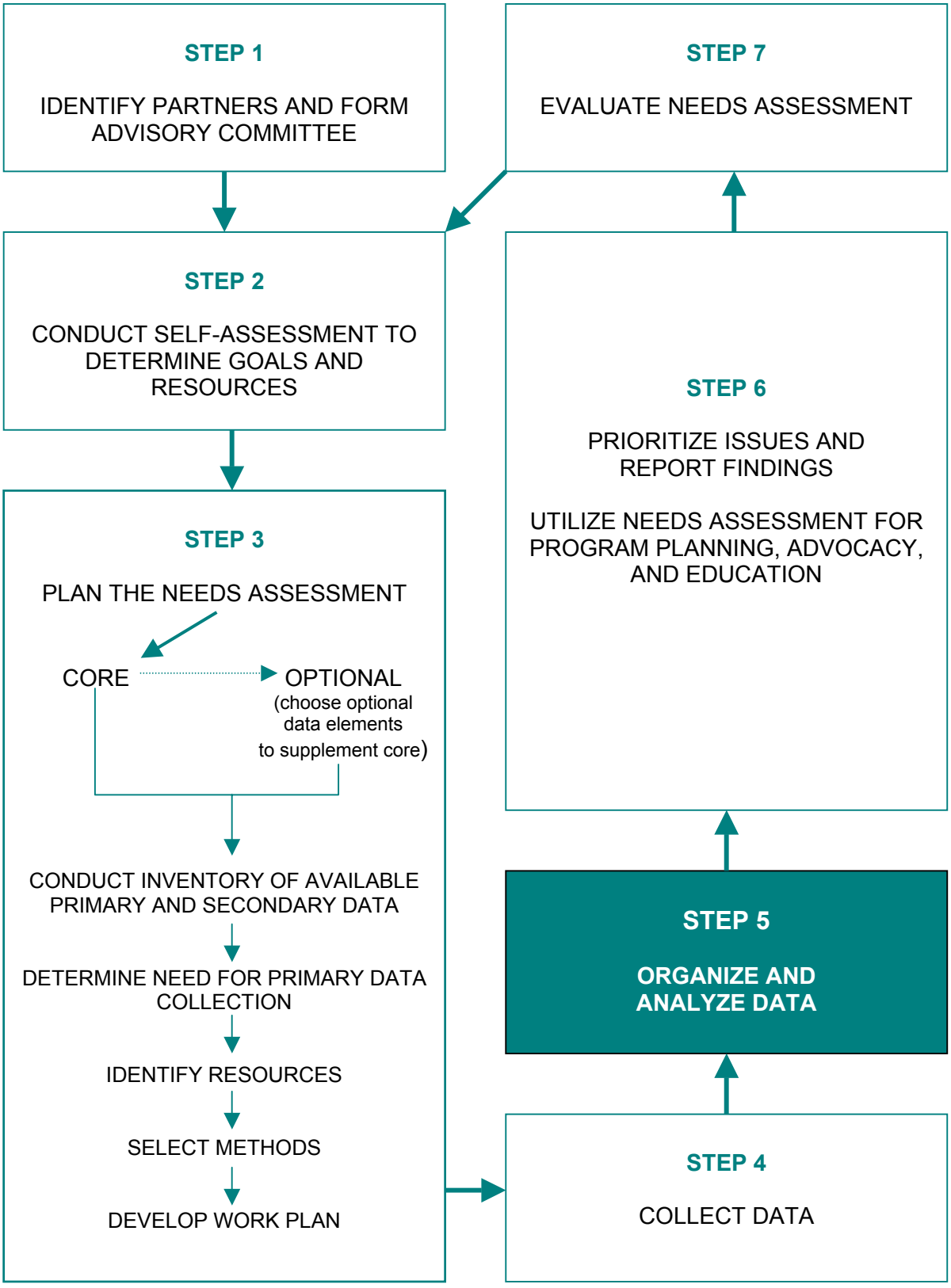
MODEL ORAL HEALTH NEEDS ASSESSMENT



STEP 5: ORGANIZE AND ANALYZE DATA

STEP 5 is divided into two major components: descriptive statistical techniques and data summary pages. Many data items, such as demographic information and the description of public resources, don't require statistical manipulation. Other information, however, requires reporting in a summary manner. This manual addresses only some of the most common statistical manipulations for reporting this information. It is not intended to replace a statistician.

The bulk of STEP 5 provides **data summary sheets** to help you organize the data you collect. The summary sheets are useful because some types of information listed as single items on *Worksheet 3* may translate into several data items when you implement your needs assessment plan. Also, several individual data items relate to each other and should be considered together to provide a more complete description. The data summary sheets are organized by topics, listed in Table 6 on page 89, which correspond to the four groupings in *Worksheet 3* (*i.e.,* **demographics, oral health status, risk reduction, systems development/access**). Opposite each summary sheet you will find the corresponding definitions of terms. All of these summary sheets are examples of how data collected in the needs assessment process can be organized. Many summary sheets have several additional rows. This allows you to record several subgroups of the population, in addition to the total.

The summary sheets presented in this section, however, are not the only way the data can be organized. If you have a better way of summarizing the data, then use it. You might even consider sharing it with other states or communities so that all can benefit. Any of the summary sheets may be photocopied for use in subgroups of the population (*e.g.,* counties).

Please consider your initial needs assessment recorded on these data summary pages as a baseline. This information should be reviewed periodically to determine trends.

STEP 5 provides data summary sheets for organizing your data.

This part of STEP 5 discusses some of the basic items to be considered in the collection, management and statistical interpretation of data. A person with expertise in research design and statistics should be consulted for more sophisticated methods of analysis.

Information collected in a needs assessment generally is placed into one of two categories -- qualitative and quantitative. Qualitative information is gained from open-ended questions. It allows interviewees to express themselves without being confined to a series of fixed responses. This type of information typically is collected through questionnaires, telephone surveys, personal interviews or public meetings. Qualitative results complement quantitative data. Because of the wide variation and techniques used in the interpretation of this information, those who elicit qualitative information are encouraged to request assistance from a person who has experience in its interpretation.

Quantitative findings answer questions such as: how many? how much? to what extent? In their simplest form, quantitative findings count the number of people who selected a specific answer to a question. There are three major types of quantitative measurements:

nominal measurements - Define distinct groups rather than amounts (*e.g.,* yes/no; specific race or religious affiliation). Nominal measurements are sometimes called categorical.

ordinal measurements - Place groups in a rank order with no specification as to **how much** difference exists between groups (*e.g.,* top twenty songs of the week; excel-

lent, good, fair, poor). Frequently, some qualitative information can be collected in a quantitative format by the use of rating scales (*e.g.,* Likert scale).

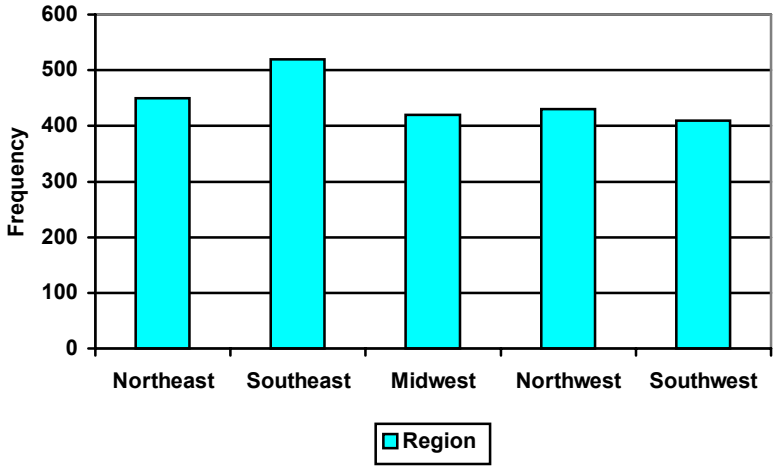
continuous measurements - Indicate an equal quantitative space between responses. Continuous data can be further divided into either interval or ratio. Interval scales have no absolute zero point (*e.g.,* temperature); whereas ratio scales do (*e.g.,* age).

Nominal variables are displayed in either percentage tables, bar graphs or pie charts. In most instances, such tables and charts are the preferred method for reporting ordinal measurements as well. A variable is reported by the number of times it occurs. For instance, upon completion of a telephone survey it is possible to report the number of respondents from various regions of the country. Examples of different ways of displaying the findings follow.

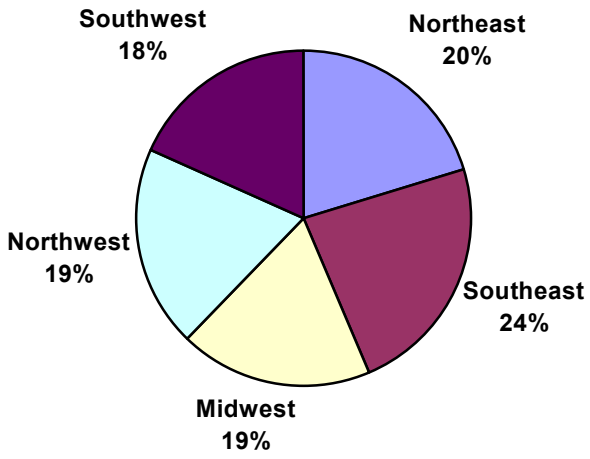
TABLE
TELEPHONE RESPONDENTS BY REGION (N = 2230)

Geographic Region	Frequency	Percentage
Northeast	450	20.2
Southeast	520	23.3
Midwest	420	18.8
Northwest	430	19.3
Southwest	410	18.4
Total	**2230**	**100.0**

BAR CHART
TELEPHONE RESPONDENTS BY REGION (N = 2230)



PIE CHART
TELEPHONE RESPONDENTS BY REGION (N = 2230)



Most often, continuous variables are represented by summary statistics, called measures of central tendency and spread. The most frequently used statistics are:

mean - The mathematical average score for all responses.

median - The middle score for all responses. This measure may be used when extreme values have influenced the mean or when the data do not conform to the traditional bell-shaped curve for its distribution. Frequently the median, rather than the mean, is used when analyzing ordinal data.

mode - The most frequent response.

range - The greatest response minus the least response, or the highest and lowest values.

standard deviation - How much the scores are spread out around the mean. The larger the standard deviation, the more spread out are the scores.

The survey instrument should be tested prior to collecting data to determine the validity and reliability and to make certain the questions address relevant concerns.

Prior to final statistical applications, a protocol should be determined for handling such concerns as: missing data (*e.g.,* specific items left unanswered); improper or miscoded responses (*e.g.,* entering a category that is not one of the choices); responses that are in an "other" category; outliers (*e.g.,* in a sample of 100 sixth grade children two are recorded as 16 years old); and inconsistent answers (*e.g.,* comparing answers to related questions that should produce similar results). Simple frequency tables or graphs for each of the variables should quickly indicate where problems exist. Decisions about the atypical responses must be resolved before further analyses are performed. Good preparation and pilot testing of the design at the outset, however, should minimize these problems.

Another issue that should be addressed before beginning the analysis is whether the information will be compared to a standard at the local, state or national level. If so, an analogous methodology should be used. If a different methodology is used, it must be clearly explained.

Since most of the information collected is from a subset of the total population, inferences should be limited to appropriate groups. For instance, a random sample from northern Arizona can be generalized only to individuals from northern Arizona. Moreover, findings from a convenience sample should be limited to that specific population. Statistical computing packages will "crunch" the data, but they assume that equal probability of selection was used in the data collection process.

While several good statistical packages are available, serious consideration should be given to using the Centers for Disease Control and Prevention's *Epi Info,* a user-friendly program available at state health departments or through CDC's website (www.cdc.gov). Some modifications in the program permit direct data entry from oral health field surveys.

Make sure that the analysis and conclusions are logical. A report that concludes that it is better to have an edentulous maternity population because there is no need for restorative dental services is absurd. The conclusions must be based on proper logic and sound scientific principles.

S. J. Haines, in an article in *Neurosurgery*[1], succinctly stated that there are six important considerations when either reading or writing scientific articles. While the following were written primarily from the perspective of someone reviewing the literature, they are nonetheless as critical when interpreting and reporting your findings:

1) always state the statistical test used to obtain the reported p-value; **2)** beware of multiple analyses (the reported significance level is probably much too small); **3)** significance depends on sample size; **4)** failure to disprove the null hypothesis does not prove the null hypothesis; **5)** there are many assumptions underlying statistical techniques that may have been ignored; and **6)** different kinds of data require different types of analysis. While statistical analysis is a powerful adjunct for any interpretation of the collected data, make certain that the sampling frame and the statistical test chosen is appropriate for your population.

The following free, on-line statistics textbooks may be useful for assisting in displaying and analyzing data:

Lane DM. HyperStat Online Textbook, 1993-2002.
http://davidmlane.com/hyperstat/.

Goodman A. Introduction to Data Analysis and Collection, 1999.
http://www.deakin.edu.au/%7Eagoodman/sci101/index.html

Swinscow TDV, Campbell MJ. Statistics at Square One, Ninth Edition, 1997.
http://bmj.com/statsbk/

Dallal, GE. The Little Handbook of Statistical Practice, 2001.
http://www.tufts.edu/%7Egdallal/LHSP.HTM

The remainder of this step provides sample data summary pages to assist you in organizing the information you collect.

[1] Haines SJ. Six statistical suggestions for surgeons. Neurosurgery 1981;9:414-8.

TABLE 6: INDEX OF DATA SUMMARY SHEETS

DEMOGRAPHICS - Definitions

Year - The year for which this data summary sheet was completed or collected

Population -

***total* -** The total population within the jurisdiction
<6 years old - Number of children from birth through 5 years of age
<18 years old - Number of children from birth through 17 years of age
***females, child-bearing age* -** Females from 15 through 44 years of age

Below _% poverty level

Use the percent appropriate for your programmatic needs (*e.g.,* often 185 or 200% is used to designate the "near poor")
families - Number of families below the established poverty level
persons - Number of persons who are below the established poverty level
<5 years old - Number of children from birth through 4 years of age in families below the established poverty level
5-17 years old - Number of children 5 through 17 years of age in families that are below the established poverty level
<18 years old - Number of children from birth through 17 years of age in families below the established poverty level

Family Composition

families - Number of families within the jurisdiction
families with own children <18 years old Number of families within the jurisdiction with their own children under 18 years of age
female householder, no husband and children <18 years old - Number of families within the jurisdiction with only a female parent in residence and children under 18 years of age

Employment Status

unemployment - Number of individuals of employable age who are not currently working for income
employed females with children <6 years old - Female parent with at least one child from birth through 5 years of age and who works outside the home (potential proxy for learning about accessibility problems relating to regular dental care)

School Enrollment

schoolchildren (K - 12) - All school children (public and private) enrolled in schools within the jurisdiction
schoolchildren receiving free or reduced (payment) lunch program - Children within the jurisdiction eligible for this federal program
pre-primary school enrollment - All children 3 years of age and older currently enrolled in a pre-primary school
Head Start enrollment - Number of children within the jurisdiction currently enrolled in either a home-based or site-based federally funded program
other day care facilities - Number of children within the jurisdiction currently enrolled in a licensed day care facility

Check with either the Maternal and Child Health program or the health planning section of the state health department to determine whether this information already is being used in current health planning documents. If not, most of this information can be found in census publications at the library or at www.census.gov.

Please photocopy table if you desire to maintain information on subgroups (*e.g.*, race, gender).

DATA SUMMARY 1
DEMOGRAPHICS

Year _____

VARIABLE	NUMBER	%	DATA SOURCE
Population			
total			
< 6 years old			
< 18 years old			
females, child-bearing age			
Below __% Poverty Level			
families			
persons			
< 5 years old			
5 - 17 years old			
< 18 years old			
Family Composition			
families			
families with own children <18 years old			
female householder, no husband and children < 18			
Employment Status			
unemployment			
employed females with children < 6 years old			
School Enrollment			
schoolchildren (K-12)			
schoolchildren receiving free or reduced lunch program			
pre-primary enrollment			
Head Start enrollment			
other day care facilities			

ORAL HEALTH STATUS:
Dental Caries - Definitions

Data Source - The original source of this information (*e.g.,* Indianapolis School Health Fair)

Sampling Method - Type of sample selection (*e.g.,* convenience sample, probability sample)

Year Data Collected - The year(s) the sample was collected

Age/Grade - The specific ages or grades involved in the sample. If the information already is either age or grade specific, you may want to retain the specific age (grades) as well as a total figure

Number of People - Number of people in the sample

Caries category chosen - How the caries information has been aggregated (*e.g.,* caries experience, untreated decay, teeth or surfaces with caries experience [DMFT or dmft]. You may want to record this information in more than one category in order to choose the most appropriate category for the selected audience.

Caries Experience – Number (percent) of children with any caries experience
Untreated Decay – Number (percent of children with untreated decay
Mean DMFT or dmft – The average of all scores for the category chosen

DATA SUMMARY 2A
ORAL HEALTH STATUS: *Dental Caries*

DATA SOURCE	SAMPLING METHOD	YEAR DATA COLLECTED	AGE/ GRADE	NUMBER OF PEOPLE	CARIES CATEGORY CHOSEN _____ (*e.g.*, caries experience, untreated decay, etc.)		
					Caries Experience	Untreated Decay	Mean DMFT or dmft
Example: Indianapolis School Health Fair	Conven-ience	1992	G 3	500	200 (40%)	100 (20%)	1.1 DMFT

ORAL HEALTH STATUS:
Periodontal Diseases - Definitions

Data Source - The original source of this information (*e.g.,* the Fulton County Health Department)

Sampling Method - Type of sample selection (*e.g.,* convenience sample, probability sample)

Year Data Collected - The year(s) for which the data were collected

Age/Grade - The specific ages or grades involved in the sample. If the information already is either age or grade specific, you may want to retain the specific age (grades) as well as a total figure.

Number of People - Number of people in the sample

Disease Category Chosen - How the periodontal disease information has been aggregated (*e.g.,* standard gingivitis or periodontal indices; whether any periodontal diseases exist within the mouth). This information may be recorded in more than one category in order to choose the most appropriate category for the selected audience.

(If this information has been collected as present or absent, make the appropriate change in the title of the column.)

Range - The low and high scores that were recorded
Mean - The average of all the scores for the category chosen
Median - The middle number for all of the scores (*i.e.,* the 50th percentile)
Mode - The most frequently recorded number for the category chosen

DATA SUMMARY 2B
ORAL HEALTH STATUS: *Periodontal Diseases*

DATA SOURCE	SAMPLING METHOD	YEAR DATA COLLECTED	AGE/ GRADE	NUMBER OF PEOPLE	DISEASE CATEGORY CHOSEN _____ (*e.g.,* GINGIVITIS, PERIODONTITIS)			
					Range	Mean	Median	Mode
Example: Fulton County Health Department	Conven-ience	1991	18 - 44	100 con-secutive	0 – 4 CPITN		2	1

ORAL HEALTH STATUS:
Oral Injuries – Definitions

Data Source - The original source of this information (*e.g.,* statewide survey)

Sampling Method - Type of sample selection (*e.g.,* convenience sample, probability sample)

Year Data Collected - The year(s) for which the data were collected

Age/Grade - The specific ages or grades involved in the sample. If the information already is either age or grade specific, you may want to retain the specific age (grades) as well as a total figure

Number of People - Number of people who participated in the sample

Number of Children With Oral Injuries - How the information has been documented (*e.g.,* whether any type of dental injury exists within the mouth; number of teeth with dental injury). Since the prevalence of dental injuries may be quite small for most populations, the information may be recorded per number of children examined (*e.g.,* 4.1 children per 1000 had some dental injury).

DATA SUMMARY 2C
ORAL HEALTH STATUS: *Oral Injuries*

DATA SOURCE	SAMPLING METHOD	YEAR DATA COLLECTED	AGE/ GRADE	NUMBER OF PEOPLE	NUMBER OF CHILDREN WITH ORAL INJURIES
Example: Statewide survey	stratified probability	1990	12-14, G 6-8	1000	27

ORAL HEALTH STATUS:
Enamel Fluorosis - Definitions

Data Source - The original source of this information (*e.g.,* statewide survey)

Method Used - Type of sample selection (*e.g.,* convenience sample, stratified sample)

Year Data Collected - The year(s) for which the data were collected

Age/Grade - The specific ages or grades involved in the sample. If the information already is either age or grade specific, you may want to retain the specific age (grades) as well as a total figure

Number of People - Number of people who participated in the sample

Percentage of people with different levels of fluorosis -

none - No signs of dental fluorosis
questionable - Included in this category are teeth showing no more than 1-2 mm. of white opacity at the cusp tips of posterior teeth or incisal edges of anterior teeth
mild - The white opaque areas involve less than 50 percent of the total surface area
moderate - At least 50 percent of the total surface area is affected
severe - The entire surface is usually affected. The diagnostic sign required for this classification is discrete or confluent pitting of the enamel

If another dental fluorosis index has been selected to record this information, change the headings of the categories accordingly.

DATA SUMMARY 2D
ORAL HEALTH STATUS: *Enamel Fluorosis*

DATA SOURCE	METHOD USED	YEAR DATA COLLECTED	AGE/ GRADE	NUMBER OF PEOPLE	PERCENTAGE OF PEOPLE WITH DIFFERENT LEVELS OF FLUOROSIS				
					None	Quest-ionable	Mild	Mod-erate	Severe
Example: Statewide survey	stratified random	1991	6-8, G 1-3	1000	65	25	5	4	1

COMMUNITY-BASED PREVENTION PROGRAMS: *Fluorides* - Definitions

Year - The year for which the data summary sheet was completed or data were collected

Community water systems - Any water supply with 15 or more year-round connections or serving more than 25 people

Community water systems fluoridating - Any community water supply with a natural or adjusted concentration of at least 0.7 parts per million (ppm)[2] fluoride

Population served by optimal fluoridation - The total population served by either natural or adjusted concentrations of at least 0.7 parts per million fluoride in the water supply

Population served by adjusted fluoridation - The population served by adjusted concentrations of at least 0.7 parts per million fluoride in the water supply

Population served by natural fluoridation - The population served by natural concentrations of at least 0.7 parts per million fluoride in the water supply

Compliance with ASTDD/CDC guidelines for monitoring/surveillance - Are more than 80 percent of the monitoring samples from all community water supplies that adjust fluoride within 0.1 ppm below optimum level of fluoride or 0.5 ppm above the optimum level of fluoride?

Children receiving fluoride varnish applications - Number of children who receive a fluoride varnish application through public health programs at least one time per year.

Children receiving a school-based, fluoride mouthrinse - Number of children actively participating in a weekly school-based, fluoride mouthrinse program

Children not on community water fluoridation who receive professionally-applied topical fluorides - For those children who don't have optimum fluoride from a community water source, what (estimated) percent are receiving a topical fluoride treatment at a dental office?

Home use of fluorides - Estimated percent of children who use products such as an over-the-counter fluoride mouthrinse or fluoride toothpaste

Supplemental fluoride prescriptions filled - The number of unduplicated fluoride prescriptions purchased at pharmacies throughout your jurisdiction

Y/N - Yes or No

Data Source - The original source of the information

[2] ppm is equivalent to milligrams per liter (mg/L)

DATA SUMMARY 3A
COMMUNITY-BASED PREVENTION PROGRAMS: *Fluorides*

Year _____

	Number	%	Y/N	Data Source
Community water systems				
Community water systems fluoridating				
Population served by optimal fluoridation				
Population served by adjusted fluoridation				
Population served by natural fluoridation				
Compliance with ASTDD/CDC guidelines for monitoring/ surveillance				
Children receiving fluoride varnish applications				
Children receiving a school based fluoride mouthrinse				
Children not on community water fluoridation who receive professionally applied topical fluorides				
Home use of fluorides				
Supplemental fluoride prescriptions filled				

Drugstore chains may be a useful source of data for fluoride supplement prescriptions.

COMMUNITY-BASED PREVENTION: *Educational Programs* - Definitions

Year - The year for which the data summary sheet was completed or data were collected

Schoolchildren, Total Served - The number of schoolchildren directly served by the educational program

Schools with an oral health educational program - The number of schools actively participating in an oral health educational program

Data Source - If not collected by the oral health program, provide the original source of this information (*e.g.,* Department of Education)

If more than one topic (*e.g.,* oral hygiene and fluoride) is discussed at any educational encounter, choose the one category that took the most time.

Various states and localities have different definitions concerning an oral health education program. Please be specific in your own definition and convey this to your audience.

DATA SUMMARY 3B
COMMUNITY-BASED PREVENTION: *Educational Programs*

Year _____

ITEM	UNDUPLICATED NUMBER RECEIVING EDUCATIONAL PROGRAM							DATA SOURCE
	Oral Hygiene	Diet and Nutrition	Tobacco	Sealants	Fluoride	Sports Mouth-guards	Other	
Preschool children, total served								
Elementary school								
Middle school								
High school								
School children, total served								
Schools with an oral health educa-tion program								
Other:								

COMMUNITY-BASED PREVENTION: *Sealant Programs* - Definitions

Year - The year for which the data summary sheet was completed or data were collected

School System - Name of school system

Grades - The grade levels targeted for the sealant program

 # Schools - Number of schools participating in the sealant program

Screened - Number of children who had a dental screening prior to dental sealant placement

Need Sealants - Of those **screened,** the number of children who would benefit by dental sealants. The program should have some sealant criteria already established (*e.g.,* child has previous caries experience, tooth morphology)

Children Sealed - Of those **screened**, the number of children receiving one or more sealants

 # Teeth Sealed - Number of teeth sealed during this time. If the program places sealants on other surfaces beyond the occlusal, this should be recorded as well

Dental sealants provided as part of other clinical services should be included in *DATA SUMMARY 4E: Clinical Services Provided* (page 119).

DATA SUMMARY 3C
COMMUNITY-BASED PREVENTION: *Sealant Programs*

Year _____

School System	Grades	# Schools	Screened	Need Sealants	# Children Sealed	# Teeth Sealed
TOTAL						

COMMUNITY-BASED PREVENTION: Required Mouthguard Use for Athletic Programs - Definitions

Year - The year for which the data summary sheet was completed for data were collected

Elementary/Middle School - Specify the grades included

High School - Specify the grades included

Other - Any other organization requiring mouthguards

Data Source - The original source of this information (e.g. state high school athletic association)

Percentages for each column refer to individuals, not schools.

Estimates for this summary table most likely will be collected by a written or telephone survey

DATA SUMMARY 3D
COMMUNITY-BASED PREVENTION
Required Mouthguard Use for Athletic Programs

Year _____

Is there a state (local) law or regulation concerning athletic mouthguards? ____ Yes ____ No

Is Yes, which groups or organizations are required to use athletic mouthguards?

_____

Who is your liaison within the state (local) high school athletic program?

NAME _____ TELEPHONE _____

The following table is an estimate of the percentage of individuals who wear a sports mouthguard in various sports activities.

SPORT	ELEMENTARY/ MIDDLE SCHOOL (%)	HIGH SCHOOL (%)	OTHER (Little League, etc.) (%)	DATA SOURCE
baseball				
basketball				
boxing				
fencing				
field hockey				
football				
ice hockey				
lacrosse				
soccer				
volleyball				
wrestling				
other:				

COMMUNITY-BASED PREVENTION: Tobacco Use – Definitions

Year - The year for which the data summary sheet was completed or data were collected

Form of Tobacco Used - Was the information collected about cigarette smoking, spit tobacco or other tobacco products?

Age/Grade - Age range or grade levels of the participants

% Gender - Percentage of the participants, by gender

% Race - Percentage of the participants, by race

% Usage - What percentage of this population used this form of tobacco during the past month? past year? ever?

Data Source - The original source of the information

DATA SUMMARY 3E
COMMUNITY BASED PREVENTION: Tobacco Use

Year _____

FORM OF TOBACCO USED	AGE/ GENDER	% GENDER	% RACE	% USAGE			DATA SOURCE
				EVER	PAST YEAR	PAST MONTH	

PRIMARY DENTAL CARE: ACCESS
Dental Services Under Medicaid - Definitions

Year - The year for which the data summary sheet was completed or data were collected

Children eligible for EPSDT - Number of children eligible for the federally mandated Early and Periodic Screening, Diagnosis and Treatment program (% = the percentage of all Medicaid eligible, who are children)

Eligible children who used dental care in past year - Of those children eligible for EPSDT how many received at least one dental service within the past year? (% = the percentage of Medicaid eligible children who used dental services during the past year)

Total Medicaid expenditures - The Medicaid expenses for all health services (see HCFA Report 2082)

Total Medicaid dental expenditures - The Medicaid expenditures for all dental services (see HCFA Report 2082) (% = the percentage of total Medicaid expenditures that were for dental services)

Medicaid dental expenditures for children - The Medicaid expenditures for all dental services for those under 21 years of age (see HCFA report 2082) (% = the percentage of Medicaid dental expenditures that were for child dental services)

Dentists treating Medicaid patients -Number and percentage of dentists who treated at least one Medicaid patient during this time period

Dentists treating >50 unduplicated Medicaid patients during the year - Number and percentage of dentists who treated more than 50 different Medicaid patients during the time period

In what year were sealants first reimbursed by the state Medicaid program? - The first year of sealant reimbursement

Is there an adult dental program? - Does the state have an adult Medicaid program? Are there restrictions for the type of services rendered?

Counties without Medicaid dentists - How many counties don't have any dentists providing care to Medicaid patients?

What are the Medicaid criteria for sealant placement? - What are the age, teeth or other criteria for dental sealant placement within the state's Medicaid program?

Y/N - Yes or no

Data Source - The original source of the information

DATA SUMMARY 4A
PRIMARY DENTAL CARE: ACCESS – *Dental Services Under Medicaid*

Many of the following items are contained in the annual report that your state Medicaid agency must prepare for federal HCFA – 416 and 2082 reports.

Year _____

ITEM FOR CONSIDERATION	NUMBER	%	Y/N	DATA SOURCE
Children eligible for EPSDT				
Eligible children who used dental care in past year				
Total Medicaid expenditures	$			
Total Medicaid dental expenditures	$			
Medicaid dental expenditures for children	$			
Dentists treating Medicaid patients				
Dentists treating > 50 unduplicated Medicaid patients during the year				
In what year were sealants first reimbursed by the state Medicaid program?	Year			
Is there an adult dental program? Program restrictions: _____ _____				
Counties without dental Medicaid provider				

What are the Medicaid criteria for sealant placement? _____

_____

PRIMARY DENTAL CARE: RESOURCES
Dental Health Care Providers - Definitions

Year - The year for which the data summary sheet was completed or data were collected

All licensed dentists - The number of dentists who maintain an active license and have an in-state address. If your jurisdiction is partly served by dentists within the Indian Health Service, then you should keep this number separate from other dentists. Moreover, any dentist to population ratios should take the Native American population into consideration

General dentists - The number of general dentists (*i.e.,* non-specialists) who maintain an active license and have an in-state address

Pediatric dentists - The number of in-state dentists who limit their practice to children

Dental hygienists - The number of dental hygienists who maintain an active license and have an in-state address

Counties without a dentist - The number of counties in your jurisdiction without a dentist

Federally designated Health Professional Shortage Areas, dental - The number of dental shortage areas that have been recognized by the federal government

National Health Service Corps dentists - The number of dentists within your jurisdiction associated with the federal National Health Service Corps

City/County health departments - The number of recognized city and county health departments within your jurisdiction

City/County health departments with public dental programs offering clinical services - The number of recognized city and county health departments with a clinical dental program

Hospitals with outpatient clinical dental services - The number of hospitals providing outpatient primary dental care services

Dental schools - Number of accredited dental schools within your jurisdiction

Dental hygiene schools - Number of accredited dental hygiene programs within your jurisdiction

Migrant (329), Community (330) and Homeless (340) health centers - Number of federally-funded health centers which provide dental services

Data Source - The original source of this information

DATA SUMMARY 4B
PRIMARY DENTAL CARE: RESOURCES - *Dental Health Care Providers*

Year _____

ITEM FOR CONSIDERATION	NUMBER	%	DATA SOURCE
All licensed dentists (more specific information concerning location is detailed on the next page)			
General dentists			
Pediatric dentists			
Dental hygienists			
Counties without a dentist			
Federally designated Health Professional Shortage Areas, dental			
National Health Service Corps dentists			
City/County health departments			
City/County health departments with public dental programs offering clinical services			
Hospitals with outpatient clinical dental services			
Dental schools			
Dental hygiene schools			
Migrant health centers (329) Community health centers (330) Homeless health centers (340)			

PRIMARY DENTAL CARE: RESOURCES
Geographic Location of Dental Care Providers - Definitions

Year - The year for which the data summary sheet was completed or data were collected

County/City/Division - The geographic area for which information is recorded

Population - The total number of people within the county/city/division

Dentists - The total number of licensed dentists within the county/city/division

Population to Dentist Ratio - The total number of people within the county/city/division divided by the total number of active dentists within the county/city/ division. For those jurisdictions that have populations served by the Indian Health Service, two calculations should be figured (with and without the Native American population)

Pediatric Dentists - The total number of licensed pediatric dentists within the county/city/division

Dental Hygienists - The total number of licensed dental hygienists within the county/city/division

DATA SUMMARY 4C

PRIMARY DENTAL CARE: RESOURCES - *Location of Dental Care Providers*

Year _____

COUNTY/CITY/ DIVISION	POPULATION	DENTISTS	POPULATION TO DENTIST RATIO	PEDIATRIC DENTISTS	DENTAL HYGIENISTS
TOTAL					

PRIMARY DENTAL CARE: SYSTEMS
Public - Definitions

NOTE: This data summary sheet addresses systems development rather than a quantitative summary.

Year - The year for which the data summary sheet was completed or data were collected

Facility or Organization - The various entities contained within the public sector

Y/N - Yes or no

Location - The address of the facility or organization

Contact Person - The person who serves as the oral health liaison

Telephone - The telephone number of the facility or organization

Is an oral examination required for school entry? - Does your state or locale require an oral examination as part of school entrance?

Liaison within the state Department of Education? - The person who serves as the liaison at the Department of Education for dental health matters

Other Public Dental Facilities - Information concerning the location, telephone number and contact person for each of several different federal or state agencies that may have dental programs within your jurisdiction

DATA SUMMARY 4D
PRIMARY DENTAL CARE: SYSTEMS – *Public*

Year _____

FACILITY OR ORGANIZATION	Y/N	LOCATION	CONTACT PERSON	TELEPHONE
Public School System				
Is an oral examination required for school entry?		Statute or Regulation:		
Liaison within the state Department of Education?				
Is there an oral health component to the health education program?				
Other Public Dental Facilities (state and federal)				
Mental Health Department				
Department of Corrections				
Primary Care / State Cooperative Agreement (Agency)				
Migrant Health Centers (329)				
Community Health Centers (330)				
Homeless Health Centers (340)				
National Health Service Corps				
Indian Health Service				
Other:				

PRIMARY DENTAL CARE: SYSTEMS
Clinical Services Provided - Definitions

NOTE: This summary sheet pertains to those public programs that provide clinical data to the state oral health program.

Dates - Time period for which this information was collected

Total Number of Patients - Number of patients receiving any dental service for this time period

Service - Type of dental service provided to patients

Number of Patients Receiving Service - During this time the number of patients who received at least one of these dental services

Total Number of Services - During this time the total number of this type of dental service

DATA SUMMARY 4E
PRIMARY DENTAL CARE: SYSTEMS - *Clinical Services Provided*

Total Number of Patients _____ **Dates** _____ - _____

SERVICE	NUMBER OF PATIENTS RECEIVING SERVICE	TOTAL NUMBER OF SERVICES
Oral examination		
X-rays		
Prophylaxis		
Topical fluoride		
Dental sealants		
One-surface restoration		
Other restorations		
Root canal treatment		
Other periodontal services		
Removable prosthetics		
Extractions		
Other:		
TOTAL		

PRIMARY DENTAL CARE: PERCEIVED NEEDS - *Consumers/Key Informants* - Definitions

NOTE: These items relate to perceived needs of consumers/community key informants and not an actual oral examination.

Type of Survey - Was the information collected through either a written questionnaire (**W**), a telephone survey (**T**) or a face-to-face interview (**F**)?

Group - Was this information collected from a sample of consumers (**C**) or a group of key informants (**K**) (*i.e.,* knowledgeable individuals within a community)?

Highlights of Findings - What were the most important findings from this survey?

Date - Write the month and year of the survey

DATA SUMMARY 4F
PRIMARY DENTAL CARE: PERCEIVED NEEDS - *Consumers/Key Informants*

TOPIC	TYPE OF SURVEY	GROUP	HIGHLIGHTS OF FINDINGS	DATE
Oral Health Status **(of community)**				
Perceived need for dental care (*e.g.*, dental caries, periodontal diseases)				
Perceived concern regarding dental esthetics (*e.g.*, enamel fluorosis, malocclusion)				
Risk Reduction/Community-Based Prevention **(perceptions of use in the community)**				
Fluorides				

TOPIC	TYPE OF SURVEY	GROUP	HIGHLIGHTS OF FINDINGS	DATE
Education (*e.g.*, smokeless tobacco)				
Sealants				
Mouthguards				
Importance of oral health to public				
Access				
Ability to find dental care				
Types of problems with obtaining care				
Other:				

PRIMARY DENTAL CARE: PERCEIVED NEEDS - *Oral Health Professionals* - Definitions

NOTE: These items relate to perceived needs of oral health professionals. The information may be a mixture of clinical observations from their own practices and subjective beliefs about the community.

Type of Survey - Was the information collected through either a written questionnaire (**W**), a telephone survey (**T**) or a face-to-face interview (**F**)?

Highlights of Findings - What was the most important finding(s) from this survey?

Date - Write the month and year of the survey

DATA SUMMARY 4G: PERCEIVED NEEDS - *Oral Health Professionals*

TOPIC	TYPE OF SURVEY	HIGHLIGHTS OF FINDINGS	DATE
Oral Health Status **(of community)**			
Dental caries			
Periodontal diseases			
Oral injuries			
Enamel fluorosis			
Soft tissue lesions			
Risk Reduction/ Community-Based Prevention **(perception of use in the community)**			
Fluorides			

TOPIC	TYPE OF SURVEY	HIGHLIGHTS OF FINDINGS	DATE
Education (*e.g.,* smokeless tobacco)			
Sealants			
Mouthguards			
Importance of oral health to public			
***Access* (problems within community)**			
Ability to find dental care			
Other types of problems with obtaining care (*e.g.,* Medicaid, HIV/AIDS, transportation)			
Children with special health care needs			
Other:			

PRIMARY DENTAL CARE: PERCEIVED NEEDS - *MCH Services Providers* - Definitions

NOTE: These items relate to perceived needs of MCH service providers. The information may be a mixture of clinical observations from their own practices and subjective beliefs about the community.

Type of Survey - Was the information collected through either a written questionnaire (**W**), a telephone survey (**T**) or a face-to-face interview (**F**)?

Highlights of Findings - What was the most important finding(s) from this survey?

Date - Write the month and year of the survey

DATA SUMMARY 4H
PRIMARY DENTAL CARE: PERCEIVED NEEDS - *MCH Services Providers*

TOPIC	TYPE OF SURVEY	HIGHLIGHTS OF FINDINGS	DATE
Oral Health Status			
Perceived need for dental care (*e.g.,* dental caries, periodontal diseases)			
Perceived concern regarding dental esthetics (*e.g.,* enamel fluorosis, malocclusion)			
Risk Reduction/ Community-Based Prevention **(perception of use in the community)**			
Fluorides			
Educational (*e.g.,* smokeless tobacco)			

TOPIC	TYPE OF SURVEY	HIGHLIGHTS OF FINDINGS	DATE
Sealants			
Mouthguards			
Importance of oral health to public			
Access			
Ability to find dental care (referral)			
Other types of problems with obtaining care (*e.g.,* Medicaid, HIV/AIDS, transportation)			
Children with special health care needs			
Extent to which there is integration of dental care within existing health system			
Other:			

CHILDREN WITH SPECIAL HEALTH CARE NEEDS: *Cleft Lip / Palate* - Definitions

Year - The year the data summary sheet was completed or data were collected

Incidence - The number of new cases within the past year

Cleft lip only - Infants diagnosed as having cleft lip without a cleft palate

Cleft palate only - Infants diagnosed as having cleft palate only

Cleft lip / cleft palate (both) - Infants diagnosed as having both cleft lip and cleft palate

Other cranio-facial anomalies - Other anomalies of the face that require special oral health considerations

Data Source - The original source of information (*e.g.,* state health department)

Cranio-facial Teams - Those professionals who jointly treat the individual for various medical, dental, psychological and physical aspects of cleft lip / cleft palate

Site - The location of the participant on the cranio-facial team

Providers - The names of the principal providers on the cranio-facial team

Specialties - The specialty of the principal providers on the cranio-facial team

Telephone - The telephone number of the principal providers within the cranio-facial team

DATA SUMMARY 4I
CHILDREN WITH SPECIAL HEALTH CARE NEEDS: *Cleft Lip / Palate*

Year _____

INCIDENCE	FEMALES	MALES	DATA SOURCE
Cleft lip only			
Cleft palate only			
Cleft lip / cleft palate (both)			
Other cranio-facial anomalies (specify) _____			

CRANIO-FACIAL TEAMS

SITE	PROVIDERS	SPECIALTIES	TELEPHONE

Is there a system for identifying and referring cleft lip and / or palate children?
____ Yes ____ No

Does the state fund clinical dental care for those served by the state's Children with Special Health Care Needs program? ____ Yes ____ No

Is there an orthodontic component to this program? ____ Yes ____ No