



FDA Regulations Governing Hormone Replacement Therapy Supplements

Submitted by:

Christina Hoff, Katelyn Kennedy, & Sara Wilson

Class: NURS 648

Professor: Rev. Linda Liebert-Hall, Deacon

Objectives

What is Hormone Replacement Therapy (HRT)?

What is happening in the health care community?

Legal history.

Current law.

What does the future of HRT look like?

Recommendations for improvement.

What is Hormone Replacement Therapy (HRT)?



Treatment with hormones to replace natural hormones when the body does not make enough.



For example, hormone replacement therapy may be given when the thyroid gland does not make enough thyroid hormone or when the pituitary gland does not make enough growth hormone.



It may be given to women after menopause to replace the hormones (estrogen, progesterone, testosterone) that are no longer made by the body.

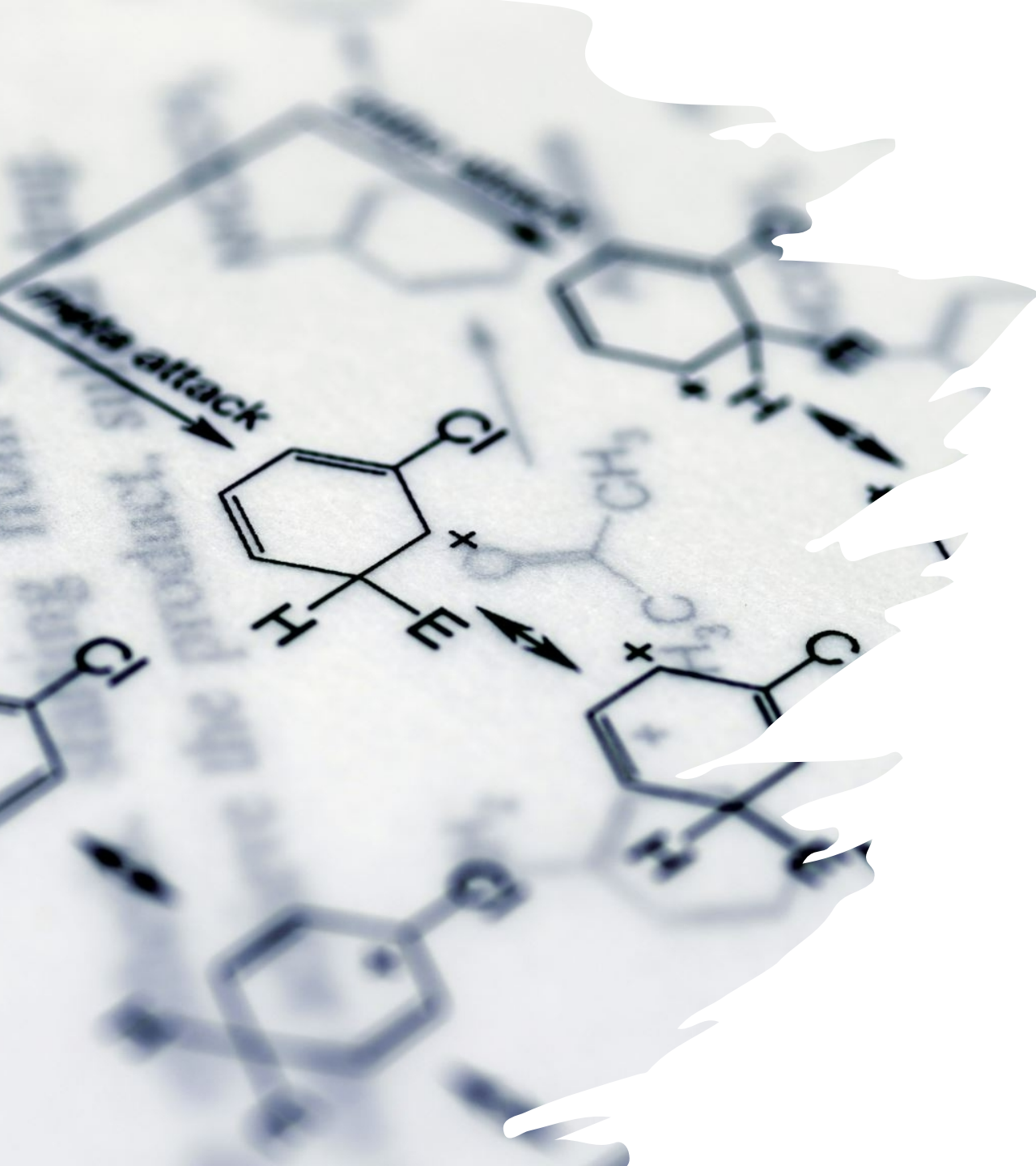


It replenishes women with ovarian hormones diminished during the natural menopausal transition to help with associated symptoms, like hot flashes and night sweats.

Examples include:

- Estradiol creams or transdermal
- Estradiol/Norethindrone Acetate
- Testosterone undecanoate capsules or injections
- Testosterone gels
- Progesterone capsules or gels
- Leuprolide acetate (gonadotropin releasing hormone (GnRH) agonist)
- Somatropin-rDNA origin (recombinant growth hormone)
- Conjugated estrogens/medroxyprogesterone



The background of the slide features a collage of chemical structures, including various rings and functional groups. A prominent label 'mass attack' with an arrow points towards a specific chemical structure in the upper left. The overall theme is scientific and chemical.

Current Regulation

- Approved:
 - estrogen-based HRT for treating moderate to severe vasomotor symptoms associated with menopause.
 - Testosterone replacement therapy (TRT) for men with hypogonadism caused by certain medical conditions.
- Not approved:
 - Compounded bioidentical hormones

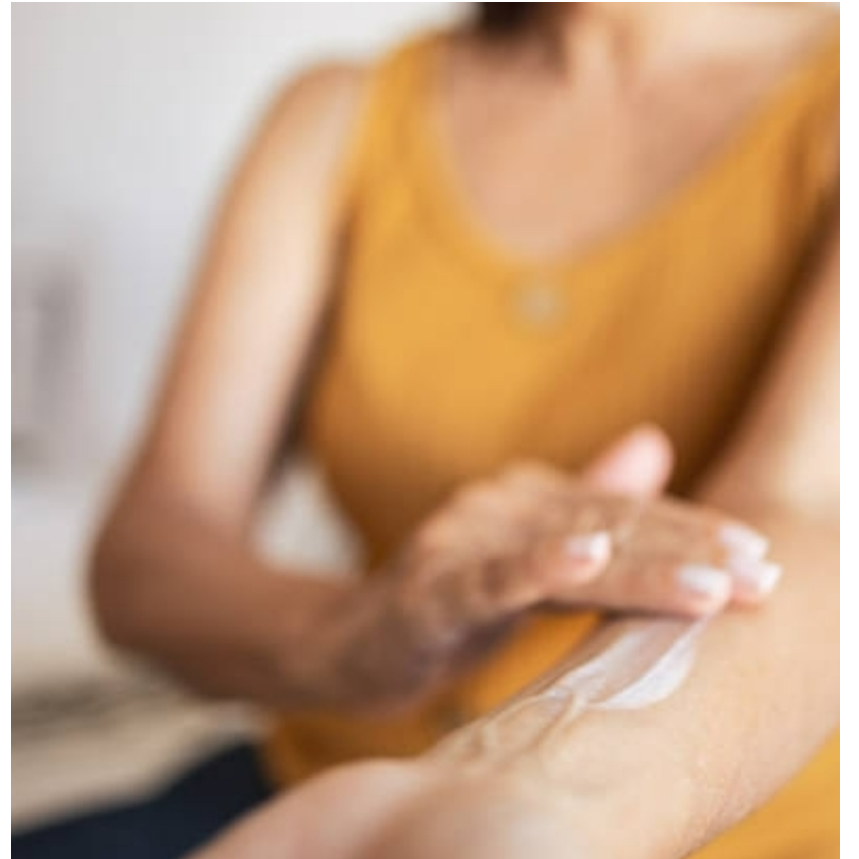
Why is it important?

- Menopause is a natural biological process women will go through.
- Symptoms can have a significant impact on quality of life (QOL) for many women. Legalization of bioidentical methods could change QOL for millions of women.
- While commonly reported symptoms included hot flashes and mood changes, menopause can have an impact on all body systems
- Hormone depletion can lead to multiple co-morbidities including Alzheimer's disease, osteoporosis and heart disease (Bluming & Tavis, 2018).

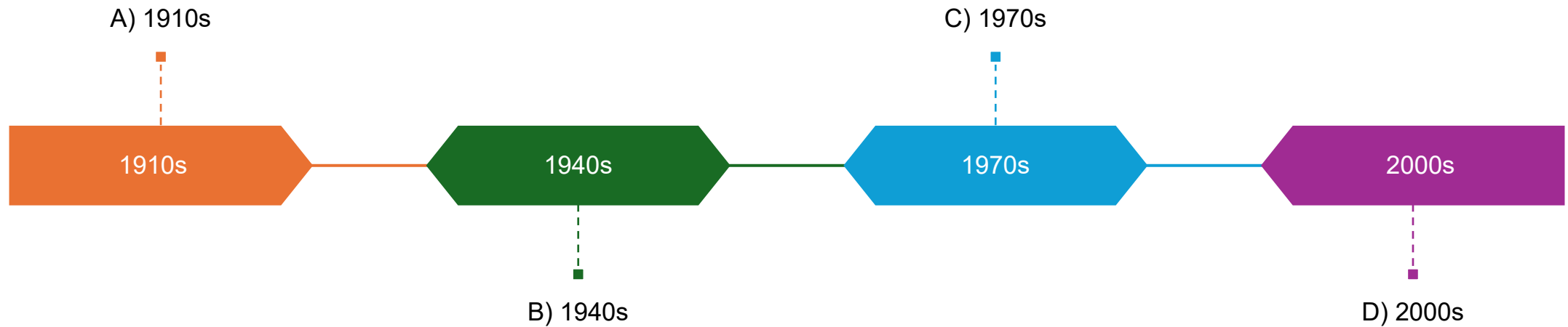


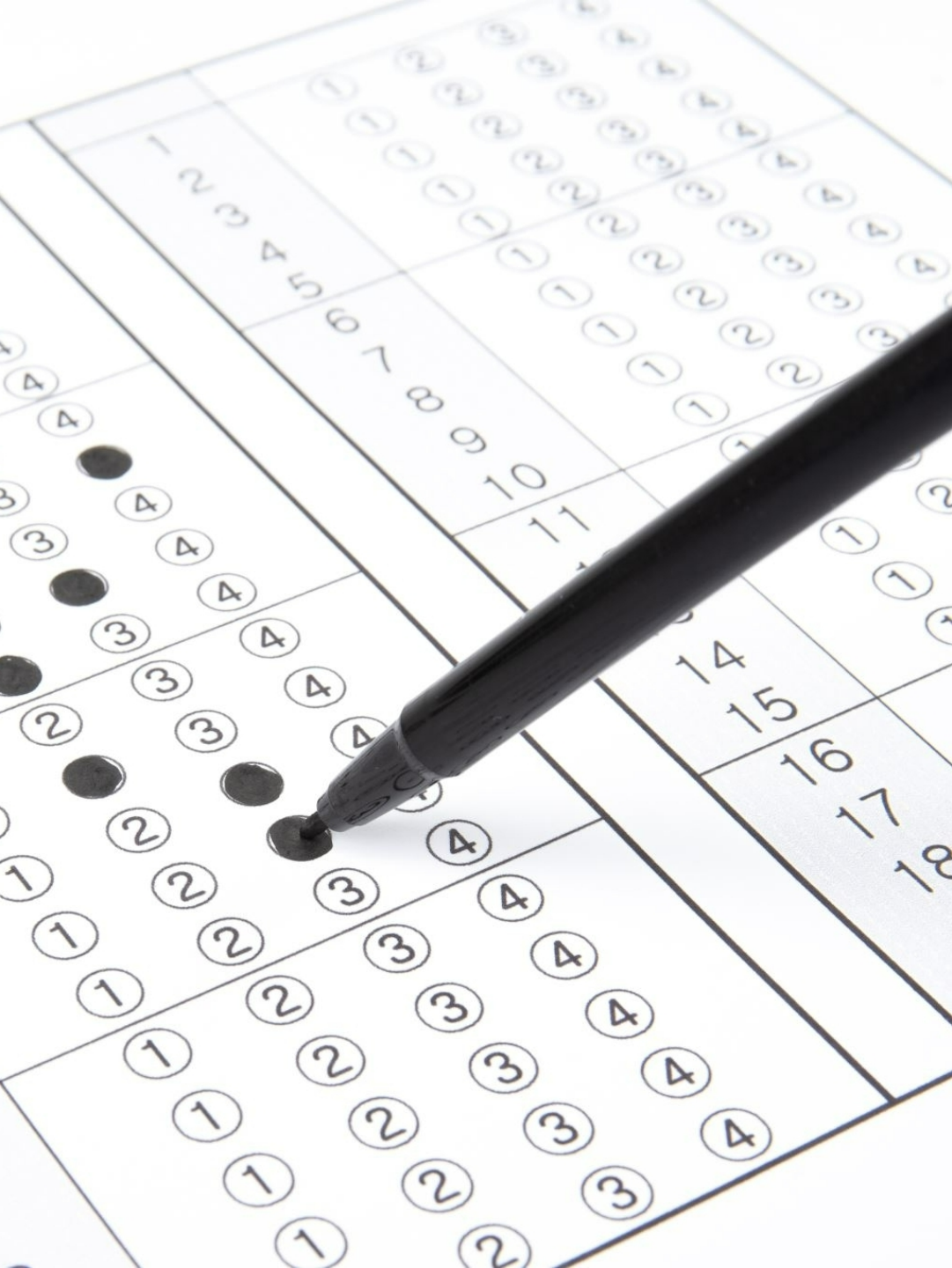
Why is it important?

- A growing movement to focus women's health and quality of life,
- Women are living longer, making HRT a key issue for improving their long-term health,
- HRT has been at the center of debate due to conflicting studies on the risks and benefits,
- The healthcare community is being pressured to find the right balance between symptom relief and minimizing risk (Haver, 2024). While also confined by legal limitations.



What year was HRT first approved by the FDA?





Answer

- B) 1940s



Legal History:

- First HRT Drug Approval by FDA
 - 1942
- Major Developments:
 - 1970s
- Other Advancements:
 - Menopause – 1997, 2003, 2013, 2023

(Federal Drug Administration, 2023; Glazier & Ko, 2023; McAninch & Bianco, 2016)

What HRT drug is
not FDA
approved?

Answer

- Transgender HRT Drugs



Current Law:



Not Approved by FDA:

Transgender HRT Medications



Current Legislature:

Transgender HRT Medications in Minors



Alternative Treatments and Fairness Act of 2011

Introduced to amend the XVIII (Medicare)of the Social Security Act to cover HRT for menopausal symptoms.

(American Speech Language Hearing Association, n.d.; Geffen et al., 2018; Library of Congress, n.d.)

What does
the future
hold?



The future of HRT

Advances in Personalized Medicine

Development of Safer Hormone
Options

Focus on Non-Hormonal
Treatments

Policy Changes and Workplace
Support for Menopausal Women

What if nothing changes?

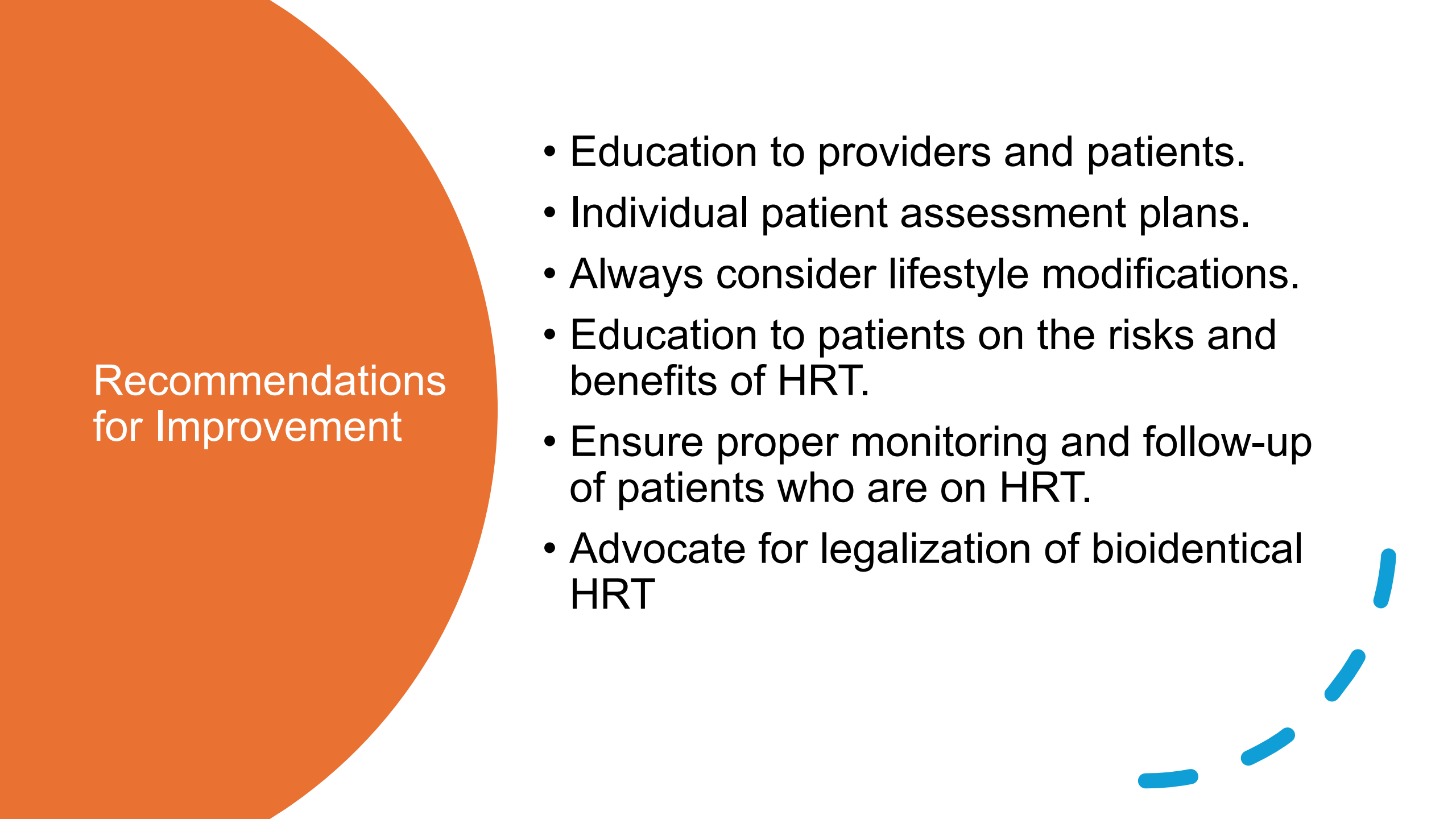
Worsening Health and Quality-of-Life Outcomes

Continued Misinformation and Stigma Around HRT

Economic and Workplace Impact

Disparities in Health Access and Gender Equality





Recommendations for Improvement

- Education to providers and patients.
- Individual patient assessment plans.
- Always consider lifestyle modifications.
- Education to patients on the risks and benefits of HRT.
- Ensure proper monitoring and follow-up of patients who are on HRT.
- Advocate for legalization of bioidentical HRT

Summary

- HRT is a treatment therapy with hormones to replace natural hormones when the body does not make enough.
- Approved therapies are:
 - Estrogen-based HRT for treating moderate to severe vasomotor symptoms associated with menopause.
 - Testosterone replacement therapy (TRT) for men with hypogonadism caused by certain medical conditions.
- Continued advancement in medicine and technology is allowing for advancement in HRT delivery. Legal advancement should also follow.
- Evolving with the market and patient needs is essential to addressing health issues that affect the disease burden.

References:

- American Speech Language Hearing Association. (n.d.). *States with specific gender affirming care restrictions*. <https://www.asha.org/advocacy/state/state-mandates-around-diversity-equity-and-inclusion/states-with-specific-gender-affirming-care-restrictions/#:~:text=North%20Dakota%20law%20prohibits%20surgery,the%20date%20of%20the%20law.>
- Bluming, A., & Tavis, C. (2018). *Estrogen matters*. Little, Brown Spark.
- CenterWatch. (n.d.). FDA approved drugs: Listings in hormone replacement therapy. <https://www.centerwatch.com/directories/1067-fda-approved-drugs/topic/286-hormone-replacement-therapy>
- Federal Drug Administration. (2023, December 14). *Menopause: From the FDA Office of Women's Health*. <https://www.fda.gov/consumers/womens-health-topics/menopause>.
- Geffen, S., Horn, T., Smith, K. J., & Cahill, S. (2018, March 1). Advocacy for gender affirming care: Learning from the injectable estrogen shortage. *Transgender Health*, 3(1), 42-44. <https://pmc.ncbi.nlm.nih.gov/articles/PMC5908424/#:~:text=The%20FDA%20ensures%20the%20safety,disparate%20treatment%20is%20not%20acceptable..>

References:

- Glazier, E. M. & Ko, E. (2023, May 1). 2002 HRT study comes under criticism. *University of California, Los Angeles (UCLA) Health*. <https://www.uclahealth.org/news/article/2002-hrt-study-comes-under-criticism>.
- Harper-Harrison, G., Carlson, K., & Shanahan, M. (2024, October 6). Hormone replacement therapy. National Library of Medicine: StatPearls [Internet]. <https://www.ncbi.nlm.nih.gov/books/NBK493191/>
- Haver, M.C. (2024). *The new menopause*. Rodale.
- McAninch, E. A. & Bianco, A. C. (2016, January 5). The history and future of treatment of hypothyroidism. *Annals of Internal Medicine*, 164(1), 50-56. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4980994/pdf/nihms808138.pdf>.
- National Cancer Institute. (n.d.). Hormone replacement therapy. *National Institutes of Health*. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/hormone-replacement-therapy>.
- Library of Congress. (n.d.). *H.R.383 – Menopausal Hormone Replacement Therapies and Alternative Treatments and Fairness Act of 2011*. <https://www.congress.gov/bill/112th-congress/house-bill/383>.

Thank you!

You've been a
great audience!



Any Questions!