USING THE CANS FOR LOCAL PROGRAM EVALUATION

2013 STATE CSA CONFERENCE

USING THE CANS

- State mandatory uniform assessment instrument –
 Child and Adolescent Needs and Strengths (CANS) assessment instrument required beginning July, 2009
- How is the CANS being used around the state?
 - Service planning developing the IFSP, a communication tool for youth and families
 - FAPT review documentation of needs, level of care
 - Utilization review effectiveness of service, youth outcomes
 - Program evaluation, service evaluation
 - CPMT planning needs analysis for CSA-referred youth

OBJECTIVES FOR WORKSHOP

- What would participants like to get out of the workshop? Why this workshop?
 - See samples of how the CANS is used for outcome evaluation?
 - Learn "simple" ways of calculating CANS outcomes?
 - Want some ideas about how the CANS could be used for individual cases?

A "CAN-DO" ATTITUDE

- CANS as a requirement vs. a helpful/useful tool
- Case managers and agency staff provide data to their own agencies and state systems. They provide CANS ratings to CSA. What's their return on (time) investment?
- It's only fair, and it reinforces their behavior, to give them something useful back.
- Leaders and policy makers also need to see outcomes and a return on the investment (\$\$).

CSA AUDIT

OCS presentation to the Commission on Youth, November, 2012

- "Utilizing Data to Maximize Resources and Youth Outcomes"
- Data analysis to include the CANS:
 - Six domain scores for the initial assessments
 - Difference between the initial and the last assessment for the six domain scores

ASSESSMENT 101

- Reliability refers to the consistency of a measurement
 - Inter-rater reliability
- Validity the instrument measures what it intends to measure
- A measurement procedure cannot be valid unless it's reliable; however, a measurement can be reliable without being valid.

RELIABILITY

Challenges:

- CSA case managers vary in training and experience understanding and identifying "mental health/ behavioral health care" concepts
 - Ex. Adjustment to Trauma

Check of reliability:

- Members of the service planning team agree on the needs and strengths.
- Other assessments identify the same types of needs and strengths.

VALIDITY

Check of validity:

The family and youth agree that the CANS ratings accurately reflect their needs and strengths.

Service plans are consistent with the "Actionable" ratings on the CANS.

If those needs are addressed, the youth/family function better.

TCOM - GRID OF ACTIVITIES

Total Clinical Outcomes Management

- Decision Support what do you do?
- Quality Improvement how well did we do it?

 Outcome Monitoring -what difference did it make?

Refer to John Lyons, Ph.D. <u>www.CANSTraining.com</u> for more information

USES FOR CANS DATA

	Family and Youth	Programs	Systems
Decision Support	Service Planning	Eligibility	Resource Management
Quality Improvement	Case Management Supervision	Accreditation	Transformation
Outcome Monitoring	Service Planning & Transitions	Evaluation	Performance Contracting

Refer to www.CANSTraining.com for more information

LOCAL PROGRAM EVALUATION

CANS DATA ANALYSIS FOR LOCALITIES

EVALUATION DESIGN: FACTORS TO CONSIDER

- What do you want to analyze?
 - Individual change over time?
 - Specific service? (ex. ICC, RTC, TFC)
 - By vendor/provider
 - By disability/need
 - CSA program?

EVALUATION DESIGN: FACTORS TO CONSIDER

- What population do you want to analyze?
 - By Needs
 - Disability
 - Diagnosis (DSM-IV)
 - Autism
 - By Demographic Information
 - Age
 - Race
 - Region
 - Gender
 - Mandate or referral source

OTHER FACTORS TO CONSIDER

Which CANS need to be analyzed?

- First / Most recent
- First / Last this FY
- Entry / Exit from CSA
- Entry / Exit from a provider or service (i.e. ICC)
- Entry / Exit from a program (i.e. Foster Care, IEP, Non-Mandated)

FACTORS TO CONSIDER

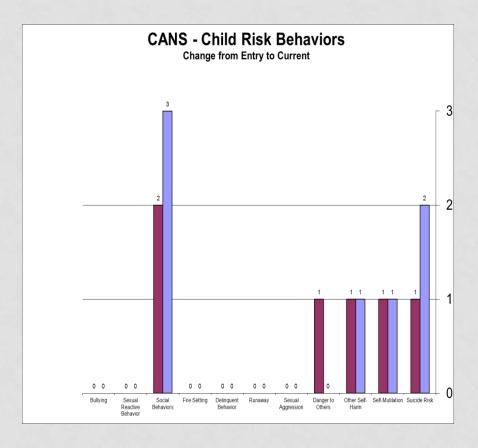
- Do you want to create Domain (Dimension) scores?
 - Average all the ratings in one domain and multiply by 10
- Do you want to look at each item within a domain or overall domain averages?
- Analyze only actionable items? (2's and 3's)
- All changes positive or negative can be analyzed

USING THE CANS FOR LOCAL PROGRAM EVALUATION

INDIVIDUAL ANALYSIS

CHANGE IN YOUTH OVER TIME

CANS - Child Risk Behavior	5/12/2011	8/12/2012
Suicide Risk	2	1
Self-Mutilation		
Other Self-Harm	1	1
Danger to Others	0	1
Sexual Aggression	0	0
Runaway	0	0
Delinquent Behavior	0	0
Fire Setting	0	0
Social Behaviors	3	2
Sexual Reactive Behavior		-
Bullying	0	0
	0	0
	6.36	5.45



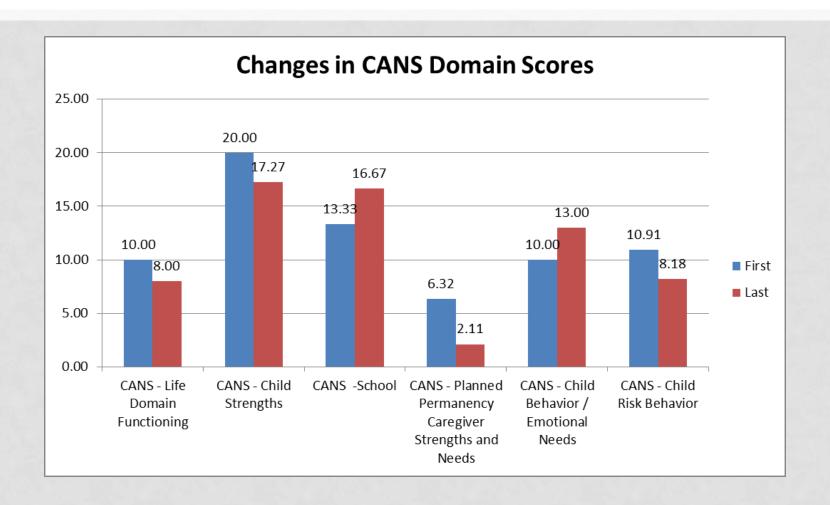
DIMENSION SCORES

SUMMARIZING CANS RATINGS BY DOMAIN

Instructions: Fill in the greyed out boxed, y	ou can then p	int the chart	s on the oth	er tab.		
CANS - Life Domain Functioning	First	Last	Std Error	StdDev	Error	RCI
Family	1	2				
Living Situation	2	3				
Sleep	1	2				
Social Functioning	2	2				
Sexual Development	0	0				
Recreational	2	0				
Developmental	0	0				
Communication	0	0				
Judgment	3	3				
Acculturation	1	0				
Legal	2	0				
Medical	0	0				
Physical Health - Life Domain	1	0				
Daily Functioning	0	0				
Independent Living	0	0				
	10.0	00.8	1.28	1.09	0.22	0.3
CANS - Child Strengths						
Family - Child Strength	2	1				
Interpersonal	2	2				
Optimism	1	2				
Educational	2	1				
Vocational	2	0				
Talents / Interests	1	2				
Spiritual / Religious	3	3				
Community Life	2	3				
Relationship Permanence	2	2				
Child Involvement	2	1				
Natural Supports	3	2				
• •	20.0	0 17.27	1.28	0.77	0.22	0.2

CANS - School						
Behavior	2	2				
Achievement	0	1				
Attendance	2	2				
	13.33	16.67	1.28	0.84	0.22	0.24
Not Applicable - No Caregiver Identified						
Supervision - Caregiver	3	0				
Involvement with Care - Caregiver	1	1				
Knowledge - Caregiver	1	2				
Organization - Caregiver	0	0				
Social Resources - Caregiver	2	0				
Residential Stability - Caregiver	0	0				
Physical Health - Caregiver	2	1				
Mental Health - Caregiver	0	0				
Substance Use - Caregiver	0	0				
Developmental - Caregiver	0	0				
Accessibility to Care - Caregiver	0	0				
Family Stress - Caregiver	1	0				
Self Care / Daily Living - Caregiver	0	0				
Employment - Caregiver	0	0				
Education - Caregiver	0	0				
Legal - Caregiver	0	0				
Financial Resources - Caregiver	0	0				
Transportation - Caregiver	1	0				
Safety - Caregiver	1	0				
- -	6.32	2.11	1.28	0.76	0.22	0.21

0	0				
	3				
	1				
	0				
	2				
0					
0					
2	1				
0	1				
0	1				
10.00	13.00	1.28	1.04	0.22	0.29
1	0				
	_				
	_				
	_				
_	_				
_	_				
10.91	8.18	1.28	1.00	0.22	0.28
		RCI			
10.00	8.00	0.31			
20.00	17.27	0.22			
13.33	16.67	0.24			
7					
6.32	2.11	0.21			
10.00	13.00	0.29			
10.91	8.18	0.28			
	0 2 0 0 10.00 10.00 10.00 2 10.91 10.00 20.00 13.33 6.32 10.00	3 3 3 2 1 1 1 0 2 2 2 0 2 2 1 0 1 1 0 1 1 1 1	3 3 3 2 1 1 1 0 2 2 2 0 0 2 2 0 1 0 0 1 0 1 1 0 0 1 1 1 0 0 1 1 1 0 0 0 1 1 1 0 0 0 0 1 1 0	3 3 3 2 1 1 1 0 2 2 2 0 0 2 2 0 0 2 0 0 1 0 0 1 0 0 0 0	3 3 3 1 1 1 1 0 2 1 1 1 1 0 1 1 1 1 1 1 1 1 1



USING THE CANS FOR LOCAL PROGRAM EVALUATION

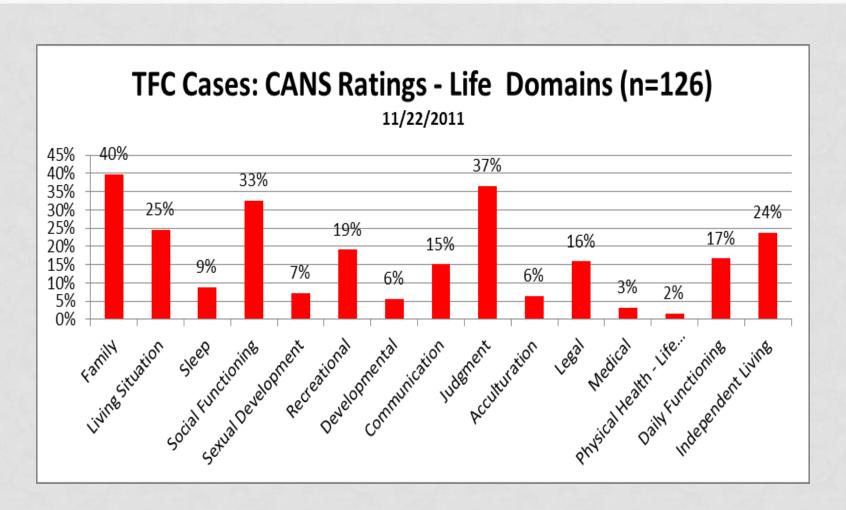
AGGREGATE DATA

SUMMARIZING CANS DATA ACROSS YOUTH

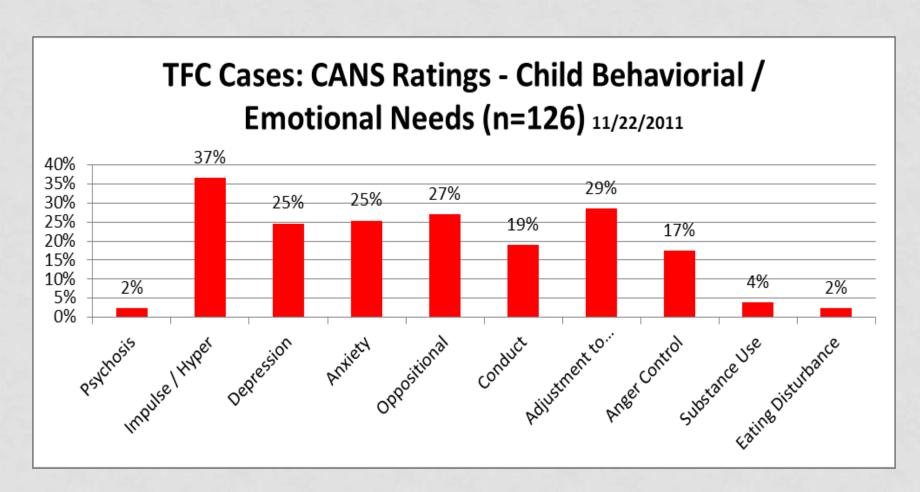
- Number and Percentage of Youth with ratings of 0, 1, 2, 3
 - Example: Out of 100 youth... on any item
 0 = 50 (50%)
 1 = 27 (27%)
 2 = 18 (18%)
 3 = 5 (5%)

- Summarize youth ratings at initial CSA referral to show the types of needs youth in your locality have
 - Example:
 - 37% of youth scored a "2 or a 3" on Adjustment to Trauma

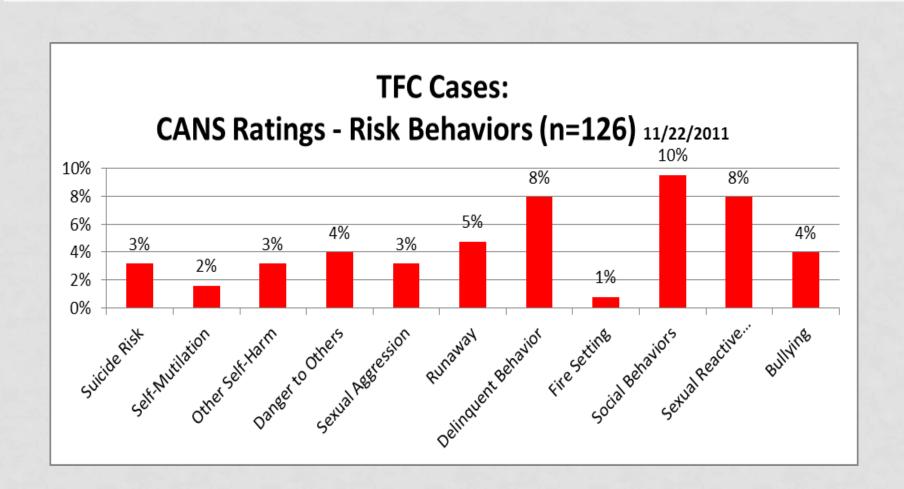
FY 2011 TFC CANS ANALYSIS BASED ON % OF ACTIONABLE ITEMS



FY 2011 TFC CANS ANALYSIS BASED ON % OF ACTIONABLE ITEMS



FY 2011 TFC CANS ANALYSIS BASED ON % OF ACTIONABLE ITEMS



OUTCOMES - % CHANGE IN RATINGS

- Compare the percentage of youth rated at each score at referral to CSA or at the beginning of a service to the percentage when they exit CSA or complete a service
 - Example comparison of the percentage of actionable needs at initiation of a Mental Health Juvenile
 Justice (MHJJ, Lyons, Griffin & Quintel, 2004) intervention designed to identify youth who were
 arrested and detained who had major mental illness as defined by either depressive or psychotic
 disorders.

CANS Mental Health Need	% at enrollment	% at transition
Depression	86.1	66.7
Psychosis	12.4	4.8
Attention deficit/Impulse	46.1	27.0
Oppositional behavior	67.8	49.2
Antisocial behavior	45.6	14.3
Adjustment to Trauma	31.2	25.8
Substance Use	23.5	9.0

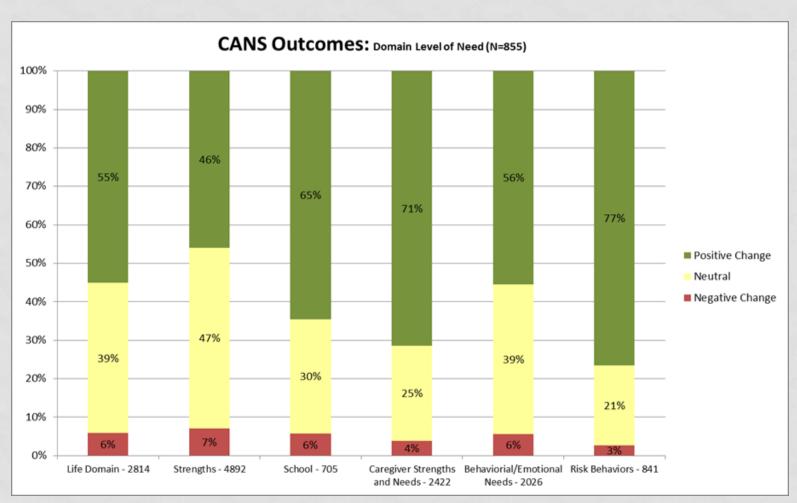
LOCAL PROGRAM EVALUATION

FAIRFAX-FALLS CHURCH CSA

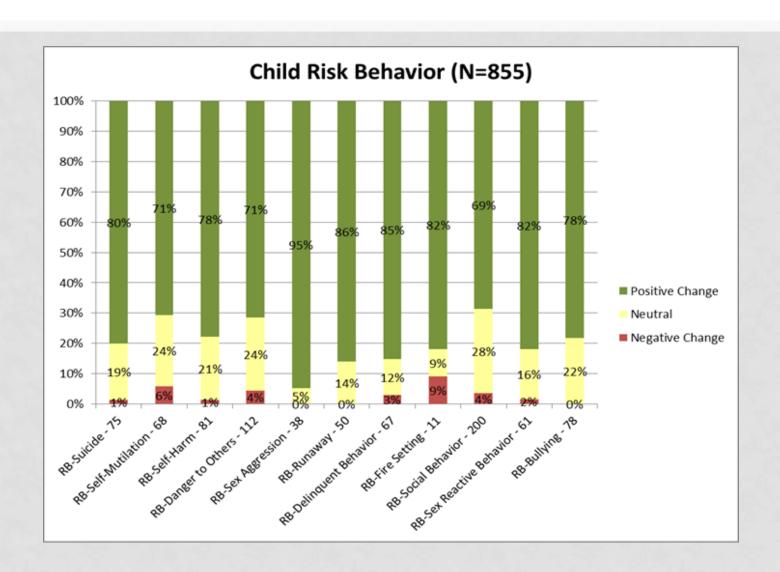
EVALUATION DESIGN

- Analysis of outcomes for CSA as a program
- Used CANS 5+ version
- Youth received services in FY 12 (N=1,251)
- Included youth with 2 administrations initial CANS and most recent in FY12 (N=855)
- FY 11 and FY 12 annual reports
- Used "Actionable" scores from initial to determine if youth had positive, negative or neutral change in ratings
- Obtained data file from OCS

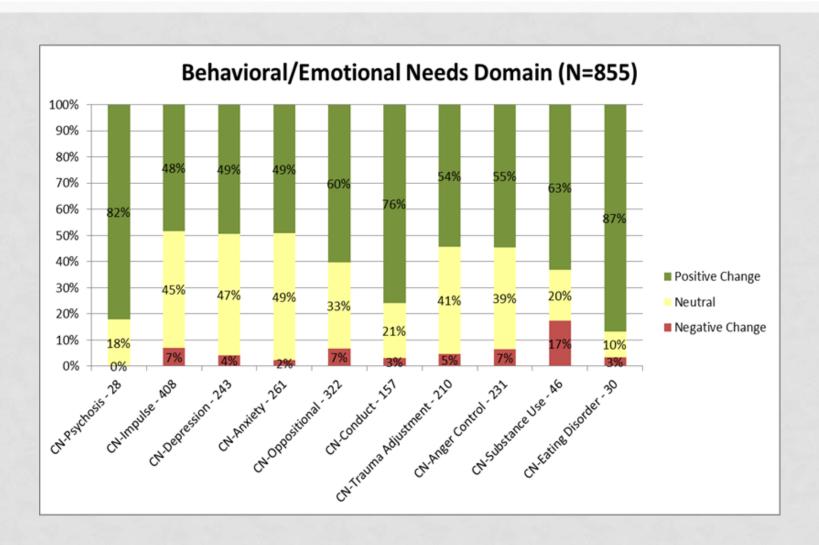
CHANGE ACROSS CANS DOMAINS



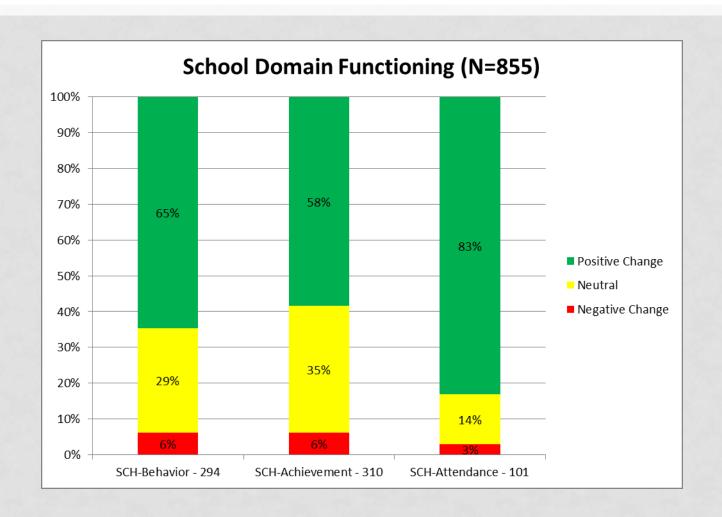
RISK BEHAVIOR DOMAIN



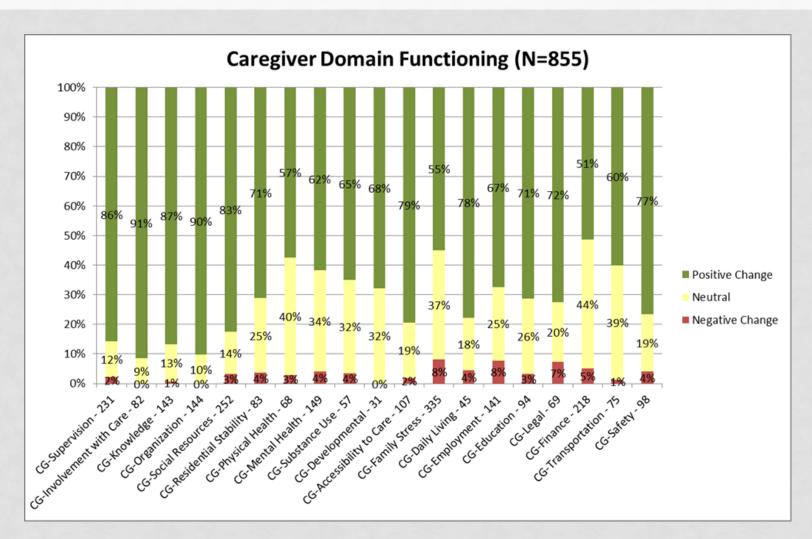
BEHAVIORAL/EMOTIONAL NEEDS



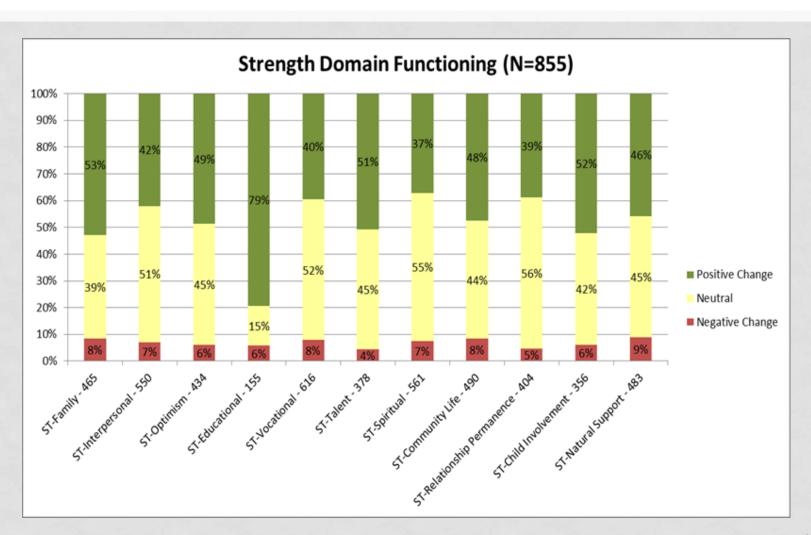
SCHOOL DOMAIN



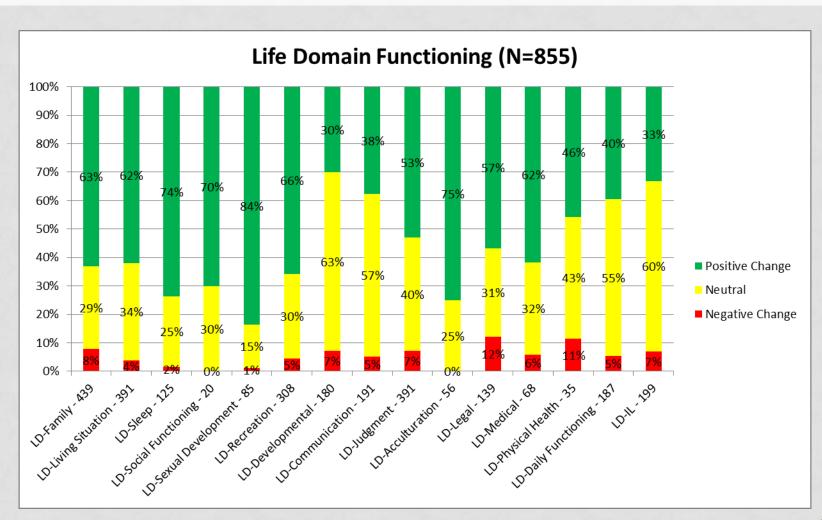
CAREGIVER DOMAIN



STRENGTHS



LIFE FUNCTIONING



STEPS TO CALCULATE OUTCOMES

- Obtain data file from state or create your own
- For each youth, line up item ratings for each domain for the two assessments (ex. first and most recent)
- Remove ratings of 0 and 1
- Calculate change score from two assessments
- Count the youth by category (# with positive, neutral or negative change)
- Change to % and create graph

RAW DATA FROM THE STATE

		799					700						-	- 20	76.6				
4	Α	В	С	D	Е	F	G	Н	1	J	K	L	M	N	0	P	Q	R	S
1	Consumer SSN	Consumer_Birth_Date	Consumer_Gender	CANS Date	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	LD-IL
2	1	7/30/94	M	12/4/09	1	0	0		0	0	0	0	0	1	0	0	0	1	2
3	1	7/30/94	М	7/2/10	1	1	0	0	0	2	0	1	0	1	1	0	0	1	1
4	1	7/30/94	M	10/14/11	1	2	1	1	0	1	1	1	3	0	0	0	0	1	0
5	1	7/30/94	M	2/27/12	2	3	0	3	0	3	0	0	3	0	2	0	0	0	1
6	2	8/27/98	M	12/14/09	1	0	0		0	0	0	0	1	1	0	0	0	1	0
7	2	8/27/98	M	3/22/11	2	1	1	2	0	3	0	0	2	0	0	1	0	1	1
8	2	8/27/98	M	4/23/12	1	1	0		0	2	0	0	3	0	2	0	0	0	0
9	2	8/27/98	M	8/13/12	2	2	1	1	0	2	0	0	3	0	2	0	0	0	2
10	2	8/27/98	М	10/15/12	2	3	1	1	0	2	0	0	2	0	2	1	0	0	2
11	3	10/14/04	М	12/14/09	0	0	0		0	0	0	1	0	0	0	0	0	0	0
12	3	10/14/04	М	7/2/10	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0
13	3	10/14/04	М	8/30/10	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
14	3	10/14/04	М	3/22/11	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
15	4	11/20/92	F	12/14/09	0	0	0		0	0	0	0	0	1	0	0	0	0	0
16	4	11/20/92	F	7/2/10	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0

FIRST AND MOST RECENT CANS

Consumer_SSN	1/R	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	LD-IL	ST-Family	ST-Interp	ST-Opt	ST-Edu	ST-Voc	ST-Talent	ST-Spirit	ST-Comm Lf	ST-Relation	ST-Child Inv	ST-Nat Supp
1	Α	2/26/99	M	2	1	1		0	2	0	0	2	0	0	1	1	1	0	3	3	2	1	3	2	2	2	2	1	3
1	В	2/26/99	M	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0	2	3	2	2	2	2	3	1	1	2	1
2	Α	3/1/90	M	0	1	0		0	1	1	1	1	0	0	1	0	1	1	0	2	1	1	1	2	0	2	0	1	3
2	В	3/1/90	M	1	0	0	1	0	1	2	0	1	0	0	0	0	1	2	1	1	1	0	2	2	0	3	2	1	2
3	Α	9/5/01	M	2	3	2		2	0	1	0	2	1	0	0	0	2	2	2	1	0	0	0	0	0	0	1	1	1
3	В	9/5/01	M	3	2	1	2	0	0	0	1	2	0	0	0	0	2	0	3	1	2	2	0	1	3	1	2	0	3
4	Α	9/12/93	F	1	1	0		0	0	0	0	1	1	1	0	0	0	0	1	2	1	0	1	1	3	0	1	2	1
4	В	9/12/93	F	3	3	0	1	0	0	1	0	2	1	1	0	0	1	0	1	0	0	3	1	2	2	1	1	3	1
5	Α	2/27/03	M	3	2	0		0	1	0	0	2	0	0	0	0	0	0	1	2	1	1	0	1	3	0	0	1	2
5	В	2/27/03	М	3	3	0	2	0	2	1	1	2	0	0	0	1	0	3	1	2	2	1	3	0	2	2	2	1	3
6	Α	3/16/94	F	0	1	2		0	1	0	0	0	0	2	0	0	0	0	1	1	1	1	2	2	2	2	2	0	3
6	В	3/16/94	F	1	0	1	1	0	0	0	0	1	1	2	0	0	0	0	1	0	1	0	0	2	2	1	2	0	0
7	Α	9/28/92	M	1	1	0		0	0	0	0	2	0	2	0	0	0	0	0	2	2	0	0	0	3	1	0	1	1
7	В	9/28/92	M	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	2	0	0	0	0	0	0	0	1

FIRST AND MOST RECENT CANS WITH A CHANGE LINE

	Consumer_SSN	I/R	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	T-D-IF	ST-Family	ST-Interp	ST-Opt	ST-Edu	ST-Voc	ST-Talent	ST-Spirit	ST-Comm Lf	ST-Relation	ST-Child Inv	ST-Nat Supp
1				_	_	-			-		-	-		-	-			-	-							_				3
2			2/26/99	М	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0	2	3	2	2	2	2	3	1	1	2	1
2 B 3/1/90 M 1 0 0 1 0 1 2 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0																														
2	2			М	0	1	0		0	1	1	1	1	0	0	1	0	1	1	0	2	1	1	1	2	0	2	0	1	3
3	2		3/1/90	M	1	0	0	1	0	1	2	0	1	0	0	0	0	1	2	1	1	1	0	2	2	0	3	2	1	2
3 B 9/5/01 M 3 2 1 2 0 0 0 1 2 0 0 0 0 2 0 3 1 2 2 0 1 3 1 2 0 4 4 A 9/12/93 F 1 1 0 0 0 0 1 0 1 1 1 1 0 0 0 0 1 1 2 1 0 1 1 3 0 1 2 1 1 3 0 1 2 4 B 9/12/93 F 3 3 0 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 1 0 1 3 0 0 1 3 4 C 5 5 A 2/27/03 M 3 2 0 0 0 1 0 1 0 0 2 1 1 0 0 0 1 0 1 0 1	2	С																												
3 C	3	Α	9/5/01	M	2	3	2		2	0	1	0	2	1	0	0	0	2	2	2	1	0	0	0	0	0	0	1	1	1
4 A 9/12/93 F 1 1 0 0 0 0 0 0 1 1 1 1 0 0 0 0 0 1 1 1 1 1 0 0 0 1 1 1 3 0 1 2 4 B 9/12/93 F 3 3 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0 0 3 1 2 2 1 1 3 4 C 5 A 2/27/03 M 3 2 0 0 1 0 0 1 0 0 2 0 0 0 0 0 0 1 2 1 1 0 0 1 2 1 1 0 0 1 3 0 0 1 5 B 2/27/03 M 3 3 0 2 0 2 1 1 2 0 0 0 0 1 0 3 1 2 2 1 3 0 2 2 2 1 1 5 0 0 0 0 0 1 0 3 1 2 2 1 3 0 2 2 2 2 1 6 A 3/16/94 F 0 1 2 0 1 0 0 0 0 0 1 1 2 0 0 0 0 0 1 1 1 1	3	В	9/5/01	M	3	2	1	2	0	0	0	1	2	0	0	0	0	2	0	3	1	2	2	0	1	3	1	2	0	3
4 B 9/12/93 F 3 3 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 1 0 0 3 1 2 2 1 1 3 4 C S S S S S S S S S S S S S S S S S S	3	С																												
4	4	Α	9/12/93	F	1	1	0		0	0	0	0	1	1	1	0	0	0	0	1	2	1	0	1	1	3	0	1	2	1
5 A 2/27/03 M 3 2 0 0 1 0 0 2 0 0 0 0 0 0 0 1 2 1 1 0 0 1 3 0 0 1 5 B 2/27/03 M 3 3 0 2 0 2 1 1 2 0 0 0 0 1 0 3 1 2 1 1 0 1 3 0 0 1 5 C C C C C C C C C C C C C C C C C C	4	В	9/12/93	F	3	3	0	1	0	0	1	0	2	1	1	0	0	1	0	1	0	0	3	1	2	2	1	1	3	1
5 B 2/27/03 M 3 3 0 2 0 2 1 1 2 0 0 0 1 0 3 1 2 2 1 3 0 2 2 2 1 5 C	4	С																												
5 C G G G G G G G G G G G G G G G G G G	5	Α	2/27/03	М	3	2	0		0	1	0	0	2	0	0	0	0	0	0	1	2	1	1	0	1	3	0	0	1	2
5 C G G G G G G G G G G G G G G G G G G	5			M	3	3	0	2	0	2	1	1	2	0	0	0	1	0	3	1	2	2	1	3	0	2	2	2	1	3
6 A 3/16/94 F 0 1 2 0 1 0 0 0 0 2 0 0 0 1 1 1 1 2 2 2 2																														
6 B 3/16/94 F 1 0 1 1 0 0 0 1 1 2 0 0 0 0 1 1 2 0 0 0 0		Α	3/16/94	F	0	1	2		0	1	0	0	0	0	2	0	0	0	0	1	1	1	1	2	2	2	2	2	0	3
				F	1	0	_	1	0		0	0		1		0	0	0	0		0	1			_				0	0
6 C -	6	С																												

CANS WITH 0'S AND 1'S REMOVED FROM THE FIRST CANS

Consumer_SSN	I/R	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	TD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	LP-IL
4423401	Α	2/26/99	M	2					2			2						
4423401	В	2/26/99	M	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0
4423401	С																	
5789008	Α	3/1/90	M															
5789008	В	3/1/90	M	1	0	0	1	0	1	2	0	1	0	0	0	0	1	2
5789008	С																	
6580947	Α	9/5/01	M	2	3	2		2				2					2	2
6580947	В	9/5/01	M	3	2	1	2	0	0	0	1	2	0	0	0	0	2	0
6580947	С																	
6930952	Α	9/12/93	F															
6930952	В	9/12/93	F	3	3	0	1	0	0	1	0	2	1	1	0	0	1	0
6930952	С																	
7728217	Α	2/27/03	M	3	2							2						
7728217	В	2/27/03	M	3	3	0	2	0	2	1	1	2	0	0	0	1	0	3
7728217	С																	
001-94-57	A	3/16/94	F			2								2				
001-94-57	В	3/16/94	F	1	0	1	1	0	0	0	0	1	1	2	0	0	0	0
001-94-57	C																	
021-76489	A	9/28/92	M									2		2				
021-76489	В	9/28/92	M	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
021-76489	C																	

CANS WITH 0'S AND 1'S REMOVED AND REPLACED WITH N/A'S IN FIRST CANS

Consumer_SSN	I/R	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	TD-II
1	Α	2/26/99	M	2	N/A	N/A	N/A	N/A	2	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
1	В	2/26/99	M	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0
1	С																	
2	Α	3/1/90	M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	В	3/1/90	M	1	0	0	1	0	1	2	0	1	0	0	0	0	1	2
2	С																	
3	Α	9/5/01	M	2	3	2	N/A	2	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	2	2
3	В	9/5/01	M	3	2	1	2	0	0	0	1	2	0	0	0	0	2	0
3	С																	
4	Α	9/12/93	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	В	9/12/93	F	3	3	0	1	0	0	1	0	2	1	1	0	0	1	0
4	С																	
5	Α	2/27/03	М	3	2	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
5	В	2/27/03	М	3	3	0	2	0	2	1	1	2	0	0	0	1	0	3
5	С																	
6	Α	3/16/94	F	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A
6	В	3/16/94	F	1	0	1	1	0	0	0	0	1	1	2	0	0	0	0
6	С																	

CALCULATING THE CHANGE IN CANS SCORES (OLD – NEW)

Consumer_SSN	I/R	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	LD-IL
1	Α	2/26/99	M	2	N/A	N/A	N/A	N/A	2	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
1	В	2/26/99	M	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0
1	C			1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	2	#VALUE!	#VALUE!	1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2	Α	3/1/90	M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	В	3/1/90	M	1	0	0	1	0	1	2	0	1	0	0	0	0	1	2
2	С				#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
3	Α	9/5/01	M	2	3	2	N/A	2	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	2	2
3	В	9/5/01	М	3	2	1	2	0	0	0	1	2	0	0	0	0	2	0
3	С				1	1	#VALUE!	2	#VALUE!	#VALUE!	#VALUE!	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	0	2
4	Α	9/12/93	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	В	9/12/93	F	3	3	0	1	0	0	1	0	2	1	1	0	0	1	0
4	С				#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
5	Α	2/27/03	M	3	2	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
5	В	2/27/03	M	3	3	0	2	0	2	1	1	2	0	0	0	1	0	3
5	С				-1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
6	Α	3/16/94	F	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A
6	В	3/16/94	F	1	0	1	1	0	0	0	0	1	1	2	0	0	0	0
6	С				#VALUE!	1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!

N/A'S REMOVED AND REPLACED WITH BLANKS

Consumer_SSN	I/R	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	ID-IL
1	Α	2/26/99	M	2					2			2						
1	В	2/26/99	M	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0
1	С			1					2			1						
2	Α	3/1/90	М															
2	В	3/1/90	М	1	0	0	1	0	1	2	0	1	0	0	0	0	1	2
2	С																	
3	Α	9/5/01	M	2	3	2		2				2					2	2
3	В	9/5/01	М	3	2	1	2	0	0	0	1	2	0	0	0	0	2	0
3	С			-1	1	1		2				0					0	2
4	Α	9/12/93	F															
4	В	9/12/93	F	3	3	0	1	0	0	1	0	2	1	1	0	0	1	0
4	С																	
5	Α	2/27/03	М	3	2							2						
5	В	2/27/03	M	3	3	0	2	0	2	1	1	2	0	0	0	1	0	3
5	С			0	-1							0						
6	Α	3/16/94	F											2				
6	В	3/16/94	F	1	0	1	1	0	0	0	0	1	1	2	0	0	0	0
6	С													0				

CHANGE IN THE CANS FROM THE FIRST CANS TO THE MOST RECENT

Consumer_SSN	Visit_Date	I/R	Consumer_Last_Name	Consumer_First_Name	Consumer_Birth_Date	Consumer_Gender	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Development	LD-Recreation	LD-Dev elopmental	LD-Communication	LD-Judgement	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	LD-IL
1		С					1					2			1						
2		C																			
3		C					-1	1	1		2				0					0	2
4		C																			
5		С					0	-1							0						
6		C															0				
7		С													2		0				
8		С					0	2			1	0			1					2	1
9		С																			
10		С					2	0							1		2				
11		С					0	1			3	2		2	0		0			2	1

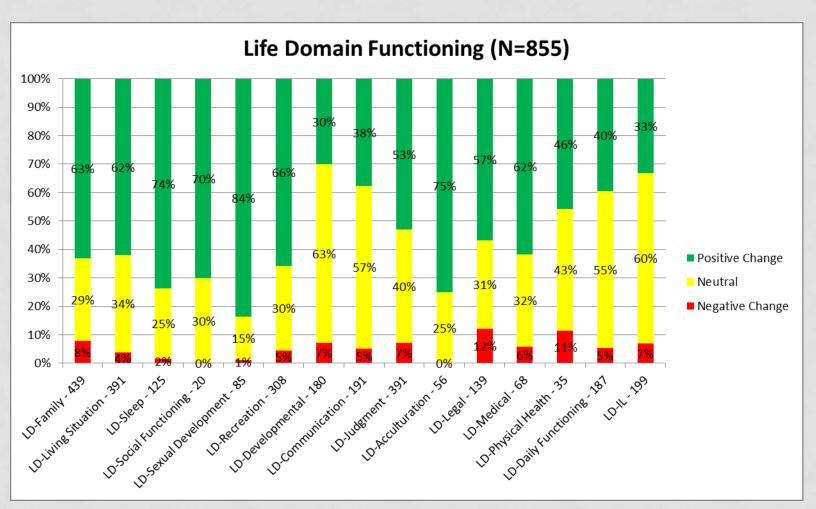
COUNTS OF THE CHANGE IN CANS SCORES

	LD-Family	LD-Living Situation	LD-Sleep	LD-Social Functioning	LD-Sexual Developmen	LD-Recreation	LD-Developmental	LD-Communication	LD-Judgment	LD-Acculturation	LD-Legal	LD-Medical	LD-Physical Health	LD-Daily Functioning	TP-II	LD-Score
Count	439	391	125	20	85	308	180	191	391	56	139	68	35	187	199	2814
-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o
-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o
-1	34	15	2	0	1	14	13	10	28	0	17	4	4	10	14	166
0	128	134	31	6	13	91	113	109	156	14	43	22	15	103	119	1097
1	171	115	38	6	26	104	42	49	120	13	33	29	8	42	37	833
2	94	100	48	4	27	69	12	23	68	24	37	13	8	27	16	570
3	12	27	6	4	18	30	0	0	19	5	9	0	0	5	13	148
Negative Change	34	15	2	0	1	14	13	10	28	0	17	4	4	10	14	166
Neutral	128	134	31	6	13	91	113	109	156	14	43	22	15	103	119	1097
Positive Change	277	242	92	14	71	203	54	72	207	42	79	42	16	74	66	1551

PERCENTAGE CHANGE IN CANS SCORES

	LD-Family - 439	LD-Living Situation - 391	LD-Sleep - 125	LD-Social Functioning - 20	LD-Sexual Development - 85	LD-Recreation - 308	LD-Developmental - 180	LD-Communication - 191	LD-Judgment - 391	LD-Acculturation - 56	LD-Legal - 139	LD-Medical - 68	LD-Physical Health - 35	LD-Daily Functioning - 187	LD-IL - 199
Negative Change	8%	4%	2%	0%	1%	5%	7%	5%	7%	0%	12%	6%	11%	5%	7%
Neutral	29%	34%	25%	30%	15%	30%	63%	57%	40%	25%	31%	32%	43%	55%	60%
Positive Change	63%	62%	74%	70%	84%	66%	30%	38%	53%	75%	57%	62%	46%	40%	33%

GRAPH OF CHANGE IN CANS SCORES

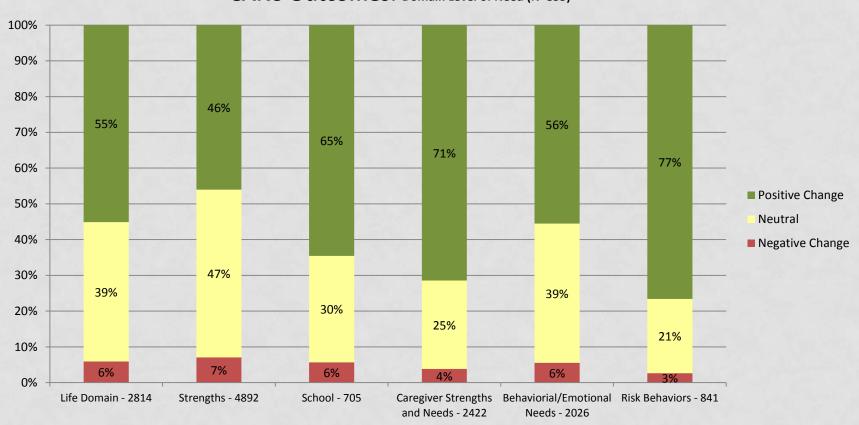


CHANGE IN CANS AVERAGE DIMENSION SCORES

	LD-Score	ST-Score	SCH-Score	CG-Score	CN-Score	RB-Score
Count	2814	4892	705	2422	2026	841
-3	0	0	0	0	0	0
-2	0	0	0	0	0	0
-1	166	346	40	93	112	22
0	1097	2294	210	598	789	175
1	833	1387	211	453	694	279
2	570	637	176	912	371	295
3	148	228	68	366	60	70
Negative Change	166	346	40	93	112	22
Neutral	1097	2294	210	598	789	175
Positive Change	1551	2252	455	1731	1125	644
	LD-Score	ST-Score	SCH-Score	CG-Score	CN-Score	RB-Score
Negative Change	6%	7%	6%	4%	6%	3%
Neutral	39%	47%	30%	25%	39%	21%
Positive Change	55%	46%	65%	71%	56%	77%
r ositive change	5570	70/0	0570	7170	3070	7770

AGGREGATE CHANGE ACROSS CANS DOMAINS

CANS Outcomes: Domain Level of Need (N=855)



USING THE CANS

Questions or Comments

You may contact us at:

- Christopher.Metzbower@fairfaxcounty.gov
- Janet.Bessmer@fairfaxcounty.gov

Thank you!!