Improving Quality of Life through Structured Resident Interviews and Care Planning

National Stakeholders Briefing
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BACKGROUND AND STUDY FINDINGS

Overview

- Background and Rationale
- QOL.SRI/CP System
- Findings from Randomized Controlled Trial

Background

- Quality of Life is acknowledged to be poor at many nursing homes
- MDS 2.0 mainly measures clinical and functional deficits
  - Existing Quality Indicators and Quality Measures (NHCompare) do not address QOL in a meaningful way
- Growing Regulatory Focus
  - MDS 3.0, QIS, QOL FTAG Guidance

RAI/Minimum Data Set 3.0

- Implementation in October 2010
- Places priority on ‘resident’s voice’ in assessment process
  - Section D: Mood
  - Section F: Preferences for Customary Routine and Activities
  - Section J: Pain
  - Assessor must document why staff informant was used rather than resident
- Section ‘F’ includes 16 ‘Quality of Life’ items:
  - Drawn from research by Kane et al.
  - Choice, privacy, security, activities
  - Closed-ended rating of importance
- Limitations:
  - Does not collect information about specific preferences related to items
  - No guidance for staff based on responses
  - RAPs done only if triggered – not clear what threshold will be

Section F Preferences for Customary Routine and Activities

F1. Should Interview for Daily and Activity Preferences be Conducted? — Attempt to interview all residents able to communicate. If resident unable to complete, attempt to complete interview with family member or significant other.

Enter Code

0. No (resident is rarely/never understood and family not available) → Skip to F6, Staff Assessment of Daily and Activity Preferences
1. Yes → Continue to F2, Interview for Daily Preferences

F2. Interview for Daily Preferences

Say to resident: "*While you are in this facility...*"

Coding:
1. Very important
2. Somewhat important
3. Not very important
4. Not important at all
5. Important, but can't do or no choice
9. No response or non-responsive

→ Enter Codes in Boxes →

Enter Code	a. *how important is it to you to choose what clothes to wear?*
Enter Code	b. *how important is it to you to take care of your personal belongings or things?*
Enter Code	c. *how important is it to you to choose between a tub bath, shower, bed bath, or sponge bath?*
Enter Code	d. *how important is it to you to have snacks available between meals?*
Enter Code	e. *if you could go to bed whenever you wanted, how important would it be to you to stay up past 8:00 p.m.?*
Enter Code	f. *how important is it to you to have your family or close friend involved in discussions about your care?*
Enter Code	g. *how important is it to you to be able to use the phone in private?*
Enter Code	h. *how important is it to you to have a place to lock your things to keep them safe?*

F3. Interview for Activity Preferences

Say to resident: "*While you are in this facility...*"

Coding:
1. Very important
2. Somewhat important
3. Not very important
4. Not important at all
5. Important, but can't do or no Choice
9. No response or non-responsive

→ Enter Codes in Boxes →

Enter Code	a. *how important is it to you to have books, newspapers, and magazines to read?*
Enter Code	b. *how important is it to you to listen to music you like?*
Enter Code	c. *how important is it to you to be around animals such as pets?*
Enter Code	d. *how important is it to you to keep up with the news?*
Enter Code	e. *how important is it to you to do things with groups of people?*
Enter Code	f. *how important is it to you to do your favorite activities?*
Enter Code	g. *how important is it to you to go outside to get fresh air when the weather is good?*
Enter Code	h. *how important is it to you to participate in religious services or practices?*

Revised Survey Approach: Quality Indicator Survey (QIS)

- New national program
  - Currently in 8-10 states
- Surveyors select a random sample of residents to interview
- Topics include:
  - Ability to make decisions about daily care
  - Dignity
  - Activities

Revised QOL F-TAG Guidance

- Transmittal 48 (6/12/2009) Provides Revised Guidance for Existing Tags
  - Focus throughout on preference and choice
- Specific Tags:
  - Dignity (241)
    - Dignity is global and gives purpose to everything that follows
    - Language, Confidentiality, Grooming & Clothing, Bathing, Dining, Privacy
    - Training staff to have conversations with residents that treat as adults
  - Self-Determination and Participation (F242)
    - Increased emphasis on resident choice and control
    - **"…Actively seeking information from the resident regarding…preferences…"**
  - Homelike Environment (F252)
    - Personalization
  - Environment
    - Accommodation of Needs (F246); Lighting (F256); Sanitary/Food (F371) Rooms (F461); Call Systems (F463)
  - Other Tags:
    - Access and Visitation (F172), Married Couples (F175); Roommate Change (F247)

Self-Report QOL Measure for Nursing Home Residents

- Items identified through literature review, expert opinion, focus groups
- Priority is given to subjective assessment of QoL
  - The impact of the care, services and environment on resident self-appraisal
- Response Set:
  - Often (4),
  - Sometimes (3),
  - Rarely (2),
  - Never (1)
- CMS Data:
  - n~3800, 100 facilities, 6 states
  - Few residents refuse
  - 55% of facility can complete
- Studies show validity, reliability, aggregation, stability over time

Domains:

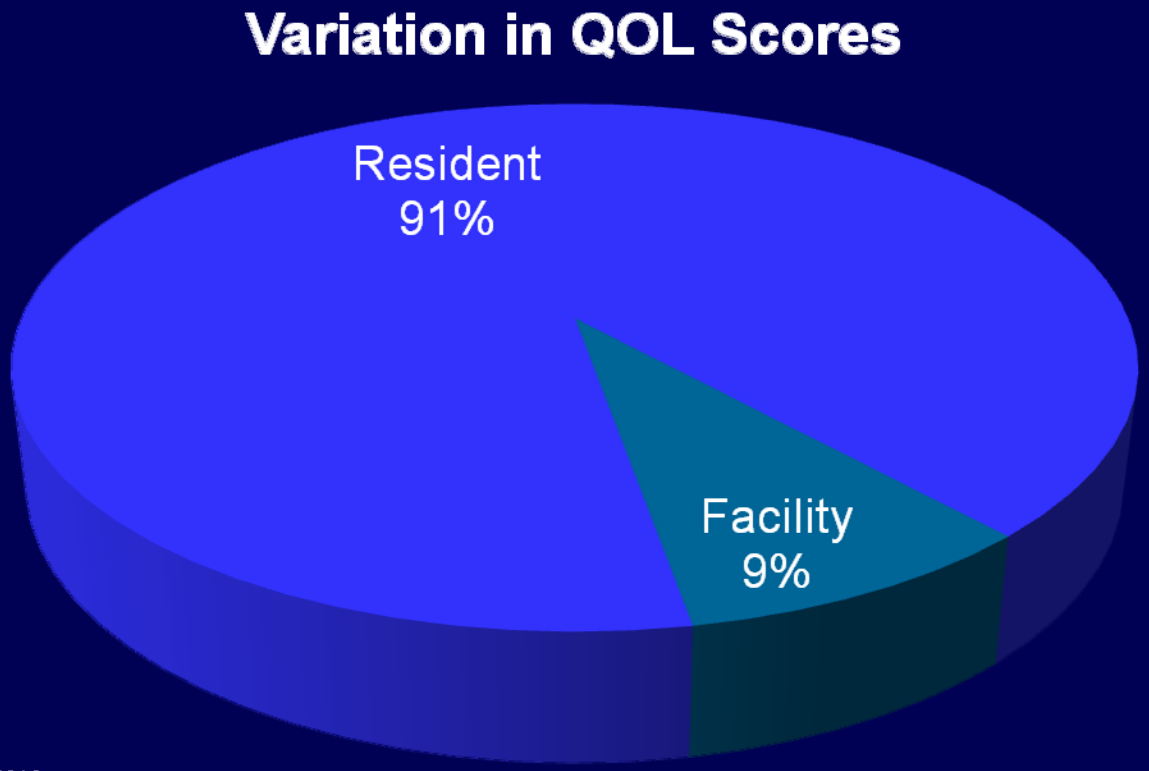
1. Comfort
2. Functional Competence
3. Privacy
4. Dignity
5. Autonomy
6. Relationships
7. Meaningful Activities
8. Food Enjoyment
9. Security
10. Spiritual Well-Being
11. Individuality

Each domain measured with multi-item scale

(Assessment Separates Religious from other Activities)

Kane, R. A., Kling, K. C., Bershadsky, B., Kane, R. L., Giles, K., Degenholtz, H. B., Liu, J., & Cutler, L. J. (2003). Quality of life measures for nursing home residents. *J Gerontol A Biol Sci Med Sci, 58*(3), 240-248.

Most Variation in QOL Scores is Within Facilities



N=101 Facilities

Rationale for QOL Assessment and Care Planning System

- Staff need ways to meet expectations related to QoL embodied in new FTAG Guidance, QIS, public report cards
- MDS 3.0 does not fully meet the need that facilities face
  - Assessment produces an 'importance' rating for a limited number of items
  - In resident voice sections, staff are encouraged to continue the conversation, but guidance is limited
- Original QoL Measure produces a scaled (1-4) score that tells you the Level of QoL at the individual and facility aggregate
  - Useful for tracking individual change and facility level performance
  - Closed ended questions do not provide caregivers with practical guidance to make meaningful changes for individual residents
  - Assessment is still needed to find out resident preferences in order to make meaningful changes
  - Preferences must inform care plan in order to be acted on
- Project Goals:
  - Develop an Assessment System that produces actionable suggestions for individualized care planning
  - Generate quantitative scores that measure individual change and track facility performance to support QI, and
  - Be compatible with workflow in typical facility

Overview

- Background and Rationale
- QOL.SRI/CP System
- Findings from Randomized Controlled Trial

Quality of Life Assessment and Care Planning: QoL.SRI/CP

- Meets the need for a practical way to ascertain resident preferences and incorporate those preferences into daily routines
- Emphasizes resident autonomy
- Consistent with regulatory requirements
  - MDS 3.0; QIS; F-Tags
- Compatible with typical workflow
- Track individual and facility level outcomes
- Designed for self-report:
  - Used with all residents who are capable
  - Care Plan written for all residents based on prioritized issue
  - Covers broad range of topics
  - Allows assessor to follow ‘leads’

Development Process

- Random samples of residents at two facilities
  - Total of 55 Assessments during Summer 2008
  - 52% completion (of residents approached)
    - 9% family opt out
    - 8% resident refusal
- Pilot test assessment forms
  - Alternate formats for closed-ended questions
  - Addition of importance scores
  - Shading of responses indicating ‘poor’ QOL to facilitate scoring
- Open-ended in-depth section
  - Tested each section multiple times, adding items
  - Experimented with asking residents directly what they would like changed
- Pilot test decision rules for selecting items
  - Shifted from selecting an entire domain to selecting 5 items from any part of the assessment
- Write ‘practice’ care plans
  - Reviewed with facility staff (SW, DON)
- Hypothetical Case Narratives

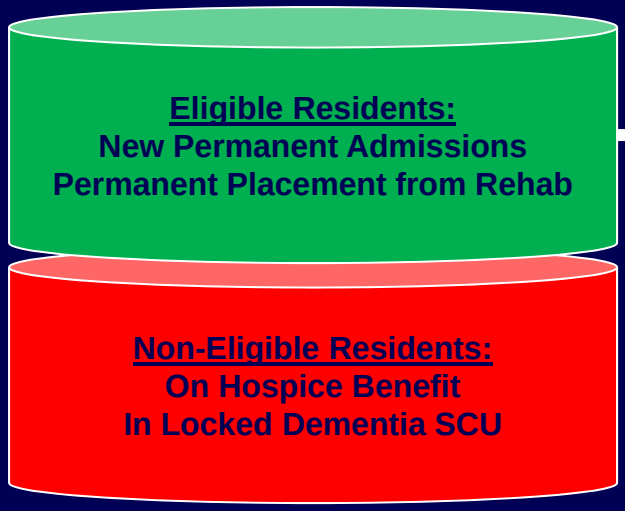
Implementation is Central to Design of System

- Approach must be compatible with typical workflow
  - 90-day cycle
  - Discuss at care conference with staff, resident and/or family
  - Framed as ‘orders’ with accountability
- Approach needs to vary based on cognitive function
  - Priority on self-report for residents who are capable
  - Other techniques needed for cognitively impaired residents who screen out (beyond scope)
- Different resident populations have distinct needs
  - Long-Stay*
  - Short-stay/Rehab
  - Hospice/End-of-life
  - MDS 3.0 resident selection rules can be applied

Components of Final Version of QoL Structured Resident Interview (QoL.SRI)

- Domain Questionnaire (DQ): Closed-ended Questions
  - 69 items
  - Covers 12 broad domains of QoL
  - Captures level of QoL and importance (if QoL Level is poor)
- Scoring Algorithm:
  - Prioritizes a short list of issues for follow-up in a standardized way
    - QOL and Importance ratings are combined to create a priority score (ranking),
- In-Depth Questions (ID): Open-ended Probes
  - Multiple open-ended probes for each closed-ended question
    - Focus is on actionability
    - Capture what, when, and how
  - Balance of breadth and depth
  - Training is to follow thread of conversation, not stifle it
  - Assessors encouraged to use their judgment to address any topic that came up during the conversation but did not rank or is not covered on in-depth
- Care Plan Form (CP):
  - Based on a paper form
  - Can be implemented in any EMR/Order entry system

QOL.SRI/CP Flowchart



Target Date: 14 days
Prior to Care Conference or MDS

QOL.SRI:
12 Domains/69 Closed-ended items

In-Depth Open-Ended Questions
Up to 6 probes per item

QOL.CP
Resident Centered Care Plan

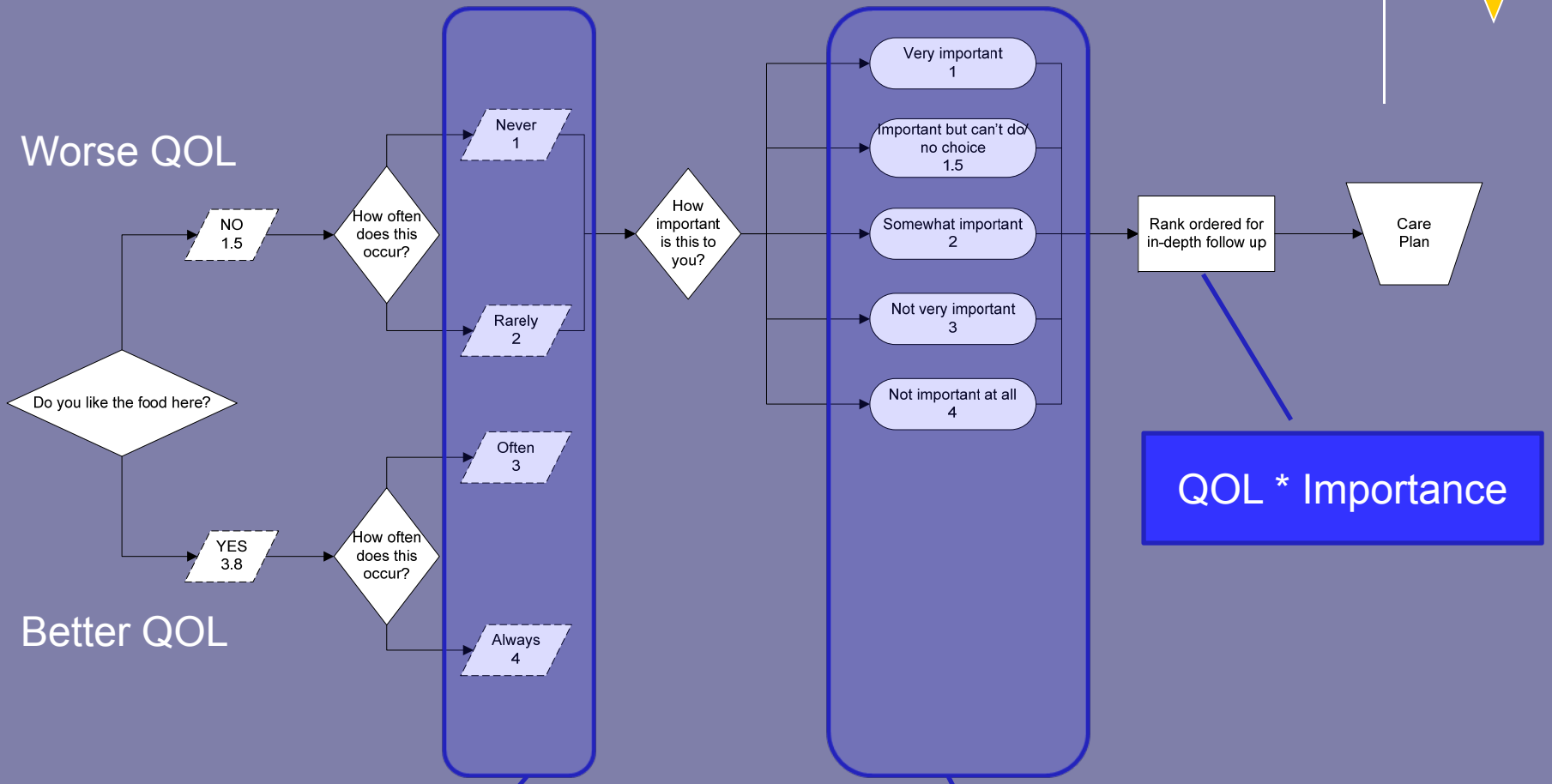
Repeat:
90 Day Cycle

Care Plan for Mary Smith Date:_____

My Quality of Life Care Goal:_____

Task	Responsibility	Frequency	Completed

Sample Question Flow



Scoring the Closed-Ended Assessment Form (QoL.SRI.DQ)

SCORE = QoL * Importance

Range: 1 (Lowest) to 8 (Highest)

	If Yes	If No	How Important?	Score
CMF_4 Are you bothered by noise when you are in your room? 1.5 ☑ Yes 3.8 ☐ No 999 ☐ Unable	1 ☐ Always 2 ☑ Often 999 ☐ Unable	4 ☐ Never 3 ☐ Rarely 999 ☐ Unable	1 ☐ Very Imp 2 ☑ Somewhat Important 3 ☐ Not Very Imp 4 ☐ Not imp at all 1.5 ☐ Imp can't do/no choice 999 ☐ Unable	4

Grid to Quickly Convert QoL and Importance Ratings into Priority Rating

		Importance Rating					
		Very Important	Important, Can't Do	Somewhat Important	Not Very Important	Not Important	Missing
QOL Rating		1	1.5	2	3	4	999
Poor	1	1.0	1.5	2.0	3.0	4.0	-
	1.5	1.5	2.3	3.0	4.5	6.0	-
	2	2.0	3.0	4.0	6.0	8.0	-
	3	-	-	-	-	-	-
	3.8	-	-	-	-	-	-
Good	4	-	-	-	-	-	-
Missing	999	-	-	-	-	-	-

Item Scoring Summary

- CMF_4 and AUT_4 are tied
- Priority is given to the more ‘concrete’ item
- AUT_2 was selected as ‘wildcard’ based on remarks made during the interview process

Rank	Item	Score
1	CMF_4	4
2	AUT_4	4
3	PRI_3	6
4	REL_2	6
5	CMF_4	8
wildcard	AUT_2	No score

Using the In Depth Assessment Form (QoL.SRI.ID)

- Select 5 items with LOWEST SCORE
  - Low QoL and HIGH Importance
- Optional: May select a 6th 'wildcard' topic based on judgment

CMF 4	*Are you ever bothered by noise when you are in your room?*
What kind of noise in your room bothers you? Television, radio, roommate, sounds outside of your room? What time of the day does it occur? How can the staff help to reduce the noise level in your room?	

Care Planning (QOL.SRI.CP)

- Problem statement
- Goal/Preference statement
- Written in 1st person
- Single, discrete task
  - Focus on feasibility, practicality
- Assign responsibility
- Seek consensus regarding problem, goal and task
- Accountability for process of care
- Can be implemented using paper or electronically

Blank QoL.CP Form

Quality of Life Care Plan

Resident Name:_____

Date Initiated:_____

Problem	Goal	Goal Date	Dept	Tasks

NOTES:

Example QOL.CP Task Implementation in Accunurse (A/C)

- Wireless headset with voice recognition
  - Appointment function
  - Prompts staff with task
  - Time and frequency can be set
- Example
  - “Ask resident if she would like window shades adjusted.”

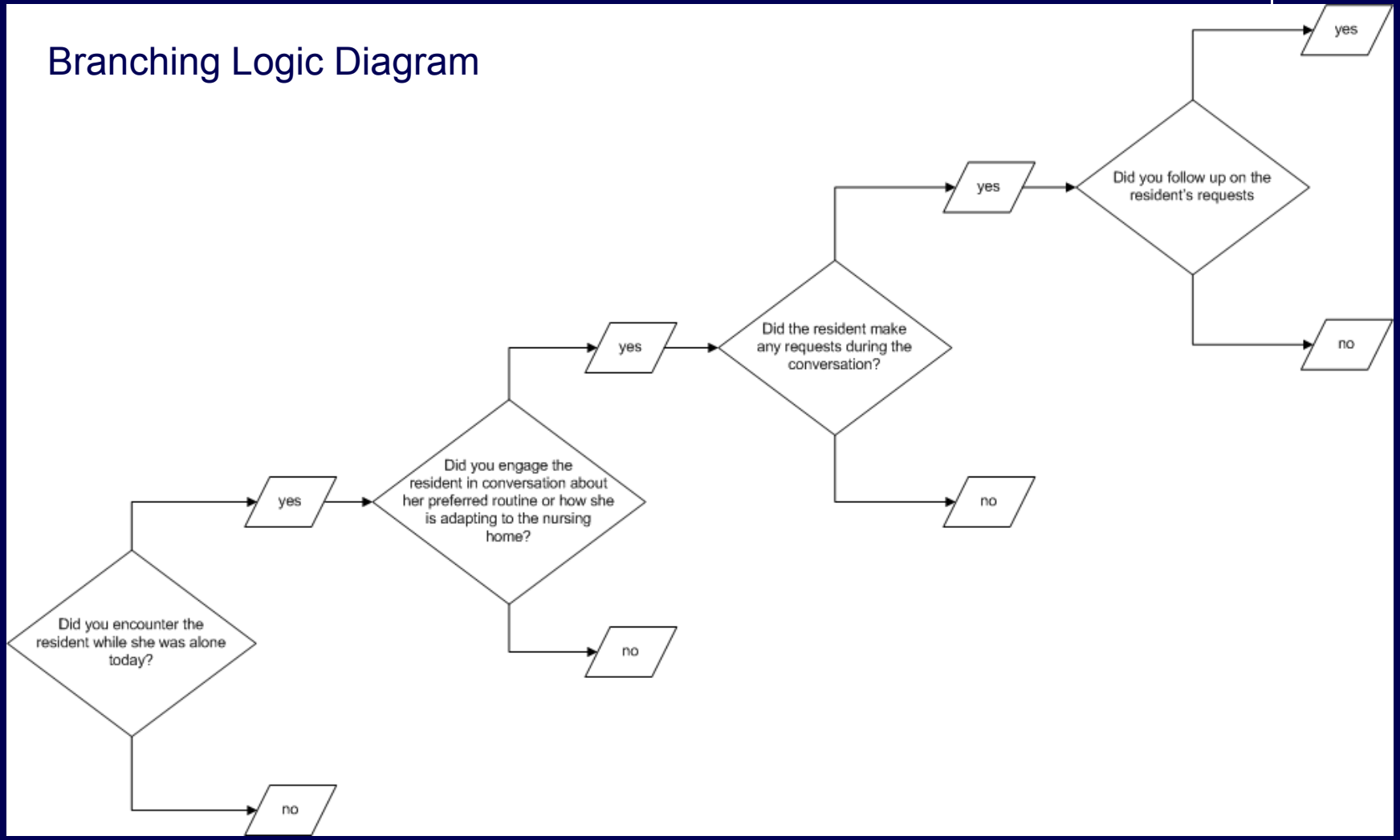
CareTracker Screenshot

- Touch screen computer mounted in corridor
- Aides receive orders and chart vitals and ADLs
- Can be customized by unit manager

http://www.seecaretracker.com

Care Tracker Flow Chart

Branching Logic Diagram



Overview

- Background and Rationale
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- Findings from Randomized Controlled Trial

RCT Methodology

- Randomized trial of feasibility, outcomes and costs of implementing a QOL care plan
- Hybrid Consultative Model for Intervention
  - Assessment conducted by Research Assistant (BASW)
    - Baseline, 90, 180 days
  - Care plan 'recommendation' drafted and reviewed with Staff
  - Care plan implemented by staff
  - Control group received care plans after trial
- In Services for all staff; attended care conferences, scheduled meetings and shift change
- Process
  - Ability to elicit actionable QOL goals
  - Observe care conference
  - Track care plan tasks for completion
  - Debrief staff about incremental time
- Outcomes
  - 90-day and 180-day reassessment to measure change
  - Staff surveys before and after program

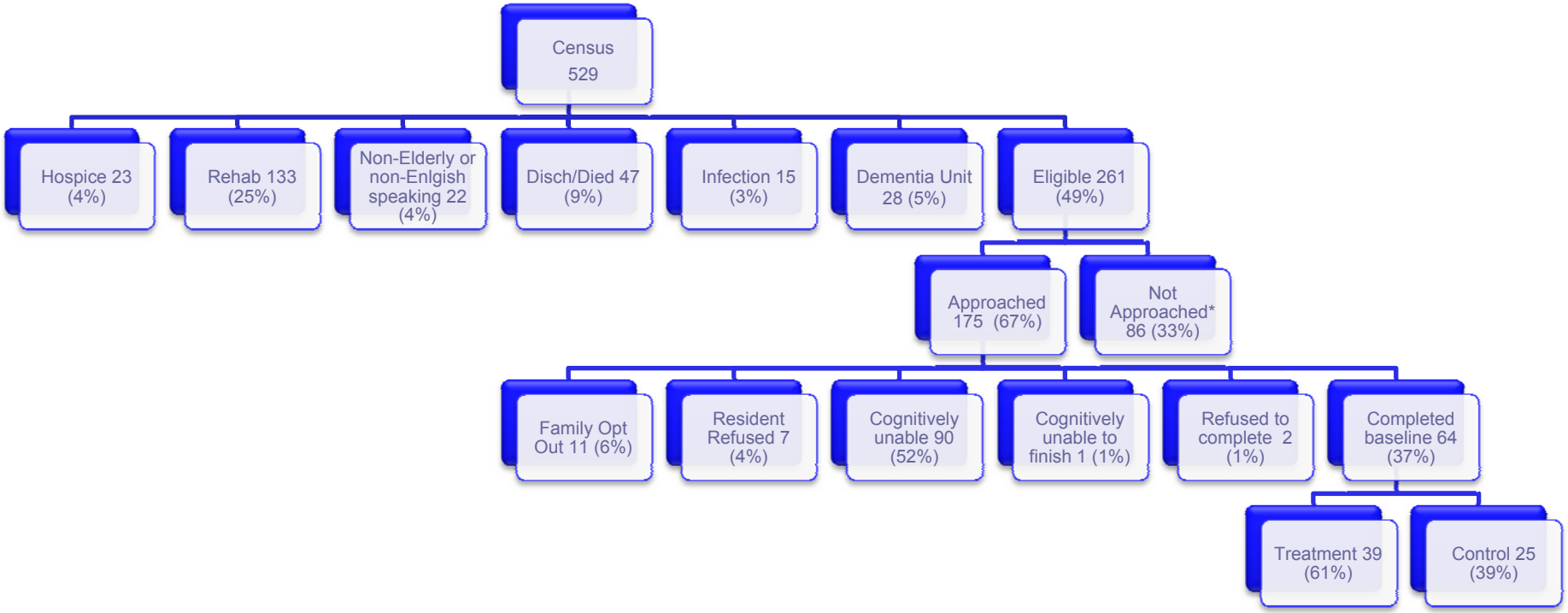
Research vs. Operational Program

- Family notification with opt-out (3-4%)
- Verbal Consent script (1-2% refusal)
  - Adds ~10 minutes to interaction
- Approval from State Department of Health
- External staff conducting assessment
- Broader policy/programmatic changes are outside scope
  - Food service
  - New programming
  - Bereavement
  - Mental health
  - Behavior management

Study Sites

- Facility A
  - Urban, Non-Profit Chain
  - 137 Residents
  - Target: 5 care plan/5 comparison
  - Accunurse
- Facility B:
  - Suburban, Faith-Based Chain
  - 182 Residents
  - Target: 5 care plan/5 comparison
  - Caretracker
- Facility C
  - Suburban, Non-Profit Chain (multilevel campus)
  - 164 Residents
  - Target: 34 care plan/17 Comparison
  - Accunurse

Resident Recruitment



Notes: The study census was based on rosters of all residents living in all 3 facilities in January, 2009. In one facility, the census was replenished in June 2009; these residents were simply added to the study census.
* Residents not approached were those at the two facilities where implementation was on small scale and quota for each location was filled. Every resident on the roster did not need to be approached.
90 day

Baseline Characteristics

	N	Cognitive Score	ADL
Complete	64	1.5	22.5
Refused Consent	7	1.5	23.8
Unable to Give Consent	90	3.8	25.4

	N	Cognitive Score	ADL	Pain
Treatment	39	1.5	22.1	2.4
Control	25	1.6	24.0	2.3

Notes: Cognitive score ranges from 0 to 4; ADL range 0-34; Pain 1 to 6

Summary of Sample Disposition

	Treatment N = 39	Control N = 25
Baseline	Discharged/transferred =3 (7.7%) Dead =4 (10%) Cognitively Unable =2 (5.1%) Refused =1 (2.6%) Quarantined =1 (2.6%) Physically Unable =1 (2.6%)	Discharged/transferred =2 (8%) Dead =2 (8%) Cognitively Unable =2 (8%) Refused =0 Quarantined =0 Physically Unable =0
90 Day	N = 27	N = 19
	Discharged/transferred =1 (3.7%) Dead =0 Cognitively Unable =2(7.4%) Refused =0 Quarantined =1 (3.7%) Physically Unable =1 (3.7%)	Discharged/transferred =0 Dead =1 (5.3%) Cognitively Unable =1 (5.3%) Refused =2 (1.1%) Quarantined =0 Physically Unable =0
180	N = 22	N = 15

Summary of Care Plan Tasks

Domain	Task	Staff
Food Enjoyment	Ask resident if her food is warm enough, offer to microwave if cold	CNA/ Dietary
Comfort	Ask resident if she would like her pillows or bed height adjusted	CNA
Comfort	When assisting resident with getting dressed, ask resident if she would like to have any extra layers on or near by.	CNA
Comfort	Each night ask resident if the temperature of her room is acceptable.	CNA
Functional Competence	Ask resident if she would like her bathroom straightened up	CNA/Housekeeping
Meaningful Activities	During one-on-one visits with resident ask if she would like materials for her in-room activities	Activities

Summary of Care Plan Tasks

Domain	Task	Staff
Individuality	Once a week, visit with resident to talk about prior life experiences such as military service	Social Services
Individuality	When giving care to resident take an extra five minutes to engage resident in a conversation about talking points in his room	CNA/Nursing
Meaningful Activities	Ask resident about current reading material and if she would like new books or other reading material	Activities
Functional Competence	When in resident's room at same time as resident, ask her if she would like anything moved within her reach	CNA/Nursing
Meaningful Activities	When there is an activity involving cards (blackjack etc) invite resident to join	Activities/CNA

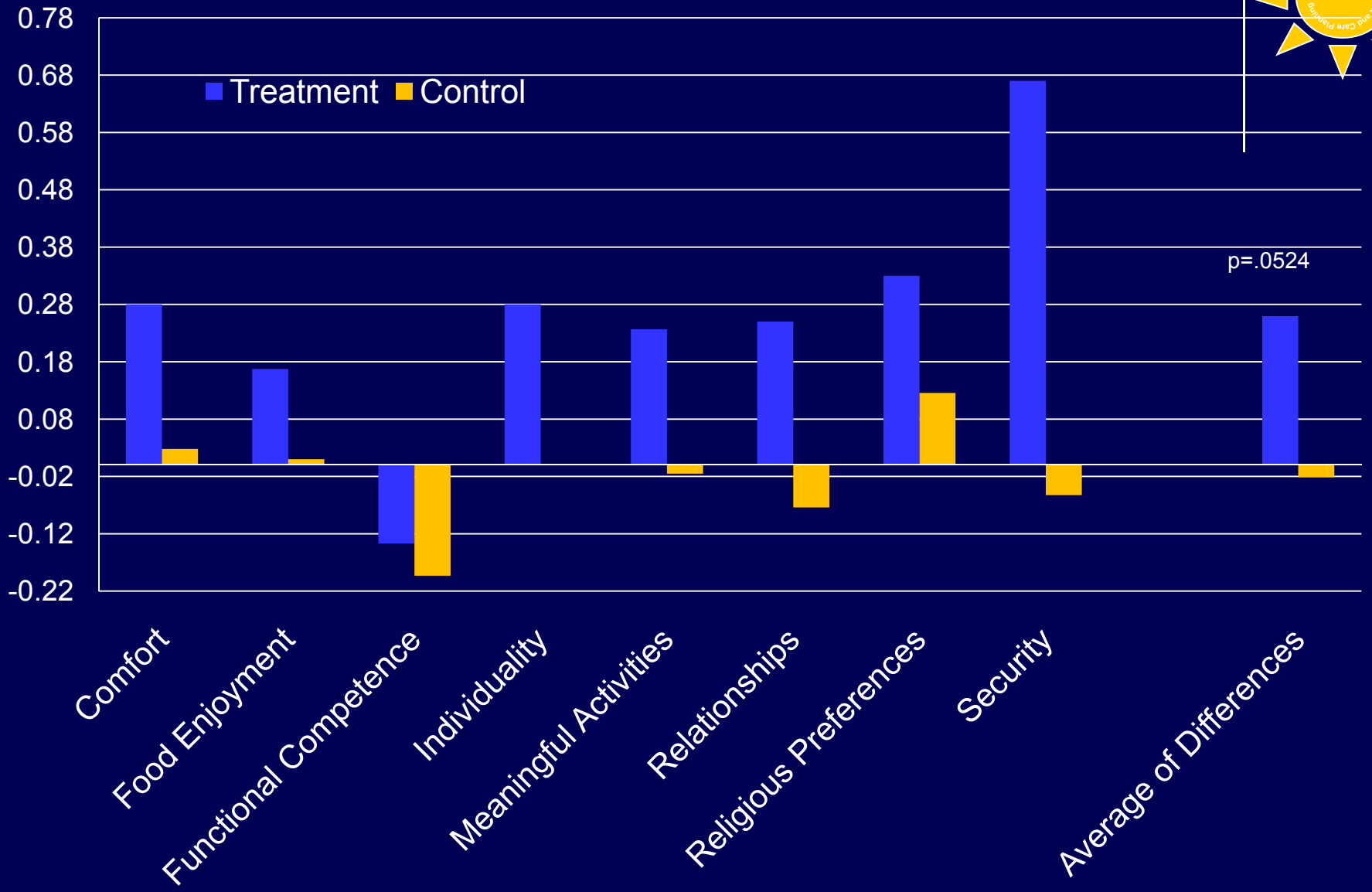
QOL Improvement Stories

- I'd like to have a "Reacher" to help me get dressed in the mornings. I have never been offered one.
- I would like to have a Catholic Bible to read and study in room because I cannot go to mass.
- Resident was observed to be in more positive spirits when neatly groomed (esp. hair)
- Would like to talk with someone about wartime experiences; no one seems interested

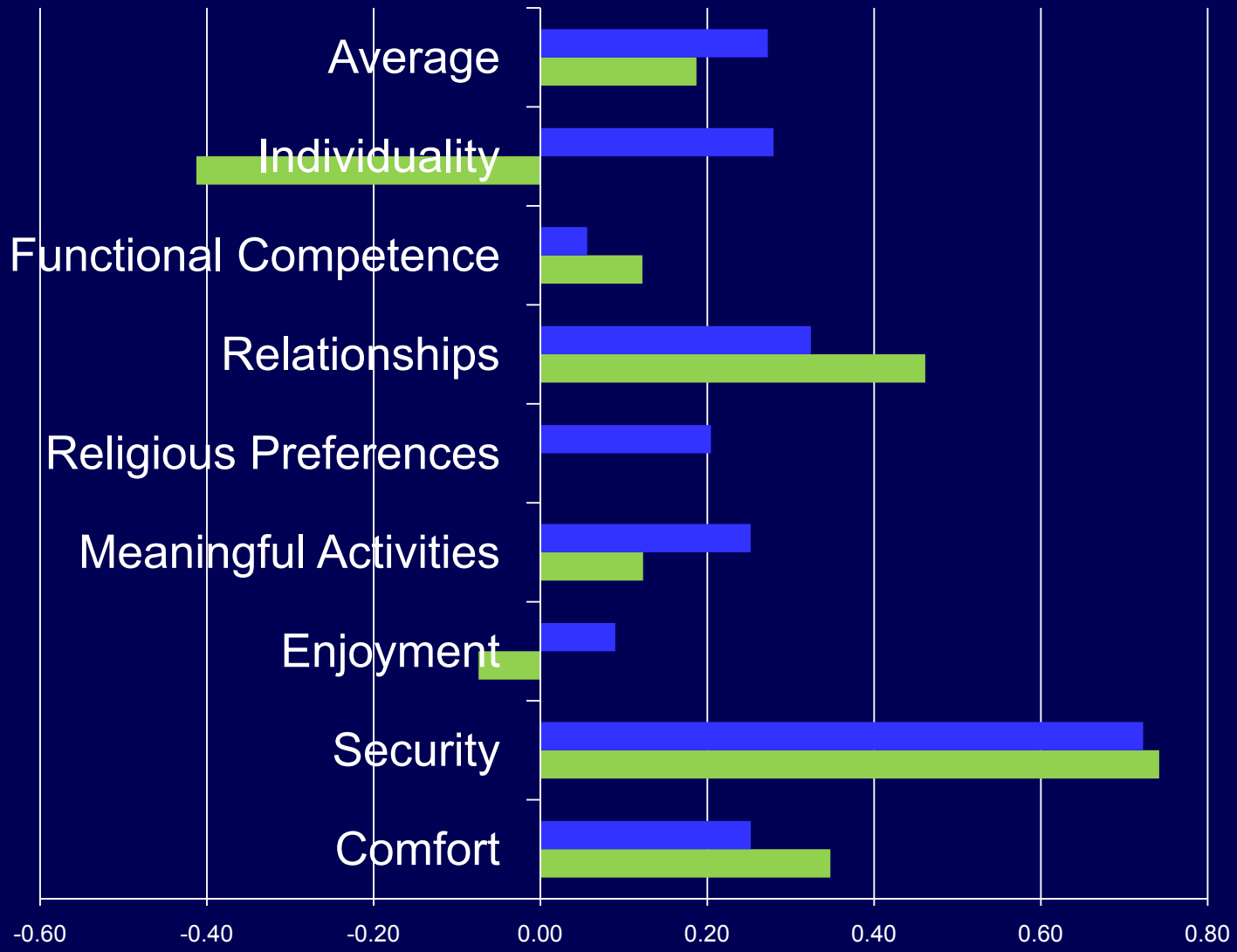
Quantitative Analysis of Resident Outcomes

- Intervention Group residents grouped by care plan target area
  - Small numbers per domain
  - Each resident contributes to only one domain
- Control Group residents are pooled
  - Each resident contributes to all domains
- Change from baseline to 90 days
  - Raw change
- Change from baseline to 180 days
  - Difference between treatment and control

Change in QoL in Targeted Domains: Baseline to 90 Days



Difference Between Treatment and Control at 90 and 180 Days (Difference in Difference)



Staff Outcomes (1): Cross-Sectional Comparison

- Pre-Intervention to Post-Intervention surveys; Pooling all staff
- Facility A:
  - Perceptions of resident QoL and Choice were higher
- Facility B:
  - Job Satisfaction with co-workers and rewards were higher
- Facility C:
  - Perceptions of resident QoL and job satisfaction

Staff Outcomes (2): By Awareness of Care Plan

- Pooling All Staff:
  - No difference at Facility A or B
  - Facility C:
    - Perceptions of resident QoL and job satisfaction re: resident contact were higher
- Examine CNA only (pooling 3 facilities):
  - Perceptions of resident QoL were higher

Summary of Findings

- Assessment takes an average of 40 minutes
  - Approximately 10 minutes for consent script
- Most residents are engaged, willing to talk
- Staff are enthusiastic and receptive
  - Allows them to break the monotony of ‘autopilot conversations’
- Leadership is supportive and engaged

Staff Outcomes (3): Time and Resources [n=38]

- Self-reported compliance was high:
  - 62% reported that they never failed to complete a task when due
- Exposure varied:
  - 48% reported doing tasks ≤ 3 times
  - 52% reported doing tasks > 4
- Duration of CP Task (Minutes):
  - 42% reported < 10
  - 26% reported 10 – 15
  - 18% reported 15 – 20
  - 13% reported > 20
- Most tasks (70%) did not require additional materials, supplies or equipment
- Most tasks (82%) were not considered too hard to complete

Barriers

- Residents vary in how talkative they are
  - Reluctant to ‘complain’ even to outsider
- Multiple perspectives on ‘what’ is the problem
  - Issues identified by residents are different than family or staff (bereavement; complaints; visits)
  - Gaining input from multiple parties raises question of what is ‘best’: resident nominated problem or consensus?
- Limited Degrees of Freedom
  - Some tasks require ‘systemic’ changes
  - Redirect to individual, person-centered changes

Further Research

- Interaction between QoL (as we define it) and depression
  - Changes in depressive symptoms (as measured on MDS 2.0) are associated with changes in QoL
    - Both positive and negative
  - Unclear if poor QoL leads to depressive symptoms, or if clinical depression leads to reporting poor QoL
- Integration with Proxy and observational assessment for people unable to participate in interview
  - Usefulness for people who have a QoL.SRI but subsequently are non-communicative
- Translation to other settings

Discussion

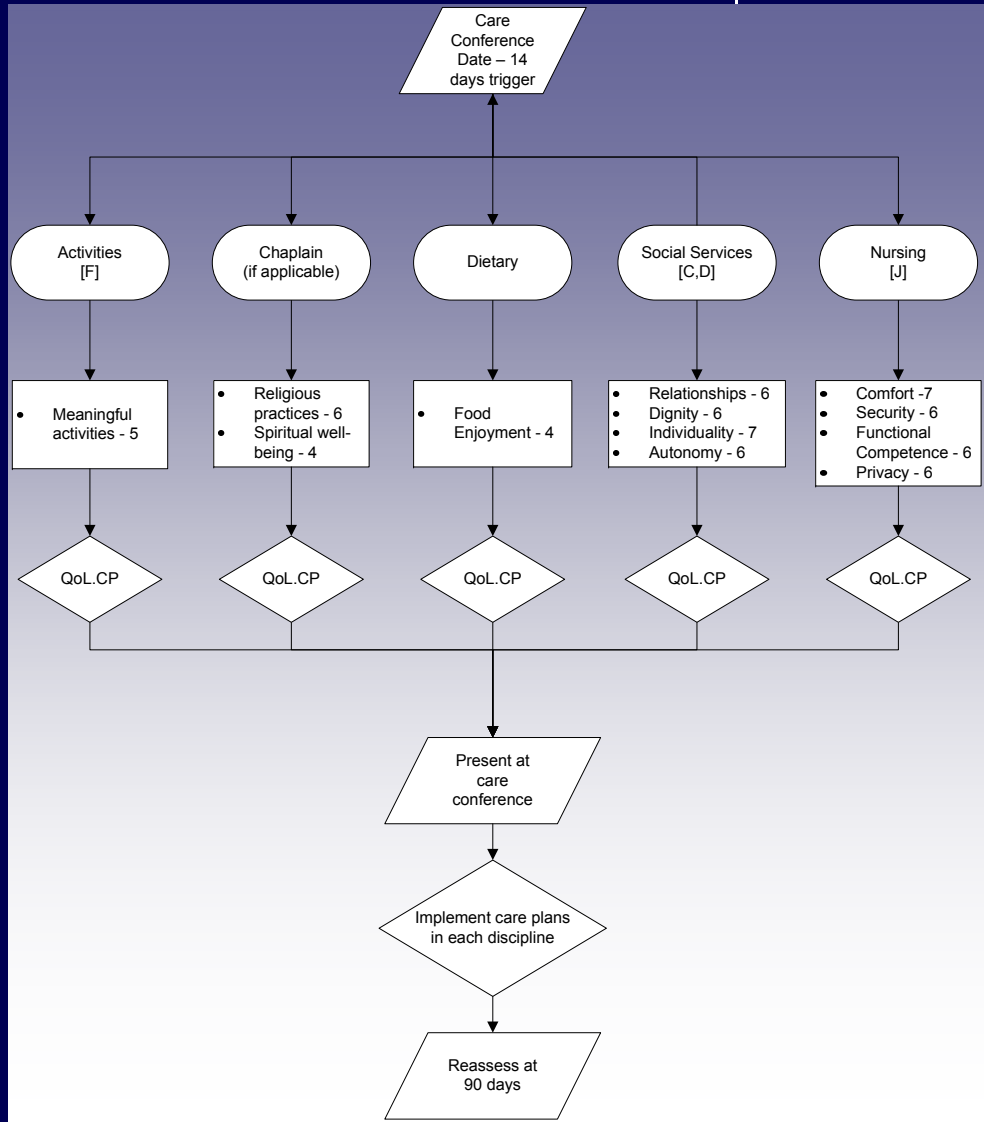
IMPLEMENTATION AND TRAINING

Challenge and Opportunity of MDS 3.0

- Facilities will start to use MDS 3.0 in October, 2010
  - All parts of the facility are impacted
  - The interview component is a major change in role responsibilities and facilities are not certain about the time
- Value proposition:
  - MDS 3.0 creates new expectations for QoL among residents, families and staff that are not addressed within the system itself
  - QoL.SRI provides tools for staff who are conducting interviews and don't have a 'script' for what to do or say next
  - QoL.SRI provides tools for facilities to monitor and improve performance
  - As a voluntary system, it can be used internally
- Timing is important to avoid overwhelming providers
  - Three pilot sites planning to roll-out after January 1, 2011

Decentralized Workflow

- Packets for each discipline:
  - instructions, forms, scoring sheets
- Can be appended to MDS 3.0
- Each discipline implements care plan task independently
- Facility-wide champion adjudicates conflicts



Implementation Plan

- Use continuous quality improvement (Plan Do Study Act)
  - Implement in phases
    - Assessment
    - Care planning
  - Diffuse across facility
    - By discipline/department
    - By unit/floor
  - Iterate small cycles (n=5) until each group is competent

Phased Implementation Plan

- Identify project champion with house-wide authority to distribute work to departments
- Introduce Assessment on a department by department basis
  - Integrate QoL.SRI materials with MDS 3.0 to extent possible
  - Match data capture mode
    - Assess whether organization is using electronic, paper or hybrid of both
    - Options for electronic capture of assessment:
      - Capture either full detail or summary scores
      - Develop user defined assessments
      - Record as a 'Note'
  - Train each department one by one
    - Identify and train individual staff who will use system
    - Do five (5) assessments
    - Review, correct, repeat until comfortable
- Introduce Care Plan on a department by department basis
  - Integrate care plan with existing order system for each department
  - Assess whether staff use electronic orders, paper or both
    - Place QoL.SRI.CP on par with other types of orders
    - Enforces accountability and places on par with other types of orders
  - Train each department one by one
    - Close monitoring of initial cases

Staff Training

- Lesson Plan for full day of training
- Covers interview skills
- Addresses all components of QoL.SRI system
- Developed worksheets for each step of the process
- Developed case studies as complete examples and as ‘homework’

Aggregate to facility level

- Individual outcomes can be aggregated to facility/quarter level
  - Process:
    - Are staff conducting assessments, etc.
  - Outcomes:
    - Cross-sectional trend captures overall climate in context of resident turnover
    - Longitudinal trend captures % of residents improving, declining or stable from quarter to quarter
- Developed a summary form to record domain scores for each quarter
  - Voluntary reporting to benchmarking database

DISSEMINATION STRATEGIES AND PLANNING

Dissemination and Next Steps

- Participants in this Meeting
  - Promote program to your constituents
  - Consider engaging Pitt to consult on implementation
- Primary dissemination via website
  - Benchmarking
  - Sharing best practices
  - Continual improvement of materials (Open-Source Model?)
- PA Culture Change Coalition
  - September 2011 Full-Day hands-on learning
  - Plan to video-conference with other state coalitions
- R & D Agenda
  - Develop web-based training
  - Implement on Commercial HIT System
    - Market to installed base of users
  - Organizational Level RCT
    - Assessment only vs. Assessment and Care Planning
  - Translate to Assisted Living