



Diane Todd Pace, PhD, FNP-BC, NCMP, FAANP University of Memphis/Loewenberg School of Nursing Clinical Professor

FNP-Methodist Teaching Practice NAMS Certified Menopause Practitioner Past President-North American Menopause Society

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NAMS Menopause Decision Support App



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Margery L. S. Gass, MD, NCMP
The North American Menopause Society
Executive Director
Women's Health Consultant/Cleveland Clinic

Manson, J. E., Ames, J. M., Shapiro, M., Gass, M. L., Shifren, J. L., Stuerhel, C. A., Pinkerton, J. V., Kaunitz, A. M., Paxe, D. T., Kagan, R., Schustz, P. F., Kingbeeg, S. A., Liu, J. H., Joffe, H., Goldstein, S. R., Schiff, I. & Utira, W. H. (2015). Algorithm and mobile app for memopasary supmom management and hormonal lunch approximation making A clinical decision-support tool from the North American Memopasse Society. The Journal of Memopause, 23, 2 (Published absolute) of print online: Control Contr

Manson, J. E., Ames, J. M., Shapiro, M., Gass, M. L., Shifren, J. L., Stuenkel, C. A., Pinkerton, J. V., Kaunitz, A. M., Pace D. T., Kagan, R., Schnatz, P. F., Kingsberg, S. A. Liu, J. H., Joffer, H., Goldstein, S. R., Schfiff, J. & Utian, W. H., MenoPiev. A mobile app for women bothered by menopause symptoms. Published online by the North American Menopause Society at <u>Intra J. Views menopause org</u> (J. October 2014).

...for evidenced based treatment of menopausal symptoms

Menopause Symptoms? There's an App for That!

- By 2020, it is estimated that 61 million women in the US will ≥50 years of age around the average of menopause (51).
- A recent study reported that more than half of women experience vasomotor flashes at least 7 -12 years and may seek intervention.
- Providers are often confused about evidenced based options to discuss with patients.

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Apple Store: MenoPro



- Free downloadable mobile iPhone/iPad app for clinicians or women
- Expected to be available in future for other devices
- Purpose: Choose the optimal treatment by individualizing treatment based on personal preferences and risk factors
- Users progress through a series of questions to
 - assess symptom severity
 - Calculate CV risks
 - Evaluate risk for reproductive organ cancer
- Users obtain evidence-based information about risks and benefits of each treatment option
 - Lifestyle modifications
 - Non-prescription therapies
 - Hormone therapies

 - Prescription non-hormone therapies
- If available by Wi-Fi accessibility, users or women can print out choices for further discussion.

Options with the App

- Treatment for moderate to severe hot flashes and/or night
- · Symptoms of vaginal dryness, pain with sexual activity or urinary issues (GSM)
- Convenient links to information about treatment choices. formulations and doses and "contraindications"
- · Calculations of CVD risk score over next 10 years
- · Links to GAIL model to calculate risk of breast cancer risk
- · Link to FRAX to determine risk of osteoporosis.

Decision-Making Process and Treatment Options

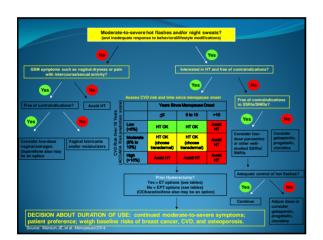
- Key elements include

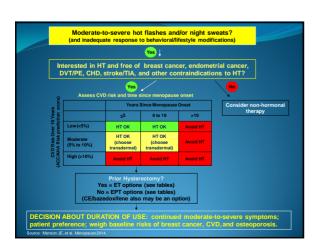
 - Assessment of presence of bothersome symptoms
 Personal preference regarding hormone versus non-hormone treatments Presence of risk factors that might make woman ineligible for treatment

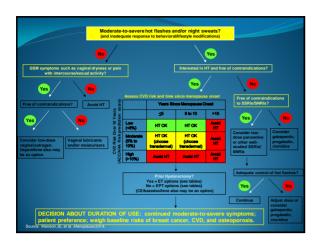
 - Assessment of years since menopause and baseline risks of CVD, breast cancer, and other health problems
 - Review of benefits and risks of treatment
- If HT is chosen makes suggestion of transdermal vs for patients with metabolic syndrome or other significant CVD risk.
- A similar process is followed for non-hormone treatment for women who are not candidates for, or who choose not to take HT suggesting Paroxetine or other antidepressants or different medications options.
- Recommendations for vaginal meds are given.
- Recommendations for vaginal meds are given.

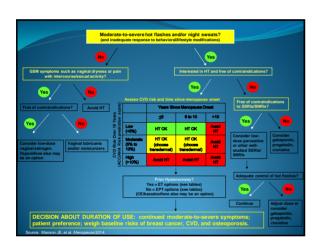
 A section is available for women to use in the "Self-Assessment Section" to share a summary with their provider, and review comments and definition at the end of that section.

Consumer Questionnaire - What is your age? - What is your age when you had your last menstrual period? - What was your age when you had your last menstrual period? - Questions At Haw you had both ovaries removed? Yes [Go to Question B] - Question B: Haw your periods become irregular or stopped? Yes [Go to Question B] - Question B: Haw your periods become irregular or stopped? Yes [Go to Question C] No [You are probably not yet in perimenopause, but read more to be sure.] [i] - Question C: Are you younger than 4 yo years old? Yes [Go to Question C] No [Be sure that you are not pregnant. If not, most likely you are entering perimenopause. Read more about perimenopause [l] While you are in perimenopause, it is helpful to keep a menstrual calendar. You can print out a copy of the menstrual calendar. [z] Let's move on to symptoms. [Go to Question B] - Question D: Haw you had any of the following: intrauterine device/synen, injectable birth control (Depo-Provera), endometrial ablation, hysterectomy, both ovaries removed, chemotherapy, or radiation? Yes [If you have had one of the procedures or treatments in the list, you might have stopped bleeding as a result of the procedure or treatment. Read more to find our why!], [E3] No [You might be experiencing early menopause [4] as a result of primary ovarien insufficiency.] [5] - Question E: two ginal dryness/discomfort your only symptom? [6] Yes [Go to Question F] No [Go to Question F] - Question E: two ginal dryness/discomfort before menopause? Yes [If the question F: Bird you have vaginal dryness/discomfort before menopause? Yes [If the question F: Bird you have vaginal dryness/discomfort before menopause? Yes [If the question F: Bird you have vaginal dryness/discomfort before menopause? Yes [If the question F: Bird you have vaginal dryness/discomfort before menopause?









Enter number of years since last menstrual period:

- Low (c5%) 10-Year VD Risk and less than 10 years since menopause: Patient appears to be a candidate for either oral of transdermal therapy. Women with hysterectomy can take ET (see footnote d and TAP HERE for options and dosages). Women with an intact uters on HT 3 whold take EPT (TAP HERE for transdermal store) and the transdermal store of the transdermal store of the transdermal store (EA) and the transdermal store (EA) and the transdermal estrogen (TAP HERE) are summarized. On to footnotes keen of regarding duration of treatment. CE/bazedoxifene (a third-generation SERM) is an additional FDA-approved option for women with an intact uterus (dosing: CE 0.4.5 mg bazedoxifene 20 mg delily (TAP HERE).

 Moderate (SX-10%) 10-Year CVD Risk and less than 10 years since menopause: Patient should avoid oral estrogen, but transdermal estrogen may be an option because in that a less adverse effect on clotting factors, triglyceride levels, and inflammation factors than oral estrogen (TAP HERE to see transdermal papproved biodefinical options). Got ofootnote k and regarding duration of treatment.

 gWomen with obesity, diabetes, or metabolic syndrome and otherwise considered to be candidates for HT may do better with transdermal than oral estrogen (TAP HERE to see definition of Mets). Metabolic syndrome is defined as the presence of three or more of the following criteria in women: abdominal obesity (wast crumaferene 25 is [R8 cm]); 2 triggerende s2150 mg/d (1.6.9 mm/d); 1.3 high-density inpoprotein cholesterol <30 mg/dt. (2.1 mm/dt), 4 blood pressure 2130/285 mmHg.

 John 10 mg/dt (2.1 mm/dt), 4 blood pressure 2130/285 mmHg.

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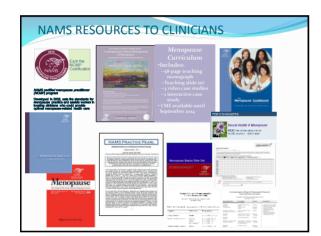
 John 10 mg/dt (2.1 mg/dt), 4 blood pressure 2130/285 mmHg.

- handout.
 NAMS Hormone Therapy Position Statement, 2012

- Personalized Estimation of the 10 Pear Atheroscientic Cardiovascular Disease Risk Score from the American College of Cardiology/American Heart Association (ACC/AHA ASCVO Risk Estimator) Figure displaying absolute risks of chronic disease outcomes by age group, Women's Health Initiative Hormone Therapy Trials

 NAMS Practice Pearl on Extended Duration Use of Hormone Therapy

- NAMS Practice Pearl on Extended Duration Use of Hormone Therapy
 Several tables adapted from Menopause Practice. A Cinitican's Guide, 5th edition, NAMS, 2014,* including: Table 1.
 Vaginal Estrogen Therapy Products for Postmenopausal Use in the United States and Canada (detailed listing of products, composition, and dossages (categories of low, moderate, and high)
 Table 2. Oral Estrogen Therapy Products for Postmenopausal Use in the United States and Canada (detailed listing of products, composition, and dossages (categories of low, moderate, and high)
 Table 4. Approximate States and Canada (detailed listing of products, composition, and dosages (categories of low, moderate, and high))
 Table 4. Approximate Equivalent Estrogen Doses for Postmenopausal Use in the Approximate Equivalent Estrogen Doses for Postmenopausal Use (oral, transdermal, and vaginal formulations)
- tormulations)
 Table 5. Combination Estrogen-Progestogen Therapy Products for Postmenopausal Use in the United States and Canada foral continuous-cyclic, oral continuous-combined, oral intermittent-combined, and transdermal continuous-combined regimens)
 Table 6. Progestogens Available in the United States and Canada (Detailed listing of products, composition, and
- dosages)
 Table 7. Estrogen-Progestogen Therapy Regimens, Terminology (sequential, continuous-combined, intermittent-combined)
- commineup
 Table 8. Minimum Progestogen Dosing Requirements for Endometrial Protection With Standard Estrogen Dosing
 Table 9. FIAP. approved "Bioidentical" Hormone Products (FDA-approved products containing estradiol and/or
 progesterone)
 Table 10. Pros and Cons of Hormone Therapy Routes of Administration (oral, transdermal, vaginal)



Thank You!



Diane Todd Pace, PhD, APRN, FNP-BC, NCMP, FAANP University of Memphis Loewenberg School of Nursing

Clinical Professor

Clinical Practice: Methodist University Teaching Practice, Memphis NAMS Certified Menopause Practitioner
Past President: North American Menopause Society

dpace@comcast.net