The Importance of Big Data for improving oral health of vulnerable populations through increased involvement of the patient care, research, and payer community
Objectives:

- To understand the current definitions and characteristics of “Big Data” in the biomedical and health research domains
- To learn how Big Data is intended to be used for policy and program management within the Medicaid oral health system
- To better understand the opportunities and challenges in using existing dental data sets for research, and the need for diagnostic codes
- To become aware of mechanisms for research and program support from the NIDCR and CMS that might be applicable for Big Data research.
Who is using Big Data for healthcare?

Northrop Grumman, UMBC team to study health data for populations
What is Big Data?

Any attribute of a data set that challenges a system’s capabilities or business need.

Examples...

► Data too large to send via email
► Data too large or too diverse if structure to analyze ...
Within Health Care

5 of the top purposes of clinical intelligence:

1. Drive quality improvement programs
2. Identify individual care gaps
3. Stratify the population by level of risk
4. Measure long-term outcomes
5. Assess population health needs

17% Have no BI tools
50% Are using a single BI vendor or product
33% Multiple BI products or vendors

164,414 LIVES POTENTIALLY SAVED

A 2013 Healthgrades Hospital Clinical Excellence report found that, from 2009 through 2011, if all other hospitals performed at the level of Distinguished Hospitals for Clinical Excellence: 164,414 lives could have potentially been saved.

Our leaders on the journey...

- T. Bruce Dye Dental, Epidemiology Officer -- NIDCR

- Lynn D. Mouden, Chief Dental Officer – CMS
  CMS Data Challenges: Uses, Requirements, and Opportunities.

- Peter Damiano, Director, Public Policy Center – U. Iowa
  Using Big Data as Part of a Mixed Methods Approach to Evaluating Medicaid.

- Mary E. Foley Executive Officer- Medicaid, Medicare, CHIP Services Dental Association
  State need for Big Data for policy and administrative purposes.