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The 4th edition of the *Core Curriculum for Ambulatory Care Nursing*
is dedicated to
Cyndee Nowicki Hnatiuk, EdD, RN, CNE, FAAN, former AAACN CEO
A friend and mentor to a constellation of stars in AAACN.

Instructions for Continuing Nursing Education Contact Hours

Continuing nursing education credit can be earned for completing the learning activity associated with this chapter. Instructions can be found at aaacn.org/CoreCNE

Telehealth Nursing Practice

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Telehealth is an integral part of ambulatory care and nurses play a major role in this form of care delivery. In contrast to traditional, in-clinic appointments, telehealth nursing does not have boundaries of time and distance. Nurses working in all ambulatory settings (clinics, call centers, college health centers, same-day surgery centers, and myriad other environments including select inpatient settings) engage in delivering care and communicating with patients through the use of telehealth technologies. Depending on the nurse's role and setting, telehealth nursing may be the prevalent mode of care delivery or it may be one component of many responsibilities. Regardless of the job description or work environment, nurses must have education, resources, and leadership support to provide quality telehealth nursing care.

Nurses engage with patients via telehealth technologies to provide care including, but not limited to, symptom management, transitional care, disease management, patient education, and counseling. Through utilization of the nursing process and implementation of specialized skills, nurses are able to provide care that meets the Institute of Medicine's (IOM) six aims of health care quality: safe, effective, patient-centered, timely, efficient, and equitable (Agency for Healthcare Research and Quality [AHRQ], 2016).

The majority of academic nursing programs do not include ambulatory care clinical theory in the curriculum and even fewer include practicum hours in clinic settings or address telehealth nursing. There is also a lack of formalized ambulatory care orientation programs. This is a disturbing void considering nearly one in five nurses work in ambulatory care (Bureau of Labor Statistics, 2017) and more than 70% of health care providers are using telehealth technologies to connect with patients (Beaton, 2017). The American Academy of Ambulatory Care Nursing (AAACN) supports professional nursing practice in the ambulatory care setting and has published numerous books, periodicals, white papers, and articles that include information about telehealth nursing practice.

This chapter describes telehealth nursing practice and identifies the essential knowledge, skills, and attitudes needed for ambulatory care nurses to provide quality and safe telehealth nursing care. The method used to present this content enables readers to incorporate best practices into orientation and education programs and may be used as a resource to strengthen the practice of nurses involved in telehealth nursing.

I.   Telehealth Nursing Practice Defined

A. *Telehealth:* "The inclusive term used to describe the wide range of health services delivered, management, and coordination of care and services provided via telecommunications technology" (Greenberg, Espensen, Becker, & Cartwright, 2003, p. 8).

B. *Telehealth nursing:* The delivery, management, and coordination of care and services provided via telecommunications technology within the domain of nursing (Greenberg et al., 2003).

C. *Telenursing:* A synonym for telehealth nursing.

D. *Telehealth technology:* Technology used to provide care via telecommunications technology within a health-related context.

E. *Telephone triage:* An interactive process between nurse and client that occurs over the telephone and involves identifying the nature and urgency of client health care needs and determining the appropriate disposition (Greenberg et al., 2003). All symptom-based encounters involve triage (Rutenberg & Greenberg, 2012).

F. *Telemedicine:* The World Health Organization (2010) defines telemedicine as the delivery of health care services between two locations by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers to advance the health of individuals and their communities. Telemedicine is the remote delivery of health care services and clinical

Care of the Acutely Ill Patient

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Patient Prototypes

Emergent Conditions
Cardiac and Respiratory Arrest, Anaphylactic Shock, Stroke, Hypoglycemia, Acute Opioid Overdose, Seizure, Depression and Suicide, Domestic Violence

Adult and Pediatric Acute Illnesses
Tuberculosis, Acute Viral Infectious Diseases (Measles, Mumps, Pertussis, Chickenpox, and Varicella Zoster [Shingles])

Adult and Adolescent Acute Illnesses
Headache, Low Back Pain, Sinusitis, Abdominal Pain, Sexually Transmitted Diseases

Pediatric Acute Diseases
Fever, Ear Pain, Upper Respiratory Infection, Nausea, Vomiting, and Diarrhea

Cardiac and Respiratory Arrest

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Patient Population: Adult and Pediatric

I.   Overview

According to the American Heart Association (AHA), cardiovascular disease (CVD) accounts for approximately 800,000 deaths in the United States, or one of every three deaths. Among Americans, an average of one person dies from CVD every 40 seconds. Coronary heart disease (CHD) accounts for the majority of CVD deaths, followed by stroke and heart failure. The estimated cost of CVD will reach $1,044 billion by 2030. Although deaths due to CHD have declined over the past 10 years, CHD remains the leading cause of death in the United States. An estimated 790,000 U.S. adults experience a heart attack each year. Seventy-percent of out-of-hospital cardiac arrests (OHCAs) occur in the home, and approximately 50% are unwitnessed. Outcome from OHCA remains poor: only 10.8% of adult patients with nontraumatic cardiac arrest who have received resuscitative efforts from emergency medical services (EMS) survive to hospital discharge (AHA, 2017). The AHA has developed the chain of survival in basic life support (BLS) training to increase survival rates from sudden cardiac arrest. The chain of survival consists of rapid EMS activation, initiation of cardiopulmonary resuscitation (CPR), rapid defibrillation with an emphasis on chest compression, effective advanced cardiac life support (ACLS) or pediatric advanced life support (PALS) protocols, and integrated post-cardiac arrest care (AHA, 2017). The key to successful outcomes for sudden cardiac arrest due to ventricular tachycardia is timely defibrillation. In the ambulatory care setting, this step is most efficiently reached by use of the automated