provided:
- \* 1008 dental examinations
- \* 920 dental x-rays
- \* 889 extractions
- \* other services
- \* Total cost of care provided----- \$248,315
- \* Actual savings to the hospital----unknown but if the average visit is \$750, it would be nearly \$750,000 assuming no "repeat performers".

# Providing Care to ED patients in Florida -Pinellas County Program

- \* Pinellas County Dental Association formed a coalition of public and private organizations and dentists provide care at the local dental assisting college, homeless shelters with dental clinics, Pinellas County Health Department clinics, 2 FQHC's, and UFCD dental residency program in Seminole.
- \* A county-wide ED referral program gives EMS personnel, first responders, and ED staff the information needed to refer patients to a dental home.

# Providing Care to ED patients in FL – Jacksonville pediatric program

- \* Pediatric dentists in Jacksonville have had a program for over 30 years to treat inpatient dental emergencies as well as outpatient pediatric dental patients referred by the Wolfson Hospital Pediatric ED.
- \* Pediatric emergency patients receive care in the private practices of 8 participating pediatric dentists and are offered a dental home.

# Providing Care to the Underserved Populations

#### **Dental Lifeline Network**

- \* Connects volunteer dentists and laboratories with special needs and medically compromised patients.
- \* The FDA Foundation matches volunteers, laboratories and patients and seek grants for lab fees not covered.
- \* \$5,000,000 of donated care provided since the program's inception in 1997.

# Providing Care to the Underserved Populations

- \* FDA Foundation oversees and provides grants for
   55 Project Dentists Care clinics across FL.
- \* 33 of the clinics reported data in FY 2013-14:
- \* Pro bono dental care was provided to over 5127 children and 20,915 adults by 2621 dentists, 653 hygienists, and 1271 dental assistants who volunteered over 23,231 hours.
- \*\$9,857,817 value of care provided

# Providing Care to the Underserved Populations

- \* Mission of Mercy (MOM) March, 2014 in Tampa
- \* Over 2 days, 1660 patients were treated with over 8,000 procedures valued at \$1,141,648.
- 294 dentists, 70 hygienists, 280 dental assistants,
  19 laboratory technicians volunteered.
- \* The next MOM will be held April 23-24, 2016 in Jacksonville at the Prime Osborn Convention Center.

# Impact of a MOM on ED visits??

- \* ED referral programs have developed from the "Morning After MOM" effect—KY and VA.
- \* According to the US HHS HCRQ data, 4 Jacksonville Hospital EDs had 6,793 ED visits for dental diagnoses with a total cost of \$9,468,522.
- \* The FDA is compiling referral information on those dental facilities with capacity to give JAXMOM patients and the local ED's.
- \* Through collaboration and appropriate data collection, the effect of a MOM on local ED utilization for dental problems will be evaluated.

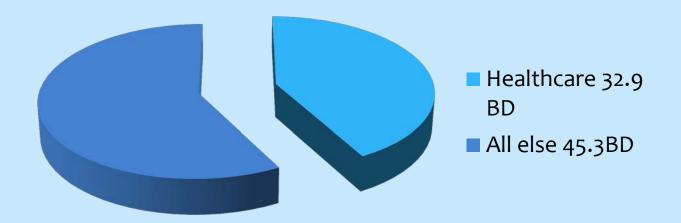
#### References

- Visits to US Emergency Departments by 20-29 year olds with toothache during 2011-2010, JADA, May, 2015.
- Eliminating Medicaid Adult Dental Care in California Led to Increased Dental Emergency Visits and Associated Costs, Health Affairs, May 2015
- \* Emergency Department Use for Dental Conditions Continues to Increase, HPI, April 2015
- Reducing the Burden of Dental Patients on the Busy Hospital Emergency Department, J Oral Maxillofac Surg, 2013

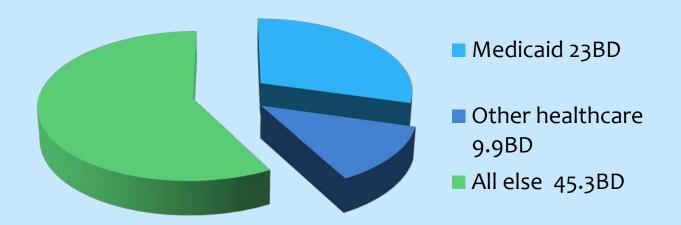
# Politician-Legislator

Emergency Medicine Physician

#### State of Florida Budget 78.2BD



#### State of Florida Budget 78.2BD



### Florida Medicaid

- \* 60/40 federal/state split
- \* 3 ¾ million covered lives
- \* \$6,573 per insured per year
- \* 8.5% spending growth per year
- \* Other budget items average 3.3% growth per year

# GDP spending on healthcare

- \* United States
- \* 17%

- \* 36 other comparable countries
- \* 12%

# Florida Legislation

- \* SPP LIP funding debacle
- \* Medicaid expansion rejection
  - \* 1. An entitlement to a new population
  - \* 2. Additional funding is borrowed dollars
  - \* 3. Waste

#### Healthcare

- Heavily regulated
- \* Very little free market influence
- \* ERs are aggressively marketed by hospitals
- \* EMTALA '86 requires all to be seen
- \* A mentality that a pill will fix all
- People are doing exactly as they are incentivized to do

# Moving Forward

- \* Technology
- \* Transparency
- \* Competition
- \* Consumerism