2017
Certification Examination for Hypertension Specialists
(AHSCP-CHS)

AMERICAN HYPERTENSION SPECALIST
CERTIFICATION PROGRAM

**Formerly* the ASH Specialist Program, Inc.

HANDBOOK FOR CANDIDATES

2017 Testing Period

Application Deadline:	April 10, 2017 (Midnight Eastern)
Testing Begins:	Saturday, May 6, 2017
Testing Ends:	Wednesday, May 24, 2017

PROFESSIONAL TESTING CORPORATION® 1350 BROADWAY • 17th FLOOR • NEW YORK, NY 10018
www.ptcny.com

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This handbook contains necessary information about the Certification Examination for Hypertension Specialists. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This handbook is subject to change.

WHAT IS THE AMERICAN HYPERTENSION SPECIALIST CERTIFICATION PROGRAM?

The American Hypertension Specialist Program (AHSCP) was formed in response to the growing recognition that the hypertension problem requires the coordinated effort of front-line health care providers and those physicians with documented expertise in managing hypertension. The *Specialist in Clinical Hypertension* (SCH) designation was created for the specific purpose of identifying and recognizing physicians with expert skills and knowledge in the management of clinical hypertension and related disorders.

DESIGNATION

The AHSCP designates *Specialists in Clinical Hypertension* on the basis of: a) submission of an application which documents training and experience in hypertension and related areas, and b) passing the Certification Examination for Hypertension Specialists.

ELIGIBILITY REQUIREMENTS FOR CANDIDATES FROM THE UNITED STATES & CANADA

By the application deadline, candidates must meet the following eligibility requirements:

1. Be a currently licensed physician in the United States or Canada.
   [Submit a copy of current license with application]

2. Be certified by a relevant primary board (American Board of Medical Specialties (ABMS) or equivalent) (e.g., Internal Medicine, Family Practice, Pediatrics, Obstetrics-Gynecology).
   [Submit documentation with application]

3. Meet at least ONE (1) of the following:
   a. Certified by a relevant subspecialty board (ABMS or equivalent) (e.g., cardiovascular disease, nephrology, endocrinology).
      [Submit documentation of specialty standing or training with application]

      OR

   b. Current enrollment in an accredited relevant fellowship program (e.g., cardiovascular disease, nephrology, endocrinology)
      [Submit appropriate documentation with application]

      OR

   c. Demonstrate appropriate experience and practice activity in the management of complex hypertension problems (e.g., letter from Chief of Service or other recognized senior physician).
      [Submit copy of letter or other documentation demonstrating experience and practice activity with application]

4. **Complete Attestation of Current Appointment Form** by Chief of Department or Division.

5. Complete and file an Application for the Certification Examination for Hypertension Specialists.

6. Pay the required fee.

ELIGIBILITY REQUIREMENTS FOR CANDIDATES FROM COUNTRIES OTHER THAN THE UNITED STATES & CANADA

By the application deadline, candidates must meet the following eligibility requirements:

1. Be a currently licensed physician.
   (Submit a copy of current license, in English, with application)

2. Be certified by a relevant national or U.S. primary board (American Board of Medical Specialties (ABMS) or equivalent) (e.g., Internal Medicine, Family Medicine, Pediatrics, Obstetrics-Gynecology).
   [Submit documentation with application]

3. Meet at least ONE (1) of the following:
   a. Certified by a relevant secondary national or U.S. subspecialty board (ABMS or equivalent) (e.g., cardiovascular disease, nephrology, endocrinology).
   [Submit documentation of specialty standing or training with application]

   OR

   b. Current enrollment in an accredited relevant national or U.S. fellowship program (e.g., cardiovascular disease, nephrology, endocrinology).
   [Submit appropriate documentation with application]

   OR

   c. Demonstrate appropriate experience and practice activity in the management of complex hypertension problems (e.g., letter from Chief of Service or other recognized senior physician).
   [Submit copy of letter or other documentation demonstrating experience and practice activity with application]

4. **Complete Attestation of Current Appointment Form** by Chief of Department or Division.

5. Complete and file an Application for the Certification Examination for Hypertension Specialists.

6. Pay the required fee.

EXAMINATION DEVELOPMENT AND ADMINISTRATION

The Certification Examination for Hypertension Specialists was developed by the American Hypertension Specialist Certification Program with the assistance of the Professional Testing Corporation (PTC) [1350 Broadway – 17th Floor, New York, New York 10018, (212) 356-0660]. The Certification Examination for Hypertension Specialists is also administered for the AHSCP by PTC. Questions concerning the examination should be referred to PTC.

ATTAINMENT OF DESIGNATION AND REDESIGNATION

Eligible candidates who pass the Certification Examination for Hypertension Specialists are eligible to use the designation *Specialist in Clinical Hypertension* (SCH) after their names and will receive certificates from the American Hypertension Specialist Certification Program. A registry of designated *Specialists in Clinical Hypertension* will be maintained by AHSCP and may be reported in various publications.

The *Specialist in Clinical Hypertension* designation is recognized for a period of 10 years at which time the candidate must retake and pass the current Certification Examination for Hypertension Specialists or meet such alternative requirements as are in effect at that time in order to retain designation.

REVOCATION OF DESIGNATION

Designation will be revoked for violations of the policies of the Board of the AHSCP, including, but not limited to:

1. Falsification of an Application.
2. Revocation of any current license to practice medicine.
3. Misrepresentation of designation status.

The Board of the AHSCP shall make all decisions regarding revocation of designation.

COMPLETION OF APPLICATION

The application for the Qualifying Application must be submitted online.

- Read and follow the directions on the application and in this handbook. The application can be found on Professional Testing Corporation's website www.ptcny.com/clients/ash.
- The online application and appropriate fees for the examination must be received on or before the appropriate deadline listed in this handbook.

APPLICATION CHECKLIST

Candidates MUST submit the following:

— Online Application
— Copy of current medical license
— Copy of primary care board certification
— Attestation form completed by division chair
— Appropriate fee enclosed or credit card payment section completed

You must also provide ONE of the following:

— Copy of subspecialty board certification

OR

— Documentation of current enrollment in a relevant, accredited fellowship program

OR

— Letter from Chief of Service or other recognized senior physician, on letterhead, verifying demonstration of appropriate experience and practice activity in the management of complex hypertension problems

FEES

Please note: Fees are NOT refundable.

Application Fee for the Certification Examination for Hypertension Specialists: $**1,000.00**

Please note: The application fee listed above apply to those applicants taking the examination at computer testing centers in the U.S. and Canada. For applicants wishing to take the examination outside of the U.S. or in areas in Canada where computer testing is not available, an additional special test center fee of $150.00 will apply.

MAKE CHECK OR MONEY ORDER PAYABLE IN U.S. DOLLARS ON A U.S. BANK TO:
PROFESSIONAL TESTING CORPORATION

To pay by Visa, MasterCard, or American Express, complete the Credit Card Payment section of the Online Application.

REFUNDS

There will be no refund of fees. Fees will not be transferred from one testing period to another.

EXAMINATION ADMINISTRATION

The Certification Examination for Hypertension Specialists is administered during an established testing period on a daily basis, Monday through Saturday, excluding holidays, at computer-based testing facilities managed by PSI, Inc. PSI has several hundred testing sites in the United States, as well as certain cities in Canada. Scheduling is done on a first-come, first-serve basis. To find a testing center near you visit: http://www.ptcny.com/cbt/sites.htm or call PSI at (800) 733-9267. Please note: Hours and days of availability vary at different centers. **You will not be able to schedule your examination appointment until you have received a Scheduling Authorization via email from notices@ptcny.com.**

TESTING SOFTWARE DEMO

A Tutorial and Testing Software Demonstration can be viewed online. Go to http://www.ptcny.com/cbt/demo.htm. This online Tutorial can give you an idea about the features of the testing software.

SCHEDULING YOUR EXAMINATION APPOINTMENT

Once your application has been received and processed and your eligibility verified, you will be sent a notice from PTC confirming receipt of payment and acceptance of application. Within six weeks prior to the first day of the testing period, you will be sent a Scheduling Authorization via email from notices@ptcny.com. Please ensure you enter your correct email address on the application and add the notices@ptcny.com to your contacts. If you do not receive a Scheduling Authorization at least three weeks before the beginning of the testing period, contact the Professional Testing Corporation at (212) 356-0660.

The Scheduling Authorization will indicate how to schedule your examination appointment as well as the dates during which testing is available. Appointment times are first-come, first-serve, so schedule your appointment as soon as you receive your Scheduling Authorization in order to maximize your chance of testing at your preferred location and on your preferred date.

Your current driver's license, passport, or U.S. military ID must be presented in order to gain admission to the testing center. PTC also recommends you bring a paper copy of your Scheduling Authorization and your PSI appointment confirmation with you to the testing center.

After you make your test appointment, PSI will send you a confirmation email with the date, time and location of your exam. Please check this confirmation carefully for the correct date, time and location. Contact PSI at (800) 733-9267 if you do not receive this email confirmation or if there is a mistake with your appointment.

- **It is your responsibility as the candidate to call PSI to schedule the examination appointment.**
- **It is highly recommended that you become familiar with the testing site.**
- **Arrival at the testing site at the appointed time is the responsibility of the candidate. Please plan for weather, traffic, parking, and any security requirements that are specific to the testing location. Late arrival may prevent you from testing.**

SPECIAL TEST CENTERS, EXCLUDING THE UNITED STATES AND PARTS OF CANADA

It may be possible to establish a special testing center to take the examination in your own country for an additional fee of $150. Complete the Request for Special Test Center Form, available at www.ptcny.com, and submit it with the application, all required documentation, and fees at least eight weeks before the testing period begins.

If there are no computer test centers in your province in Canada, you can follow this same procedure or travel to the closest computerized testing center in the United States or Canada to take the exam.

SPECIAL NEEDS

AHSCP and PTC supports the intent of and complies with the Americans with Disabilities Act (ADA). PTC will take steps reasonably necessary to make certification accessible to persons with disabilities covered by the ADA. Special testing arrangements may be made upon receipt of the Application, examination fee, and a completed and signed Request for Special Needs Accommodations Form, available from www.ptcny.com or by calling PTC at (212) 356-0660. This form must be uploaded with the online application at least EIGHT weeks before the testing period begins. Please use this form if you need to bring a service dog, medicine, food or beverages needed for a medical condition with you to the testing center.

Information supplied on the Request for Special Accommodations form will only be used to determine the need for special accommodations and will be kept confidential

CHANGING YOUR EXAMINATION APPOINTMENT

If you need to cancel your examination appointment or reschedule to a different date within the two-week testing period you must contact PSI at (800) 733-9267 no later than noon, Eastern Standard Time, of the second business day PRIOR to your scheduled appointment.

PSI does not have the authority to authorize refunds or transfers to another testing period.

RULES FOR THE EXAMINATION

1. All Electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to, cell phones, laptop computers, tablets, Bluetooth devices; wearable technology such as smart watches; MP3 players such as iPods; pagers, cameras and voice recorders are not permitted to be used and cannot be taken in the examination room.

2. No books, papers, or reference materials may be taken into or removed from the testing room.

3. Simple, nonprogrammable calculators are permitted with the exception of calculators as part of cellular phones, and other prohibited electronic devices. A calculator is also available on screen if needed.

4. No questions concerning content of the examination may be asked during the testing period. The candidate should read carefully the directions that are provided on screen at the beginning of the examination session.

5. Candidates are prohibited from leaving the testing room while their examination is in session, with the sole exception of going to the restroom.

Violation of any of the rules listed above may lead to forfeiture of fees, dismissal from testing room, and cancellation of your test scores.

REPORT OF RESULTS

Candidates will be notified in writing by the American Hypertension Specialist Certification Program within four weeks of the close of the testing window whether they have passed or failed the examination. The total examination scores will be reported. Successful candidates will also receive certificates from AHSCP.

REEXAMINATION

The Qualifying Examination for Specialist in Clinical Hypertension may be taken as often as desired upon filing of a new Application and fee. There is no limit to the number of times the examination may be repeated.

CONFIDENTIALITY

1. The American Hypertension Specialist Certification Program will release the individual test scores ONLY to the individual candidate.
2. Any questions concerning test results should be referred to the Professional Testing Corporation at (212) 356-0660.

CONTENT OF EXAMINATION

1. The Certification Examination for Hypertension Specialists is a computer-based examination composed of 200 multiple-choice, objective questions with a total testing time of four (4) hours.
2. The content for the examination is described in the Content Outline below.
3. The questions for the examination are obtained from individuals with expertise in clinical hypertension and are reviewed for construction, accuracy, and appropriateness by the American Hypertension Specialist Certification Program.
4. The American Hypertension Specialist Certification Program prepares the examination with the advice and assistance of the Professional Testing Corporation.
5. The Certification Examination for Hypertension Specialists will be weighted in approximately the following manner:

I.	Basic Science	15%
II.	Diagnostic Evaluation	10%
III.	Secondary Hypertension	20%
IV.	Treatment	35%
V.	Treatment Special Conditions	20%

CONTENT OUTLINE

I. BASIC SCIENCE

A. Physiology (Hemodynamics, Renin-Angiotensin-Aldosterone System, Sympathetic Nervous System)
B. Pathophysiology
C. Epidemiology (Risk, Prevalence, Importance of Systolic Hypertension, Control Rates)
D. Genetics
E. Pharmacology

II. DIAGNOSTIC EVALUATION

A. Blood Pressure Measurement/Monitoring
B. Blood Pressure Classification
C. Clinical Characteristics
D. Laboratory Testing
E. Target Organ Damage

III. SECONDARY HYPERTENSION

A. Renal Parenchymal Disease
B. Renovascular
C. Endocrine
D. Obstructive Sleep Apnea
E. Other Including Pharmacologic

IV. TREATMENT

A. Prevention/Public Health Strategies
B. Lifestyle Modification/Nonpharmacologic Treatment
C. Clinical Trials
D. Drug Therapy (Drugs, Combination Therapy, Targets, Approaches)
E. Treatment Guidelines
F. Barriers to Treatment and Control, Adherence

V. TREATMENT: SPECIAL CONDITIONS

A. Hypertensive Crisis/Emergencies/Urgencies/Malignant Hypertension
B. Resistant Hypertension
C. Co-existing Renal Disease (Proteinuria, Diabetic Nephropathy, Renal Failure)
D. Co-existing Heart Disease (Coronary Artery Disease, Myocardial Infarction, Congestive Heart Failure)
E. Co-existing Vascular Disease (Aortic Aneurysm, Stroke)
F. Lipids, Obesity, and Diabetes
G. Hypertension in Pregnancy
H. Orthostatic Hypotension
I. Psychologic Disorders
J. Children and Adolescents

SAMPLE EXAMINATION QUESTIONS

In the following questions, choose the one best answer.

1. A 42-year-old man, seen for a check-up, has blood pressure of 135/85 mm Hg, with a body mass index of 29, and no symptoms. He reports occasional exercise and consumption of 4-5 beers per week. The exam and usual tests are normal. Which of the following lifestyle interventions is the best strategy for management?

   1. Weight loss
   2. Stress management
   3. Decreased alcohol intake
   4. Dietary supplementation with potassium

2. An overweight 55-year-old man with type II diabetes mellitus has blood pressures 145-150/90-95 mm Hg. His fasting glucose level is 138 mg/dL and his hemoglobin A1C level is 7.8%. He has normal renal function and 1+ proteinuria. He stopped smoking one year ago. Which antihypertensive drug should be started?

   1. Ramipril
   2. Verapamil
   3. Metoprolol
   4. Amlodipine

3. A 24-year-old woman is seen for recent headaches with a blood pressure of 190/120 mm Hg. Two years ago her pressure was normal. The examination is normal except for narrowed retinal arteries and a systolic-diastolic upper abdominal bruit. Urinalysis is normal, serum creatinine is 0.9 mg/dL, Na 139, K 3.6, Cl 102, HCO_3 26. Which of the following tests is indicated?

   1. Renal artery imaging
   2. 24-hour urine free cortisol
   3. Urine metanephrine excretion
   4. Serum thyroid hormone and TSH levels

5. Laboratory studies in a 45-year-old man with an average blood pressure of 165/110 mm Hg while receiving no antihypertensive therapy are as follows: Serum sodium 144 mEq/L, potassium 3.1 mEq/L, HCO_3 32, glucose 110 mg/dL and creatinine 1.1 mg/dL. Which <u>one</u> of the following test results obtained after 7 days on a high sodium diet supports the suspected diagnosis of primary aldosteronism?

   1. Plasma renin activity= 2.5 ng/mL/hr
   2. Urinary potassium excretion = 20 mEq/L
   3. Plasma aldosterone / plasma renin activity ratio = 8.0
   4. Urinary aldosterone excretion = 30 micrograms/24 hours

CORRECT ANSWERS TO SAMPLE QUESTIONS

1. **1**; 2. **1**; 3. **1**; 4. **4**

ASSESSMENT TOOLS AND STUDY OPTIONS

Assessment tools and study options for preparing to take the Specialist in Clinical Hypertension Examination include the following:

- "2017 Certification Examination for Hypertension Specialists" – Handbook for Candidates – see sections entitled (1) Content Outline, and (2) Sample Examination Questions

- The Practice Examination for the Hypertension Specialist Examination, a 60 question computerized test simulating the actual examination. The practice examination covers the five content areas of the examination. For more information, go to www.ptcny.com and see Page 13 of this Handbook.

- Refer to the "Suggested Study Topics for the Hypertension Specialist Certification Exam" at http://www.ash-us.org/documents/files/Suggested-Study-Sources-ASH-HTN-Specialist-Examination.pdf. This Study Topics document is an outline of current clinical hypertension literature, and consists of (a) hypertension textbooks (b) links to clinical practice guidelines and statements, and (c) a list of significant randomized clinical trials that serve as the basis for current practice recommendations.

- Participation in continuing education activities relating to hypertension and cardiovascular disease, e.g. ASH Annual Scientific Meeting, and other activities posted on the ASH Website and elsewhere.

ONLINE PRACTICE TEST FOR SPECIALISTS IN CLINICAL HYPERTENSION

WHAT IS IT: A practice test consisting of 60 questions with a testing time of 2 hours taken over the Internet

WHY TAKE IT: To experience taking a computerized exam, to review an example of the type of content included in the Certification Examination for Hypertension Specialists, and to learn more about question format, style, and level of difficulty

SCORE REPORT: After completing the online practice test, you will receive an instant score report showing test performance in each of the content areas. The score report does not provide correct answers or indicate which questions were answered correctly and incorrectly. Once the practice test is scored, you cannot return to the test to review the questions

NOTE: Performance on the online practice test may differ from actual performance on the Qualifying Examination. Thus, there is no guarantee that taking this practice test will help you pass the Qualifying Examination. Participants may, however, find it helpful to review content in any areas of weakness indicated on the score reports prior to taking the Qualifying Examination

CONTENT INCLUDED

I. Basic Science
II. Diagnostic Evaluation
III. Secondary Hypertension
IV. Treatment
V. Treatment Special Conditions

FEE: $195 by credit card

APPLY: Go to www.ptcny.com and select Online Practice Test for Specialists in Clinical Hypertension

FURTHER INFO: Visit www.ptcny.com or call Professional Testing Corporation at 212-356-0660