PACE Framework Planning Tool

Questions for consideration		
Which PACE domain(s) most align with your telehealth program?		
□ <u>P</u> opulation and Health Outcomes		
□ <u>A</u> ccess for All Clients		
\Box <u>C</u> ost and Cost Effectiveness		
□ <u>E</u> xperiences of Clients and Occupational Therapy Practitioners		
Which Population and Health Outcomes sub-domains, if any, most align with your telehealth program?		
□ Care coordination □ Health promotion □ Occupational Performance □ Participation □ Prevention □ Quality of Life		
□ Role competence □ Self-advocacy □ Well-being		
Which Access for All Clients sub-domains, if any, most align with your telehealth program? Diversity, equity, and inclusion Access to technology and internet Availability and usability of translators Availability of specialists Digital health literacy Integration and use of clients' everyday materials Organizational digital health literacy Technology Usability Scheduling ease and convenience Scheduling ease Scheduling ease Scheduling ease Scheduling ease		
Which Cost and Cost Effectiveness sub-domains, if any, most align with your telehealth program? Client costs and cost savings Practitioner costs and cost savings Relation of service utilization to long term outcomes Service provision and utilization Relation of service utilization		
Which Experiences of Clients and Occupational Therapy Practitioners sub-domains, if any, most align with your telehealth program? Care in authentic contexts Caregiver/Trusted supporter acceptability and satisfaction Client acceptability and satisfaction Inclusion of care supporters Practitioner acceptability and satisfaction		

PACE Framework Checklist for Research/Program Evaluation

	Population and Health Outcomes
Care coordination	Care coordination: Policies and practices that create coherent and timely client-centered care both within and across care settings and over time.
□ Sub-domain applicable to research/program evaluation	 Examples include: Communication between team members Timing and support of transition between care (e.g., acute care to in-patient rehab; early intervention to early childhood) Link to community resources
□ Sub-domain not applicable to research/program evaluation	 Potential outcome measures for <u>care coordination (check all that align with research/program)</u> <u>Assessment of Interprofessional Team Collaboration Scale</u> (Orchard et al., 2012) <u>Interprofessionalism Assessment</u> (Frost et al., 2019) <u>Interdisciplinary Team Process and Performance Survey (Temkin-Greener et al., 2004)</u> Length of time for transition care Survey of client perceptions of quality and timeliness of care coordination Other:
Health promotion	Health promotion : "Process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental, and social well-being, an individual or group must be able to identify and realize aspirations, to satisfy needs, and to change or cope with the environment" (World Health Organization, 1986).
applicable to research/program evaluation	 Examples include: Population health promotion, focused on communities and factors that influence their health Group health promotion, focused on health and engagement (e.g., engagement in leisure among older adults, reduction in bullying at schools) Individual health promotion
not applicable to research/program evaluation	Potential outcome measures for <u>health promotion (check all that align with research/program)</u> Groups & Populations Healthy People 2030 Leading Health Indicators (U.S. Department of Health and Human Services, n.d.) Population measurement: Patient-Reported Outcomes Measurement Information System PROMIS®, <u>www.nihpromis.org</u> (Northwestern University, 2021a) Reduction in health disparities Promotion of healthy living practices Other:
	Individuals □ Healthcare utilization

	 Measures of health status Changes in modifiable health risk factors Frequency of participation in health promotion activities Other:
Occupational performance	Occupational performance : "Accomplishment of the selected occupation resulting from the dynamic transaction among the client, their contexts, and the occupation" (AOTA, 2020d, p. 8).
☐ Sub-domain applicable to research/program evaluation	Examples include: Occupational performance (Activities of daily living (ADLs), Instrumental activities of daily living (IADLs), Health management, Rest and sleep, Education, Work, Play & leisure, Social participation, Performance patterns, Performance skills, Client factors
	Potential outcome measures for occupational performance (check all that align with research/program)
Sub-domain not applicable to research/program	□ <u>Canadian Occupational Performance Measure</u> (Law et al., 1990) □ Montreal Cognitive Assessment (Nasreddine et al., 2005)
evaluation	 <u>Montrear Cognitive Assessment</u> (Nasteduire et al., 2003) <u>NIH Toolbox for Assessment of Neurological and Behavioral Function</u> (Northwestern University, 2021b) <u>Occupational Circumstances Assessment Interview and Rating Scale</u> (Forsyth et al., 2005) Occupational Performance History Interview (Kielhofner et al., 2001)
	□ <u>Occupational Self-Assessment</u> (Baron et al., 2002)
	<u>Pediatric Evaluation of Disability Inventory – Computer Adaptive Testing</u> (Dumas et al., 2015) <u>Sensor: Processing Measure</u> (Perham et al. 2007)
	 □ <u>Sensory Processing Measure</u> (Parham et al., 2007) □ <u>Sensory Profile-2</u> (SP-2; Dunn, 2014)
Participation	 Other: Participation: "Involvement in a life situation" (World Health Organization, 2001, p. 10).
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☐ Sub-domain applicable to	Potential outcome measures for <u>participation</u> (check all that align with research/program)
research/program	□ Client satisfaction, enjoyment, and/or frequency of engagement in meaningful occupations and everyday activities
evaluation	□ <u>Assessment of Preschool Children's Participation</u> (Law et al., 2012)
	Canadian Occupational Performance Measure (Law et al., 1990)
□ Sub-domain	 □ Community Participation Indicators (Heinemann, 2010) □ Goal Attainment Scaling (Kiresuk & Sherman, 1968)
not applicable to research/program	□ School Function Assessment (Coster et al., 1998)
evaluation	□ The Child and Adolescent Scale of Participation (Bedell, 2011)
	Other:
Prevention	Prevention: "Education or health promotion efforts designed to identify, reduce, or prevent the onset and decrease the incidence of unhealthy conditions, risk factors, diseases, or injuries" (American Occupational Therapy Association, 2020d, p. 81).
□ Sub-domain applicable to	Potential outcome measures for prevention (check all that align with research/program)
research/program evaluation	 Considerations of how occupational therapy delivered through telehealth influences health and developmental outcomes, possibly decreasing need for more intensive care later in life Prevention-focused program process measure

☐ Sub-domain not applicable to research/program evaluation	 Safe at Home Checklist (AOTA, n.dc) # of injuries, rate of absenteeism related to injury # of falls post implementation of fall prevention programming # of hospitalizations post prevention-focused occupational therapy intervention Developmental and academic outcomes among children Home safety and accessibility for fall prevention among older adults Other:
Quality of life	Quality of life: "Dynamic appraisal of the client's life satisfaction (perceptions of progress toward goals), hope (real or perceived belief that one can move toward a goal through selected pathways), self-concept (composite of beliefs and feelings about oneself), health and functioning (e.g., health status, self-care capabilities), and socioeconomic factors (e.g., vocation, education, income; adapted from Radomski, 1995)" (AOTA, 2020d, p. 66). Examples include: Nutrition Stress Quality of education Economic conditions Social engagement Leisure/recreation participation Potential outcome measures for <u>quality of life (check all that align with research/program)</u> Global Quality of Life Scale (Hyland & Sodergren, 1996) Health-related Quality of Life Questionnaire (CDC, 2000) McGill Quality of Life Questionnaire (CDC, 2000) Health-related QOL PedsQL (Varni et al., 1999) Short Form 36 Questionnaire (Rand, n.d.) The Quality of Life Scale (Flanagan, 1978) World Health Organization Quality of Life Instrument (WHO, 2004)
Role competence Sub-domain applicable to research/program evaluation Sub-domain not applicable to research/program evaluation	Role competence: "Ability to effectively meet the demands of the roles in which one engages" (AOTA, 2020d, p. 67). Potential outcome measures for role competence (check all that align with research/program) Self-efficacy, satisfaction, prioritization, and motivation related to life roles Parenting Sense of Competence Scale (Ohan et al., 2000) Perceived Maternal Parenting Self-Efficacy Scale (Barnes & Adamson-Macedo, 2007) Role Checklist V3 (Scott, 2019) Self-Management Self-Test (Wehmeyer et al., 2019) Other:

Self-advocacy Sub-domain applicable to research/program evaluation Sub-domain not applicable to research/program evaluation	Self-advocacy: "Advocacy for oneself, including making one's own decisions about life, learning how to obtain information to gain an understanding about issues of personal interest or importance, developing a network of support, knowing one's rights and responsibilities, reaching out to others when in need of assistance, and learning about self-determination" (AOTA, 2020d, p.83). Examples include: • • Behavioral autonomy • Self-regulated behavior • Psychological empowerment • Self-realization Potential outcome measures for self-advocacy (check all that align with research/program) • Daily Living Self-Efficacy Scale (Maujean et al., 2014) • General Self-Efficacy Scale (Tinetti et al., 1990) • Patient Activation Measure (Hibbard et al., 2004) • The Arc's Self-Determination Scale-Adolescent Version (Wehmeyer & Kelchner, 1995) • Other:
Well-being Sub-domain applicable to research/program evaluation Sub-domain not applicable to research/program evaluation	Well-being: "Contentment with one's health, self-esteem, sense of belonging, security, and opportunities for self-determination, meaning, roles, and helping others" (AOTA, 2020d, p. 67). "A general term encompassing the total universe of human life domains, including physical, mental, and social aspects, that make up what can be called a 'good life'" (World Health Organization, 2006, p. 211). Examples include: Sense of self-efficacy, satisfaction, stress, and burden associated with caregiving Potential outcome measures for well-being (check all that align with research/program) Caregiver Life Balance Inventory (Matuska, 2012) WHO-Five Well-Being Index (WHO-5), WHO-Ten Well-Being Index (WHO-10) (World Health Organization, 1998) Zarit Burden Interview (Zarit et al., 1980) Other: Client Life Balance Inventory (Matuska, 2012) WHO-Five Well-Being Index (WHO-5), WHO-Ten Well-Being Index (WHO-10) (World Health Organization, 1998) Zarit Burden Interview (Zarit et al., 1980) Other: Client Life Balance Inventory (Matuska, 2012) OECD Guidelines on Measuring Subjective Well-being Student Life Satisfaction Scale (Huebner, 1991) NIH Toolbox® (Northwestern University, 2021b) Subjective well-being measures Other:

	Access for All Clients
Diversity, equity, and	Diversity, equity and inclusion [This topic merits extensive content, which is beyond the scope of this article and must be fully addressed in future work.]
inclusion □ Sub-domain applicable to	In accord with AOTA's commitment to diversity, equity, and inclusion (AOTA, 2020b) and the AOTA Vision 2025 (AOTA, n.da), telehealth research, practice, and policy should reflect diversity in race, ethnicity, gender, age, socio-economic status, geography, and other demographics; promote occupational justice; and be client-centered.
research/program evaluation	Potential outcome measures for <u>Diversity, Equity, and Inclusion</u> can be extracted from the following guides (check all that align with research/program):
□ Sub-domain not applicable to research/program evaluation	 AOTA's Guide to Acknowledging the Impact of Discrimination, Stigma, and Implicit Bias on Provision of Services (AOTA, 2020a) Diversity, Equity and Inclusion in Occupational Therapy, Resources and the DEI Tool Kit (AOTA, n.db) Equity & Inclusion Lens Guide (Non-Profit Association of Oregon, 2018) Ford Foundation Disability Inclusion Toolkit (Ford Foundation, n.d.) Other:
Access to	Access to technology and internet: The extent to which technology and available internet data is sufficiently available and affordable to
technology and internet	individuals and communities.
internet	Potential outcome measures for access to technology and internet (check all that align with research/program)
□ Sub-domain applicable to research/program evaluation	 Broadband availability and speed in communities Individuals' access or ownership of smartphones, tablets, laptops or desktop computers. Cost of access (i.e., laptops, smartphone, internet, data) Amount of high-speed data available per month, per individual or family
□ Sub-domain not applicable to research/program	 County average cellular and fixed wireless download speeds (see <u>www.NACO.org</u>) Number of internet subscribers in a community or neighborhood (see <u>www.Brookings.edu</u>) Number of devices per household Point of access for internet use (e.g., home, community, school)
evaluation	□ Other:
Availability and usability of translators	Availability and usability of translators: The ways in which an organization supports the availability and quality of translation services for clients to access services.
□ Sub-domain	Potential outcome measures for availability and usability of translators (check all that align with research/program)
applicable to research/program evaluation	 The range and number of translation services offered at various entry points into occupational therapy treatment as well as client reported satisfaction and acceptability of translation services. Satisfaction surveys with ways for clients to express ways to improve language services
□ Sub-domain not applicable to	 The percent of clients/patients who have been screened for their preferred spoken language The percent of clients receiving initial assessment and intervention sessions from assessed and trained interpreters or from bilingual providers assessed for language proficiency (see Regenstein, 2007).

research/program evaluation	 Volume of interpreter encounters within an institution, agency, or school Wait times for interpreter availability Other:
Availability of specialists Sub-domain applicable to research/program evaluation Sub-domain not applicable to research/program evaluation	Availability of specialists: The extent to which telehealth extends the availability of providers with specializations and/or certifications. Potential outcome measures for <u>availability of specialists (check all that align with research/program)</u> Number, availability, and collaboration among occupational therapy practitioners with specializations and/or certifications Client wait times to access providers with specialty certifications Number of sessions with specialty providers Number of sessions with collaboration between specialty providers and client's original provider Percent of telehealth providers with specialty certifications within an agency, hospital, or school Other:
Digital health literacy □ Sub-domain applicable to research/program evaluation □ Sub-domain not applicable to research/program evaluation	Digital health literacy: The degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others. Potential outcome measures for digital health literacy (check all that align with research/program) Finding and consuming digital content Creating digital content Communicating and/or sharing digital content Evaluating quality and relevance of digital content Digital Health Literacy Instrument (van der Vaart & Drossaert, 2017) eHealth Literacy Assessment Toolkit (Karnoe et al., 2018) eHealth Literacy Scale (eHEALS; Norman & Skinner, 2006) Tracking the level of support that individuals, including children, require to log on and navigate telehealth sessions Other:
Integration and use of clients' everyday materials Sub-domain applicable to research/program evaluation Sub-domain not applicable to	Integration and use of clients' everyday materials: The ways in which assessment and intervention sessions use clients' readily available materials in their natural contexts. Potential outcome measures for integration and use of clients' everyday materials (check all that align with research/program) Using clients' and families' materials for assessment and intervention Any specialized materials and/or equipment that clients/families are asked to purchase to engage in the occupational therapy evaluation and/or intervention Any documentation to prepare clients and/or families about expectations regarding upcoming sessions Documentation about what materials/intervention activities in which clients and families engaged

research/program evaluation	 Documentation that would reflect any "specialized" materials and/or materials that clients/families would have to purchase to complete the intervention session Other:
Organizational digital health literacy	Organizational digital health literacy : The degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others (CDC, 2021).
□ Sub-domain	Potential outcome measures for organizational digital health literacy (check all that align with research/program)
applicable to research/program evaluation	 Organizational structure, policy, and leadership supports for telehealth software that supports clear client- occupational therapy practitioner communication, and is easily navigated by occupational therapy practitioners and clients Availability of validated assessment measures that are compatible with numerous telehealth platforms
□ Sub-domain not applicable to research/program evaluation	 Ease of integration of assessment measures, documentation, and client communication within telehealth software Leadership support for practitioner and client training to access telehealth Other:
Technology usability □ Sub-domain	Technology usability : The extent to which available technology is appropriate for telehealth access, including evaluation and intervention sessions.
applicable to	Potential outcome measures for technology usability (check all that align with research/program)
research/program evaluation	□ Effectiveness, efficacy, and satisfaction with the device and internet quality of accessing telehealth sessions □ Amount of time to log on to telehealth sessions
□ Sub-domain not applicable to	 □ <u>Computer Proficiency Questionnaire</u> (Boot et al., 2015) □ <u>Mobile Device Proficiency Questionnaire</u> (Roque & Boot, 2018)
research/program	 □ Number of internet disruptions / slow internet miscommunications during a session □ The amount of client assistance needed to schedule and log on to a session
evaluation	 The amount of client assistance needed to schedule and log of to a session The extent to which the device / internet speed allows for effective communication between the client and practitioner Other:
Scheduling ease and	Scheduling ease and convenience: Client reports of scheduling ease as convenient and fitting into daily life.
convenience	Potential outcome measures for scheduling ease and convenience (check all that align with research/program)
□ Sub-domain applicable to research/program evaluation	 Client reported ease and satisfaction with setting up and attending telehealth sessions Availability of occupational therapy practitioners on evenings and weekends to match clients' schedules Client satisfaction survey with questions about scheduling convenience and availability of appointments Other:
□ Sub-domain not applicable to research/program evaluation	

	<u>C</u> ost and Cost Effectiveness
Client costs and cost savings Sub-domain applicable to	Client costs and cost savings: The costs and cost savings associated with accessing and attending telehealth sessions; clients may save expenses due to convenience of telehealth and/or incur costs if any additional technology or data is necessary to access telehealth sessions.
research/program evaluation	Examples include: Travel considerations related to time and distance may be dependent on community setting (e.g., rural vs. urban) and client reported method of transportation
□ Sub-domain not applicable to research/program	Potential outcome measures for <u>client costs and cost savings (</u> check all that align with research/program) Costs
evaluation	□ Costs incurred by clients, including sufficient internet connectivity and technology devices to access appointments
	Savings Cost savings related to client burden reduction including: travel expenses (gas, food) time off work for travel to appointments missed work or school days childcare expenses associated with appointment public transportation costs fuel costs and costs associated with parking personal vehicle, if applicable attendance at community support activities Calculated mileage/travel distance (Note: Distance may be appropriate to measure for suburban and/or rural samples, while for urban samples, measurement strategies may be based in time, where public transportation or traffic are considered.) Clients' report of travel distance and time with their specific method of transportation (e.g., car travel may be faster than public transit travel) Other:
Practitioner costs and cost	Practitioner costs and cost savings: The costs and cost savings among practitioners that result from telehealth.
savings □ Sub-domain	Potential outcome measures for practitioner costs and cost savings (check all that align with research/program)
applicable to research/program evaluation	 Saved expenses due travel time and costs, and/or incurred costs if software, technology, or additional data is necessary to conduct telehealth sessions Costs associated with telehealth software, multiple state licenses, internet and technology (e.g., hardware, software, peripherals)
□ Sub-domain not applicable to research/program evaluation	 Miles from home to clinic or hospital setting Travel distance /time for therapy practitioner(s) to travel (between home, hospital, clinic(s), school(s), clients' homes) Other:

Relation of	Relation of service utilization to long term outcomes: The degree to which costs of occupational therapy delivered through telehealth
service	are associated with long term health and/or developmental outcomes across clients and settings.
utilization to	
long term outcomes	Examples include: Expenses that would likely have occurred if service was not provided (e.g., re-hospitalization, development of pressure ulcer)
□ Sub-domain	
applicable to	Potential outcome measures for relation of service utilization to long term outcomes (check all that align with research/program)
research/program evaluation	□ Analyses using an incremental cost-effectiveness ratio (ICER) to determine if clients' functional gains over time differ by service delivery model (e.g., in-person, hybrid, telehealth)
□ Sub-domain not applicable to	□ Analyses that compare groups' outcomes among those that receive occupational therapy by different service delivery models (e.g., in- person, hybrid, telehealth)
research/program	Emergency department (ED) visit avoidance in real time and/or future
evaluation	□ Healthcare utilization, compare to a normative database
	 Comparison of adopters to non-adopters to long term health outcomes (e.g., cohort design) Other:
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Service	Service provision and utilization: The extent to which occupational therapy services are offered, available, and attended by clients
provision and utilization	across settings and communities.
□ Sub-domain	Potential outcome measures for service provision and utilization (check all that align with research/program)
applicable to	□ Rate of attendance, which includes number of cancelled appointments and/or no shows
research/program evaluation	□ The number, frequency, and length of sessions that were used to achieve a specific goal or gain in function
evaluation	\square The ratio of number, frequency, and length of sessions that are attended by clients
□ Sub-domain	Total number, frequency, and length of time of recommended services
not applicable to	□ Other:
research/program	
evaluation	
	Experiences of Clients and Occupational Therapy Practitioners
Authentic	Authentic contexts: The extent to which telehealth sessions occur within clients' authentic contexts and address clients' everyday
contexts	activities.
□ Sub-domain	Detential autoema maaauraa far autoentia aantayta (abaak all that align with reasoned)
applicable to research/program	Potential outcome measures for <u>authentic contexts (check all that align with research/program)</u>
evaluation	□ Assessment results that reflect clients' performance in their everyday environments
	Documentation about how everyday routines look for clients in their natural context
□ Sub-domain	Documentation of locations in which sessions occur
not applicable to	Documentation of locations of both clients and occupational therapy practitioner
research/program	Evidence of ecological validity of assessment approaches Detential measure of neuronalization of here aligned to an interaction starts in a start and in a start data and in a st
evaluation	 Potential measures of generalization of how clients/caregivers can use intervention strategies used in everyday environments Other:
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Caregiver/Care partner acceptability and satisfaction	Caregiver/Care partner acceptability and satisfaction: The acceptability and perceived quality of the service delivery mechanism from the perspective of the caregiver for younger clients and/or trusted supporter for older clients. Potential outcome measures for caregiver/care partner acceptability and satisfaction (check all that align with research/program) Canadian Occupational Performance Measure (Law et al., 1990) Telehealth Acceptability and Satisfaction Questionnaire (e.g., Little et al., 2018; Vismara et al., 2012) Washing Co. Family Caregiver Satisfaction Survey (Washington Co. Family Caregiver Support Program, n.d.) Other:
Client acceptability and satisfaction Sub-domain applicable to research/program evaluation Sub-domain not applicable to research/program evaluation	Client acceptability and satisfaction: The perceived acceptability, value, and client attributed outcomes of telehealth delivered occupational therapy services. Potential outcome measures for <u>client acceptability and satisfaction (check all that align with research/program)</u> $\begin{array}{l} \hline Canadian \ Occupational \ Performance \ Measure} (COPM; Law et al., 1990) \\ \hline Telehealth \ Acceptability \ and \ Satisfaction \ Questionnaire} (adapted for clients' self-report) (e.g., Little et al., 2018; Vismara et al., 2012) \\ \hline Client \ satisfaction \ influenced \ by \ perceived \ benefits \ of \ telehealth \ (e.g., \ saved \ workdays \ or \ school \ days, \ reduced \ travel, \ time, \ and \ costs \ associated \ with \ receiving \ care \ through \ telehealth) \\ \hline Surveys \ that \ incorporate \ clients' \ reports \ of \ functional \ gain \ as \ a \ result \ of \ telehealth \ Deliverse \ days, \ reduced \ travel, \ time, \ and \ costs \ associated \ with \ receiving \ care \ through \ telehealth) \\ \hline Other:$
Inclusion of care partners □ Sub-domain applicable to research/program evaluation □ Sub-domain not applicable to research/program evaluation	Inclusion of care partners (caregiver/family/other): The extent to which clients' care supporters actively participate in and are included in the occupational therapy process (i.e., assessment, intervention, re-evaluation). Potential outcome measures for inclusion of care partners (caregiver/family/other (check all that align with research/program) Documentation of care supporter's engagement in the session The % of time the care supporter participated in the session Other:

Practitioner acceptability and satisfaction	Practitioner acceptability and satisfaction : The extent to which occupational therapy practitioners perceive that telehealth promotes wellness, reduces burnout, and is an effective mechanism to deliver assessments and interventions that meet clients' needs and achieve evidence-based practice standards.
□ Sub-domain applicable to research/program	Potential outcome measures for <u>practitioner acceptability and satisfaction (check all that align with research/program)</u>
evaluation □ Sub-domain not applicable to research/program evaluation	 <u>Masach Burnout Inventory</u> (Masach & Jackson, 1961) <u>Oldenburg Burnout Inventory</u> (Demerouti et al., 2001) <u>Professional Quality of Life Measure</u> (Stamm, 2009) <u>Stanford Professional Fulfillment Index</u> (Trockel et al., 2018) <u>Telehealth Acceptability and Satisfaction Questionnaire</u> (adapted for practitioners' responses) (e.g., Little et al., 2018; Vismara et al., 2012) <u>WHO-5 Well-Being Index</u> (WHO, 1998) Other: