



**TOP 10 ISSUES IN
WOMEN'S HEALTH**

November 2, 2018
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Objectives

- Apply “Choosing Wisely” women’s health guidelines in daily practice
- Identify best screening practices for osteoporosis, cervical and breast cancer.
- Develop a plan for same day LARC access in your office.

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**BREAST CANCER
SCREENING**

Mammogram Screening Guidelines

	ACOG	USPSTF	ACS	AAFP
Clinical Breast Exam	Every 1-3 yrs for women age 25-39. Annually >40	Insufficient evidence to recommend for or against	Does not recommend	Insufficient Evidence
Mammogram (start)	Age 40-49 (shared decision) Recommend at age 50	Age 40-49 (shared decision) Recommend at age 50	Age 40-45 (shared decision) Recommend at age 45	Age 50
Mammogram (interval)	Every 1-2 yrs	Every 2 yrs	Yearly age 40-54 Every 2 yrs >55 with option to continue yearly	Every 2 years age 50-74
Mammogram (stop)	Age 75 (shared decision based on health)	Age 75 (insufficient evidence beyond 75)	When life expectancy < 10 years	Age 75 4

Mammogram Modalities

Screen Film

- High spatial & contrast resolution
- Easily Displayed
- Low cost
- Only modality that has been shown to decrease breast cancer related deaths
- Film can be misplaced or damaged
- Unable to manipulate the image
- Hard to image all tissues densities optimally

Digital (2-D)

- Greater contrast resolution
- Ability to manipulate the image and share it with others easily
- May be slightly more sensitive in women <50 or with dense breasts
- More costly
- More false positives
- No significant decrease in breast cancer related death or mortality

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Digital breast tomosynthesis (3-D)

- Good for women with dense breasts or high risk for breast cancer
- Improved rates of detection
- Decreased recall and false positive rates
- Higher radiation (up to double the amount) if images produced separately
 - Newer tomographic images produce a synthetic 2-D image with less radiation but costly and not available everywhere yet.
- No documented improvement in survival outcomes

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CERVICAL CANCER SCREENING

Cervical Cancer Screening

Population	Recommendation
Age < 21	No screening
Age 21-29	Cytology with reflex HPV every 3 years
Age 30-65	Cytology alone every 3 yrs OR Co-testing (cytology +hrHPV) every 5 yrs OR hrHPV w/reflex to genotype every 5 yrs**
Age > 65	No screening **
Women with hysterectomy and removal of cervix for non-cancerous reasons	No screening**

** Does not apply to women with symptoms of cervical cancer, history of HGSIL, immunocompromised or previous DES exposure.

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ASCP



ASCCP



ACOG





ACS



USPSTF

They all agree. I can't believe it !

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High risk HPV

- Collection is the same as for cytology alone
 - Order high risk HPV (hrHPV) with reflex to genotype
-
- Increased detection of CIN3+
 - Lower risk of invasive cervical cancer when HPV used alone (or in conjunction with cytology) as compared to cytology alone
 - Higher false positive rate than cytology
 - More colposcopies performed than cytology

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Miscellaneous Do's and Don'ts

- “Routine” or “Screening” pelvic exams are NOT recommended
 - Reserve pelvic and bimanual exams for symptomatic women
- Rectal exams NOT recommended as a standard part of the pelvic exam
- DO give HPV vaccine

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HPV VACCINE

HPV vaccine (9 valent)

- Approved for boys and girls ages 9-26 **AND men & women 27-45.**
 - Cervical cancer prevention for girls
 - Anal cancer prevention for boys
 - Condyloma prevention for all
- Current guidelines recommend HPV vaccine for all adolescents at age 11-12

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How are we doing?

	≥1 HPV	HPV UTD
Nationally	65%	48%
Pennsylvania state	67%	52%
Philadelphia	85%	70%
PA – rest of state	65%	50%

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HPV dosing schedule

Age	Number of doses
9-15	Two doses at time 0 and 6-12 months
16-26	Three doses at time 0, 1-2 months and 6 months
21-26	Three doses, but seems it is not as effective when started after age 20
27-45	Three doses at time 0, 1-2 months and 6 months

IRR for CIN2+ for ages 13-16 = 0.23, IRR for age 17-19 = 0.65, IRR for age 21-29 = 1.31

Deblendorf C et al. Effectiveness of varying number of doses and timing between doses of quadrivalent HPV vaccine against severe cervical lesions. *Vaccine* (2018).

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Pearls from recent research on number and timing of doses.

- One or two doses is better than none.
- If the vaccine is initiated between age 13-16, with at least 5 months in between doses, then two doses appears as effective as 3 doses in that age range.
- Strongest protection against CIN2+ is for women who received their full HPV series before age 20.

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◦ Vaccinate (age 9-45)
Vaccinate early (age 11-12)

- You only need 2 doses
AND it's more effective



Think about standing orders for vaccines in your office as a way to improve vaccination rates

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OSTEOPOROSIS
SCREENING

More fractures occur in patients with osteopenia than in those with osteoporosis.



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Primary Risk Factors

Secondary Risk Factors

- Advanced age
- Low body weight
- Long-term glucocorticoid therapy
- Parental history of hip fracture
- Smoking
- > 3 alcoholic drinks/ day
- Caucasian or Asian race
- **Previous low trauma fracture **
- Endocrine disorders:
 - diabetes, adrenal insuff., Hyperparathyroid
- Rheumatologic disease:
 - RA, SLE, Ankylosing Spondylitis
- Hypogonadism:
 - anorexia, premature ovarian failure, female triad, panhypopituitarism
- Malabsorbtive GI disorders:
 - celiac, IBD, gastric bypass
- Meds:
 - >5mg prednisone daily for >3 months, Depo, GRH agonists, Anticonvulsants, Chemo agents

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Screen women \geq age 65
OR

those with an equivalent fracture risk of a 65 yo woman

WHO Fracture Risk Assessment: FRAX

<http://www.shef.ac.uk/FRAX/tool.aspx?country=9>

Treat if osteopenia and 20% risk of major fracture
or 3% risk of hip fracture in 10 years

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Osteoporosis Screening and Treatment

Who

- Women age 65 and over
- Or those with equivalent fracture risk (FRAX)

How often

- No more frequently than every 2 years
- Consider every 5 yrs

Treatment

- Bisphosphonates still first line for most patients
- Rx for 5 years in most patients
- Rx for 10 yrs in those with baseline femoral neck T scores <-2.5

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MENOPAUSE

Diagnosis

◦ Amenorrhea for 12 months without other causes

- Median age 51.
- Before age 40 think about primary ovarian insufficiency
- FSH (can be elevated but levels vary widely)

◦ Symptoms

- Hot flashes (80%)
- Vaginal dryness / sexual dysfunction
- poor concentration/ memory
- Poor sleep
- Mood changes
- Joint pain (50-60%)



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Hormone Replacement Therapy & Risk

WHI trial was done on women much older than the average post menopausal woman (average age 63)

Timing makes a difference

- Starting therapy early in menopause does not seem to increase risk for CAD
- Beginning therapy in 60's-70's has increased risk of CAD

Estrogen only arm

- no increased risk of heart disease or breast CA
- + increased risk of stroke and VTE

Transdermal Patch

- Avoids first pass metabolism
- May have decreased risk of VTE

Hormone Therapy should NOT be used for primary or secondary prevention of heart disease.

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Vasomotor Symptoms

HRT is the most effective treatment

Treat with the lowest effective dose for shortest amount of time

If there is a uterus, include progesterone

Try to discontinue annually

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Alternatives to HRT

- **SSRI's**
 - Paxil 7.5mg daily – FDA approved
- **SNRI's**
 - Effexor (venlafaxine) 75mg BID
 - Pristiq (desvenlafaxine) 25-50mg daily
- **Gabapentin** 600-900 mg daily
- **Clonidine** 0.1mg daily



◦ No great evidence for soy, black cohosh, exercise, Acupuncture, testosterone

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Atrophic Vaginitis



- Can present as dryness, pain, itching, dyspareunia, bleeding, fissures, recurrent infection (due to increased pH)
- Vaginal estrogen preparations best treatment
 - Vaginal ring is preferred by patients
 - Estring = topical dosage
 - Femring = systemic dosage

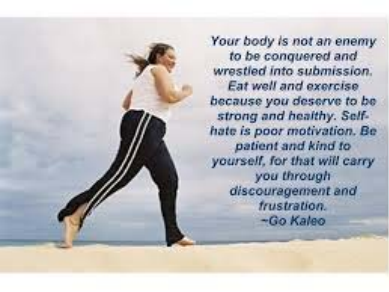
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WEIGHT MANAGEMENT IN MIDLIFE

- On average, women gain about 1.5 lbs per year during their 50's and 60's
- In the U.S. about $\frac{3}{4}$ of women over 60 are overweight (BMI >25) and about $\frac{1}{2}$ of those women are obese (BMI >30)
- Women significantly underreport their weight throughout life and are more likely to underreport with increasing BMI.
 - 44% of overweight women reported being a normal weight
 - 72% of obese women identified themselves as overweight
- Only 40-60% of obese patients receive counselling on obesity from any health care provider.


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Your body is not an enemy to be conquered and wrestled into submission. Eat well and exercise because you deserve to be strong and healthy. Self-hate is poor motivation. Be patient and kind to yourself, for that will carry you through discouragement and frustration.
—Go Kaleo

◦ Aging results in decreased total and basal energy expenditure, so unless you adjust your caloric intake or physical activity, a **POSITIVE** energy balance develops --> **weight gain**.

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What About Menopause?

Most of the current literature suggests that weight gain is primarily the result of aging and lifestyle changes, **NOT** menopause itself.

BUT

Menopause can lead to decreased estrogen, joint pain, mood disorders and sleep disturbances - all of which can contribute to central weight attribution.

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Weight Gain

<u>How</u>	<u>Where</u>	<u>What Risks</u>
<ul style="list-style-type: none"> • Aging <ul style="list-style-type: none"> • Decreased lean body mass • Lifestyle Changes • Decreased Sleep • Hot flashes • Mood changes • Joint pain <p>↓</p> <p>Decreased physical activity</p>	<ul style="list-style-type: none"> ◦ Central obesity <p>↓</p> <ul style="list-style-type: none"> ◦ More severe and frequent hot flashes ◦ Increased cardiovascular risk ◦ Sleep Apnea -> weight gain ◦ Poor body self image -> mood ◦ Sexual dysfunction -> mood 	<ul style="list-style-type: none"> ◦ Dyslipidemia ◦ Hypertension ◦ Cardiovascular disease ◦ Insulin resistance/ diabetes ◦ Cancer (breast and uterine) ◦ Arthritis ◦ Mood disorders ◦ Sexual Dysfunction

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A Multidisciplinary Approach

PHYSICAL ACTIVITY: #1 predictor of weight for middle aged women.

- Maintains lean body mass
- Improves mood
- Helps maintain sleep



DIET (net calorie deficit) is important for weight loss- 1200-1500 cal/ day.

- It's not the "diet" itself. It's whether you stick to the "diet".
- Mediteranean diet has been shown to reduce cardiovascular risk.
- Dietician visits can be helpful
- Utilize online tools/ apps ("My Fitness Pal", "Lose It!", National Weight Control Registry)

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TREAT VASOMOTOR SYMPTOMS

- Estrogen replacement not indicated for weight loss, but IS indicated to help decrease vasomotor symptoms.

TREAT SLEEP DISORDERS

- Evaluate for offending meds
- General sleep hygiene
- Treat sleep apnea

OFFER EMOTIONAL / BEHAVIORAL SUPPORT

- Assess for and treat mood disorders
- Offer group or individual counselling

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CARDIOVASCULAR DISEASE IN WOMEN

#1 cause of mortality in women



- Diabetes (> in women)
- Smoking (> in women)
- Hypertension
- Hypercholesterolemia
- Obesity
- Family History
- Mental Health and Depression
- History of a hypertensive disorder in pregnancy
- Menopause
- Takotsubo “stress” cardiomyopathy

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Symptoms



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Testing



- Exercise stress test without imaging is still the preferred initial test for cardiac risk stratification in women.
- Because the prevalence of CAD is less in women ...
 - A positive stress test indicates a lower probability of CAD in women than in men. (69% vs 89%)
 - A Negative stress test has a better negative predictive value in women.

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Cardiovascular Disease



◦ Aspirin 81 mg

- for primary prevention of stroke in women age 55-79 when stroke prevention benefit outweighs risk for GI bleeding

10 year stroke risk	
Age 55-59	>3%
Age 60-69	>8%
Age 70-79	>11%

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◦ Abdominal Aortic Aneurysm



- USPSTF guideline states “Evidence is insufficient to recommend a one time screening for women age 65-75 with a prior history of smoking”
- USPSTF also recommends against screening women age 65-75 for AAA who have never smoked.
- AAFP recommends against screening any woman for AAA



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ABNORMAL
UTERINE
BLEEDING

Falling Out of Favor

Dysfunctional Uterine Bleeding

- Amenorrhea
- Menorrhagia
- Metrorrhagia
- Polymenorrhea
- Oligomenorrhea

Newly Defined

- Amenorrhea
- Abnormal Uterine Bleeding
- Heavy Menstrual Bleeding
- Intermenstrual Bleeding

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PALM-COEIN

Polyp	} Submucosal Other	Coagulopathy
Adenomyosis		Ovulatory dysfunction
Leiomyoma		Endometrial
Malignancy & hyperplasia		Iatrogenic
		Not yet classified

STRUCTURAL CAUSES

NON-STRUCTURAL CAUSES

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Medications	Herbals
Oral contraceptives	Garlic
Tamoxifen	St. John's wort
Oral corticosteroids	Ginseng
Phenytoin	Ginkgo
Anticoagulants	Soy
Antipsychotics	Fish Oil
Antidepressants	Dong quai
(TCA/SSRI)	Arnica
Tranquilizers	Parsley
	Capsicum
	Bladderwrack
	Pau darco
	Saw palmetto
	Aspen

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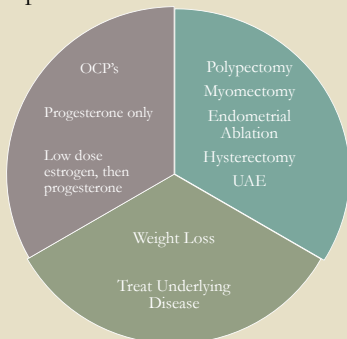
Differential Diagnosis

Pre-teen / Teen	Pre-Menopausal	Post-Menopausal
Pregnancy Primary Amenorrhea Hormonal Contraception Anovulatory (Immature Axis) Pelvic Infection Coagulopathy Tumors	Pregnancy Endometrial Cancer Hormonal Contraception Fibroids Polyps Anovulatory (PCOS) Endometrial Hyperplasia	Endometrial Cancer Endometrial Atrophy Endometrial Hyperplasia

Work-up

Pre-teen / Teen	Pre-Menopausal	Post-Menopausal
Labs: Pregnancy Test, CBC TSH +/- Prolactin +/- Coagulation Profile Cervical Cultures If Risk Factors: HbA1c, PCOS Labs Imaging – low yield <ul style="list-style-type: none"> Precocious Puberty Primary Amenorrhea 	Labs: Pregnancy Test, CBC TSH +/- Prolactin +/- Coagulation Profile Cervical Cultures PAP Smear If Risk Factors: HbA1c, PCOS Labs Imaging: Transvaginal U/S, MRI, Saline-Infusion Sonography Hysteroscopy Biopsy: Depends... <ul style="list-style-type: none"> Abnormal physical Bleeding refractory to medical management Significant risk factors for malignancy 	Labs: CBC, TSH +/- Prolactin +/- Coagulation Profile Cervical Cultures PAP Smear If Risk Factors: HbA1c, PCOS labs Imaging: Transvaginal U/S first. If stripe < 4mm no biopsy needed. Biopsy: If stripe \geq 4mm or symptoms persist. <ul style="list-style-type: none"> Cancer until proven otherwise. Don't pursue medical treatment without full evaluation.

Treatment Options



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LONG ACTING REVERSIBLE CONTRACEPTION

The best form of birth control for any woman is one that she feels comfortable with and is willing to use.



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Nexplanon (68 mg etonogestrel)



- Lasts for up to 3 years
- Requires a procedure to insert and remove
- Low maintenance, high efficacy
- Rapid return to fertility
- Nothing intra-uterine
- Radiopaque
- Cost ~ \$1259 or \$35/month



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Intrauterine Devices

	Mirena	Liletta	Kyleena	Skyla	Paragard
Hormone	Levonorgestrel	Levonorgestrel	Levonorgestrel	Levonorgestrel	None (Copper)
Efficacy	99.8 %	99.8 %	99.8 %	99.8 %	99.2 %
String Color	Black	Blue	Blue	Black	White
Size	32 mm x 32 mm	32 mm x 32 mm	28 mm x 30 mm	28 mm x 30 mm	32 mm x 36 mm
Commercial Cost	\$928	\$637	\$928	\$861	\$891
340 b Cost	\$302	\$50	\$575	\$449	\$240
Evidence-based duration	5/7 yrs *	3/5 yrs*	5 yrs	3 yrs	10/12* yrs
Dose of Levonorgestrel	52 mg	52 mg	19.5 mg	13.5 mg	----
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Truth

- IUD is as effective as tubal ligation in terms of pregnancy prevention
- Return to fertility is rapid – usually within one cycle
- Removal and insertion can be done in the same visit.
- STD can be treated with an IUD in place
- IUD should not be inserted in anyone with an active vaginal infection or PID within the last 3 months

Myth

- Can not be inserted in a teen
- Can not be inserted in a nulliparous patient
- IUD can not be inserted in anyone with a history of an STD
- Can not be inserted same day as your office counselling visit.
- People with IUDs and Nexplanon in place have a higher risk of ectopic pregnancy.

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Quick Start Algorithm

<https://www.reproductiveaccess.org/resource/quick-start-algorithm/>

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Basics of the Quick Start Algorithm

- 1) Counsel patient on options
- 2) Pregnancy test negative.
- 3) If no medical contraindications, then....
 - <7 days since LMP OR they have been on a reliable method of birth control consistently → Yes start method.
 -
 - > 7 days since LMP and unprotected intercourse →
 - offer emergency contraception VS
 - bridge to LARC with repeat pregnancy test in 2 weeks VS
 - start method after counselling.

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Birth Control Pearls for Improved Access

- Prescribe for a year at a time
- Avoid linking birth control scripts to cervical cancer screening
- Utilize alternate forms of access when needed.
 - Direct to consumer web sites (<https://app.nurx.com>, <https://thepillclub.com>)
- Counsel on emergency contraception and offer a script
 - Ella for those with BMI >25 (need a script)
 - Plan B One Step (OTC)

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THE ARRIVE STUDY

Large randomized controlled trial from 2014-2017

6,106 nulliparous, low risk women recruited from 41 facilities across the U.S.

Randomized to induction of labor at 39 weeks vs. expectant management.

63% in induction group and 64% in expectant group had Bishop score <5

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INDUCTION ...

Reduced the risk of cesarean section by 16%
NNT= 28

Reduced the risk of pre-eclampsia or gestational hypertension by 36%
NNT = 20

Reduced the risk of neonatal respiratory support by 29%
NNT = 83

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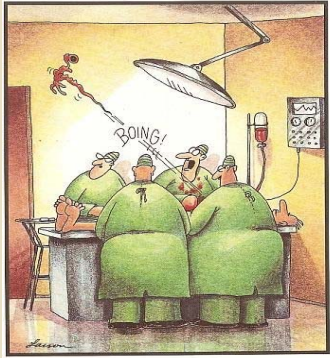
Discussion Points

- No difference in perinatal mortality or severe morbidity
- Does not speak to the facilities or personnel needed to accommodate all these women for induction at 39 weeks.

Shared decision making

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Thank you for
your attention.



"Whoa! Watch where that thing lands—
we'll probably need it."

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