



Economic Impact Analysis Virginia Department of Planning and Budget

18 VAC 75-40 – Regulations Governing Criteria for Certification of Dialysis Technicians Department of Health Professions March 3, 2004

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.G of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

Chapter 995 of the 2003 Acts of the Assembly amended the Code of Virginia to establish a definition and title protection for "dialysis care technicians" or "dialysis patient care technicians." This legislation further requires the Board of Health Professions (board) to approve in regulation certifications through specific organizations by which a person could use one of the restricted titles. In these proposed regulations the board lists the organization certifications deemed approved by the Board. Only those who hold one of those titles are authorized in the Drug Control Act to possess and administer drugs used in dialysis treatments.

Estimated Economic Impact

While Chapter 27.01 of Title 54.1 of the Code of Virginia provides only title protection, rather than licensure, certification or registration by a health regulatory board, the Drug Control Act (Chapter 34 of Title 54.1) limits the administration of drugs used in dialysis treatment to those persons who hold the protected titles. Therefore, practically speaking, it will be necessary

for any individual, who is not a licensed health care professional, who seeks employment in a dialysis care facility to hold the certification specified in regulations adopted by the Board of Health Professions.

The board proposes to specify that holding one of the following certifications will permit an individual to work under the title “dialysis care technician” or “dialysis patient care technician:”

1. Certified Clinical Hemodialysis Technician (CCHT) by the Nephrology Nursing Certification Commission (NNCC);
2. Certified Hemodialysis Technician (CHT) by the Board of Nephrology Examiners Nursing and Technology (BONENT);
3. Certified in Clinical Nephrology Technology (CCNT) by the National Nephrology Certification Organization (NNCO); or
4. Certification or licensure as a dialysis technician or similar title by another jurisdiction in the United States provided the standards for certification or licensure or substantially equivalent to those in Virginia.

CCHT is the least costly of the above certifications in terms of fees and time.

According to Deborah Cote, RN CNN, Manager of University of Virginia Renal Services, the majority of technicians administering drugs in dialysis treatment in Virginia most likely did not possess certification prior to the enactment of Chapter 995 of the 2003 Acts of the Assembly. In order to take the CCHT qualifying examination, candidates must: 1) possess a minimum of a high school diploma or GED, and 2) “have successfully completed a training program for hemodialysis patient care technicians that included both classroom instruction and supervised clinical experience.”¹ Ms. Cote believes that just about all employed dialysis technicians will have had classroom instruction and supervised clinical experience provided by their employer (or elsewhere) that would enable them to qualify to take the CCHT examination.

The cost for the CCHT examination and initial certification is \$125. Certification lasts two years. In order to recertify technicians must have 2,000 hours of work experience and 20 hours of continuing education within the previous two years, and pay a \$50 fee. NNCC suggests, but does not require, that applicants obtain their contact hours from either the National Association of Nephrology Technicians/Technologists (NANT) or the American Nephrology Nurses’ Association (ANNA). Continuing education costs \$15 per hour online via NANT.² The

¹ Source: Nephrology Nursing Certification Commission website: <http://www.nncc-exam.org/>

² Source: National Association of Nephrology Technicians/Technologists website: <http://www.dialysistech.org/>

required 20 hours of continuing education required for CCHT would thus cost \$300 through NANT. ANNA offers online courses as well. The courses cost either \$30 or \$35 and vary in length.³ The required 20 hours of continuing education could be obtained from ANNA for \$275 through taking a variety of courses. Both NANT and ANNA require that course-takers pass a test demonstrating knowledge of the material presented. The University of Virginia Hospital provides continuing education for their dialysis technicians at no direct charge to the technicians.⁴ The provision of this continuing education does have a cost. The instructors' time and the space and equipment used for instruction all have value. These resources could potentially be used productively for other purposes.⁵ Dialysis technicians earn on average approximately \$20,000 to \$25,000 per year.⁶ That converts to \$10 per hour to \$12.50 per hour, using a typical 2,000-hour work year. Assuming that the value of a technician's time is equal to her average hourly wage, then the cost for a dialysis technician to take 20 hours of continuing education every two years would be about \$475 to \$550.⁷

Improper care by dialysis technicians can result in increased probability of potentially fatal excess bleeding, severe infection, cardiac arrest, or congestive heart failure.⁸ Passing the qualifying examination for CCHT, CHT, or CCNT demonstrates that dialysis technicians possess knowledge that will enable them to minimize the probability of adverse health outcomes due to faulty care. Research is not available that estimates how much less the risk is for adverse health outcomes from care from a certified dialysis technician versus from an uncertified technician. In order to conduct such research, detailed data on both numerous certified and numerous uncertified dialysis technicians would be needed. Necessary data would include: 1) detailed medical histories for each technician's patients both before and after treatment, 2) the technician's education, the technician's gender, the technician's age, etc. Since this research has apparently not been conducted and would be beyond the scope of this report (even if data were available), the benefit of requiring certification cannot be accurately estimated at this time.

³ Source: American Nephrology Nurses' Association website: <http://www.annanurse.org/>

⁴ Source: Deborah Cote, RN CNN, Manager of University of Virginia Renal Services

⁵ Economists call this opportunity cost.

⁶ Source: Deborah Cote, RN CNN, Manager of University of Virginia Renal Services

⁷ Calculation: $\$275 + 20 \times \$10 = \$475$; $\$300 + 20 \times \$12.50 = \$550$

⁸ Source: Deborah Cote, RN CNN, Manager of University of Virginia Renal Services

Businesses and Entities Affected

The proposed regulations affect dialysis technicians, the 119 dialysis facilities in Virginia, and their patients. According to the Department of Health Professions, the number of dialysis technicians per dialysis facility varies from one to 30.

Localities Particularly Affected

The proposed regulations affect all Virginia localities.

Projected Impact on Employment

The proposed amendments will make it more costly to be a dialysis technician who administers medication. It is possible that the increased cost may result in a small decrease in employment.

Effects on the Use and Value of Private Property

The demand for continuing education services will increase. The value of providers of continuing education services will increase commensurately. Dialysis technicians and potentially their employers will spend more on training.