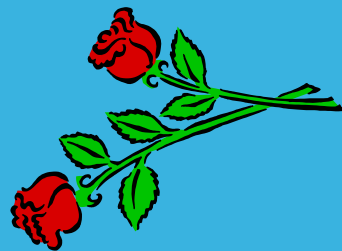


LOOKING BEYOND LUNGS

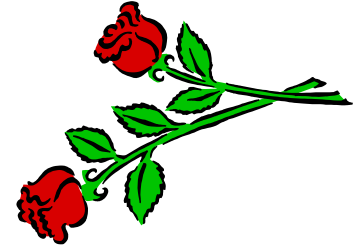
INTEGRATING DEPRESSION INTO THE CF CARE MODEL

MEG DVORAK, LCSW
STANFORD HOSPITAL AND
CLINICS

MARCH 2, 2013
CF EDUCATION DAY



OBJECTIVES



Diagnostic criteria for depression

General symptoms and prevalence

Specific factors in CF

Literature review of depression in CF adults

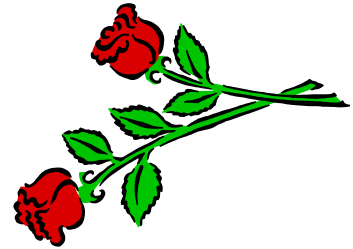
Current CFF registry data

SHC data

Strategies for prevention and intervention

Discussion/questions

DEPRESSIVE DISORDERS, DSM-IV



Major depressive disorder

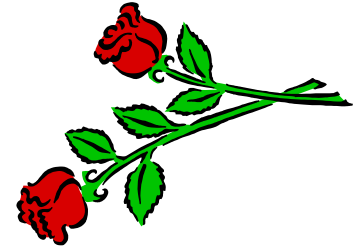
Major depressive disorder, recurrent

Dysthymic disorder

Adjustment disorder with depressed mood

Depressive disorder NOS

OTHER TYPES OF DEPRESSION



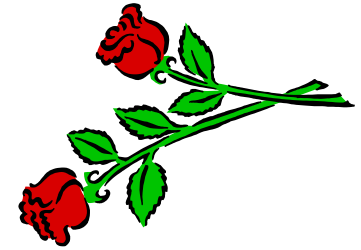
“Hospital” depression

Situational depression

Grief and bereavement

Seasonal depression

DSM-IV DEFINITION, MAJOR DEPRESSIVE EPISODE



Five or more of the following symptoms have been present during the same 2-week period and represent a change from previous functioning

Depressed mood *

Diminished pleasure in activities*

Weight changes (up or down)

Insomnia or hypersomnia

Fatigue or loss of energy

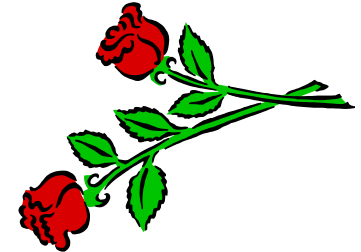
Psychomotor retardation or agitation nearly every day

Feelings of worthlessness or guilt

Diminished ability to think or concentrate

Recurrent thoughts of death

PREVALENCE IN GENERAL POPULATION



Mental health equivalent of a “common cold”

More common in women than men

Leading cause of disability worldwide

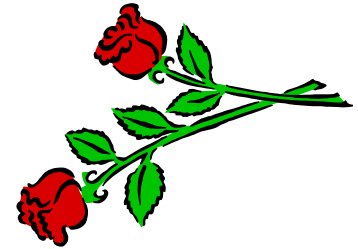
Lifetime prevalence 10-17% in general population

12 month prevalence 3-9%

10-14 million Americans, over 100 million worldwide

Higher rates among chronic illness populations

MIND BODY CONNECTION



Depression weakens immune functioning

Stroke rates 2x higher in depressed people

Depressive disorders associated with increased prevalence of chronic diseases

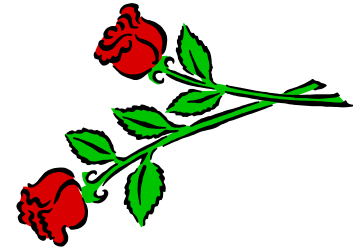
Multiple studies in cardiac patients reveal strong impact of depression (increased risk of heart attack, more surgeries, predictive of future problems)

CF exacerbations often occur during times of stress

Studies show depressed people die earlier

- Suicide, poor compliance, impact on body

DEPRESSION IN CF POPULATION



Prevalence estimates in CF population are inconsistent

Shifts in disease course and management

Some studies show prevalence = general population

Anxiety more common than depression

- Multiple studies in both young adults and adults

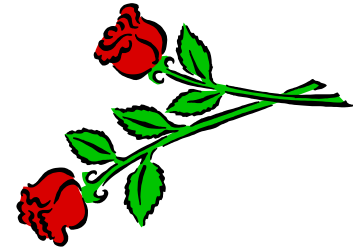
Abbott J, Coping with Cystic Fibrosis. JR Soc Med 2003; 96:42-50

Cruz I, Marciel K K, Quittner AL, Schechter MS. Anxiety and depression in cystic fibrosis. Semin Resp. and Critical Care Medicine. 2009

Babyak, M (2000). Exercise treatment for major depression: maintenance of therapeutic benefit at 10 months. Psychosomatic Medicine, 62:633-638.

P.E. Pfeffer, J.M. Pfeffer, M.E. Hodson. The psychosocial and psychiatric side of cystic fibrosis in adolescents and adults. Journal of Cystic Fibrosis 2003

SPECIFIC FACTORS IN CF ADULTS



Burden of care

Real and anticipated losses

Chronic isolation, loneliness

Nebulous future

Lack of energy, breathlessness

Relationship problems (“CF is my child”)

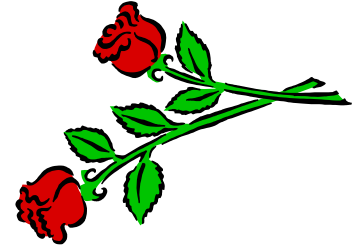
- *Feeling unworthy of love and friendship*

Dependency

Addiction

10:00 am	- Wake up
10:15 am	- Boil Water for Sinus Rinse, Make Tea or other beverage, Gather Nebulizers and Inhaled Medications
10:30 am - 10:40 am	- Inhale Albuterol (bronchodilator) via Nebulizer while strapped into The VEST (high frequency chest compression therapy) for airway clearance
10:40 am - 11:00 am	- Inhale 7% Hypertonic Saline via Nebulizer while still doing The VEST
11:00 am - 11:10 am	- Inhale Pulmozyme via Nebulizer while still doing The VEST
11:10 am - 11:30 am	- Complete VEST treatment while huff coughing or other airway clearance techniques
11:30 am - 11:50 am	- Inhale Tobi antibiotic via Nebulizer
11:50 am - 12:10 am	- Prepare and do 8 oz hypertonic saline sinus rinse w/ baby shampoo in each nostril
12:10 am - 12:15 am	- Inhale Advair steroid, Inhale Spiriva, Squirt Nasonex in each nostril
12:15 am	- Prepare and eat brunch. Requires taking pancreatic enzymes, insulin (and checking blood sugar two hours after), as well as other morning pills.
1:00 pm	- Rest, and/or do some activity sitting down (check email), make any necessary phone calls regarding medical appts, rx refills, or other items. I need to stay rather still after the full morning of airway clearance in order not to throw up my lunch.
2:00 pm	- Get dressed.
2:30 pm	- Clean all nebulizers and sinus rinse bottles (requires dis-assembling all nebulizer parts, washing in hot soapy water, and boiling for 10 minutes).
2:50 pm	- Light household chores, errands away from the house (often, pharmacy), or go to Dr appts.
4:30 pm	- Mid-afternoon snack. Requires taking pancreatic enzymes, insulin (checking blood sugar), as well as other afternoon pills.
4:50 pm	- If arthritis is flaring up, take tylenol or percocet to allow me to do effective airway clearance (exercise and chest physical therapy)
5:00 pm	- Drive to my mom's house for more airway clearance - exercise and chest physical therapy.
5:30 pm - 6:30 pm	- Exercise: walking, aerobics, pilates, yoga, or strength training with light weights - depending on my tolerance and energy (cannot do pilates if recent hemoptysis episode, sometimes cannot tolerate high impact aerobics), always with frequent stops to cough and/or throw up
6:30 pm - 7:30 pm	- My mom performs manual chest physical therapy while I huff cough and use other clearance techniques, sometimes break to rest/catch my breath
7:30 pm	- Drive back home
8:00 pm	- Eat dinner, normally prepared by my husband. Requires taking pancreatic enzymes, insulin (and checking blood sugar two hours after), as well as other evening pills.
8:45 pm	- Rest (read, watch tv, email, computer) - need to take a break between dinner and evening treatment in order to not throw up my dinner
10:00 pm	- Gather Nebulizers and Inhaled Medications
10:00 pm - 10:10 pm	- Inhale Albuterol (bronchodilator) via Nebulizer while strapped into The VEST (high frequency chest compression therapy) for airway clearance
10:10 pm - 10:30 pm	- Inhale 7% Hypertonic Saline via Nebulizer while still doing The VEST
10:30 pm - 10:40 pm	- Inhale Pulmozyme via Nebulizer while still doing The VEST
10:40 pm - 11:00 pm	- Complete VEST treatment while huff coughing or other airway clearance techniques
11:00 pm - 11:20 pm	- Inhale Tobi antibiotic via Nebulizer
11:20 pm - 11:30 pm	- Inhale Advair steroid, Squirt Nasonex in each nostril
11:30 pm	- Light snack before bed, take bedtime pills
12:00 pm	- Go to bed.

DEPRESSION AND MORTALITY IN CF



2011 deaths to suicide = 2 out of 444 or .45%.

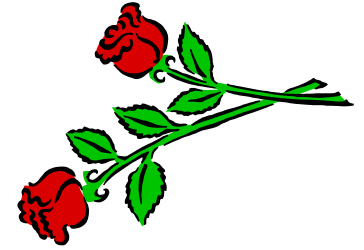
Total deaths to suicide (all years) = 23 out of 10,149 or .22%

Depressed people more likely to die earlier

Associated with poorer health outcomes

Passive suicidality

LITERATURE REVIEW



TIDES (The International Depression/Anxiety Epidemiological Study)

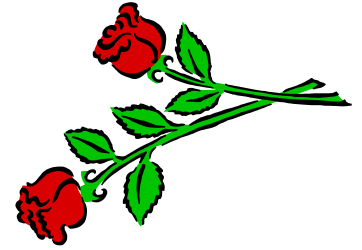
screens for depression and anxiety in patients and caregivers ages 12 and up in more than 10 countries worldwide (www.tides-cf.org)

link psychological data to health outcomes

German data

- **Elevated anxiety found in 20.6% of patient with CF**
 - Recent hemoptysis/pneumothorax , dx of CFRDM
- **Depression no different than rates in general population**
 - Impaired lung fx
 - transplant listing

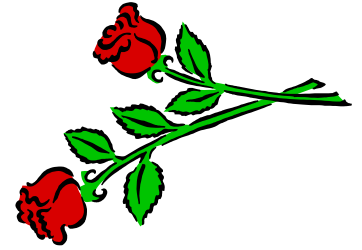
ANXIETY, DEPRESSION, AND QOL



April 2012 study out of UK with N=121 CF adults using HADS scale and CF-QOL

- Depression found in 17% of patients
- Anxiety found in 33% of patients
- Depression associated with poorer QOL, lower BMI, lower FEV1, and higher re-hospitalization
- Depression NOT associated with age, sex, or co-morbidities

LITERATURE REVIEW



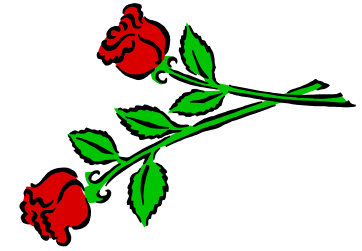
Ongoing study of adult CF patients in Arkansas reveals 15.9% prevalence of depression (HADS)

- Older age
- Lower education
- Frequent hospitalizations
- Less religious commitment

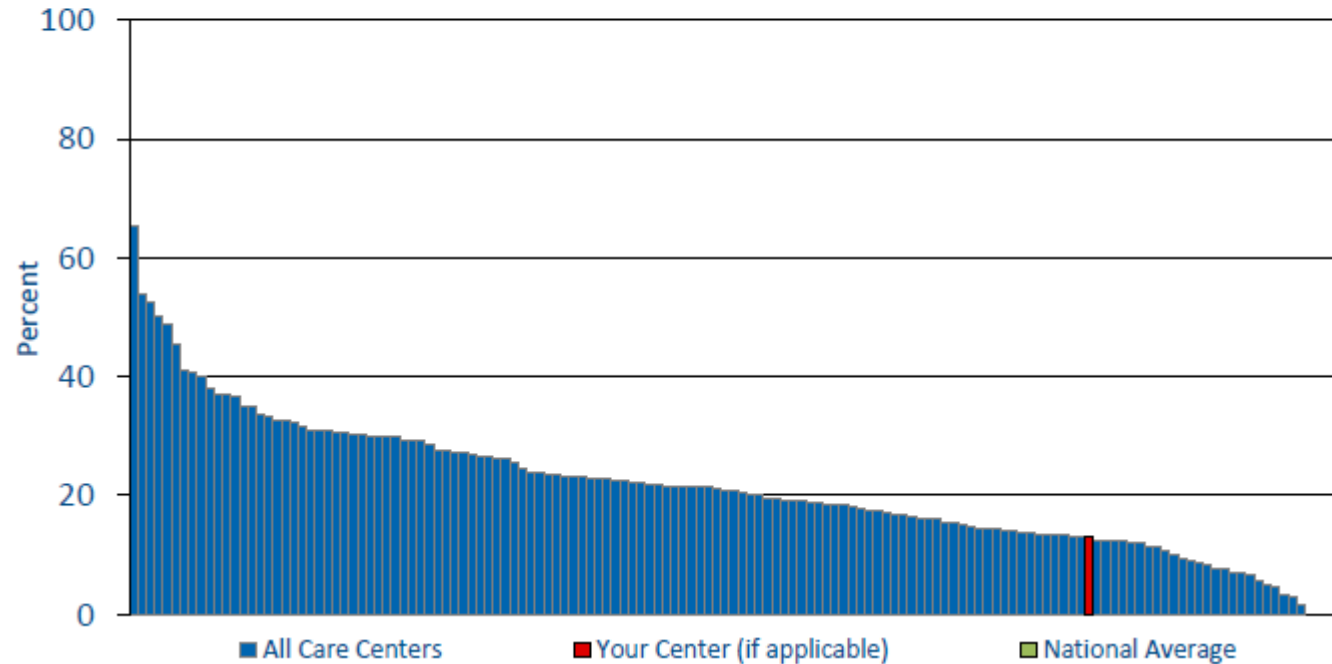
2007 study revealed 30% adults screened positive for depression

- results closely related to lung function

HOW DO WE MEASURE UP? CFF DATA 2011

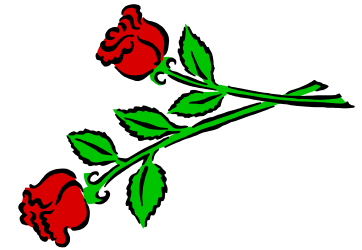


Stanford University Medical Center (Palo Alto, CA) = 12.9

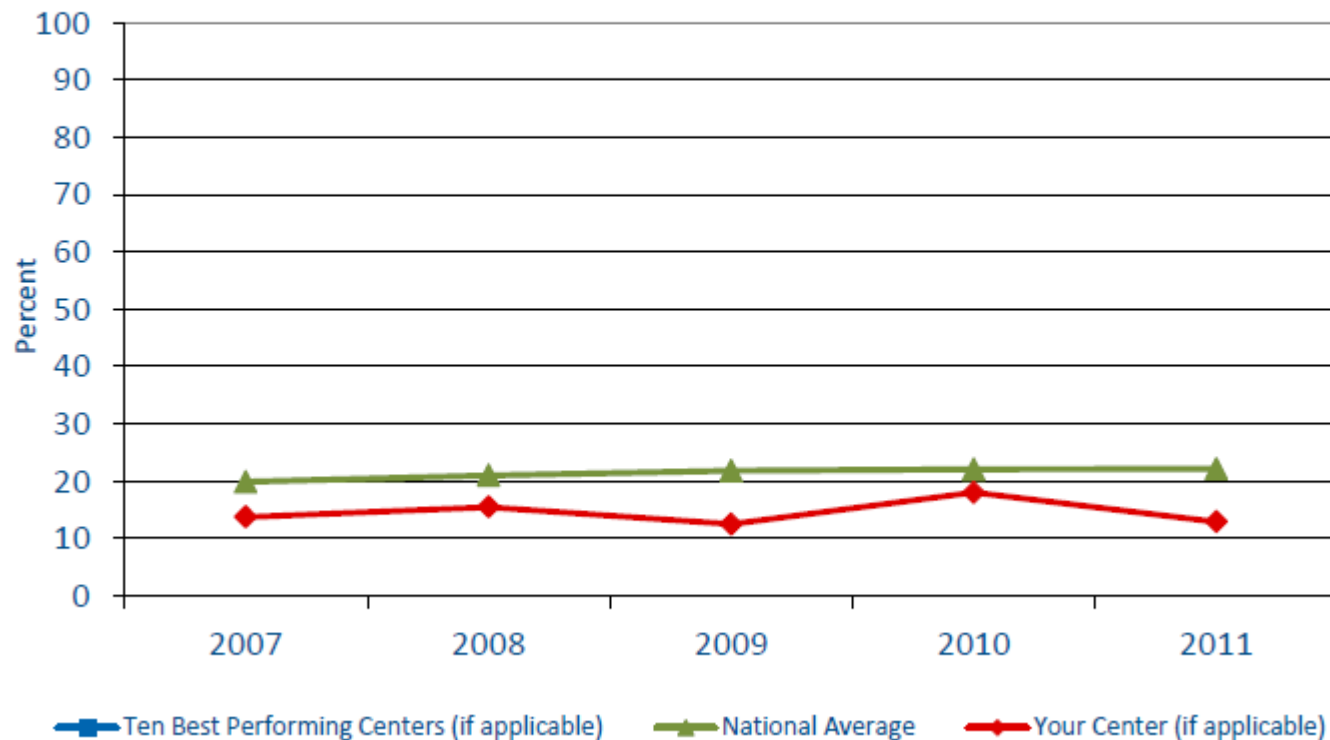


CFF registry 2011

2011 CFF DATA



Depression in Patients 18 Years and Older, 2007-2011



Center for Epidemiologic Studies Depression Scale (CES-D)

Date: _____

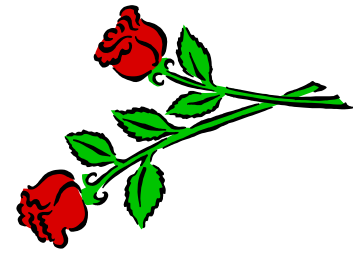
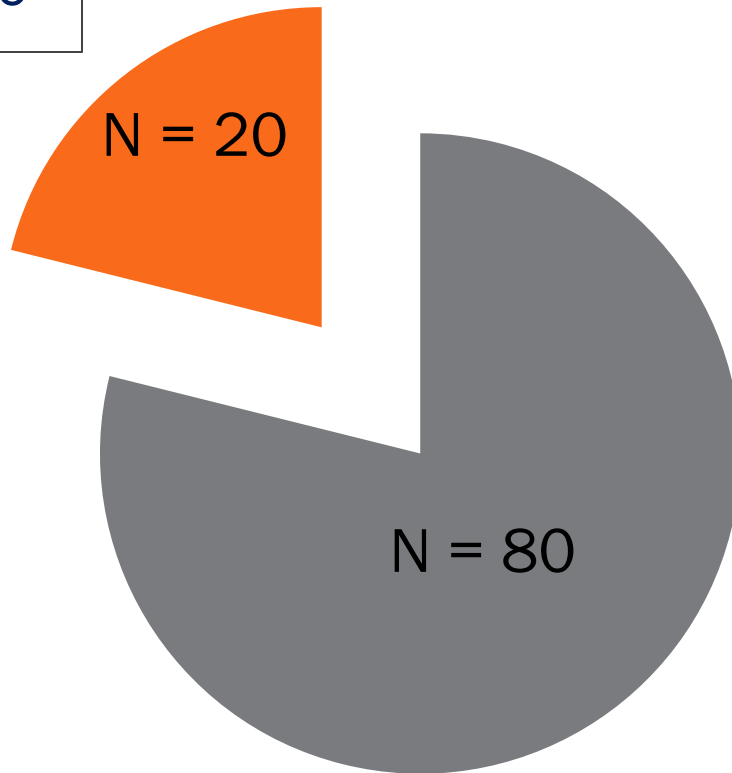
Below is a list of some of the ways you may have felt or behaved. Please indicate how often you've felt this way during the **past week**. Respond to all items.

Place a check mark (✓) in the appropriate column. During the past week...	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)
1. I was bothered by things that usually don't bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family.				
4. I felt that I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not "get going."				

Source: Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1: 385-401.

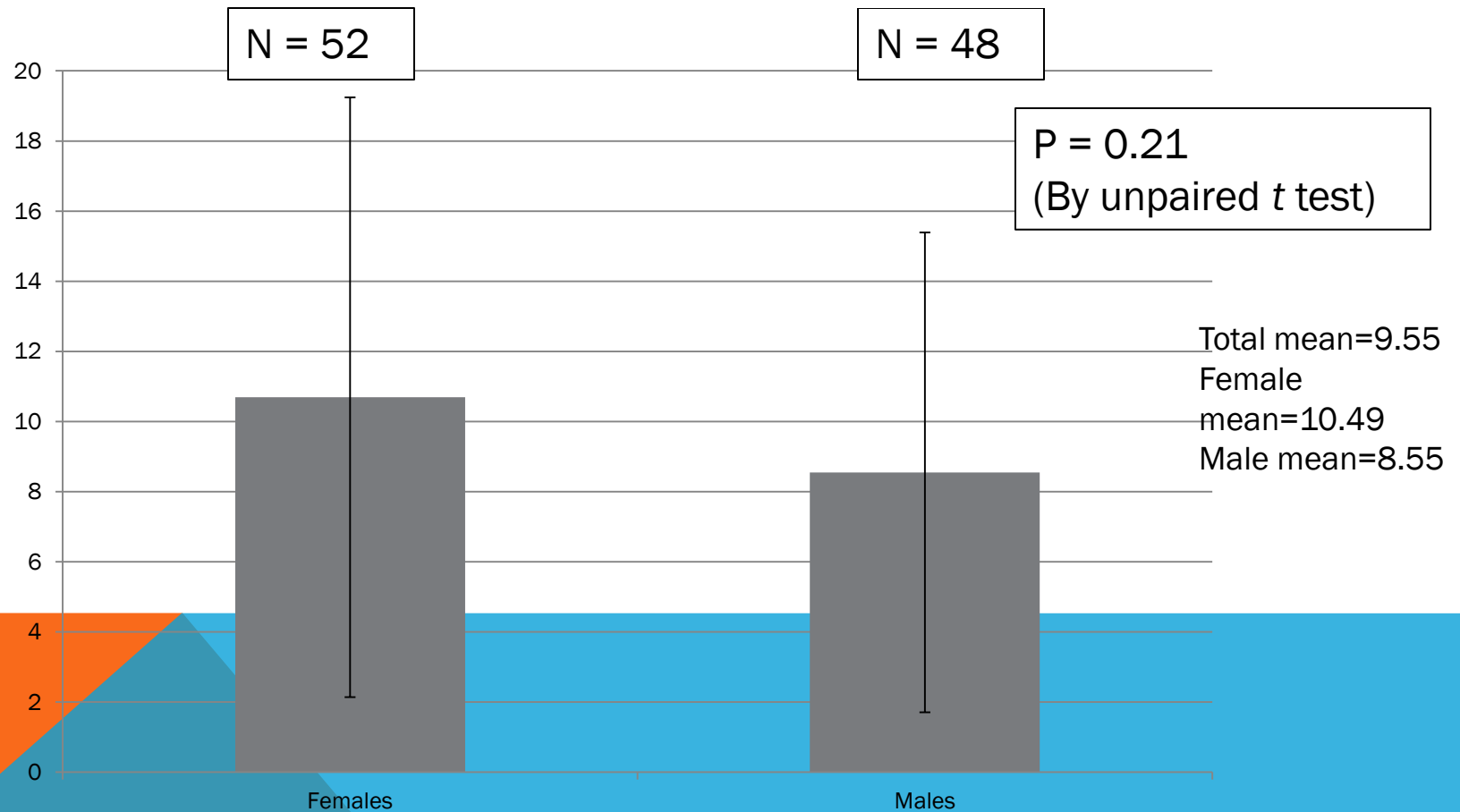
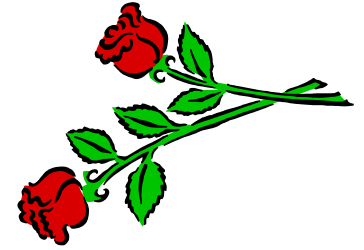
Emotional Status

20%

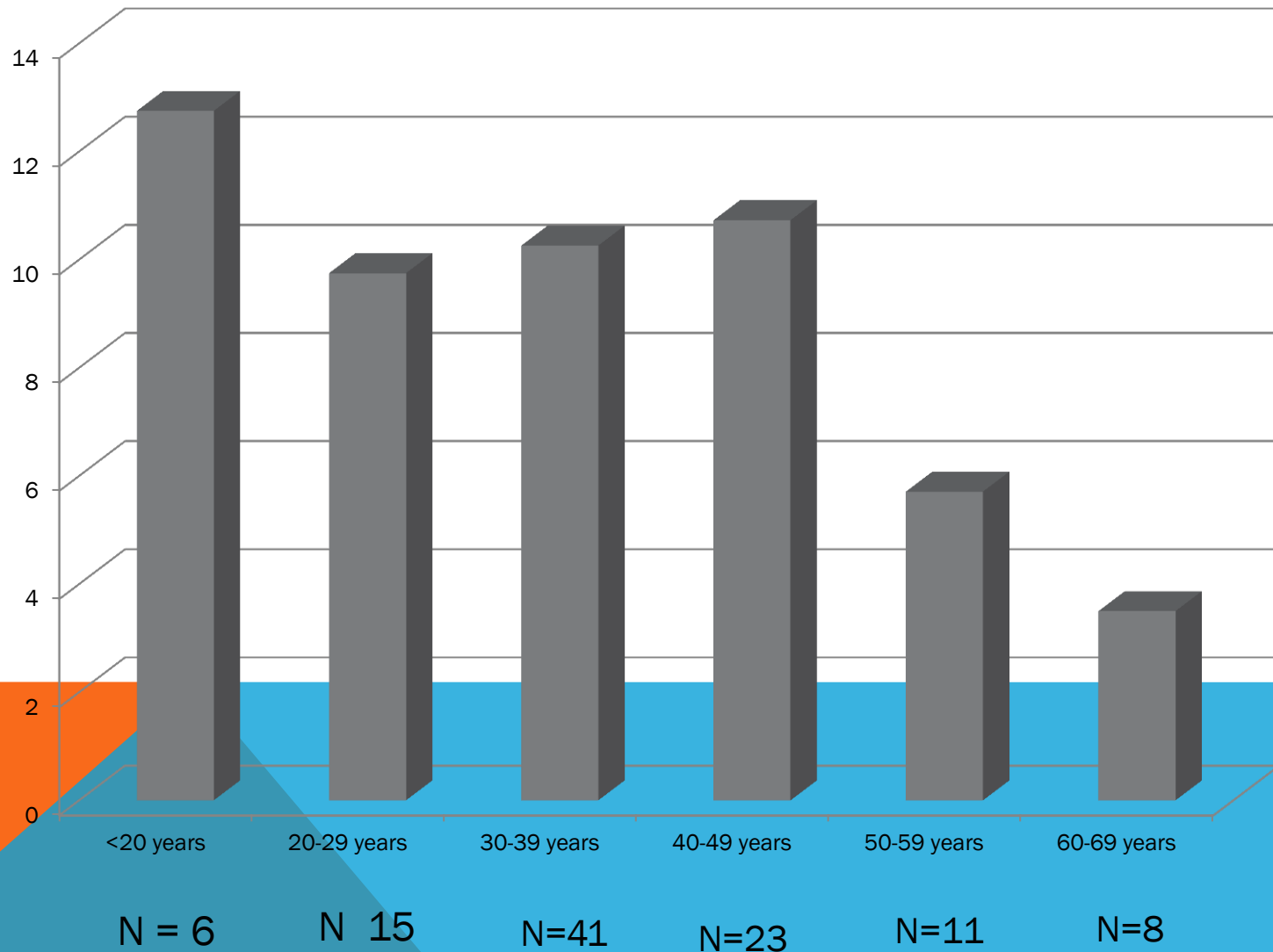
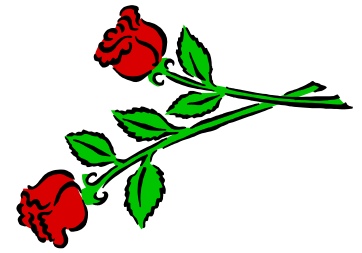


■ Not Depressed
■ Depressed

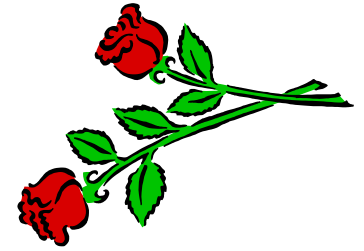
DEPRESSION SCORE BY GENDER



DEPRESSION SCORE BY DECADE



FOLLOW UP FOR 2013



Survey follow up in all patients with score > 16

Follow up scores came down significantly

- 82% scores were lower on post test
- 64% scores were < 16 on post test

Retrospective study exploring depression

Depression integrated into routine CF clinic visits

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems?

(Use "✓" to indicate your answer)

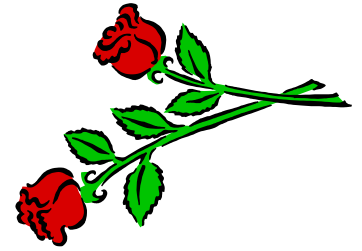
	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____
=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all <input type="checkbox"/>	Somewhat difficult <input type="checkbox"/>	Very difficult <input type="checkbox"/>	Extremely difficult <input type="checkbox"/>
--	--	--	---

TREATMENT



Referral to psychiatrist

Referral to psychologist or therapist

- CBT is evidenced based intervention for treatment of anxiety and depression in CF adolescents and adults

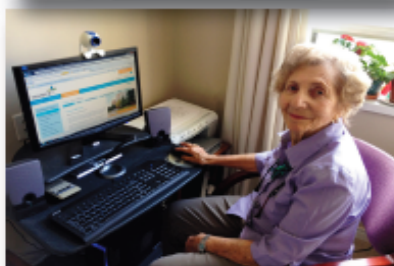
Self help strategies

- Exercise
- Faith based support systems
- Group support (support grp, mentor, CF community involvement)
- Mindfulness based stress reduction, meditation, hypnosis

FREE CF Counseling Support Program

USC Telehealth, through the University of Southern California is currently offering a special program of FREE (no obligation) professional online counseling worth \$2,000 per person for individuals, families, and caregivers affected by CF.

Participants receive up to 12 weeks of free 50-minute professional counseling sessions that highly professional, secure, and HIPAA compliant.



**Sponsored by the University of Southern California*

USC Telehealth
www.USCTELEHEALTH.com

- Coping with a CF diagnosis
- Stress, depression, anxiety
- Caring for a loved one with CF
- Financial pressures
- Kids/teens social adjustment
- Family counseling
- Couples therapy
- Grief and loss
- Other non-medical life issues & more...

You'll need:

- Computer (less than 4 yrs old)
 - Webcam
 - High-speed Internet
- For California residents
 - Easy and convenient (no driving)
 - Safe, private, and confidential
 - Family can connect from remote locations
 - Hablamos Español

Call Today!

(866) 740-6502

*Free spaces are limited to availability...call to reserve your spot ASAP