THE VIRGINIA BOARD OF HEALTH PROFESSIONS
THE VIRGINIA DEPARTMENT OF HEALTH PROFESSIONS

Study into the Need to Regulate Kinesiotherapists in the Commonwealth of Virginia

September 2010

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Table of Contents

EXECUTIVE SUMMARY ..... **i**
Background & Authroity i
Major Findings of the Study i
Recommendation iii
BACKGROUND AND AUTHORITY **1**
Scope of the Study 1
Methodology 2
OVERVIEW OF THE PROFESSION **2**
Professional Organization 2
Previous Studies 3
OVERLAPPING SCOPE OF PRACTICE **4**
Rehabilitation Therapy 5
Comparison of Kinesiotherapy & Physical Therapy 8
Definitions of Therapy Professions in the Code of Virginia 12
Exercise Science 13
CREDENTIALS **16**
EDUCATION **17**
OTHER REGULATION **17**
United States 17
Canada 17
ECONOMIC IMPACT **18**
Barriers to Practice 18
Supply & Demand in Rehabilitation Therapy 21
Reimbursement 21
Effects of Regulation 22
RISK OF HARM **23**
Characteristics of Patients Served 23
Practices Inherent to the Occupation 23
Setting 26
POLICY OPTIONS **27**
RECOMMENDATION **29**
Appendix A 30
Appendix B 31
Appendix C 38

EXECUTIVE SUMMARY

Background & Authority

Pursuant to the letter from the Clerk of the Senate to the Director of the Department of Health Professions, dated March 24, 2010 and provided in Appendix A, the Department undertook a review of the subject matter contained in Senate Bills 573 and 727. This study was conducted by the Board of Health Professions on behalf of the Department.

Major Findings of the Study

1. Kinesiotherapists work as therapeutic exercise specialists, alongside physical and occupational therapists, within the Veterans Health Administration.

Kinesiotherapists provide sub-acute or post-acute rehabilitative therapy focusing on therapeutic exercise, reconditioning and physical education. Kinesiotherapists emphasize the psychological as well as physical benefits of therapeutic exercise for rehabilitative patients. They have provided these services within the military and veterans health systems since World War II.

2. Rehabilitation therapy is a crowded professional field, involving a multitude of regulated and unregulated professions with particular specialties.

The American Medical Association recognizes exercise physiologists, exercise scientists, personal fitness trainers, therapeutic recreation specialists, athletic trainers, dance/movement therapists, orthotists & prosthetists, physical therapists and occupational therapists within their *Health Care Careers Directory.* Virginia currently regulates physical therapists, occupational therapists and athletic trainers. Various unregulated professions, including kinesiotherapists, have sought regulation from time to time.

3. Kinesiotherapists share overlapping duties, methods and modalities with physical therapists, occupational therapists and athletic trainers.

Despite having a particular focus, kinesiotherapists share their scope of practice with other regulated professionals. Physical therapists and athletic trainers provide therapeutic exercise. Occupational therapists and physical therapists provide work conditioning. Other evaluations, methods and modalities of kinesiotherapists are also performed by occupational therapists, physical therapists or athletic trainers.

4. Kinesiotherapists successfully provide a wide range of therapeutic services and evaluations to patients with often complex or serious conditions but only within the Veterans Health Administration.

Within the Veterans Health Administration (VHA), kinesiotherapists work with rehabilitative patients with a variety of conditions, including acute rehabilitation patients, those with chronic injuries and within the spinal cord and polytraumatic brain injury section. While most job openings within the VHA called for a specific occupation, some job openings for rehabilitation

positions, including supervisory positions, accepted physical therapists, occupational therapists or kinesiotherapists interchangeably. Public comment from physicians, patients, medical administrators and veteran's organizations commended the work of kinesiotherapists within the Veterans Health Administration.

5. Federal and state regulations may make it difficult for kinesiotherapists to practice to their full scope of practice outside of the federal system.

Regulatory barriers include Centers for Medicare & Medicaid Systems restrictions on providers, state practice acts for physical and occupational therapists, and regulations related to the practice of physical and occupational therapy. CMS regulations limit providers to using physical and occupational therapists, or physical and occupational therapy assistants to provide rehabilitation therapy. Virginia statute and regulations may cause a reasonable person to be wary of practicing kinesiotherapy in Virginia, or a reasonable employer to be wary of hiring a kinesiotherapist to provide rehabilitation services; however, they do not explicitly restrict the practice of kinesiotherapy. Regulations may make it difficult for physical or occupational therapists to hire kinesiotherapists or to work with them as part of a rehabilitation team.

6. No other state regulated kinesiotherapists.

No other state regulates kinesiotherapists. Their ability to practice outside of the federal system in Virginia is analogous to other states.

7. The number of kinesiotherapists practicing in Virginia is small and the number practicing outside of the Veterans Health System may be smaller.

The American Kinesiotherapy Association (AKTA) reported that there are 37 Registered Kinesiotherapists in Virginia. The AKTA estimates that only 20 percent of kinesiotherapists pursue credentials or employment in their field. Most of these work in the Veteran's Health Administration or within a limited scope of practice outside of that setting. Virginia's kinesiotherapy programs, including the closed program at Virginia Commonwealth University and the existing program at Norfolk State University, have graduated 250 kinesiotherapists since 1989.

8. National employment in the rehabilitation therapy field is growing faster than employment in other health occupations.

The US Bureau of Labor Statistics projects employment for occupational and physical therapists and occupational and physical therapy assistants to grow by about 30 percent between 2008 and 2018. Employment growth in the health occupations is projected to grow by about 21 percent, while employment in the US economy is expected to grow by about 10 percent.

9. There is no demonstrated risk of harm from the practice of kinesiotherapy and the potential for harm is unclear.

There are no reports of harm caused by kinesiotherapists. Kinesiotherapists share some modalities with regulated rehabilitation therapists; however, these regulated therapists perform other tasks and duties which may pose a greater risk to patients than that posed by kinesiotherapists.

Recommendation

At its September 29, 2010 meeting, the Regulatory Research Committee recommended against regulating kinesiotherapists. This recommendation was adopted by the full Board of Health Professions at its meeting the same day. During discussion, Committee and Board members noted the following points:

- There is no demonstrated risk of harm from the practice of kinesiotherapy.
- Kinesiotherapists do not have unique modalities that distinguish them from regulated professions.
- The number of kinesiotherapists in the Commonwealth is low.
- No other state regulates kinesiotherapists.

BACKGROUND AND AUTHORITY

Pursuant to the letter from the Senate Clerk Susan Clarke Schaar to the Director of the Department of Health Professions, dated March 24, 2010 and provided in Appendix A, the Department undertook a review of the subject matter contained in Senate Bills 573 and 727. Per Ms. Schaar's letter, the Senate Committee on Education and Health proffered the request pursuant to Rule 20 (1) of the Rules of the Senate of Virginia which states:

> *A Committee may refer the subject matter of a bill or resolution to any agency, board, commission, council, or other governmental or nongovernmental entity for comment, but the bill or resolution shall remain with the committee. . .*

Section 54.1-2510 of the *Code of Virginia* assigns certain powers and duties to the Board of Health Professions. Among them are the power and duty:

7. To advise the Governor, the General Assembly and the Director on matters relating to the regulation or deregulation of health care professions and occupations;

12. To examine scope of practice conflicts involving regulated and unregulated professions and advise the health regulatory boards and the General Assembly of the nature and degree of such conflicts;

Pursuant to these powers and duties, the Director requested that the Board of Health Professions through its Regulatory Research Committee conduct this sunrise review into the need to regulate kinesiotherapists in the Commonwealth of Virginia.

Scope of the Study

The primary focus of this study was to determine the need for Virginia to regulate kinesiotherapists. To conduct such studies, the Board of Health Professions references seven criteria (hereafter, the Criteria), enumerated in its 1998 *Policies and Procedures for the Evaluation of the Need to Regulate Health Occupations and Professions.* These Criteria are:

(1) Risk of Harm to the Consumer
(2) Specialized Skills and Training
(3) Autonomous Practice
(4) Scope of Practice
(5) Economic Impact
(6) Alternatives to Regulation
(7) Least Restrictive Regulation

Information on the application of these professions is available in the *Policies and Procedures Manual* on the Board of Health Professions website:
http://www.dhp.virginia.gov/bhp/

Methodology

The following methods were used to gather and organize information on kinesiotherapists and related professions and determine the proper regulatory structure:

- ◊ Review the literature on kinesiotherapists and related professions.
- ◊ Review relevant state laws and regulations.
- ◊ Review malpractice insurance data, if it is found to exist.
- ◊ Review reimbursement data, and cost of education/credentialing data.
- ◊ Review data on the current workforce.
- ◊ Prepare a draft report to the Board for public comment.
- ◊ Hold one or more Public Hearings on this issue, and review all public comment received.
- ◊ Prepare a draft report incorporating any recommendations.
- ◊ If required by the Department Director and Secretary, amend the report and prepare a final report for their approval.

OVERVIEW OF THE PROFESSION

Following a prescription from a licensed practitioner, kinesiotherapists provide rehabilitative exercise and education to patients. These therapeutic exercises enhance the strength, mobility and endurance of functionally limited patients, or those requiring long-term reconditioning following an injury, illness or other condition. Kinesiotherapists emphasize the psychological as well as physical value of therapeutic exercises. Developed during World War II, kinesiotherapists originally helped wounded or sick soldiers return to their units quickly and at full functionality following long periods of bed rest. Kinesiotherapists have practiced mainly within the military and the Veterans Administration, though some have branched into civilian practice. In addition to reconditioning following injury or illness, kinesiotherapy is suited to ameliorate the effects and risks associated with chronic and congenital conditions.

Professional Organization

The American Kinesiotherapy Association (AKTA) is the only national organization representing Kinesiotherapists. The AKTA publishes a newsletter for members, *Mobility*, and a peer-reviewed journal, *Clinical Kinesiology*. The AKTA also holds an annual conference. Their 2007 conference was held in Richmond, Virginia. Since 2008, the AKTA has held its annual conference in conjunction with the Medical Fitness Association (MFA) Annual Conference. The MFA represents the interests of and upholds standards for medically integrated fitness centers. Only Registered Kinesiotherapists may become Registered Members of the AKTA. Other membership categories are available for students or recent members of accredited kinesiotherapy education programs and for associate members in affiliated roles.

The Council on Professional Standards for Kinesiotherapy (COPS-KT) is the standard setting organization for Registered Kinesiotherapists (RKT). The Council as a whole sets standards for Registered Kinesiotherapists. COPS-KT consists of three Boards:

1) The Board of Registration: Administers the Registration examination.
2) The Continuing Competency Board: Administers continuing competency programs.
3) Committee on Accreditation of Kinesiotherapy Programs: Administers accreditation of kinesiotherapy educational program, and is a Committee on Accreditation of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

The COP-KT has developed a detailed Scope of Practice for Kinesiotherapy, along with extensive Standards of Practice. The Scope of Practice document includes the following definition of kinesiotherapy. The full Scope of Practice, along with the Standards of Practice, appears in Appendix B.

> *KINESIOTHERAPY: Kinesiotherapy is the application of scientifically based exercise principles adapted to enhance the strength, endurance, and mobility of individuals with functional limitations or those requiring extended physical conditioning. An RKT can administer treatment only upon receipt of a prescription from qualified physicians, nurse practitioners and/or physician's assistants who have been privileged to make such referrals.*
>
> *The Kinesiotherapist is a health care professional competent in the administration of musculoskeletal, neurological, ergonomic, biomechanical, psychosocial, and task specific functional tests and measures. The Kinesiotherapist determines the appropriate evaluation tools and interventions necessary to establish, in collaboration with the client and physician, a goal specific treatment plan.*
>
> *The intervention process includes the development and implementation of a treatment plan, assessment of progress toward goals, modification as necessary to achieve goals and outcomes, and client education. The foundation of clinician-client rapport is based on education, instruction, demonstration and mentoring of therapeutic techniques and behaviors to restore, maintain and improve overall functional abilities.*

Previous Studies

In 1982, the Virginia Council of Health Regulatory Boards (now the Board of Health Professions) studied the need to regulate both occupational therapy and corrective therapy. Physical therapy was already regulated. The Council recommended licensure for occupational therapy and urged physical therapists, occupational therapists and corrective therapists to differentiate their scopes of practice. At the time, the Council had not developed criteria for determining the need to regulate professions, and recommendations were withdrawn or defeated in the General Assembly in favor of legislation requiring the Council to develop adequate criteria.

Armed with newly developed Criteria, the Council took up reviews of occupational therapy and athletic training and recommended against regulation. In 1986, the Council undertook a comprehensive study of “therapy professions.” This review included activity

coordinators; art, dance and music therapists; athletic trainers; corrective therapists (kinesiotherapists); massage therapists; occupational therapists; orientation and mobility specialists; orthotists, prosthetists and recreational therapists. The Council recommended against regulating any of these professions. However, this study evolved into a comprehensive review of allied health professions, in which corrective therapists participated. No regulation resulted from this study, either.

Since that broad review, the Council (later, the Board of Health Professions) has reviewed many of the "therapy professions" individually. Art therapists, orthotists, and prosthetists were reviewed but not recommended for regulation. Athletic trainers, massage therapists, and occupational therapists are all currently licensed. In 2003, the Board of Physical Therapy released Guidance Document 112-6 "Board Guidance on licensure of kinesiotherapists as physical therapists." This Guidance Document was readopted in 2007. The text of the document states:

> ***Request for interpretation:***
>
> *The Board received an inquiry regarding the licensure of kinesiotherapists as physical therapists. The Board stated that kinesiotherapy requires a different curriculum and those graduates cannot be licensed as physical therapists.*

Kinesiotherapists (formerly corrective therapists) requested a new review by the Board of Health Professions in the summer of 2009. Subsequent to the Board's next meeting in November 2009, Senate Bills 573 and 727 were introduced by Senators Patricia S. Ticer and Yvonne B. Miller, respectively, regarding the licensure of kinesiotherapists. The Board deferred further study until the General Assembly had an opportunity to address the matter. As indicated earlier, pursuant to Senate Rule 20(L), the issue was referred to the Department of Health Professions, hence the Board's further current review.

OVERLAPPING SCOPE OF PRACTICE

Kinesiotherapists share a crowded professional space. The "rehabilitation therapy" field is replete with varying professions that share overlapping scopes of practice and modalities. The American Medical Association recognizes exercise physiologists, exercise scientists, personal fitness trainers, therapeutic recreation specialists, athletic trainers, dance/movement therapists, orthotists, prosthetists, physical therapists and occupational therapists within their Health Care Careers directory.[1] These rehabilitation therapists compete with adaptive and corrective physical educators, therapeutic horticulturalists, driver rehabilitation specialists, assistive technology professionals, manual arts therapists, hydrotherapists, orientation and mobility specialists, lymphedema therapists and others.

Although these professions share many characteristics, most focus their Scopes of Practice on specific modalities or conditions within the rehabilitative field. Kinesiotherapists, for

[1] American Medical Association. Health Care Careers Directory 2009-2010. http://www.ama-assn.org/ama/pub/education-careers/careers-health-care.shtml

instance, focus on “sub-acute” reconditioning through exercise—returning persons to full strength following rehabilitation of an acute injury. Table 1 displays the focus of several related professions currently regulated in Virginia. Despite this focus practices often overlap.

Kinesiotherapy	Physical Therapy	Occupational Therapy	Athletic Trainers
Reconditioning following illness or injury, or to cope with ongoing conditions	Rehabilitation of specific acute injuries	Increased functionality in daily life and work	Conditioning and training to prevent injuries and first aid for acute injuries

Table 1: The professional focus of kinesiotherapy, physical therapy, occupational therapy and athletic trainers.

Rehabilitation Therapy

Kinesiotherapists are primarily employed within the military and Veteran’s Administration health systems within Physical and Rehabilitation Medicine Departments and Units. Kinesiotherapists share this professional space with physical therapists, occupational therapists, recreational therapists, psychiatrists and related physicians, nurses and other allied health specialists. The Military Health System and Veteran’s Administration Health System are often at the forefront in developing new models of health care, particularly during times of war. These systems must often cope with rapid increases in the volume of cases, often involving conditions or complexities which are not common during times of peace. They meet these challenges in a results-oriented culture fettered only by federal and internal controls. The military has played a particularly prominent role in the professional organization of the rehabilitative therapy professionals.[2]

The kinesiotherapist profession has its roots in the shortage of physical therapist recruits available during World War II. The military turned to physical educators to provide exercise therapy (physical educators also filled “reconstruction aide” units in World War II. Reconstruction Aides evolved into physical therapists in the interwar period.) They initially worked with psychiatric patients but expanded to treat the war wounded by the end of the war.[3]

During the Vietnam War, another shortage led to an expanded role for physical therapists. Orthopedic surgeons were overwhelmed with a long waiting list of patients with nonsurgical musculoskeletal (NMS) problems. The Army adjusted the triage protocols for NMS complaints by providing patients with direct access to physical therapists. Physical therapists provided evaluation, diagnosis and treatment for NMS complaints—and provided referrals to orthopedic surgeons, radiologists or other specialists. This change in military practice also

[2] Flood, Katherine M. “Physiatry: Interdisciplinary Management”. *Rehabilitation of the Injured Combatant, Vol 2.* Ed. Praxedes V. Belandres & Timothy R. Dillingham. Borden Institute, Walter Reed Army Medical Center. Washington D.C. 1999. pg. 830.

[3] See Flood, Katherine M. “Physiatry: Interdisciplinary Management”. *Rehabilitation of the Injured Combatant, Vol 2.* . Ed. Praxedes V. Belandres & Timothy R. Dillingham. Borden Institute, Walter Reed Army Medical Center. Washington D.C. 1999. pp 829-844 and Gritzer, Glenn & Arnold Arluke. *The Making of Rehabilitation: A Political Economy of Medical Specialization, 1890-1980.* University of California Press. Berkeley. 1985. pp 71 & 115-118.

changed physical therapy education and practice in the civilian sector.[4] Today, 45 states and the District of Columbia provide some direct access by patients to physical therapists, including 16 states with no restrictions to access by patients, for diagnosis, treatment, and referral. In Virginia, physical therapists may treat a patient for 14 days (with some restrictions) before seeking a referral from a licensed physician.[5]

Physical Therapy education has likewise evolved to meet the demands of direct access. The Commission on Accreditation for Physical Therapy Education (CAPTE) stopped accrediting new baccalaureate programs in 2002, and will only accredit doctoral programs beginning in 2015. The APTA lists four main reasons for the transition: (1) the breadth and depth of education required for patient/client management model, (2) societal expectations regarding fully autonomous healthcare practitioners (3) realization of the profession's goals including direct access, "physician status" and evidence-based practice, and (4) the fact that many existing Master's level programs already offer doctorate level education. An informal survey conducted by the APTA noted that Doctor of Physical Therapy programs augment content existing in current master's level programs to meet these needs:

> ". . .augmented content areas include, among others, health systems screening and differential diagnosis, pharmacology, radiology/imaging, health care management, prevention/wellness/health promotion, histology, pathology, and evidence-based practice."[6]

Within the Veteran's Administration, kinesiotherapists act as core and independent members of rehabilitation teams alongside physical therapists and occupational therapists. Job descriptions for advertised positions within the Department of Veteran's Affairs list major duties including:

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[4] Greathouse, David G, Jane Sweekney & Ann Ritchie Hartwick. "Physical Therapy in a Wartime Environment." *Rehabilitation of the Injured Combatant, Vol 1.* . Ed. Praxedes V. Belandres & Timothy R. Dillingham. Borden Institute, Walter Reed Army Medical Center. Washington D.C. 1998

[5] American Physical Therapy Association. See "Direct Access Resources" webpage: http://www.apta.org/AM/Template.cfm?Section=Top_Issues2&TEMPLATE=/CM/HTMLDisplay.cfm&CONTENTID=73240. accessed August 30 2010.

[6] American Physical Therapy Association. "Doctor of Physical Therapy (DPT) Degree Frequently Asked Questions". APTA Website. Accessed August 30, 2010. http://www.apta.org/AM/Template.cfm?Section=Clinical&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=48048.

• Recognize appropriate prosthetics for patients • Adapt or modify prosthetics without supervision or review • Highly specialized complex evaluations and diagnostic tests • Assess patients having diverse and multiple disabilities • Recommend assistive devices • Employ unusual motivational techniques • Administration and management of rehabilitation services in the home	• Independently assess behavioral and emotional status of patients with severe or multiple diagnoses and apply appropriate treatment • Independently administer physical tests • Change treatment intervention based on patient response using creative thinking and problems solving that goes beyond typical diagnoses-based treatment pathways • Coordinate the overall treatment plan with the patient, family and caregivers[7]

Kinesiotherapists, occupational therapists and physical therapists often share overlapping roles within the Veterans Health Administration. A recent job opening with the Jack C. Montgomery VA Medical Center in Muskogee, Oklahoma (Job Announcement Number 09-184-RF) requested an occupational therapist *or* kinesiotherapist to serve as part of an interdisciplinary home-based primary care team serving "an aging veteran population with complex chronic disabling disease." A 2007 job announcement (T38H-08-381-DR) called for a "Kinesiotherapist (Clinical Manager)" to serve as the Supervisory Clinical Manager of Physical Medicine & Rehabilitation within the Portland VA Medical Center. This position could be filled by a kinesiotherapist, physical therapist or occupational therapist. This position managed clinical supervisors of inpatient physical and occupational therapists and was responsible for all out-patient clinical activities—including direct supervision of physical and occupational therapists.

Profession	Full Performance Level	Licensure	Certification	Education	Experience
Kinesiotherapist	GS-10	No	No	Bachelors Degree	1-2 years experience
Physical Therapist	GS-11	Yes	No	Doctoral Degree	Or Equivalent
Occupational Therapist	GS-11	Yes	Yes	Doctoral Degree	Or Equivalent

Table 2: Current VHA Full Performance Levels and Qualification Standards

Within the Veterans Health Administration, Full Performance Levels for individual practitioners are associated with General Schedule (GS) pay bands or grade levels. As the name suggests, practitioners at these grade levels practice at the full scope of their professions (journeymen), while practitioners at lower grade levels are considered trainees and/or require additional supervision in core tasks. Practitioners at Full Performance levels may be the only member of his profession serving at a clinic or on a multidisciplinary or specialized medical

[7] Search of USAjobs.gov for "kinesiotherapist" positions made throughout August, 2010. Older announcements, including the 2007 Clinical Manager opening, were discovered during the normal research process and were also surveyed by staff.

team, or may train or supervise practitioners at lower levels. The Full Performance Level for kinesiotherapists is the GS-10 grade level. Performance at this level requires a bachelor's degree in kinesiotherapy including clinical training and up to two years of training and experience at lower (GS-7 and GS-9) grade levels. As recently as 2009, Full Performance Level for physical therapists and occupational therapists was at the GS-9 grade level. In February of 2009, however, the Full Performance Level for both of these occupations was raised to the GS-11 grade level. This was in keeping with raised qualifications within these professions, including raising the lowest degree level for accredited programs from the baccalaureate level to the masters.

Profession	Full Performance Level Prior to Feb. 2009	Basic Pay-January 2009	Basic Qualifications	Full Performance Level After Feb. 2009	Basic Pay--2010	Basic Qualifications
Kinesiotherapist	GS-10	$45,095 to $58,622	Bachelor's plus Experience	GS-10	$45,771 to $59,505	Bachelor's plus Experience
Physical Therapist	GS-9	$40,949 to $53,234	Masters	GS-11	$50,287 to $65,371	Doctorate
Occupational Therapist	GS-9	$40,949 to $53,234	Masters	GS-11	$50,287 to $65,371	Doctorate

Table 3: VHA Full Performance Level changes. Basic qualifications are for general comparison only. Sources: USA Jobs InfoCenter (http://www.usajobs.gov/infocenter/); VA Handbook 5005 Part II & updates (Transmittal sheet 5005/17, 5005/24 & 5005/25).

Comparison of Kinesiotherapy & Physical Therapy

Kinesiotherapists share many modalities with physical therapists, yet there are distinct differences in their Scopes of Practice and educational programs. Table 4, next page, compares the physical therapy scope of practice to the kinesiotherapy scope of practice. Table 4 uses the physical therapist scope of practice, listed on the American Physical Therapy Association website, as a reference. The roles and tasks listed appear in the first column. The second column lists whether these tasks are performed by kinesiotherapists. Two documents provided by the American Kinesiotherapy Association were used to make this determination: (1) The Standards of Practice for Kinesiotherapy and, (2) the AKTA Guidelines for Documentation. The AKTA Guidelines for Documentation provides documentation guidelines for Kinesiotherapists using Current Procedural Terminology (CPT) codes. To ensure understanding by non-clinicians, the second document was used to ensure understanding by all of the Standards of Practice. The source used to determine if a particular task or role appears in the third column, where "SOP" refers to Standards of Practice and "GFD" refers to Guidelines for Documentation, with corresponding line or page numbers, respectively.

Physical Therapist Scope of Practice	Performed by KTs	Source
1) examining (history, system review and tests and measures) individuals with impairment, functional limitation, and disability or other health-related conditions in order to determine a diagnosis, prognosis, and intervention; tests and measures may include the following:		
• aerobic capacity/endurance	Yes	SOP 4.16
• anthropometric characteristics	Yes	GFD 14
• arousal, attention, and cognition	Yes	SOP 4.24, 4.27, 4.27
• assistive and adaptive devices	Yes	SOP 4.4; GFD 15, 20, 33
• circulation (arterial, venous, lymphatic)		
• cranial and peripheral nerve integrity	Sensory deficits	SOP 4.14
• environmental, home, and work (job/school/play) barriers	Yes	SOP 4.22, GFD 15
• ergonomics and body mechanics	Yes	SOP 6.13, 6.14; GFD 15
• gait, locomotion, and balance	Yes	SOP 4.12, 4.14; GFD 16
• integumentary integrity	Yes	GFD 16
• joint integrity and mobility	Yes	SOP 4.12, 4.15; GFD 16
• motor function (motor control and motor learning)	Yes	SOP 4.13; GFD 16
• muscle performance (including strength, power, and endurance)	Yes	SOP 4.11; GFD 16
• neuromotor development and sensory integration	Yes	SOP 4.14, GFD 16
• orthotic, protective, and supportive devices	With specific training	SOP 4.3 (with specific training); GFD 17
• pain	Yes	GFD 17, GFD 57 to 59
• posture	Yes	SOP 4.12; GFD 17
• prosthetic requirements		
• range of motion (including muscle length)	Yes	SOP 4.15; GFD 17
• reflex integrity	Yes	SOP 4.13, GFD 17
• self-care and home management (including activities of daily living and instrumental activities of daily living)	Related to kinesiotherapy treatments	SOP 4.23, 6.1; (related to kinesiotherapy treatment)
• sensory integrity	Yes	SOP 4.14; GFD 16
• ventilation, and respiration/gas exchange	Yes	SOP 4.16; GFD 17
• work (job/school/play), community, leisure integration or reintegration (including instrumental activities of daily living)	Driver Training Only	GFD 32 (Driver Training Only)
2) alleviating impairment and functional limitation by designing, implementing, and modifying therapeutic interventions that include, but are not limited to:		
• coordination, communication and documentation	Yes	SOP 2, 3 & 7; GFD 46
• patient/client-related instruction	Yes	SOP 6; GFD 45
• therapeutic exercise	Yes	SOP 5
• functional training in self-care and home management (including activities of daily living and instrumental activities of daily living)	Related to kinesiotherapy treatments	SOP 6.14; GFD 42, 45
• functional training in work (job/school/play) and community and leisure integration or reintegration activities (including instrumental activities of daily living, work hardening, and work conditioning)	Driver training & Work hardening/conditioning	SOP 5.18, 6.14; GFD 32 (driver training only) 43, 44

• manual therapy techniques (including mobilization/manipulation)		
• prescription, application, and, as appropriate, fabrication of devices and equipment (assistive, adaptive, orthotic, protective, supportive, and prosthetic)		
• airway clearance techniques		
• integumentary repair and protection techniques	Protection techniques	GFD 16 (protection techniques)
• electrotherapeutic modalities		
• physical agents and mechanical modalities		
3) preventing injury, impairment, functional limitation, and disability, including the promotion and maintenance of health, wellness, fitness, and quality of life in all age populations		
4) engaging in consultation, education, and research		

Table 4: Comparison of Physical Therapy and Kinesiotherapy Scopes of Practice

Kinesiotherapists perform many of the same evaluations and interventions as physical therapists. Their activities associated with activities of daily living, home self-care and work/community integration tend to be related specifically to driver rehabilitation or kinesiotherapy interventions specifically, or to work conditioning. Kinesiotherapists require specific training to assess orthotic and other devices, and neither the SOP nor GFD indicate the evaluation methodology. As noted above, however, job descriptions for kinesiotherapist positions have included some elements of these tasks. Additionally, kinesiotherapists do not employ some of the adjustment techniques or the electrotherapeutic and physical modalities of physical therapists. Lastly, kinesiotherapists only provide these techniques under prescription from a licensed practitioner authorized to prescribe and employ evaluations under prescription to develop prescribed treatments.

Kinesiotherapy educational programs reflect this scope of practice. The accredited kinesiotherapy baccalaureate program offered by Norfolk State University (NSU) was compared to the accredited physical therapy master's program offered by Winston-Salem State University in North Carolina. These programs were chosen because they represent the minimum accredited educational requirement within their respective professions and due to their location within or in proximity to Virginia. Readers should keep in mind that 96 percent of physical therapy programs are doctoral level programs and that these programs may not be representative of other programs. As demonstrated in Table 5, NSU's kinesiotherapy students receive significantly more training in therapeutic exercise, kinesiology, exercise science and nutrition than WSSU physical therapy students. WSSU's physical therapy students receive additional training in anatomy, musculoskeletal systems, neuroscience and pathology, while also receiving training in the areas of pharmacology, diagnoses and physical agents.

Winston-Salem State University (MPT)	Semester Hours	Semester Hours	**Norfolk State Bachelor KT**
Prerequisites			**Undergraduate Courses**
General Psychology	3	3	General Psychology
Behavioral Science	6	6	Abnormal Psychology & Psychology of Human Growth & Development
Statistics	3	*1.5*	Research Methods & Statistics
Chemistry I & II	8	4	Chemistry I
Physics I & II	8	4	Physics I
Anatomy & Physiology I & II	8	8	Anatomy & Physiology I&II
Biology I & Advanced Biology	7-8	4	Biology I
Graduate Courses			
Professional Issues	1		
Basic Skills	3		
Psychosocial Aspects of Physical therapy	2	3	Physiology Psychology
Gross Anatomy & Embryology Lecture & Lab	8	3	Anatomical Kinesiology
Applied Physiology	4	4	Exercise Physiology & lab
Kinesiology Lecture & Lab	3	6	Clinical Kinesiology
Human Neuroscience Lecture & Lab	4	*1.5*	Neurological & Pathological Foundations in Exercise Science
Musculoskeletal Lecture & Lab	7	3	Biomechanics of Human Motion
Therapeutic Exercise	1	10	Therapeutic Exercises & Sports I& II, Adapted Physical Education, and Therapeutic Modalities
Pharmacology	2		
Physical Agents Lecture & Lab	3		
Acute Care	2	5	First Aid and Care & Prevention of Athletic Injuries
Lifespan Development	2	2	Clinical Aspects of

			Aging
Pathology	3	*1.5*	Neurological & Pathological Foundations in Exercise Science
Research	7	*1.5*	Research Methods & Statistics
Clinical Education Seminar	1		
Clinical Internship	25	12	Clinical Internships*
Integumentary Management	3		
Health Care Systems	2	3	Personal & Community Health
Cardiopulmonary Rehabilitation	2		Clinical Internship*
Neuromuscular Lecture & Lab	8	3	Motor Learning
Prosthetics & Orthotics	1		
Differential Diagnosis	3		
Management & Administration	3	3	Organization & Administration in Exercise Science
		3	Introduction to Exercise Science
		3	Swimming
		3	Medical Terminology
		3	Nutrition for the Life Cycle
			*Clinical internships includes 1000 hours associated with specific classes: 200 hours orthopedics 100 hours pediatrics 100 hours psychiatry 100 hours Geriatric 200 hours Cardiac 200 hours Specialization

Table 5: A Comparison of Winston-Salem State University MPT prerequisites and graduate curriculum to Norfolk State University's Kinesiotherapy program undergraduate curriculum.

Definitions of Therapy Professions in the Code of Virginia

The Code of Virginia includes the following definitions

§ 54.1-3473. Definitions.

"Practice of physical therapy" means that branch of the healing arts that is concerned with, upon medical referral and direction, the evaluation, testing, treatment, reeducation and rehabilitation by physical, mechanical or electronic measures and procedures of individuals who, because of trauma, disease or birth defect, present physical and emotional disorders. The practice of physical therapy also includes the administration, interpretation, documentation, and evaluation of tests and measurements of bodily functions and structures within the scope of practice of the physical therapist. However, the practice of physical therapy does not include the medical diagnosis of disease or injury, the use of Roentgen rays and radium for diagnostic or therapeutic purposes or the use of electricity for shock therapy and surgical purposes including cauterization.

§ 54.1-2900. Definitions

"Practice of athletic training" means the prevention, recognition, evaluation, and treatment of injuries or conditions related to athletic or recreational activity that requires physical skill and utilizes strength, power, endurance, speed, flexibility, range of motion or agility or a substantially similar injury or condition resulting from occupational activity immediately upon the onset of such injury or condition; and subsequent treatment and rehabilitation of such injuries or conditions under the direction of a licensed physical therapist and the patient's physician or under the direction of any doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry, while using heat, light, sound, cold, electricity, exercise or mechanical or other devices.

"Practice of occupational therapy" means the evaluation, analysis, assessment, and delivery of education and training in activities of daily living (ADL); the design, fabrication, and application of orthoses (splints); guidance in the selection and use of adaptive equipment; therapeutic activities to enhance functional performance; prevocational evaluation and training; and consultation concerning the adaptation of physical environments for individuals who have disabilities.

The core role of kinesiotherapists—therapeutic exercise—is not explicitly listed in these definitions. However, it seems likely that therapeutic exercise would fall under "therapeutic activities to enhance functional performance" in the definition of "Practice of Occupational Therapy". Additionally, many of the associated evaluations, tests, assessments, modalities and educational activities within the kinesiotherapists scope of practice may also fall within these definitions.

Exercise Science

The kinesiotherapy profession has often stressed its background in physical education and exercise science. Kinesiotherapy degree programs often exists as a specific track within kinesiology, exercise science or physical education departments. Kinesiotherapists use therapeutic exercise as a treatment modality for sub-acute and, increasingly, chronic conditions. Other exercise professionals use science-based exercise techniques to ameliorate health risks by improving overall fitness, but not as a therapeutic modality. Examples include personal trainers, exercise science professionals, and applied exercise physiologists. Clinical exercise physiologists work with physicians to provide therapeutic exercise to persons with chronic metabolic conditions. The following job descriptions appear on the CAAHEP's website.[8] Note that descriptions for personal trainers emphasize work with apparently healthy individuals, while exercise science expands this to those with controlled conditions. Exercise physiologists may work with teams of these professionals to provide therapeutic care but with an emphasis on cardiac rehabilitation and other pulmonary or metabolic conditions.

> ***Exercise Physiology***
>
> *Occupational/Job Description*
>
> *Exercise Physiology is a discipline that includes clinical exercise physiology and applied exercise physiology. Applied Exercise Physiologists manage programs to assess, design, and implement individual and group exercise and fitness programs for apparently healthy individuals and individuals with controlled disease. Clinical Exercise Physiologists work under the direction of a physician in the application of physical activity and behavioral interventions in clinical situations where they have been scientifically proven to provide therapeutic or functional benefit.*
>
> *Employment Characteristics*
>
> *As a clinical part of the health and wellness team, Exercise Physiologists can work with Personal Fitness Trainers, Exercise Science Professionals, and physicians in cardiac rehabilitation, typically in a hospital or clinical setting. Exercise Physiologists work with clients who have been diagnosed with a chronic metabolic, pulmonary, or cardiac disease.*
>
> ***Exercise Science***
>
> *Occupational/Job Description*
>
> *Exercise Science encompasses a wide variety of disciplines including, but not limited to: Biomechanics, Sports Nutrition, Sport Psychology, Motor Control/Development, and Exercise Physiology. The study of these disciplines is integrated into the academic preparation of Exercise Science professionals.*

[8] Accessed April 17, 2010. http://www.caahep.org/Content.aspx?ID=19

Exercise Science professionals work in the health and fitness industry, and are skilled in evaluating health behaviors and risk factors, conducting fitness assessments, writing appropriate exercise prescriptions, and motivating individuals to modify negative health habits and maintain positive lifestyle behaviors for health promotion. They conduct these activities in university, corporate, commercial or community settings where their clients participate in health promotion and fitness-related activities.

Employment Characteristics

As an integral part of the health and wellness team, Exercise Science Professionals can work with Personal Fitness Trainers and Exercise Physiologists in a number of different settings, such as corporate, clinical, community, and commercial fitness and wellness centers. Exercise Science Professionals work with the apparently healthy population and clients with controlled disease, leading and demonstrating these clients in safe and effective methods of exercise. The Exercise Science Professional can also assess risk factors and identify the health status of clients.

Personal Fitness Training

Occupational/Job Description

Personal Fitness Trainers are skilled practitioners who work with a wide variety of client demographics in one-to-one and small group environments. They are familiar with multiple forms of exercise used to improve and maintain health-related components of physical fitness and performance. They are knowledgeable in basic assessment and development of exercise recommendations. In addition, they are proficient in leading and demonstrating safe and effective methods of exercise, and motivating individuals to begin and to continue with healthy behaviors. They consult with and refer to other appropriate allied health professionals when client conditions exceed the personal trainer's education, training, and experiences.

Employment Characteristics

As an integral part of the health and wellness team, Personal Fitness Trainers can work with Exercise Science Professionals and Exercise Physiologists in a number of different settings, such as corporate, clinical, community, and commercial fitness and wellness centers. Personal Fitness Training involves working with the apparently healthy population, leading and demonstrating these clients in safe and effective methods of exercise.

There is evidence, however, that personal trainers and exercise scientists provide therapeutic exercise as well—including rehabilitative therapeutic exercise. For instance, the National Academy of Sports Medicine (NASM) provides a *Corrective Exercise Specialist (CES)*

Advanced Specialization course for "post-rehabilitation and reconditioning of clients with musculoskeletal disorders."[9] The CES course is an online course consisting of 11 modules. It is marketed to athletic trainers, chiropractors, physical therapists, massage therapists and personal trainers. Similarly, the American Council on Exercise (ACE) offers the Advanced Health & Fitness Specialist Certification. Personal trainers with this certification provide post-rehabilitative and special population fitness programming. While both of these programs incorporate post-rehabilitative exercise, the emphasis is on conditions resulting from unhealthy lifestyles, including cardiovascular, pulmonary and metabolic conditions, and musculoskeletal and orthopedic conditions. Again, this creates an emphasis different than that of kinesiotherapists, but modalities and conditions may overlap.

CREDENTIALS

The Board of Registration for Kinesiotherapy (BoR-KT) of the COPS-KT provides the only recognized credential for kinesiotherapists. Persons who meet this Board's eligibility requirements and pass its registration exam are listed on the Registry of Kinesiotherapists and earn the Registered Kinesiotherapist (RKT) credential. Applicants must meet the following eligibility requirements:

- Possess a bachelor's degree from a CAAHEP-accredited kinesiotherapy program, and,
- Complete 1,000 hours of rehabilitation exercise and education verified by a clinical supervisor.[10]

The registration examination consists of two sections: a written examination and an oral practical examination. The written examination consists of 100 multiple choice questions. The oral examination consists of five questions scored by two raters. A 1986 role delineation study performed by COPS-KT forms the basis of the examination. The exams are updated every two to three years. The exam is administered and analyzed by Professional Examination Service.[11]

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[9] National Academy of Sports Medicine. "Corrective Exercise Specialist (CES)" Advertising flyer. http://www.nasm.org/uploadedFiles/NASMORG/objects/downloads/NASM_CES_flyer.pdf. Accessed 04/17/2010.
[10] Council on Professional Standards for Kinesiotherapy. "How to Become a Registered Kinesiotherapist." http://www.akta.org/cops/registration_documents.shtml. Accessed 04/16/2010.
[11] Information on the Registration Exam was provided by the AKTA on request of the Regulatory Research Committee.

The registration examination covers the following content areas:

Biological Sciences
- Anatomy and Physiology
- Neurology
- Pathology
- Growth and Development

Behavioral Sciences
- Psychology
- Pathologies of Abnormal Mental Functioning
- Behavior Modification
- Physiological Psychology

Applied Sciences
- Applied Anatomy
- Exercise Physiology
- Biomechanics/Kinesiology

Clinical Sciences
- Theory and Practice of KT
- Clinical Education
- Clinical Foundations—Program Development/ Implementation
- Aquatic Therapy

Application of Kinesiotherapy
- Extended Care
- Geriatric Care
- Psychiatric Care
- Pediatric Care
- Wellness and Prevention

Oral/Practical Exam
- Patient Evaluation
- Range of Motion Measurement
- Manual Muscle Testing
- Therapeutic Exercise
- Gait and Ambulation Training (Assistive supports)

EDUCATION

The Committee on Accreditation of Education Programs for Kinesiotherapy (CoA-KT) is one of CAAHEP's sixteen Committees on Accreditation. The CAAHEP accredits kinesiotherapy educational programs on the recommendation of the CoA-KT. The accreditation process must meet CAAHEP's standards.

State	School
Virginia	Norfolk State University
California	California State University-Long Beach
California	San Diego State University
Mississippi	University of Southern Mississippi
North Carolina	Shaw University
Ohio	University of Toledo

Table 6: CAAHEP Accredited Kinesotherapy Programs

CAAHEP currently accredits six kinesiotherapy programs (see Table 6). All six programs award baccalaureate degrees. Virginia hosts one accredited program at Norfolk State University. Virginia Commonwealth University previously hosted a kinesiotherapy program; however the program was discontinued in 2004. Accredited programs require general education and science courses as well as professional core courses. Additionally, all programs must include a clinical internship of at least 1,000 hours. Students must work within diverse specialties or clinical settings, including neurology, orthopedics, cardiac, pediatric, psychiatry, geriatric and wellness and fitness programs.

OTHER REGULATION

United States

No other state currently regulates kinesiotherapists.

Canada

In 2007, the Canadian province of Ontario passed the *Health Systems Improvement Act.* Among other actions, the Act establishes a College of Kinesiology and subjected kinesiologists

to regulation under the Ontario Regulated Health Profession Act, 1991 (see Appendix C). This legislation is currently early in the implementation phase, and the College has not yet left the "Transitional Council" phase mandated by the law. The Act provides title protection to kinesiologists but does not assign any controlled acts to kinesiologists. The law defines the scope of practice of kinesiologists as:

> "*The practice of kinesiology is the assessment of human movement and performance and its rehabilitation and management to maintain, rehabilitate, or enhance movement and performance.*"
> From: Ontario Health Systems Improvement Act, 2007, Chapter 10 Kinesiology Act, sec 3.

It is important to note that the act regulates *kinesiologists*-- not kinesiotherapists. In Canada, kinesiologists fill a variety of roles. The Canadian Kinesiology Association lists health promotion, clinical/rehabilitation, ergonomics, health and safety, disability management/case coordination and management/research/administration/health and safety as broad service areas of kinesiologists.[12] When considering the need to regulate kinesiologists, Ontario's Health Professions Regulatory Advisory Council (HPRAC) considered kinesiologists' role in several settings, including:

Insurance	**Long-term care**	**Hospital**	**Community Health Care**
• Independent Assessor • Therapeutic rehabilitation provider • Return to work manager • Case manager • Adjudicator/ adjuster • Medical-legal evaluator	• Walking programs • Individual exercise programs • Group exercise programs • Restorative dining • Physical Therapy support	• Health & Safety Managers • Staff exercise programs • ECG & EMG monitors • Post-operative rehabilitation providers	• Rehabilitation Providers • Exercise Physiologists • Trainers for those with conditions that would benefit from physical activity.

While the legislation does cover kinesiotherapists, it also covers many roles that fall outside of the kinesiotherapists' area of providing therapeutic post-rehabilitative assessment and exercise by prescription. Some of these roles are similar to regulated professions in Virginia, including rehabilitation provider, physical therapist assistant and occupational therapist. Additionally, HPRAC cited the proliferation of kinesiologists in private practice and a growing need for ergonomic assessors as important factors in its support for regulation.[13]

[12] Canadian Kinesiology Alliance Website. "Services Provided by Kinesiologists". http://www.cka.ca/kinesiology_kinesiologistservices.php. Accessed July 28, 2010.
[13] Health Professions Regulatory Advisory Council. *Regulation of Health Professions in Ontario: New Directions.* 2006. pp 192-205.

ECONOMIC IMPACT

Barriers to Practice

It is difficult to estimate the number of kinesiotherapists practicing in Virginia. According to information provided by the AKTA, kinesiotherapy programs at Norfolk State University and Virginia Commonwealth University conferred over 250 degrees since 1989. However, there are only 37 Registered Kinesiotherapists in Virginia. The AKTA contends that only 20 percent of persons with kinesiotherapy degrees pursue credentials or employment in their field. Most of these find employment with the federal government in the Veteran's Administration.

Some commenters believe that a lack of state recognition plays a role in this situation. Licensed practitioners, particularly physical and occupational therapists, dominate the rehabilitative therapy arena of allied health care. Despite having a particular focus, kinesiotherapy shares many modalities and interventions with these licensed rehabilitative professions. Kinesiotherapists may experience "crowd-out" as employers and consumers seeking these services come to expect practitioners to have licenses. In such an environment, kinesiotherapists may have difficulty differentiating themselves from licensed practitioners and in gaining referrals from prescribers.

As noted earlier (see page 10), many of the roles and tasks included within the scope of practice of kinesiotherapists may be considered the practice of physical therapy, occupational therapy and/or athletic training as defined in the *Code of Virginia*. The *Code of Virginia* also prohibits anyone from practicing these professions without a license (§ 54.1-3474, § 54.1-2956.5 & § 54.1-2957.4, respectively). Although the law does not explicitly restrict the practice of kinesiotherapy, "state licensure typically endows a particular occupation or profession with a monopoly in a specified scope of practice".[14] A reasonable person may be wary of practicing kinesiotherapy to the full extent of its scope of practice, or of hiring a kinesiotherapist to practice to the full extent of his scope of practice. This supposition appears to be backed up by public comment. Many kinesiotherapists cite difficulties attaining employment or practicing outside of the federal system, and many physical therapists stated their belief that physical therapists—and only physical therapists—have the proper type and level of education to safely perform some tasks.

Additionally, physical therapy assistants and occupational therapy assistants require a license to practice in Virginia. Kinesiotherapists may not practice in these supportive roles. If they support licensed personnel in the performance of their duties, they must be directly supervised by a licensed therapist or therapist assistant. Regulations and Guidance Documents provide some insight into the requirements of licensed therapists and assistants when working with unlicensed personnel:

[14] Virginia Board of Health Professions. *Policies & Procedures for the Evaluation of the Need to Regulate Health Occupations and Professions*. 1998. Definition of Licensure.

18VAC85-80-111. Supervision of unlicensed occupational therapy personnel.

A. Unlicensed occupational therapy personnel may be supervised by an occupational therapist or an occupational therapy assistant.

B. Unlicensed occupational therapy personnel may be utilized to perform:

1. Nonclient-related tasks including, but not limited to, clerical and maintenance activities and the preparation of the work area and equipment; and

2. Certain routine patient-related tasks that, in the opinion of and under the supervision of an occupational therapist, have no potential to adversely impact the patient or the patient's treatment plan.

18VAC112-20-100. Supervisory responsibilities.

A. A physical therapist shall be fully responsible for any action of persons performing physical therapy functions under the physical therapist's supervision or direction.

B. Support personnel shall only perform routine assigned tasks under the direct supervision of a licensed physical therapist or a licensed physical therapist assistant, who shall only assign those tasks or activities that are nondiscretionary and do not require the exercise of professional judgment.

C. A physical therapist shall provide direct supervision to no more than three individual trainees at any one time.

D. A physical therapist shall provide direct supervision to a student in an approved program who is satisfying clinical educational requirements in physical therapy. A physical therapist or a physical therapist assistant shall provide direct supervision to a student in an approved program for physical therapist assistants.

Guidance Document 112-15
Board of Physical Therapy
Supervision of unlicensed support personnel in any setting

If a Physical Therapist is asked to provide a plan of care and sign off on care provided to patients by unlicensed support personnel (regardless of the title of such personnel) in any setting, then the PT is fully responsible for the actions of the unlicensed support personnel performing PT tasks. The tasks assigned must be under the direct supervision of the PT/PTA, meaning he or she is physically present and immediately available. The tasks assigned must be non-discretionary and can not require the exercise of professional judgment. If the

tasks assigned in the plan of care are to be carried out in such a manner or at a location in which direct supervision from the PT/PTA is not possible, then the PT who developed the plan of care and signed off on the plan of care may be in violation of the regulations governing the practice of physical therapy, specifically §18VAC112-20-10 and §18VAC112-20-100.

Regulations such as these may restrict the ability of kinesiotherapists to practice in the offices of physical therapists or occupational therapists or as a part of multidisciplinary teams or in rehabilitation clinics.

Although restrictions related to state regulation may exacerbate barriers to practice, other factors likely play a significant role as well. Kinesiotherapists have traditionally practiced within the federal medical system, serving mostly military personnel and veterans. They have struggled to establish the profession outside of that realm. Kinesiotherapists share a professionally fragmented rehabilitation and therapeutic exercise field. The American Medical Association recognizes exercise physiologists, exercise scientists, personal fitness trainers, therapeutic recreation specialists, athletic trainers, dance/movement therapists, orthotists & prosthetists, physical therapists and occupational therapists within their Health Care Careers directory. Rather than offering choice, competition among narrowly-defined professions may cause confusion and delay public acceptance. These factors and others likely contribute to difficulties faced by kinesiotherapists within the private health care market.

Occupational Category	Projected Employment Change, 2008-2018
All Occupations	10.12%
Health Practitioners & Technical Occupations	21.35%
Physical Therapists	30.27%
Physical Therapist Assistants & Aides	34.54%
Occupational Therapists	25.60%
Occupational Therapist Assistants and Aides	29.99%
Chiropractors	19.50%
Athletic Trainers	36.95%
Orthotists & Prosthetists	15.48%
Recreational Therapists	14.60%
Recreation & Fitness Workers	29.41%

Table 7: Projected Employment Growth of Select Occupations, 2008-2018.
Source: Bureau of Labor Statistics

Supply & Demand in Rehabilitation Therapy

Demand for rehabilitative services is increasing. The Bureau of Labor Statistics projects that employment for many rehabilitation professions will grow faster than the projected national rate of just over 10 percent between 2008 and 2018 (See Table 7). Of particular note is the strong projected growth in employment of physical therapists, occupational therapists, athletic trainers and their assistants. Employment in all of these regulated professions is projected to grow by 25 to 37 percent. Employment of recreation & fitness workers is also projected to grow by about 30 percent.

This growth is occurring while the physical therapy and occupational therapy professions are raising entry-level education standards from baccalaureate degrees to doctorate degrees. Raised eligibility standards will increase the cost of joining these professions in terms of direct costs, time commitment, and lost wages. This will tend to restrict the supply of these practitioners. More importantly, competition from similar but less educated independent therapists may make it difficult to sustain or increase incomes—incomes necessary to cover increased costs and to attract doctoral students to these professions.

Reimbursement

The Centers for Medicare & Medicaid Services (CMS) places strict restrictions on the types of personnel Certified Providers may use to provide therapy services settings, including physician offices, hospitals, Comprehensive Outpatient Rehabilitation Facilities (CORFs), Rehabilitation Agencies and therapists in private practice. To be certified, providers must only supply therapy services provided by a licensed (if applicable) physical therapist or occupational therapist. Only physical therapist assistants or occupational therapist assistants may assist in providing therapy—however their services are considered unskilled and are not compensated. PTAs and OTAs may not provide skilled services such as evaluations. Furthermore, these persons must be graduates of accredited programs and pass recognized national exams. Other therapists—including other therapists licensed by the state in which they practice (i.e., athletic trainers, recreation therapists)—are not compensated by CMS for therapy services.

The sole exception is for therapy services provided in skilled nursing facilities (SNFs). SNFs must provide therapy services prescribed by a physician; however, they are not compensated for providing these services. Rather, these services (which are differentiated by restorative services provided by nurses or restorative aides) are considered facility services and are covered by prospective payment systems. SNFs may employ any specialized therapy or rehabilitation provider licensed, certified or registered by the state.

Private payers may look to these or other standards when making reimbursement decisions, including facility accreditation and private certifications. It does not appear that state regulation will have a significant impact on reimbursement opportunities for kinesiotherapists from third-party payers-particularly from CMS.

Effects of Regulation

Responding to legislation submitted to the 2010 General Assembly (SB 573), the Department of Planning and Budget (DPB) prepared a Fiscal Impact Statement on creating an independent Board of Kinesiotherapy that would license kinesiotherapists. Relying on the figures provided the AKTA, the DPB assumed that 200 kinesiotherapists would apply for licensure. Using a very conservative estimate of the annual costs associated with an independent licensure Board ($200,000), the DPB determined licensure fees would have to be $1,000 per licensee annually to support a Board. Such a high amount would likely discourage kinesiotherapists from practicing their profession outside of federal employment.

As an alternative, kinesiotherapists could be regulated through an existing regulatory Board, such as the Board of Medicine or Board of Physical Therapy, either in an advisory role or as voting members. Given the same estimate of the number of kinesiotherapists in Virginia, it is assumed that fees associated with regulation would be similar to those incurred by physical therapists (Board of Physical Therapy) and occupational therapists (Board of Medicine). The application and renewal fees for each occupation are as follows:

Physical therapist:
Licensure fee: $140.00

Occupational therapist:
Licensure fee: $130.00

Thus, the cost incurred by kinesiotherapists, if included under an existing regulatory Board, specifically either the Board of Medicine or Board of Physical Therapy, would be approximately $130.00-$140.00 not including examination fee. In 2009, the Department of Health Professions' Finance Department estimated that it would cost approximately $12,030 to regulate 500 individuals with an independent advisory board.

The Criteria instruct the Board of Health Professions to consider whether regulation would restrict the supply of the profession. In this case, however, it is important to consider whether regulation would *increase* the supply of practitioners by removing some of the regulatory barriers to practice noted above. The AKTA contends that only 20 percent of graduates from kinesiotherapist programs pursue credentials or employment in their field. It is likely this number would increase if any real or perceived barriers to practice are removed.

RISK OF HARM

The AKTA reports there are no reports of harm caused by the practice of kinesiotherapists. And, no documented cases of harm were uncovered from other sources.

Characteristics of Patients Served

Within the Veterans Health Administration, kinesiotherapists work with patients suffering from severe and complex injuries, often with compounding conditions. Dr. David Cifu, the National Director of the Veterans Administration's Physical Medicine and Rehabilitation program, in comments provided to the Board, noted that kinesiotherapists care for patients in surgical and specialty care clinics including spinal cord injury, polytraumatic/traumatic brain injury, cardiopulmonary rehabilitation and long-term rehabilitation clinics. Other commenter's noted their service to patients with acute and sub-acute orthopedic and neurological conditions, to paralyzed patients, and for patients assigned to bed rest. Kinesiotherapists sometimes treat patients shortly after they are stable. At the Hunter Holmes McGuire Richmond Veterans Administration Medical Center, kinesiotherapists also provide

services within the nursing home care unit.[15] Handling, testing and exercising these types of patients may pose an additional risk of injury or reinjury.

Practices Inherent to the Occupation

Within the Veterans Health Administration, kinesiotherapists perform in roles similar to physical and occupational therapists. In addition to therapeutic exercise, this includes ambulation training, functional mobility training and transfer (from bed to chair, etc) training for persons. Kinesiotherapists also perform range of motion exercise (passive and active), neuromuscular reeducation and work conditioning exercise. In addition to these interventions, kinesiotherapists perform a number of evaluations and assessments similar to, if not identical to, those performed by occupational therapists, physical therapists and athletic trainers. Additionally, kinesiotherapists develop treatment plans and assess the effectiveness of treatment. This will have a significant impact on outcomes and on speed of recovery.

Regulation of physical therapy in Virginia dates back to the 1950s and occupational therapy to the 1980s—before the current Criteria were adopted. It is difficult to know whether risk of harm was a concern, or whether these professions—as they existed at the time of initial regulation—would meet today's criteria for regulation. Exactly what about the practice of physical and occupational therapy poses a risk of harm to patients and whether or not kinesiotherapists perform those roles or tasks is an open question.

Regulation of athletic trainers is much more recent. In 1999, the Board of Health Professions issued a report[16] examining the profession in relation to the Criteria, and recommended regulation. For this study, the Board performed a structured survey of clinical experts (including physicians, physical therapists and athletic trainers) to determine if uncertified practitioners posed a greater risk of harm than certified practitioners. While this review may provide some insight, readers should keep in mind that the expert panel was considering the practice of athletic trainers in specific settings using training modalities. The results of that survey, by major domain, appear in the following table:

Likelihood of Various Types of Injuries Occurring When Tasks Are Performed by Incompetent vs. Competent Athletic Trainers: By Task Domain and By All Task Domains Combined

Domain	Types of Injuries					
	Minor		Severe		Life Threatening	
	Uncertified	Certified	Uncertified	Certified	Uncertified	Certified
Domain 1: Prevention of Injury Tasks	45%	8%	15%	3%	4%	1%
Domain 2: Recognition, Evaluation and Immediate Care Tasks	54%	8%	27%	3%	8%	1%
Domain 3: Rehabilitation and Reconditioning Tasks	54%	6%	19%	2%	3%	1%
Domain 4: Health Care Administration	33%	4%	12%	2%	1%	1%
Domain 5: Professional Development	27%	5%	6%	1%	1%	1%
ALL DOMAINS	**42%**	**6%**	**16%**	**2%**	**3%**	**1%**

[15] Hunter Holmes McGuire VAMC Website. http://www.richmond.va.gov/services/gec.asp. Accessed Sept. 8, 2010.
[16] Department of Health Professions. *Study of the Regulation of Athletic Trainers.* Senate Document No. 10. 1999. Richmond, Virginia.

The expert panel saw an increased risk of harm in the unregulated practice of athletic training. Of important note is Domain 3: Rehabilitation and Reconditioning Tasks. The expert panel believed that uncertified trainers were 9.5 times more likely to cause severe injury when performing these tasks, and nine times more likely to cause minor injuries. The tasks associated with this domain were:

Domain 3: Rehabilitation and Reconditioning of Athletic Injuries

Task 1. Identify injury/illness status by using standard techniques for evaluator and re-assessment in order to determine appropriate rehabilitation programs.

Task 2. Construct rehabilitation/re-conditioning programs for the injured/ill athlete or physically active individual using standard procedures for therapeutic exercise and modalities in order to restore functional status.

Task 3. Select appropriate rehabilitation equipment, manual techniques, and therapeutic modalities by evaluating the theory and use as defined by accepted standards of care in order to enhance recovery.

Task 4. Administer rehabilitation techniques and procedures to the injured/ill athlete or physically active individual by applying accepted standards of care and protocols in order to enhance recovery.

Task 5. Evaluate the readiness of the injured/ill athlete or physically active individual by assessing functional status in order to ensure a safe return to participation.

Task 6. Educate parents, staff, coaches, athletes, physically active individuals, etc., about the rehabilitation process using direct communication in order to enhance rehabilitation.

All of these tasks are similar to roles and tasks associated with kinesiotherapy. Athletic trainers, however, work with a specific population. This population—often a student population—partakes in high intensity athletic, occupational or recreational programs. A closer look at the expert panel's opinion of risk of injury associated with each task appears in the following table:

Domain 3.
Rehabilitation and Reconditioning Tasks:
Likelihood of the Various Types of Injuries Occurring

TASKS	Incompetent Trainer	Competent Trainer
Minor Injury		
Task 1:Identify Injury/Illness Status	51	6
Task 2:Construct Rehabilitation Programs	56	7
Task 3:Select Equipment and Techniques	56	6
Task 4:Administer Rehabilitation Procedures	58	6
Task 5:Evaluate Readiness of the Athlete	56	5
Task 6:Educate All Concerned	45	3
TOTAL	**54**	**6**
Severe Injury		
Task 1:Identify Injury/Illness Status	19	2
Task 2:Construct Rehabilitation Programs	16	2
Task 3:Select Equipment and Techniques	17	3
Task 4:Administer Rehabilitation Procedures	21	2
Task 5:Evaluate Readiness of the Athlete	28	2
Task 6:Educate All Concerned	13	1
TOTAL	**19**	**2**
Life Threatening Injury or Death		
Task 1:Identify Injury/Illness Status	3	1
Task 2:Construct Rehabilitation Programs	2	1
Task 3:Select Equipment and Techniques	3	1
Task 4:Administer Rehabilitation Procedures	4	1
Task 5:Evaluate Readiness of the Athlete	2	1
Task 6:Educate All Concerned	1	1
TOTAL	**3**	**1**

Setting

Kinesiotherapists have traditionally served within the military and Veterans Health Administration. These health systems may provide a level of structure and regulation that may not be mirrored in private practice. Within the Veteran's Health Administration, kinesiotherapists work in inpatient, outpatient, long-term care and home care settings, and may manage clinics and rehabilitation teams.

Special Settings

Kinesiotherapists also employ aquatic therapy which may pose additional risks to therapy patients. They also perform driver rehabilitation training. Driver training is regulated by the Virginia Department of Motor Vehicles.

POLICY OPTIONS

Based on the principles of occupational and professional regulation established by the General Assembly, the Board has adopted the following criteria to guide evaluations of the need for regulation of health occupations and professions.

VIRGINIA BOARD OF HEALTH PROFESSIONS
CRITERIA FOR EVALUATING THE NEED FOR REGULATION
Initially Adopted October, 1991
Readopted February, 1998

Criterion One: Risk for Harm to the Consumer
The unregulated practice of the health occupation will harm or endanger the public health, safety or welfare. The harm is recognizable and not remote or dependent on tenuous argument. The harm results from: (a) practices inherent in the occupation, (b) characteristics of the clients served, (c) the setting or supervisory arrangements for the delivery of health services, or (d) from any combination of these factors.

Criterion Two: Specialized Skills and Training
The practice of the health occupation requires specialized education and training, and the public needs to have benefits by assurance of initial and continuing occupational competence.

Criterion Three: Autonomous Practice
The functions and responsibilities of the practitioner require independent judgment and the members of the occupational group practice autonomously.

Criterion Four: Scope of Practice
The scope of practice is distinguishable from other licensed, certified and registered occupations, in spite of possible overlapping of professional duties, methods of examination, instrumentation, or therapeutic modalities.

Criterion Five: Economic Impact
The economic costs to the public of regulating the occupational group are justified. These costs result from restriction of the supply of practitioner, and the cost of operation of regulatory boards and agencies.

Criterion Six: Alternatives to Regulation
There are no alternatives to State regulation of the occupation which adequately protect the public. Inspections and injunctions, disclosure requirements, and the strengthening of consumer protection laws and regulations are examples of methods of addressing the risk for public harm that do not require regulation of the occupation or profession.

Criterion Seven: Least Restrictive Regulation
When it is determined that the State regulation of the occupation or profession is necessary, the least restrictive level of occupational regulation consistent with public protection will be recommended to the Governor, the General Assembly and the Director of the Department of Health Professions.

The following outline delineates the characteristics of licensure, certification, and registration (the three most commonly used methods of regulation) and specifies the criteria applicable to each level.

Licensure. Licensure confers a monopoly upon a specific profession whose practice is well defined. It is the most restrictive level of occupational regulation. It generally involves the delineation in statute of a scope of practice which is reserved to a select group based upon their possession of unique, identifiable, minimal competencies for safe practice. In this sense, state licensure typically endows a particular occupation or profession with a monopoly in a specified scope of practice.

RISK: High potential, attributable to the nature of the practice.
SKILL & TRAINING: Highly specialized accredited post-secondary education required; clinical proficiency is certified by an accredited body.
AUTONOMY: Practices independently with a high degree of autonomy; little or no direct supervision.
SCOPE OF PRACTICE: Definable in enforceable legal terms.
COST: High
APPLICATION OF THE CRITERIA: When applying for licensure, the profession must demonstrate that Criteria 1 - 6 are met.

Statutory Certification. Certification by the state is also known as "title protection." No scope of practice is reserved to a particular group, but only those individuals who meet certification standards (defined in terms of education and minimum competencies which can be measured) may title or call themselves by the protected title.

RISK: Moderate potential, attributable to the nature of the practice, client vulnerability, or practice setting and level of supervision.
SKILL & TRAINING: Specialized; can be differentiated from ordinary work. Candidate must complete education or experience requirements that are certified by a recognized accrediting body.
AUTONOMY: Variable; some independent decision-making; majority of practice actions directed or supervised by others.
SCOPE OF PRACTICE: Definable, but not stipulated in law.
COST: Variable, depending upon level of restriction of supply of practitioners.
APPLICATION OF CRITERIA: When applying for statutory certification, a group must satisfy Criterion 1, 2, 4, 5, and 6.

Registration. Registration requires only that an individual file his name, location, and possibly background information with the State. No entry standard is typically established for a registration program.

RISK: Low potential, but consumers need to know that redress is possible.

SKILL & TRAINING: Variable, but can be differentiated for ordinary work and labor.
AUTONOMY: Variable.
APPLICATION OF CRITERIA: When applying for registration, Criteria 1, 4, 5, and 6 must be met.

A fourth policy option, no regulation, is implied.

RECOMMENDATION

At its September 29, 2010 morning meeting, the Regulatory Research Committee recommended against regulating kinesiotherapists. This recommendation was accepted by the Board of Health Professions at its afternoon meeting on the same day. During discussion, Committee and Board members noted the following points:

- There is no demonstrated risk of harm from the practice of kinesiotherapy
- Kinesiotherapists do not have unique modalities that distinguish them from regulated professions.
- The number of kinesiotherapists in the Commonwealth is low
- No other state regulates kinesiotherapists.

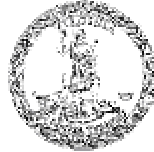
APPENDIX

Appendix A – Letter from Susan Clarke Schaar

Director's Office MAR 2 6 2010

COMMONWEALTH OF VIRGINIA

SUSAN CLARKE SCHAAR
CLERK OF THE SENATE
P.O. BOX 396
RICHMOND, VIRGINIA 23218



SENATE

March 24, 2010

Ms. Sandra Whitley Ryals, Director
Department of Health Professions
Perimeter Center
9960 Mayland Drive, Suite 300
Richmond, VA 23233

Dear Ms. Ryals:

This is to inform you that, pursuant to Rule 20 (l) of the Rules of the Senate of Virginia, the subject matter contained in Senate Bills 573 and 727 have been referred by the Senate Committee on Education and Health to the Department of Health Professions for study. It is requested that the appropriate committee chair and bill patrons receive a written report, with a copy to this office, by November 2, 2010.

With kind regards, I am

Sincerely yours,

Susan Clarke Schaar

SCS:jdm

cc: Sen. R. Edward Houck, Chair, Committee on Education and Health
Sen. Patricia S. Ticer, Patron of SB 573
Sen. Yvonne B. Miller, Patron of SB 727

Appendix B

SCOPE OF PRACTICE FOR KINESIOTHERAPY

PREAMBLE

This Scope of Practice has been established by the Council on Professional Standards for Kinesiotherapy, Inc., and is put forth for application to those individuals who are REGISTERED by said body. This document delineates the competencies for Registered Kinesiotherapists, and identifies the job tasks that Registered Kinesiotherapists are qualified to perform. This Scope of Practice reflects the evaluation procedures and comprehensive treatment interventions applied by Kinesiotherapists. The individual Kinesiotherapist may obtain additional training and credentials in areas beyond this Scope of Practice.

Kinesiotherapists administer treatment upon receipt of a prescription from physicians, and nurse practitioners or physician's assistants who have legal privileges to make such referrals.

DEFINITIONS

KINESIOTHERAPY: Kinesiotherapy is the application of scientifically based exercise principles adapted to enhance the strength, endurance, and mobility of individuals with functional limitations or those requiring extended physical conditioning. An RKT can administer treatment only upon receipt of a prescription from qualified physicians, nurse practitioners and/or physician's assistants who have been privileged to make such referrals.

The Kinesiotherapist is a health care professional competent in the administration of musculoskeletal, neurological, ergonomic, biomechanical, psychosocial, and task specific functional tests and measures. The Kinesiotherapist determines the appropriate evaluation tools and interventions necessary to establish, in collaboration with the client and physician, a goal specific treatment plan.

The intervention process includes the development and implementation of a treatment plan, assessment of progress toward goals, modification as necessary to achieve goals and outcomes, and client education. The foundation of clinician-client rapport is based on education, instruction, demonstration and mentoring of therapeutic techniques and behaviors to restore, maintain and improve overall functional abilities.

THE COUNCIL ON PROFESSIONAL STANDARDS FOR KINESIOTHERAPY, INC.: An organization whose function is to insure that kinesiotherapy practitioners meet the standards for education, credentialing, and professional competence, which the Council has established.

GENERAL SCOPE OF PRACTICE

A. **EVALUATION**

The kinesiotherapist obtains detailed information from the client and the clinical record regarding the specific history that resulted in the referral for treatment. This is followed by an appropriate physical assessment pertaining to the reason for referral. The kinesiotherapist then records and analyzes the data, develops an appropriate treatment plan in conjunction with the client, and communicates with the referring practitioner regarding the proposed treatment. In cases where an evaluation is performed without the expectation of treatment, a physician referral may not be necessary. Examples might be fitness testing, work fitness testing, physical ability testing, and functional capacity testing. The Kinesiotherapist is advised to obtain a written or oral written or oral screening survey from the client to determine whether any possible medical conditions exist that may be affected by the testing conditions or tasks. Additionally the Kinesiotherapist should obtain from the client a signed written consent form that describes the test conditions and possible risks of the evaluation.

I. PHYSICAL COMPONENTS:

a. Muscular strength and endurance

b. Functional stability and mobility

c. Neuromuscular coordination

e. Flexibility/joint range of motion

f. Aerobic fitness

g. Reaction time

2. PSYCHOSOCIAL COMPONENTS:

a. Appropriateness of behavior

b. Enhancers/barriers to learning

c. Capability of task planning and goal-directed behavior

d. Orientation

e. Affect

f. Social interaction

9. Motivation

B. INTERVENTIONS:

The kinesiotherapist administers scientifically based exercise principals and activities to accomplish the stated goals of the treatment plan, such as those outlined in the Kinesiotherapy Scope of Practice and Kinesiotherapy Standards of Practice. The treatment plan may include strategies to educate the client and caregiver on techniques to enhance neuromusculoskeletal, psychomotor and psychosocial well being.

1. THERAPEUTIC EXERCISE:

a. Strengthening exercise:

1) Isometric

2) Isotonic

3) Isokinetic

b. Endurance exercise

1) Aerobic exercise

2) Muscular endurance

c. Functional mobility training and ambulation training

d. Flexibility and range of motion exercise

1) Passive

2) Active-assistive

3) Active

e. Aquatic exercise

f. Balance and coordination activities

g. Neuromuscular re-education

h. Work conditioning exercise

2. EDUCATION:

a. Implications of disease/disability process, progression, and expectations for client and family

b. Home exercise programs

c. Body mechanics and functional mobility

d. Home and/or worksite modification

Standards of Practice for Registered Kinesiotherapists

Preamble:

These standards have been established by the Council on Professional Standards for Kinesiotherapy and are endorsed by the American Kinesiotherapy Association. The intent of these standards is to serve as guidelines for Registered Kinesiotherapists and to provide a basis for assessment of Kinesiotherapy practice. A registered Kinesiotherapist has attained that status upon passing the registration examination of the Council on Professional Standards for Kinesiotherapy. Herein after in this document a registered Kinesiotherapist will be referred to as an RKT.

Standard 1: Only individuals who qualify by virtue of their education and clinical experience can practice Kinesiotherapy.

1.1 An RKT must have a minimum of a baccalaureate degree with didactic Preparation in the following areas:
1.101 Human physiology
1.102 Exercise physiology
1.103 Kinesiology/biomechanics
1.104 Therapeutic exercise/adapted physical education
1.105 Growth and development
1.106 Motor learning/control/performance
1.107 General psychology
1.108 Organization and administration
1.109 Test and measurements
1.110 Research methods or statistics
1.111 First aid and cardiopulmonary resuscitation
1.2 An RKT must have completed a minimum of 1,000 hours of clinical practice in approved training sites to qualify for certification and subsequent registration.
1.3 An RKT must not perform any treatment beyond the Kinesiotherapy Scope of Practice unless credentialed or otherwise qualified to do so.
1.4 An RKT can administer treatment only upon receipt of a prescription from qualified physicians, nurse practitioners and/or physician's assistants who have been privileged to make such referrals.
1.5 An RKT will adhere to all policies and protocols established by the profession and the work setting.
1.6 An RKT will comply with local, state and federal requirements for administering health care.
1.7 An RKT must demonstrate competency to maintain a safe treatment environment.

Standard 2: Referrals shall contain appropriate information before treatment can be administered by an RKT.

2.1 Prescriptions for kinesiotherapy should contain description information to include the following:
2.11 Client's name and/or identification number
2.12 A referring diagnosis and problem to be addressed
2.13 Indications/contraindication for treatment
2.14 Client's assigned medical setting or address

Standard 3: An RKT shall develop an individual treatment plan for each client.

3.1 An RKT is responsible for documentation of the treatment plan in the client's permanent medical record as dictated by the work setting.
3.2 The client and family should actively participate as appropriate in the formulation of the treatment plan.
3.3 Client/family education shall be addressed as appropriate in the treatment plan.
3.4 The treatment plan should be updated on a regular basis or as required by national accrediting bodies and/or the treatment facility.

Standard 4: An RKT shall perform assessments on the first visit and on subsequent visits as change in status dictates.

4.1 An RKT will evaluate the physical capabilities and capacities of the patient, including:
4.11 Muscular strength and endurance
4.12 Functional stability and mobility
4.13 Neuromuscular coordination
4.14 Kinesthesis, proprioception, and sensory deficits
4.15 Flexibility/joint range of motion
4.16 Aerobic fitness
4.17 Reaction time

4.2 An RKT will assess various psychosocial components, which include:
4.21 Appropriateness of behavior
4.22 Enhancers/barriers to learning
4.23 Capability of task planning and goal-directed behavior
4.24 Orientation
4.25 Affect
4.26 Social interaction
4.27 Motivation
4.3 Only an RKT with specific academic and professional training will be qualified to assess prosthetic and orthotic devices with regard to fit and appropriateness of prescription.
4.4 An RKT will assess clients for ambulation and mobility aids.
4.5 Client/family involvement will be encouraged as a part of the assessment process.

Standard 5: An RKT shall administer therapeutic exercise or activity to accomplish the stated goals of the treatment plan.

5.1 An RKT shall instruct clients in the following interventions:
5.11 Strengthening exercise
5.111 Isometric
5.112 Isotonic
5.113 Isokinetic
5.114 Endurance exercise
5.115 Aerobic exercise
5.116 Muscular endurance
5.12 Functional mobility training and ambulation training
5.13 Flexibility and range of motion exercise
5.131 Passive
5.132 Active-assistive
5.133 Active

5.14 Aquatic exercise
5.15 Balance and coordination exercise/activity

5.16 Neuromuscular re-education
5.17 Work conditioning exercise
5.2 An RKT will monitor client treatment and intervene regularly to facilitate progress toward stated goals.
5.3 An RKT shall be responsible for the treatment process and will provide a safe environment that is conducive to achievement of the treatment objectives.
5.4 An RKT will be trained in the safe use of equipment employed in the treatment process.

Standard 6: An RKT shall educate the client and family/caregiver as appropriate to accomplish the stated goals of the treatment plan.

6.1 An RKT shall provide instruction in the following areas:
6.11 Implications of disease/disability process, progression, and expectations for client and family
6.12 Home exercise programs
6.13 Body mechanics/functional mobility
6.14 Home and/or worksite modification

Standard 7: An RKT shall document patient treatment information.

7.1 An RKT shall document progress toward established goals.
7.11 An RKT will be responsible for entering progress notes into the permanent patient record.
7.12 Time frames of completion of notes will conform to those as specified in Standard 3.
7.13 An RKT will provide a written summary of treatment, which includes recommendations for follow-up care.
7.14 All notes will be signed either in writing or electronically.
7.15 Documentation shall be subject to peer review on a regular basis so as to insure conformity to stated standards and as part of the facility's total quality management system.

Standard 8: An RKT shall actively participate in the activities congruent with health care delivery.

8.1 An RKT shall attend client-planning functions and provide input as deemed appropriate.
8.2 An RKT shall at all times conduct themselves as professionals and accord client, family, medical staff and visitor's respect and dignity.
8.3 An RKT shall work as a member of the health care team by participation in total quality management programs.
8.4 An RKT shall notify the Council on Professional Standards as to improprieties of another RKT.
8.5 An RKT shall inform appropriate individuals or agencies of any improprieties in the delivery of health care to the client.

8.6 An RKT shall participate in continuing education as required to insure quality client care.

Standard 9: An RKT shall follow established quality assurance guidelines to assure quality and appropriateness of treatment provided.

9.1 A written plan shall exist that describes program objectives, organization and scope.
9.2 There will be a planned, systematic and ongoing process for monitoring and evaluating client care. Solutions will be developed when problems are identified.
9.3 Records are maintained to document all quality improvement activity.

Appendix C – Ontario's Legislation

Kinesiology Act, 2007

S.O. 2007, CHAPTER 10
SCHEDULE O

No Amendments.

Definitions

1. In this Act,

"College" means the College of Kinesiologists of Ontario; ("Ordre")

"Health Professions Procedural Code" means the Health Professions Procedural Code set out in Schedule 2 to the *Regulated Health Professions Act, 1991*; ("Code des professions de la santé")

"member" means a member of the College; ("membre")

"profession" means the profession of kinesiology; ("profession")

"this Act" includes the Health Professions Procedural Code. ("la présente loi") 2007, c. 10, Sched. O, s. 1.

Health Professions Procedural Code

2. (1) The Health Professions Procedural Code shall be deemed to be part of this Act. 2007, c. 10, Sched. O, s. 2 (1).

Same, interpretation

(2) In the Health Professions Procedural Code, as it applies in respect of this Act,

"College" means the College of Kinesiologists of Ontario; ("ordre")

"health profession Act" means this Act; ("loi sur une profession de la santé")

"profession" means the profession of kinesiology; ("profession")

"regulations" means the regulations under this Act. ("règlements") 2007, c. 10, Sched. O, s. 2 (2).

Definitions in Code

(3) Definitions in the Health Professions Procedural Code apply with necessary modifications to terms in this Act. 2007, c. 10, Sched. O, s. 2 (3).

Note: Sections 3 to 10 come into force on a day to be named by proclamation of the Lieutenant Governor. See: 2007, c. 10, Sched. O, s. 15 (2).

Scope of practice

3. The practice of kinesiology is the assessment of human movement and performance and its rehabilitation and management to maintain, rehabilitate or enhance movement and performance. 2007, c. 10, Sched. O, s. 3.

College established

4. The College is established under the name College of Kinesiologists of Ontario in English and Ordre des kinésiologues de l'Ontario in French. 2007, c. 10, Sched. O, s. 4.

Council

5. (1) The Council shall be composed of,

(a) at least seven and no more than nine persons who are members elected in accordance with the by-laws;

(b) at least six and no more than eight persons appointed by the Lieutenant Governor in Council who are not,

(i) members,

(ii) members of a College as defined in the *Regulated Health Professions Act, 1991*, or

(iii) members of a Council as defined in the *Regulated Health Professions Act, 1991*;

(c) one person selected, in accordance with a by-law made under section 10, from among members who are members of a faculty or department of kinesiology of a university in Ontario. 2007, c. 10, Sched. O, s. 5 (1).

Who can vote in elections

(2) Subject to the by-laws, every member who practises or resides in Ontario and who is not in default of payment of the annual membership fee is entitled to vote in an election of members of the Council. 2007, c. 10, Sched. O, s. 5 (2).

President and Vice-President

6. The Council shall have a President and Vice-President who shall be elected annually by the Council from among the Council's members. 2007, c. 10, Sched. O, s. 6.

Restricted titles

7. (1) No person other than a member shall use the title “kinesiologist”, a variation or abbreviation or an equivalent in another language. 2007, c. 10, Sched. O, s. 7 (1).

Representations of qualification, etc.

(2) No person other than a member shall hold himself or herself out as a person who is qualified to practise in Ontario as a “kinesiologist”or in a specialty of kinesiology. 2007, c. 10, Sched. O, s. 7 (2).

Definition

(3) In this section,

"abbreviation" includes an abbreviation of a variation. 2007, c. 10, Sched. O, s. 7 (3).

Notice if suggestions referred to Advisory Council

8. (1) The Registrar shall give a notice to each member if the Minister refers to the Advisory Council, as defined in the *Regulated Health Professions Act, 1991*, a suggested,

(a) amendment to this Act;

(b) amendment to a regulation made by the Council; or

(c) regulation to be made by the Council. 2007, c. 10, Sched. O, s. 8 (1).

Requirements re notice

(2) A notice mentioned in subsection (1) shall set out the suggestion referred to the Advisory Council and the notice shall be given within 30 days after the Council of the College receives the Minister's notice of the suggestion. 2007, c. 10, Sched. O, s. 8 (2).

Offence

9. Every person who contravenes subsection 7 (1) or (2) is guilty of an offence and on conviction is liable to a fine of not more than $25,000 for a first offence and not more than $50,000 for a second or subsequent offence. 2007, c. 10, Sched. O, s. 9.

By-laws

10. The Council may make by-laws respecting the qualifications, selection and terms of office of Council members who are selected. 2007, c. 10, Sched. O, s. 10.

Transition before certain provisions in force

11. (1) The Lieutenant Governor in Council may appoint a transitional Council. 2007, c. 10, Sched. O, s. 11 (1).

Powers of transitional Council

(2) Before section 5 comes into force, the transitional Council and its employees and committees may do anything that is necessary or advisable for the implementation of this Act and anything that the Council and its employees and committees could do under this Act. 2007, c. 10, Sched. O, s. 11 (2).

Same

(3) Without limiting the generality of subsection (2), the transitional Council and the Council's committees may accept and process applications for the issuance of certificates of registration, charge application fees and issue certificates of registration. 2007, c. 10, Sched. O, s. 11 (3).

Powers of the Minister

(4) The Minister may,

(a) review the transitional Council's activities and require the transitional Council to provide reports and information;

(b) require the transitional Council to make, amend or revoke a regulation under this Act;

(c) require the transitional Council to do anything that, in the opinion of the Minister, is necessary or advisable to carry out the intent of this Act and the *Regulated Health Professions Act, 1991*. 2007, c. 10, Sched. O, s. 11 (4).

Transitional Council to comply with Minister's request

(5) If the Minister requires the transitional Council to do anything under subsection (4), the transitional Council shall, within the time and in the manner specified by the Minister, comply with the requirement and submit a report. 2007, c. 10, Sched. O, s. 11 (5).

Regulations

(6) If the Minister requires the transitional Council to make, amend or revoke a regulation under clause (4) (b) and the transitional Council does not do so within 60 days, the Lieutenant Governor in Council may make, amend or revoke the regulation. 2007, c. 10, Sched. O, s. 11 (6).

Same

(7) Subsection (6) does not give the Lieutenant Governor in Council authority to do anything that the transitional Council does not have authority to do. 2007, c. 10, Sched. O, s. 11 (7).

Expenses

(8) The Minister may pay the transitional Council for expenses incurred in complying with a requirement under subsection (4). 2007, c. 10, Sched. O, s. 11 (8).

Note: Section 12 comes into force on a day to be named by proclamation of the Lieutenant Governor. See: 2007, c. 10, Sched. O, s. 15 (2).

Transition after certain provisions in force

12. After section 5 comes into force, the transitional Council shall be the Council of the College if it is constituted in accordance with subsection 5 (1) or, if it is not, it shall be deemed to be the Council of the College until a new Council is constituted in accordance with subsection 5 (1). 2007, c. 10, Sched. O, s. 12.

13., 14. Omitted (amends or repeals other Acts). 2007, c. 10, Sched. O, ss. 13, 14.

15. Omitted (provides for coming into force of provisions of this Act). 2007, c. 10, Sched. O, s. 15.

16. Omitted (enacts short title of this Act). 2007, c. 10, Sched. O, s. 16.