Momentum Summit I

Building Workforce Capacity in the Community with a focus on Driving, Access, Behavioral and Population Health

June 3-4, 2021

Older driver report

On June 3-4, 2021, the Momentum Summit, in collaboration with the Older Driver Project, funded in part by The National Highway Traffic Safety Administration (NHTSA), convened via virtual format. The Summit gathered occupational therapy demonstration site leads, subject matter experts and leaders in driving and community mobility to share successes, barriers, and opportunities, with the goal of improving driving and community mobility safety services for older drivers and caregivers. Discussants and panelists highlighted the contribution occupational therapy can make to preserving older adults' participation as drivers, non-drivers, pedestrians, and passengers through safe transportation and mobility. Below are key Summit findings and recommendations.

Background

The U.S. older adult population is poised to reach 20% by 2030. Age-related impairments and increased rates of complex chronic conditions place older adults at risk for negative outcomes such as falls and household accidents both at home and in the community. The impact of such negative outcomes is enormous, with the health care system ill-equipped to respond to acute medical crises while also lacking sufficient long-term care options.

Older adults want to do more than just survive—they want to thrive. As a cohort which is increasingly diverse, educated, and consumer-conscious, older adults will live and work longer than prior generations. Valuing independence, older adults overwhelmingly desire to age-in-place. Given their increasing medical complexity, early identification of the risk of functional decline is critical. However, it is imperative that risk stratification not be punitive; that is, focused on removing older adults from the road. Rather, the goal of risk identification must be ensuring older adults' successful adaptation to age-related changes and continued participation in valued activities.

Health is about the doing.

Summit overview

This two-day virtual conference brought together experts from government, non-profit entities, academia, research, and the healthcare industry, to identify strategies to address driving and community mobility safety for older drivers and caregivers. Representatives from government agencies included the National Highway Traffic Safety Administration, Health Resources Services Administration, and Substance Abuse Mental Health Services Administration. Additionally, there were representatives from agencies serving older adults, such as National Council on Aging and AARP Public Policy Institute, universities such as Spaulding University, industry, including Adaptive Mobility Services, LLC and Lifestyle Redesign, and health care, including Northwest Community Health (demonstration project site), Veterans Health Administration and Children's Hospital LA.

The Summit included presentations by Dr. Joseph Coughlin, Director of MIT AgeLab, and Dr. Ganesh Babulal, Professor at the Washington University School of Medicine, who discussed priorities to address older adults' changing needs around driving and community mobility, as well as Panels on topics such as Population and Behavioral Health and Access to Care.

Discussion points

- Accessing the community is vital to older adults.
- Driving safety is complicated by age and the impact of medical conditions like dementia.
- OT positively impacts options for older adults' driving and community mobility needs.

Driving and community mobility

Driving is powerful. It means freedom and independence, allowing older adults to work, be social, and access goods and services. Driving is also the most complex instrumental activity of daily living (IADL), requiring simultaneous cognitive, physical, sensory, and emotional function. A driver does not just see the road—she also reacts in the blink of an eye to the unexpected, e.g., the classic example of the child running into the street to chase a ball. This requires scanning the road and seeing the child, safety awareness and ability to identify potential danger, and quick reaction time, strength, and range of motion, to turn the wheel and/or hit the brakes.

As people age, driving may be affected by changes to vision, hearing, physical and cognitive function. Acute and chronic illness may also result in deficits affecting driving, such as limited range of motion, sensation loss, and cognitive impairment. Since every person ages differently, driving changes are not "one size fits all." Many older adults continue to drive by modifying their routines, e.g., not driving at night. However, others struggle to adapt to changes or to a specific health condition, often triggering a driving test with only one of two outcomes—yes or no—which do not adequately address the complexity of the issue.

Occupational therapy practitioners (OTP) understand functional performance in the context of driving and that performance in driving is linked to overall safety and independence. Occupational therapy practitioners address driving through a therapeutic approach that optimizes function, safety, and overall well-being.

Occupational therapy is the profession on the frontier of a population that values its ability to do things.

Dr. Joseph Coughlin, MIT AgeLab

Continued participation in driving and community mobility

According to Summit leaders and participant discussion, strategies to address driving and community mobility to enable older adults' continued participation in day-to-day activities must be personalized, proactive, and integrated, reflecting older adults' complex needs.

Services must also be equitable and accessible to older adults facing housing, transportation and income insecurity, and unequal access to health care, which disproportionately affects older adults from underrepresented and under resourced groups and those living in rural communities.

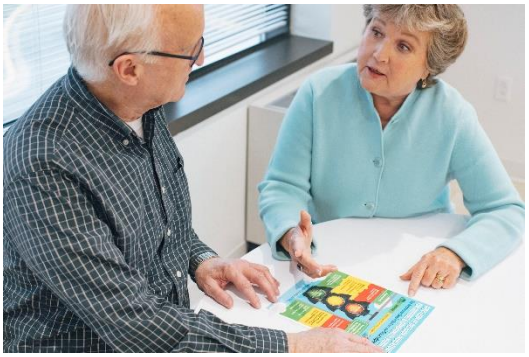
As a complex task, driving may also be used as a predictor of functional performance and risk, that is, older adults' ability to function safely and independently. Supporting older adult driving and community mobility will require coordinated programming delivered by professionals with a specialized skill set.

Gaps and opportunities

According to participants, evaluating and monitoring older adults' ability to drive **before** a crash (and, if necessary, intervening around driving cessation) will be critical. Technology offers new opportunities for assessment and intervention, including naturalistic driving monitoring, in-clinic use of driving simulation, and safe use and benefit from automated vehicles. Occupational therapy practitioners have a role in ensuring older drivers know how to benefit from these features and matching the right technology with an older adult's individual needs.

Barriers to this **more holistic, enabling approach** include driving risk not being consistently integrated into the current medical model, which reacts to impairments associated with an acute care crisis like a stroke versus taking a preventative stance. A proactive approach considers both functional outcomes and the impact on others. This is particularly true for dementia, where driving risk and indicators for cessation create a complex decision-making process, conflating impairment, risk, and emotion which frequently immobilizes action for individuals, families, and clinicians. As a result, driving for this population is often not discussed (Stasiulis et al, 2020). Driving is too often evaluated solely to exclude individuals instead of identifying strategies to facilitate continued participation in driving or exploring options to driving like public transportation. Reimbursement and confusion about roles, i.e., who addresses driving, also limit effective evaluation and intervention.

Momentum grew around the notion that the forecasted growth in older adults necessitates a **change in thinking**, an approach more supportive of transitions and maintaining community access. Such a shift will require a comprehensive approach by experts in person-centered care. At the same time, technological advances like integration of smart technology into cars and development of autonomous vehicles offer expanded roles around facilitating older adults' abilities to engage with innovative technologies. Concurrently, there is a need for accessible public spaces and transportation options that are adapted for older adults.



A therapeutic approach— personalized, proactive, integrated, equitable and accessible

Occupational Therapy & "What's Possible"
According to Summit participants, occupational therapy can be an *effective bridge* between where people are living and adapting in the community, and the health care system.

OT should be "universally identified" as the profession to address driving risk. assessment and supportive intervention

Why OT?

1. Client-centered approach
    a. Focuses on the biopsychosocial needs of the individual in context.
    b. Aligns with "personal" as the new premium with aging cohort.
    c. Address function broadly, understanding deficits in driving require comprehensive evaluation of function.
    d. Interprets driving as a symptom of the broader array of IADL deficits.
    e. Understands individual characteristics to interpret the complexity of driving needs (from prevention to intervention).
2. Task analysis
    a. Understands the science of function and its complexities.
    b. Observes and analyzes tasks to identify and treat deficits (e.g., memory, communication, and mobility).
    c. Prioritizes potential to benefit from intervention strategies.
    d. Assesses safety awareness and implications for participation.
    e. Extrapolates from one observed task (e.g., dressing) the potential impact on another (e.g., driving).
3. Holistic
    a. Understands the importance of motivation and behavior change.
    b. Experts in patient education and communicating the need for adaptation, and the potential for technology interventions.

c. Interacts with at-risk populations—persons with mental health disorders, homeless, rural —not routinely served in traditional settings.
d. Approach allows us to see the interplay between the many variables that impact function, participation, and safety.

4. Context
    a. Identifies the limitations and possibilities of the built environment.
    b. Recommends solutions and modifications to vehicles (personal to public transport), homes, buildings, and communities.
    c. Sensitive to social context; partners with families and caregivers
5. Lifespan perspective
    a. Supports driving and community mobility from pediatric to geriatric.
        i. Young adult with developmental disorder and seating in a car
        ii. Prevention and early intervention through education and risk screening to support healthy aging.
        iii. Prevention and early intervention through education and risk screening to support older adults with chronic conditions like dementia.
        iv. Promoting adaptations for older adults aging with disabilities such as amputation, spinal cord injury, etc.

OT's role in driving and community mobility

Participants recounted OT's vital role in both practice and research (Golisz, 2014, Davis, 2017). The OT Practice Framework includes driving and community mobility as IADLs, which OTs ranging from entry level practitioners to Driving Rehab Specialists address (Stav et al, 2011). Recognizing driving as the most complex IADL, OTPs use clinical reasoning to evaluate the impact of functional performance on driving, while simultaneously recognizing that deficits in driving affect participation in other activities (Dickerson et al, 2018). Unlike other disciplines, OT focuses on participation, identifying solutions if/when driving is no longer an option. Occupational therapy has extensive translational research in driving, developing evidence-based driving evaluation and intervention and safe community design (Barco et al, 2020; Bixby et al, 2015; Burns et al, 2018; Classen et al, 2014, Classen et al, 2019). Speaker Dr. Ganesh Balulal's research using "naturalistic driving" to predict pre-clinical dementia (Bayat et al, 2021) energized the Summit, with the potential to re-brand occupational therapy as "IADL Scientists"—utilizing driving to stage IADL deficits to maximize not just older driver safety but also quality of life, well-being, and meaning.

Summary of Summit outcomes and recommendations

Below are several recommendations which grew out of the Summit, organized utilizing a framework proposed by Dr. Coughlin of priority areas for AOTA to consider. Recommendations are synthesized across Summit panelists and participants to create a future vision for occupational therapy in driving and community mobility.

Priority area	Sub-themes	Example/strategies
Proactive	• Focus on preventing injury through assessment and monitoring. • Re-envision OT as necessary for well-being via preventative, community-based strategies. • Don't wait to be discovered, "Start knocking on doors."	1. Assess driving as routine assessment and help seniors develop transportation plans, e.g., Plan for the Road Ahead. 2. Evaluate IADL as predictor of driving safety risk, building on Dr. Balulal's work. 3. Employ driving simulation to assess component parts. 4. Expand use of translational tools, e.g., OT Performance Analysis of Driving, to identify problem areas. 5. Include early intervention at the community level, e.g., CarFit, as part of continuum of services. 6. Increase OT role in community safety programs and design of public spaces like Complete Streets initiative. 7. Expand OT's role in technology development and transportation innovation, from safety features in existing vehicles, to autonomous vehicles, to multimodal transportation. 8. Engage with programs like SmartCities and ConnectedNation.
Partnerships	• Develop partnerships with non-traditional stakeholders entering the driving and community mobility market. • Increase OT's footprint at the grassroots level.	1. Educate Injury Prevention Specialist and law enforcement about the importance of reporting medically at-risk individuals to the Division of Motor Vehicles not to take away their license but to identify risk and access services. 2. Partner with senior housing and senior service agencies who deliver services directly where older adults reside. 3. Engage retailers, which offer vision and pharmaceutical services, recognizing a health care market increasingly comprised of older adults. 4. Work with tech companies to identify knowledge gaps about the impact of technology on older drivers. 5. Partner with non-profits (Councils on Aging, AAA, AARP) delivering evidence-based services. 6. Work with Federally Qualified Healthcare Centers to ensure access by populations at/below the poverty line. 7. Expand OT's role in design of Rideshare to include specialized transportation services and training. 8. Partner with organizations that support underrepresented and underserved populations to ensure equitable access. 9. Work with ADA coordinators at local/state level to ensure access to health, recreation, safety, and roles for emergency preparedness/services.

		10. Involve OT in U.S. Department of Transportation's Complete Trip Deployment Program.
Profession	• Re-imagine workforce readiness through different roles for OT. • Expand and build educational opportunities that prepare OTs to integrate technology to deliver services. • Enhance consultant role.	1. Provide entry-level and continuing development opportunities around driving and community mobility. 2. Create pathway to OT generalist addressing driving risk and certification for OT specialist. 3. Create new OT role as travel trainer (or train the trainer) —training older adults to safely use public transportation options. 4. Facilitate older drivers' integration and use of smart technology in new vehicles to driver-less cars. 5. Serve in the vital role as part teacher, part coach. 6. Ensure occupational therapy practitioners have the skills to teach people driver wellness, how to use the car, how to sit in it, and make adjustments to accommodate medical needs, etc. 7. Create "champions" at local clinics and provide training to an OTP who can update the clinic staff. 8. Pursue creative sources of funding (grants, seed money) to support training. 9. Educate entry-level students about flexible payment models, e.g., fee-for-service, private practice.

Conclusion and Next Steps

The Momentum Summit and the Older Driver Project catalyzed discussion by occupational therapy and community leaders to develop a futuristic vision for occupational therapy's role in driving and community mobility. Amidst conversations about changing contexts, evidenced by rapid technological expansion and demographic shifts, participants built momentum around ***several key priority areas*** for occupational therapy. ***One,*** occupational therapy should return to its roots as experts in analyzing and understanding behavior change to support older adults' decision-making around driving and to provide solutions for continuing to access the community for as long as safely possible and once driving is no longer an option. ***Two,*** occupational therapy should be "universally" identified as the profession to address driving and community mobility at the individual and population level, building upon established evidence-based practice in these areas and collaborating with the array of multidisciplinary providers and stakeholders to ensure older adults' access to helpful services. ***Third,*** occupational therapy can expand its role as consultants to both community-based non-profits serving older adults and industry partners looking to move into the elder market with a goal of ensuring that technological advances and communities are adapted to meet the needs of a growing older adult population and to enable them to have engaged and happy lives.

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