



Women's HEALTH SUMMIT

Menopause **Matters**

A Public Health Call to Action

UC Irvine
Joe C. Wen School of
Population & Public Health



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Why Women's Health—and Menopause—Matter Now

Women's health is not a single specialty—it touches every stage of life, every system in the body, and every aspect of wellbeing.

At Wen Public Health, we believe that **health and wellbeing are a fundamental human right**—and that includes the right to age with dignity, knowledge, and support.

This year's theme, ***Menopause Matters: A Public Health Call to Action***, challenges us to reframe menopause not as a private struggle, but as a population health priority.

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Menopause: A Public Health Issue

2025 Women's Health Summit
Joe C. Wen School of Population and
Public Health, UC Irvine.

Wen Shen, MD, MPH
Dept Gyn/Ob
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Agenda

- Definition
- Epidemiology
- Menopause medicine
- Public health
- Healthy aging and Society

What is menopause?

Menopause

Premenopause: reproductive

Perimenopause: 45-55

Postmenopause: 52

- 12 consecutive months without a menses: spontaneous, surgical, medical
- Cessation ovarian function

Natural progression – NOT A DISEASE!

Happens to all people born with ovaries

Aging Population

Life expectancy for women in the US is in the 80's

- 1/3 to ½ of their lives in postmenopause.
- Spent in poor health with **chronic medical morbidities**

Midlife health/transition

- more than bikini medicine
- opportunity to evaluate women's health and risk factors
- **340 million** people in the US
 - 170 million women
 - 75 million in menopause
 - 2 million transitioning into menopause/yr
 - **6000** women daily.

Aging Population

- In developed countries, the absolute number of postmenopausal women has **tripled** over the last century
- Increasing emphasis on remaining active physically and professionally, with maintenance of a high **quality of life**
- For corporate America, this represents **\$billions** profits annually.

Sandwich generation

Menopausal women:

- **Matriarch** she is the main caregiver of the family: aging parents, children, partner.
- **Chief consumer** decisions for healthcare dollars
- **Works** full time
- Primarily responsible for the **house and home**.

While suffering with life altering menopause symptoms, and onset of medical conditions which will impact how she age

So, instead of a TimTam sandwich, she often feels more like a vegemite sandwich.

MENOPAUSE MEDICINE

“an important unmet public health need related to the health of women”

NIH RFTO EPC: Improving the Management of Menopause Symptoms

Chronic Diseases in Menopause

- CVD
- Obesity
- Osteoporosis
- Autoimmune
- Psychological
- Cognitive
- Alzheimer's Disease

Cardiovascular Disease

LEADING KILLER OF WOMEN WORLDWIDE

- 1 in 3 women will die of heart disease
- More women die of heart disease than men
- Medical disparity and gender differences

Cardiovascular Disease

There IS a relationship between menopause and CVD:

- **Premature menopause** before the age of 35 associated with 2-3x risk of heart attack
- **Estrogen and progesterone receptors** are present in vascular tissue, including coronary arteries
- **Coagulation factors** increase with menopause
- **Decreased blood flow** in all vascular beds after menopause

Weight Gain/Obesity

- 70% women over 55 y/o are overweight in the U.S.
- Related to **lifestyle** and **aging**
 - Sleep deprivation increases hunger and appetite
 - Fatigue reduces activity
- **Hormonal** and **metabolic** influences
- Menopause related to body composition and increase in **central fat distribution**

Osteoporosis

- Most common bone disorder
- **1 in 2** postmenopausal women will have an **osteoporosis-related fracture** in their lifetimes
- Aging U.S. population, the number of hip fractures in the U.S. to **double/triple** by 2040

Osteoporosis

- **Morbidity:**
 - Most common **cause of morbidity** in postmenopausal women >65 y/o
 - 25% require **long term care**
 - 50% long term **loss of mobility**
- **Mortality:**
 - Hip fracture results in **5-8 fold increase** mortality within the first 3 months
 - 20% increase** in mortality within one year

Autoimmunity

- Prior to menopause, females have more reaction to vaccines and autoimmune diseases

Immune senescence

- Decreased ability to respond to infection and vaccination
- Many **>65 y/o produce only 25-50%** of influenza-specific antibodies after vaccine

Psychological Symptoms

“Domino Effect” of menopausal symptoms:

Estrogen fluctuations →

vasomotor symptoms →

Sleep disturbance

Psychological/cognitive

During menopause transition ->

2-4x increased rate of depression

Psychological Symptoms

3 periods of vulnerability for mood problems:

- menarche
- pregnancy
- menopause

Cognition

- **31-92%** have cognitive change during perimenopause. “Brain fog”
- Estrogens are potent antioxidants with **neuroprotective** actions against: mitochondrial dysfunction, neuroinflammation, synaptic decline, cognitive impairment
- **Neuroimaging** showed enhanced hippocampal and prefrontal function with MHT

Alzheimer Disease

11% of population will get Alzheimer Disease (AD)

- Rate of AD **3x higher** in women
- More abrupt change in women
- **More women die** from AD than men, even if corrected for age
- **Mitochondrial inheritance** is significant - maternal

Public Health Healthy Aging

Why Menopause Should Be a Public Health Agenda

Women's Health:

- Historically equated with **reproductive** functions.
- Need for expanded focus throughout lifespan

Menopause transition is a window of opportunity for health in next phase of life:

- Integrated **holistic** approach to patient centric preventive care
- Shift away from viewing menopause as a **disease** state
- Promote **modifiable** healthy lifestyle

Public Health Issue

Prospective cohort study of 11,258 Australian women followed 1996-2016

- Risk of **age** at Natural Menopause and **chronic conditions**:
-DM, HTN, HD, stroke, arthritis, osteoporosis, asthma, CPD, depression, anxiety and breast CA
- **Premature menopause** (<40) compared to 51 y/o:
-Twice the odds of multimorbidity by 60's

Recommendations:

Comprehensive screening and assessment of risk factors for women with premature menopause (natural, medical or surgical)

Menopause Hormone Therapy indicated in premature menopause

Xu, Jones, Mishra. Age at natural menopause and development of chronic conditions and multimorbidity: result from a Australian prospective cohort. Human Reproduction, Volume 35, Issue 1, January 2020, Pages 203–211

Public Health Issue

Report from UK:

- Increase in older women in the **workforce**.
- Menopause not well understood by general population
- **Gender ageism** is a significant problem
- Both positive and negative effects of menopause exist

Brewis, J., Beck, V., Davies, A., & Matheson, J. (2017). Menopause transition: effects on women's economic participation. Department for Education.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/630846/menopause_report_final.docx

Why Menopause Should Be a Public Health Agenda

Cost of menopause symptoms annually:

- Increased sick leave costs (\$647 vs \$599/woman)
- Increased sick leave days (3.57 vs 3.30)
- 10.9% lower productivity
- \$1.8 billion loss on sick days

Why Menopause Should Be a Public Health Agenda

Cost of menopause related morbidity:

- **\$27,668,410.00** US Bureau of Labor Statistics (2011)
Indirect **work productivity** loss due to untreated
menopause symptoms
- **\$20 trillion** Alzheimer's Association estimates
prevalence to triple by 2050
- **\$17 billion Osteoporosis** fractures and subsequent
physical impairment

Healthy Aging

How to achieve healthy aging?

- Education
- Science
- Public Health
- Private Sector

Education

WHI data in 2000 resulted in a generation of women not being appropriately managed for menopause and healthy

- **Unnecessary fear** in both the general public and medical providers
- Vacuum of **evidence based** information
- Proliferation of **misinformation and unethical treatments**
- **Lack of education** and knowledge in medical providers, result in women seeking help from predatory entities peddling treatments which are **not FDA approved** and **“meno-influencers”** pandering misinformation.
- "lotions, potions and eye of newt"

Science

More research and **evidence based data to improve knowledge** in key menopause issues and safe treatment options

“Can’t fix what you can’t measure”*

Needs:

- Improvement of **research design**
- **Standardization across trials** for better transparency
- **increase funding**: only 5% of global R&D funds went to women specific conditions
- Increase in **women participants** in clinical research
- Increase in women in **research leadership**

“gray haired male silverbacks”*

*Prof Mark Lawler, Belfast

Public Health

Establish policies for healthy aging and prevention

- Need **system change**, doing something for society, not just women
- Public health institutions to **institutionalize** population wide improved menopause health care, like what was done for smoking cessation and heart disease awareness
- **Improve equity, access and outcomes**
- ADA covers sex, age and disability – nothing on menopause

Private Sector

Advance priorities for menopause programs in workplace

- 74 million women in workplace (**47% total**)
- Shift menopause in workplace **away from being a liability**

Data from Mexico:

- **20% resignation rate** of women in menopause age
- 50% more than men of same age

The World Economic Forum

- **14 million days lost/year:**
 - 53% felt unable to go to work due to symptoms
 - 23% considered resigning
- **97% returns on investment**

Workplace

The 2024 McKinsey report on Women in the Workplace

- Companies took action, but gains are fragile and modest, especially in senior leadership.
- Companies have been pulling back in the last year.
- Microaggressions have macro impact on women.
- Women over 50 are equally at risk for sexual harassment.

The Society for Women's Health Research

- **“Roadmap to Menopause-Friendly Workplaces”**
- **“Navigating Menopause Care”**
- Recommendations for corporations:
 - HR and managers remove stigma of age and support career progression
 - Institutional knowledge, loyalty and the worth of senior talent
 - Health navigator services

Partnerships: Education, Science, Public Health and Private Sector

UNGA 80 Scientific Summit on Healthy Aging

- Healthy women could boost the economy by **\$1 trillion annually worldwide**
- \$1 investment in women's health -> **\$300 return**
- Move data into strategic funding
- Women are the primary caretakers of the family, and healthy women means healthy family

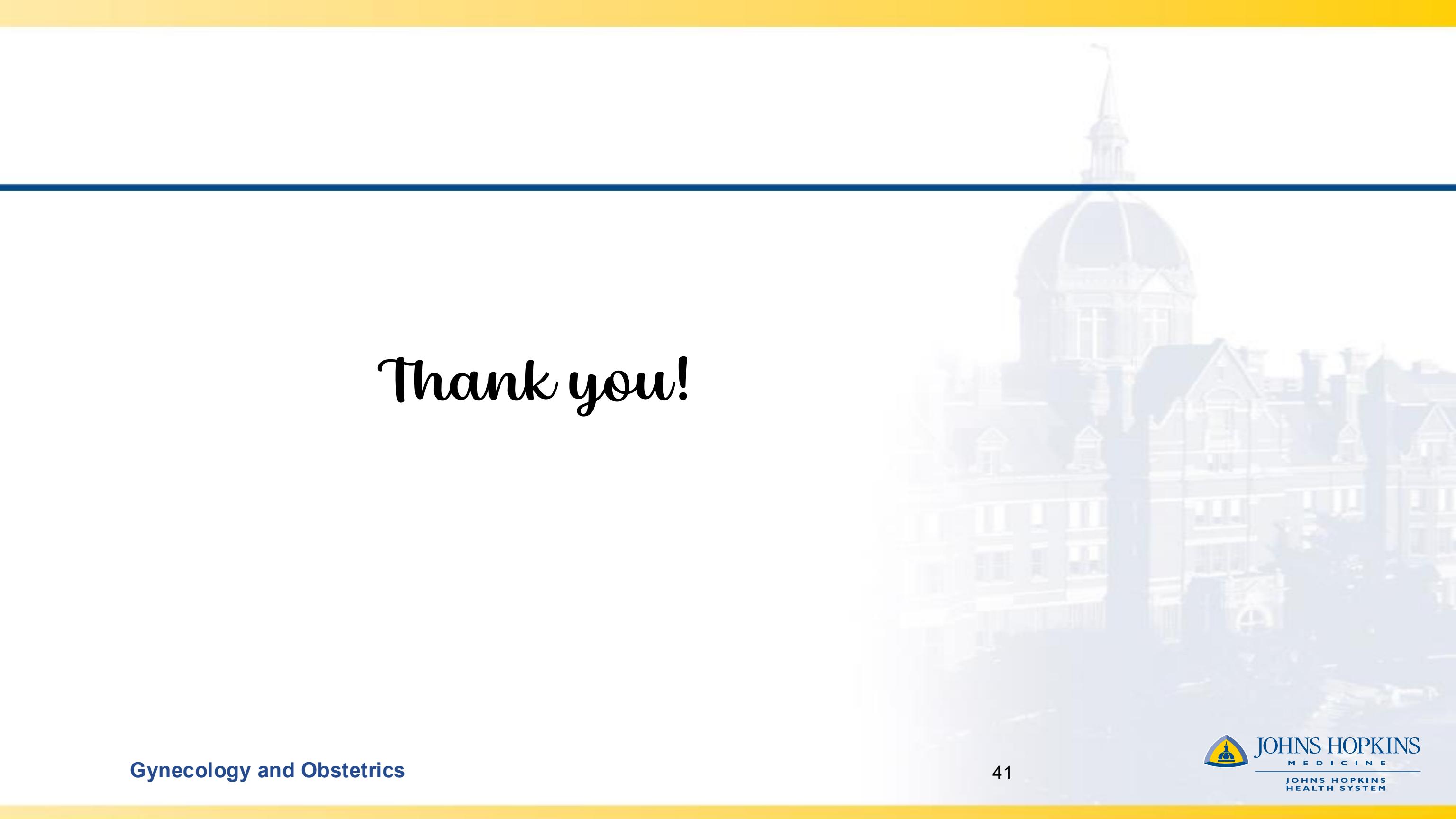
Partnerships: Education, Science, Public Health and Private Sector

The UN Decade of Healthy Ageing (2021–2030)

- **Global initiative** to improve the lives of older people, families, and communities
- **Combat ageism**: Work to eliminate discrimination based on age
- **Foster age-friendly environments**: Develop cities and communities where older people can live safely, be included, and remain independent
- Provide **integrated care**: Ensure older adults have access to comprehensive health and social care that is well-coordinated and easy to navigate
- Strengthen **long-term care**: Ensure access to the care older people need as they age

“one of the greatest under-appreciated sources of innovation and new business may in fact be women over 50 with new ideas, lots of life ahead of them and with the verve to get it done. Older women are changing workplaces as entrepreneurs and engines for innovation”

Joseph F Coughlin PhD, Director, AgeLab, MIT



Thank you!

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Panel Session: Bridging Public Health, Clinical Care, & Women's Health Policy



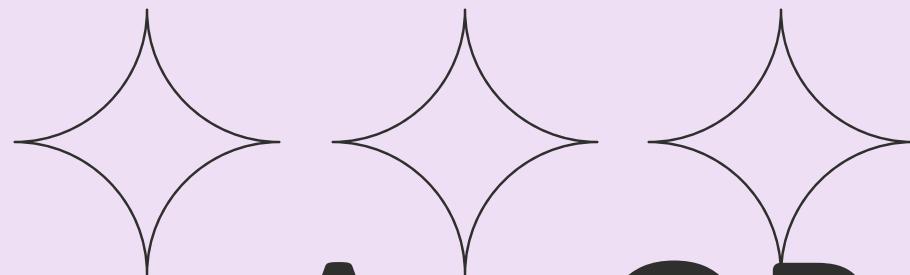
Gigi Kroll, MD, OB/GYN

Certified Menopause Specialist
Founder, Newport Center Women's Health



Liz Powell, MPH, Esq.

Founder of G2G Consulting & Women's Health Advocates



An OB/GYN's Clinical Perspective on Delivering Menopausal Care

DR. GIGI KROLL
FACOG, MENOPAUSE CERTIFIED SPECIALIST

26 Years in Private Practice

- Biology degree from UCLA 1991.
- USC Medical School in 1995. No curriculum on menopause.
- 4 year OB/GYN residency at the University of Washington in 1999. No dedicated menopause training.
- I recertify yearly to continue to be a Board Certified OB/GYN, reading a minimum of 30 articles per year. Categories include: obstetrics, office gynecology, surgical gynecology, gynecological oncology, urogynecology, reproductive endocrinology, and infertility. No menopause category.
- In 2002, the WHI hit the news headlines claiming that hormone replacement increased the risk of breast cancer.
- In 2020, I joined the Menopause Society and in 2023 became a Certified Menopause Practitioner.



My Own Journey

- Initially hired, then became an associate
- Opened my own private practice in 2008
- Practiced primary care, general gynecology (including surgery) and, until 2024, practiced obstetrics. I often would see 25 patients per day.
- Became menopausal at 49. Now 57, I was motivated by my own personal journey to help women through this transition.
- Prior to becoming menopause certified, I was admittedly ill-equipped to help women through this midlife transition.





The Menopause Transition

Will affect half of the population

Will impact quality of life and health span

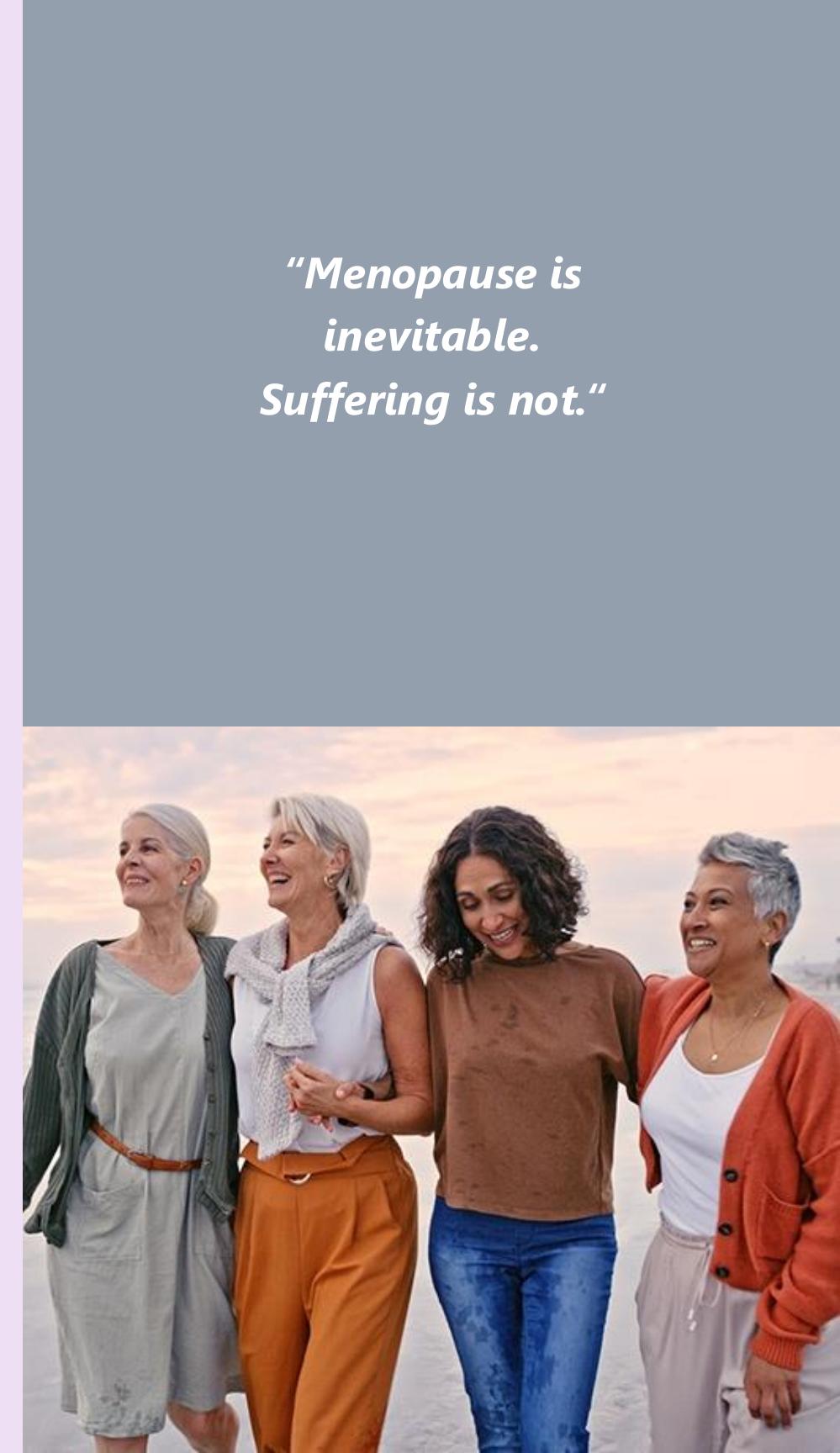
Scientific, evidence-based data shows the safety and efficacy of supportive care from lifestyle interventions to hormone therapy

Healthcare providers should learn the symptoms, the health risks, and the skill set to initiate care

From a Public Health perspective, women should receive general education about the menopause transition by age 35

Together we can bridge the gap!

***"Menopause is inevitable.
Suffering is not."***





Some Current Barriers to Care

Poor Physician Training:
Mayo Clinic Survey shows
less than 20% received
any training on
menopause and only
6.8% feel capable of
treating

Poor reimbursement
for codes pertaining to
women's health

Impacted physician
schedules with short
visits and difficulty
arranging follow-up

Inconsistent insurance
coverage for services
and prescriptions
(i.e., Vaginal estrogen
cream can range from
\$13/tube to over \$200!)

Barriers to Care (continued...)

Persistence of the FDA Black Box Warning:
untrue information

Pervasive Fear related to WHI despite retracted statements and new data with transdermal and bioidentical formulations

Wild, wild west of menopause care: compounded, cash-based companies taking advantage

No FDA approved testosterone product for women (but 32 for men)

hotels, officials said. Mr. Earhart Tuesday, Mr. Earhart did not ad- email: mmccain@enquirer.com a new financial crimes unit.

From Page C1

ative. She also is president of the North American Menopause Society. Dr. Gass was in

Study warns of hormone therapy risk

By CHARLOTTE HOFF

RESEARCH

A study points to risks in hormone therapy for treatment and prevention of breast cancer, the researchers said. The findings, published in the journal *Cancer*, show that women taking HRT for prevention of breast cancer "to taper and stop

Breast cancer risk ends study

265 Isle women are involved in research on hormones taken by 6 million people

By PATRICIA ANSTETT

Serious Health Risks Outweigh Treatment's Benefits In 5-Year Survey Of 16,608 Women

"The message is that estrogen plus progestin should not be used for the new women being given the hormone. Women taking HRT would have breast cancer rates three times as high as the health risks. By comparison, women taking HRT between 1990 and 1994 would have breast cancer rates 10 years earlier than women taking HRT between 1995 and 1999."

Hormone decision is all about risk

Risks Halt Study

Finding affects 6M women on combination hormone therapy



Hope for Change

Patient education: social media, books, documents, podcasts, Youtube, etc

Telehealth platforms: Alloy, Midi, Elektra

Increases in private and government investment in women's healthcare: Melinda Gates, Maria Shriver, Jill Biden

State policies being introduced (and some passing) related to menopause training and care

Innovative courses for physicians to self learn: Heather Hirsch Academy, Rachel Rubin

Menopause Society and other organizations (ISWSS, ISM) providing services

Cost Plus (Mark Cuban), GoodRx, Costco working to *level the playing field*

Appeal to ACGME (Accreditation Council for Graduate Medical Education)



Even more hope!

Local Institutions adapting and training physicians and providing services

Consumer demand: GenX and Millennials

Interest in Longevity Medicine

Interest in disease prevention

Removing the stigma

Patient Advocacy Tools

Workplace programs being implemented as retention tools

Public Policy approaches

Thank you!

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Liz Powell, MPH, Esq.

Founder of G2G Consulting & Women's Health Advocates



Women's Health Policy & Advocacy

November 14, 2025



Women's Health

Disproportionate | Different | Exclusive

- 66% of those 65+ with **Alzheimer's** are women
- 80% of **autoimmune** patients are women
- 84% increase of **lung cancer** in non-smoking women while falling 36% in men <42 years
- 2X rate of mortality following ER admission for a **heart condition**
- 80% of women will have **fibroid tumors** at some point
- Black women are 3.5X more likely to **die from a pregnancy-related cause**
- **Breast cancer** impacts 1 in 8 women but screening key to saving lives still inaccessible
- 50% mortality rate for **ovarian cancer**
- 1 in 2 women will experience a bone fracture due to **osteoporosis** in their lifetime
- **Menopause** triggers increased risk for heart disease, cognitive decline, autoimmune conditions, cardio metabolic syndrome, and many more conditions



Ecosystem Challenges



- Women **live 5 years longer** than men but often in poorer health
- Most pre-clinical studies use **exclusively male mice**
- Medical decisions are made using clinical trials, **data**, and algorithms based on mostly white men
- Only 31.3% OB/GYNs report having a **menopause curriculum** in their residency program
- **Adverse drug events** are 2X in women
- Urological-gynecological **surgeries are reimbursed 30% less on average**
- Significant **advertising censorship** in women's sexual health and wellness

Investment Challenges



- Only **8-11% of NIH grants** fund women's health
- Only **2% VC investment** and **2% of Big Pharma R&D** is in women's health innovation
- Investments by **micro-fund investors** are <\$1 M investment per company when PE healthcare deals are ~\$200 B
- **Females are 10% of VCs** with check-writing power at their firms
- Female entrepreneurs are **63% less likely to get VC funding**
- **76% of women's health companies have a female founder** – 3X rate
- Women's health investments are **undervalued by 20%**

Market Opportunity



- Women's health is a **\$1 T market opportunity**
- Doubling current NIH investment in the 4 areas of heart, brain, autoimmune and lung cancer (\$350 million) would **generate \$14 billion to our economy**, according to WHAM Report
- **<60% of women's health-focused companies** were founded 2016-22
- **1,000% increase** in women's health innovation businesses in last 10 years
- **314% increase** in women's health VC investment since 2018

ROI in Women's Health



- From 2019 through 2023, investments are rising:

\$1,358 B in pregnancy

\$1,238 B oncology

\$1,167 B fertility

\$755 M pelvic health

\$637 M in sexual and reproductive health

\$594 M in advanced primary care & gynecology

\$325 M in platforms

\$223 M in menopause

- Past 5 years, seeing big exits:

Immunogen – ADC for ovarian cancer –
\$9 B acquisition by Abbvie (2024)

Axonics / Boston Scientific for overactive bladder & incontinence, **\$3.7B** (2024)

Progyny IPO for fertility – **\$1.3 B** (2019)

Forendo for endometriosis therapeutic –
\$955 M acquisition by Organon (2021)

Naytal for menopause – **\$500 M** acquisition by Maven Clinic (2023)

Pharmavite for vitamins – **\$425 M** (2023)

Hologic acquired Gynesonics for imaging and treatment for fibroids –
\$350 M (2024)

Alydia, a PPH device – **\$244 M** by Organon (2021)

Flo Health, women's health app – \$200 M total valuation **\$1 B** (2024)

Genev – menopause – undisclosed by Unified Health (2022)



Connecting Women's Health to Policy and Advocacy

Women in Office

Bad News – Women Remain in the Minority

- 125 women in the House and 25 women in the Senate = 28%
- 404 is the total number of women in House of Representatives since 1789
- 13 women governors = 26%
- 2,450 women in state legislatures = 33%

Good News – Rising Power

- NM and CO are now majority-woman legislatures
- 7 legislative chambers at or beyond parity in 2025



WHA Mission

Educating and advocating on women's health throughout the life span from head to toe:

- **Adverse Drug Reactions/Clinical Trial Representation/Therapeutic Development**
- **Aging Health & Longevity**
- **Autoimmune Health**
- **Brain Health**
- **Cancer, e.g. breast cancer**
- **CMS Reimbursement Inequities**
- **Gynecological, Ovarian and Sexual Health, e.g. endometriosis**
- **Heart Health**
- **Maternal & Postpartum Health**
- **Menopause**
- **Mental Health**
- **Wellness**

Advocacy Issues



- Education on all women's health issues
- Research funding
- Sex-based data collection
- Clinical trial representation
- Women's health FDA pathway
- CMS reimbursement parity
- Access to care
- Impact of policy decisions on the health of women, research, innovation and access



WOMEN'S HEALTH CAPITOL HILL DAY

MAY 21, 2025



WOMEN'S HEALTH CAPITOL HILL DAY

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IMPACT

- Congressional Briefing Luncheon – Speakers were expert leaders in women's health with U.S. Reps. Juan Ciscomani (R-AZ) and Joyce Beatty (D-OH)
- **100** Advocates in 50 Hill Meetings
- Reception for Advocates and Members of Congress – Speakers were U.S. Reps. Robin Kelly (D-IL), Marianette Miller-Meeks, MD (R-IA), Deborah Ross (D-NC), Emilia Sykes and (D-OH), Nancy Pelosi (D-CA) and staff



BREAST CANCER EARLY DETECTION COALITION CAPITOL HILL DAY

JULY 16, 2025

IMPACT

- Luncheon Briefing & Advocacy Training – Guest Speaker Ruth McDonald, Health Policy Adviser for Senator Amy Klobuchar (D-MN) who co-sponsored the Find it Early Act with Senator Roger Marshall, MD (R-KS)
- **50** Advocates in 35 Hill Meetings
- Happy Hour for Advocates
- Congressional Softball Game to raise funding for young patients and survivors



How Can I Get Involved?



BECOME AN ADVOCATE!



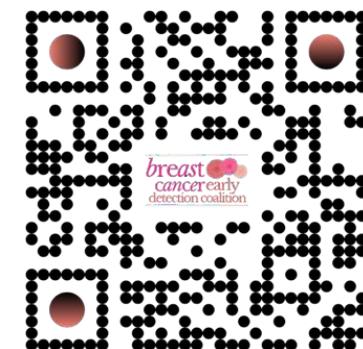
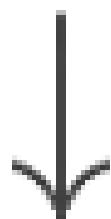
Join the WHA

www.womenshealthadvocates.org



Join the Breast Cancer Early Detection Coalition

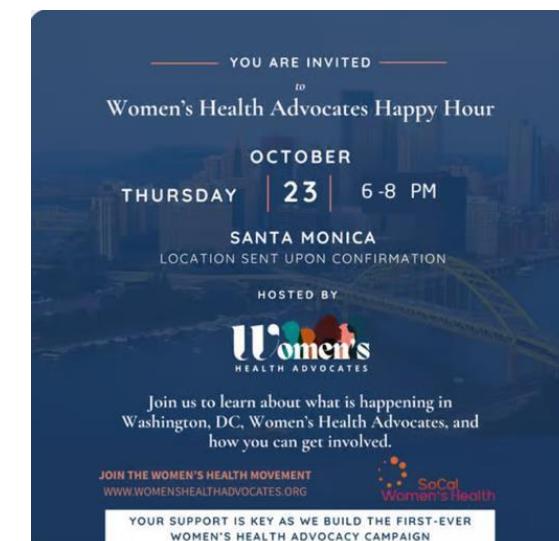
www.BCEarlyDetectionCoalition.com



ENGAGE IN LETTER-WRITING CAMPAIGNS



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ENGAGE IN OUR #WHATSYOURWHY CAMPAIGN

WHAT TO DO

1. Go to Canva Template
2. Insert your photo
3. Insert your “WHY”
4. Download and share using:
 - #WhatsYourWhy
 - *LinkedIn*: Women’s Health Advocates
 - *Instagram*: @WomensHealth.Advocates

Your why motivates others to
take action and join this
coalition of advocates!



<http://bit.ly/44qtAF8>

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WHAT'S YOUR WHY FOR WOMEN'S HEALTH?



JOIN THE STEERING COMMITTEE!

Know what is happening in D.C.

Shape policy priorities

Speak at events

Access expertise, intel and decision-makers

WHO

Industry and nonprofit leaders, investors, entrepreneurs, C-Suite executives, businesses, organizations, institutions, researchers, clinicians, patients and anyone who is committed to advancing the health of women.

Join as an individual, company or nonprofit.

WHY

We are the first and only professional lobbying organization to unite all people and sectors to address women's health throughout the life span from head to toe.

We are solely focused on lobbying for policies and funding that advance the health of women.

Join a powerhouse **network**

Receive exclusive meetings and invitations to private events with Members of Congress, agencies & KOLs

Companies are **highlighted on website** and in social media

INVOLVEMENT

We meet monthly following the Open to All call every first Wednesday of the month at 12:30pm ET / 9:30am PT and every third Wednesday of the month at 3:00pm ET / 12:00pm PT to provide updates, share intel on government activities, and strategize on how best to engage to make an impact. Once you join the Steering Committee, we send you calendar invitations with the details.



Our voice is our power.

Let's make it count!



info@womenshealthadvocates.org



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