



Georgia Society of Health-System Pharmacists

Our Mission is to help our members become better practitioners.

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NOTICE OF RENEWALS OF PHARMACIST AND NUCLEAR PHARMACIST LICENSES AND NOTICE REGARDING ACTIVE - RENEWAL PENDING STATUS

The Georgia Board of Pharmacy has begun the online renewal process for active pharmacist and nuclear pharmacist licenses. Licensees interested in license renewal should consult the Board's website at <https://gadch.mylicense.com/eGov/>. All pharmacist and nuclear pharmacist licenses expire on December 31, 2016.

If a licensee has submitted a timely and complete renewal application on or before December 31, 2016, the licensee's license status online will change from "active" to "active-renewal pending" after submission of the renewal application. "Active-Renewal Pending" does not mean that the license has lapsed, is inactive, is deficient, or invalid in anyway. Rather, "Active-Renewal Pending" status merely reflects that the licensee has submitted a timely renewal application. A licensee should save the receipt generated after submission of a timely and complete application as additional proof of renewal during the period in which the application is reviewed.

Please be reminded that licensees will not receive pocket license cards in the mail. Pocket license cards may now be printed, free of charge, on the Georgia Board of Pharmacy website: <http://gadch.mylicense.com/PocketCards/>. Pocket license cards may be also ordered using the "[Duplicate Pharmacy License-License Verification Order Form](#)" that appears under "Applications and Forms" on the website of the Georgia Board of Pharmacy: <http://gbp.georgia.gov/>

Call for Committee Volunteers

GSHP invites you to serve as a member of one of our committees during the 2017 year.

GSHP's mission is to help our members become better practitioners. We work towards fulfilling our mission every year through education of our members via district meetings, statewide meetings, newsletters, and our website; fostering professional standards; educating the public about the role of health system pharmacists; monitoring legislative issues that affect pharmacy; and by promoting health system pharmacy as a career path for future pharmacists. The majority of our Society's work is done by member volunteers working through our committees. You can play a vital role by serving on one of our committees.

What will you get out of it? It looks good on your resume. You will meet and get to know many of the current and future pharmacy leaders in Georgia, make new friends, and maybe make a good impression on a future employer. Also, you will have the professional satisfaction of helping shape and advance health system pharmacy in Georgia.

What is your commitment? It can be as little as giving your input during our upcoming Committee Day on Saturday, January 7, 2017 and participating in conference calls, to taking on other assignments depending on your interests and time.

The following is a description of the functions of each committee. If you are interested in serving on a committee for GSHP, please click on the link below:

<https://www.surveymonkey.com/r/2017gshpcommittee>

If you were a member of a committee last year, please also click on the link and confirm your participation for this year.

Committees will meet on Saturday, January 7, 2017 from 9am to 12 noon at Eagles Landing Country Club in Stockbridge, ([directions](#)). If you cannot attend Committee Day, you can still serve on a committee. The Committee Chair will contact you regarding upcoming meetings or other opportunities to participate.

COMMITTEE FUNCTIONS AND CHARGES:

COMMUNICATIONS COUNCIL: The Communications Council and Editorial Board is responsible for the direction, development, and quality control of all GSHP publications, including the GSHP web site.

EDUCATIONAL AFFAIRS: The Educational Affairs Committee is responsible for planning, coordinating, and evaluating educational content of the 3 statewide GSHP meetings.

LEGISLATIVE AFFAIRS: The Legislative Committee is responsible for informing the GSHP membership and Board of Directors of important legislation and regulations and how they will impact pharmacy practice in organized health care settings in Georgia.

ORGANIZATIONAL AFFAIRS: The Organizational Affairs Committee reviews and analyzes the GSHP organization and make recommendations to increase its effectiveness. It also serves as a liaison between GSHP and other professional organizations.

PROFESSIONAL AFFAIRS: The Professional Affairs Committee provides recommendations to the Board of Directors on policies and actions to be taken by GSHP on issues of professional practice.

PUBLIC RELATIONS: The Public Relations Committee provides the public with information and awareness of GSHP's mission and values through a variety of forums and media. GSHP's publics include, but are not limited to: patients/consumers and their families, industry, other healthcare professionals, organized healthcare executives, academia, pharmacists, technicians and other pharmacy support staff, and other pharmacy professional organizations.

STUDENT and RESIDENTS COMMITTEE: The Student and Residents Committee provides input to GSHP on how to get students interested in health-system pharmacy practice and how to get them interested and involved in GSHP.

Make a commitment to get involved with a GSHP Committee.

Matthews Retiring from Mercer College of Pharmacy

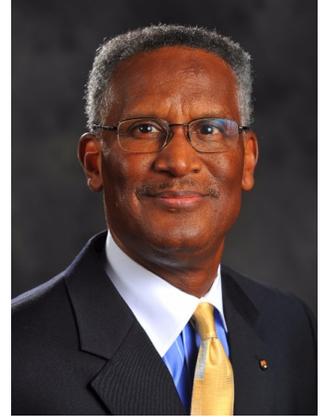
It's Time

H.W. "Ted" Matthews

Many of you may have already heard that I will be retiring from Mercer University College of Pharmacy at the end of this academic

year, June 30, 2017, but I wanted you to hear the news directly from me. I have been with the University for over four decades and have served as dean for nearly 27 years. There is a season for everything, and it's time for me to move on to my next journey in life.

I have been incredibly blessed to have had such a fulfilling job for so many years. The many opportunities given me to help make our College of Pharmacy a better place have kept me excited and motivated every single day. This has kept the fire that burns within me to be committed to continuous quality improvement and the pursuit of excellence.



I would like to personally thank all of you who have steadfastly supported and encouraged me. Your confidence in me has made me feel good about coming to work every day. I am humbled and honored to have been given the privilege of being dean at my alma mater. I am excited and confident that our College of Pharmacy has a bright future as we continue to value and embrace our motto, "A Tradition of Excellence, A Legacy of Caring." And I look forward to interacting with all of you for the remainder of the school year and wish you the very best.

Sincerely,
H.W. "Ted" Matthews
Dean

Call for Resolutions for the 2017 ASHP House of Delegates

The Call for Resolutions for the 2017 House of Delegates Session is open. Deadline for submissions is **March 6, 2017**.

The [ASHP policy development process](#) allows professional policies to originate in three ways:

- from ASHP councils, which meet in July, September and February;
- from executive committees of sections and forums; and
- directly from ASHP members via Resolutions.

ASHP's Resolution process offers a mechanism for ASHP members to have input into the House of Delegates. Resolutions require sponsorship by two active members, who need not be delegates. All Resolutions must be submitted 90 days in advance of the House session, which is March 6, 2017. Resolutions must be submitted via the [online Resolutions Submission Form](#).

Before submitting a Resolution, members are encouraged to familiarize themselves with the [Guidelines for Submitting Resolutions](#) and [existing ASHP policy](#) on the proposed topic. New policy recommendations that resulted from September's ASHP Policy Week and are currently under Board consideration are available on the ASHP Connect [House of Delegates Community](#) site.

We appreciate your interest and participation in the policymaking process of ASHP. If you have any questions about the process for submitting a Resolution, you are encouraged to contact the Chair of the House of Delegates at hodchair@ashp.org.

Congratulations

GSHP Deborah Fincher has been appointed Chair of the Georgia Department of Community

Clinical Article

Venous Thromboembolism Management: Updated CHEST Guidelines and Non-Vitamin K Antagonist Oral Anticoagulants

Catherine Akin, Pharm.D. Candidate Class of 2017 and Maria Miller Thurston, Pharm.D., BCPS

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Background:

Venous thromboembolism (VTE) can be broken into two main categories: deep vein thrombosis (DVT) and pulmonary embolism (PE).¹ Thrombi are clots composed of red blood cells, platelets, leukocytes, and fibrin. These clots can cause vessel damage, stagnant blood flow, and can lead to stroke and death. The Wells Criteria can be used to help determine probability of a DVT in a patient and items include:²

- Active cancer (treatment or palliation within 6 months) [1 point]
- Recently bedridden for > 3 days or major surgery within 4 months [1 point]
- Calf swelling > 3 cm compared to other leg [1 point]
- Collateral nonvaricose superficial veins present [1 point]
- Entire leg swollen [1 point]
- Localized tenderness along the deep venous system [1 point]
- Pitting edema, confined to the symptomatic leg [1 point]
- Paralysis, paresis, or recent plaster immobilization of the lower extremity [1 point]
- Previously documented DVT [1 point]

The total score from the Wells Criteria can help practitioners to determine if further testing is necessary. Three or more of the above listed criteria suggest that a DVT is likely and further d-dimer testing is generally recommended. Practitioners should also consider the patient's signs and symptoms. Signs and symptoms of a DVT include pain, tenderness, swelling, warmth, edema, and erythema, commonly in a single lower extremity. Signs and symptoms of a PE include dyspnea, tachypnea, pleuritic chest pain, hemoptysis, cough, syncope, and tachycardia. Diagnostic tools used to help confirm diagnosis include the d-dimer test, duplex ultrasonography, electrocardiography, troponin and natriuretic peptide levels, and angiography.³

Treatment of VTE includes anticoagulant therapy or surgery. Anticoagulants can also be used to help prevent VTE in patients with risk factors or to help prevent recurrence of VTE in patients with a history of VTE. Currently available anticoagulant options include unfractionated heparin, low-molecular weight heparin (enoxaparin), vitamin K antagonists (warfarin), factor Xa inhibitors (fondaparinux, rivaroxaban), and novel oral anticoagulants (apixaban, dabigatran, edoxaban).⁴

The 9th edition of the CHEST Guidelines were published in 2012. Food and Drug Administration approval dates for the non-vitamin K antagonist oral anticoagulants span from 2010-2015. Since the 9th edition was published, these new therapies have been studied and evidence has arisen regarding their efficacy and safety.⁵ The American College of Chest Physicians therefore were prompted to evaluate the available evidence and update the guidelines accordingly to acknowledge these new agents and incorporate recommendations concerning their place in therapy for VTE management. All of the recommendations were reviewed and new studies evaluated to determine if updates in other topic areas were warranted as well.

2016 CHEST 10th Edition Guideline Updates:

- In patients with DVT of the leg or PE and no cancer, non-vitamin K antagonist oral anticoagulants (NOACs) are suggested over a VKA for long-term (first 3 months) anticoagulant therapy. (Grade 2B) There is currently no preference for one NOAC over another based on current availability of data. Non-vitamin K antagonist oral anticoagulants display fewer recurrent VTEs and major bleeding incidents over VKAs and LMWH.⁵
- In patients with a DVT of the leg or PE and cancer, LMWH is suggested over a VKA or NOAC therapy for long-term (first 3 months) anticoagulant therapy. (Grade 2C) Based on the nature of a patient's cancer, it can be more difficult to achieve a therapeutic INR with VKA therapy. In cancer patients who have issues tolerating oral therapy (i.e., vomiting), injected LMWH would be more reliable than an oral VKA.⁶
- In patients with a DVT of the leg or PE who receive therapy for 3+ months, there is no need to change anticoagulants after the first 3 months. (Grade 2C) Changes may occur based on patient-specific factors and responses.
- In patients with an unprovoked proximal DVT or PE who are stopping anticoagulation therapy and have no contraindication to aspirin, it is recommended to give aspirin to prevent recurrent VTE. (Grade 2B) Although aspirin is not as effective as anticoagulants, risk/benefit analysis should be done for patients who have decided to stop anticoagulant therapy. Aspirin 81mg could be an acceptable therapeutic option in these patients.⁷
- In patients with an acute VTE in the leg, routine use of compression stockings is not suggested for post-thrombotic syndrome (PTS) prevention. (Grade 2B) Graduated compression stockings are justified with acute/chronic symptoms, but are not recommended for prevention of chronic complications of PTS. More robust trials have shown no reduction in PTS risk with the use of compression stockings.⁸
- In patients with subsegmental PE (no involvement of more proximal pulmonary arteries) and no proximal DVT in the legs who have a ...
 - ...low clinical risk for recurrent VTE, clinical surveillance is preferred over anticoagulation. (Grade 2C)
 - ...high clinical risk for recurrent VTE, anticoagulation is preferred over clinical surveillance. (Grade 2C)

Imaging is needed to rule-out proximal DVT. Surveillance can be supplemented with

imaging.

- In patients with low-risk PE whose home circumstances are adequate, treatment at home or early discharge is suggested over standard discharge that occurs after the first five days of treatment. (Grade 2B) In addition to the recommendation to discharge low-risk patients early, it is now recommended to treat entirely at home when appropriate.⁹
- In most patients with acute PE not associated with hypotension, recommend against systemically administered thrombolytic therapy. (Grade 1B) Risk/benefit analysis shows risks outweigh benefits without hypotension. For patients with severe cardiopulmonary impairment, aggressive anticoagulation and supportive care is recommended over thrombolytic therapy. Thrombolytic therapy is generally indicated after hypotension develops.¹⁰
- In selected patients with acute PE who deteriorate after starting anticoagulant therapy, but have yet to develop hypotension, and who have a low bleeding risk, suggest systemically administered thrombolytic therapy over no such therapy. (Grade 2C) Thrombolytic therapy is indicated with associated symptoms of shock and myocardial dysfunction or damage due to a shift in the risk-benefit assessment.
- In patients with acute PE who are treated with a thrombolytic agent, suggest systemic thrombolytic therapy using a peripheral vein over catheter-directed thrombolysis (CDT). (Grade 2C) There is a higher quality of evidence to support the use of systemic thrombolytic therapy. There have been no randomized trials comparing systemic thrombolytic therapy to CDT.
- In selected patients with chronic thromboembolic pulmonary hypertension (CTEPH) who are identified by an experienced thromboendarterectomy team, suggest pulmonary thromboendarterectomy over none. (Grade 2C) Guidelines removed restrictions associated with the recommendation in favor of thromboendarterectomy team's expertise over concerns about suboptimal evaluations.
- In patients who have recurrent VTE on VKA therapy within therapeutic range or on a NOAC and believed to be compliant, suggest switching to LMWH treatment temporarily. (Grade 2C) Temporary switch of at least 1 month to re-evaluate patient and determine the strength of diagnosis of a recurrent VTE, patient's compliance with therapy, and if an underlying malignancy is present.¹¹
- In patients who have recurrent VTE on long-term LMWH and believed to be compliant, suggest increasing dose of LMWH by 1/4 to 1/3 (Grade 2C) It is recommended to evaluate the strength of diagnosis of a recurrent VTE, patient's compliance with therapy, and if an underlying malignancy is present.

Impact on Ambulatory Pharmacy Practice:

Novel oral anticoagulant agents have many advantages over traditional anticoagulants (e.g., warfarin and enoxaparin) such as standardized dosing, reduced monitoring requirements, and increased ease of use. Recent studies demonstrating the benefit and safety profiles of the NOACs have lent support to their increased use in practice. For the

ambulatory care pharmacist, some of the new recommendations within the CHEST guidelines provide an additional practice opportunity. Patients who are able to complete VTE treatment at home or who are discharged early could benefit from the expertise of an ambulatory care pharmacist monitoring them during that process. An ambulatory care pharmacist could also offer an educational class for patients beginning NOAC therapy to reinforce counseling points after discharge. Finally, if compliance issues are discovered during the treatment period or the patient refuses to continue treatment, an ambulatory care pharmacist is well positioned to assess the patient's risks and benefits of therapy and potentially recommend aspirin therapy as an alternative.

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Insomnia in the Elderly: Approach and Treatment

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Insomnia is common in older adults but is complicated by polypharmacy and changes in clearance and metabolism of medications. Geriatric insomnia should not be ignored as there is a potential increased

risk in falls, fractures, and automobile accidents.^{2,3} When approaching insomnia treatment in older adults, providers should re-evaluate the use and doses of any medication that can contribute to insomnia.^{1,3} Examples of medications that may contribute to geriatric insomnia are listed below. If treatment is appropriate, providers should attempt non-pharmacological options; however, if elderly patients are still experiencing symptoms of insomnia, providers may initiate pharmacotherapy. Some classes of medications used in geriatric insomnia include non-benzodiazepine sedatives and sedating anti-depressants. Any medications initiated for insomnia treatment in geriatrics should be started at the lowest dose for the shortest possible time.

Table 1: Medications that May Contribute to Geriatric Insomnia

Medication Classes	Examples
Cholinesterase inhibitors	donepezil, rivastigmine
Antidepressants	sertraline, citalopram, paroxetine
Sedatives	zolpidem, phenobarbital, diazepam
Anti-Parkinson's agents	levodopa, selegiline
Antihypertensives	hydrochlorothiazide, metoprolol
Corticosteroids	prednisone, dexamethasone
Sympathomimetics	clonidine, phenylephrine

Non-pharmacologic options work well for insomnia in the elderly. Cognitive Behavioral Therapy for Insomnia (CBT-I) is highly effective for insomnia treatment in older adults and may work better than pharmacotherapy. CBT-I involves a sleep diary and education on sleep hygiene over 4-8 sessions.⁴ Massage, acupuncture, auricular therapy, acupuncture, meditation, yoga, and tai chi may also be beneficial complementary therapies with minimal side effects.⁵

Herbals are used for insomnia; however the evidence does not support the use of some herbals. Melatonin has evidence for treatment of insomnia in the elderly and should be considered due to its low risk of side effects. Valerian may improve subjective sleep measures, but it should not be recommended due to its variability in purity.⁵

Pharmacotherapy for insomnia in the elderly is complicated by changes in pharmacokinetics, potential for drug interactions, comorbid conditions, and lack of strong evidence from clinical trials. Many medications used for insomnia, including benzodiazepines and non-benzodiazepine sedatives, increase fall risk, can cause confusion, loss of balance, and accumulate in geriatric patients. Temazepam, a benzodiazepine used for sleep, does not have much evidence and is associated with increased daytime drowsiness and a 4-fold increased risk of hip fracture. Trazodone is an antidepressant used due to its sedating effects, but is associated with risk of falls and orthostasis.⁶ Mirtazapine is another sedating antidepressant but is also associated with increased risk of weight gain and falls.¹ Zolpidem, a non-benzodiazepine sedative, has been associated with traumatic brain injury and hip fracture resulting in hospitalization.⁸

Many newer insomnia medications seem to be better tolerated in elderly patients. Eszopiclone, a non-benzodiazepine sedative, seems to be safe and effective in older adults without evidence of rebound insomnia. Its main side effect is unpleasant taste.⁷ Ramelteon, a melatonin receptor agonist, was shown to be effective in elderly patients with sleep apnea without rebound insomnia. Side effects include diarrhea, dizziness, and myalgia.⁹ Doxepin, a sedating antidepressant, improved symptoms and seems well-tolerated in the elderly with main side effects including headache and somnolence.¹⁰ The first orexin receptor antagonist, suvorexant increased total sleep time in elderly and non-elderly patients with insomnia with few side effects.¹¹

Due to the lack of strong evidence for pharmacotherapy in elderly insomniacs, there are no current

treatment guidelines. Patient-specific factors should be considered and an emphasis should be placed on non-pharmacologic therapies when possible.

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