10A NCAC 14F .1802 is readopted with changes as published in 32:12 NCR 1185-1188 as follows:

**10A NCAC 14F .1802 EXERCISE THERAPY**

(a) The medical director, in consultation with program staff, shall establish staff to patient ratios for exercise therapy sessions based on medical acuity, utilizing an acceptable risk stratification model.

(b) ~~If any patient has not had a graded exercise test prior to the first exercise session, the~~ The patient's first exercise session ~~must~~ shall include ~~objective~~ an objective initial assessment of hemodynamic data, ECG, and symptom response data.

(c) ~~Unless contraindicated by medical and laboratory assessments or the cardiac rehabilitation care plan, each patient's exercise therapy shall include:~~ The [~~patients~~] patient's exercise therapy shall be developed based on needs identified by the initial assessment. Guidelines regarding exercise testing and prescription for exercise therapy are identified in the American College of Sports Medicine 10th edition, incorporated herein by reference including subsequent [~~changes~~] amendments and editions. Copies of the American College of Sports Medicine guidelines are available from http://www.acsmstore.org/Product Details.asp?ProductCode=9781496339072 at a cost of forty seven dollars and ninety nine cents ($47.99). The following [~~Chapters~~] chapters of these guidelines apply to the cardiac rehabilitation program:

(1) Chapters 3 through 7 that describe the "Pre-exercise Evaluation," "Health-Related Physical Fitness Testing and Interpretation," "Clinical Exercise Testing and Interpretation," "General Principles of Exercise Prescription," and "Exercise Prescription for Healthy Populations with Special Consiterations;" and

(2) Chapter 9 that describes "Exercise Prescription for Patients with Cardiac, Peripheral, Cerebrovascular and Pulmonary Disease."

~~(1) mode of exercise therapy including, but not limited to: walk/jog, aquatic activity, cycle ergometry, arm ergometry, resistance training, stair climbing, rowing, aerobics;~~

~~(2) intensity:~~

~~(A) up to 85 percent of symptom-limited heart rate reserve;~~

~~(B) up to 80 percent of measured maximal oxygen consumption;~~

~~(C) rating of perceived exertion (RPE) of 11 to 13 if a graded exercise test is not performed; or~~

~~(D) for myocardial infarction patients: heart rate not to exceed 20 beats per minute above standing resting heart rate if a graded exercise test is not performed; and for post coronary artery by-pass graft patients: heart rate not to exceed 30 beats per minute above standing resting heart rate if a graded exercise test is not performed;~~

~~(3) duration: up to 60 minutes, as tolerated, including a minimum of five minutes each for warm-up and cool-down; and~~

~~(4) frequency: minimum of three days per week.~~

(d) The patient shall be monitored through the use of electrocardiography during each exercise therapy session. The frequency of the ~~monitoring~~ monitoring, continuous [~~continuous,~~] or intermittent, shall be based on medical acuity and risk stratification.

(e) At two week intervals, the patient's adherence to the cardiac rehabilitation care plan and progress toward goals shall be monitored by an examination of exercise therapy records and ~~documented.~~ documented [~~by the exercise specialist~~] in accordance with hospital or [~~Cardiac Rehabilitation Program~~] cardiac rehabilitation program policy.

(f) The ~~exercise specialist~~ program staff shall be responsible for consultation with the medical director or the patient's personal physician concerning changes in the ~~exercise therapy, results of graded exercise tests, as needed or anticipated (e.g. regular follow up intervals, graded exercise test conducted, or medication changes)~~ patient's treatment plan. Feedback concerning changes in the ~~exercise therapy~~ patient's treatment plan shall be discussed with the patient and documented.

(g) Diabetic patients who are taking insulin or oral hypoglycemic agents for control of diabetes shall have blood sugars monitored for at least the first week of cardiac therapy sessions in order to establish the patient's level of control and subsequent response to exercise. Cardiac rehabilitation staff shall record blood sugar measurements pre- and post-exercise. Patients whose blood sugar values are considered abnormal ~~for the particular patient~~ per hospital or [~~Cardiac Rehabilitation Program~~] cardiac rehabilitation program policy shall be monitored. A carbohydrate ~~food~~ source ~~or serving~~ ~~shall be available. Snacks~~ shall be available in case of a hypoglycemic response.

*History Note:* *Authority G.S. 131E-169;*
*Eff. July 1, ~~2000.~~ 2000;*
*Readopted Eff. June 1, 2018.*