



Consumer Feedback About Services: How is it Being Used at DHS

Age and Disabilities Odyssey Conference

8/1/2019

Agenda

Time	Topic	Speaker
2:45 - 2:50	Introductions	All
2:50 – 3:10	Overview of National Core Indicators (NCI) Initiative	Julie Angert Miriam DeVaney-Hirman
3:10 – 3:30	NCI-AD Factor Analysis: Developing a Quality of Life Index	Tetyana Shippee Yinfei Duan
3:30 – 3:50	Health Plan NCI-AD Collaboration	Nancy Taff Susan Oestreich Laurel Rose
3:50 – 4:00	Questions	All

What are the National Core Indicators (NCI) surveys?

- Standardized national survey tools
- Collaboration between states and national partners started in 1997
- Minnesota is one of 46 states that voluntarily participates in a NCI survey
- One way DHS measures quality
- Results are used to improve and monitor services and supports

NCI Partners

- Develop survey tools and analyze national data
 - National Association of State Directors of Developmental Disabilities Services (NASDDDS)
 - National Association of States United for Aging and Disabilities (NASUAD)
 - Human Services Research Institute (HSRI)
- Implement interviews and surveys in Minnesota
 - Vital Research

What sets the NCI surveys apart from other efforts?

- National comparison data with other states
- Surveys were developed for specific populations
- Gathers feedback directly from people
- Independently administered

NCI Suite of Surveys

Survey	Target Population	Method
Aging and Disabilities (AD)	Adults with a physical disability People age 65+	Face to face interview
Adult In-person Survey (IPS)	Adults with intellectual and developmental disabilities (I/DD)	Face to face interview
Adult Family Survey	Families of adults with I/DD living with family	Mailed survey
Family/Guardian Survey	Families or guardians of adults with I/DD not living with family	Mailed survey
Child Family Survey	Families of children with I/DD living with family	Mailed survey

NCI-AD Target Population

Survey	Target Population	# Complete	Sample level(s)
Disability population	Adults with a physical disability	400 or 2,000	<ul style="list-style-type: none">• State• Region• Race/ethnicity
Aging population	People receiving home care with PCA, AC, EW	2,000	<ul style="list-style-type: none">• State• Program• Managed care organization (EW)• Race/ethnicity

Limitations of the NCI surveys

- The results can only be generalized to the survey's target population.
- The results are not reflective of everyone who receives services.

Limitations of surveys cont.

- Comparisons across state results should be interpreted with caution.
- Each state has a different LTSS system.
- Each state is allowed to define its target population.

Limitations of surveys cont.

- Comparisons across years should be interpreted with caution, for some questions.
- Questions may change from year to year.
- The NCI survey tools are trademarked tools developed by NASDDDS, NASUAD, and HSRI.

What questions do the NCI data help inform?

- Results based accountability framework
 - How much did we do?
 - **How well did we do it?**
 - **Is anyone better off?**

What do the NCI surveys tell us about people?

1. Activities they engage in during the day
2. The nature of their experiences with the services and supports that they receive
3. The context of their lives – friends, community involvement, safety
4. Health and well-being, access to healthcare

Activities people engage in during the day

What does the NCI survey tell us?

- Do people get to do things they enjoy outside of the home as much as they want to?
- Do people have transportation to do things outside of their home?
- Has anyone talked with people who want a job about job options?

The nature of people's experiences with the services and supports that they receive

What does the NCI survey tell us?

- Can people reach their case manager / care coordinator when they need to?
- Can people choose or change how often and when they get services?
- Do the paid staff that help people treat them with respect?

The context of people's lives – friends, community involvement, safety

What does the NCI survey tell us?

- Are people as active in their community as they'd like to be?
- Can people see or talk with family and friends when
- Do people else have concerns about themselves falling or being unstable?

Health and well-being, access to healthcare

What does the NCI survey tell us?

- Do people always get enough help with self-care when they need it?
- Do people know how to manage their chronic conditions? (if they have one)
- Can they see a doctor when they need to?

Learn about NCI Results

Full survey results

- www.NationalCoreIndicators.org (intellectual and developmental disabilities)
- www.NCI-AD.org (adults age 65+ and people with physical disabilities)

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NCI-AD Factor Analysis: Developing a Quality of Life Index

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Agenda

- What is a factor analysis and how can factor analysis results be used to inform policy
- Developing a Quality of Life (QOL) index based on factor analysis using NCI-AD data
- Racial/ethnic disparities in QOL
 - older adults
 - younger adults with disabilities

What is a factor analysis?

- A useful tool for looking at relationships between variables for complex concepts such as QOL
 - 1) Allows to collapse a large number of variables into indexes
 - Develop and validate scales
 - 2) Captures a latent, unobserved construct based on multiple observed variables that have similar patterns of responses
 - 3) Useful for sub-group analyses (e.g., by race/ethnicity) at index/scale level rather than item level to reduce measurement error and improve statistical power

Developing a QOL index based on factor analysis using NCI-AD data

Methods

- **Item screening**
 - 44 out of 88 items are eligible because they are not conditional items and are not multiple-choice items
- **Domains identification**
 - Item analysis: missing data analysis, items' descriptive statistic
 - Exploratory factor analysis
- **Domains confirmation**
 - Confirmatory factor analysis (4 factors identified: security, community inclusion, physical function, care experience)
- **Psychometric test**
 - Reliability (Cronbach's alpha)
 - Validity (CFA model fit, correlation with some global measures)
- **Examining differences in QOL domains across racial/ethnic groups**

Results For Older Adults

QOL index for older adults

Security (Alpha=0.56)

1. Worry about belongings*
2. Feel safe
3. Money has been taken without permission*
4. Prefer to live somewhere else*
5. Like where I am living right now

Community inclusion (Alpha=0.52)

1. Can eat meals when I want to
2. Can get up and go to bed at the time when you want to
3. People ask your permission before coming into your home/room?
4. Like how I spend a day
5. Can access healthy food
6. Can do things I enjoy outside of my home
7. Have transportation going outside

Physical Function (Alpha=0.70)

1. Need assistance with self-care*
2. Need assistance in daily life activities*
3. Self-identified disability*

Care experience (Alpha=0.64)

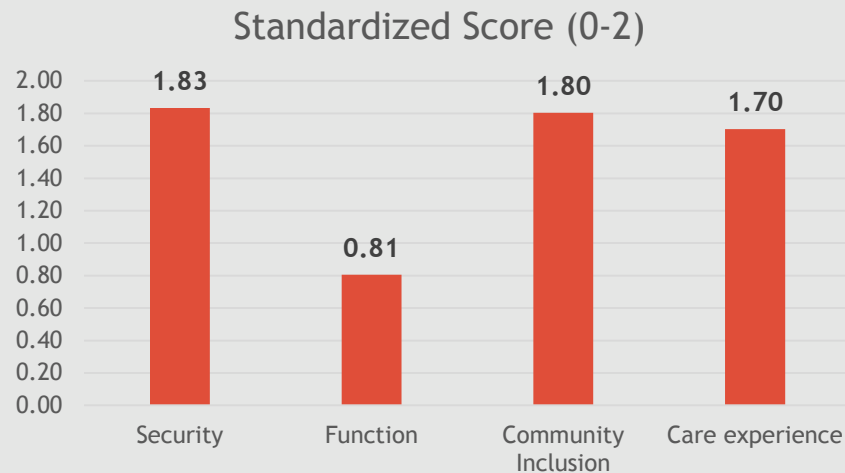
1. Know whom to call when I have a complaint about the services
2. Know whom to call when I need different types of services
3. Can choose types of services and determine how often and when to get them
4. Can choose or change who provides my services

All items are recoded to 0-2

*items are reverse coded

Summary of QOL domains for older adults

Summary score	Original range	Items	Mean	Std. Dev.
Security	0-10	5	9.16	1.49
Function	0-6	3	2.42	1.86
Community Inclusion	0-14	7	12.62	1.74
Care experience	0-8	4	6.81	1.89



Racial/ethnic disparities in QOL for older adults (unadjusted)

	White	Black	Asian	Hispanic/Latino
Security (0-10)	9.24	9.12	9.52**	9.15
Function (0-6)	2.82	1.61**	1.92**	2.10**
Community Inclusion (0-14)	12.48	12.81	13.26**	12.91*
Care experience (0-8)	6.95	6.43**	6.64	6.35

** Significantly different from White with $P < 0.01$; * $P < 0.05$

Racial/ethnic disparities in QOL for older adults (adjusted)

	Security (0-10)	Function (0-6)	Community Inclusion (0-14)	Care experience (0-8)
Race(Ref=White)				
Black	0.05	-0.90**	0.00	-0.89**
Asian	0.22	-0.75**	0.45*	-0.73*
Hispanic/Latino	-0.03	-0.32	0.30	-0.80*
Age	0.03**	0.00	0.01	-0.01
Female	0.00	-0.21	-0.07	0.07
Area(Ref=Metropolitan)				
Micropolitan	0.10	0.37	0.14	-0.61**
Small town	-0.07	0.71**	0.52*	-0.37
Rural	-0.01	0.42*	0.22	0.22
Live with (Ref=spouse)				
Alone	-0.39**	0.76**	-0.53*	-0.57**
Non-spouse family number	-0.26	0.08	-0.32	-0.47*
Live-in personal care assistant or others who are not family or friend	-0.81**	0.32	-0.99*	-0.65*
Live at group setting (Ref=at home)	0.49*	0.08	0.88**	0.49
Hearing impaired	0.06	-0.32*	-0.18	0.21
Vision impaired	-0.22	-0.17	-0.08	-0.34*

*p<0.05; ** p<0.01

Results For Younger Adults

QOL index for younger adults

Security (Alpha=0.64)

1. Like where I am living right now
2. Money has been taken without permission
3. Worry about belongings
4. Prefer to live somewhere else
5. Feel safe
6. People ask my permission before coming into my home/room

Care experience (Alpha=0.66)

1. Can choose or change who provides my services
2. Can choose or change types of services and determine how often and when to get them
3. Know whom to call when I need different types of services
4. know whom to call when I have a complaint about the services

Community inclusion (Alpha=0.72)

1. Can access to healthy food
2. Can do things I enjoy outside of my home
3. Like how I spend a day
4. Have transportation going outside
5. Have transportation going to medical appointments
6. Have been diagnosed with a chronic condition or conditions *
7. During the past 12 months, I forget things more often than before *
8. Have to skip a meal due to financial constraints *
9. I or somebody else have concerns about you falling or being unstable*
10. I have a paying job in the community, either full-time or part-time

Physical function (Alpha=0.64)

1. Need assistance in self care*
2. Need assistance in daily life activities*
3. Self-identified disability*

Findings for younger adults

All items are recoded to 0-2

*items are reverse coded

Items in **brown** are those not in the QOL scale for older adults

Summary of QOL domains for younger adults

Summary score	Items	Original range	Mean	Std. Dev.
Security	6	0-12	10.36	2.21
Function	3	0-6	1.98	1.77
Community Inclusion	10	0-20	13.55	3.37
Care experience	4	0-8	6.71	1.87



Racial/Ethnic disparities in QOL for younger adults (unadjusted)

	White	Black	Asian	Hispanic/Latino
Security (0-12)	10.59	10.23*	10.77	10.65
Function (0-6)	1.90	1.23**	1.30**	1.24
Community inclusion (0-20)	13.24	11.82**	11.76**	13.02
Care experience (0-8)	6.75	6.37*	6.51	6.20

** Significantly different from White with $P < 0.01$; * $P < 0.05$

Racial/Ethnic disparities in QOL for younger adults (adjusted)

	Security (0-12)	Function (0-6)	Community inclusion (0-20)	Care experience (0-8)
Race(Ref=White)				
Black	-0.46	-0.44**	-0.73	-0.49*
Asian	0.19	-0.32	-0.94	-0.19
Hispanic/Latino	-0.35	-0.75**	-0.45	-0.48
Age	-0.01	-0.02**	-0.07**	0.00
Female	-0.09	-0.25*	-1.08**	-0.27
Area(Ref=Metropolitan)				
Micropolitan	0.12	0.08	0.16	0.10
Small town	-0.21	0.03	0.55	0.17
Rural	0.02	-0.10	0.03	0.44*
Live with (Ref=spouse)				
Alone	-0.44	0.42*	-0.77	0.45
Non-spouse family member	-0.21	-0.17	-0.43	0.23
Live-in personal care assistant or others who are not family or friend	0.77	0.76**	2.46**	0.49
Live at group setting (Ref=at home)	-1.47**	0.13	-0.80*	-0.23
Hearing impaired	0.50*	0.01	-0.35	-0.18
Vision impaired	-0.12	-0.45**	-0.15	0.04

*p<0.05; ** p<0.01

Validating QOL index using 2017-2018 NCI-AD data

- Item reliability and validity are comparable
- Item composition is mainly the same, except:
 - some items are not available in 2017-2018 survey
 - some new items in 2017-2018 survey
- Significant racial/ethnic differences in QOL remain in 2017-2018 data

Next steps

- Finalize the index based on both waves of data

Conclusions

- NCI-AD survey is a useful tool for measuring consumer-reported quality of LTSS
- Numerous items on NCI-AD that may reflect quality=need for factor analysis to optimize
- Need for better psychometric precision

- Different QOL indexes for older adults and younger adults with disability
 - QOL measures should be adapted for the two subsamples



Thank You!

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Health Plan NCI-AD Collaboration

Comparing Factor Analysis Results

Program	Security (0-10)	Community Inclusion (0-10)	Function (0-6)	Care Experience (0-8)	Quality of Life (0-26)	Service Performance (0-34)
Plan A	9.04	8.90	3.01	6.65	21.08	27.83
Plan B	9.07	8.92	2.11	6.54	20.21	27.02
Plan C	9.30	9.18	2.61	7.19	21.21	28.35
Plan D	9.30	8.97	2.27	6.89	20.73	27.89
Plan E	9.26	9.07	3.19	7.23	21.70	28.75
Plan F	9.17	9.02	2.99	6.81	21.37	28.47
Plan G	9.29	9.13	2.11	6.65	20.88	28.00
FFS	8.42	8.39	2.38	6.13	19.63	25.64
Overall	9.17	8.99	2.57	6.79	20.94	27.91
P	0.017	0.105	<0.001	0.020	<0.001	0.006

Red = Statistically significantly lower.

Analyzing the Individual Health Plan Data

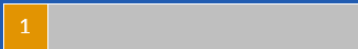
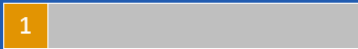


Diving Deeper

Key Factor: Security

- Feel safe
- Feel belongings are safe
- Money was taken or used without permission
- Satisfied with where you live
- Would prefer to live somewhere else

Health Plan Rank



Looking at Disparities

results
for
older
adults

Factor	White	Black	Asian	Hispanic/ Latino	Overall
Security	9.20	8.84	9.33	9.18	9.16
Community Inclusion	8.88	8.64	9.10	9.01	8.87
Care Experience	6.96	6.51	6.53	6.26	6.81
Function	2.73	1.52	1.42	1.98	2.42

Red= statistically significantly lower than White

Identifying Improvement Opportunities

What can we do
as a health
plan?

What can we do
as a health plan
collaborative?

Common Thread

Care Coordination Services:

- knowing who your care coordinator is and how they can help

Other areas to explore:

- Getting materials in your preferred language
- Safety: Feeling safe in your home

Questions?