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**Integrating Occupational Therapy
into Home-Based Primary Care**

Presented in Collaboration with Midwestern University Department of
Occupational Therapy and Johns Hopkins School of Nursing

HCCIntelligence™ Webinar and Virtual Office Hours
August 19, 2020

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Introductions



Monika Robinson, DrOT, OTR/L
Partner at Living Fully at Home, LLC & Assistant
Professor at Midwestern University



Sarah Szanton, PhD, ANP, FAAN
Professor, Director, Center for Innovative Care in Aging
at Johns Hopkins School of Nursing

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Objectives

- 1 Understand occupational therapy's role in home-based primary care.
- 2 Relate how occupational therapy addresses the Geriatric 5Ms areas of care and quality metrics.
- 3 Identify a home-based model of care such as the Community Aging in Place – Advancing Better Living for Elders (CAPABLE) that provides evidence for positive outcomes using occupational therapy services.

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**Role of OT in Home-Based
Primary Care**

Monika Robinson, DrOT, OTR/L

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**Occupational Therapy Practitioner
as Interdisciplinary Team Member
in Primary Care**

- **Assess the “person-environment-occupation fit”**
 - Occupation is a meaningful activity
 - Social determinants of health considered aspects of the environment
- **Unique knowledge and skills set for addressing functional skills through:**
 - Activity analysis
 - Compensatory and adaptive equipment knowledge
- **Work as generalists with a focus on function and participation**
 - Training includes behavioral health
 - Norm and criterion-referenced functional assessment tools

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**Efficacy of Occupational Therapy
Primary Care Interventions**

- **Demonstrated improved health and function for older adults and those with chronic conditions**
(Donnelly, Brenchley, Crawford & Letts, 2013; Leland et al., 2017; AOTA 2020; Pyatak et al., 2019)
- **Cost-effectiveness in primary care settings within geriatric, behavioral health and pediatric care interventions**
(Hart & Parson, 2015; Jordan, 2019)

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How is Primary Care OT Different than Traditional OT Rehab?

Focus on primary levels of prevention:

- primary,
- secondary, and/or
- tertiary

Care is not exclusively episodic or solely related to post-acute illness or injury

- longitudinal
- follows patient and their on-going health needs
- "Occupational" performance across contexts and conditions



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Role of Occupational Therapy in Home-based Primary Care: Does it Exist?

Present

- Veteran's Administration Home-based primary care team member
- Extension of Patient Centered Medical Home

Future Growth?

- Independence at Home Demonstration
- Primary Care First Model
- Medicare Part B Provider
- ACO's



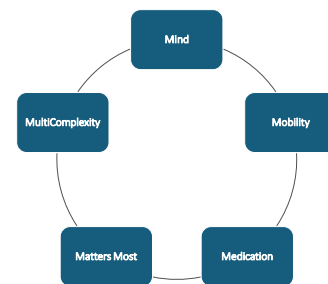
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Geriatric 5Ms Areas of Care & Quality Metrics: Occupational Therapy's Contribution

Monika Robinson, DrOT, OTR/L

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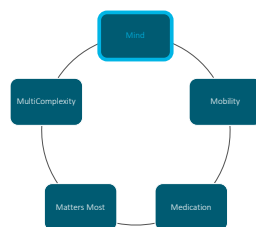
Geriatric 5Ms Areas of Care & OT: Evidence-based Practices



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MIND

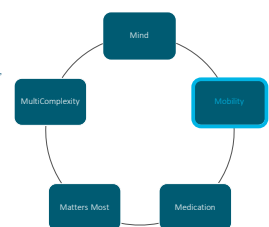
- Strategies to address psychiatric and behavioral conditions, e.g., dementia and depression
- Caregiver education in managing dementia to reduce caregiver burden and increase family members level of participation: Skills2Care (Gitlin et al., 2001)
- Effective interventions using competence-environmental-press framework & personal control theory
- Formal Assessments:
 - Performance Assessment of Self-Care Skills (PASS) (Holm & Rogers, 2008);
 - Executive Function Performance Test (EFPT) (Baum et al., 2008)



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MOBILITY

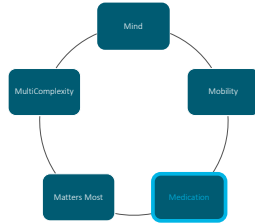
- Functional mobility with use of adaptive devices and techniques
- Safety & fall prevention using multi-component interventions (Elliott & Leland, 2018; Stark et al., 2017)
- Home modifications by OT reduce falls by 39% (Stark et al., 2017)
- Home Hazards Removal Program (HARP) Study (Stark et al., 2017)
- Formal assessments:
 - In-Home Occupational Performance Evaluation (I-HOPE) (Stark et al., 2015)
 - Westmead Home Safety Assessment (WeSHA) (Clemson et al., 1999)



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MEDICATION

- Medication adherence that focuses on routines and habits (Sanders & Oss, 2013)
- Determining other contributing factors limiting medication administration, i.e., low vision, cognitive status, dexterity and other performance skills
- Formal measurement tools to assess medication management:
 - HOME-Rx (Somerville et al., 2019)
 - Cognitive Performance Test-Medication subtest (Burns 2018)

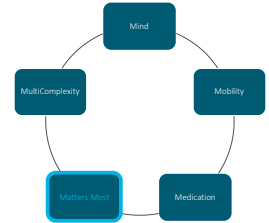


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MATTERS MOST

- Profession focuses on client centered care as evidenced in:
 - development of client centered theoretical models
 - standardized assessments
 - process of interventions
- Client-centered, goals driven by patient (Dahl-Popitz et al., 2017)
- Formal Assessments:
 - Canadian Occupational Performance Measure (COPM) (Law et al., 1990)
 - Activity Card Sort (ACS) (Baum & Edwards, 2001)

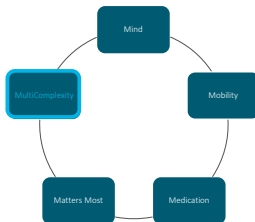


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MULTICOMPLEXITY

- Emphasize implementation of self-care management skills for chronic diseases
- Address interplay of social and physical environmental factors to individual client factors impacting management of co-morbidities
- Importance of cognitive assessments and interventions, task modification,
- Incorporate health promotion and prevention:
 - E.g., **Lifestyle Redesign®** & REAL Diabetes, combined with motivational interviewing (Pyatak et al, 2019)



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Occupational Therapy & Home-Based Primary Care Quality Metrics

Primary Care First

- Days at Home (Risk score groups 3 or 4)

IAH Demonstration

- All-cause hospital admissions within 30 days
- Hospital admissions for ambulatory care sensitive conditions

Efficacy of OT: Higher hospital spend on OT is only spending category that statistically lowered readmission rates for HF, pneumonia and acute MI (Rogers et. al., 2016)

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Occupational Therapy & Other Home-Based Metrics

National Home-Based Primary Care & Palliative Care Data Registry

- Number of Deaths at Home vs SNF
- Hospitalizations 90 days before death

Merit-based Incentive Payment System

- Current Medications
- Functional Outcome Assessment
- Falls: Risk Assessment & Plan of Care
- Preventive Care & Screening: Clinical Depression
- Elder Maltreatment & Follow Up Plan
- Dementia: Cognitive & Functional Assessment; Education & Support of Caregivers; Safety concern Screening

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Community Aging in Place - Advancing Better Living for Elders (CAPABLE) Project

Sarah Szanton, PhD, ANP, FAAN

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Community Aging in Place – Advancing Better Living for Elders (CAPABLE) Project

Function: It's What We Do

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CAPABLE origins
Row Homes in Baltimore, Maryland

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Mrs. B's Story

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Her Wardrobe

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Her Floor

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Her Exterior Stairs

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Addressing Disability, Fostering Function

- Treating the whole person
- Modifying the environment
- Best fit

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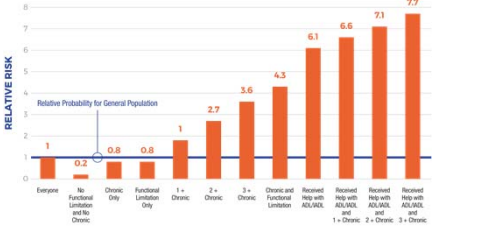
Functional Limitations Are Costly

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Relative Risk of Being in the Top 5% of Health Care Spenders, 2006



Group	Relative Risk
Everyone	1
No Functional Limitation and No Chronic	0.2
Chronic Only	0.8
Functional Limitation Only	0.8
1+ Chronic	1
2+ Chronic	2.7
3+ Chronic	3.6
Chronic and Functional Limitation	4.5
Received Help with ADL/IADL and 1+ Chronic	6.1
Received Help with ADL/IADL and 2+ Chronic	6.6
Received Help with ADL/IADL and 3+ Chronic	7.1
Received Help with ADL/IADL and 4+ Chronic	7.7

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Older Adults Drive Population Health Outcomes



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CAPABLE: Approach



AGE IN PLACE

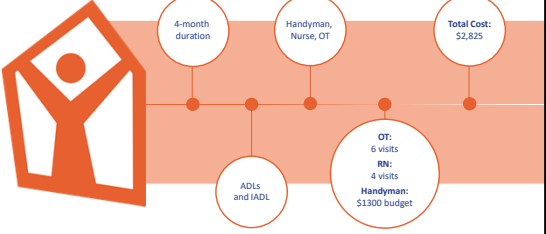
- Increased physical function
- Reduced depression
- Fewer hospitalization and nursing home admissions

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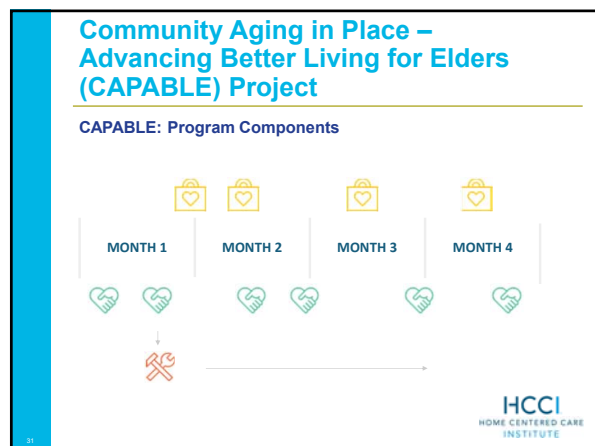
CAPABLE: Key Aspects



- 4-month duration
- Handyman, Nurse, OT
- Total Cost: \$2,825
- OT: 6 visits
- RN: 4 visits
- Handyman: \$1300 budget
- ADLs and IADL

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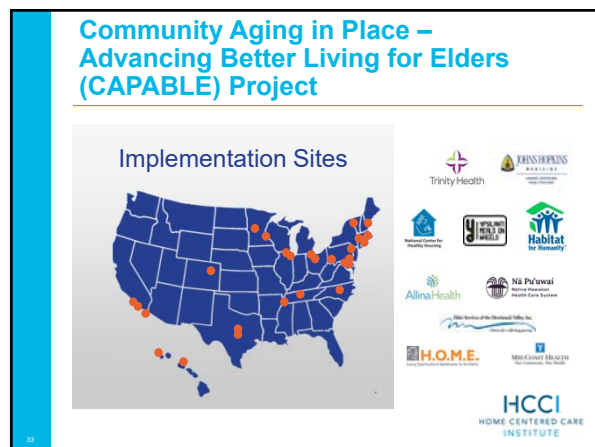
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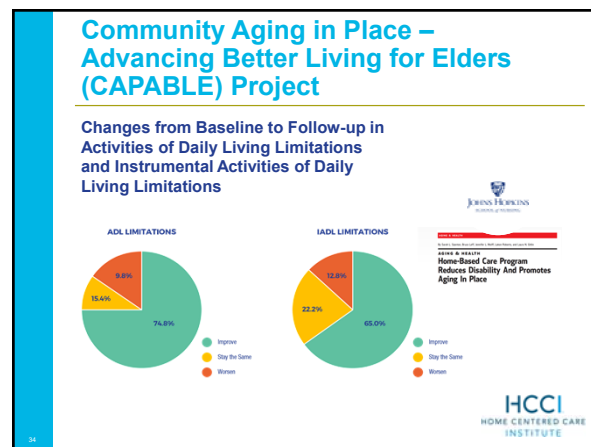
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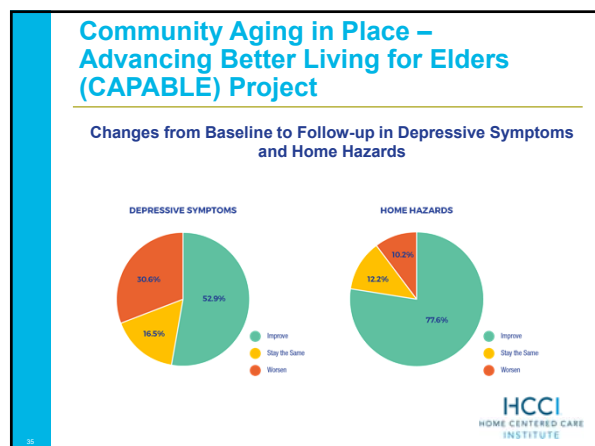
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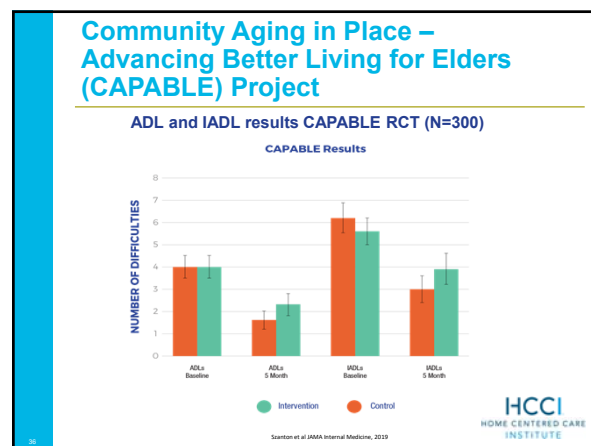
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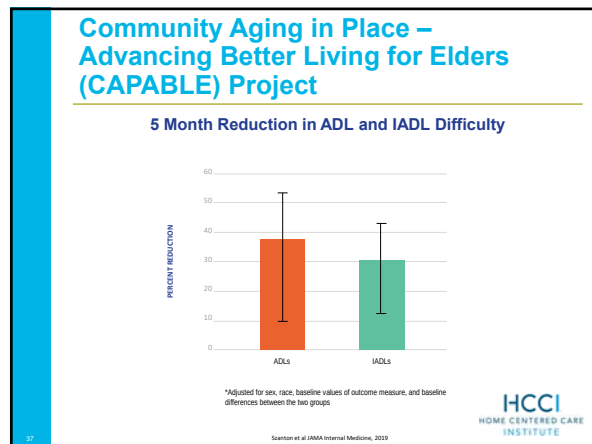
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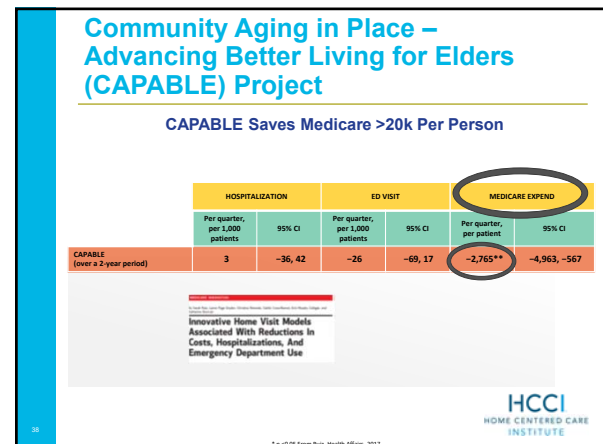
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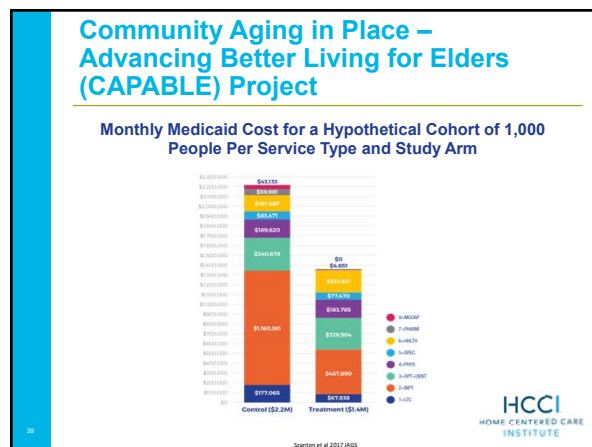
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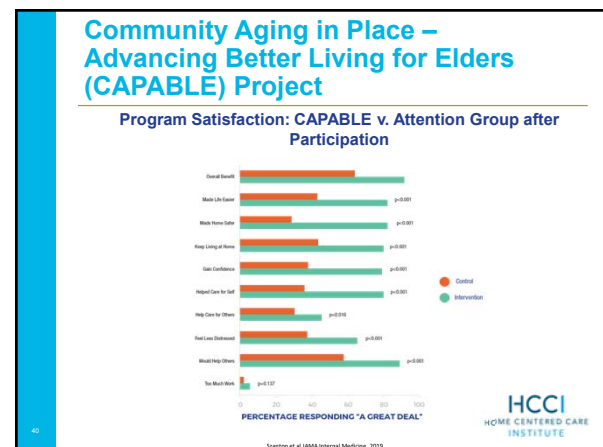
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Health Concerns

- Confused, over-medicated
- 30 minutes to walk to the bathroom
- Sat on commode all day as a chair

CAPABLE Solution

- Meds schedule
- Chair along hall
- Chair at top of stairs
- Railing on both sides
- Bed risers
- Wider commode

MRS. D

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Health Concerns

- Asthma, DM, HTN, Arthritis
- Breathless
- Limited ADLs, couldn't walk up steps, or outside house

CAPABLE Solution

- Connected with PCP for long-acting inhalers
- Switched from Aleve to Tylenol
- CAPABLE exercises
- Easier to take a bath → decreased pain
- Super ear
- Railings, repaired linoleum floor

MRS. H

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If I had 10,000 tongues...

"If I had 10,000 tongues and they could all speak at the same time, I could not praise the CAPABLE program enough."

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Why This Works

- We ensure the person-environment fit
- We unleash people's motivation
- We honor their strengths and goals
- We provide resources to achieve those goals
- We build self-efficacy for new challenges



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Function: It's What We Do

- Poor function is costly
- It's what older adults care about
- It's virtually ignored in medical care
- It can be modified



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The Opportunity



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A New Generation of Health Care Innovation

- 1.0 = Hospital-based
- 2.0 = Clinic/outpatient care
- 3.0 = Home based care

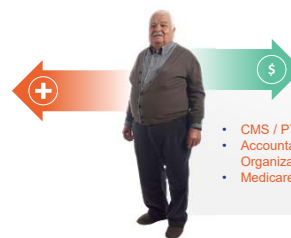


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Payer Possibilities



- CMS / PTAC
- Accountable Care Organizations
- Medicare Advantage
- PACE
- Medicaid Waivers
- Global Hospital Payment

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Growing a sustainable change

- Ground and seed - Research environment and idea
- Seedling - from maturation and NIH funding
- Getting bigger - philanthropy
- Tree - Fiscal incentives aligned and policy environment right

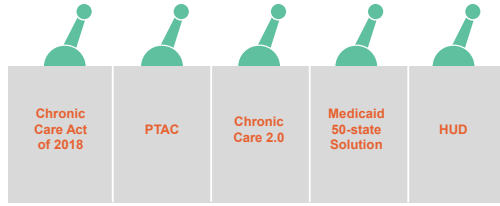


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Policy Possibilities



Chronic Care Act of 2018 PTAC Chronic Care 2.0 Medicaid 50-state Solution HUD

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Clinicians have ideas grounded in reality, ready for practical change.

You see what matters.

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HCCIntelligence™ Virtual Office Hours: Ask the Experts

An open forum for questions and answers

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9:00 am–5:00 pm (CST)
Monday through Friday



Webinars
Every third Wednesday of the month, HCCI hosts a webinar on topics relevant to HBPC.



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HCCIntelligence™ Upcoming Events

HCCIntelligence™ – Webinars

Every third Wednesday of the month, HCCI hosts a free webinar on a clinical or practice management topic relevant to home-based primary care (HBPC). Visit www.HCCIInstitute.org for more details.

Leading Teams During a Crisis: COVID-19 and Beyond

Wednesday, September 16th, 4 pm – 5 pm CST

[Register here](#)

Presenter:

- Cheryl Fattibene, DNP, MSN, MPH, CRNP – Clinical and Practice Management Liaison, National Nurse Practitioner Entrepreneur Network and Family Nurse Practitioner, La Comunidad Hispana

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References

- American Occupational Therapy Association. (2017). Occupational therapy's role in medication management. *American Journal of Occupational Therapy*, 71(Suppl. 2), 7112410025. <https://doi.org/10.5014/ajot.716S02>
- American Occupational Therapy Association. (2020). Occupational therapy in the promotion of health and well-being. *American Journal of Occupational Therapy*, 74, 7403420010. <https://doi.org/10.5014/ajot.2020.743003>
- Baum, C. M., Connor, L. T., Morrison, T., Hahn, M., Dromerick, A. W., & Edwards, D. F. (2008). Reliability, validity, and clinical utility of the Executive Function Performance Test: A measure of executive function in a sample of people with stroke. *American Journal of Occupational Therapy*, 62, 446–455. <https://doi.org/10.5014/ajot.62.4.446>
- Baum, C. M., & Edwards, D. (2001). *Activity Card Sort (ACS): Test Manual*. St. Louis: Program in Occupational Therapy, Washington University School of Medicine.
- Burns, T. (2018). *Cognitive Performance Test revised manual*. Pequannock, NJ: Maddak.
- Clemson, L., Fitzgerald, M., & Heard, R. (1999). Content validity of an assessment tool to identify home fall hazards: the Westmead Home Safety Assessment. *British Journal of Occupational Therapy*, 62(4), 171–179. <https://doi.org/10.1177/030802269906200407>
- Dahl-Popoli, S., Rogers, O., Muir, S. L., Carroll, J., & Manson, L. (2017). Interprofessional primary care: The value of occupational therapy. *Open Journal of Occupational Therapy*, 5(3). <https://doi.org/10.15453/2168-6408.1363>

55

References

- Donnelly, C., Brenchley, C., Crawford, C., & Letts, L. (2013). The integration of occupational therapy into primary care: A multiple case study design. *BMC Family Practice*, 14(60). <https://doi.org/10.1186/1471-2296-14-60>
- Elliott, S., & Leland, N. E. (2018). Occupational therapy fall prevention interventions for community-dwelling older adults: A systematic review. *American Journal of Occupational Therapy*, 72, 7204190040. <https://doi.org/10.5014/ajot.2018.030494>
- Gitlin, L. N., Corcoran, M., Winter, L., Boyce, A., & Hauck, W. W. (2001). A randomized, controlled trial of a home environmental intervention: Effect on efficacy and upset in caregivers and on daily function of persons with dementia. *The Gerontologist*, 41, 4–14.
- Halle, A. D., Mroz, T. M., Fogelberg, D. J., & Leland, N. E. (2018). Health Policy Perspectives—Occupational therapy and primary care: Updates and trends. *American Journal of Occupational Therapy*, 72, 7203090010. <https://doi.org/10.5014/ajot.2018.723001>
- Hart, E. C., & Parsons, H. (2015). Occupational therapy: Cost-effective solutions for a changing health system [Fact sheet]. Bethesda, MD: American Occupational Therapy Association. Retrieved from <https://www.aota.org/~media/CorporateFiles/Advocacy/Federal/FactSheets/Cost-Effective-Solutions-for-a-Changing-Health-System.pdf>
- Holm, M. B., & Rogers, J. C. (2008). The performance assessment of self-care skills (PASS). In Hemphill-Pearson B. J. (eds.). *Assessments in Occupational Therapy Mental Health* (2nd ed.) SLACK.
- Jordan, K. (2019). Guest Editorial—Occupational therapy in primary care: Positioned and prepared to be a vital part of the team. *American Journal of Occupational Therapy*, 73, 7305170010. <https://doi.org/10.5014/ajot.2019.735002>

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References

- Keglovits, M., Somerville, E., & Stark, S. (2015). In-Home Occupational Performance Evaluation for Providing Assistance (I-HOPE Assist): An assessment for informal caregivers. *American Journal of Occupational Therapy*, 69, 6905290010. <http://dx.doi.org/10.5014/ajot.2015.015248>
- Law, M., Baptiste, S., McCall, M., Opzoomer, A., Polatajko, H., & Pollock, N. (1990). The Canadian occupational performance measure: an outcome measure for occupational therapy. *Canadian journal of occupational therapy*. *Revue canadienne d'ergotherapie*, 57(2), 82–87. <https://doi.org/10.1177/000841749005700207>
- Leland, N. E., Fogelberg, D. J., Halle, A. D., & Mroz, T. M. (2017). Health Policy Perspectives—Occupational therapy and management of multiple chronic conditions in the context of health care reform. *American Journal of Occupational Therapy*, 71, 7101090010. <https://doi.org/10.5014/ajot.2017.711001>
- Pyatak, E. A., Carandang, K., Vigen, C. L. P., Blanchard, J., Diaz, J., Concha-Chavez, A., . . . Peters, A. L. (2018). Occupational therapy intervention improves glycemic control and quality of life among young adults with diabetes: The Resilient, Empowered, Active Living with Diabetes (REAL Diabetes) randomized controlled trial. *Diabetes Care*, 41, 696–704. <https://doi.org/10.2337/dc17-1634>
- Pyatak, E., King, M., Vigen, C. L. P., Salazar, E., Diaz, J., Schepens Niemiec, S. L., . . . Shukla, J. (2019). Addressing diabetes in primary care: Hybrid effectiveness—implementation study of Lifestyle Redesign® occupational therapy. *American Journal of Occupational Therapy*, 73, 7305185020. <https://doi.org/10.5014/ajot.2019.037317>

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References

- Rogers, A. T., Bai, G., Lavin, R. A., & Anderson, G. F. (2017). Higher Hospital Spending on Occupational Therapy Is Associated With Lower Readmission Rates. *Medical Care Research and Review*: *MCRR*, 74(6), 668–686. <https://doi.org/10.1177/1077558716666881>
- Sanders, M., & Van Oss, T. (2013). Using daily routines to promote medication adherence in older adults. *American Journal of Occupational Therapy*, 67, 91–99. <https://doi.org/10.5014/ajot.2013.005033>
- Somerville, E., Massey, K., Keglovits, M., Vouri, S., Hu, Y.-L., Carr, D., & Stark, S. (2019). Scoring, clinical utility, and psychometric properties of the In-Home Medication Management Performance Evaluation (HOME-Rx). *American Journal of Occupational Therapy*, 73, 7302205060. <https://doi.org/10.5014/ajot.2019.029793>
- Stark, S., Keglovits, M., Arbesman, M., & Lieberman, D. (2017). Effect of home modification interventions on the participation of community-dwelling adults with health conditions: A systematic review. *American Journal of Occupational Therapy*, 71, 7102290010. <https://doi.org/10.5014/ajot.2017.018887>
- Stark, S., Somerville, E., Keglovits, M., Conte, J., Li, M., Hu, Y., & Yan, Y. (2017). Protocol for home hazards removal program (HARP) study: A pragmatic, randomized clinical trial and implementation study. *BMC Geriatrics*, 17(90). <https://doi.org/10.1186/s12877-017-0478-4>
- Stark, S. L., Somerville, E. K., & Morris, J. C. (2010). In-Home Occupational Performance Evaluation (I-HOPE). *American Journal of Occupational Therapy*, 64, 580–589. doi: 10.5014/ajot.2010.08065

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