



REVIEW ARTICLE

Comprehensive Gynecology Care Across the Lifespan: Evidence-Based Preventive, Diagnostic, and Therapeutic Strategies

Vruth Sleng

Loung Mè Hospital, Phnom Penh,
Cambodia

Correspondence

Vruth Sleng, Loung Mè Hospital,
Phnom Penh, Cambodia

Email: taingsing75092@gmail.
com

ABSTRACT

Comprehensive gynecology care spans the entirety of a woman's life from adolescence through reproductive years, menopause, and beyond. This continuum includes preventive services, age-appropriate screening, accurate diagnostics, and evidence-based therapeutic management tailored to individual needs. A structured approach enhances early detection of disease, optimizes reproductive outcomes, promotes healthy aging, and reduces morbidity from chronic and gynecologic conditions.

KEYWORDS

Gynecology care, Lifespan, HPV vaccination

INTRODUCTION

Gynecology encompasses the study and clinical management of disorders affecting the female reproductive system and the delivery of preventative health services designed to maintain overall well-being. Comprehensive care integrates preventive screening, reproductive counseling, risk assessment, diagnostics, and treatment strategies through a lifespan perspective. This review synthesizes current recommendations and clinical strategies grounded in evidence.

Preventive Gynecology: A Lifespan Framework

Well-woman visits

Regular well-woman visits are foundational to comprehensive reproductive healthcare. These visits offer an opportunity for providers to assess preventive needs, counsel on healthy behaviors, review medical and gynecologic history, and tailor age-appropriate interventions. A comprehensive history remains one of the most crucial components in guiding examinations and shared decision-making during these visits.

Screening Recommendations

Clinical preventive services are recommended from adolescence through older adulthood, and schedules vary by risk and age

Adolescence (11–12 years)

Initiate HPV vaccination to prevent cervical cancer and other

HPV-associated diseases.

Reproductive years (21–65 years)

Cervical cancer screening with cytology every 3 years, or cytology plus HPV testing every 5 years (age 30–65).

Breast cancer

Screening mammography beginning at age 40 to 50 with intervals based on risk and guidelines, continuing through at least age 74.

Bone health

Bone mineral density screening recommended beginning at age 65 or earlier based on risk factors.

Other screenings

Colon cancer screening from age 45; routine assessments for sexually transmitted infections, diabetes (especially gestational diabetes), urinary incontinence, and mental health screenings (e.g., anxiety and intimate partner violence).

A comprehensive chart of preventive services across the lifespan has been developed by the Women's Preventive Services Initiative (WPSI).

Diagnostic Strategies in Gynecology

Accurate diagnosis is critical in gynecology and requires an integration of history, physical examination, laboratory assessment, and imaging tailored to the clinical scenario.

Clinical evaluation

A detailed history should encompass menstrual patterns, sexual health, contraception history, fertility desires, and risk factors such as family history of gynecologic cancers. This informs when to perform focused examinations—including pelvic and breast exams—based on symptoms or clinical indications.

Laboratory and imaging tools

- HPV testing and cytology are central in cervical dysplasia diagnosis.
- Ultrasound imaging assists in evaluating adnexal masses, uterine abnormalities, and pregnancy-related pathology.
- Bone density testing for osteoporosis and DEXA scans in postmenopausal women with risk factors.
- Additional targeted imaging (e.g., MRI, CT) is used for complex gynecologic malignancies.

Therapeutic Strategies

Evidence-based medical therapies

Treatment plans must align with established clinical evidence and patient preferences:

Contraceptive management

Tailored options including hormonal and non-hormonal methods to support reproductive planning.

Menstrual disorders

Use of hormonal therapies, iron supplementation for anemia, and individualized management of conditions like polycystic ovarian syndrome (PCOS) and endometriosis.

Menopause care

Hormone replacement therapy where appropriate, lifestyle guidance, and bone health preservation strategies.

Gynecologic surgery and advanced interventions

Minimally invasive surgical techniques—such as laparoscopy and hysteroscopy—are now standard for many gynecologic procedures, improving recovery and reducing morbidity.

Integrated sexual health care

Sexual health is essential for quality of life. Obstetrics and gynecology providers play a pivotal role in screening, counseling, early intervention, and treatment strategies tailored to patient concerns.

Special Considerations

Chronic conditions and gynecologic care

Reproductive-age women with chronic conditions may receive differential preventive services depending on care setting, highlighting the importance of coordinated care between gynecologists and primary care providers to ensure comprehensive health coverage.

Older women

Emerging evidence suggests the need to reassess screening practices, such as extending cervical cancer screening beyond age 65 in women at higher risk or who were previously under-screened.

CONCLUSION

Comprehensive gynecology care across the lifespan integrates preventive screening, tailored diagnostics, and evidence-based therapeutic approaches. Structured well-woman visits, risk-based screening, accurate diagnosis, and personalized treatment plans improve women's health outcomes. Clinicians must stay informed about evolving evidence and guidelines to deliver optimal care for women at every stage of life.

REFERENCES

1. Well-Woman Visit recommendations and components.
2. Women's Preventive Services guidelines (cervical cancer, incontinence, etc.).
3. Age-specific preventive care timelines.
4. Well-Woman preventive services framework (WPSI).
5. Breast cancer and cervical screening recommendations (2025 update).
6. Role of integrated sexual health care.
7. Preventive care in reproductive-age women with chronic conditions.
8. Emerging evidence on cervical screening in older women.
9. Minimally invasive gynecology evidence and practice.