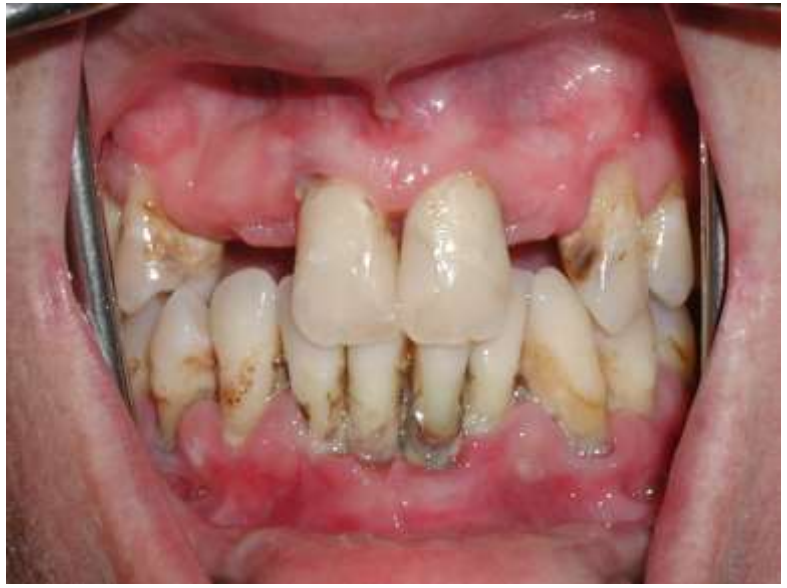
Dental and Oral Health in Wyoming

Young Wang

Oral Health's Connection to Overall Health

- Physical
  - Cardiovascular Disease
  - Diabetes
- Emotional
  - Quality of Life
- Social
  - Job Attainment

Boyd (2014)



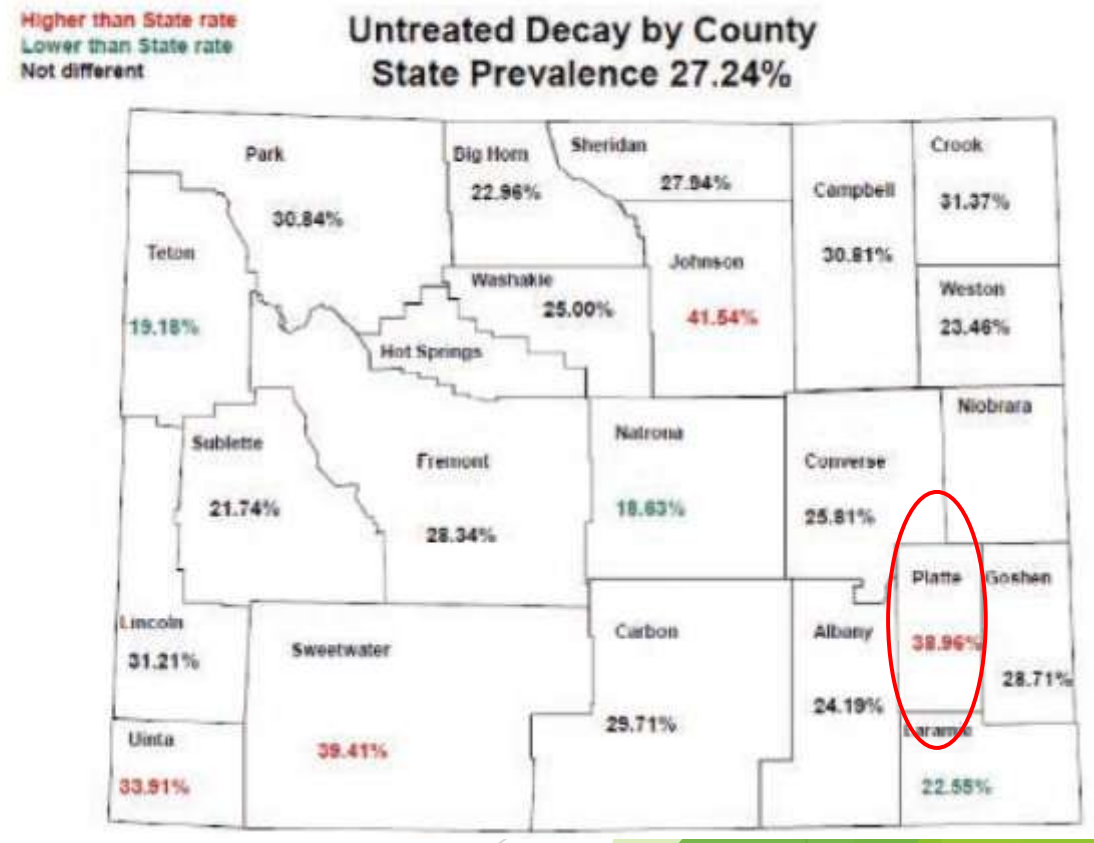
Caputo (2012)

Dental Health Network (2015)

Oral Health in Wyoming

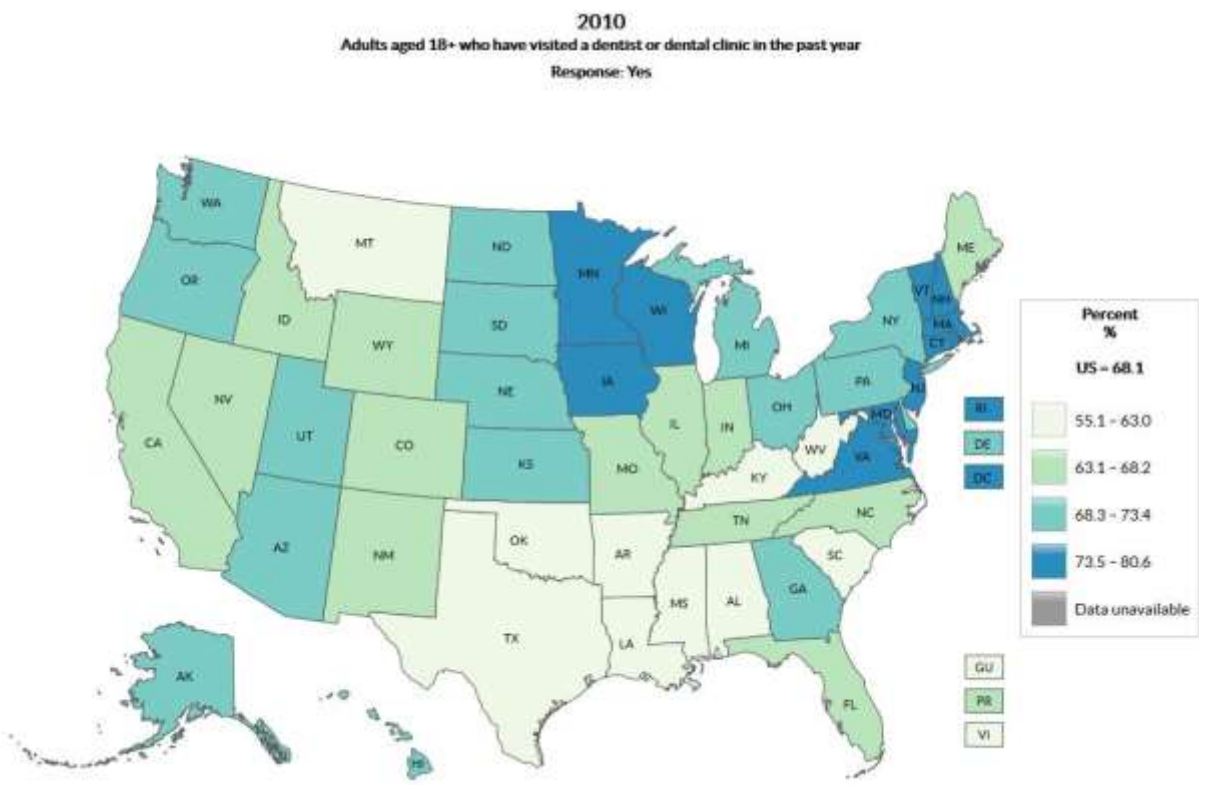
- 12/23 counties considered Health Professional Shortage Area in Dental Care (Wyoming Office of Rural Health, 2009, p. 9)
- 63.3% of people with unmet dental care reported “I could not afford dental care” as the main barrier to receiving dental care in the past twelve months (Wyoming Department of Health, 2010)
- 26.3% of people with unmet dental care reported “No insurance” as the main barrier to receiving dental care in the past twelve months (Wyoming Department of Health, 2010)
- 1.1% of people with unmet dental care reported “Dentist unavailable” (Wyoming Department of Health, 2010)

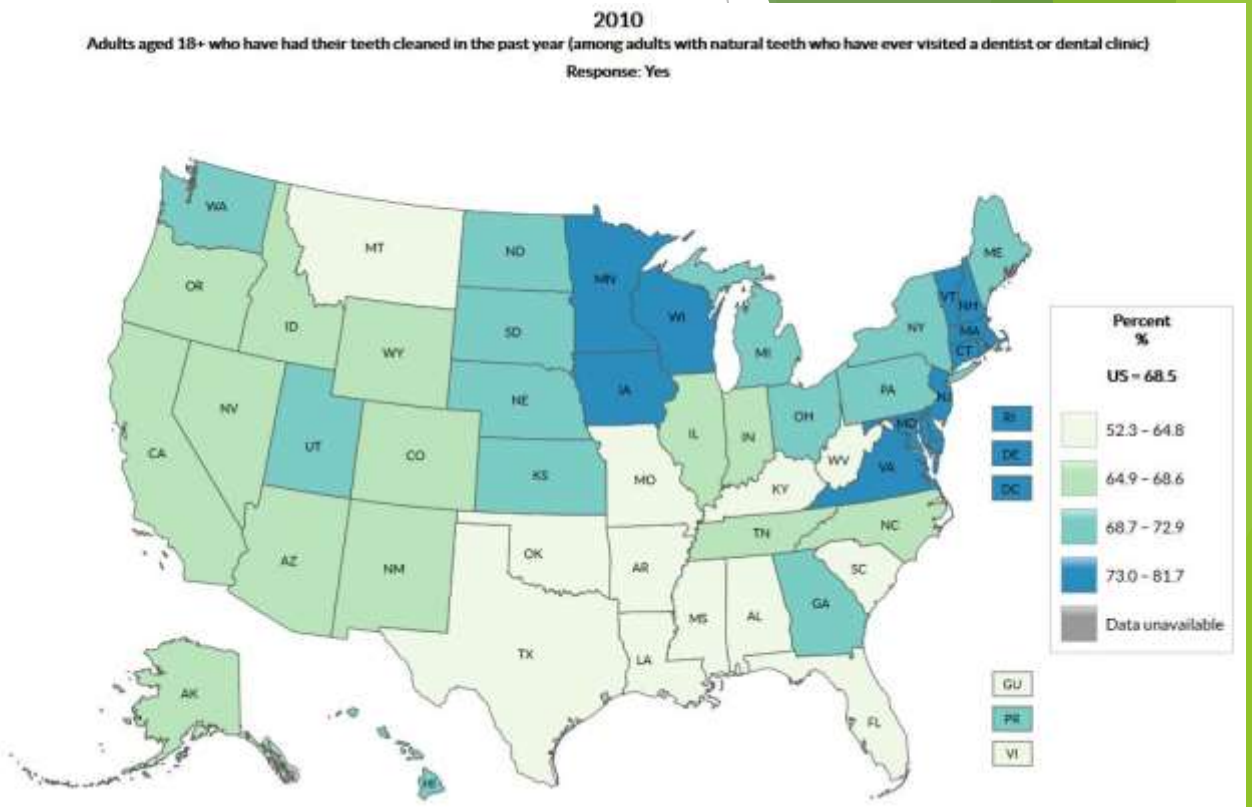
FIGURE 6: PREVALENCE OF UNTREATED DECAY BY COUNTY



(Wyoming Department of Health, 2010)

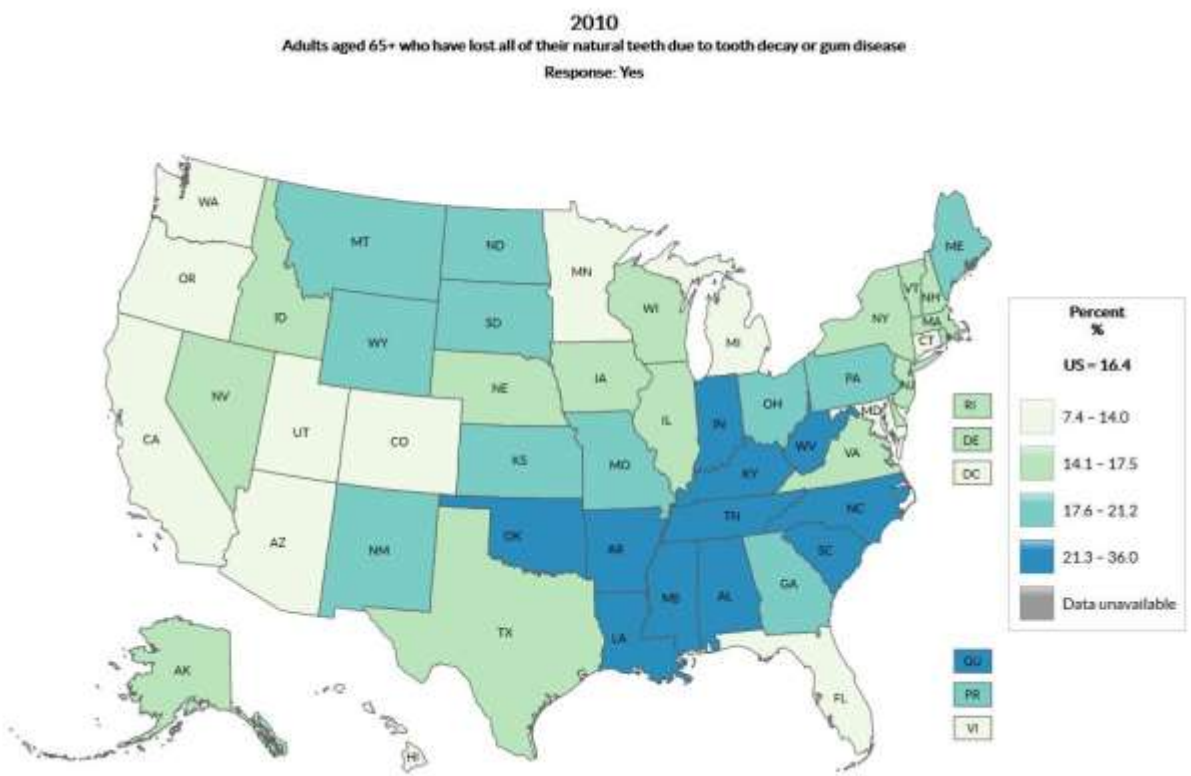
Oral Health in Comparison

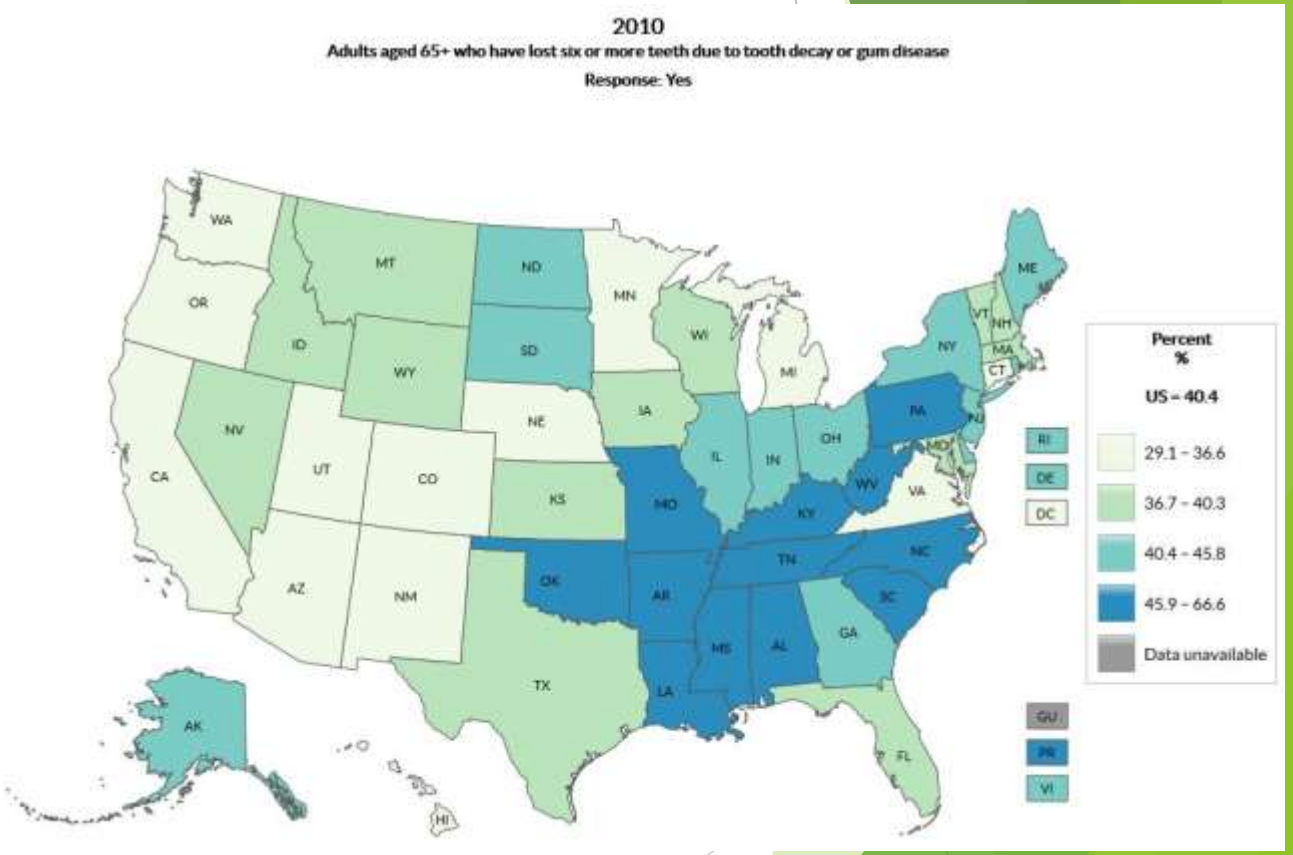




Centers for Disease Control and Prevention (2010)

Oral Health in Comparison Cont.





Centers for Disease Control and Prevention (2010)

Solutions to Poor Oral Health in WY

- WYDENT
- WICHE
- Wyoming Healthcare Professional Loan Repayment Program
- Wyoming Health Centers

Downtown Clinic

DOWNTOWN CLINIC PATIENT INFORMATION SHEET

Services available to you as a DTC patient are:

- Primary medical care for non-emergencies, including physicals
- Limited laboratory services and diagnostic testing, including HIV/AIDS testing
- Limited pharmacy with refills available during designated clinic hours, including applications to Patient Assistance Programs as needed and as available
- Limited mental health services, including on-site counseling
- Referral for counseling and mental health/substance abuse
- Referral to health care specialists
- Assistance with applications for community services or other community resources
- Health education
- Referral for emergency dental

Services not available at the clinic include:

- Emergency care – you will be referred to the emergency room
- Prescription refills outside of clinic time
- Care for purely cosmetic problems
- Routine gynecological or obstetric care
- Routine family planning or birth control needs
- Pediatric care (birth - age 19)
- Elder care (65 and over) unless you do not qualify for Medicare

Other things that you should know:

- You must qualify financially for clinic services and must requalify every 6 months.
- You shall be considered a patient of the Downtown Clinic and not as a patient of the individual providers at the clinic.
- Feel free to ask for our assistance with referrals and other health information.
- Please do not come to the clinic while under the influence of alcohol or illegal drugs.
- Please be on time for a scheduled appointment.
- Any out of clinic care arranged for you by the DTC must be arranged in advance of the service.

Patient Forms

Downtown Clinic
611 S. 2nd Street, Laramie, WY 82070

Application for Eligibility & Patient Information
Complete this form in full. Please print clearly.

Patient Information

Patient's Name: _____

Household Name: _____ Patient Position in Household: (check one) Head ___ Spouse ___ Dependent ___

Current Address: _____ Zip _____

Mailing Address: _____ Zip _____

Home Phone: _____ Work Phone: _____

Cell Phone: _____ Message Phone: _____

Date of Birth: ___/___/_____ Social Security Number: _____

Albany County resident ___ Homeless ___ Transient ___ (please check one)

Referred by: _____

Patient Demographics

Gender: Male ___ Female ___ (check one)

Race/Ethnicity (please check one): African American ___ Asian ___ Hispanic ___ Native American ___ Caucasian ___ Other ___

Primary Language: _____ Interpreter Needed: Yes ___ No ___ (check one)

Veteran: Yes ___ No ___ (check one)

Education Level (please check one): High School ___ High School Graduate ___ Some College ___ College Graduate ___ Masters/Doctorate ___

Marital Status (please check one): Single ___ Married ___ Separated ___ Divorced ___ Widowed ___

Housing (please check one): Own ___ Rent ___ Stay with Family/Friend ___ Shelter ___ None ___

Please list name, relationship to patient, and age of all household members:

_____
_____
_____
_____

Employment Status

Are you or is someone in your household currently employed? Yes ___ No ___ (please fill out information below)

Name: _____ Full Time ___ Part Time ___ Seasonal ___ Avg. # of hrs/week ___

Name of Employer(s): _____

Estimated Income: $/hr _____ $/week _____ $/month _____ $/semester _____

Is anyone else in your household currently employed? Yes ___ No ___ (if yes, then please fill out information below)

Name: _____ Full Time ___ Part Time ___ Seasonal ___ Avg. # of hrs/week ___

Name of Employer(s): _____

Estimated Income: $/hr _____ $/week _____ $/month _____ $/semester _____

List other source(s) of income and amount (ex. Unemployment, Disability, Worker's Compensation, Social Security Benefits or Retirement Benefits, etc.)

Source	Amount
_____	$_____
_____	$_____
_____	$_____
_____	$_____

Do you have Equality Care, Medicaid, Medicare, Veteran's Benefits, or any other form of Medical Insurance: Yes ___ No ___ (check one)
If yes, what kind: _____

Medical History

Prior Physician: _____ Number of Trips to the ER in the last year: _____

Most Frequent Health Care Locations (please check one): ER ___ Doctor's Office ___ Free Clinic ___

Prior Pharmacy: _____

Emergency Contact:

Name: _____ Phone: _____

Relationship:

DATE: _____

NAME: _____ DATE of BIRTH: ____/____/____

GENDER: ☐ MALE ☐ FEMALE

MARITAL STATUS: ☐ SINGLE ☐ MARRIED ☐ WIDDOWED ☐ DIVORCED

ETHNIC BACKGROUND: ☐ White ☐ Black ☐ American Indian ☐ Hispanic Origin ☐ Other

SEASONAL WORKER (check one) ☐ Seasonal ☐ Migrant ☐ Neither

Heart and Circulation Problems:
- ☐ High blood pressure
- ☐ Chest pain
- ☐ Irregular heart rate
- ☐ Heart attack
- ☐ Heart surgery
- ☐ Blood clot
- ☐ Amputation
- ☐ Artery or vein surgery

Breathing Problems:
- ☐ Asthma
- ☐ Bronchitis
- ☐ Shortness of breath
- ☐ Pneumonia
- ☐ Use home oxygen
- ☐ Tuberculosis
- ☐ Emphysema

Digestive Problems:
- ☐ Chronic diarrhea
- ☐ Ulcers
- ☐ Liver problems
- ☐ Hepatitis
- ☐ Stomach or bowel surgery
- ☐ Loss of Appetite – recent
- ☐ Difficulty swallowing
- ☐ Heartburn
- ☐ Peptic ulcer
- ☐ Persistent nausea/vomiting
- ☐ Abdominal pain – chronic
- ☐ Gall bladder trouble
- ☐ Change in bowel habits
- ☐ Constipation
- ☐ Bloody or tarry stools
- ☐ Hemorrhoids
- ☐ Hernia

Urinary Problems:
- ☐ Urination, overnight>than 2x
  - ☐ Painful
  - ☐ Decrease in force/flow
- ☐ Kidney problems
- ☐ Bladder problems
- ☐ Incontinence
- ☐ Bladder/kidney surgery

Psychosocial Problems:
- ☐ Anxiety
- ☐ Depressions
- ☐ Confusions

Musculoskeletal Problems:
- ☐ Arthritis
- ☐ Paralysis
- ☐ Muscle weakness
- ☐ Joint or bone surgery

Neurological Problems:
- ☐ Stroke
- ☐ Seizure/Epilepsy
- ☐ Memory Loss
- ☐ Dizziness
- ☐ Head injury
- ☐ Headaches
- ☐ Head neck or back surgery

Eye, Ears, Nose Problems:
- ☐ Glaucoma
- ☐ Blurred vision
- ☐ Cataracts
- ☐ Hearing loss
- ☐ Eye, ear, nose, throat surgery
- ☐ Nose bleeds – recurrent
- ☐ Sinus trouble
- ☐ Sore throats – frequent
- ☐ Hayfever/Allergies
- ☐ Hoarseness – prolonged

Skin Problems:
- ☐ Eczema
- ☐ Psoriasis
- ☐ Other rash

Endocrine Problems:
- ☐ Diabetes
- ☐ Thyroid problems
- ☐ Gland surgery

Bleeding Problems:
- ☐ Low blood count
- ☐ Leukemia
- ☐ Prolonged bleeding

General problems:
- ☐ Chronic fatigue
- ☐ Weight loss
- ☐ Weight gain - recent
- ☐ Cancer
- ☐ Bruise easily

Past illnesses:
- ☐ Rheumatic Fever
- ☐ Scarlet Fever
- ☐ Chicken Pox
- ☐ Polio
- ☐ Mumps
- ☐ Measles
- ☐ German measles
- ☐ Tuberculosis
- ☐ Herpes

Reproductive Problems:
MALES:
- ☐ Prostate Problems

FEMALES:
Menstrual Flow:
- ☐ Regular
- ☐ Irregular
- ☐ Pain/Cramps

Date – 1st day of last period_____
- ☐ Pain/bleeding during or after sex

Number of:
Pregnancies_____
Miscarriages_____
Abortions_____
Live births_____

Birth Control Method:_____

Birth Control pill name:_____
- ☐ Flushing/Menopause

Date of last PAP test:_____
☐ Normal ☐ Abnormal

Date of last Mammogram_____
☐ Normal ☐ Abnormal

Do you use alcohol? ☐ No ☐ Yes → How much?_____

Have you ever smoked? ☐ No ☐ Yes → How many packs/day?_____ How many years?_____

Do you now or have you ever used any street drugs? ☐ No ☐ Yes
What type?_____

What medications are you currently taking?

_____

_____

_____

_____

FAMILY HISTORY: If any blood relative has suffered any of the following, please circle the number and indicate who.

1) Epilepsy	5) Diabetes	9) Anemia	13) Heart Disease	17) Cancer
2) Migraine	6) Thyroid	10) Bleeds easily	14) Stroke	18)
3) Mental illness	7) Hayfever	11) Osteoporosis	15) High Blood Pressure	19)
4) Glaucoma	8) Asthma	12) Arthritis	16) Alcoholism	20)

Please list all illnesses and Operations.

_____

_____

_____

_____

Please list all allergies.

_____

_____

_____

_____

Vaccine	Year of Last	Test/Exam	Year of Last
Tetanus/Td		Rectal/Stool	
Flu		Cholesterol	
Pneumonia		Eye	
Hepatitis			
Tuberculosis			

Name _____ Date _____

Behavioral Health Questionnaire

In the last MONTH:

1. Have you had problems sleeping? .....Yes.....No
2. Has your appetite changed? .....Yes.....No
3. Have you been having thoughts or worries that keep running through your head? .....Yes.....No
4. Have you been feeling hopeless or helpless? .....Yes.....No
5. Has your weight gone up or down more than five pounds? .....Yes.....No
6. Have you been having strong feelings of guilt? .....Yes .....No
7. Have you felt that you need to do something over and over again? Yes.....No
8. Have you seen or heard things that other people don't seem to see or hear? .....Yes.....No
9. Have you been having feelings of panic, anxiety or nervousness? ...Yes.....No
10. Have your thoughts ever been so loud that they seemed like voices? .....Yes.....No
11. Have you had so much energy that you felt like you could do anything? .....Yes.....No
12. Have you made yourself throw up or used laxatives to lose weight? Yes .....No
13. Have you been feeling sad or down? .....Yes.....No
14. Has your use of medications, alcohol or drugs caused problems for you? .....Yes.....No
15. Do you have any concerns about yourself or loved ones that you would like to talk with someone about? .....Yes.....No
16. Do you feel safe in your home? .....Yes.....No
17. Are you currently seeing a mental health professional? .....Yes.....No

If so, who? _____

Families with children:

18. Would you like information or help with managing your children? .....Yes.....No
19. Is a child having any problems at home or school that you feel he/she would benefit from some help? .....Yes.....No

Risk Factor Analysis

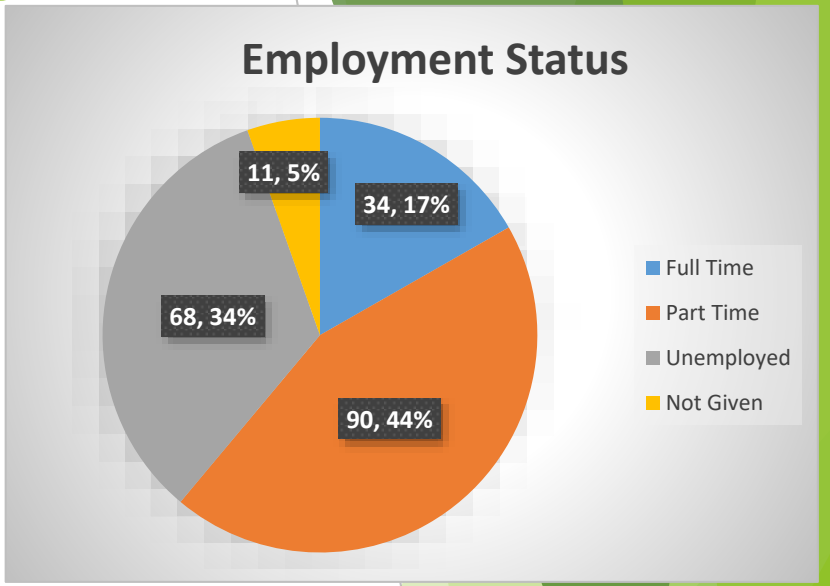
Date of Service	Dentist	Amount	% FPL																					
12/20/2012	Doser	250	195%				M																	
1/10/2013	Doser	394	130%	Crown			M																	
1/30/2013	Knaub	311	189%	oral exam	x-ray	Ext.	F	4/16/1983	White	Part-time	High School					Non-smok	Anxiety	Depressio	Arthritis	Chronic fa	Fibromyal	Fam Hx mi	Tooth pa	
2/12/2013	Doser	182	0%	Ext.			M	1/7/1982	White	None		69	123/83			Smoker	Broken toc	Fam Hx Diabetes, arthritis, CVD, HTN, stroke, cancer						
2/13/2013	Doser	491	0%				M																	
2/18/2013	Knaub	285	68%	x-ray	oral exam	Ext.	M	12/9/1955	White	Part-time	High Schoo	79	140/72	180	5'8"	Non-smok	HTN	SOB	Fam Hx MI	Tooth pain				
2/26/2013	McPherson	377	113%				F																	
2/26/2013	Knaub	105	153%				F																	
2/26/2013	Knaub	186	37%	Jaw Pain			F	3/13/1989	Other	Part-time	High School		90/68	102		Non-smok	Abdomina	Painful uri	Jaw pain					
2/27/2013	Doser	132	32%	x-ray	oral exam	Ext.	M	2/3/1975	White	Part-time	College	70	122/80	150		Smoker	Fam Hx mi	Tooth pain						
3/5/2013	Doser	350	0%	Ext.	S. Ext		M	4/2/1990	Black	None	College					Non-smok	Tooth pain							
3/8/2013	Knaub	121	129%	Molar cavity			F	8/14/1981	White	Part-time	College		104/76	147		Non-smok	Asthma	Fam Hx mental illness, arthritis, stroke, HTN, cancer						
3/22/2013	Doser	241	0%	Oral exam	x-ray	Ext.	M	6/5/1957	White	None	College					Smoker	Tooth pain							
4/2/2013	Knaub	76	35%				F																	
4/3/2013				Molar pain			M	6/14/1972	White	Part-time	College	87	154/91			Non-smok	HTN	Asthma	Bronchitis	Pneumoni	Depressio	Arthritis	Joint sur	
4/4/2013	Shevick	99	77%				F																	
4/11/2013	Doser	464	146%	Oral exam	Crown bui	Ext.	F	9/13/1974	Hispanic	Part-time	High Schoo	84	142/80	365		Non-smok	Headache	Leg swelli	Chronic co	Pre-diabet	Tubes tied	Dental caries		
4/16/2013	McPherson	122	43%				F																	
4/26/2013	Doser	205	0%	Comp. Filling			M	7/28/1984	Hispanic	Full-time		65	104/72	109		Non-smok	Tooth pain							
4/29/2013	Knaub	261	0%	S. Ext.			M	8/27/1974	White	None	College	68	115/70	172		Smoker	Trouble br	Rash	Joint surge	Wisdom tooth pain				

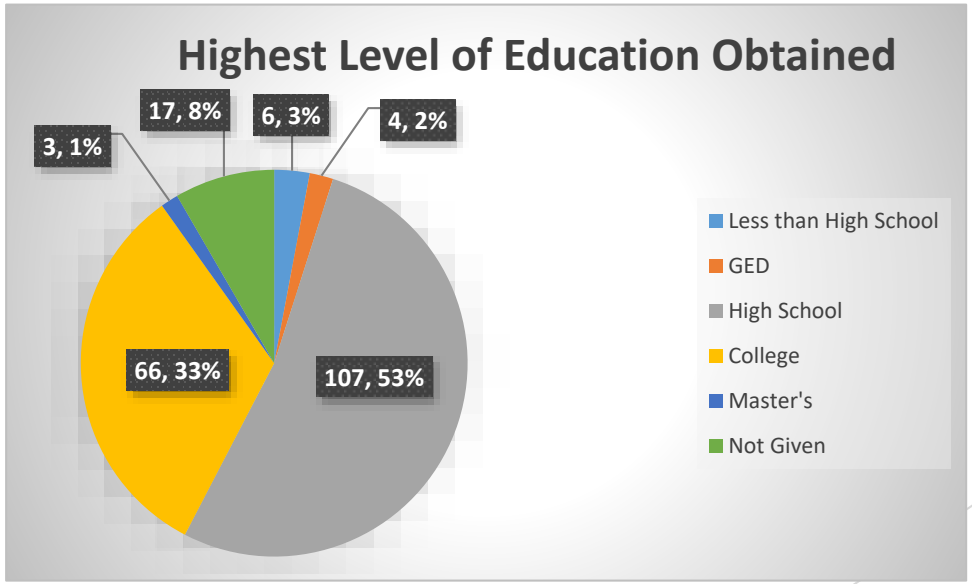
Dental Data Collection/Interpretation

- Mostly white
  - Followed by Hispanic, American Indians, Nepali, black
- 176 Females 150 Males (approximately, had to guess using names)
- 63.5% smokers (Out of the 203)
  - 12.8% asthma
    - 73% of asthma were smokers
  - 5% Bronchitis
    - 70% of bronchitis were smokers
- 20.1% Anxiety (41 people)
- 19.7% Depression (40 people)
  - 50% of depression also anxiety (20 people)

Dental Data Collection/Interpretation Cont.

- Employment
  - 34 full time
  - 90 part time
  - 68 unemployed
- Education
  - 6 < than High School
  - 4 GED
  - 107 High School
  - 66 College
  - 3 Master's





Prevention vs Treatment

- Economics of Dentistry
  - Treatment-based curriculum
  - Prevention is abstract
- Cost-effectiveness of prevention
  - Inconclusive (Shariati, MacEntee, and Yazdizadeh, 2013).
  - Health as a good (Woolf, Husten, Lewin, Marks, Fielding, and Sanchez, 2009)
    - Bought for nonmonetary benefits – reduced suffering in future

Conclusions & Future Outlooks

- Research at Downtown Clinic was very unrepresentative
  - Extremely small cross-section
- But shows an accessibility problem for low SES individuals
- A high need for affordable dental care, including preventive care, exists

- LCCC Dental Hygiene
  - Barriers: transportation, facilities
- Increased funding to Downtown Clinic for Prevention

References

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