

## TITLE 16. CALIFORNIA BOARD OF OCCUPATIONAL THERAPY

NOTICE IS HEREBY GIVEN that the California Board of Occupational Therapy (Board) is proposing to take the action described in the Informative Digest. Any person interested may present statements or arguments relevant to the proposed action in writing. Written comments, including those sent by mail, facsimile, or e-mail to the addresses listed under Contact Person in this Notice, must be received by the Board at its office not later than 5:00 pm on October 8, 2012.

The Board does not intend to hold a hearing in this matter. If any interested party wishes that a hearing be held, he or she must make the request in writing to the board. The request must be received in the board office not later than 5:00 pm. on September 24, 2012.

The Board, upon its own motion or at the instance of any interested party, may thereafter adopt the action substantially as described below or may modify such action if such modifications are sufficiently related to the original text. With the exception of technical or grammatical changes, the full text of any modified action will be available for 15 days prior to its adoption from the person designated in this Notice as contact person and will be mailed to those persons who submit written or oral testimony related to this proposal or who have requested notification of any changes to the action.

Authority and Reference: Pursuant to the authority vested by section 2570.20 of the Business and Professions Code (BPC), and to implement, interpret or make specific sections 2290.5 and 2570.20, the Board is proposing changes to Division 39, Title 16 of the California Code of Regulations (CCR) as follows:

### INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

Existing law, Business and Professions Codes (BPC) section 2290.5, defines and establishes "telehealth" as a mode of delivering health care services via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health while the patient is at the originating site (where the patient is located at the time health care services are provided) and the health care provider is at a distant site (site where the health care provider who provides health care services is located while providing these services via telecommunication). This emerging method in delivering health care services is designed to expand access to underserved and rural communities and provide greater modern day flexibility to all consumers in scheduling appointments and reducing or eliminating the need for long trips or congested urban travel.

This proposed regulatory action is designed to implement and establish rules and protocols, and clarify occupational therapy practice standards relevant to occupational therapy practitioners who provide services via telehealth.

The proposed regulatory action seeks to clarify and establish that occupational therapy practitioners may provide occupational therapy services via telehealth to patients or clients in the State of California, when they possess a license issued by the Board. It proposes to establish the same standard of care must be exercised as compared to any other occupational therapy services. It proposes to require that an occupational therapist obtain a client's or patient's consent prior to delivering telehealth services, and the consent shall be documented in the client's or patient's medical record. It proposes to clarify and establish that an occupational therapist must make a determination whether an in-person evaluation and/or intervention(s) is/are

necessary based on the complexity of the patient's/client's condition and other factors. And it proposes to clarify that occupational therapy practitioners shall not deviate from their scope of practice in delivering telehealth services.

The purpose of the proposed regulatory action is to protect consumers and to establish and make clear standards and expectations associated with the delivery of occupational therapy services via information and communication technologies. The proposed regulatory action is consistent and compatible with the Board's mission in regulating the practice of occupational therapy and protecting the public's health, safety, and welfare.

### FISCAL IMPACT ESTIMATES

Fiscal Impact on Public Agencies Including Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None

Non-discretionary Costs/Savings to Local Agencies: None

Local Mandate: None

Cost to Any Local Agency or School District for Which Government Code Sections 17500-17630 Requires Reimbursement: None

Business Impact:

The Board has determined the proposed regulatory action will not have a significant, statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

It is anticipated the proposed regulations will promote new business opportunities and result in deployment of new advanced telecommunication technologies.

Results of the Economic Impact Analysis:

The Board has determined that this regulatory proposal will not have an adverse impact on the creation of jobs or new businesses or the elimination of jobs or existing businesses or the expansion of businesses in the State of California. It is anticipated the proposed regulations will promote new business, new jobs, and result in the increased use of advanced telecommunication technologies.

Cost Impact on Representative Private Person or Business:

There would be a cost impact to representative private persons or businesses who wish to provide the services (telehealth) described in this proposed regulatory action. Representative private persons or businesses would need to acquire telecommunication equipment and technologies that would protect and secure a consumers health care information and treatment.

Effect on Housing Costs: None

## EFFECT ON SMALL BUSINESS

The Board has determined that there would be fiscal impact to any private practice or small business that wished to provide the services described in this proposed regulatory action.

## CONSIDERATION OF ALTERNATIVES

The Board must determine that no reasonable alternative considered by it or that has otherwise been identified and brought to its attention would either be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons than the proposal described in this Notice or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law. Adoption of the proposed regulatory action is consistent with the Board's mandate to regulate the practice of occupational therapy.

## TEXT OF PROPOSAL AND INITIAL STATEMENT OF REASONS AND INFORMATION

The Board has prepared an initial statement of reasons that sets forth the reasons for the proposed action and has all the information upon which the proposal is based.

Copies of the exact language of the proposed regulation and of the initial statement of reasons, and all of the information upon which the proposal is based, may be obtained from our website as listed below or upon written request from the contact person listed below.

## AVAILABILITY AND LOCATION OF THE FINAL STATEMENT OF REASONS AND RULEMAKING FILE

All the information upon which the proposed regulation is based is contained in the rulemaking file, which is available for public inspection by contacting the person named below.

You may obtain a copy of the final statement of reasons once it has been prepared, by making a written request to the contact person named below or by accessing the Board's website as listed below.

## CONTACT PERSON

Inquiries or comments concerning the proposed rulemaking action may be addressed to:

Jeff Hanson  
CA Board of Occupational Therapy  
2005 Evergreen Street, Suite 2050  
Sacramento, CA 95815  
(916) 263-2294  
(916) 263-2701 (FAX)  
cbot@dca.ca.gov

OR

Heather Martin  
CA Board of Occupational Therapy  
2005 Evergreen Street, Suite 2050  
Sacramento, CA 95815  
(916) 263-2294  
(916) 263-2701 (FAX)  
cbot@dca.ca.gov

Website Access: All materials regarding this proposal can be found on-line at [www.bot.ca.gov](http://www.bot.ca.gov) > **Laws and Regulations > Proposed Regulations.**

California Board of Occupational Therapy  
Department of Consumer Affairs  
Title 16, Division 39, California Code of Regulations

**PROPOSED LANGUAGE**

ARTICLE 8. Ethical Standards of Practice

Add section 4172 - Standards of Practice for Telehealth

**§ 4172. Standards of Practice for Telehealth.**

(a) In order to provide occupational therapy services via telehealth as defined in Section 2290.5 of the Code, an occupational therapist or occupational therapy assistant in this State or providing services to a patient or client in this State must have a valid and current license issued by the Board.

(b) An occupational therapist or occupational therapy assistant must exercise the same standard of care when providing occupational therapy services via telehealth as with any other mode of delivery of occupational therapy services.

(c) An occupational therapist shall obtain informed consent from the patient or client prior to delivering occupational therapy services via telehealth, and shall include documentation of that consent statement in the patient's or client's health record.

(d) Prior to providing occupational therapy services via telehealth, an occupational therapist shall determine:

(1) whether an in-person evaluation is necessary; and

(2) whether in-person interventions are necessary.

The obligations of an occupational therapist continue during the course of treatment to determine whether an in-person evaluation or intervention is necessary. In making these determinations, an occupational therapist shall consider: the complexity of the patient's/client's condition; his or her own knowledge, skills, and abilities; the nature and complexity of the intervention; the requirements of the practice setting; and the patient's/client's context and environment.

(e) An occupational therapist or occupational therapy assistant providing occupational therapy services via telehealth must:

(1) Provide services consistent with the practice of occupational therapy as defined in section 2570.2(k) of the Code; and

(2) Comply with all other provisions of the Occupational Therapy Practice Act and its attending regulations, including the ethical standards of practice set forth in section 4170, as well as any other applicable provisions of law.

Note: Authority Cited: Business and Professions Code section 2570.20. Reference: Business and Professions Code sections 2290.5 and 2570.20.

**CALIFORNIA BOARD OF OCCUPATIONAL THERAPY**  
**INITIAL STATEMENT OF REASONS**

Subject Matter of Proposed Regulations: Standards of Practice for Telehealth

Section Affected: Title 16, Division 39, California Code of Regulations, Section 4172

Introduction

The California Board of Occupational Therapy (Board) is the state agency that regulates the practice of occupational therapy. The Board's highest priority in exercising its licensing, regulatory, and disciplinary functions is to protect and promote the health, safety and welfare of the public. The Board administers, coordinates, and enforces provisions of the laws and regulations pertaining to occupational therapy.

Purpose

The purpose of the proposed regulatory language is to implement and clarify existing law, Business and Professions Code (BPC) section 2290.5, pertaining to services provided via "telehealth." Telehealth is not a separate form of practice; it's a mode of delivering health care services via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health while the patient is at a different site and location from where the treating health care professional is located. This emerging method in delivering health care services is designed to expand access to underserved and rural communities and provide greater modern day flexibility to all consumers in scheduling appointments and reducing or eliminating the need for long trips or congested urban travel.

This proposed regulatory action is designed to establish standards for occupational therapy practitioners providing services via telehealth and identify and clarify the factors that occupational therapy practitioners must consider prior to providing services via telehealth. This language is intended to facilitate the administration, coordination, and enforcement of the laws and regulations that occupational therapy practitioners must abide by while promoting public health, safety, and awareness.

Factual Basis/Rationale

Section 4172(a) establishes that occupational therapy practitioners providing services via telehealth to patients or clients in California must possess a valid and current license issued by the Board to provide these services.

The reason and rationale for the regulatory language proposed in section 4172(a) is to implement and clarify statutory language set forth in BPC section 2290.5(3) requiring that the occupational therapy practitioner providing telehealth services must be licensed by the Board.

Section 4172(b) proposes to establish that the same standard of care exists for services provided via telehealth as there would for any other mode in delivering occupational therapy services.

The reason and rationale for the regulatory language proposed in section 4172(b) is to implement BPC section 2290.5(d) and clarify that, regardless of the mode of delivery of services, the occupational therapy practitioner must exercise an established standard of care.

Section 4127(c) proposes to require occupational therapists to obtain a client's or patient's consent, prior to delivering telehealth services. The section also would require the occupational therapist to document the client's or patient's consent in the medical record.

The reason and rationale for the regulatory language proposed in section 4127(c) is to implement BPC section 2290.5(b) requiring occupational therapy practitioners to obtain the client's or patient's consent prior to the delivering telehealth services, and maintain documentation of that consent.

Section 4127(d) would establish that prior to providing telehealth services an occupational therapist shall determine whether an in-person evaluation is necessary or if in-person intervention (treatment) is necessary based on the complexity of the patient's/client's condition; the practitioner's own skills and abilities; the nature and complexity of the intervention; the requirements of the practice setting; and the patient's/client's context and environment.

The reason and rationale for the regulatory language proposed in section 4127(d) is to implement BPC section 2290.5(d) by establishing standards an occupational therapy practitioners must follow when prior to providing services via telehealth.

Section 4127(e)(1) and (2) would clarify and establish that when occupational therapy practitioners provide services via telehealth, they must provide services consistent with the scope of practice defined in BPC Section 2570.2(k) and comply with the ethical standards of practice and any other applicable laws.

The reason and rationale for the regulatory language proposed in section 4127(e)(1) is to implement BPC section 2290.5(d) by requiring occupational therapy practitioners provide services within their scope of practice.

The reason and rationale for the regulatory language proposed in section 4127(e)(2) is to implement BPC section 2290.5(d) by clarifying that occupational therapy practitioners must adhere to the same laws and regulations governing the practice of occupational therapy, even when services are provided via telehealth.

#### UNDERLYING DATA:

None

#### BUSINESS IMPACT:

This regulation will not have a significant adverse economic impact on business.

In all likelihood this proposed regulation will promote expanded opportunities for hospitals, health care and rehabilitation businesses, and information technology companies.

#### ECONOMIC IMPACT ANALYSIS

The proposed regulatory action will establish rules and practice standards for occupational therapists delivering services via telecommunication.

The Board anticipates the proposed regulatory action will increase job opportunities for occupational therapy practitioners and in technology/ telecommunications communities to meet confidentiality requirements inherent in health care records management. It is anticipated that the demand for occupational therapy practitioners will increase in order to meet the unmet need of remote, rural or underserved communities or to provide services to those with limited mobility or transportation issues, who will all benefit from increased access to occupational therapy services.

The Board anticipates the proposed regulatory action will promote new business and will not result in the elimination of existing business. Health care entities, private practices, hospitals, rehabilitation companies, etc., will be afforded new opportunities to expand their business by providing access to services to consumers in remote or rural areas.

Not all services will be appropriate for delivery via telehealth; services will be based on the nature and complexity of client's condition. Businesses that choose not to purchase telecommunication equipment will still be competitive and viable since the majority of services would still be provided traditionally, via face-to-face evaluation and intervention.

The proposed regulatory action will expand access to underserved and rural communities and provide greater modern day flexibility to all consumers in scheduling appointments and reducing or eliminating the need for long trips or congested urban travel. The proposed regulatory language set forth rules and requirements that are designed to protect the public in the delivery of this emerging and modern way of providing services.

#### **SPECIFIC TECHNOLOGIES OR EQUIPMENT:**

This regulation would mandate the use of specific technologies or equipment that would maintain the confidentiality of a patient's medical information.

#### **CONSIDERATION OF ALTERNATIVES:**

The Board must determine that no reasonable alternative considered by it or that has otherwise been identified and brought to its attention would either be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposal described in this Notice or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.



## AVAILABILITY OF MODIFIED TEXT

NOTICE IS HEREBY GIVEN that the Board of Occupational Therapy has proposed modifications to the text of CCR Sections 4172 in Division 39, Title 16. A copy of the modified text is enclosed.

Any person who wishes to comment on the proposed modifications may do so by submitting written comments on or before 5:00 PM on March 18, 2012, to the following:

Jeff Hanson  
California Board of Occupational Therapy  
2005 Evergreen Street, Suite 2050  
Sacramento, CA 95815  
Telephone: (916) 263-2294  
Fax: (916) 263-2701  
E-mail: [cbot@dca.ca.gov](mailto:cbot@dca.ca.gov)

DATED: March 1, 2013



HEATHER MARTIN  
Executive Officer  
Board of Occupational Therapy

California Board of Occupational Therapy  
Department of Consumer Affairs

Title 16. Division 39, California Code of Regulations

**PROPOSED LANGUAGE**

Proposed amendments are shown by ~~strikeout~~ for deleted text and underline for new text.

Modifications are shown by ~~double-strikeout~~ for deleted text and double underline for new modified language.

ARTICLE 8. Ethical Standards of Practice

Add section 4172 - Standards of Practice for Telehealth

**§ 4172. Standards of Practice for Telehealth.**

(a) In order to provide occupational therapy services via telehealth as defined in Section 2290.5 of the Code, an occupational therapist or occupational therapy assistant in this State or providing services to a patient or client in this State must have a valid and current license issued by the Board.

~~(b) An occupational therapist or occupational therapy assistant must exercise the same standard of care when providing occupational therapy services via telehealth as with any other mode of delivery of occupational therapy services.~~

(b) An occupational therapist shall obtain informed consent from the patient or client prior to delivering occupational therapy services via telehealth, and shall include. Documentation of that consent statement and a consent for release of records shall be maintained in the patient's or client's health record.

(c) All records, including but not limited to, patient consent statements, medical, billing, and employee records, must be provided to the Board upon request.

(d) Prior to providing occupational therapy services via telehealth, :

(1) an occupational therapist shall determine: (1) whether an in-person evaluation is necessary; and a local therapist must be available should an onsite visit be required;

(2) an occupational therapist shall determine whether in-person interventions are necessary. If it is determined in-person interventions are necessary, an on-site occupational therapist or occupational therapy assistant shall provide the appropriate interventions.

~~(e) The obligations of an occupational therapist continue during the course of treatment to determine whether an in-person evaluation or intervention is necessary.~~ In making these determinations whether an in-person evaluation or in-person interventions are necessary, an occupational therapist shall consider: the complexity of the patient's/client's condition; his or her own knowledge, skills, and abilities; the nature and complexity of the intervention; the requirements of the practice setting; and the patient's/client's context and environment. The obligations of an occupational therapist to determine whether an in-person evaluation or intervention is necessary continue during the course of treatment.

~~(e)~~ (f) An occupational therapist or occupational therapy assistant providing occupational therapy services via telehealth must:

(1) Exercise the same standard of care when providing occupational therapy services via telehealth as with any other mode of delivery of occupational therapy services;

~~(1)~~ (2) Provide services consistent with the practice of occupational therapy as defined in section 2570.2(k) of the Code; and

~~(2)~~ (3) Comply with all other provisions of the Occupational Therapy Practice Act and its attending regulations, including the ethical standards of practice set forth in section 4170, as well as any other applicable provisions of law.

(g) Failure to comply with these regulations shall be considered unprofessional conduct as set forth in the Occupational Therapy Practice Act.

Note: Authority Cited: Business and Professions Code section 2570.20. Reference: Business and Professions Code sections 2290.5 and 2570.20.



March 18, 2013

Submitted via email to [cbot@dca.ca.gov](mailto:cbot@dca.ca.gov)

Heather Martin, Executive Officer  
California Board of Occupational Therapy  
2005 Evergreen Street, Suite 2050  
Sacramento, CA 95815

**Re: Proposed Regulations for Standards of Practice for Telehealth**

Dear Ms. Martin:

The Occupational Therapy Association of California (OTAC) appreciates the opportunity to comment on the proposed regulations to establish standards of practice for telehealth. We recognize the growing significance of delivering occupational therapy services to patients and clients using increasingly advanced telecommunications technologies. The delivery of services in this manner has the potential to increase access to rural and underserved communities. **We appreciate the Board's efforts to ensure the public is safe and professional standards are adhered to as telehealth practice becomes more prevalent. However, we have significant concerns with the Board's latest draft regulations, and are eager to engage the Board in a dialogue to resolve these concerns.** In addition, we are attaching AOTA's new Telehealth Position Paper for your reference as you continue to develop these regulations. Our concerns with the proposed regulations are as follows.

In paragraphs (b) and (c) of the proposed regulations, new language has been inserted related to obtaining clients' consent to release their health records, and making those records and other records available to the Board "upon request." We believe the intent and effect of this language is not clear, and there may be conflicts with other laws, regulations, and policies with which occupational therapists may be required to comply.

For example, as to the clarity of the provisions, what if a client provides informed consent to receive telehealth services, but refuses to sign a release for his or her health records? Does that prevent that client from being able to receive telehealth services? Assuming the client signs the necessary release, does that mean the Board may request that client's health records even if no complaint has been filed with the Board by the client against the therapist who provided services? It is not clear to us the precise requirements and limitations imposed by this language.

In terms of potential conflicts with legal and contractual requirements, how are therapists expected to reconcile the Board's request for records when there is a conflict with state or federal privacy law related to health records, labor law related to employment records, or a

payer's contractual requirements to maintain the confidentiality of billing records? We believe this language has the potential to discourage occupational therapists from engaging in telehealth practice for fear of being unable to comply with the myriad other requirements being imposed on them that may conflict with this regulation. **We urge the Board to reconsider inclusion of the new language in paragraphs (b) and (c) unless the intent and effect can be clarified, and the potential for conflicts with other laws and policies can be resolved.**

In paragraph (d), the Board has included new language requiring the provision of in-person evaluations and interventions by local therapists should the necessity of such services be established. As with the previously mentioned additions to the regulations, we believe the intent and effect of this language is not clear. For example, if the occupational therapist determines an in-person evaluation or interventions are necessary to meet some of a client's needs, does that prevent the therapist from performing any evaluation or interventions, even those that do not require onsite services to meet that client's needs? In addition, the regulations, as currently drafted, state "...a local therapist **must** be available should an onsite visit be required..." [emphasis added] and "...an on-site occupational therapist...**shall** provide the appropriate interventions" [emphasis added]. However, what if no therapist is available locally? Who is responsible to assure evaluations are conducted or interventions are provided? How would those provisions be enforced? **We urge the Board to reconsider inclusion of the new language in paragraph (d) unless the intent and effect can be clarified.**

Finally, we would like to bring your attention to language that was stricken from and added to paragraph (e). In that paragraph, as amended in this draft of the proposed regulations, a series of considerations are listed that an occupational therapist must take into account when determining whether in-person evaluations or interventions are necessary. However, we are of the opinion that those considerations should be viewed broadly, and applicable prior to and during the provision of occupational therapy services via telehealth, not just in terms of the necessity of in-person evaluations and interventions. **We would prefer language more closely aligned with that which is included in AOTA's Telehealth Position Paper, specifically:**

**"To determine whether providing occupational therapy by means of telehealth is in the best interest of the client, the occupational therapist must consider the following:**

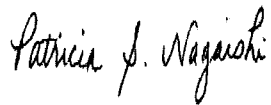
- **Complexity of the client's condition**
- **Knowledge, skill, and competence of the occupational therapy practitioner**
- **Nature and complexity of the intervention**
- **Requirements of the practice setting**
- **Client's context and environment." (4-5)**

While our concerns stated above reflect our reaction to language added in this new draft of the proposed regulations, we also would like to remind the Board of the changes we suggested in our comment letter dated October 5, 2012. Our preference for the simplicity and clarity of that suggested language remains, and we have attached it for your reference.

We understand that the Board faces a significant challenge in terms of balancing the safety of consumers with the advent of new technologies that enable new forms of occupational therapy practice. We support the use of telehealth to provide occupational therapy services, while acknowledging the need to ensure consumers are protected and professional standards are adhered to.

Thank you for the opportunity to comment on the proposed regulations related to the practice of telehealth. We welcome the opportunity to provide additional feedback to the Board on these issues and hope that we can work together to ensure telehealth practice of occupational therapy is regulated in a manner that maximizes access to services and consumer safety. Please feel free to contact Jennifer Snyder at (916) 444-0400 for further information.

Sincerely,

A handwritten signature in cursive script that reads "Patricia J. Nagaishi".

Patricia Nagaishi, PhD, OTR/L  
President, Occupational Therapy Association of California

Enclosures: AOTA Telehealth Position Paper (2013); Comment letter dated October 5, 2012

March 18, 2013

Submitted via email to [cbot@dca.ca.gov](mailto:cbot@dca.ca.gov)

Heather Martin, Executive Officer  
California Board of Occupational Therapy  
2005 Evergreen Street, Suite 2050  
Sacramento, CA 95815

**Re: Proposed Regulations for Standards of Practice for Telehealth**

Dear Ms. Martin:

The American Occupational Therapy Association (AOTA) appreciates the opportunity to comment on the proposed regulations to establish standards of practice for telehealth. We recognize the growing significance of delivering occupational therapy services to patients and clients using increasingly advanced telecommunications technologies. The delivery of services in this manner has the potential to increase access to rural and underserved communities. **We appreciate the Board's efforts to ensure the public is safe and professional standards are adhered to as telehealth practice becomes more prevalent. However, we have significant concerns with the Board's latest draft regulations, and are eager to engage the Board in a dialogue to resolve these concerns.** In addition, we are attaching AOTA's new Telehealth Position Paper for your reference as you continue to develop these regulations. Our concerns with the proposed regulations are as follows.

In paragraphs (b) and (c) of the proposed regulations, new language has been inserted related to obtaining clients' consent to release their health records, and making those records and other records available to the Board "upon request." We believe the intent and effect of this language is not clear, and there may be conflicts with other laws, regulations, and policies with which occupational therapists may be required to comply.

For example, as to the clarity of the provisions, what if a client provides informed consent to receive telehealth services, but refuses to sign a release for his or her health records? Does that prevent that client from being able to receive telehealth services? Assuming the client signs the necessary release, does that mean the Board may request that client's health records even if no complaint has been filed with the Board by the client against the therapist who provided services? It is not clear to us the precise requirements and limitations imposed by this language.

In terms of potential conflicts with legal and contractual requirements, how are therapists expected to reconcile the Board's request for records when there is a conflict with state or federal privacy law related to health records, labor law related to employment records, or a

payer's contractual requirements to maintain the confidentiality of billing records? We believe this language has the potential to discourage occupational therapists from engaging in telehealth practice for fear of being unable to comply with the myriad other requirements being imposed on them that may conflict with this regulation. **We urge the Board to reconsider inclusion of the new language in paragraphs (b) and (c) unless the intent and effect can be clarified, and the potential for conflicts with other laws and policies can be resolved.**

In paragraph (d), the Board has included new language requiring the provision of in-person evaluations and interventions by local therapists should the necessity of such services be established. As with the previously mentioned additions to the regulations, we believe the intent and effect of this language is not clear. For example, if the occupational therapist determines an in-person evaluation or interventions are necessary to meet some of a client's needs, does that prevent the therapist from performing any evaluation or interventions, even those that do not require onsite services to meet that client's needs? In addition, the regulations, as currently drafted, state "...a local therapist **must** be available should an onsite visit be required..." [emphasis added] and "...an on-site occupational therapist...**shall** provide the appropriate interventions" [emphasis added]. However, what if no therapist is available locally? Who is responsible to assure evaluations are conducted or interventions are provided? How would those provisions be enforced? **We urge the Board to reconsider inclusion of the new language in paragraph (d) unless the intent and effect can be clarified.**

Finally, we would like to bring your attention to language that was stricken from and added to paragraph (e). In that paragraph, as amended in this draft of the proposed regulations, a series of considerations are listed that an occupational therapist must take into account when determining whether in-person evaluations or interventions are necessary. However, we are of the opinion that those considerations should be viewed broadly, and applicable prior to and during the provision of occupational therapy services via telehealth, not just in terms of the necessity of in-person evaluations and interventions. **We would prefer language more closely aligned with that which is included in AOTA's Telehealth Position Paper, specifically:**

**"To determine whether providing occupational therapy by means of telehealth is in the best interest of the client, the occupational therapist must consider the following:**

- **Complexity of the client's condition**
- **Knowledge, skill, and competence of the occupational therapy practitioner**
- **Nature and complexity of the intervention**
- **Requirements of the practice setting**
- **Client's context and environment." (4-5)**

While our concerns stated above reflect our reaction to language added in this new draft of the proposed regulations, we also would like to remind the Board of the changes we suggested in our comment letter dated October 5, 2012. Our preference for the simplicity and clarity of that suggested language remains, and we have attached it for your reference.



We understand that the Board faces a significant challenge in terms of balancing the safety of consumers with the advent of new technologies that enable new forms of occupational therapy practice. We support the use of telehealth to provide occupational therapy services, while acknowledging the need to ensure consumers are protected and professional standards are adhered to.

Thank you for the opportunity to comment on the proposed regulations related to the practice of telehealth. We welcome the opportunity to provide additional feedback to the Board on these issues and hope that we can work together to ensure telehealth practice of occupational therapy is regulated in a manner that maximizes access to services and consumer safety. Please feel free to contact Jennifer Snyder at (916) 444-0400 for further information.

Sincerely,

A handwritten signature in cursive script that reads "Chuck Willmarth".

Chuck Willmarth  
Director of Health Policy and State Affairs  
American Occupational Therapy Association

Enclosures: AOTA Telehealth Position Paper (2013); Comment letter dated October 5, 2012



October 5, 2012

VIA EMAIL to [cbot@dca.ca.gov](mailto:cbot@dca.ca.gov)

Heather Martin

California Board of Occupational Therapy

2005 Evergreen Street, Suite 2050

Sacramento, CA 95815

**Re: Proposed Regulations for Standards of Practice for Telehealth**

Dear Ms. Martin:

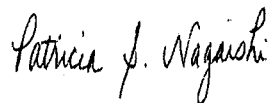
The Occupational Therapy Association of California (OTAC) and the American Occupational Therapy Association (AOTA) appreciate the opportunity to comment on the proposed regulations to establish standards of practice for telehealth. We recognize the growing significance of delivering occupational therapy services to patients and clients using increasingly advanced telecommunications technologies. The delivery of services in this manner has the potential to increase access to rural and underserved communities. We appreciate the Board's efforts to ensure the public is safe, and professional standards are adhered to, as telehealth practice becomes more prevalent. However, we request the Board consider the proposed modifications to the draft regulations enclosed with this letter. We believe our suggestions do not substantively change the intent of the Board's proposed language, but simply clarify several of the provisions.

The nature of and justification for our suggested changes are as follows.

1. We recommend paragraph (d) be combined with paragraph (b), so that the reference to maintaining "the same standard of care when providing occupational therapy services via telehealth" is followed by the list of factors practitioners should consider prior to and during the provision of telehealth services.
2. We recommend all the factors an occupational therapist should consider prior to and during the provision of telehealth services be enumerated in a single list, and we added the patient's/client's "preferences" to that list.
3. We recommend the remaining changes, as we believe consolidating the provisions into fewer words, while maintaining the same intent, and changing some of the terminology, enhances clarity.

Thank you for the opportunity to comment on the proposed regulations related to the practice of telehealth. Please feel free to contact Jennifer Snyder at (916) 444-0400 for further information.

Sincerely,



Patricia Nagaishi, PhD, OTR/L  
President, Occupational Therapy Association of California



Chuck Willmarth  
Director, State Affairs, American Occupational Therapy Association

Enclosures: Standards of Practice for Telehealth Proposed Regulations with OTAC/AOTA's  
Suggested Modifications

California Board of Occupational Therapy  
Department of Consumer Affairs  
Title 16, Division 39, California Code of Regulations

PROPOSED LANGUAGE

ARTICLE 8. Ethical Standards of Practice

Add section 4172 - Standards of Practice for Telehealth

§ 4172. Standards of Practice for Telehealth.

(a) In order to provide occupational therapy services via telehealth as defined in Section 2290.5 of the Code, an occupational therapist or occupational therapy assistant in this State or providing services to a patient or client in this State must have a valid and current license issued by the Board.

(b) An occupational therapist or occupational therapy assistant must exercise the same standard of care when providing occupational therapy services via telehealth as with any other mode of delivery of occupational therapy services. Prior to and during the course of providing occupational therapy services via telehealth, the occupational therapist shall consider all of the following:

(1) the patient's/client's preferences, context, and environment;

(2) the complexity of the patient's/client's condition;

(3) the occupational therapist's or occupational therapy assistant's own knowledge, skills, and abilities;

(4) the nature and complexity of the patient's/client's condition;

(5) the requirements of the practice setting; and

(6) the necessity of in-person evaluations or interventions.

(c) An occupational therapist or occupational therapy assistant shall obtain informed consent from the patient or client prior to delivering occupational therapy services via telehealth, and shall include documentation of that consent statement in the patient's or client's health record.

~~(d) Prior to providing occupational therapy services via telehealth, an occupational therapist shall determine:~~

~~(1) whether an in-person evaluation is necessary; and~~

~~(2) whether in-person interventions are necessary.~~

~~The obligations of an occupational therapist continue during the course of treatment to determine whether an in-person evaluation or intervention is necessary. In making these determinations, an occupational therapist shall consider: the complexity of the patient's/client's condition; his or her own knowledge, skills, and abilities; the nature and complexity of the intervention; the requirements of the practice setting; and the patient's/client's context and environment.~~

~~(e) (d) An occupational therapist or occupational therapy assistant providing occupational therapy services via telehealth must:~~

~~(1) Provide services consistent with the practice of occupational therapy as defined in section 2570.2(k) of the Code; and~~

~~(2) Comply with all other provisions of the Occupational Therapy Practice Act and its attending regulations, including the ethical standards of practice set forth in section 4170, as well as any other applicable provisions of law.~~

~~Note: Authority Cited: Business and Professions Code section 2570.20. Reference: Business and Professions Code sections 2290.5 and 2570.20.~~

March 22, 2013

Dear State Regulatory Board Members and Staff:

We are pleased to provide you with a copy AOTA's Telehealth Position Paper. This document replaces the 2010 document, Telerehabilitation Position Paper, previously published in 2010 by AOTA. The document is also available on AOTA's website at: <http://www.aota.org/Practitioners/Official/Position/36203.aspx?FT=.pdf>.

We would also like to take this opportunity to let you know that AOTA's 2013 Annual Conference and Exposition will be held in San Diego, California April 25-28, 2013. As always, it will be an exciting and stimulating event with many professional development opportunities. We hope that many Board members and staff will join us this year.

If you have any questions, or if I can be of assistance to you, please feel free to contact me at AOTA.

Sincerely,



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Enclosure

# TELEHEALTH

The purpose of this paper is to provide the current position of the American Occupational Therapy Association (AOTA) regarding the use of telehealth by occupational therapists and occupational therapy assistants<sup>1</sup> to provide occupational therapy services. This document describes the use of telehealth within occupational therapy practice areas, as described in the existing research. Additionally, occupational therapy practitioner<sup>2</sup> qualifications, ethics, and regulatory issues related to the use of telehealth as a service delivery model within occupational therapy are outlined. Occupational therapy practitioners are the intended audience for this document, although others involved in supervising, planning, delivering, regulating, and paying for occupational therapy services also may find it helpful.

Telecommunication and information technologies have prompted the development of an emerging model of health care delivery called *telehealth*, which involves health care services, health information, and health education. AOTA defines *telehealth* as the application of evaluative, consultative, preventative, and therapeutic services delivered through telecommunication and information technologies. Occupational therapy services provided by means of a telehealth service delivery model can be *synchronous*, that is, delivered through interactive technologies in real time, or *asynchronous*, using store-and-forward technologies. Occupational therapy practitioners can use telehealth as a mechanism to provide services at a location that is physically distant from the client, thereby allowing for services to occur where the client lives, works, and plays, if that is needed or desired (AOTA, 2010a). An Overview of Telehealth Technologies is included in Appendix A. *Telerehabilitation* within the larger realm of telehealth is the application of telecommunication and information technologies for the delivery of rehabilitation services. Key terms related to telehealth and telehealth technologies are defined in Appendix B.

## Use of Telehealth Within Occupational Therapy

Occupational therapy practitioners use telehealth as a service delivery model to help clients develop skills; incorporate assistive technology and adaptive techniques; modify work, home, or school environments; and create health-promoting habits and routines. Benefits of a telehealth service delivery model include increased accessibility of services to clients who live in remote or underserved areas, improved access to providers and specialists otherwise unavailable to clients, prevention of unnecessary delays in receiving care, and workforce enhancement through consultation and research among others (Cason, 2012a, 2012b). By removing barriers to accessing care, including social stigma, travel, and socioeconomic and cultural barriers, the use of telehealth as a service delivery model within occupational therapy leads to improved access to care and ameliorates the impact of personnel shortages in underserved areas. Occupational

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<sup>1</sup>The *occupational therapist* is responsible for all aspects of occupational therapy service delivery and is accountable for the safety and effectiveness of the occupational therapy service delivery process. The *occupational therapy assistant* delivers occupational therapy services under the supervision of and in partnership with the occupational therapist (AOTA, 2009).

<sup>2</sup>When the term *occupational therapy practitioner* is used in this document, it refers to both occupational therapists and occupational therapy assistants (AOTA, 2006).

therapy outcomes aligned with telehealth include the facilitation of occupational performance, adaptation, health and wellness, prevention, and quality of life.

Telehealth has potential as a service delivery model in each major practice area within occupational therapy. Note that given the variability of client factors, activity demands, performance skills, performance patterns, and contexts and environments, the candidacy and appropriateness of a telehealth service delivery model “should be determined on a case-by-case basis with selections firmly based on clinical judgment, client’s informed choice, and professional standards of care” (Brennan et al., 2010, p. 33). See Appendix C for applications and evidence supporting the use of telehealth within occupational therapy practice areas.

### **Evaluation Using Telehealth Technologies: Tele-Evaluation**

The traditional telephone system continues to be a low-cost alternative for effectively conducting interview assessments by various health care professionals (Cooper et al., 2002; Dreyer, Dreyer, Shaw, & Wittman, 2001; Winters, 2002), and advanced communication technologies have broadened the possibilities for conducting evaluations. Studies have described the use of telehealth in areas that are of concern to occupational therapy, such as evaluation and consultative services for wheelchair prescription (Barlow, Liu, & Sekulic, 2009; Schein, Schmeler, Brienza, Saptono, & Parmanto, 2008; Schein, Schmeler, Holm, Saptono, & Brienza, 2010; Schein, et al., 2011); neurological assessment (Savard, Borstad, Tkachuck, Lauderdale, & Conroy, 2003), adaptive equipment prescription and home modification (Sanford et al., 2007), and ergonomic assessment (Baker & Jacobs, 2013).

Clinical reasoning guides the selection and application of appropriate telehealth technologies necessary to evaluate client needs and environmental factors. Therapists should consider the reliability and validity of specific assessment tools when administered remotely. Researchers have investigated the reliability of assessments such as the Functional Reach Test and European Stroke Scale (Palsbo, Dawson, Savard, Goldstein, & Heuser, 2007); the Kohlman Evaluation of Living Skills and the Canadian Occupational Performance Measure (Dreyer et al., 2001); and the Functional Independence Measure, the Jamar Dynamometer, the Preston Pinch Gauge, the Nine-Hole Peg Test, and the Unified Parkinson’s Disease Rating Scale (Hoffman, Russell, Thompson, Vincent, & Nelson, 2008) and found these tools to be reliable when administered remotely through telehealth technologies. In some cases, an in-person assistant, such as a paraprofessional or other support person, may be used to relay assessment tool measurements or other measures (e.g., environmental, wheelchair and seating) to the remote therapist during the evaluation process.

When choosing a telehealth model for conducting an evaluation, occupational therapists need to consider the client’s diagnosis, client’s preference, access to technology, and the ability to measure outcomes when using that model. The occupational therapist may determine that an in-person evaluation is required for some clients. Because of the evolving knowledge and technology related to telehealth, occupational therapists should review the latest research to remain current about the appropriate use of telehealth technologies for conducting evaluations.



## **Intervention Using Telehealth Technologies: Teleintervention and Telerehabilitation**

A telehealth model of service delivery may be used for providing interventions that are preventative, habilitative, or rehabilitative in nature. When planning and providing interventions delivered with telehealth technologies, Scheideman-Miller et al. (2003) reported that the appropriateness and maintenance of the technology and the sustainability of participation by the client are important factors to consider. As related to occupational therapy interventions, some factors to consider include technology availability and options for the occupational therapy practitioner and the client; the safety, effectiveness, sustainability, and quality of interventions provided exclusively through telehealth or in combination with in-person interventions; the client's choice about receiving interventions by means of telehealth technologies; the client's outcomes, including the client's perception of services provided; reimbursement; and compliance with federal and state laws, regulation, and policy, including licensure requirements (Cason & Brannon, 2011).

## **Consultation Using Telehealth Technologies: Teleconsultation**

*Teleconsultation* is a virtual consultation that includes the

- Expert provider and client,
- Expert provider and local provider with the client present, or
- Expert provider and local provider without the client present.

Teleconsultation uses telecommunication and information technologies for the purpose of obtaining health and medical information or advice.

Teleconsultation has been used to overcome the shortage of various rehabilitation professionals across the United States. For example an occupational therapist or prosthetist can remotely evaluate and adjust a client's prosthetic device using computer software with videoconferencing capability and remote access to a local clinician's computer screen despite the physical distance between the expert and client (Whelan & Wagner, 2011). Similarly, Schein et al. (2008) demonstrated positive outcomes associated with teleconsultation between a remote seating specialist and a local therapist for evaluating wheelchair prescriptions. The Veterans Health Administration is using teleconsultation for veterans with traumatic brain injuries in a process that involves interactive videoconferencing technology and Web-based management systems (Girard, 2007). In the practice area of pediatrics, Wakeford (2002) used videoconferencing technologies to consult on play performance in children with special needs.

Practitioners should contact state professional licensure boards in their state as well as in the state where the client is located for further clarification on policies related to teleconsultation before rendering services. Some states do have consultation and licensure exemption provisions, although application of the consultation and licensure exemption provisions to facilitate temporary (i.e., consultative) interstate occupational therapy practice using telehealth technologies has not been established (Cason & Brannon, 2011).

## **Monitoring Using Telehealth Technologies: Telemonitoring**

Occupational therapy practitioners can use telehealth technologies to monitor a client's adherence to an intervention program, assist a client in progressing toward achieving desired outcomes, and track and respond to follow-up issues and concerns within a client's natural environments. For example, the Gator Tech Smart House (Mann & Milton, 2005) developed at the University of Florida provides an array of *self-monitoring analysis and reporting technology* (SMART) technologies that monitor and cue clients remotely. Examples include the SmartShoe (Naditz, 2009), which determines fall risk by analyzing walking behavior patterns in a client's own environment and sends the information to a remote site. Similarly, home exercise programs can be monitored remotely using a *haptic* (touch-sensitive) control interface to track a client's hand position while providing resistive forces remotely (Popescu, Burdea, Bouzit, & Hentz, 2000).

Tang and Venables (2000) used smartphones to deliver rehabilitation interventions remotely by using wireless Internet or Intranet access and by providing frequent prompts and cues regarding when and how to complete daily living occupations. Wireless technologies such as these are expanding opportunities for occupational therapy practitioners to implement interventions using telehealth technologies where clients live, work, and play and to provide services throughout the day rather than only within the occupational therapy clinic.

Appendix D provides case examples of how occupational therapy practitioners use telehealth technologies to support health and participation in occupations.

## **Practitioner Qualifications and Ethical Considerations**

AOTA asserts that the same ethical and professional standards that apply to in-person delivery of occupational therapy services also apply to the delivery of services by means of telehealth technologies. Occupational therapy practitioners should refer to the *Occupational Therapy Code of Ethics and Ethics Standards 2010* (AOTA, 2010b). As stated in this document, occupational therapy practitioners are responsible for ensuring their individual competence in the areas in which they provide services. In addition, Principle 1B of the *Code and Ethics Standards* states that "Occupational therapy personnel shall provide appropriate evaluation and a plan of intervention for all recipients of occupational therapy services specific to their needs" (AOTA, 2010b, p. 9). This requirement reinforces the importance of careful consideration about whether evaluation or intervention through a telehealth service delivery model will best meet the client's needs and is the most appropriate method of providing services given the client's situation.

Clinical and ethical reasoning guides the selection and application of appropriate telehealth technology necessary to evaluate and meet client needs. Occupational therapy practitioners should consider whether the use of technology and service provision through telehealth will ensure the safe, effective, appropriate delivery of services. To determine whether providing occupational therapy by means of telehealth is in the best interest of the client, the occupational therapist must consider the following:

- Complexity of the client's condition
- Knowledge, skill, and competence of the occupational therapy practitioner
- Nature and complexity of the intervention

- Requirements of the practice setting
- Client's context and environment.

Additionally, the American Telemedicine Association's *A Blueprint for Telerehabilitation Guidelines* outlines important administrative, clinical, technical, and ethical principles associated with the use of telehealth (Brennan et al., 2010). Occupational therapy practitioners may use various educational approaches to gain competency in using telehealth technologies. They may gain an understanding about basic telehealth service delivery model and telehealth technologies as a part of entry-level education (Standard B.1.8; ACOTE, 2012) or may participate in continuing education opportunities as clinicians to acquire expertise in this area (Theodorus & Russell, 2008). Examples of ethical considerations related to telehealth are outlined in Table 1.

The *Specialized Knowledge and Skills in Technology and Environmental Interventions for Occupational Therapy Practice* document (AOTA, 2010c) describes the knowledge and skills necessary for entry- and advanced-level practice in technology. Practitioners should have a working knowledge of the hardware, software, and other elements of the technology they are using and have technical support personnel available should problems arise (Schopp, Hales, Brown, & Quetsch, 2003). They should use evidence, mentoring, and continuing education to maintain and enhance their competency related to the use of a telehealth service delivery model within occupational therapy.

## **Supervision Using Telehealth Technologies**

State licensure laws, institution-specific guidelines regarding supervision of occupational therapy students and personnel, the AOTA *Guidelines for Supervision, Roles, and Responsibilities During the Delivery of Occupational Therapy Services* (AOTA, 2009), and the *Occupational Therapy Code of Ethics and Ethics Standards (2010)* (AOTA, 2010b) must be followed, regardless of the method of supervision. Telehealth technologies may be used within those guidelines to the extent that they take into account the unique characteristics of telehealth supervision, to support students and practitioners working in isolated or rural areas (Miller, Miller, Burton, Sprang, & Adams, 2003; Hubbard, 2000). However, practitioners engaged in telehealth supervision should be cautious when relying on legal or other standards that were not necessarily established with telehealth supervision in mind. Factors that may affect the model of supervision and frequency of supervision include the complexity of client needs, number and diversity of clients, skills of the occupational therapist and the occupational therapy assistant, type of practice setting, requirements of the practice setting, and other regulatory requirements (AOTA, 2009). Supervision must comply with applicable state and federal practice regulations, state and federal insurance programs, relevant workplace policies, and the *Occupational Therapy Code of Ethics and Ethics Standards (2010)* (AOTA, 2010b).

## **Legal and Regulatory Considerations**

Occupational therapy practitioners are to abide by state licensure laws and related occupational therapy regulation regarding the use of a telehealth service delivery model within occupational therapy (Cwiek, Rafiq, Qamar, Tobey, & Merrell, 2007). Given the inconsistent adoption and nonuniformity of language regarding the use of telehealth within occupational therapy, it is incumbent upon the practitioner to check a state's statutes, regulations, and policies before

beginning to practice using a telehealth service delivery model. Typically, information may be found on state licensure boards' Web sites. The absence of statutes, regulations or policies that guide the practice of occupational therapy by means of telehealth delivery should not be viewed as authorization to do so. State regulatory boards should be contacted directly in the absence of written guidance to determine the appropriateness of using telehealth technologies for the delivery of occupational therapy services within their jurisdictions. In addition, the policies and guidelines of payers should be consulted. At this time, occupational therapy practitioners are to comply with the licensure and regulatory requirements in the state where they are located and the state where the client is located (Cason & Brannon, 2011).

Occupational therapy practitioners are to abide by Health Insurance Portability and Accountability Act (HIPAA, 1996; Pub. L. 104–191) regulations to maintain security, privacy, and confidentiality of all records and interactions. Additional safeguards inherent to the use of technology to deliver occupational therapy services must be considered to ensure privacy and security of confidential information (Watzlaf, Moeini & Firouzan, 2010; Watzlaf, Moeini, Matusow, & Firouzan, 2011). Occupational therapy practitioners are to consult with their practice setting's privacy officer or legal counsel or to consult with independent legal counsel if they are in independent or other practice outside of an institutional setting to ensure that the services they provide through telehealth are consistent with protocol and HIPAA regulations.

### **Funding and Reimbursement**

It is the position of AOTA that occupational therapy services provided with telehealth technologies should be valued, recognized, and reimbursed the same as occupational therapy services provided in person. At this writing, Medicare does not list occupational therapy practitioners as eligible providers of services delivered through telehealth technologies. However, AOTA supports the inclusion of occupational therapy practitioners on Medicare's approved list of telehealth providers. The U.S. Department of Defense and Veteran's Health Administration use occupational therapy practitioners for select telehealth programming.

Opportunities for reimbursement exist through some state Medicaid programs; insurance companies; and private pay with individuals, school districts, agencies, and organizations. Medicaid reimbursement is available at the discretion of each state, because it is subject to specific requirements or restrictions within a state. It is recommended that occupational therapy practitioners contact their state Medicaid or other third-party payers to determine the guidelines for reimbursement of services provided through telehealth technologies.

When billing occupational therapy services provided by means of telehealth technologies, practitioners must distinguish the service delivery model, often designated with a *modifier* (Cason & Brannon, 2011). However, regardless of whether the services are reimbursed or the practitioner is responsible for completing paperwork related to billing, the nature of the service delivery as being performed through telehealth should be thoroughly documented.

### **Summary**

Telehealth is a service delivery model that uses telecommunication technologies to deliver health-related services at a distance. Occupational therapy practitioners are using synchronous or

asynchronous telehealth technologies to provide evaluative, consultative, preventative, and therapeutic services to clients who are physically distant from the practitioner. Occupational therapy practitioners using telehealth as a service delivery model must adhere to the *Occupational Therapy Code of Ethics and Ethics Standards (2010)* (AOTA, 2010b), maintain the *Standards of Practice for Occupational Therapy* (AOTA, 2010d), and comply with federal and state regulations to ensure their competencies as practitioners and the well-being of their clients.

Occupational therapy practitioners must give careful consideration as to whether evaluation or intervention through a telehealth service delivery model will best meet the client's needs and provide the most appropriate method of providing services given the individual's situation. Clinical and ethical reasoning guides the selection and application of appropriate telehealth technology necessary to evaluate and meet client needs.

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<http://dx.doi.org/10.1146/annurev.bioeng.4.112801.121923>

### **Additional Resources**

American Telemedicine Association's Telerehabilitation Special Interest Group/Resources,  
[www.americantelemed.org/i4a/pages/index.cfm?pageid=3328](http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3328)

Center for Telehealth and e-Health Law (CTel), <http://ctel.org/>

*International Journal of Telerehabilitation*, <http://telerehab.pitt.edu/ojs/index.php/telerehab>

*Journal of Telemedicine and Telecare*, <http://jtt.rsmjournals.com/>

Rehabilitation Engineering Research Center for Telerehabilitation, [www.rerctr.pitt.edu](http://www.rerctr.pitt.edu)

Telehealth Resource Centers, <http://www.telehealthresourcecenter.org/>

*Telemedicine and e-Health*, [www.liebertpub.com/TMJ](http://www.liebertpub.com/TMJ)

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**Table 1. Ethical Considerations and Strategies for Practice Using Telehealth Technologies**

Ethical Consideration	Strategies for Ethical Practice
Fully inform the client regarding the implications of a telehealth service delivery model versus an in-person service delivery model.	<p>“Occupational therapy personnel shall:</p> <p>“Establish a collaborative relationship with recipients of service, including families, significant others, and caregivers in setting goals and priorities throughout the intervention process. This includes full disclosure of the benefits, risks and potential outcomes of any intervention; the personnel who will be providing the intervention(s) and/or any reasonable alternatives to the proposed intervention.” (Principle 3A)</p> <p>“Obtain consent before administering any occupational therapy service, including evaluation, and ensure that recipients of service (or their legal representatives) are kept informed of the progress in meeting goals specified in the plan of intervention/care.” (Principle 3B)</p>
Abide by laws and scope of practice related to licensure and provision of occupational therapy services using telehealth technologies.	<p>“Occupational therapy personnel shall comply with institutional rules, local, state, federal, and international laws and AOTA documents applicable to the profession of occupational therapy.” (Principle 5)</p>
Adhere to professional standards.	<p>“Occupational therapy personnel shall:</p> <p>“Provide occupational therapy services that are within each practitioner’s level of competence and scope of practice (e.g., qualification, experience, the law).” (Principle 1E)</p> <p>“Take responsible steps (e.g. continuing education, research, supervision, training)</p>

	<p>and use careful judgment to ensure their own competence and weigh potential for client harm when generally recognized standards do not exist in emerging technology or areas of practice.” (Principle 1G)</p> <p>“Take responsibility for maintaining high standards and continuing competence in practice, education, and research by participating in professional development and educational activities to improve and update knowledge and skills.” (Principle 5F)</p> <p>“Occupational therapy personnel shall comply with institutional rules, local, state, federal, and international laws and AOTA documents applicable to the profession of occupational therapy.” (Principle 5)</p>
<p>Understand and abide by approaches that ensure that privacy, security, and confidentiality are not compromised as a result of using telehealth technologies.</p>	<p>“Occupational therapy personnel shall:</p> <p>“Ensure that confidentiality and the right to privacy are respected and maintained regarding all information obtained about recipients of service, students, research participants, colleagues, or employees. The only exceptions are when a practitioner or staff member believes that an individual is in serious foreseeable or imminent harm. Laws and regulations may require disclosure to appropriate authorities without consent.” (Principle 3G)</p> <p>“Maintain the confidentiality of all verbal, written, electronic, augmentative, and nonverbal communications, including compliance with HIPAA regulations.” (Principle 3H)</p>
<p>Understand and adhere to procedures if there is any compromise of security related to health information.</p>	<p>Report any breach of security to an appropriate health privacy officer, or seek guidance of an independent legal counsel.</p>
<p>Assess the effectiveness of interventions provided through telehealth technologies by consulting current research and conducting ongoing monitoring of client response.</p>	<p>“Occupational therapy personnel shall</p> <p>“Refer to other health care specialists solely on the basis of the needs of the client.” (Principle 1I)</p> <p>“Reevaluate and reassess recipients of service in a timely manner to determine if goals are being achieved and whether intervention plans should be revised.” (Principle 3D)</p> <p>“Use, to the extent possible, evaluation,</p>

	<p>planning, intervention techniques, and therapeutic equipment that are evidence-based and within the recognized scope of occupational therapy practice.” (Principle 3F)</p>
<p>Recognize the need to be culturally competent in the provision of services via telehealth, including language, ethnicity, socioeconomic and educational background that could affect the quality and outcomes of services provided.</p>	<p>“Occupational therapy personnel shall:  “Provide services that reflect an understanding of how occupational therapy service delivery can be affected by factors such as economic status, age, ethnicity, race, geography, disability, marital status, sexual orientation, gender, gender identity, religion, culture, and political affiliation.” (Principle 4F)  “Make every effort to facilitate open and collaborative dialogue with clients and/or responsible parties to facilitate comprehension of services and their potential risks/benefits. (Principle 3J)</p>
<p><i>Note.</i> HIPAA = Health Insurance Portability and Accountability Act of 1996 (Pub. L. 104–191). Ethical principals are from AOTA’s (2010b) <i>Occupational therapy code of ethics and ethics standards (2010)</i>.</p>	

## Appendix A. Overview of Telehealth Technologies

### Synchronous Technologies: Videoconferencing

*Synchronous technologies* enable the exchange of health information in *real-time* (i.e., live) by interactive audio and video between the patient or client and a health care provider located at a distant site. Several options for videoconferencing are available; they include voice over the Internet protocol (VoIP) services, mobile videoconferencing systems, “plain old telephone service” (POTS), videoconferencing, and high-definition television (HDTV) technologies (see Table A1).

VoIP services use a computer, special VoIP phone, or traditional phone with adapter to convert voice into a digital signal that travels over the Internet (Federal Communications Commission, 2010). Integrated with video software, VoIP provides a mechanism for Internet-based videoconferencing. Similarly, mobile videoconferencing uses a mobile device (e.g., smartphone, electronic tablet) with videoconferencing capabilities to transmit audio and video over a wireless or cellular network. POTS videoconferencing primarily uses an analog telephone line or landline to support audio and video transmission through a videophone or specialized equipment connected to a television. HDTV videoconferencing requires an HD television, console, HD camera, remote control and high-speed broadband connection at both locations. Unlike the technologies described above and marketed for consumer use, telehealth networks use high-end videoconferencing technologies (e.g., Polycom, Tandberg) and fiberoptic telephone lines (e.g., T1 lines) or high-speed Internet to connect sites.

Advantages of VoIP, mobile, POTS, and consumer HDTV technologies include service provision within the context where occupations naturally occur (e.g., home, work, community), minimal infrastructure requirements, and lower costs for equipment and connectivity (e.g., residential service plan, data plan). Disadvantages may include privacy, security, and confidentiality risks; lack of infrastructure (e.g., limited access to high-speed Internet/Broadband; inadequate bandwidth for connectivity); recurring expense (e.g., residential service plan, data plan); diminished sound or image quality; and technological challenges associated with end-user experience and expertise with videoconferencing technology (Cason, 2011; see Table A1).

### **Asynchronous Technologies**

Telehealth applications that are asynchronous, commonly referred to as “store-and-forward” data transmission, may include video clips, digital photographs, virtual technologies, and other forms of electronic communications. With *asynchronous technologies*, the provider and client are not connected at the same time. Potential applications for asynchronous telehealth technologies within occupational therapy include home assessments and recommendations for home modifications that are based on recorded data of the home environment; recommendations for inclusion of ergonomic principles and workstation modifications that are based on recorded data of the work environment; and secure viewing of video segments for evaluation and intervention purposes.

### **Technologies That May Be Synchronous or Asynchronous**

#### **Telemonitoring Technologies**

Occupational therapy practitioners providing services through telehealth technologies can take advantage of *self-monitoring analysis and reporting technology* (SMART) to monitor a client’s occupational performance within the home and community. SMART technologies that are wireless allow the occupational therapy practitioner to provide services within varied environments without restricting the client’s movements within those environments. These technologies provide information that allows an offsite occupational therapy practitioner to assess performance and modify services and the environment and also enable occupational therapy practitioners to understand the real-life occupations and performance challenges of the client and to plan appropriate interventions. As a result, occupational therapy practitioners can tailor environmental accommodations for clients with physical limitations or can develop individualized technology-based cueing systems for clients with cognitive disabilities so that they can live more independently.

#### **Virtual Reality Technologies**

*Virtual reality (VR)* typically refers to the use of interactive simulations created with computer hardware and software to present users with opportunities to engage in environments that appear and feel similar to real-world objects and events (Sheridan, 1992; Weiss & Jessel, 1998). Although typical use of VR technologies does not constitute a telehealth service delivery model, live data (synchronous) streamed to a remote occupational therapy practitioner or recorded data (asynchronous) used by an occupational therapy practitioner to monitor and adjust a client’s



course of treatment would constitute the use of VR technologies within a telehealth service delivery model. Occupational therapy practitioners can use a telehealth service delivery model with VR technologies when conducting evaluations and providing interventions. A remote console telerehabilitation system (ReCon, Rutgers University, Rutgers, NJ) incorporating VR technology provides occupational therapy practitioners with three-dimensional representations of the client's movements, VR-based exercise progress, and motor performance updates (Lewis, Boian, Burdea, & Deutsch, 2005; Lewis, Deutsch, & Burdea, 2006). Telehealth combined with virtual reality has been used to provide feedback and information remotely as part of occupational therapy intervention (Merians et al., 2002), to distract people from physical pain, and to improve their adherence to therapeutic exercises (Hoffman, Patterson, & Carrouger, 2000).

Further, VR provided through telehealth technologies is effective in enabling people to compare the difference between their desired level of occupational engagement and their current functional status after a stroke (Brewer, Fagan, Klatzky, & Matsuoka, 2005; Merians et al., 2002; Rand, Katz, & Weiss, 2009; Rand, Weiss, & Katz, 2009), using virtual environments as part of the assessment and training of users of power wheelchairs (Harrison, Derwent, Enticknap, Rose, & Attree, 2002), and evaluating and determining home accessibility using three-dimensional construction of the architectural features of the environment (Kim & Brienza, 2006; Kim, Brienza, Lynch, Cooper, & Boninger, 2008).

Low-cost video capture gaming systems (e.g., Nintendo Wii, Sony Playstation's EyeToy and MOVE, XBOX-360 Kinect) were not developed specifically for rehabilitation, but they offer an easy-to-set up, fun, and less expensive alternative to the expensive VR systems (Rand, Kizony, & Weiss, 2008). Although typical use of gaming systems does not constitute telehealth, live data (synchronous) streamed to a remote occupational therapy practitioner or recorded data (asynchronous) used by an occupational therapy practitioner to monitor and adjust a client's course of treatment would constitute a telehealth application of the devices.

**Table A1. Telehealth Technologies**

Technology Type	Examples	Considerations
Synchronous	<ul style="list-style-type: none"> <li>• Voice over Internet protocol software</li> <li>• Mobile videoconferencing</li> <li>• Consumer high-definition television videoconferencing</li> <li>• "Plain old telephone service"</li> <li>• Videoconferencing</li> <li>• Telehealth network with commercial videoconferencing system</li> <li>• Virtual reality (VR) technologies (with live-streaming data to remote practitioner)</li> </ul>	<ul style="list-style-type: none"> <li>• Confidentiality (security, privacy)</li> <li>• Integrity (information protected from changes by unauthorized users)</li> <li>• Availability (information, services)</li> <li>• Cost-benefit ratio</li> <li>• Socioeconomic considerations</li> <li>• Leveraging existing infrastructure (equipment and personnel)</li> <li>• Technology connection requirements (e.g., broadband,</li> </ul>

Asynchronous	<ul style="list-style-type: none"> <li>• Video recording devices</li> <li>• Cameras (photographs)</li> <li>• Devices enabling electronic communication</li> <li>• Virtual reality technologies (with store-and-forward data to remote practitioner)</li> </ul>	T1 line) <ul style="list-style-type: none"> <li>• Sound and image quality</li> <li>• Equipment accessibility</li> <li>• Provider and end-user comfort, experience, and expertise with technology</li> </ul>
Synchronous (interactive) or asynchronous (store-and-forward data)	<ul style="list-style-type: none"> <li>• Telemonitoring technologies               <ul style="list-style-type: none"> <li>– Home monitoring systems/devices</li> <li>– Wireless sensors</li> </ul> </li> <li>• VR technologies               <ul style="list-style-type: none"> <li>– Remote use of VR systems/devices</li> </ul> </li> </ul>	
<p>Note. From “Telerehabilitation: An adjunct service delivery model for early intervention services, by J. Cason, 2011, <i>International Journal of Telerehabilitation</i>, 3(1), p. 24. <a href="http://dx.doi.org/10.5195/ijt.2011.6071">http://dx.doi.org/10.5195/ijt.2011.6071</a> Copyright © 2011 by Jana Cason. Adapted with permission.</p>		

## Appendix B. Glossary

**asynchronous**—A method of exchanging health information whereby the provider and patient or client are not connected at the same time; commonly referred to as “store-and-forward” data transmission and may include video clips, digital photographs, virtual technologies, and other forms of electronic communications.

**eHealth**—A broad term encompassing health-related information and educational resources (e.g., health literacy Web sites and repositories, videos, blogs), commercial “products” (e.g., apps), and direct services delivered electronically (often through the Internet) by professionals, nonprofessionals, businesses, or consumers. May also be written as e-Health or E-Health; sometimes used interchangeably with *health informatics*.

**haptic technology**—A tactile feedback technology that takes advantage of a user’s sense of touch by applying forces, vibrations, or motions upon the user.

**health informatics**—Use of information technologies for health care data collection, storage, and analysis to enhance health care decisions and improve quality and efficiency of health care services.

**mHealth**—The delivery of health-related information and services using mobile communication technology (e.g., smartphone, electronic tablet, or other mobile devices).

**modifier**—A modifier used in conjunction with a *Current Procedural Terminology*, (American Medical Association, 2011) code to identify the type of technology used within a telehealth service delivery model. GT is the most common modifier; it indicates use of interactive audio

and video telecommunications technology. The GQ modifier designates the use of asynchronous technologies; reimbursement for this modifier is limited.

**privacy officer**—A position or office that responds to concerns over the use of personal information, including medical data and financial information. It ensures adherence to regulations but is not limited to legislation concerning the protection of patient medical records (e.g., Health Insurance Portability and Accountability Act of 1996, Pub. L. 104–191).

**protocol**—A written document specifying standard operating policies and procedures for application of telehealth technologies in delivering services.

**synchronous**—A method of exchanging health information in real time (i.e., live) between the patient or client and a health care provider located at a distant site.

**telehealth**—The application of evaluative, consultative, preventative, and therapeutic services delivered through telecommunication and information technologies.

**telehealth technologies**—The hardware and software used in delivering services remotely by means of a telehealth service delivery model.

**telemedicine** – Medical services delivered through communication and information technologies.

**telerehabilitation**—The application of telecommunication and information technologies for the delivery of rehabilitation services.

**virtual reality**—A computer-simulated environment of the real world; can be coupled with telehealth technologies as part of a telehealth service delivery model.

## **Appendix C. Applications of Telehealth Within Occupational Therapy Practice Areas**

### **Children and Youth**

Evidence supports the use of a telehealth service delivery model to deliver appropriate early intervention and school-based services effectively and efficiently. Early intervention (EI) services, mandated by Part C of the Individuals With Disabilities Education Act (IDEA; Pub. L. 105–117), are designed to promote development of skills and enhance the quality of life of infants and toddlers who have been identified as having a disability or developmental delay (Cason, 2011). Telehealth technology supports delivery of early intervention services (Cason, 2009, 2011; Heimerl & Rasch, 2009; Kelso, Fiechtl, Olsen, & Rule, 2009).

Similarly, evidence supports the use of telehealth for the delivery of occupational therapy services within the school setting for evaluation and intervention (Gallagher, 2004) as well as for reintegration of students with traumatic injury following acute rehabilitation (Verburg, Borthwick, Bennett, & Rumney, 2003). Telehealth may be used within school-based interprofessional team models for wellness programming, including efforts to combat the obesity

epidemic among children and for programming targeting prevention of violence among youth (Cason, 2012b). School-based occupational therapy services focus on helping children with disabilities participate in and, thus, benefit from the instructional program.

In addition to what has been stated, telehealth technology may provide another avenue for the occupational therapy practitioner to observe the child's level of participation in a school setting without risk of altering the setting by being physically present. This unobtrusive observation strategy can allow the occupational therapy practitioner to consult with the teacher and offer strategies to alter the child's level of participation (e.g., strategies to facilitate a child's use of self-regulation skills, encourage appropriate interaction with peers, or facilitate the child's physical participation in an instructional activity).

The potential benefit of this observation strategy is to ensure the maintenance of the day-to-day integrity of the classroom while providing the practitioner with an understanding of the specific sensory, cognitive, physical, and emotional demands placed on the child in the setting. This technology may also provide the ability to record observations that contribute to the therapist's data collection during evaluation; this information can then be used as a baseline from which to support IEP teams in developing goals and objectives and measuring progress in the child's level of participation in the setting. In rural or large urban school districts, this technology can assist the occupational therapy practitioner with more efficiently supporting multiple campuses that may be located across large distances, thereby facilitating the interprofessional team process as well as reducing costs incurred to allow a practitioner the time and transportation resources to support multiple campuses.

### **Productive Aging**

The growing number of older adults in the United States creates opportunities for occupational therapy practitioners to use telehealth to promote health and wellness, prevention, and productive aging while reducing health care costs. The use of telerehabilitation to remotely monitor and provide self-management strategies to older adults who are chronically ill and living in their homes has been found to decrease hospitalizations and nursing home stays (Bendixen, Levy, Olive, Kobb, & Mann, 2009). Interactive videoconferencing technologies promote health and aging in place among older adults (Bendixen, Horn, & Levy, 2007; Harada et al., 2010; Hori, Kubota, Kihara, Takahashi, & Kinoshita, 2009). The use of home monitoring devices such as *self-monitoring analysis and reporting technology* (SMART) enable occupational therapy practitioners to remotely monitor clients' occupational performance and provide recommendations for environmental modifications and interventions to support occupational performance (Mann & Milton, 2005).

### **Health and Wellness**

Telehealth also supports health and wellness and prevention programming through assessment and management of obesity (Neubeck et al., 2009) and chronic diseases such as diabetes mellitus, congestive heart failure, and hypertension (Darkins et al., 2008; Steel, Cox, & Garry, 2011).

### **Mental Health**

Opportunities exist for occupational therapy practitioners to use telehealth to promote participation and psychological and social functioning for clients within the home, at work, and in the community through engagement in meaningful occupations. Research demonstrates efficacy of telehealth as a delivery model for psychological and behavioral interventions among individuals with posttraumatic stress disorder (PTSD) and other mental health issues (Germain, Marchand, Bouchard, Drouin, & Guay, 2009; Gros, Yoder, Tuerk, Lozano, & Acierno, 2011).

### **Rehabilitation, Disability, and Participation**

In the practice area of rehabilitation, disability, and participation, the use of a telehealth service delivery model promotes occupational performance, adaptation, participation, and quality of life for clients with polytrauma, neurological, and orthopedic conditions. Telehealth provides remote access to occupational therapy services through assessment of physical function and goal setting, integration of individualized exercise interventions, training in adaptive strategies such as environmental modifications and energy conservation, and consultation on durable medical and adaptive equipment (Chumbler et al., 2010; Sanford et al., 2007).

Published studies support the use of telehealth in improving functional outcomes with individuals with stroke (Chumbler et al., 2010; Hermann et al., 2010), survivors of breast cancer (Hegel et al., 2011), veterans with polytrauma (Bendixen et al., 2008), and individuals with traumatic brain injury (Diamond et al., 2003; Forducey et al., 2003; Girard, 2007; Verburg et al., 2003). Additional studies have used a telehealth service delivery model to evaluate activities of daily living and hand function in individuals with Parkinson's disease (Hoffman, Russell, Thompson, Vincent, & Nelson, 2008) and other neurological impairments (Savard et al., 2003). Seating experts used telehealth to provide remote wheelchair prescription and consultation to individuals with neurological and orthopedic conditions (Barlow et al., 2009; Schein et al., 2010; Schein et al., 2011). In addition to positive clinical outcomes, evidence indicates a high level of practitioner and client satisfaction associated with a telehealth service delivery model (Kairy, Lehouz, Vincent, & Visintin, 2009; Steel et al., 2011).

### **Work and Industry**

Schmeler, Schein, McCue, and Betz (2009) detailed the use of assistive technology via a telehealth service delivery model for clinical and vocational applications. Telehealth is also being used to support work through remote assessment and analysis of work spaces. Bruce and Sanford (2006) described using teleconferencing to complete remote assessments and discussed the need for a highly structured and comprehensive assessment tool to be able to complete remote assessments.

Backman, Village, and Lacaille (2008) developed the Ergonomic Assessment Tool for Arthritis (EATA) to evaluate the workplace for people with arthritis. The EATA was designed so that the worker could gather the data for the assessment without an expert visiting the work place. Pilot testing of the method indicated that workers could successfully gather the necessary information for appropriate intervention identification (Baker & Jacobs, 2013). Baker and Jacobs (2010) developed a systematic two-step program, the Telerehabilitation Computer Ergonomics System (*tele-CES*). This systematic program will allow ergonomically trained health professionals to (1) remotely assess the computer workstation and (2) on basis of the assessment, generate explicit,

participant-specific workstation modification recommendations. The recommendations will be easily implemented; reduce pain, discomfort, and fatigue; and eliminate barriers to productivity.

### Appendix D. Telehealth Case Examples

Case Description	Use of Telehealth	Outcome
<p><b>Lisa</b> is a 70-year-old woman who has difficulty performing her daily occupations because of a stroke resulting in right-sided weakness. Although she had learned compensatory techniques for completing activities of daily living (ADLs), instrumental ADLs, and work, she still wants to increase the use of her right hand, particularly for tasks related to managing her farm. Lisa learned of a program in a nearby community using new technology that might be beneficial for people with hemiparesis; however, the clinic is 2 hours from her home.</p>	<p>Lisa meets with her occupational therapist in a clinic for the initial evaluation. During the evaluation, Lisa learns additional strategies for incorporating the use of her right hand to perform her farm work. She is fitted for a functional electrical stimulation orthosis that she can use at home once it is programmed in the clinic. Twice each week, Lisa meets with her occupational therapist by computer, using a Web camera and online video software. As Lisa continues to make progress, the occupational therapist instructs her in how to more effectively use her right hand for completion of ADLs and farm chores.</p>	<p>Lisa is able to make functional gains in using her right hand for everyday occupations. She reports that she is able to rely less on compensatory strategies and use her right hand more easily, especially while completing ADLs. Lisa achieved these outcomes with only two trips to the clinic and without therapist travel.</p>
<p><b>Josh</b> is a 35-year-old administrative assistant working at an urban university. He has been employed in this position for 5 years. Recently, he began experiencing discomfort in his neck, shoulder, and back areas. He reported this discomfort, which he associated with computer work, to his immediate supervisor.</p>	<p>Josh scheduled an appointment with an occupational therapist who had expertise in ergonomic workstation evaluation. During his initial contact with the occupational therapist, he requested that because of his busy schedule, he would prefer to have his evaluation conducted through telehealth technology. The occupational therapist asked Josh to have photographs taken of him while working at his office computer workstation. The occupational therapist</p>	<p>Explicit workstation modification recommendations were provided by the occupational therapist by means of a telephone consultation with Josh. The recommendations included raising the notebook computer so that his head was not positioned in flexion or extension and that the monitor was about arm's length away (closed fist) and using a keyboard and mouse as input devices. An adjustable</p>

	<p>requested that the photographs be from multiple angles and then e-mailed to a secure platform, where the therapist would be able to review them. In addition, Josh was asked to keep a time log for a week into which he would input information on his activities along with when he experienced discomfort. A telephone consultation was arranged, during which the occupational therapist reviewed findings from the photographs along with the time log. Josh reported on the time log that he sat at his computer workstation 100% of the time during the work day. During this time, he multitasked by using a hand-held telephone while keying. It was observed from the photographs that Josh was using a notebook computer, which placed him in an awkward posture for computing.</p>	<p>keyboard tray was recommended for the keyboard and mouse. On the basis of data from the time log, the occupational therapist encouraged Josh to change his work behaviors by taking regular stretch breaks every 20 minutes. A second telephone consultation occurred within 2 weeks. Josh reported that his supervisor ordered the external notebook computer accessories and that this new workstation arrangement had reduced his discomfort.</p>
<p><b>Angela</b> is a 10-year-old girl with a complicated medical history that includes spina bifida. She is significantly limited in her ability to be mobile in the home and community. Although she uses a basic power wheelchair to drive around town and attend her family activities, it is in poor condition and too small for her. Angela cannot adequately reposition herself or properly perform a weight shift because of decreased upper-extremity strength and range of motion.</p>	<p>Angela has trouble traveling and sitting for long distances. She and her mother meet with an occupational therapy generalist in person at a nearby clinic. Concurrently, an occupational therapist who has expertise in wheeled mobility participates in an occupational therapy session remotely using a videoconferencing system. The remote occupational therapist provides consultation to the local occupational therapist, Angela, and her mother about seating system frames, bases, and accessories; policy implications and funding mechanisms; and wheeled mobility and seating</p>	<p>After interviewing Angela and her mother and observing Angela navigate in her current chair, the remote occupational therapist recommends the appropriate power wheelchair and power seat functions. Upon approval from the insurance company, the remote occupational therapist uses the videoconferencing system to monitor the delivery, evaluate the fitting, and provide feedback and advice to Angela about use of the wheelchair within the community and home. Angela has benefited from services without the need to travel a</p>

	options.	long distance. The local practitioner gained additional knowledge about wheeled mobility and seating options.
<p><b>Ethan</b> is a 55-year-old self-employed entrepreneur who has severe depression, anxiety, and isolation after head and neck cancer resection surgery. The surgery left one side of his face disfigured. He plans to have reconstruction surgery in the future. Meanwhile, Ethan has difficulties with eating, fatigue, facial-body image, depression, and pain. He lives alone and over 50 minutes away from the hospital/outpatient therapy clinic. Ethan was seen by an occupational therapist in the hospital and prescribed outpatient occupational therapy for his physical and mental impairments. Due to travel distance to the outpatient therapy clinic and anxiety associated with being seen in public, Ethan is interested in the option to continue his therapy at home through secure videoconferencing technology.</p>	<p>Ethan completed a telehealth participation screening and initial occupational therapy evaluation during his hospital stay. It was determined that he would continue with occupational therapy twice a week via telehealth using secure videoconferencing software and a Web cam within his home environment. During the biweekly occupational therapy sessions delivered via telehealth technologies, focus is on establishing a therapeutic wellness plan and implementing compensatory eating techniques, pain management and relaxation techniques, stress management, and engagement in progressive physical activities. Ethan completes a home program and a daily journal sent to him by his occupational therapist through electronic communications technology.</p>	<p>Ethan is able to manage his physical and mental impairments and is able to leave his house to purchase groceries and complete other errands in his community. His pain is tolerable, and breathing and stamina have improved to allow 20–30 minutes of physical activity after 6 weeks of occupational therapy delivered through telehealth technologies. Ethan continues his daily journaling. The occupational therapist will follow up with Ethan via telehealth technologies weekly until reconstruction surgery and again after surgery to make sure Ethan continues his wellness plan.</p>



March 28, 2013

13 APR -2 PM 2: 22

Jeff Hanson  
CA Board of Occupational Therapy  
2005 Evergreen Street, Ste. 2050  
Sacramento, CA 95815

Re: Title 16, Division 39, Article 8 – addition of sec. 4172 Standards of Practice for Telehealth.

Dear Mr. Hanson,

CCHP is a non-profit, non-partisan policy research, planning and technical support organization working to advance health care system utilization of telehealth technologies. We provided the technical assistance to both the author and sponsors of AB 415, the Telehealth Advancement Act of 2011 as well as being responsible for the list of recommendations that became the contents of the bill. After reviewing the proposed regulation, we wish to offer the following comments for the record.

#### Section 4172(b) Informed Consent

The proposed language in section (b) requires occupational therapists to obtain informed consent and document that consent in the patient record. Current law now only requires the need to obtain oral consent from the patient prior to a telehealth delivered service taking place. The practitioner is required to record in the patient record that this has occurred. The lack of any reference back to the requirements in the proposed regulations to Business and Professions Code 2290.5 (save for the definition of “telehealth”), renders this proposed language unclear as to whether the informed consent should be oral or written. Any intent of the Board for it to be written, would be in conflict with current California law. Additionally, the only informed consent the Board currently requires of occupational therapists is when research activities are taking place. In those cases the therapist needs only to “indicate in the medical record that they have fully informed the client of potential risks and outcomes.” (California Board of Occupational Therapy Regulations Section 4170(c)(2). Requiring a higher level of informed consent for telehealth delivered services seems inappropriate and disproportionate given the original legislation.

We would further suggest that the language clarify the nature of the informed consent or include language that the informed consent must be obtained in the manner cited in Business and Professions Code 2290.5(b).

#### Section 4172(b) - Release of Records – Patient Consent

The proposed language requires the occupational therapists to obtain consent from the patient for the release of his/her health records. CCHP finds several aspects of this proposed language to be potentially problematic.

Lack of reason given for a release – The proposed regulations do not cite a reason as to why a patient would need to sign a consent form to release their records. This lack of specificity appears to be in conflict with California Civil Code Section 56.11 which states that an authorization for the release of medical information shall be valid if it, “States the specific uses and limitations on the types of medical information to be disclosed;” and “States the specific uses and limitations on the use of the medical information by the persons or entities authorized to receive the medical information.” (California Civil Code Section 56.11(d) & (g)).

Currently existing solutions - Currently, California Civil Code Section 56.11 appears to offer the Board avenues to obtain these records without this additional need for patient consent. Section 56.11 specifically references entities listed in California Civil Code Sections 56.10 (b) or (c) as exempt. Specifically, a provider of health care services may provide information without patient authorization “if the disclosure is compelled by any of the following...By a board, commission or administrative agency for purposes of adjudication pursuant to its lawful authority...or pursuant to an investigative subpoena...” (California Civil Code Sections 56.10(b)(2) & (4)). “The information in the possession of a provider of health care or health care service plan may be reviewed by a private or public body responsible for licensing or accrediting the provider of health care or health care service plan. However, no patient-identifying medical information may be removed from the premises except as expressly permitted or required elsewhere by law, nor shall that information be further disclosed by the recipient in a way that would violate this part.” (California Civil Code Section 56.10(c)(5)).

Ethical Dilemma - Additionally, an occupational therapist will be put into the position of denying a patient services unless that patient signs a records release form. If that patient has no access to any other occupational therapist, the patient will be forced to sign the release form or go without treatment. This could put the occupational therapists into somewhat of an ethical dilemma especially since there is no firm reason as to why a patient must sign the consent form.

Due to the lack of specificity as to why a patient would need to release their records and the sufficient avenues that currently exist in law for the Board to obtain patient records in carrying out the Board’s duties, CCHP recommends that this provision be removed.

#### Section 4172(c) – Board Access to Other Records

Section (c) of the proposed regulations state, “All records, including but not limited to, patient consent statements, medical, billing and employee records must be provided to the Board upon requests.” We have concerns about this language as well.

The proposed regulations go beyond the scope of the “telehealth delivered service” by requiring occupational therapists to provide the Board with *any* information requested. Such a sweeping requirement places the occupational therapist in potential violation of other laws as these records might contain sensitive information that they are obligated to protect. For example, HIPAA violations would occur should the requested records involve other patients who may not have consented to release their information and Civil Code violations in providing employee records that will have protected information such as Social Security numbers.

Additionally, this information would be accessible to the Board regardless of whether a complaint has been filed against an occupational therapist. On its face, this proposed regulation appears to circumvent the established Administrative hearing rights of occupational therapists. The Board would have access to any records the occupational therapist keeps. Beyond Administrative hearing rights, this potentially could be a violation of the occupational therapist's basic constitutional rights.

Beyond the potential legal violations, CCHP is perplexed as to why this information should be readily accessible to the Board when a service is delivered via telehealth when such requirements are not made on services delivered in person. Why would records related to a service delivered via telehealth not be as accessible using the currently employed process by the Board for services delivered in person?

Due to potential violations of other laws, the lack of reasoning as to why the Board would need such intrusive powers, and the potential circumvention of an occupational therapist's rights, CCHP recommends removal of this language.

In summary, when the California Legislature passed AB 415 and it was signed by Governor Brown in October 2011, it carried with it intent language that stated, "It is the intent of the Legislature to create a **parity** of telehealth with other health care delivery modes, **to actively promote telehealth** as a tool to advance stakeholders' goals regarding health status and health system improvement, and to create opportunities and flexibility for telehealth to be used in new models of care and system improvements." (Emphasis added.) These proposed regulations run counter to what the Legislature and the Governor hoped to achieve with AB 415. Additionally, they pose potentially serious concerns around violations to patients', employees', and the occupational therapist's rights.

Thank you for the opportunity to offer comments on the proposed regulations. CCHP urges you avoid any language that will deter occupational therapists from utilizing telehealth as a useful tool for delivering services.

Respectfully,



Mario Gutierrez  
Executive Director

# go<sub>2</sub>CARE

March 14, 2013

VIA EMAIL to [cbot@dca.ca.gov](mailto:cbot@dca.ca.gov)

Heather Martin

California Board of Occupational Therapy

2005 Evergreen Street, Suite 2050

Sacramento, CA 95815

RE: Modified Notice of Availability; Proposed Regulations for Standards of Practice for Telehealth

Dear Heather and Board Members,

I would like to extend my appreciation for the opportunity to comment on recent modification of language of the proposed regulations for standards of practice in telehealth. I appreciate the goal and vision of the Board to protect consumer interests. It is also a provision of the Board to promote the interests of the consumer. I, as a licensed provider also have the duty to advocate for appropriate health care for my patients.

I appeared before the Board 4 years ago, before the passing of AB 415, AB 1733 and several other related telehealth related bills. I advocated the idea of opening up the practice act so the words, "telehealth" or "telecommunication technologies" could exist within the scope of practice because occupational therapy was not included in any telemedicine provider lists and third party payers suggested they would not reimburse for services provided through technology despite the already growing field of literature highlighting the benefits of telehealth. The Board agreed and before the Board was able to find an author for proposed modifications, key legislative bills were passed that legislated the rights of consumers to receive both real time, interactive or store and forward communications (or services). Healing art professionals were included on legislated provider list and third party payers were mandated to pay for billable services with some exceptions. State legislation had given occupational therapy the provisions required to provide clinical and non clinical services on behalf of consumers. In addition, as a member of the OTAC advisory committee to OPTUM (United Health Care), I sat with stakeholders who committed to following the new legislation. There was no longer a need to open up our practice act. However, the Board felt there was a need to write regulatory standards. I appreciated the efforts of the Board to reach out to OTAC and AOTA to assist in creating a deliberated and carefully crafted regulatory draft with provisions guided by industry standards and experts. Last October, a task force was given the duty to recommend and propose changes, if needed to the regulatory draft under the duty to promote consumer interests and protection. The modifications to the standards of telehealth appear to be well intended; however, I have grave concerns about the modified language and ask the Board for further clarifications and additional provisional investigation.

As an expert, educator, published author, advisor, consultant and provider of telehealth services, I would like to share my two major areas of concern. They are:

- The need for further exploration of existing telehealth legislation in the state of California and the general provisions given to the Board by the Department of Consumer Affairs to assure compliance with current legislative statutes with regards to the informed consent and exposure to certain medical and administrative documentation. In addition, to examine existing associations and industry standards and guidelines to arrive at consumer focused principles and advocacy language.

My concern is that the task force did not have enough time to “gather, study, and analyze matters affecting the interest of the consumer, and to maintain contact and liaison with consumer groups”. (Business and Professions code section 310 -313.5). A caveat to AB 415, passed in 2011, was very clearly defined terms and qualifications of what constitutes telehealth. AB 415 reflected current practice standards and was generally accepted as proficient. However, a year later, AB 1733 was passed to clarify and remove barriers to care and to promote education and self management of consumers. And now, AB 809 has been introduced to remove another barrier to care, the requirement of the informed consent. Stakeholders in telehealth have recognized that the requirement of the informed consent and medical record is only appropriate for traditional clinical services and DOES NOT take into account the many other models of care services or education that falls outside of the traditional medical model. In occupational therapy, there are several examples of when an informed consent and medical record are not necessarily required or present or where agency-specific policies and procedures govern the informed consent and consumer records. These services can be performed through technology and include but are not limited to:

- Home modification assessments (of the environment)
- Community prevention and wellness programs
- Employee wellness programs
- Assisted living centers therapy wellness programs
- Concierge care services
- Various consultant services
- Onsite ergonomic assessments/interventions of work space
- Therapists led consumer/parent support groups
- Therapists working as claim reviewers or legal experts
- Therapists working in a school system or related Dept of Education services
- Therapists working in/for manufacturers of therapeutic products
- Therapists as educators and educational instructors (online)
- Therapists working in the military health system

Furthermore, the Department of Human and Health Services created and implemented HITECH, (Health Information Technology for Economic and Clinical Health) to provide additional privacy and security guidelines to all entities, agencies, and individuals to promote consumer protection. Those federal laws, along with HIPAA, constitute higher standards and would imply any legal governance in telehealth. Therefore, it doesn't seem plausible to formulate restrictive regulatory language that is neither reflective of current legislation nor compliant with federal and state privacy laws and ultimately take the rights of consent and privacy away from the consumer.

- Secondly, I would ask the Board to reconsider the professional qualifications and considerations regarding the application of various types of services through telehealth technologies. The suggested language appears to require the local presence of providers to the consumer and ask for specific ethical behaviors over and beyond current standards and guidelines already found in present scope of practice and in existing industry standards.

To assist the Board, there are several professional educational guidance documents in telehealth. Key papers include the following:

- AOTA Telehealth Position Paper (2010 and pending 2013)
- ATA Blueprints for Telerehabilitation, American Telemedicine Association
- Telerehabilitation Opportunities in Occupational Therapy. Authors: Jana Cason and Tammy Richmond 2012 Copyright. Springer Publishing.
- Resolving Barriers to Licensure Portability for Telerehabilitation Professionals. ATA Telerehabilitation Special Interest Group (SIG).
- AOTA Affordable Care Act: FACT SHEET: Telehealth in Occupational Therapy. AOTA Telehealth Committee. 2010
- 2012 AOTA Annual Conference: Telehealth and Occupational Therapy Fact Sheet and Resource Guide. AOTA Telehealth Committee

In addition, last fall, AOTA adopted new ACOTE standards requiring students to learn about the use of technology to support performance, participation, and health and well-being. Several telehealth online courses are now available and last year over 27 educational sessions in telehealth or technology were presented at the AOTA National Conference and several more presented at the OTAC conference.

Furthermore, provisional language in 415, along with the federally passed Affordable Care Act, developed by industry and policy stakeholders and supported by evidence based studies, advocates the basic premise of delivering services through telehealth technologies:

- The need to reduce costs, improve quality, change the conditions of practice, and improve access to health care
- The need to remove barriers of care by socioeconomic disparities, geographic isolation, lack of health care providers and specialists, and the need to educate the consumer on health and self management of health

Therefore, the requirements of the modified language standards in regards to the prescription of local or onsite therapy and professional and ethical practice qualifications should be reconsidered.

To conclude, as a provider of telehealth services, I would like to share a couple of stories of real life telehealth application.

- ❖ *Nell, a 62 year old woman in good health, happily married with two grown daughters and three grandkids suffers a sudden stroke due to genetically inherited tendency of her body to form blood clots. She suffers mild physical impairments but extensive expressive aphasia. Nell experiences depression and isolation from the embarrassment of losing her ability to speak. Her activities of*

*daily living are compromised by executive functioning impairments. Her cardiologist refers her to me, an Occupational therapist. During my in person evaluation, Nell expresses her great interest in using the personal computer for communication since she can easily write her thoughts although she cannot express them well. Telehealth is a way for Nell to work on her impairments in her home, within the context of the environment where she feels safe, free to express herself without judgment and work diligently on recovering her lost functions. She can write to her kids and grandkids and have videoconferencing sessions with me if she chooses. Or, she can decide that she would like to see me in person. Once she is discharged from Occupational Therapy services, Nell chooses to continue her wellness by participating in a post-rehab wellness program. There, she can continue using technology to journal her exercise program, her thoughts and goals. Nell, today, is still receiving life coaching once a month. She has the choice of an in person or secure, videoconferencing session. More importantly, Nell is no longer depressed and has completely recovered from her expressive aphasia and executive functioning impairments. She and her husband have just made plans to travel to Argentina, a place that is on their bucket list.*

- ❖ *Becky, a 40 year old young woman, with three young kids and husband suffers a cavernous malformation, a rare occurring malformation of the arteries in her medulla. She is taken to the operating room and survives. She suffers extensive brain injury and is basically starting over from talking to walking. She lives in a very rural area and there is no occupational therapist specializing in neurological disorders. The closest local occupational therapist is in another county many miles away. Her husband feels abandoned and alone. I hear about Becky and offer to see her through secure, videoconferencing technology. Her impairments require that a family member assist during our sessions. Becky is initially aphasic and physically unable to write. I begin, what is now over a year of telehealth sessions. Becky can now walk with assistance and can speak fluently and fairly clearly. She now assists in grocery shopping, cooking, homework, school activities, uses the iPad and iPhone, participates in daily family and community activities. She and her husband will tell you the telehealth was the single most important factor in improving the quality of her life.*

Thank you for the opportunity to comment on the proposed modified regulations on standards in telehealth. I am available for additional comments and inquiries and welcome the chance to share my knowledge and experiences in telehealth.

Regards,

Tammy Richmond, MS, OTR/L, FAOTA  
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CEO, Go 2 Care, Inc.  
COO, Ultimate Rehab, LLC  
President, Hands 4 Health  
Ad Hoc Chair of Telehealth, OTAC  
Telehealth Committee member, AOTA  
Nominating Committee and member, ATA Telerehabilitation SIG  
OTAC Advisory Committee member to OPTUM (United Health Care)  
Adjunct Professor, USC Dept of Occupational Therapy  
Expert Witness, Occupational Therapy practice and management

# USC Division of Occupational Science and Occupational Therapy

March 8, 2013

To: CA Board of Occupational Therapy

Re: Proposed modifications to CCR Sections 4172 in Division 39, Title 16

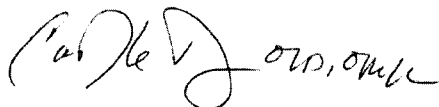
At the USC Occupational Therapy Faculty Practice we recently began telehealth treatment with patients working on various wellness goals such as weight and diabetes management, pain management and stress management. Patients are grateful for the opportunity to receive their care via this method because distance and transportation often exacerbates their conditions that bring them to OT in the first place.

I would like to comment on two parts of the proposed modifications. 1) Under 4172 c – it would be a violation of patient and employee privacy and HIPPA for CBOT to have access to all records without subpoena. I recommend changing this text to include that these records must be available upon request with subpoena. 2) Under (1) - It is unreasonable to require an on-site occupational therapist. Many patients seeking treatment through telehealth will not have access to specialty occupational therapists in their area. For example, at the USC Occupational Therapy Faculty Practice, we have many specialty skills/services, like chronic pain management, that a local occupational therapist in a given community would not have. It would be impossible to have a local OT available for this service outside of Los Angeles. It is also critical that the patient have the right to choose their provider and refuse any assigned provider, like a local OT. I recommend that this language be removed.

The proposed text is intrusive to the consumer and limits their ability to receive occupational therapy services via telehealth.

Thank you,

Camille Dieterle, OTD, OTR/L



Director, USC Occupational Therapy Faculty Practice

Assistant Professor, USC Division of Occupational Science and Occupational Therapy

