Working Better Together: Integrated Care Models and the Role of Neuropsychology

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Disclosures

- Presenters Carolyn Parsey, PhD, and Christine Petranovich, PhD declare no conflicts of interest
- We do not have any financial relationships to disclose

Quick Poll

What is the scope of your practice?

- Adult
- Pediatrics
- · Life-span

Another question on the scope of practice?

- Neuropsychology/ assessment only
- Intervention only
- Mix of both

Which of the following do you best fall into?

- I am a provider who already works in collaborative care team and wants to trouble-shoot.
- I am a provider that is looking to start or join a collaborative care team and am seeking information about how to go about it.
- Other

Overview

- · Part I: Evidence for Collaborative Care
 - · What is collaborative care?
 - Types of multiple discipline clinical teams
- · Origins of collaborative care models
- BREAK
- · Part II: Principles of Effective Collaborative Care
 - 10 principles of effective care teams
- Part III: Overcoming Barriers to Effective Collaborative Care
 - Challenges to team-based practice
 - · Applications of collaborative care models
 - Memory Disorders Clinic
 - Acquired Brain Injury Clinic
 - · Breakout session & Discussion
- PART IV: Neuropsychology Training for Collaborative Care

Part I: Evidence for Collaborative Care



The Problem With "Silos"

- · Primary Care vs. Specialty Care
- Inpatient vs. Outpatient
- · Access of Care
- · EHR and patient information
- · Today's focus: Integration of teams and information
- A lack of coordination between mental health and physical healthcare
 - Provider communication, documentation, treatment planning

Co-Location vs. Collaboration

- · Co-Location
 - Providers located close by, but not integrated in treatment or care planning
- · Collaborative Care
 - Supported by $80 \pm$ RCTs and growing to promote better health outcomes for patients
 - · e.g., primary care and behavioral/mental health integration
 - · Better patient and provider interactions
 - Improved functioning in patients and care teams
 - Reduction in healthcare costs (over long-run)

Three Team Approaches

Multidisciplinary: "Co-located"Interdisciplinary: "Collaborative"

· Transdisciplinary: "Integrative"

Choi & Pak, 2006

Multidisciplinary Team

- · Work with several disciplines
- · Independent work on a case
 - · Work is parallel or sequential
- · Team members maintain separate, individual roles & goals
- Outcome = sum of parts
- Example: PCP at HMO site, Neurologist at a hospital, Psychologist at community-based clinic
- · Analogy: Salad Bowl





Interdisciplinary Team

- · Working between several disciplines
- Joint work on the same case or project
- · Shared goals with individual and team goals
- · Outcome is more than sum of parts
- Example: Rehab team with physiatrist, neurologist, psychologist, PT and OT, social worker who meet about a single patient
- · Analogy: Stew





Transdisciplinary Team

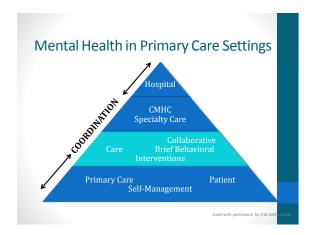
- · Working across and beyond disciplines
- Involves additional stakeholders outside patients and providers (e.g., healthcare organization, insurance)
- Shared goals and skills, shared conceptual framework
- Holistic, integrative, transcendental
- · Individual components are indistinguishable
- · More common in a research setting, rather than clinical
- Example: Team members that can assume roles of others, transforming a role into something new
- · Analogy: Cake

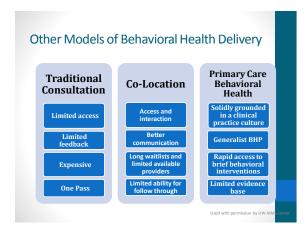


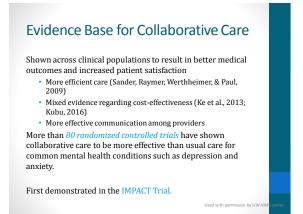


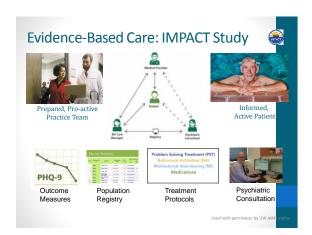
The Rise of Collaborative Care

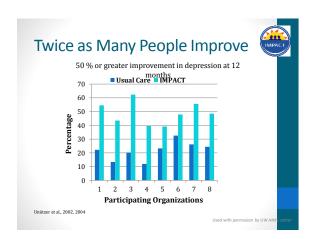
- Collaborative Care Model was result of inadequate management of depression in primary care settings
 - Most initial presentations and follow-up for depression occur in primary care, not mental health specialty
 - Katon et al., 2012
- CCMs can increase initial cost of care, but creates reduced total medical expenditures in the long-run (Serrano, 2014)





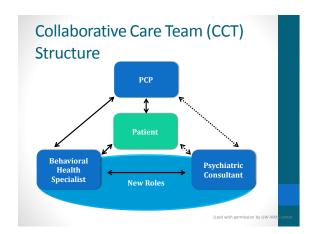


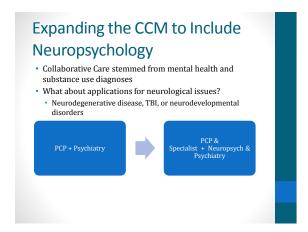


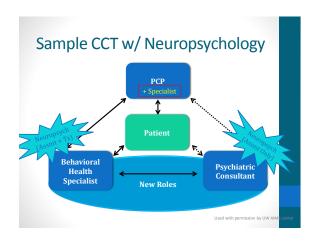












Effectiveness of Collaborative Care for Older
Adults With Alzheimer Disease in Primary Care
A Randomized Controlled Trial

Christopher M. Callahan, MD, Malaz A. Boustani, MD, MPH; Frederick W. Universagt, PhO; et.al.

Article information

JMMA. 2006;295(18):2148-2957. doi:10.1001/jama.295.18.2148

• Indiana University/Purdue University
• 153 older adults with AD and their caregivers
• 1 year of care management
• Random assignment to Collaborative Care (n=84) or
Augumented Usual Care (n=69)
• Neuropsychiatric Inventory (NPI), depression scales,
(CSDD, PHQ-9), cognitive screening (TICS), ADL
questionnaire (AD Cooperative Study ADLs)
• Included pharmacological and non-pharmacological
interventions

RCT for Collaborative Care for Alzheimer's Disease

Findings for Collaborative Care Group:

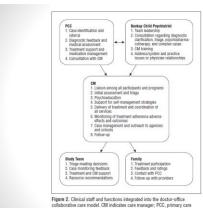
- · More likely to receive cholinesterase inhibitors and antidepressant medications
- · Fewer behavioral and psychological symptoms (per NPI scale ratings) at 12 and 18 months
- · Caregivers reported significant improvements in distress (NPI) at 12 months and improved in depressive symptoms at 18 months

	No. (%) of Intervention Patients Receiving Nonpharmacologics Protocol (n = 84)
Offered to all	
Intervention patients Stress/coping Exercise Communication	76 (90.5) 76 (90.5) 74 (98.1)
Legal and financial Offered based on	72 85.7)
reported symptoms Caregiver's physical hooth	75 (89.3)
Deorposion	09 (82.1)
Repetitive behavior Aggression	62 (73.8)
Mobility Personal care	52 (61.9) 35 (41.7)
Sleep disturbances Delusions	31 (36.9) 26 (31.0)
Optional participation Support group attendance	47 (56.0)

Collaborative care model for childhood behavior problems

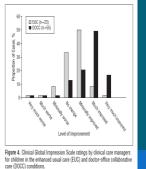
- Randomized to collaborative care or enhanced usual care
- · Most common services were parent training and child skill implementation
- Average age = 8.7 (2.4)
- · Range of diagnoses, including anxiety (47%), ADHD (45%), and ODD (49%)
- · Groups well matched for pre-treatment parent report

Kolko, Campo, Kilbourne, & Kelleher, 2012



Kolko, Campo, Kilbourne. & Kelleher, 2012 Collaborative care greater improvements after, particularly with respect to ADHD symptoms

71% of parents were satisfied



Kolko, Campo, Kilbourne, & Kelleher, 2012

Core Principles of Collaborative Care

- 1. Patient-Centered & Team-Driven Care
- 2. Population-Based Care
- 3. Measurement-Based Treatment to Target
- 4. Evidence-Based Care
- 5. Accountable Care

2016 APA/APM Report on Dissemination of Integrated Care Full report available online:

https://www.psychiatry.org/psychiatrists/practice/profes sional-interests/integrated-care

- 1) Patient-Centered & Team-Driven Care
 "To promote a systematic, planned approach to care" (Wagner, 2001)
- · Physical health providers collaborate with behavioral health providers
- Focused on the needs of the patient, from the lens of different providers' expertise



2) Population-Based Care

- Team is responsible for provision of care and health outcomes of a defined patient population
- · Components to Consider:
 - · Monitor population outcomes
 - Regular data collection, aggregation, and analysis
 - Use findings to inform practice
 - · Patient-centered services
 - · "No shows" as opportunities for engagement to prevent decline
 - · Elevate capacity of specialty and primary care
 - Shift focus of primary care for less-complex cases, greater involvement of specialists for greater complexity
 - · Attend to social issues
 - Identify barriers to care (e.g., SES, homelessness) and advocate for resources

3) Measurement-Based Treatment to Target

- Systematic, disease-specific, patient-reported outcome measures to drive clinical decision-making (Hatfield, 2009)
- Patient report > Clinician report/observation
- Measures should be correlated with disease process and treatment
- Instruments must be reliable, sensitive to change, available and usable by the clinical team
- · Collect measures frequently and accurately
- Measures can also allow communication between providers
 - · Beginning to be associated with healthcare plans, insurance
- · Can help with advocacy for resources (community, federal)

4) Evidence-Based Care

- Team adapts empirically-supported treatments within an individual clinical context
- "Conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett et al., 1996)
- Measurements should $\emph{directly}$ result in improved function
 - Vague measurements (e.g., quality of life, generalized risk scores) are interesting, but difficult to apply practically
 - · Specific values that are linked to disease severity are better
- Evidence-based care allows teams to have greater confidence in treatments and better expectations of outcomes

5) Accountable Care

- · Opportunity for quality improvement within a clinic
- · Performance measures of the practitioners
 - · How these performances impact patients and stakeholders
- · Patient-Reported Outcome Measures (PROM)
 - Structured feedback from patients collected by payers and accreditors to keep providers accountable for outcomes of populations served
- Periodic review of caseloads, team work distribution
- WHAT services are offered, HOW the care is coordinated, and WHEN the services are given

All MS Center dustered Integrated Behavioral Health Care Principles & Tasks Checklist About 19 miles And the The Tool And the Tool A

Break

Neuropsychologists on **Collaborative Care Teams**

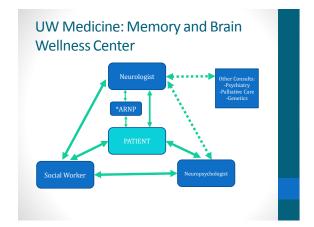
- · Two Examples
 - · Memory Disorders Clinic
 - · Pediatric Acquired Brain Injury Program
- · Recent Archives of Neuropsychology special series
 - Vol. 33, Issue 3 (May 2018)
 - Primary Care, Epilepsy, MS, Memory Disorders, TBI, etc.

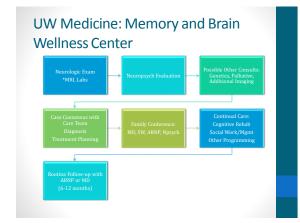
UW Medicine: Memory and Brain Wellness Center

- · Outpatient evaluation of neurodegenerative disorders
- Team Members
- Neurologists Geriatricians
- Psvchiatrists ARNPs
- Neuropsychologists
- Social Work and Case Managers
- Support Staff (medical assistants, nurses, administrative staff)
- · Weekly full team meetings for patient care
 - Additional meetings for case consensus as needed
- Rotating meetings for Journal Club, Research Updates, Operations and Administrative needs, etc

UW Medicine: Memory and Brain Wellness Center

- Team Goal/Vision: Holistic and Comprehensive Care
 - Evidence-based and collaborative care of disciplines for diagnosis and treatment
 - Pharmacological and non-pharmacological strategies
 - · Help patients discover ways to use their strengths to promote brain health and overall well-being
 - · Maintaining "personhood"
 - · Community outreach and education
 - "Momentia"
 - Advocacy
 - Dementia Action Collaborative
 - WA State Plan to Address Alzheimer's Disease & other dementias
- · Patients are not "demented," they are living with dementia





MBWC Case Example

- 54yo, female patient, 18yrs education
- · Problems with organization and planning at work
- Neurologist exam (1st appointment)
 - Unremarkable neurologic exam, labs normal, MRI normal MoCA screening w/Neurologist = 28/30 (cube, del. recall)
- Neuropsychology eval
 WAIS-IV PRI = 3rd percentile; RCFT = <1st percentile
- Report routed back to Neurologist
- Likely PCA → Order PET
- Review full case in team meeting \rightarrow Diagnostic Consensus & Tx Plan Family Meeting

- Patient, spouse, Neurologist, ARNP, Neuropsych, Social Worker
 Discuss diagnosis (education), treatment plan, patient resources, care partner resources, family resources
- Routine follow-up with Neurologist
- ARNP for routine follow-up by phone, questions
- Social Work as needed
- Neuropsychologist for cog rehab, repeat evaluation (if needed)

MBWC Case Example

- · Feedback from patient and spouse
 - Felt "heard" by provider and team (previous providers and insurance unwilling to believe symptoms in 'young' woman)
 - Family conference helpful for education and answering questions
 - "I could tell that the team was all on the same page. They each had something to say that was helpful. They were focused on me and things going forward."
 - Support from multiple specialties, if needed
 "I might not need it right now, but I am glad
 - "I might not need it right now, but I am glad that [SW] is available for me and my husband"



Children's Hospital Colorado Acquired Brain Injury Program

- · Mostly TBI, other acquired brain injuries
- Inpatient: cognitive monitoring, psychosocial support/ education, and discharge testing
- 1 year follow-up: patient meets with entire team after having a comprehensive neuropsychology evaluation
- Toam
 - · Speech, occupational, and physical therapies
 - · Rehabilitation psychology and neuropsychology
 - · Interns and fellows
 - · Rehabilitation medicine
 - · Education
 - · Child Life
- Social work

Children's Hospital Colorado Acquired Brain Injury Program

- Co-treatment
- Support behavior and emotional adjustment in the context of therapy and other services
 - PT and psychology: anxiety, impulsivity, and safety when moving; self-perception
 - OT and psychology: self-image around grooming and hygiene
 - SLT and psychology: family education, assessment, coping and compensatory strategies
 - Education and psychology: manage behavior and emotional problems in the classroom, support social engagement, inform IEP and transition back to school

Children's Hospital Colorado Acquired Brain Injury Program

- · Goal/ vision for future:
 - · Subacute program
 - · Increasing supports to transition home
 - Standardized interventions/ protocols based on diagnosis
 - · Systematic tracking of outcome
 - · Increasing opportunities for training

CHCO ABI Case Example

- 7-year-old with TBI and stroke sustained under psychologically traumatic circumstances
- High functioning at baseline, possible subclinical anxiety
- · Remained average in many aspects of cognition
 - · Higher-level cognitive problems
 - Increased anxiety
 - Frustration
 - · Emotional indifference

CHCO ABI Case Example

- · Better understand changes in functioning
- Relationship of cognition and his emotional and behavioral presentation
- Supported anxiety and social competence in the context of therapies and school

Part II: Principles of <u>Effective</u> Collaborative Care

10 Principles of **Effective** Care Teams

253 staff from 11 community rehabilitation and intermediate care teams in the UK

"A dynamic process involving two or more health professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted physical and mental effort in assessing, planning, or evaluating patient care. This is accomplished through interdependent collaboration, open communication and shared decision-making. This in turn generates value added, patient, organizational, and staff outcomes"

Nancarrow et al., 2013

1. Leadership

- · Clear vision, role, and purpose
 - · Willing to act and listen
 - · Clear direction and management of team
- · Democratic, shared power
- · Support and supervision
- · Values are visible and consistently portrayed
- Demonstrates a team culture of trust



Nancarrow et al., 2013

2. Communication

- · Emphasis on the leader to implement and uphold
- Appropriate systems to promote communication within team
- · In-person meetings (team, pairs, subgroups, etc.)
- · Agenda items
- Collaborative calendars and schedules
- · Ability to discuss and resolve issues
- · Must be "two-way"
 - Concern that some members' perspectives are not valued as highly

Nancarrow et al., 2013

3. Personal Rewards and Training

- · Training and development
- Opportunities to share knowledge with the rest of the team
- · Individual rewards and opportunities
 - Career development
 - Financial
 - Autonomy
 - Challenges
 - · Morale and motivation
- Perceives the importance of individual returns on the broader team

Nancarrow et al., 2013

4. Appropriate Resources

- Basics: office space, parking, computers, etc.
- Privacy
- Procedures to uphold the team vision
- Communication within the team and to outside providers
- · Referral criteria
- · Team members value being asked for input
- Procedures and responsibilities don't impede patient care
 - Paperwork
 - Charting
 - Meetings
- Reasonable work load/ sufficient time to complete job well

Nancarrow et al., 2013

5. Appropriate Skill Mix

- · Diversity
- · Mix and breadth of staff
- Sufficient and appropriate skills, experiences, and competencies
- · Provider mix meets the demands of the patients
- Personalities
- Timely replacement and coverage during absences and changes in team structure

Nancarrow et al., 2013

6. Culture

- · Largest theme
 - · Flexibility: both of the team itself and its members
 - Trust
 - · Mutual respect
 - · Reliability
 - Commitment
 - · Informal relationships
 - · Valued contributions of others
 - Camaraderie
 - Fun
 - Friendship

Nancarrow et al., 2013

7. Individual Characteristics

- · Knowledge, experience, initiative
- · Listening skills
- · Interest in common goal
- · Approachability
- Compromise
- Decisiveness
- Empathy
- Organized
- · Self-awareness
- · Open to learning
- · Personal responsibility

Nancarrow et al., 2013

8. Clear Vision

- · Clear set of values that drive direction of service
- · Referral criteria
- · Services offered
- · Uniform and consistent external image
 - · Accurate information given to referring providers
 - Portrayal of the team within my system and externally
 - Physical representation of staff
 - External marketing



Nancarrow et al., 2013

9. Quality of Care Outcomes

- · Patient-centered care focus
- · Ways to measure effectiveness and outcome
- Mechanisms in place for feedback to provider and to other services

Do outcomes matter?



Nancarrow et al., 2013

10. Respect and Understanding of Team Member Roles

- · Shared power
- · Working jointly
- Autonomy
- Boundaries
- Clear understanding of how my role fits into the team and impacts other providers



Nancarrow et al., 2013

Part III: Overcoming Barriers to Effective Collaborative Care

Challenges

- · Lack of clear vision (Nancarrow et al., 2013)
- Satisfaction with involvement in goal-planning (Sivaraman Nair & Wade, 2003)
- Balance between collaboration and the inevitable need for someone to hold decision making power
- Frustrations as MD opinions may be valued differently (Mickan & Rodger, 2000)
- · Insufficient communication

Challenges

- · Managing differing opinions
 - Particularly important as conflict can interfere with patient-focus (Mickan & Rodger, 2000)
- Lack of resources to complete job effectively (Nancarrow et al., 2013)
- · Feeling underappreciated
- · Accessibility of other team members

Challenges Specific to Neuropsychology

- Overlapping roles with therapists and other psychologists (Sander, Raymer, Werthheimer, & Paul, 2009)
- · Unrealistic expectations
- · Time needed for assessment
 - Work load
 - · Sharing patient's time with other providers
- Billing
- · Can be sticky when multiple providers are present

Breakout

- 1. What works well in my current setting?
- What are challenges and barriers in my setting?
- 3. What has been harmful to my team?
- 4. Which of the principles of good interdisciplinary team work resounded most with you?
- 5. What are ways to overcome communication challenges?
- 6. What are strategies that have worked well for me in navigating and establishing my role as a neuropsychologist?
- 7. Does my institution have policies and procedures in place to support collaborative care? Are there procedures that discourage it?

Part IV: Training in Collaborative Care

Training in Collaborative Care

- Recent survey showed many NPs are involved in integrated care but lacked formal training (Kubu et al., 2016)
- Roper and colleagues (2018) propose 3 broad competency areas for NPs
 - Foundational Competencies Related to Integrated Care
 - · Functional Competencies Relevant to Integrated Care
 - · Knowledge and Skills Specific to the Team/Setting



8 Foundational Competencies

- Range includes processes, relationships, collaboration, and outcomes that advance patient care and research
- Interdisciplinary systems competency is conceptualized as being relevant to all professional activities of neuropsychologists and is especially relevant to integratedcare settings
- 8 elements could be part of a curriculum for collaborative care training

8 Foundational Competencies

- (5) Neuropsychologist will have knowledge of...
 - Roles, responsibilities, skills, and values/attitudes of different disciplines and arranges settings (e.g., health care, education, forensic, policy, community)
 - Different systems relevant neuropsychological practice and strategies to negotiate these systems effectively
 - Interprofessional collaboration and its role in contributing to optimal care
 - General and setting-specific contributions and limitations of neuropsychological expertise
 - Functional impact of neuropsychological disorders on patient abilities to negotiate systems and relevant management strategies

8 Foundational Competencies

- (3) Neuropsychologist will be able to...
 - Collaborate effectively with individuals and systems across disciplines, adapt indications to context appropriately, address questions about neurobehavioral functioning, and contribute to integrated understanding
 - Work cooperatively across systems, validating shared values and demonstrating mutual respect
 - Work collaboratively, providing neuropsychological expertise in clinical and research teams
 - Roper et al., 2018; CNS, 2016; Rey-Casserly et al., 2012)

Functional Competencies

- · Assessment
- Intervention
- Consultation
- · Research/evaluation
- · Teaching/supervision
- Management/administration
- Advocacy

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Training in Collaborative Care

- · Achieving Competencies for Neuropsychology Trainees
 - · Doctoral Programs
 - · Didactics for collaborative and interdisciplinary models
 - · Screening tools, measurement for efficiacy
 - · Learning brief interventions
 - Interprofessional relationships
 - Contributions to quality improvement projects
 - · Issues related to diversity, access to care, cultural influences
 - · Interviewing and communication techniques
 - Ability to communicate information in a fast environment
 Communication between patients, families, and physicians
 - Published guidance is available for training directors
 - Hunter et al., 2017; Robinson & Reiter, 2007

Training in Collaborative Care

- · Achieving Competencies for Neuropsychology Trainees
 - Internship
 - Intentional placement at a site that offers major and minor rotations in assessment, intervention, and consultation
 - May cut across patient population (race, gender), intensity (inpatient, outpatient), care setting (hospital, forensic, academic), care line (mental health, psychiatry, neurology, primary care, transplant)
 - Learn to adapt neuropsychological evaluation skills to various populations and teams
 - · Develop communication skills (written and oral)
 - Research opportunities within a clinic
 - Collaboration between providers or departments

Training in Collaborative Care

- · Achieving Competencies for Neuropsychology Trainees
 - Post-doctoral Training
 - · Expand range, efficiency, and flexibility of skills
 - Involvement in program evaluation or quality improvement projects
 - Understanding and addressing gaps in patient care
 - Interdisciplinary research collaborations
 - Administrative opportunities and involvement in organizational, legislative or institutional committees
 - Encourage collaborative decision-making in team settings
 - Providing educational talks on value and utility of neuropsychology to other services, promoting collaboration
 - Supervise, mentor, and educate other trainees and professionals from other disciplines

Training in Collaborative Care

- · Achieving Competencies for Neuropsychology Trainees
 - · Post-license Training
 - Seek CE opportunities to learn and develop skills
 - APA offers CEs related to integrated primary care
 - On-the-job training
 - Participate in legislative and institutional committees
 - Educate other disciplines about neuropsychology
 Communicate the value of neuropsychology services
 - Learn about other disciplines as well
 - Learn about other disciplines as well
 - Be open to adapting communication (written and oral) to the setting and team
 - Seek or develop team-based training opportunities for your team

Additional Information & Resources

- · Archives of Clinical Neuropsychology, Vol. 33, Issue 3
- Volume 33, Issue
- AIMS Center (University of Washington)
- https://aims.uw.edu/
- APA/APM
- WIHPT: Webkit for Interdisciplinary Health Service Psychology Trainees

Thank you!

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