Contraception Choices: An Evidence Based Approach Case Study Approach

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Objectives

- Describe the U.S. Medical Eligibility Criteria for Contraceptive Use, 2016 (U.S. MEC)
- Identify intended use and target audience
- Explain how to use the U.S. MEC
- Discuss the guidance in specific situations, based on clinical scenarios
U.S. Medical Eligibility Criteria for Contraceptive Use, 2016

- Safe use of contraceptive methods by women and men with certain characteristics or medical conditions

- Target audience: health care providers

- Purpose: to assist health care providers when they counsel patients about contraceptive use and to serve as a source of clinical guidance

- Content: more than 1800 recommendations for over 120 conditions and subconditions
Methods for 2016 U.S. MEC

- Adapted from WHO guidelines
- On-going monitoring of published evidence
- Expert meeting in August 2014 to discuss scope
- Expert meeting in August 2015 to review evidence and discuss specific recommendations
  - CDC staff and outside authors conducted independent systematic reviews to inform recommendations
  - These systematic reviews have been e-published
  - CDC determined final recommendations
Why is evidence-based guidance for contraceptive use needed?

- To base family planning practices on the best available evidence
- To address misconceptions regarding who can safely use contraception
- To remove unnecessary medical barriers
- To improve access and quality of care in family planning
Contraceptive Methods in US MEC

- Intrauterine devices
- Progestin-only contraceptives
- Combined hormonal contraceptives
- Emergency contraceptive pills
- Barrier contraceptive methods
- Fertility Awareness-Based Methods
- Lactational Amenorrhea Method
- Coitus Interruptus
- Female and Male Sterilization
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No restriction for the use of the contraceptive method for a woman with that condition</td>
</tr>
<tr>
<td>2</td>
<td>Advantages of using the method generally outweigh the theoretical or proven risks</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical or proven risks of the method usually outweigh the advantages – not usually recommended unless more appropriate methods are not available or acceptable</td>
</tr>
<tr>
<td>4</td>
<td>Unacceptable health risk if the contraceptive method is used by a woman with that condition</td>
</tr>
</tbody>
</table>
### Example: Smoking and Contraceptive Use

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cu-IUD</th>
<th>LNG-IUD</th>
<th>Implants</th>
<th>DMPA</th>
<th>POPs</th>
<th>CHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Age &lt;35</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b. Age ≥35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. &lt;15 cigarettes/day</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>II. ≥15 cigarettes/day</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Cu IUD: Copper IUD;  
LNG-IUD: Levonorgestrel IUD;  
DMPA: Depo-Medroxyprogesterone Acetate;  
POPs: Progestin-only pills;  
CHCs: Combined hormonal contraceptives including pills, patch, and ring
## Conditions Associated with Increased Risk for Adverse Health Events as a Result of Pregnancy

<table>
<thead>
<tr>
<th>Condition</th>
<th>Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast cancer</td>
<td>Hepatocellular adenoma and malignant liver tumors (hepatoma)</td>
</tr>
<tr>
<td>Cystadenoma</td>
<td></td>
</tr>
<tr>
<td>Diabetic nephropathy</td>
<td></td>
</tr>
<tr>
<td>Diabetes (including retinopathy, nephropathy, and neuropathy)</td>
<td></td>
</tr>
<tr>
<td>Endometriosis</td>
<td></td>
</tr>
<tr>
<td>Epilepsy</td>
<td></td>
</tr>
<tr>
<td>Hypertension (&gt; 140/90 mm Hg)</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia, chronic hypertension</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia, chronic hypertension, renal disease</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia, chronic hypertension, proteinuria</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia, chronic hypertension, retinopathy</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia, chronic hypertension, nephropathy</td>
<td></td>
</tr>
<tr>
<td>Hypertension, preeclampsia, chronic hypertension, neuropathy</td>
<td></td>
</tr>
<tr>
<td>HIV: not clinically well or not receiving anti-retroviral therapy</td>
<td>Thrombogenic mutations</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Gestational trophoblastic disease</td>
<td></td>
</tr>
</tbody>
</table>

Consider long-acting, highly-effective contraception for these patients.
2016 Updates to U.S. MEC: New Recommendations

- **4 new conditions**
  - Cystic fibrosis
  - Multiple sclerosis
  - Women using selective serotonin reuptake inhibitors (SSRIs)
  - Women using St. John’s wort

- **1 new emergency contraception method**
  - Ulipristal acetate (UPA)
2016 Updates to U.S. MEC: Changes to Existing Recommendations

- **Hormonal methods (Implants, DMPA, POP, CHCs)**
  - Migraine headaches
  - Superficial venous disease
  - Women using antiretroviral therapy
  - Women with known dyslipidemia

- **Intrauterine devices (Cu-IUD, LNG-IUD)**
  - Gestational trophoblastic disease
  - Postpartum and breastfeeding women
  - Human immunodeficiency virus
  - Factors related to sexually transmitted diseases
CLINICAL SCENARIOS
Scenario 1

- 28 year old G1P0 female is pregnant and being counseled for postpartum family planning. She is not planning on breastfeeding. What options are available to her postpartum?

A. IUD (copper or levonorgestrel)
B. Progestin-only methods (pill, injectable, implant)
C. Combined hormonal methods (pill, patch, ring)
Why is postpartum contraception important?

- Avoid unintended pregnancy and short birth interval
- May be ideal time to provide contraception
  - Motivation
  - Access to health care services, especially during delivery hospitalization
- Prevent repeat adolescent pregnancies
  - 20% of adolescent births are repeat births

Hormonal methods for non-breastfeeding postpartum women

<table>
<thead>
<tr>
<th>Postpartum (non-breastfeeding)</th>
<th>CHCs</th>
<th>Progestin-only methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;21 days</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>21-42 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With other risk factors for VTE</td>
<td>3*</td>
<td>1</td>
</tr>
<tr>
<td>Without other risk factors for VTE</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>&gt;42 days</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Clarification: Other risk factors might increase classification to “4”
## Postpartum IUD insertion

<table>
<thead>
<tr>
<th>Postpartum (including cesarean delivery)</th>
<th>LNG-IUD</th>
<th>Cu-IUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 min after delivery of placenta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Non-breastfeeding</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10 min to &lt;4 weeks</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>&gt;4 weeks</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Postpartum sepsis</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Scenario 1

- 28 year old G1P0 female is pregnant and being counseled for postpartum family planning. She is not planning on breastfeeding. What options are available to her immediately postpartum?

A. IUD (copper or levonorgestrel)
B. Progestin-only methods (pill, injectable, implant)
C. Combined hormonal methods (pill, patch, ring)
   (Wait until 21-42 days postpartum, depending on VTE risk factors)
Scenario 2

- 38 year old G2P2 female with diabetes has been using condoms for contraception and is looking for a more effective method. What methods are safe for her to use?

A. IUD (copper or levonorgestrel)
B. Progestin-only methods (pill, injectable, implant)
C. Combined hormonal methods (pill, patch, ring)
### Diabetes

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cu-IUD</th>
<th>LNG-IUD</th>
<th>Implant</th>
<th>DMPA</th>
<th>POP</th>
<th>CHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of gestational disease</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nonvascular disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noninsulin-dependent</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Insulin-dependent §</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Nephropathy/retinopathy/neuropathy §</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3/4†</td>
</tr>
<tr>
<td>Other vascular disease or diabetes of &gt;20 yrs' duration §</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3/4†</td>
</tr>
</tbody>
</table>

§ This condition is associated with increased risk for adverse health events as a result of pregnancy
† This category should be assessed according to the severity of the condition
Scenario 2

- 38 year old G2P2 female with diabetes has been using condoms for contraception and is looking for a more effective method. You now know that she is non-insulin dependent and has no vascular disease. What methods are safe for her to use?

A. IUD (copper or levonorgestrel)
B. Progestin-only methods (pill, injectable, implant)
C. Combined hormonal methods (pill, patch, ring)
ALL OF THE ABOVE

Discuss risk of adverse events with pregnancy and consider highly effective methods.
Scenario 3

- A 30 year old female has a history of migraine headaches with light sensitivity. She does not experience any visual warning signs for a coming headache. She is interested in starting contraception. What methods are safe for her to consider?

A. Combined hormonal methods (pill, patch, ring)
B. Progestin implant
C. Intrauterine device
## Headaches

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cu-IUD</th>
<th>LNG IUD</th>
<th>Implants</th>
<th>DMPA</th>
<th>POP</th>
<th>CHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-migraine</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Migraine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without aura (including menstrual migraine)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>With aura</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* These recommendations rely upon accurate diagnosis of headache as migraine with or without aura. They are intended for women without other risk factors for stroke. Consult full guidance for additional clarification.
Scenario 3

- A 30 year old female has a history of migraine headaches with light sensitivity. She does not experience any visual warning signs for a coming headache. She is interested in starting contraception. What methods are safe for her to consider?

Answer:
A. Combined hormonal methods (pill, patch, ring)
B. Progestin implant
C. Intrauterine device

All of the above, so long as she does not have other risk factors for stroke. (If so, progestin-only methods and IUDs are safe or generally safe to use.)
Scenario 4:

- A 19 y.o. woman comes to the office desiring an IUD. She has a history of chlamydia 6 months ago that was treated, and reports one new partner since then.

  - Q: Given her STD risk factors, can you place an IUD today?
**Sexually transmitted diseases**

<table>
<thead>
<tr>
<th>Condition</th>
<th>IUDs Init.</th>
<th>IUDs Cont.</th>
<th>Implants</th>
<th>DMPA</th>
<th>POP</th>
<th>CHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current purulent cervicitis or chlamydial infection or gonococcal infection</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Vaginitis (including trichomonas and bacterial vaginosis)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other factors related to STDs</td>
<td>2*</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Clarification: If a woman with risk factors for STDs has not been screened for gonorrhea and chlamydia according to CDC STD treatment guidelines, screening may be performed at the time of IUD insertion and insertion should not be delayed.*
Scenario 4:

- A 19 y.o. woman comes to the office desiring an IUD. She has a history of chlamydia 6 months ago that was treated, and reports one new partner since then.

  - Q: Can you place an IUD today?

  - A: Yes, so long as she does not have purulent cervicitis or other contraindications. Perform screening for gonorrhea/chlamydia at the time of IUD insertion. Refer to the SPR for guidelines on assessment of pregnancy and follow-up.
Scenario 5:

- A 26 y.o. female who has been using combined oral contraceptives for one year calls you to ask whether it is safe to start taking sertraline for depression.

  Q: What should she do?
## Psychotropic Drugs

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cu-IUD</th>
<th>LNG-IUD</th>
<th>Implants</th>
<th>DMPA</th>
<th>POP</th>
<th>CHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSRIs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>St. John’s Wort</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Scenario 5:

- 26 y.o. female who has been using combined oral contraceptives for one year calls you to ask whether it is safe to start taking sertraline for depression.

  - **Q:** What should she do?
  - **A:** She can start taking the sertraline and continue her COCs, if she still desires this method of contraception. There is no evidence for increased adverse events or decreased effectiveness for either drug when taken in combination.
Take Home Messages, U.S. MEC

- U.S. MEC can help providers decrease barriers to choosing contraceptive methods

- Most women can safely use most contraceptive methods

- Certain conditions are associated with increased risk for adverse health events as a result of pregnancy
  - Affected women may especially benefit from highly effective contraception for family planning

- Women, men, and couples should be informed of the full range of methods to decide what will be best for them
US SPR

US Selected Practice Recommendations for Contraceptive Use, 2016
U.S. Selected Practice Recommendations for Contraceptive Use, 2016

- Recommendations for contraceptive management questions
- Target audience: health care providers
- Purpose: to assist health care providers when they counsel patients on contraceptive use and to serve as a source of clinical guidance
- Content: Guidance for common contraceptive management topics such as:
  - How to be reasonably certain that a woman is not pregnant
  - When to start contraception
  - Medically indicated exams and tests
  - Follow-up and management of problems
Accessing the MEC and SPR in everyday practice
2016 U.S. MEC and SPR App

- MEC by Condition
- MEC by Method
- SPR

Select Method (MEC)
- Intrauterine Contraception
- Progestin-only Contraceptives
- Combined Hormonal Contraceptives
- Barrier Methods
- Fertility Awareness-based Methods
- Lactational Amenorrhea Method
- Coitus Interruptus

SPR
- How To Be Reasonably Certain That A Woman Is Not Pregnant
- Cu-IUD
- LNG-IUD
- Implants
- Injectables
- Combined Hormonal Contraceptives
- Progestin Only Pills
### Using the U.S. MEC App

#### Headaches

- **b. Migraine**
  - i. Without aura (this category of migraine includes menstrual migraine)
  - ii. With aura

<table>
<thead>
<tr>
<th>Method</th>
<th>Category</th>
<th>Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cu-IUD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>LNG-IUD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Implants</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DMPA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>POP</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHCs</td>
<td>2(^1)</td>
<td></td>
</tr>
</tbody>
</table>

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\(^1\)Clarifications

Classification depends on accurate diagnosis of those severe headaches that are migraines and those headaches that are not, as well as diagnosis of ever experiencing aura. Aura is a specific focal neurologic symptom. For more information about headache classification, see The International Classification of Headache Disorders, 2nd edition (http://ihc-classification.org/en). Any new headaches or marked changes in headaches should be evaluated.

Classification is for women without any other risk factors for stroke (e.g., age, hypertension, and smoking).
Summary tables and charts

- MEC summary table in English, Spanish
- SPR quick reference charts
  - When to start contraceptive methods and routine follow up
  - What to do for late, missed or delayed combined hormonal contraception
  - Management of IUD when PID is found
  - Management of women with bleeding irregularities while using contraception
CDC Contraceptive Guidance for Health Care Providers

U.S. Medical Eligibility Criteria for Contraceptive Use, 2016 (US MEC)

The 2016 U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC) comprises recommendations for the use of specific contraceptive methods by women and men who have certain characteristics or medical conditions. The recommendations in this report are intended to assist health care providers when they counsel women, men, and couples about contraceptive method choice.

U.S. Selected Practice Recommendations for Contraceptive Use, 2016 (US SPR)

The 2016 U.S. Selected Practice Recommendations for Contraceptive Use (U.S. SPR) addresses a select group of common, yet sometimes controversial or complex, issues regarding initiation and use of specific contraceptive methods. The recommendations in this report are intended to serve as a source of clinical guidance for health care providers and provide evidence-based guidance to reduce medical barriers to contraception access and use.

Quality Family Planning

Providing Quality Family Planning Services (QFP) recommends how to provide family planning services so that individuals can achieve their desired number and spacing of children, increase the chances that a baby will be born healthy, and improve their health even if they choose to not have children.

http://wwwdev.cdc.gov/reproductivehealth/contraception/contraception_guidance.htm
Other Tools and Aids

- MEC Wheel
- Continuing Education Activities
- Speaker-ready slides
- Contraceptive Effectiveness Charts
- Online alerts to receive updates
- eBook for SPR
- Residency training and certification
Resources


- Sign up to receive alerts!
Questions?