



Special Collection: Short Report

The Tele-Evaluation Facilitators Model

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Abstract

Telehealth has become an alternative service delivery of different healthcare professionals, including occupational therapists, upon the onset of the COVID-19 pandemic. Occupational therapists have adapted to this platform to deliver service in response to the global crisis. This conceptual framework explores the facilitators of occupational therapy evaluation provided via telehealth. It aims to provide insights to clinicians and clients in engaging tele-evaluation. It also aims to establish primary considerations to ensure a thorough evaluation process. The Tele-Evaluation Facilitators Model (TFM) describes the occupational therapy evaluation in the therapy setting. It outlines the OT evaluation process, adapting it to the telehealth setting. The process emphasizes the importance of client-caregiver interaction in creating and achieving occupational therapy goals. Moreover, surrounding the tele-evaluation process, the model highlights the facilitators of tele-evaluation, enabling a comprehensive evaluation process despite the challenges and barriers of this alternative service delivery. Across practice settings, the COVID-19 pandemic necessitated a shift in service delivery to telehealth, and occupational therapists adapted accordingly. Evaluation frameworks exist for telehealth services, but none are unique to occupational therapy evaluation. As a result, an occupational therapy framework that highlights the facilitators of telehealth evaluation will benefit occupational therapy. TFM consists of three domain areas: (1) Family Involvement, (2) Accessibility, (3) Professional Development. This framework promotes telehealth evaluation to clinicians and clients who have hesitations and difficulties in this service delivery model.

Keywords: *Tele-evaluation, Telehealth, Teletherapy, Evaluation, Tele-Evaluation Facilitators Model, Occupational Therapy*

INTRODUCTION

As the 2020 COVID-19 pandemic intensified, many healthcare professionals had to abruptly transition from traditional in-person treatment to telehealth, often without adequate preparation or training. Telehealth, or the provision of health care and rehabilitation services for persons with disabilities and medical conditions remotely using telecommunication technology, was adopted by the occupational therapy profession, being the viable service delivery model during the global crisis. The Philippine Academy of Occupational Therapists, Inc. (PAOT) defined telehealth as an alternative form of service provision wherein the therapist and the client are in different physical locations.¹

Telehealth has expanded the possibilities for conducting evaluations. Occupational therapists can use telehealth to perform evaluation measures of a patient, including administering assessment tools, observations, interviews, and even obtaining information from other disciplines. Similar to in-person evaluations, clinical reasoning and ethical judgment are vital when determining the appropriate telecommunication technology necessary to evaluate clients' occupational performance difficulties. Further, while there is evidence that supports the reliability of assessment tools when administered remotely, OTs conducting telehealth evaluation must still consider whether a specific assessment is reliable in the remote

format.²

Telehealth is not a separate intervention method. As mentioned, it is a service delivery model utilized by healthcare practitioners, including OTs, to provide services, including tele-evaluation. Using telehealth, occupational therapy services can be offered, with tele-evaluation utilizing a variety of reliable assessments. Telehealth allows OTs to provide services to physically distant clients. Physical distancing and travel restrictions imposed during the pandemics such as COVID-19 have made telehealth a more relevant option. This service provision can be synchronous, asynchronous, or both. Synchronous refers to when the service is delivered in real-time, whereas asynchronous is known as store-and-forward technology.² The American Occupational Therapy Association (AOTA) telehealth position paper favors the use of telehealth in many areas, including cognitive screening; Orthopedic (hand) assessment; Lymphedema assessment; Wheelchair prescription; Home assessment; Adaptive equipment prescription and home modification; and Ergonomic assessment. Moreover, other studies support the use of telehealth, including neurological assessments, school-based practices, early intervention services, health and wellness programs.² With recent changes within the healthcare system, telecommunication technology may advance OT services in populations with present barriers to accessing these services.³

The TFM explores the facilitators of occupational therapy evaluation provided via telehealth. It aims to provide additional insights to clinicians and clients who may require guidance, as they are expectedly hesitant to engage in this service delivery model. Aside from being understudied in the Philippine context, the guidelines set by PAOT on the use of telehealth as an alternative service delivery model also do not explicitly discuss tele-evaluation in occupational therapy. The tele-evaluation process is depicted in this framework and the facilitators that may contribute to a successful and comprehensive assessment. This model also aims to establish primary considerations to ensure a thorough tele-evaluation procedure.

DEVELOPMENT PROCESS

In developing this conceptual framework, the authors adopted a specific and structured evaluation process from the overview of Occupational Therapy Process Framework: Domain and Process 4th Edition. This process explicitly follows a progressive course starting with establishing the client's occupational profile, an analysis of occupational performance, and a synthesis of the evaluation process⁴. Such details are essential to provide a more extensive evaluation for the client incorporated within the caregiver/client and therapist collaboration. The framework emphasizes that successful tele-evaluation requires effective and communicative cooperation wherein the therapist fosters a culture of mutual understanding for the client/caregiver, demonstrates expertise, and facilitates interactions to formulate the client's desired goals and outcomes in evaluation.⁴

Furthermore, a conceptual model consisting of figures and keywords was illustrated to explain the key concepts of the TFM. The concepts used in the framework were gathered and selected from various published articles and interviews of occupational therapy experts and practitioners. The studies that were chosen specifically focused on the facilitators of telehealth and the general and overall process of evaluation for telehealth.

THEORETICAL BASES

The Occupational Therapy Process Framework: Domain and Process 4th Edition (OTPF 4) was used to provide the service delivery flow of the TFM. OTPF 4 offers a theoretical and clinical guide for the occupational therapy practice that presents a detailed summary of interconnected concepts in relation to practice.⁴ The TFM focuses on the process aspect of the said model. Generally, the said process aspect describes how occupational therapy practitioners provide client-centered services through a detailed procedure for their clients.

In this proposed model, the tele-evaluation process focuses on three concepts of evaluation, specifically the occupational profile, analysis of occupational profile, and the synthesis of the

evaluation process.⁴ When applied to tele-evaluation settings, these concepts are essential towards moving the therapy process into one that facilitates effective and collaborative client care. Furthermore, the conceptual framework's evaluation process was based on the OTPF 4 model since occupational therapy practitioners are already generally familiar with its process. This familiarity can be advantageous when applied in the relatively novel area of teletherapy practice.

The Canadian Model of Occupational Performance and Engagement (CMOP-E) served as the basis for the TFM's perspective on the interaction of person-occupation-environment components.⁵ These components are reflected in the model's outer circle. In this framework, facilitators are regarded as key factors which may positively influence the tele-evaluation process. The CMOP-E presents a similar view in which the person, occupation, and environment interaction results in the occupational engagement.

CONCEPTUAL FRAMEWORK

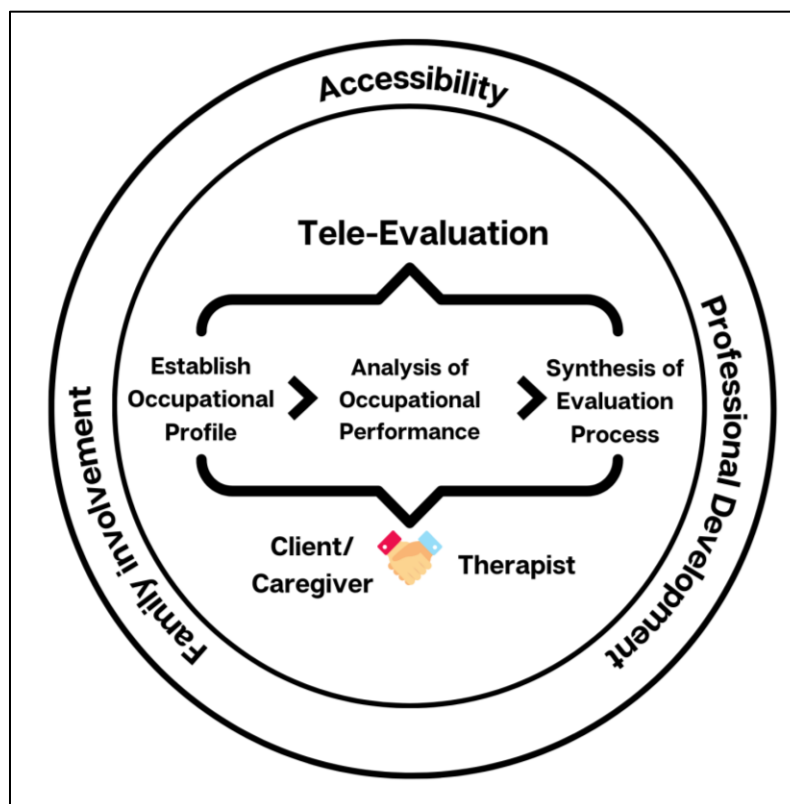


Figure 1. The Tele-Evaluation Facilitators Model

The occupational therapy process describes the entire client and/or caregiver-therapist interaction and all the steps that make up this process, as explained in the OTPF 4. The occupational therapy process has three main steps: evaluation, intervention, and outcome. In the Tele-Evaluation Facilitators Model, the inner circle represents the evaluation process done via telehealth (Refer to Figure 1). The process of assessing clients to ascertain baseline

performance, identify areas of deficit, and develop goals for occupational therapy interventions is known as evaluation. The occupational therapists create occupational profiles for clients, analyze occupational performance, and synthesize the evaluation process.

Developing an occupational profile is the first step in the tele-evaluation process. An

occupational profile provides insight of the client's daily living patterns, occupational history and experiences, interests, values, and needs. It also identifies the client's strengths, concerns about performing occupations and daily living activities, areas of potential occupational disruption, supports and barriers, and priorities. Interviews are the primary mechanism for gathering information about an occupational profile. Interviews are a planned and systematic way to collect relevant information. The occupational therapist must address potential technical challenges and poor video or audio quality while interviewing a client via telehealth. Audio or video transmission lapses can interfere with therapeutic encounters.^{6,7} To avoid service interruptions, facilities and occupational therapists need to develop a sound action plan for equipment malfunction.⁶ The occupational therapist makes decisions regarding the analysis of occupational performance from the data collected during the development of the occupational profile. Occupational therapists will identify the client's assets and any problems or possible problems in the second step of the evaluation procedure. The observation of actual performance is done in context to determine the client's support and barriers in task performance. The occupational therapist also selects specific assessment tools to collect further information. The assessment tool is used to collect information about a client's ability to carry out its duties in terms of the performance area, skills, patterns, context, client factors, and activity requirements. The occupational therapist's thorough analysis of the occupational performance will determine what affects the client's ability to engage in occupations. Occupational therapists must evaluate the reliability and validity of specific assessment tools before utilizing them to analyze occupational performance, especially if they are to be administered remotely. The researchers found the following assessment tools reliable when performed remotely via telehealth when they investigated the reliability of various assessments used by occupational therapists:

- Beery-Buktenica Test of Visual-Motor Integration (VMI)⁸
- Ergonomic Assessment Tool for Arthritis⁹

- Preston Pinch Gauge, Nine-Hole Peg Test, Unified Parkinson's Disease Rating Scale, FIM, and Jamar Dynamometer.¹⁰
- European Stroke Scale and Functional Reach Test.¹¹
- Canadian Occupational Performance Measure and Kohlman Evaluation of Living Skills.¹²
- Mini-Mental State Exam¹³
- Modified Barthel Index (MBI)¹⁴
- Montreal Cognitive Assessment¹⁵
- Sensory Profile Measure and Sensory Profile 2¹⁶
- Short Form Everyday Technology Use Questionnaire¹⁷
- Timed Up and Go Test¹⁸

Finally, after establishing an occupational profile and analyzing occupational performance, the occupational therapist synthesizes the evaluation process. The therapist determines the client's occupational values and priorities, interprets assessment data to identify occupational performance support and barriers, and develops and refines hypotheses about the client's occupational strengths and deficits. Considers existing support systems and context and their ability to support the intervention process and collaborates with the client to develop goals that address the intervention's desired outcome. The occupational therapist chooses outcome measures and procedures for tracking progress toward therapeutic goals.⁴

Occupational therapists must evaluate the client's preferences, health needs, technological accessibility, and outcome measure's ability when administering a telehealth evaluation. When administering assessment tools, occupational therapists must follow all copyright laws and guidelines.¹⁹ Suppose that the assessment material or management protocol needs to be changed when using telehealth. In that situation, it should be documented and taken into account when scoring and interpreting the assessment. Occupational therapists may find that some clients require a face-to-face or hybrid assessment approach (some parts of the evaluation are completed via

telehealth, while others are performed in person). In some cases, therapists can involve in-person assistants such as caregivers and other healthcare professionals to provide remote therapists with assessment tool measurements or other measurements (the environment, a wheelchair, a seat, etc.) during the evaluation process.

The outer circle represents the facilitators in the telehealth evaluation (Refer to Figure 1). Occupational therapists have perceived benefits that facilitate telehealth service delivery.²⁰ These facilitators are family involvement, professional development, and accessibility.

Family and/or caregivers play an active role in the telehealth setting as they have become more involved during the teletherapy sessions as compared to in-clinic sessions.²¹ Therapists commonly utilize a family- or client-centered, occupation-centered, and adult learning theory in this setting. The therapist evaluates the social and physical context of the child. Parents can observe the child's performance as the therapist can provide immediate feedback. The utilization of videos and other observational data can increase support in facilitating feedback and reflection.²³ In relation, therapists can also utilize video recordings of clients' performance in the natural setting as part of an asynchronous evaluation procedure. With this, parents will better understand their child's behavior and the management of occupational therapy.

Professional development is another facilitator of teletherapy. Although teletherapy has been present even before the COVID-19 pandemic, very few therapists, including those practicing in the Philippines, utilized this mode of delivery. Considering the initial apprehension that the therapists had about conducting teletherapy, specifically tele-evaluation, therapists rightfully attended online training and seminars to adapt to the situation. The PAOT Guidelines on Telehealth stated that an occupational therapist is expected to observe the following: comply with regulations and policies, apply telehealth environmental modification in accordance with professional standards of care and evidence-based practice, and provide competent telehealth service with necessary skills, knowledge, and attitude.¹

Lastly, accessibility is likewise a facilitator of teletherapy. The client has the opportunity to be evaluated in their natural context and schedule sessions at their most convenient time. Because of the pandemic, health safety protocols were encouraged, and government-imposed limitations hindered clients from availing in-clinic services. In addition to that, asynchronous sessions are also an option, especially for those who have limited or unstable internet connections. During an evaluation, a video recording of the client's occupational performance in the natural context is beneficial in assessing his skills and behavior. The therapist may provide a list of activities or daily tasks (e.g., eating, brushing teeth, writing, or coloring) and request a video recording of the client's usual performance in their natural setting. In this way, the therapist may assess the natural environment, support/demands of the task, and competency of the client's performance. This alternative mode of service delivery enabled clients to avail therapy services despite the limitations present in the situation.

These facilitators are essential in the success of the tele-evaluation process as they influence the client-therapist relationship. Moreover, they also facilitate connectedness between the client-therapist interaction and their environment. Thus, the interaction that occurs between the facilitators and client-therapist-context factors would result in the successful engagement of occupational performance.

Limitations. The scope of the conceptual framework is limited to the facilitators of tele-evaluation. It does not discuss the occupational therapy intervention process via telehealth, including the intervention planning, implementation, review, outcomes, and discharge. Further, the framework does not ensure the effectiveness of teletherapy.

The study is also limited to the authors' own knowledge and clinical experiences. Due to the lack of available literature on occupational therapy tele-evaluation, the empirical evidence that supports the model may be lacking. In addition, time constraints were influential in the conceptualization of the framework. Gathering extensive data using both quantitative and

qualitative measures in a longer period of time may be explored to provide stronger data for the study.

CONCLUSION AND RECOMMENDATION

The Philippine Academy of Occupational Therapists, Inc. (PAOT) identifies telehealth as a service delivery strategy for supporting occupational participation. It has published guidelines on the utilization of telehealth.¹ This paper affirms such research is necessary to determine how and to what extent the factors contribute to the positive outlook of telehealth. The key to a successful telehealth evaluation program is the acceptance and readiness of providers.²⁴ However, studies have revealed a lack of practitioner acceptance of telehealth use.²⁵ The conceptual framework presented provides crucial information and guidance to occupational therapy practitioners in initiating evaluation in a teletherapy setting. This includes the potential benefits and concerns when initiating and implementing evaluation in telehealth. Also, this model can serve as a clinical guide on the detailed process of implementing tele-evaluation. Moreover, this framework highlights the facilitators of telehealth evaluation, which occupational therapists can promote to broaden service effective and safe service delivery options more confidently for their clients. Practicing clinicians and occupational therapy students can use the study to develop continuing education and training programs. Since tele-evaluation is still a relatively novel service delivery option for many practitioners and it continues to stay relevant amidst COVID-19, it is likely to incite sustained interest to further develop and conduct researches to expand bodies of knowledge, specifically on tele-evaluation of specific client groups and in the context of interprofessional collaboration evaluations conducted in teletherapy practice.

Individual author's contributions

A.A.: drafting and conceptualizing the model, reviewing related literature to support the paper, revising based on reviewers' comments, and finalizing the manuscript for publication;

S.B.: drafting and conceptualizing the model, reviewing related literature to support the paper, revising based on reviewers' comments, and finalizing the manuscript for publication; K.B.C.: drafting and conceptualizing the model, reviewing related literature to support the paper, revising based on reviewers' comments, and finalizing the manuscript for publication; C.I.P.: drafting and conceptualizing the model, reviewing related literature to support the paper, revising based on reviewers' comments, and finalizing the manuscript for publication; A.A.D.: analyzing and reviewing the model, providing critical feedback for the paper, and finalizing the manuscript for publication.

Disclosure statement

The last author is affiliated with Independent Living Learning Center, Academia Progresiva de Manila, and the REACH Foundation, Inc. The other authors are students under the Master of Science in the Occupational Therapy program of the University of Santo Tomas Graduate School. The views expressed in this paper do not reflect the general position or opinion of the organizations the authors are affiliated with.

Conflicts of interest

No conflict of interest is declared by the authors, attesting that they have no involvement or affiliations with any organization or entity with financial or non-financial interest in the topics discussed in the paper.

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