KAFP JOURNAL
WINTER 2013
VOLUME 78
The Official Publication of the Kentucky Academy of Family Physicians

EVALUATION & TREATMENT of Premature Ejaculation

Management of Diabetes Mellitus in the Elderly:
CONSIDERATIONS FOR PRIMARY CARE PROVIDERS

An Accelerated Track to Rural Practice:
An Option to Complete Medical School in Three Years

WINTER 2013 · VOLUME 78

KENTUCKY ACADEMY OF FAMILY PHYSICIANS
STRONG MEDICINE FOR KENTUCKY

THE KENTUCKY ACADEMY OF FAMILY PHYSICIANS

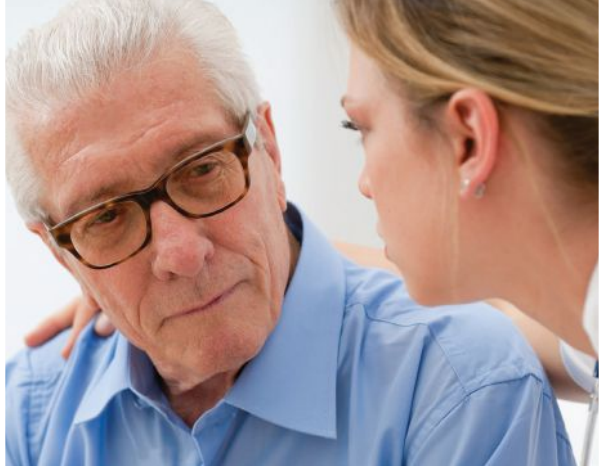
P.O. Box 1444
Ashland, KY 41105-1444

PHONE: 1-888-287-9339
FAX: 1-888-287-0662
WEB SITE: www.kafp.org
E-MAIL: *gerry.stover@kafp.org*
janice.hechesky@gmail.com

pcipublishing.com

Created by Publishing Concepts, Inc.
David Brown, President • dbrown@pcipublishing.com
For Advertising info contact
Michele Forinash • 1-800-561-4686
mforinash@pcipublishing.com

EDITION 17



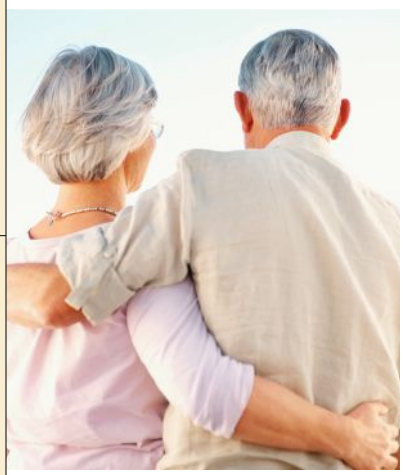


Table of Contents

THE KENTUCKY ACADEMY OF FAMILY PHYSICIANS

P.O. Box 1444 | Ashland, KY 41105-1444 | Office: 1-888-287-9339 | Fax: 1-888-287-0662

Gerry D. Stover, MS, EVP, gerry.stover@kafp.org
***Janice Hechesky*, Executive Assistant,** janice.hechesky@gmail.com

E-mail: **information@kafp.org** | Web site: **www.kafp.org**

COMMITTEE CHAIRS AND FOUNDATION

ADVOCACY COMMITTEE
Nancy Swikert, M.D.
e-mail: Ddwarrow@aol.com

Brent Wright, M.D.
e-mail: rbwright@tjsamson.org

BYLAWS COMMITTEE
E. C. Seeley, M.D.
e-mail: eseeley@andover.org

Mont Wood, M.D.
e-mail: rwood@trover.org

COMMUNICATION COMMITTEE
William Crump, M.D.
e-mail: wcrump@trover.org

Alan Stevens Wrightson, M.D.
e-mail: alan.wrightson@eku.edu

M. Eli Pendleton, M.D.
email: eli.pendleton@louisville.edu

EDUCATION COMMITTEE
Patty Swiney, M.D.
email: PSwine@aol.com

FINANCE COMMITTEE
John Darnell, Jr., M.D.
john.darnell54@gmail.com

Gay Fulkerson, M.D.
e-mail: drgfulk@kynet.net

LEADERSHIP COMMITTEE
Marshall E. Prunty, M.D.
email: drprunty@bellsouth.net
Mark Boyd, M.D.
email: mboyd@stelizabeth.com

KAFP FOUNDATION-RESEARCH COMMITTEE
TBA

PRACTICE ENHANCEMENT COMMITTEE
Michael King, M.D.
e-mail: mrking02@uky.edu

KAFP FOUNDATION
President
Nancy Swikert, M.D.
email: Ddwarrow@aol.com

Secretary
Baretta Casey, M.D.
email: bcase2@uky.edu

Treasurer
John Darnell, Jr., M.D.
email: john.darnell54@gmail.com

Member-at-Large
Patty Swiney, M.D.
email: PSwine@aol.com

Member-at-Large
Lisa Corum, M.D.
email: lisacorum@att.net

2013 KAFP CALENDAR

MARK YOUR CALENDAR FOR UPCOMING MEETINGS!

2013 TEN STATE
Feb. 22-24, 2013
University Club of NY at One West 54th St
Manhattan, NY

WVAFP ANNUAL MEETING
April 18-20, 2013
Embassy Suites
Charleston, WV

2013 NCSC & ALF
April 25-27, 2013
Sheraton Kansas City Hotel
Kansas City, MO

KAFP ANNUAL MEETING
Nov. 14-17, 2013
Crowne Plaza
Lexington, KY

2012-2013 OFFICERS, DIRECTORS AND DELEGATES

KAFP OFFICERS

Immediate Past-President, *Mark Boyd, M.D.*
413 S. Loop Rd.
Edgewood, KY 41017
OFFICE: 859-301-3800
Fax: 859-301-3820
e-mail: mboyd@stelizabeth.com

President, *Ron Waldridge, II, M.D.*
60 Mack Walters Rd.
Shelbyville, KY 40065
OFFICE: 502-633-4622
Fax: 502-633-6925
e-mail: r.waldridge@att.net

President-Elect, *Patty Swiney, M.D.*
266 Bourbon Acres Rd.
Paris, KY 40361
OFFICE: 859-987-3230
Fax: 859-987-1113
e-mail: PSwine@aol.com

Vice President, *Sharon Colton, M.D.*
P.O. Box 39
Evarts, KY 40828
OFFICE: 606-837-2108
Fax: 606-837-2111
e-mail: sharoncolton@bellsouth.net

Treasurer, *John H. Darnell, Jr., M.D.*
320 Sunset Dr.
Ashland, KY 41101
OFFICE: 606-833-6201
Fax: 606-833-4269
e-mail: john.darnell54@gmail.com

Secretary, *Melissa Zook, M.D.*
Bluegrass PCP, 803 Meyers Baker Rd., Ste. 150
London, KY 40741
OFFICE: 606-657-0903
Fax: None
e-mail: mzook@bluegrasspcp.com

AAFP DELEGATES AND ALTERNATES

Delegate, *Nancy Swikert, M.D.*
10003 Country Hills Ct.
Union, KY 41091
OFFICE: 859-384-2660
Fax: 859-384-5232
e-mail: ddwarrow@aol.com

Delegate, *Mont Wood, M.D.*
200 Clinic Dr.
Madisonville, KY 42431
OFFICE: 270-825-6690
Fax: 270-825-6696
e-mail: rwood@trover.org

Alternate, *Pat Williams, M.D.*
110 So. Ninth St.
Mayfield, KY 42066
OFFICE: 270-247-7795
Fax: 270-247-9013
e-mail: dr.pat@bellsouth.net

Alternate, *Richard Miles, M.D.*
124 Dowell Rd.
Russell Springs, KY 42642
OFFICE: 270-866-2440
Fax: 270-866-2442
e-mail: rsmfp80@duo-county.com

KAFP CONGRESS OF DELEGATES

Speaker, *Sam Matheny, M.D.*
474 West Third St.
Lexington, KY 40508
OFFICE: 859-323-5512
Fax: 859-323-6661
e-mail: matheny@uky.edu

Vice Speaker, *John Patterson, M.D., MSPH*
119 McDowell Rd. #2.
Lexington, KY 40502
OFFICE: 859-373-0033
Fax: None
e-mail: japatt@windstream.net

KAFP RESIDENT/STUDENT MEMBER

Resident-Glasgow
TBA

Alternate Resident-East KY, *Rebecca Osborne, M.D.*
141 Weslee Way, Apt 12
Hazard, KY 41701-9459
e-mail: becky.osborne@uky.edu

UK Student
TBA

UofL Student, Luke Murray-4th Year
Phone: 859-257-2826
Fax: 859-323-6661
e-mail: luke.murray@uky.edu

REGIONAL DIRECTORS

Region I-(Districts 1, 2, 3 & 6)
Alben Shockley, M.D.
Convenient Care
2211 Mayfair Dr., Ste. 101
Owensboro, KY 42301
Office: 270-688-1352
Fax: 270-683-4313
e-mail: abshock@aol.com

Region II (Districts 5)
Renee Girdler, M.D.
5501 Meadow Stream Way
Crestwood, KY 40014
OFFICE: 502-852-2822
Fax: 502-852-2819
e-mail: rvgird01@louisville.edu

Region III (Districts 4, 7, 8, 9 & 10)
Kevin Pearce, M.D.
KY Clinic 302
740 S Limestone
Lexington, KY 40536
OFFICE: 859-323-5938
Fax: 859-323-6661
e-mail: kpearce@email.uky.edu

Region IV (Districts 11, 12, 13, 14 & 15)
Lisa Fugate, D.O.
1101 St. Christopher Dr. #4105
Ashland, KY 41105
OFFICE: 606-836-3196
Fax: 606-836-2564
e-mail: lisafugate@alltel.net

DISTRICT DIRECTORS

District 1, OPEN

District 2 (Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster)
Alben Shockley, M.D.
Convenient Care
2211 Mayfair Dr., Ste. 101
Owensboro, KY 42301
OFFICE: 270-686-6180
Fax: 270-683-4313
e-mail: abshock@aol.com

District 3 (Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, Trigg)
Brian Chaney, M.D.
1010 Med. Ctr. Dr.
Powderly, KY 42367
OFFICE: 270-377-1608
Fax: 270-377-1681
e-mail: bwchaney@hotmail.com

District 4 (Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, Washington)
Brian O'Donoghue, M.D.
111 N. Breckinridge St.
Hardinsburg, KY 40143
OFFICE: 270-756-2178
Fax: 270-756-6768 E
e-mail: none

District 5 (Jefferson)
Rajesh Sheth, M.D.
332 W. Broadway, Ste. 600
Louisville, KY 40202
OFFICE: 502-583-2759
Fax: 502-583-2760
e-mail: rkssheth@yahoo.com

District 6 (Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalfe, Monroe, Simpson, Warren)
Phillip Bale, M.D.
1330 N. Race St.
Glasgow, KY 42141
OFFICE: 270-651-6791
Fax: 270-651-3182
e-mail: balemd@glasgow-ky.com

District 7 (Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, Trimble)
Meredith Kehrer, M.D.
130 Stonecrest Rd., Ste. 106
Shelbyville, KY 41017
OFFICE: 502-647-1000
Fax: 502-647-1006
e-mail: merekehrer@hughes.com

District 8 (Boone, Campbell, Kenton)
Vicki Chan, M.D.
125 Saint Michael Dr.
Cold Springs, KY 41076
OFFICE: 859-781-4111
Fax: 859-957-2355
e-mail: chickievan@yahoo.com

District 9 (Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Robertson, Scott) **OPEN**

District 10 (Fayette, Jessamine, Woodford)
Michael King, M.D.
K302 KY Clinic, 740 So. Limestone
Lexington, KY 40536
OFFICE: 859-323-5264
Fax: 859-323-6661
e-mail: mrking02@uky.edu

District 11 (Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, Wolfe)
Jon Strauss, M.D.
305 Estill St.
Berea, KY 40403
OFFICE: 859-986-9521
Fax: 859-986-7369
e-mail: jonstrauss@strauss-clinic.com

District 12 (Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, Wayne)
Glyndon Click, M.D.
126 Portman Ave.
Stanford, KY 40484
OFFICE: 606-365-9181
Fax: 606-365-9183
e-mail: pff@searnet.com

District 13 (Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, Rowan)
Lisa Fugate, D.O.
1101 St. Christopher Dr. #4105
Ashland, KY 41105
OFFICE: 606-836-3196
Fax: 606-836-2564
e-mail: lisafugate@alltel.net

District 14 (Breathitt, Floyd, Johnson, Knott, Ltcher, Magoffin, Martin, Perry, Pike)
Joe Kingery, D.O.
750 Morton Blvd., Rm B-440
Hazard, KY 41701
OFFICE: 606-439-3557
Fax: 606-435-0392
e-mail: jeking0@email.uky.edu

District 15 (Bell, Clay, Harlan, Knox, Laurel, Leslie, Whitley)
David B. Williams, M.D.
P.O. Box 127
Williamsburg, KY 40769
OFFICE: 606-549-8244
Fax: 606-549-0354
e-mail: dwilliamsM.D.@bellsouth.net

message from the PRESIDENT

My admiration goes out this month to our Past President Marshall "Eddie" Prunty for his attempt to become our District 15 Representative. Though his bid for this political office was not successful, I admire his physical and moral courage to take on the 'fight.' We have all heard of 'fight-flight' as it relates to how animals react to a dangerous situation. In this case I am using it as a simile to the action we take when we don't agree with how things are being done. Do we elect to drop out, or do we do as Dr. Prunty did - get engaged? Whether it is some policy or law that we don't agree with that gets passed in Frankfort or Washington, or KAFP or AAFP, or at our local hospital, we all have a decision to make - do we get engaged or do we elect to drop out? I do not agree with everything that is done in Frankfort but I am not going to move to another state away from my family and patients because of it. I have to ask myself what I can do to make a difference.

As I stated in my first article as President - I had some good mentors that were leaders who stayed engaged. I was reminded the other day by one of those leaders of what it took to get a family medicine department at the University of Louisville. It took leaders that defined a clear mission and set it as their number one priority. Our priorities define us whether as individuals or organizations. At KAFP's last strategic planning meeting we set our mission as "Improving the health of Kentuckians, promoting the value of family medicine, and serving the needs of our members in a supportive professional community." Our vision, though long term, is what we see as being successful in the mission which is 'A family physician for all Kentuckians'. To help achieve our mission the KAFP board recently approved the hiring of a lobbyist. Your leaders recognized that we need 'boots

I CALL ON EACH OF YOU TO GET ENGAGED. YOUR ENGAGEMENT CAN BE AS LITTLE AS PAYING YOUR DUES, TO PUTTING FORTH YOUR NAME AS DR. PRUNTY DID FOR POLITICAL OFFICE. **LASTLY, WHEN YOU ARE WITH OTHER COLLEAGUES I HOPE YOU WILL TAKE A FEW MINUTES TO SPEAK UP ABOUT THE KAFP. IF THEY ARE NOT A MEMBER, PLEASE ENCOURAGE THEM TO DO SO AS WE NEED NUMBERS.**

on the ground' in Frankfort in order to get our priorities heard. I want to say that a lobbyist is no replacement for a family physician that has established a good rapport with their legislators. Our specialty is at a critical junction in a health system that is deciding between fee-for-service and shared-saving model. In order for our lobbyist and your legislative committee to be effective we have to be in Frankfort and we need to make the case that we represent family medicine in the Commonwealth.

So, I call on each of you to get engaged. Your engagement can be as little as paying your dues, to putting forth your name as Dr. Prunty did for political office. Likely, there will be a policy or law that gets adopted that you do not agree with but I hope you will look at what our mission and vision are for the KAFP. Lastly, when you are with other colleagues I hope you will take a few minutes to speak up about the KAFP. If they are not a member, please encourage them to join as we need numbers. Tell them about our FREE CME webinars. Our webinars are in line with our strategic focus of serving your needs. Our EVP has arranged our next webinar to be Tuesday, January 22nd at 1 pm EST: 'Extreme Makeover - PCMH Edition' by Dr. John Bender from Colorado. We were made aware of Dr. Bender from an article in the Denver Post -- http://www.denverpost.com/news/ci_21520974/key-medicaid-reform-effort-colorado-shows-promising-savings. To register for this webinar go to the bottom of the KAFP web page or type this link into your browser – http://www.kafp.org/webinar-2/. Leadership requires that your words match your actions so I am beginning my practice transformation to a PCMH. My next few articles will focus on this transformation. If you need more information about our past webinars or membership or whatever, please call our EVP Gerry Stover at 888-287-9339 or email him at gerry.stover@kafp.org.

RICK MILES, M.D., FAAFP

THE DEMISE OF THE SMALL PRACTICE

I know the risk of sounding like a Luddite but I am actually fairly well versed in the use of a computer. I have used Palm Pilots and smartphones with Epocrates, planning calendars, and risk management calculators for years. I have looked at the Electronic Health Record for over ten years, and so far I see nothing that suggests that it improves quality of care. While the outflow of information is excellent and the research potential is very good, the input is not intuitive. My patients tell me that, as utilized, doctors who have the EHR spend less time looking at and communicating with the patient. As a solo practitioner, the cost of installing the system and the loss of productivity, initially, with no real increase later makes the present incentives a joke.[1] We are about to face the perfect storm.

As I read *The American Medical News* by the AMA recently, two articles stood out as relevant. The first, "Lawmakers warned of the demise of solo medical practices,"[2] and the second, "Researchers uncover new 'weekend effect' in cardiac care."[3]

Few know the problems of solo care better than I: no cost sharing; limited vacations because the weeks before and returning from result in increased work load; an inability to afford help with IT support; the inability to negotiate with insurers, which results in low pay; and the struggle to keep the practice open. But the tradeoff is that I can provide a high quality of care because I know my patients. I know about their children and their marital problems. I know about their financial ability to afford medications. I know not to put them on quinolones if I am called at night about a UTI, because they are on Coumadin for atrial fibrillation. As I cover at night or on weekends I find the decisions that I have to make on other physician's patients to be more difficult.

The weekend effect, as explained in the article, is the differences in systems and the way care is given on weekends, which results in increased mortality with atrial fibrillation.[3] I share call with other physicians on weekends and I see hospitalists working during the week. I would suggest that the weekend effect holds true for many other problems as well. The fine-tuning involved in patient care requires an advanced knowledge of the individual. Genetic studies are teaching us what physicians have known for years, that different patients respond with great variability to treatments.[4,5,6] Some may require a quarter of the standard dose of a drug and some may require twice the dose (Coumadin, chemotherapy, etc.) Some patients require instructions repeated again and again (hearing loss, short term memory loss, etc.) A doctor who knows a patient as an individual and has cared for that patient in the office and in the hospital can do a better job of individualizing the care. I contend that the weekend effect is as much a result of the physician not knowing patients as it is a systems effect. I took call 24/7 for over seven years and it is impossible for one to do well over a long period, so I am not faulting physicians for wanting time off. I am stating that knowing the patient aids in the care provided.

I referred earlier to the perfect storm and here is what I mean. By 2015 I have to implement an EHR "meaningfully."[8] I also have to learn and implement ICD-10.[7] This is after it took the concerted effort of my staff and me to implement ICD-9. In order to benefit from

THE PERFECT STORM IS IN THE ABUNDANCE OF ATTEMPTS TO IMPROVE OUR MEDICAL SYSTEM, ONE THAT HAS BEEN DAMAGED BY OVERREGULATION, AND IN APPLYING A BUSINESS MODEL VIEW TO THE MEDICAL PROFESSION FOR THE LAST 25 YEARS.

the Patient Centered Medical Home I will be required to totally change my practice. All three are Herculean efforts and none are proven to be fully operational, cost-effective or to definitely improve patient care.[8,9,10] At 61 years of age my course is clear to me. I have neither the energy nor the inclination to make these changes. I am of the opinion that all are financially based and not quality-proven changes. I will try to find someone to come into my practice and implement these changes. I will either try to find an organization to employ me and find me a partner (my local hospital is in no way ready to do this because of their own struggles), I will go to a cash-only system and tell Medicare, Medicaid, and the insurance companies to go to hell (which will make me feel wonderful but leave my patients having to deal with them) or I will rationalize that I have done my job long and well and will retire, taking those long vacations and family visits I have given up as a solo doc.

There are lots of primary care docs aged 55 and over in my area who are going to do the same. There are four practices that I know of who, after spending the time and money needed to institute EHRs, went back to paper. Primary care docs do not make a lot of money, but we are not stupid. Several have other sources of income or other "jobs" to do - I will be a part-time Medical Review Officer for a drug screening company. There is a severe shortage of primary care physicians and, as Barbara Starfield pointed out, we are the basis of cost effective quality care in the medical system.[11] A recent study in Jefferson County, KY pointed out that only 22% of the Nurse Practitioners are practicing primary care[12] while the American Academy of Nurse Practitioners claim 75% practice in a primary care setting.

The perfect storm is in the abundance of attempts to improve our medical system, one that has been damaged by over-regulation, and in applying a business model view to the medical profession for the last 25 years. The planning and implementation is done with little input from practicing physicians and almost no attempts to get feedback from those actually delivering the care, especially in rural areas. My Luddite heart fears for the future of my patients and my grandchildren. I beg the academicians, the politicians, and the medical organizations to consider methods to ease the burden of older physicians and smaller practices so as not to lose the personal care that patients love. Is the supermarket an improvement from the old local grocery? Sure, but we had to go to food stamps for people who were given credit by the smaller old-time grocers. Is the delivery of medical care really a function of business rules, or an art as held by Osler? Will we improve quality and save money with the coming changes? That remains to be proven. Will we lose experienced compassionate physicians in the process? Of this I have no doubt. Plans need to be made to replace them with a system of quality care or a system to support them in making these changes. So far the efforts to do either are woefully lacking.

REFERENCES:
1. https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/EHRIncentivePrograms/
2. http://www.ama-assn.org/amednews/2012/07/30/gvsb0730.htm
3. http://www.ama-assn.org/amednews/2012/07/30/prsb0730.htm
4. http://www.ncbi.nlm.nih.gov/pubmed/11336055
5. http://www.medscape.org/viewarticle/566575
6. http://clinicaltrials.gov/ct2/show/NCT01520402
7. http://www.cms.gov/Medicare/Coding/ICD10/index.html?redirect=/ICD10/
8. http://medicaleconomics.modernmedicine.com/memag/Medical+Economics/AOA-opposes-ICD-10-supports-EHR-interoperability-t/ArticleStandard/Article/detail/782489?contextCategoryId=25082&ref=25
9. http://diseasemanagementcareblog.blogspot.com/2009/09/group-health-cooperative-study-says.html
10. http://www.healthcareitnews.com/news/study-highlights-lurking-question-measuring-ehr-effectiveness
11. Primary Care: Balancing Health Needs, Services, and Technology, Primary Care: Concept, Evaluation, and Policy, The Effectiveness of Medical Care: Validating Clinical Wisdom (Johns Hopkins Series in Contemporary Medicine and Public Health). Barbara Starfield 1998.
12. http://reachevaluation.com/wp-content/uploads/2012/08/LPCA-Final-13Dec2011.pdf

Dr. Rick Miles, FAAFP is a solo Family Physician for over 32 years in Russell Springs KY. Dr. Miles is an associate clinical professor, serving as a rural preceptor for the University of Louisville, University of Kentucky and Pikeville Osteopathic School. He served as president of the KAFP in 1999 and was the KAFP citizen Doctor of the year in 2010. Dr. Miles has served on many committees and boards for the KMA such as the Technical Advisory Committee for Medicaid, Chairman of the Drug Formulary Committee 1992-1994 and is presently the Chairman of the Insurance Affordability and Availability Committee. Dr. Miles currently serves as An Alternate Delegate to the KAFP.

ROBERT LAMONT WOOD, M.D.

EVALUATION & TREATMENT *of* Premature Ejaculation

You are just completing an office visit with a 42 year old male. His stated reason for the visit is to establish himself as a patient and get refills on his hydrochlorothiazide. Just as you are walking out of the room, he very hesitantly asks you about premature ejaculation. He has had a problem with this for most of his sexual life and it is starting to be a problem for him and his wife. Can you help him?

The Diagnostic and Statistical Manual of Mental Disorders, Edition 4 (DSMIV) defines premature ejaculation (PE) as persistent or recurrent ejaculation with minimal sexual stimulation before, on, or shortly after penetration, and before the person wishes it with the disturbance causing marked distress or interpersonal difficulty. Prevalence of the disorder in the United States was 24% in the 2006 Premature Ejaculation Prevalence and Attitudes (PEPA) survey, and almost half of cases had the problem upon starting sexual activity.[1] The above patient is typical in his presentation in that men often wait to seek help until the problem affects their partner. They also do not feel comfortable discussing the issue. Twelve percent in the PEPA Survey were too embarrassed to discuss the issue and 23% were not comfortable discussing sexual issues with their partner. A quarter of those surveyed would rather discuss sexual concerns with a physician who is not their regular physician and 17% were too embarrassed to discuss the issue with a physician at all.[1,2]

In order to identify PE within our patient population, physicians need to be open to addressing and comfortable discussing this issue. The physician should ask open ended questions to establish an accurate sexual and psychosocial history.[3] This will help identify the etiology of the patient's PE and help choose an effective treatment plan. It is important to know if PE is associated with other sexual dysfunctions.[4] It also should be established if this is primary or secondary in nature.[3] It has been observed that if a male has erectile dysfunction he can develop secondary PE in his haste to orgasm before the erection fails.

PE IS A TROUBLING CONDITION WHEREIN THE PATIENT EXPERIENCES EJACULATION WITH MINIMAL STIMULATION BEFORE OR SHORTLY AFTER VAGINAL PENETRATION.

In order to make the diagnosis, one must document the amount of stress caused to the patient and his sexual partner by PE as well as the patient's perception of control of ejaculation. Knowing about onset and duration might help determine primary versus secondary cases. Documenting psychosocial parts of the patient's history such as the presence of sexual abuse could point to a need for psychotherapy. The medical history is also important as the presence of diabetes and other neuropathies have been associated with ejaculatory dysfunc-

continued on page 12 >>

NEW
ICD-10 DEADLINE:
OCT 1, 2014

2014 COMPLIANCE DEADLINE FOR ICD-10

The ICD-10 transition is coming October 1, 2014. The ICD-10 transition will change every part of how you provide care, from software upgrades, to patient registration and referrals, to clinical documentation, and billing. Work with your software vendor, clearinghouse, and billing service now to ensure you are ready when the time comes. ICD-10 is closer than it seems.

CMS can help. Visit the CMS website at **www.cms.gov/ICD10** for resources to get your practice ready.

CMS ICD-10
Official CMS Industry Resources for the ICD-10 Transition
www.cms.gov/ICD10

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

TABLE 1

AUA GUIDELINES

1. The diagnosis of PE is based on sexual history alone. A detailed sexual history should be obtained from all patients with ejaculatory problems (based on panel consensus).
2. In patients with concomitant erectile dysfunction and PE, treat the erectile dysfunction first (panel consensus).
3. The risks and benefits of all treatment options should be discussed with the patient prior to any intervention. Patient and partner satisfaction is the primary target outcome for the treatment of PE (panel consensus).
4. PE can be treated effectively with Selective Serotonin Reuptake Inhibitors (SSRI's) or with topical anesthetics. The optimal treatment choice shall be based on physician judgment and patient preference. (Based on panel consensus and review of data).[6]

tion. A history of substance abuse and opiate withdrawal can also be clues.[3]

It also is important to get an idea of the patient's estimate of their Intravaginal Ejaculatory Latency Time (IELT). This may not be accurate compared to the partner's estimate but will give an idea as to how severe the patient's problem is. Ultimately the goal of treatment is to improve quality of life for the patient and their partner by improving satisfaction with sexual intercourse.[5]

The American Urologic Association states that PE is a self-reported diagnosis which does not require lab tests unless history of the patient indicates a need for tests. The AUA suggest the following areas be addressed for proper diagnosis:

1. Frequency and duration of PE.
2. Whether or not PE is with one specific partner or all partners.
3. Whether PE occurs with all or some sexual attempts.
4. The degree of stimulus resulting in PE.
5. The nature and frequency of sexual activity.
6. The impact of PE on sexual activity and quality of life.[6]

Due to lack of studies looking at treatment of PE, many treatments are behaviorally based.[3] Masters and Johnson advanced the squeeze technique whereby the male withdraws the penis and squeezes the glans prior to ejaculation. Many view this as impractical and may be difficult for patients to do consistently. Another technique is the stop-start technique. The man pauses as often as is necessary during sexual stimulation to delay impending ejaculation. With time and practice this can teach and develop increased control of ejaculation.

Psychotherapy can also be of use, but generally requires a stable sexual relationship. Studies have shown that in the short term behavioral therapy is successful; however the benefit is not maintained three years out.[3]

Several pharmacologic approaches have been tried, off label, with variable results. One study, which looked at using prilocaine-lidocaine cream twenty minutes prior to intercourse, demonstrated an 80%

increased pre-ejaculatory time.[7] The obvious downside decreased sensation for the male, which the partner may also experience unless a condom is used. SSRI antidepressants may also delay ejaculation and increase IELT.[7] Sertraline (20-40mg), fluoxetine (25-50 mg), paroxetine (25-50 mg), and clomipramine (25-50 mg) have increased IELT, with the strongest effect seen with paroxetine. Chronic use increased IELT but was associated with decreased libido, erectile dysfunction and retrograde ejaculation. Short-term use was of little help.

Phosphodiesterase inhibitors, typically used for erectile dysfunction, have been studied and have little effect on the IELT. However, one study showed the combination of sildenafil and paroxetine increased sexual satisfaction and increased IELT.[7] Dapoxetine, a short-acting SSRI, shows promise for acute usage in select populations. It is currently used in Europe but is not yet available in the US.

In summary, PE is a troubling condition wherein the patient experiences ejaculation with minimal stimulation before or shortly after vaginal penetration. It can cause significant distress for both patients and their partners, and is generally under recognized. A detailed history and physical and an openness to ask about and discuss this problem are key to proper identification and treatment.

REFERENCES

1. Porst, H, et al. The Premature Ejaculation Prevalence and Attitudes (PEPA) survey: prevalence, comorbidities, and professional help-seeking. Eur Urol, 2007 Mar; 51 (3):816-23.
2. Althof, Stanley. Prevalance, Characteristics and Implications of Premature Ejaculation/Rapid Ejaculation. *The Journal of Urology*, 125:842-898, March 2006.
3. Shabsigh, Ridwan. Diagnosing Premature Ejaculation: A Review. *J Sex Medicine*, 2006; 3(suppl 4):318-323.
4. Hellstrom, Wayne J. G. , Heintz, Jay W. Treatment of Premature Ejaculation: New Drugs and Treatment Strategies. *Current Urology Reports*, 2006, 7:473-478.
5. Carson, C. Gunn, K. Premature Ejaculation: Definition and Prevalence. *International Journal of Impotence Research*, (2006)18,55-513.
6. Sharlip, Ira. Guidelines for the Diagnosis and Management of Premature Ejaculation. *J Sex Med*, 2006(suppl 4):309-317.
7. Hellstrom, Wayne JG. Current and Future Pharmacotherapies of Premature Ejaculation. *J Sex Med*, 2006; 3(suppl 4): 332-341.

Robert Lamont Wood, MD is a 1984 graduate of the University of Louisville School of Medicine. He completed three years of residency with Trover Foundation Family Medicine Residency and graduated in 1987. He is currently Residency Director of Baptist Health Madisonville Family Medicine Residency. He has been on faculty since 1988 and the Director since 1995. Dr. Wood and his wife Carol live in Madisonville with their family.

DEMETRA ANTIMISIARIS, PHARM.D. AND RENEE GIRDLER, M.D.

Management of Diabetes Mellitus in the Elderly:

CONSIDERATIONS FOR PRIMARY CARE PROVIDERS

THE CARE OF ELDERLY DIABETICS REQUIRES A BALANCE BETWEEN DISEASE MANAGEMENT GOALS AND PATIENT QUALITY-OF-LIFE GOALS.

Background on Diabetes Management in Elders and Primary Care

The percent of patients over 65 years of age presenting to all sub-specialty and primary care office visits combined constituted roughly 40% from 1998-2008. In addition, there was a 15% increase in the number of people over 65 years of age from 1998-2008, and a 37% increase in the population from 45-64 years of age. Thus the proportion of people over age 65 is expected to double by the year 2030 due to the aging of the baby boomers. The increasing concentration of physician's visits by this aging population has resulted in both an increasing frequency of visits per patient within this age group, and an increase in office visits where medications are prescribed or continued. The largest increases in office visits address essential hypertension, cardiac dysrhythmias and diabetes.[1]

Because of this shift in patient population demographics and increased reliance on primary care physicians to provide sound geriatric care to the aging population, this article will focus on management of diabetes mellitus (DM), one of the top three co-morbidities in the older patient. Currently, we are not addressing DM management in the elderly very well. According to the National Diabetes Quality Improvement Alliance, of patients over 65 years of age, 42-60% have HA1c > 7 and 20-28% have HA1c > 8. Of those 65-75 years of age, over a third have LDL > 130 mg/dL, a similar number have blood pressures > 140/90 and almost half take daily aspirin. DM management in the elderly should be highly individualized because this cohort is a very heterogeneous group. Chronological age does not necessarily guarantee that an individual's physiology, functionality or combination of diseases will be the same as the next individual of the same age.

Another reason for an individualized approach to the elderly diabetic is that the guideline data and clinical trials have not been inclusive of the older elderly patient cohort, thus application of clinical guidance and the use of certain treatment modalities requires careful consideration and monitoring in older patients. The studies pertaining to DM management in older patients have produced surprising results. The Action to Control Cardiovascular Risk in Diabetes[2] trial is an example of the challenge of seeking guidance applicable to the elderly. This trial compared tight glucose control versus normal control to see if stringent glucose control would result in improved and looked at outcomes in patients with DM who had existing CVD or additional CVD risk factors. The over-65 intensive glucose control arm was discontinued early due to an alarming increase in mortality and the entire trial (average age of subjects was 66 years of age) was discontinued due to increases in all-cause mortality in the intervention arm. The investigators concluded that it was the intensive therapy (use of many medications at aggressive doses) in combination with the older study participants which increased mortality due to increased drug-drug and drug-disease interactions.[2] The Veterans Affairs Diabetes Trial (VADT)

FIGURE 1

2010 American Diabetes Association Recommendations for Elderly Diabetics

"Older adults who are functional, cognitively intact and have significant life expectancy should receive DM treatment using goals developed for younger adults"

"HA1C goals less stringent than the general goal of 7% may be appropriate for patients with a history of severe hypoglycemia, limited life expectancy, advanced microvascular or macrovascular complications, extensive comorbid conditions, and those with longstanding diabetes in whom the general goal is difficult to attain."

American Diabetes Association. *Diabetes Care*. 2010

(average age of subjects was 60 years old) also found increased all-cause mortality with intensive glycemic control.[3] By contrast the UK Prospective Diabetes Study (UKPDS) looked at intensive glycemic control in younger DM patients, (entering study at about 48 years old with more recent diagnosis) and showed a benefit in decreased risk of all-cause mortality.[4] This may indicate intensive or aggressive glycemic control may be more beneficial in a less frail elder with more recent onset DM and history of better glycemic control. Conversely attempting intensive control in elders with long standing disease and macrovascular complications is not beneficial. The American Diabetes Association, as a result of recent trial data, has made changes to their treatment goal recommendations which address the elderly. (Fig. 1)

DM management in the elderly patient requires some important considerations such as: understanding the impact of life expectancy on DM management choices; avoidance of severe hypoglycemia; and understanding how common geriatric syndromes, multiple disease states and multiple concurrent medication use can affect DM treatment strategy.

Care Plan Considerations

In considering factors specific to individual elders of various levels of frailty, the following are important: life expectancy, goals of care including the impact of geriatric syndromes and other comorbidities versus day to day quality of life, patient preferences, and time required to benefit from therapy. To illustrate the typical concerns we will look at a hypothetical patient case.

Edna is a 79 year old female, with Alzheimer's dementia, who lives in an independent living apartment within a retirement community. She eats one meal daily in the dining room but still cooks for herself and has staff assistance with housekeeping, transportation to appointments, and shopping. She manages her own medications, although the staff helps her reorder them from the drug store. She is able to perform most activities of daily living but as mentioned, gets assistance with finances and transportation. Lately, she has been found down twice, and reports tripping on throw rugs in her apartment. Edna has recently presented to your practice as a new patient and you have discovered that she has type 2 DM. What should be considered in developing her care plan?

Life Expectancy: At 80 years of age, Americans can expect to live 3-10 additional years. People with Alzheimer's can expect, based on age of onset, to live anywhere from 3.8-10.7 years.[5] Edna, who was diagnosed two years ago, would have a life expectancy of about three to four more years (assuming she was diagnosed shortly after onset).

Goals of Care: For Edna, the overriding goal of care is quality of day-to-day life over the next few years. Prevention of end organ damage due to hyperglycemia is less of a concern given her life expectancy, whereas avoidance of hypoglycemia is of primary concern. While poor glycemic control over years is associated with numerous complications, hypoglycemia can be far more harmful in the short term. According to one study of 16,600 patients, those 65 and over with one severe hypoglycemic event requiring emergency services or hospitalization have a 26% increased risk of developing dementia over the next five years.[6] Those with two episodes had an 80% increased risk, and those with three or more have a 94% increased risk. Edna also has a history of falls, which is a geriatric syndrome of great concern, especially in a person who lives alone. We do not want to add additional risk with possible hypoglycemia.

A patient such as Edna should have a HA1C goal of 8.0%[7] given her risk of hypoglycemia, cognitive impairment and likely inability to adhere to a strict glucose management regimen. Overall the risk of severe or fatal hypoglycemia in treated diabetics increases exponentially with age due to a variety of factors: decreased awareness of the warning symptoms of hypoglycemia; impaired glucagon, growth hormone, epinephrine and cortisol response to hypoglycemia; other medications and co-morbidities which could blunt the normal response to hypoglycemia; and decreased functional status and ability to get help during hypoglycemic episodes. Conversely, avoidance of extreme hyperglycemia is important as well. Falls and incontinence can be made worse by polyuria and nocturia, and hyperglycemia has been shown to cause fatigue, loss of function, weight loss, and impaired wound healing.

Time to Benefit: Prevention of macrovascular and microvascular complications is the long-term goal of diabetic management, but how does that change in a patient with a limited life expec-

continued on page 16 >>

tancy? The greatest risk of morbidity and mortality comes with the macrovascular complications of diabetes, including heart disease and stroke. Macrovascular complications are observed in approximately 80% of older diabetics and responsible for approximately 50-60% of diabetes related deaths.[7] However, the time to benefit of glycemic control is prohibitively long, especially in elderly patients. Therefore it is important to focus on control of hypertension and hyperlipidemia as well. In managing these risk factors, the estimated time to benefit is approximately two years but may be as short as six to twelve months.[8,9] An important consideration is that the time to benefit data found in the literature is derived from a relatively young study cohort unlikely to have the same mix of medical and functional problems as any given elder you are treating. Again, it is important to individualize treatment while keeping the evidence in mind.

Edna would likely benefit from appropriate blood pressure control if it is determined that her blood pressure medications can be managed alone or with help, that she is not significantly orthostatic, and that her blood pressure medications are not worsening her diabetes control (i.e. not masking signs of hypoglycemia or causing hyperglycemia). Lipid management needs to be done in the context of the older patient who may have a decline in hypercholesterolemia due to decreased caloric intake and decreased endogenous production. Also important is to consider how the choice of statin can impact her level of muscle pain, which can impair her ADLs and exercise, and her cognition, as many can cross the blood-brain barrier.

What about microvascular complications? There is a striking lack of clinical evidence with respect to the elderly in terms of prevention of retinopathy, neuropathy and nephropathy with intense glucose control. The Action in Diabetes and Vascular Disease (ADVANCE) trial, well-known for demonstrating slight benefit of intensive control on microvascular disease but not on macrovascular disease, demonstrated approximately a 20% decrease in albuminuria at 5 years and an impact seen at approximately 2 years of tight control. It did not show a decrease in progression to worsening kidney disease.[10] Alternately, the VADT study, at 5.6 years of follow up, demonstrated minimal effects on microvascular complications. For our patient, tight control would not be beneficial given her age and the risk of hypoglycemia.

Patient Preferences: Usually this consideration centers on using the least number of medications at the lowest cost, and the least complicated dosing regimen. But it is also important to consider the patient's attitudes towards treatment. Some patients would rather die than use insulin, and some patients do not comprehend or care about the problems associ-

TABLE 1

Risk of hypoglycemia	Benefits/risks/pharmacology	Special considerations in the elderly
Biguanides: metformin		
Almost no hypoglycemia	Can cause weight loss, also anorexia.	FDA drug monograph warning about lactic acidosis, real risk not demonstrated in clinical trials. Studies seem to indicate safety in elderly, even those with some renal insufficiency.
Sulfonylureas: glyburide and glipizide		
Hypoglycemia	Special caution with long-acting agents; glipizide preferred over glyburide due to its shorter duration of action.	Avoidance of any agent that can cause significant hypoglycemia is risky in isolated elders who have cognitive impairment who may forget to eat, or any elder who eats meals irregularly. Elders who take sulfonylureas have a 36 percent higher risk of hypoglycemia than younger patients. (Neumiller) Glyburide should not be used in patients with CrCl<50ml/min and glipizide dose should be decreased 50 percent in patients with CrCl 50ml/min.
Meglitinides: repaglinide and nateglinide		
Hypoglycemia (but less due to rapid onset and short duration of action)	Not often used. Similar to sulfonylureas with different binding site.	Dosed pre-prandial, useful in those who eat irregularly. Hepatically cleared, minimal amounts renally thus dose adjustment not necessary in those with renal impairment (except end stage renal disease). Can be initial therapy choice in those elders who cannot tolerate metformin or sulfonylureas.
Thiazolidinediones: pioglitazone (mainly since rosiglitazone use restricted by FDA)		
Not associated with hypoglycemia	Improve insulin resistance and tissue sensitivity to insulin, can be used in renal impairment.	Limited use in elders due to propensity to cause edema and fluid retention and shouldn't be used in patients with CHF. Also associated with increased fracture risk in women.
Alpha-glycosidase inhibitors: acarbose and miglitol		
Not associated with hypoglycemia	Most effective for post prandial hyperglycemia.	Limited use in elders due to high rates of diarrhea and flatulence. Avoid in patients with significant renal impairment.
Glucagon like peptide-1: exenatide, an incretin mimetic and liraglutide, a glucagon-like peptide 1 (GLP-1) analogue		
	Useful in overweight, fit individuals with weight related co-morbidities.	Limited use in elders due to significant weight loss. 10-40% report of nausea and vomiting with this class of drugs, not a good option for frail elders. Renal dosing.
Amylin analogue: pramlintide		
Hypoglycemia	Synthetic amylin analogue given at mealtime SC with insulin	Not commonly used in the elderly.
Dipeptidyl-peptidase IV inhibitors: sitagliptin, saxagliptin, linagliptin		
Minimal risk of hypoglycemia	No dose adjustment for renal impairment	Rarely used in elders due to expense. Long-term safety unclear and sparse data in elders.
Insulin		
Hypoglycemia	less hypoglycemia with newer long acting insulin -can use with oral agents	Requires evaluation of patient or caregiver to provide good administration and management of dose and meals. Avoid sliding scales. Renal dosing.

continued on page 18 >>

ated with suboptimal control. It is important to discuss and document all aspects of patient preferences, their ability to adhere to regimens, and any other patient-centered barriers to optimal diabetic care.

Medications

The selection of medications to use in an elder with diabetes is centered on avoidance of side effects and drug-drug or drug disease interactions. An additional consideration is the possibility of other medications causing or contributing to hyperglycemia. A list of medications known to contribute to hyperglycemia at the following reference: http://www.dlife.com/diabetes/type-2/diabetes-treatment/drugs-that-raise-blood-glucose.

Table 1, on the previous page, summarizes some of the risks and benefits associated with various diabetic medications.

Lastly, a few words on the various medications used to manage the consequences of diabetes: statins, bone strengthening medications, ACE inhibitors, ARB agents and renin-blocking agents. The bone medications (except for denosumab and calcitonin) all require a renal adjustment or have renal contraindications. Of the statins, pravastatin is the least likely to cause cognitive or muscle side effects but also requires renal adjustment. ACE inhibitors, ARB agents and renin blocking agents have renal protective effects to a certain extent, but must be adjusted in advanced kidney disease. For most drugs in the elderly 80 years and older, consider that there has been little to no data collected on octogenarians, especially frail octogenarians. Thus individualization and careful risk benefit consideration is the key to medication use for optimal outcomes in this age group.

Summary

The care of elderly diabetics requires a balance between disease management goals and patient quality-of-life goals. Care should be taken in selection and dose of medications, giving consideration to side effects and overall medication burden. Individualized care with the input of all concerned parties can lead to better adherence and tolerance, as well as patient satisfaction.

REFERENCES

1. Cherry D, Lucas C, Decker S. Population Aging and the Use of Office Based Physician Services. NCHS Data Brief No. 41, August 2010. Centers for Disease Control Data Briefs: http://www.cdc.gov/nchs/data/databriefs/db41.htm
2. Effects of Intensive Glucose Lowering in Type 2 Diabetes The Action to Control Cardiovascular Risk in Diabetes Study Group (ACCORD). N Engl J Med 2008; 358:2545-2559.
3. Duckworth W, McCarren M, Abraira C. Glucose Control and Cardiovascular Complications: The VA Diabetes Trial (VADT). Diabetes Care May 2001 Vol 24 No 24 no. 5942-945.
4. UK Prospective Diabetes Study (UKPDS) Group: Intensive blood-glucose control with sulfonylureas or insulin compared with conventional treatment and risks of complications in patients with type 2 diabetes (UKPDS 33). Lancet 352:837–853, 1998.
5. Jing X, Matthews F. Survival Times in People with Dementia: Analysis from a Population Based Cohort Study with 14 Year Follow Up. BMJ. 2008 Feb 2;336(7638):258-62.
6. Whitmer R, Karter A, Yaffe K, et al. Hypoglycemic Episodes and Risk of Dementia in Older Patients with Type 2 Diabetes Mellitus. JAMA 2009, 301 (15): 1565-1572.
7. ADA at www.diabetes.org
8. Prevention of stroke by antihypertensive drug treatment in older persons with isolated systolic hypertension. Final results of the Systolic Hypertension in the Elderly Program (SHEP). SHEP Cooperative Research Group. JAMA. 1991 Jun 26;265(24):3255-64.
9. Ford, I. et al. A Prospective Study of Pravastatin in the Elderly at Risk (PROSPER): Screening Experience and Baseline Characteristics. Curr Control Trials Cardiovasc Med. 2002; 3(1): 8.
10. Heller S, Summary of the ADVANCE trial on behalf of the ADVANCE group. Diabetes Care. November 2009 vol. 32 no. suppl 2 S357-S361.
11. Cukierman T, Gerstein H, Williamson J. Cognitive Decline and Dementia in Diabetes - Systematic Overview of Prospective Observational Studies. Diabetologia. 2005 Dec;48(12):2460-9.
12. Cukierman T, Gerstein H, Williamson J, et al. Relationship between baseline glycemic control and cognitive function in individuals with type 2 diabetes and other cardiovascular risk factors: the action to control cardiovascular risk indiabetes-memory in diabetes (ACCORD-MIND) trial. Diabetes Care. 2009Feb;32(2):221-6.
13. Skyler J, Berzenstal R, Bonow R, et al. Intensive glycemic control and the prevention of cardiovascular events: Implications of the ACCORD, ADVANCE and VA Diabetes Trials. Diabetes Care. 32(1) Jan 2009 187-192.
14. American Geriatric Society Clinical Guideline on Diabetes Mellitus. JAGS 2003 May 51(5) supplement S265-S280.
15. Salpeter S, Greyber E, Pasternak G. Risk of Fatal and Nonfatal Lactic Acidosis with Metformin Use in Type 2 Diabetes Meletus. Cochrane Data Base Systemic Review. 2006 Jan 25(1) CD 002967 Review.
16. Rachmani R, Slavachevski I, Levi Z, et al. Metformin in patients with type 2 diabetes mellitus: reconsideration of traditional contraindications. European Journal of Internal Medicine. 13 (2002) 428–433.
17. Bodmer M, Meier C, Krahebuhl S, et al. Metformin, Sulfonylureas and other Antidiabetic Drugs and the Risk of Lactic Acidosis or Hypoglycemia: a nested case control analysis. Diabetes Care. 2008 Mpv 31 (1): 2086-91.
18. Neumiller JJ, Setter SM. Pharmacologic management of the older patient with type 2 diabetes mellitus. Am J Geriatr Pharmacother 2009; 7:324.

Demetra Antimisiaris, PharmD earned her Doctor of Pharmacy degree at the University of the Pacific (California), and completed a Geriatric Clinical pharmacy residency at UCLA. She is a Certified Geriatric Pharmacist and Fellow of the American Society of Consultant Pharmacists. She joined the University of Louisville Family & Geriatric Medicine faculty to head the "Polypharmacy Initiative" which is an innovative and unique program amongst medical schools in the United States, dedicated exclusively to fighting the problem of polypharmacy through education, research and outreach.

Renee Vannucci Girdler, MD, FAAFP is an Associate Professor and the Vice Chair of Family Medicine in the Department of Family and Geriatric Medicine at the University of Louisville. She received her MD from the University of Kentucky College of Medicine and completed her Family Medicine residency at the University of Kentucky.

University of Pikeville
Kentucky College of Osteopathic Medicine

Located in the heart of Appalachia, Kentucky College of Osteopathic Medicine provides an osteopathic medical education in a student-centered setting that emphasizes primary care, encourages research and promotes lifelong scholarly activity. In keeping with our mission, our graduates are committed to serving the health care needs of rural communities in Kentucky and the Appalachian region.

Recognized for excellence by *U.S. News & World Report*, KYCOM has earned high marks among all medical schools in the nation, ranking 12th in rural medicine, second in the percentage of graduates who enter primary care and fifth in affordability among U.S. private medical schools.

BEST GRAD SCHOOLS
U.S.News & World Report
MED SCHOOL
RURAL MEDICINE
2013

The Coal Building, the home of the Kentucky College of Osteopathic Medicine, opened fall 2012. The $40 million facility includes a clinical skills training and evaluation center, research and teaching laboratories, an osteopathic manipulative medicine lab, classrooms, offices and student study spaces.

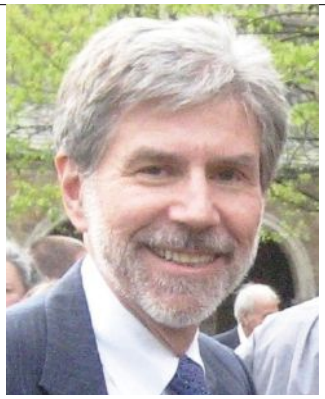
Open Positions:

- **Assistant or Associate Dean of Graduate Medical Education**
- **Assistant or Associate Professor of Family Medicine**
- **Assistant or Associate Professor of Osteopathic Principles and Practices**
- **Assistant or Associate Professor of Microbiology**
- **Assistant or Associate Professor of Anatomy**

The University of Pikeville is committed to providing equal employment opportunity to all qualified individuals without regard to race, ethnicity, gender, religion, national origin, marital or veteran status, sexual orientation, age, disability or any other characteristic protected by law, in all personnel actions.

For more information, contact Human Resources:
(606) 218-5346 • hr@upike.edu • www.upike.edu

WILLIAM CRUMP, M.D., DAVID L WIEGMAN, PHD, STEVE FRICKER



An Accelerated Track to Rural Practice: An Option to Complete Medical School in Three Years

WITH HEIGHTENED AWARENESS OF THE NEED FOR MORE PRIMARY CARE DOCTORS AND THE FOCUS ON MALDISTRIBUTION OF PHYSICIANS, THE TIMING IS RIGHT FOR INNOVATIVE METHODS OF PRODUCING MORE RURAL PHYSICIANS.

Background

America's rural areas are severely underserved, with 20% of the U.S. population living in small towns, but only 9% of doctors practicing there.[1] Family doctors distribute more evenly, with 22% practicing outside of urban areas. The most effective methods for addressing this need are to facilitate medical school admission by students from rural areas and train them outside of urban areas.[1] The effectiveness of this strategy is limited by the small number of successful rural applicants. Pipeline programs facilitating academic preparation of rural students are promising, and once the students from small towns matriculate, they do as well as their urban counterparts in medical school. However, many rural students cite the length of training and the cost as significant barriers to their even considering medical school.[2]

One strategy to address this issue is to shorten medical school, saving an entire year of tuition while allowing entry into a paying residency position earlier. An earlier "3+3" program that combined the fourth year of medical school with the first year of residency was very successful. It was eventually halted by an ACGME decision that only graduates of medical school could be accepted into residency. In 2005 the AAFP Commission on Education wrote to ACGME asking for reconsideration of this decision to no avail.

The idea reached national academic attention in 2006 with an essay by the Editor of Academic Medicine that made the case that financial barriers may exclude many students coming from families of modest means, the most likely to choose rural practice, from consideration of medical school.[3] A companion editorial in the same journal suggested specific methods to shorten medical training to lessen these financial barriers.[4] At the same time, a strategic planning process by the Kentucky Academy of Family Physicians supported a proposal for a 3-year track for rural practice, communicated in an editorial.[5]

In the academic setting, this option was discussed among the Dean's staff at the University of Louisville School of Medicine (ULSOM) and the leadership of the Trover rural regional medical school campus[6] with options for implementation considered. When Texas Tech announced in 2009 that they had received LCME (Liaison Committee on Medical Education) approval to institute such a track, the planning process began in earnest. The ULSOM Dean authorized the Senior Associate Dean for Education to convene a multi-specialty group including all the Academic Associate Deans to consider an accelerated track for primary care. This work included review of published materials and personal discussions with leadership of

the schools experienced with accelerated tracks, including McMaster's University, University of Calgary, Lake Erie College of Osteopathic Medicine, and Texas Tech University. The final recommendation was that this proposal be moved forward as soon as possible.

A formal application was submitted to the LCME, with final approval in March, 2011 to begin the rural option for this accelerated track, based at the Trover rural campus in Madisonville. There was formal consideration for an urban underserved option to be developed later. The track was designated the Rural Medicine Accelerated Track (RMAT). The structure did not change the basic science M-1 and M-2 years, except that the two-month summer break after the M-1 year and the one-month break after the M-2 year were incorporated into rural clinical rotations. These additions and allocation of all M-3 elective time to RMAT met the requirement for 130 weeks of medical education between matriculation and beginning residency. The decision was made not to tie the RMAT to any specific residency program. The decision was also made to allow students to enter the track in the spring of the M-2 year rather than at admission. Those intending to apply for the RMAT would have participated in the summer activities prior to this decision point and either the student or the track director could suggest that the four-year option was better for this individual student. Waiting until this time provided a track record of both academic performance in medical school and demonstrated commitment to rural practice, making success more likely for the RMAT student. The first two students in the pilot began their first rural rotation (RMAT-1) in summer 2012.

Rural Medicine Accelerated Track (RMAT) Component Descriptions

RMAT-1:

The first component of the RMAT is focused on a detailed analysis of a rural physician's practice with an emphasis on continuity of care. Most students considering the accelerated track will do RMAT-1 at a location in or near their hometown during June after the first (M-1) year of medical school. These students prepare chronic care notes on patients with a common chronic disease suggested by their preceptor, develop a brief management protocol, follow-up with patients seen in the office, and prepare original patient education materials for their chosen chronic condition that are suitable for continuing use in the practice. In addition, the student completes a detailed county and practice assessment assisted by the preceptor and office staff.

RMAT-2:

The second component of the RMAT is focused on patient education, community assessment, anticipatory guidance for children, and physical examination skills. Students complete this component as part of the Trover Campus Preclinical program during July after the M-1 year. This four-week program, which has now been operating for six years, includes a community-driven project that provides free school physicals to 6th grade students in two Health Professional Shortage Area (HPSA) counties near Madisonville. The guidance materials and teaching props are produced by the RMAT-2 students working with Pre-med Trover Rural Scholars. The RMAT-2 students complete the physical examinations under the supervision of certified Health Department nurses and a family physician. Trover Scholars and Preclinical students jointly prepare and present a final report summarizing their findings from the examinations as well as the results of a county-wide community assessment. This report is shared each year with key citizens in the county.

RMAT-3:

RMAT-3 is a four-week experience at the end of the M-2 year that encompasses five of the eight goals of the existing M-3 FM clerkship and is based in a rural community practice.

RMAT-4:

RMAT-4 is a four-week block in the new M-3 (final) year and is based on an existing elective in a student-led free clinic for working, low-income, uninsured families of Hopkins (Madisonville) and adjacent Webster Counties. RMAT-4 takes what was a free clinic elective and makes it a requirement for the RMAT student. Also, three of the eight goals of the existing M-3 Family Medicine clerkship are moved into RMAT-4. The elective was begun in 2006 and has focused on longitudinal continuity of outpatient care within a matrix of performance improvement concepts using a simple electronic health record.

RMAT-5:

The capstone of the RMAT is the six-week clerkship (RMAT-5) at the end of the M-3 year. This experience includes the goals of the existing four-week Family Medicine Acting Internship and allows the time needed for the students to review in preparation for USMLE Steps 2 CK and CS that are taken during this rotation.

Issues With Implementation

For those considering adding an accelerated track option, this six-year planning process taught us some lessons. First, institutional commitment is key. The ULSOM Dean initiated the process, and tasked the Senior Dean for Education at the main campus to obtain input and advice from all key academic leaders. A 16-month process then ensued including multiple meetings of the champions of the idea with all leaders of primary care on the main campus. A separate meeting was held with key family medicine faculty, ultimately resulting in endorsement by the chair. With the current interest in extending family medicine residency training beyond 3 years, some saw shortening medical school as an attractive option. Others expressed concern that if the accelerated curriculum were confined to those seeking a family medicine residency, the prestige of the discipline in the academic

continued on page 22 >>

center could be damaged. When all concerns were addressed, the final proposal was submitted to the LCME.

Secondly, there is the issue of recruitment of students. Initially, we thought it may be difficult to find many medical students motivated to undertake the RMAT. It requires a mature student who is sure of specialty choice and comfortable with the high probability of matching with a regional residency. Subsequently, several students have indicated that the opportunity to "just move once" from Louisville and spend the last four years in Madisonville is very attractive to them. For students concerned with mounting debt, the opportunity to save one year of tuition cost while earning a PG-1 income is also very attractive – a net gain of about $100,000.

The issue of limitation of residency choice was also a concern. Most accelerated programs assume that their graduates will stay in the residency associated with the campus, but some do not. The accelerated graduates clearly have an advantage in their local residency, as they are "known quantities." If the student decides during the M-3 year that they want to match elsewhere, even potentially in a different specialty, they may be at a competitive disadvantage.

From a Residency Program Director's perspective, these students' USMLE step 2 scores will not be available as the match list is completed and their accelerated clinical experience may be poorly understood. Directors interviewed reported that when considering accelerated graduates they will place more emphasis on clinical grades and shelf exam scores from the M-3 year, and one indicated he would place more emphasis on USMLE step 1 scores. The RMAT graduate who chooses a very competitive FM program outside of the region or in another specialty may not be viewed as positively as a graduate from a U.S. school with a traditional four-year curriculum. Potential RMAT participants are advised of this in advance of their decision to participate, and adequate time is provided for interviewing at other programs in the fall of the M-3 year. If their career plans change significantly, they have the option of returning to the four-year curriculum.

AMERICA'S RURAL AREAS ARE SEVERELY UNDERSERVED, WITH 20% OF THE U.S. POPULATION LIVING IN SMALL TOWNS, BUT ONLY 9% OF DOCTORS PRACTICING THERE. FAMILY DOCTORS DISTRIBUTE MORE EVENLY, WITH 22% PRACTICING OUTSIDE OF URBAN AREAS.

Conclusion

With heightened awareness of the need for more primary care doctors and the focus on maldistribution of physicians, the timing is right for innovative methods of producing more rural physicians. RMAT may be a path for rural students from families of modest means who otherwise may have chosen another career to complete medical school and practice near home.

REFERENCES
1. Rabinowitz HK, Diamond JJ, Markham FW, Wortman JR. Medical school programs to increase the rural physician supply: A systematic review and projected impact of widespread replication. Acad Med. 2008;83:235-243.
2. Crump, WJ., Fricker, S., Crump, A. M., Just what are pre-medical students thinking?: A report of the first 6 years of a pathways program. Journal of Rural Health , January 2010; 26(1): 97-99
3) Whitcomb ME. Who will study medicine in the future? Academic Medicine 2006; 81(3):205-6.
4) Dorsey ER, Nincic D, Schwartz JS. An evaluation of four proposals to reduce the financial burden of medical education. Academic Medicine 2006; 81(3):245-51.
5. Crump WJ. A Modest Proposal: Shorten Medical School and Produce More Family Doctors? Journal of the Kentucky Academy of Family Physicians 2006; 56: 2-3.
6) Crump WJ, Fricker RS, Wiegman DL. A 10-year Evaluation of the Trover Campus: lessons learned for addressing the need for more rural physicians. Journal of the Kentucky Medical Association 2010, 108(5):137-143.

Dr. Bill Crump is a Professor of Family Medicine and has served as the Associate Dean of the University of Louisville School of Medicine Trover Campus in Madisonville since 1998. His clinical practice is within Baptist Health Madisonville, with an emphasis on women's and infant health. He also serves as the Medical Director of the medical student-directed free clinic for Hopkins and Webster counties.

David L Wiegman, PhD, is Professor of Physiology and has served as Vice Dean for Academic Affairs at the University of Louisville School of Medicine since 1987. He also serves as Associate Vice President for Health Affairs. His science interests include environmental and stress physiology and the microcirculation and his educational interests are curriculum development, student assessment and comparative international medical education.

Steve Fricker is the Director of Rural Health/Student Affairs with the University of Louisville School of Medicine Trover Campus at Baptist Health Madisonville. Steve has served in this capacity since 2000.

HARDIN MEMORIAL HOSPITAL

913 North Dixie Avenue, Elizabethtown, KY • www.hmh.net

is now interviewing Family Medicine, Internal Medicine, and Med/Peds Physicians for

HOSPITALISTS

7 Shifts on/7 shifts off

Competitive Financial Package

Interested Candidates - Please send CV and information to contact:

Jonell Dailey, Director, Professional Relations
Email: jdailey@hmh.net
Phone: (270) 706-5728

The Kentucky Academy of Family Physicians
P.O. Box 1444
Ashland, KY 41105-1444