

Hormone Therapy for the Primary Prevention of Chronic Conditions in Postmenopausal Persons

US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

IMPORTANCE Menopause is defined as the cessation of a person's menstrual cycle. It is defined retrospectively, 12 months after the final menstrual period. Perimenopause, or the menopausal transition, is the few-year time period preceding a person's final menstrual period and is characterized by increasing menstrual cycle length variability and periods of amenorrhea, and often symptoms such as vasomotor dysfunction. The prevalence and incidence of most chronic diseases (eg, cardiovascular disease, cancer, osteoporosis, and fracture) increase with age, and US persons who reach menopause are expected on average to live more than another 30 years.

OBJECTIVE To update its 2017 recommendation, the US Preventive Services Task Force (USPSTF) commissioned a systematic review to evaluate the benefits and harms of systemic (ie, oral or transdermal) hormone therapy for the prevention of chronic conditions in postmenopausal persons and whether outcomes vary by age or by timing of intervention after menopause.

POPULATION Asymptomatic postmenopausal persons who are considering hormone therapy for the primary prevention of chronic medical conditions.

EVIDENCE ASSESSMENT The USPSTF concludes with moderate certainty that the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal persons with an intact uterus has no net benefit. The USPSTF concludes with moderate certainty that the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy has no net benefit.

RECOMMENDATION The USPSTF recommends against the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal persons. (D recommendation) The USPSTF recommends against the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy. (D recommendation)

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Group Information: A complete list of the members of the US Preventive Services Task Force appears at the end of this article.

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Summary of Recommendations

Population	Recommendation	Grade
Postmenopausal persons	The USPSTF recommends against the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal persons.	D
Postmenopausal persons who have had a hysterectomy	The USPSTF recommends against the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy.	D

USPSTF indicates US Preventive Services Task Force.

See the Summary of Recommendations figure.

Table. Summary of USPSTF Rationale

Rationale	Assessment for combined estrogen and progestin	Assessment for estrogen alone
Benefits	<ul style="list-style-type: none"> • Convincing evidence that use of combined estrogen and progestin has a moderate benefit in reducing the risk of fractures in postmenopausal persons • Adequate evidence that use of combined estrogen and progestin has a small benefit in reducing the risk of diabetes and colorectal cancer • Adequate evidence that use of combined estrogen and progestin does not have a beneficial effect on risk of coronary heart disease 	<ul style="list-style-type: none"> • Convincing evidence that use of estrogen alone has a moderate benefit in reducing the incidence of fractures in postmenopausal persons • Adequate evidence that the use of estrogen alone has a small benefit in reducing the risk of developing or dying of invasive breast cancer and a small benefit in reducing the risk of diabetes • Adequate evidence that estrogen use does not have a beneficial effect on risk of coronary heart disease
Harms	Adequate evidence that use of combined estrogen and progestin is associated with moderate harms, including increased risk of invasive breast cancer, stroke, venous thromboembolism, dementia, gallbladder disease, and urinary incontinence	Adequate evidence that use of estrogen alone is associated with moderate harms, including increased risk of stroke, venous thromboembolism, gallbladder disease, and urinary incontinence
USPSTF assessment	The USPSTF concludes with moderate certainty that the use of combined estrogen and progestin has no net benefit for the primary prevention of chronic conditions in postmenopausal persons with an intact uterus	The USPSTF concludes with moderate certainty that the use of estrogen alone has no net benefit for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy

Abbreviation: USPSTF, US Preventive Services Task Force.

Importance

Menopause is defined as the cessation of a person's menstrual cycle. It is defined retrospectively, 12 months after the final menstrual period.¹ Perimenopause, or the menopausal transition, is the few-year time period preceding a person's final menstrual period and is characterized by increasing menstrual cycle length variability and periods of amenorrhea, and often symptoms such as vasomotor dysfunction.² Natural menopause occurs at a median age of 51.3 years.³ The prevalence and incidence of most chronic diseases (eg, cardiovascular disease, cancer, osteoporosis, and fracture) increase with age, and US persons who reach menopause are expected on average to live more than another 30 years.⁴ However, the excess risk for chronic conditions that can be attributed to menopause alone is uncertain.

to persons who are considering hormone therapy for the management of perimenopausal symptoms, such as hot flashes or vaginal dryness. It also does not apply to persons who have had premature menopause (primary ovarian insufficiency) or surgical menopause.

The trials that provided evidence on the benefits and harms of menopausal hormone therapy for this recommendation generally used the term "women" to describe participants, although it is likely that these trials enrolled participants on the basis of sex, not gender identity.

Intervention

Menopausal hormone therapy refers to the use of combined estrogen and progestin in persons with an intact uterus, or estrogen alone in persons who have had a hysterectomy, taken at or after the time of menopause. For this recommendation, the USPSTF considered evidence on the benefits and harms of systemic (ie, oral or transdermal) menopausal hormone therapy but not local formulations of hormone therapy, because these are not generally used for the primary prevention of chronic conditions. Although some of the specific benefits and harms of estrogen plus progestin and estrogen alone differ, the USPSTF concludes that overall, both estrogen plus progestin and estrogen alone have no net benefit for the primary prevention of chronic conditions. It has also been hypothesized that the benefits and harms of menopausal hormone therapy might differ based on participants' age or timing of initiation of therapy with respect to menopause; however, evidence supporting this is limited. See "Effects on Outcomes by Age or Timing of Intervention" in the Supporting Evidence section for more detail.

Indications for hormone therapy approved by the US Food and Drug Administration in menopausal persons are limited to the treatment of menopausal symptoms and the prevention of postmenopausal osteoporosis.⁶ Several different formulations of menopausal hormone therapy are approved by the US Food and Drug Administration for use in the US; the specific formulation used in the Women's Health Initiative (WHI), the largest trial reviewed by the USPSTF, was 0.625 mg/d of oral conjugated equine estrogen, with or without 2.5 mg/d of medroxyprogesterone acetate.⁷ Currently, evidence to determine whether different types, doses, or modes of delivery of hormone therapy affect its benefit-to-harm profile for the prevention of chronic conditions is limited.^{8,9}

USPSTF Assessment of Magnitude of Net Benefit

The US Preventive Services Task Force (USPSTF) concludes with moderate certainty that the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal persons with an intact uterus has **no net benefit**.

The USPSTF concludes with moderate certainty that the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy has **no net benefit**.

See the **Table** for more information on the USPSTF recommendation rationale and assessment and the **eFigure** in the Supplement for information on the recommendation grade. See the **Figure** for a summary of the recommendation for clinicians. For more details on the methods the USPSTF uses to determine the net benefit, see the USPSTF Procedure Manual.⁵

Practice Considerations

Patient Population Under Consideration

This recommendation statement applies to asymptomatic postmenopausal persons who are considering hormone therapy for the primary prevention of chronic medical conditions. It does not apply

Figure. Clinician Summary: Hormone Therapy for the Primary Prevention of Chronic Conditions in Postmenopausal Persons

What does the USPSTF recommend?	<p>For the primary prevention of chronic conditions in postmenopausal persons: Do not use combined estrogen and progestin. Grade: D</p> <p>For the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy: Do not use estrogen alone. Grade: D</p>
To whom does this recommendation apply?	This recommendation applies to asymptomatic, postmenopausal persons who are considering hormone therapy for the primary prevention of chronic medical conditions. It does not apply to persons who are considering hormone therapy for the management of perimenopausal symptoms, such as hot flashes or vaginal dryness. It also does not apply to persons who have had premature menopause (primary ovarian insufficiency) or surgical menopause.
What's new?	This recommendation is consistent with the 2017 USPSTF recommendation statement on hormone therapy for the primary prevention of chronic conditions in postmenopausal women.
How to implement this recommendation?	<ul style="list-style-type: none"> Do not use combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal persons. Do not use estrogen alone for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy.
What additional information should clinicians know about this recommendation?	The USPSTF has made several recommendations about other ways to prevent cardiovascular disease and other chronic conditions in adults, including aspirin use for the prevention of cardiovascular disease, screening for high blood pressure, screening for prediabetes and type 2 diabetes, behavioral counseling to promote a healthful diet and physical activity for cardiovascular disease prevention in adults (with and without cardiovascular risk factors), screening for osteoporosis, screening for breast cancer, and screening for colorectal cancer.
Why is this recommendation and topic important?	<ul style="list-style-type: none"> Natural menopause occurs at a median age of 51.3 years. The prevalence and incidence of most chronic diseases (eg, cardiovascular disease, cancer, osteoporosis, and fracture) increase with age, and a person in the US who reaches menopause is expected on average to live more than another 30 years. The excess risk for chronic conditions that can be attributed to menopause alone is uncertain.
Where to read the full recommendation statement?	Visit the USPSTF website (https://www.uspreventiveservicestaskforce.org/uspstf/) or the JAMA website (https://jamanetwork.com/collections/44068/united-states-preventive-services-task-force) to read the full recommendation statement. This includes more details on the rationale of the recommendation, including benefits and harms; supporting evidence; and recommendations of others.

The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision-making to the specific patient or situation.

USPSTF indicates US Preventive Services Task Force.

Other Related USPSTF Recommendations

The USPSTF has made several recommendations related to the prevention of cardiovascular disease and other chronic conditions in adults, including aspirin use for the prevention of cardiovascular disease,¹⁰ screening for high blood pressure,¹¹ screening for prediabetes and type 2 diabetes,¹² behavioral counseling to promote a healthful diet and physical activity for cardiovascular disease prevention in adults (with and without cardiovascular risk factors),^{13,14} and screening for osteoporosis.¹⁵ The USPSTF has also made recommendations on screening for breast cancer¹⁶ and screening for colorectal cancer.¹⁷

Update of Previous USPSTF Recommendation

This recommendation replaces the 2017 USPSTF recommendation on hormone therapy for the primary prevention of chronic conditions in postmenopausal women. In 2017, the USPSTF recommended against the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal women and against the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal women who have had a hysterectomy.¹⁸ This recommendation is consistent with the 2017 USPSTF recommendation.

Supporting Evidence

Scope of Review

To update its 2017 recommendation statement, the USPSTF commissioned a systematic review of the evidence on the benefits and harms of systemic (ie, oral or transdermal) hormone therapy for the prevention of chronic conditions in postmenopausal persons and whether outcomes vary by age or by timing of intervention after menopause.^{8,9} The use of hormone therapy for the treatment of menopausal symptoms (eg, vasomotor hot flashes or vulvovaginal symptoms) or for other indications is outside the scope of this recommendation.

Benefits and Harms of Preventive Medication

The USPSTF found 20 randomized clinical trials that compared the effects of estrogen, either alone or in combination with progestin, vs placebo for the prevention of chronic conditions.^{8,9} Of these studies, the WHI trials were the only studies powered to assess the effectiveness of hormone therapy for the primary prevention of various chronic conditions. The WHI trials enrolled postmenopausal persons aged 50 to 79 years; the mean age of participants was 63 years. The WHI compared 0.625 mg/d of oral conjugated equine estrogen, with or without 2.5 mg/d of medroxyprogesterone

acetate, with placebo. Evidence on other types, doses, or modes of delivery of hormone therapy was limited. The WHI also had the longest durations of follow-up, with a median intervention of 7.2 years for the estrogen-only trial and 5.6 years for the estrogen plus progestin trial, as well as long-term follow-up of up to 20.4 years.^{7,19} The following discussion focuses on coronary heart disease outcomes, all-cause mortality, and outcomes for which the USPSTF assessed the evidence as adequate or convincing for benefit or harms. Other outcomes and more details are available in the accompanying systematic evidence review.⁸

Coronary Heart Disease

Observational evidence has suggested that there might be a protective effect of menopausal hormone therapy on coronary heart disease; however, the WHI and other trials of menopausal hormone therapy have not demonstrated such an effect. A pooled analysis of 3 trials (n = 18 085) showed no significant difference in risk of coronary heart disease events in persons treated with estrogen plus progestin compared with placebo (2.8% vs 2.6%; relative risk [RR], 1.12 [95% CI, 0.94-1.33]) during a mean follow-up of 4 years. Similarly, a pooled analysis of 3 trials (n = 11 310) found no significant difference in coronary events between persons taking estrogen alone and those taking placebo (RR, 0.95 [95% CI, 0.79-1.14]) during a mean follow-up of 4.1 years.^{8,9}

Breast Cancer

Because estrogen generally stimulates breast cell proliferation, trials of menopausal hormone therapy have reported on the risk of breast cancer as one of the primary adverse outcomes of treatment.

In the WHI (n = 16 608), persons randomized to estrogen plus progestin had a significantly increased risk of invasive breast cancer compared with those taking placebo (2.4% vs 1.9%; hazard ratio [HR], 1.24 [95% CI, 1.01-1.53]),⁷ which persisted during postintervention follow-up.²⁰ Other trials either reported few cases of breast cancer or were generally consistent with the WHI findings in direction of effect. In the WHI, during 20.3 years of follow-up, the point estimate of the risk of breast cancer mortality was higher for persons in the estrogen plus progestin group than those in the placebo group, although the difference did not reach statistical significance (HR, 1.35 [95% CI, 0.94-1.95]).¹⁹

Four trials reported on the effects of estrogen alone on breast cancer; however, only the WHI followed participants for more than 3 years. At 20.7 years of follow-up, the WHI reported a lower risk of invasive breast cancer among persons assigned to estrogen alone compared with those assigned to placebo (HR, 0.78 [95% CI, 0.65-0.93]),²⁰ although the risk of breast cancer was not significantly lower during the study's 7.2-year intervention phase.^{7,21} The other trials reported very few cases of breast cancer.^{8,9} The WHI also reported on breast cancer mortality. At 20.7 years of follow-up, persons who received estrogen alone during the intervention phase had a lower risk of breast cancer mortality than those in the placebo group (HR, 0.60 [95% CI, 0.37-0.97]).¹⁹

Fractures

Five trials reported on fracture risk in persons randomized to estrogen plus progestin compared with placebo. A pooled analysis of these trials (n = 20 499) found a statistically significant reduction of frac-

tures in persons taking estrogen plus progestin (8.7% vs 10.9%; RR, 0.79 [95% CI, 0.66-0.94]).^{8,9}

The WHI (n = 10 739) also found a lower risk of total fractures in persons taking estrogen alone compared with placebo during the intervention phase (1.53% annualized vs 2.14% annualized; HR, 0.72 [95% CI, 0.64-0.80]),⁷ which persisted during 4.3 years of post-intervention follow-up.²² A smaller trial found fewer fractures at all sites in the estrogen-alone group, although the difference was not statistically significant.²³

Diabetes

Two trials reported on the effects of menopausal hormone therapy on incident diabetes. In the WHI (n = 15 874), fewer persons randomized to estrogen plus progestin reported a new diagnosis of diabetes compared with those taking placebo (HR, 0.81 [95% CI, 0.70-0.94]).^{7,24} A smaller trial also found a reduced risk of incident diabetes, although that was a post hoc analysis.²⁵

In the WHI (n = 9917), fewer persons taking estrogen alone reported a new diagnosis of diabetes compared with those taking placebo (1.34% annualized vs 1.55% annualized; HR, 0.86 [95% CI, 0.76-0.98]).⁷

Colorectal Cancer

Four trials reported on the incidence of colorectal cancer in persons randomized to estrogen plus progestin therapy. In the WHI estrogen plus progestin trial (n = 16 608), persons randomized to estrogen plus progestin had a lower risk of colorectal cancer than those in the placebo group (0.59% vs 0.93%; HR, 0.62 [95% CI, 0.43-0.89]) over a median follow-up of 5.6 years.⁷ The other trials either reported few cases of colorectal cancer or were generally consistent with the WHI findings in direction of effect.^{8,9}

The WHI estrogen-alone trial (n = 10 739) reported no significant difference in the risk of colorectal cancer between persons randomized to estrogen alone and those taking placebo (1.2% vs 1.1%; HR, 1.15 [95% CI, 0.81-1.64]) during 7.2 years.⁷

Thromboembolic Events

Five trials reported on risk of thromboembolism. In the WHI (n = 16 608), persons randomized to estrogen plus progestin had an increased risk of venous thrombosis (1.96% vs 0.94%; HR, 2.06 [95% CI, 1.57-2.70]), deep vein thrombosis (1.4% vs 0.8%; HR, 1.87 [95% CI, 1.37-2.54]), and pulmonary embolism (1.0% vs 0.5%; HR, 1.98 [95% CI, 1.36-2.87]) compared with those in the placebo group.^{7,26} Other trials either reported few thromboembolic events or were consistent with the WHI findings.^{8,9}

In the WHI (n = 10 739), persons randomized to estrogen alone had an increased risk of deep vein thrombosis (1.6% vs 1.0%; HR, 1.48 [95% CI, 1.06-2.07]); the risk of pulmonary embolism was higher in the estrogen group than in the placebo group, but results were not statistically significant, although the confidence interval was wide (0.98% vs 0.72%; HR, 1.35 [95% CI, 0.89-2.05]).⁷

Stroke

The WHI found an increased risk of stroke with both estrogen plus progestin and estrogen-alone therapy. Stroke risk was significantly higher in persons randomized to estrogen plus progestin compared with those randomized to placebo (1.9% vs 1.3%; HR, 1.37 [95% CI, 1.07-1.76]).⁷ Similarly, persons receiving estrogen alone

had a statistically significant higher risk of stroke compared with those receiving placebo (3.2% vs 2.4%; HR, 1.35 [95% CI, 1.07-1.70]).⁷ A smaller trial reported that stroke risk was similar in estrogen plus progestin and placebo groups, although the confidence interval was quite wide.²⁷

Dementia

The Women's Health Initiative Memory Study was a substudy of the WHI, evaluating the risk of dementia in persons randomized to estrogen plus progestin or estrogen alone compared with placebo. That study found that persons randomized to estrogen plus progestin (n = 4523) had a higher risk of probable dementia than those taking placebo (1.8% vs 0.9%; HR, 2.05 [95% CI, 1.21-3.48]).²⁸ No significant increase in risk of probable dementia was found in persons taking estrogen alone (n = 2947).²⁹

Gallbladder Disease

Two trials reported on the risk of gallbladder disease in persons taking menopausal hormone therapy. The WHI (n = 14 203) reported a significantly higher risk of gallbladder disease in persons randomized to estrogen plus progestin treatment compared with those randomized to placebo (1.31% annualized vs 0.84% annualized; HR, 1.57 [95% CI, 1.36-1.80]) and in persons randomized to estrogen alone (n = 8376; 1.64% annualized vs 1.06% annualized; HR, 1.55 [95% CI, 1.34-1.79]).⁷ A smaller trial reported few cases of gallbladder disease.³⁰

Urinary Incontinence

Two trials reported on incident urinary incontinence (self-reported) in persons taking estrogen plus progestin; both found increased risk. In the WHI (n = 10 073), 16.6% (annualized) of persons taking estrogen plus progestin reported incident incontinence after 1 year of treatment, compared with 11.1% (annualized) of those taking placebo (HR, 1.49 [95% CI, 1.36-1.63]).⁷ A smaller trial also reported increased risk.³¹ Similarly, in persons randomized to estrogen alone, the WHI found a higher risk of urinary incontinence at 1 year (22.6% annualized vs 14.0% annualized; HR, 1.61 [95% CI, 1.46-1.79]) and 6.6 years after stopping treatment (28.6% vs 23.1%; HR, 1.24 [95% CI, 1.13-1.35]).⁷

All-Cause Mortality

A pooled analysis of 3 trials (n = 19 580) showed no significant difference in all-cause mortality between persons taking estrogen and progestin therapy and those taking placebo (RR, 1.01 [95% CI, 0.88-1.16]) during 3.2 to 5.6 years of follow-up. Similarly, a pooled analysis of 3 trials (n = 11 587) showed no significant difference in all-cause mortality between persons receiving estrogen alone and those receiving placebo (RR, 1.04 [95% CI, 0.89-1.21]) during a mean follow-up of 7.1 years.^{8,9}

Effects on Outcomes by Age or Timing of Intervention

It has been hypothesized that the benefits and harms of menopausal hormone therapy might differ based on participants' age or timing of initiation of therapy with respect to menopause. Accordingly, the WHI trials reported on outcomes stratified by decade of age and by time since menopause. Of note, the analyses of outcomes by time since menopause were post hoc. For most outcomes, there were no differences based on these parameters.⁷

The WHI reported no statistically significant differences in risk of coronary heart disease based on age or time since menopause.⁷ One analysis of the WHI estrogen plus progestin trial reported a statistically significant trend for risk of myocardial infarction (a secondary trial outcome) by time since menopause, with significantly higher risk in persons 20 or more years after menopause,⁷ while a second analysis found no difference in coronary risk between early (<5 years) vs late (≥5 years) initiation of hormone therapy with respect to menopause.³²

The WHI estrogen-alone trial reported statistically significant trends by decade of age for the outcomes of myocardial infarction, colorectal cancer, and all-cause mortality, with lower risk in younger persons and higher risk in older persons, although the confidence intervals in all age groups included the null, with the exception of colorectal cancer, for which risk was significantly increased in 70- to 79-year-old persons.⁷ Importantly, these findings are all limited by the multiplicity of outcomes and subgroup comparisons conducted (in these analyses, *P* values were not adjusted for the large number of tests conducted), the relatively small number of events that occurred for several of these outcomes, and the post hoc nature of the time since menopause analyses. Other studies have reported on the effect of timing on the benefits and harms of menopausal hormone therapy, but they are limited by study quality or other issues as well.^{8,9}

Response to Public Comment

A draft version of this recommendation statement was posted for public comment on the USPSTF website from April 19 to May 16, 2022. Some comments expressed that the benefits and harms of hormone therapy in postmenopausal persons might differ by the age of trial participants or by time since menopause. The USPSTF review of this evidence and its limitations is clarified in the Practice Considerations section and described further in the "Effects on Outcomes by Age or Timing of Intervention" subsection; the mean age of WHI participants is also provided in the Supporting Evidence section. In response to comments that the benefits and harms of hormone therapy differ by whether estrogen plus progestin or estrogen alone is used, or might differ by the formulation of hormone therapy used (eg, estradiol or progesterone vs conjugated equine estrogen or medroxyprogesterone acetate), the USPSTF has clarified language in the Practice Considerations section that although specific benefits and harms for estrogen plus progestin and estrogen alone differ, the USPSTF concludes that overall, both estrogen plus progestin and estrogen alone have no net benefit for the primary prevention of chronic conditions. Also, as noted in the Practice Considerations and Discussion sections of this recommendation, evidence on other types, doses, or modes of delivery of hormone therapy is limited.

Some comments noted that hormone therapy is approved by the US Food and Drug Administration for the prevention of osteoporosis and reduces fractures in postmenopausal persons. The USPSTF acknowledges this indication in the Practice Considerations section of this recommendation. Evidence reviewed by the USPSTF showed that hormone therapy was associated with decreased risk of fracture; however, given the overall benefits and harms of hormone therapy, the USPSTF concluded that there is no net benefit at the population level. The USPSTF reviewed additional studies related to the WHI that reported on outcomes

such as atrial fibrillation and peripheral arterial disease; these did not affect the overall assessment of the benefits and harms of hormone therapy.

Research Needs and Gaps

More research is needed that addresses the following.

- Whether age or the timing of initiation of hormone therapy with respect to menopause affects health outcomes.
- Whether the benefits and harms of menopausal hormone therapy might vary across population groups. Because persons who experience systemic racism, poverty, or other socioeconomic barriers can be at higher risk for certain chronic conditions (eg, type 2 diabetes or stroke), it would be important to understand whether hormone therapy might have a different magnitude (or balance) of harms or benefits across racial and ethnic groups. Combining individual patient data from previously conducted trials to conduct an individual patient data meta-analysis might provide this information.
- The comparative benefits and harms of different formulations and treatment durations of menopausal hormone therapy.

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Additional Information: The US Preventive Services Task Force (USPSTF) makes recommendations about the effectiveness of specific preventive care services for patients without obvious related signs or symptoms. It bases its recommendations on the evidence of both the benefits and harms of the service and an assessment of the balance. The USPSTF does not consider the costs of providing a service in this assessment. The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision-making to the specific patient or situation. Similarly, the USPSTF notes that policy and coverage decisions involve considerations in addition to the evidence of clinical

Recommendations of Others

The American College of Obstetricians and Gynecologists recommends against the use of menopausal hormone therapy for primary and secondary prevention of coronary heart disease.³³ It also notes that evidence suggests that women in early menopause who are in good cardiovascular health and at low risk of adverse cardiovascular outcomes should be considered candidates for the use of estrogen therapy or conjugated equine estrogen plus a progestin for relief of menopausal symptoms and that menopausal hormone therapy is approved for use in women with an increased risk of osteoporosis and fracture.³⁴ The North American Menopause Society recommends that hormone therapy should not be prescribed for chronic disease prevention. It also notes that extended duration of hormone therapy use might be appropriate in symptomatic women or for the prevention of osteoporosis, if alternative therapies are not tolerated, based on a careful assessment of individual benefits and risks.³⁵ The American Academy of Family Physicians endorses the previous USPSTF recommendation on hormone therapy in postmenopausal persons.³⁶

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