Implanon NXT: On-the-Job Training Course for Current Implant Providers

Learner’s Workbook

March 2016
Jhpiego is an international, nonprofit health organization affiliated with Johns Hopkins University. For more than 40 years, Jhpiego has empowered frontline health workers by designing and implementing effective, low-cost, hands-on solutions to strengthen the delivery of health care services for women and their families. By putting evidence-based health innovations into everyday practice, Jhpiego works to break down barriers to high-quality health care for the world’s most vulnerable populations.

Published by:
Jhpiego
Brown’s Wharf
1615 Thames Street
Baltimore, MD 21231-3492, USA
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Acknowledgments

This on-the-job (OJT) training course for Implanon NXT was developed by Jhpiego, an affiliate of Johns Hopkins University, in collaboration with a number of other groups. Some of the material was adapted from prior publications by Jhpiego and a number of other organizations, including Merck & Co, Inc. Jhpiego would like to extend a special thank-you to the Ministry of Health (MOH) in Kenya, where the original version of this package was developed, field-tested and evaluated. Gratitude is also extended to colleagues at Clinton Health Access Initiative for collaboration in the effort in Kenya.

Invaluable contributions to the development and review of the original, Kenyan version of this package were provided by members of the MOH’s Reproductive and Maternal Health Service Unit, including Dr. Agnes Nakato, Gladys Someren and Dr. Jonah Maina; the Jhpiego team of Paul Nyachae, Emmah Kariuki, Michael Muthamia, Sandra Odera, Dr. Ricky Lu, Elaine Charurat and Megan Christofield; and colleagues from Clinton Health Access Initiative including Dr. Anthony Ngatia, Joshua Okeyo, Lance Osiro, Julia McDowell, Caitlin Glover, and Christina Allan.

Jhpiego especially acknowledges the significant contribution of Dr. Rick Sullivan (retired, Jhpiego) for reviewing and compiling the first draft of the materials based on field and technical inputs from county and national health teams, and then adapting these materials for global use.

Finally, sincere thanks to the Jhpiego Publications staff who directed the assembly and production of this learning resource package (LRP).

Funding for this LRP was generously provided by the Bill & Melinda Gates Foundation through Global Development Grant Number OPP1088815, Accelerating Scale-up of Implants to Expand Access to Long-Acting and Permanent Methods of Family Planning Services. The views expressed herein are those of Jhpiego and do not necessarily reflect those of the Bill & Melinda Gates Foundation.
Preface

Implanon was first launched in Indonesia in 1998 and is now used globally by millions of women. Over the years, thousands of health care service providers have been trained to insert and remove implants including Implanon (now referred to as “Implanon classic”). With the release of Implanon NXT, the challenge is how to prepare to transition these service providers to use Implanon NXT without requiring a multi-day training course. Prolonged group-based or face-to-face training courses are expensive and require those being trained to leave their service delivery sites for a period of time.

This Implanon NXT OJT course, consisting of a one-day group activity followed by individual self-study and practice on the job has been designed and developed to meet this need. The course has been successfully field tested in Kenya.

Jhpiego is confident that this approach will minimize time away from the service delivery site and yet ensure that the implant provider has the new knowledge and skills required to competently insert Implanon NXT. This Learner’s Workbook is part of the Implanon NXT OJT learning package and is designed to help develop service providers who can confidently use Implanon NXT.
Introduction

Implanon classic is a one-rod implant containing the hormone etonogestrel (ETG) that provides contraceptive protection for up to three years. Implanon uses a single contraceptive rod, which has led to easier insertion and removal than previous implants that required multiple rods. Implanon, first launched in Indonesia in 1998, is now used globally by millions of women.

Implanon classic is being replaced with Implanon NXT. Implanon NXT is a subdermal contraceptive implant identical in composition to Implanon classic. Both are one-rod implants that are effective for up to three years. Both contain 68 mg of ETG, are prequalified by the World Health Organization (WHO), and are more than 99% effective at preventing pregnancy. The two differences between Implanon classic and Implanon NXT are:

1. The rod in Implanon NXT can be detected by x-ray, and
2. Implanon NXT uses an improved insertion device.

The ability to use x-ray detection can help providers locate the rod even if inserted so deeply into a woman’s arm that it cannot be palpated. The improved insertion device controls the depth at which the implant is inserted, minimizing complications associated with deep insertions. Because of these improvements, Implanon NXT is indicated for provider training to ensure safe provision to clients, even for those providers who are previously trained in and experienced with Implanon classic.

When Implanon classic is no longer available, Implanon NXT will be the only WHO-prequalified one-rod, three-year contraceptive implant available for purchase at the global level. Rapid training on the use of Implanon NXT will be necessary to ensure that current implant providers are able to competently and safely provide the product and that clients have the choice of a one-rod, three-year implant option. Providers that do not learn to insert Implanon NXT, either from a colleague or through formally organized training, will not be able to provide the service, reducing access and choice for thousands of women each month.

The challenge is how to train these service providers to provide Implanon NXT without requiring a multi-day training course. Prolonged group-based or face-to-face training courses are expensive and require those being trained to leave their service delivery sites for a period of time.

Providers who are experienced performing insertions and removals of implants already have general knowledge of implants, family planning (FP) counseling and infection prevention (IP) strategies. As a result, this OJT approach will focus on developing their skills to use the newer Implanon NXT correctly. It may also serve as an opportunity to review skills in removing implants.

There is a need for an approach to training that minimizes time away from the service delivery site and yet ensures that the Implanon provider has the new knowledge and skills required to competently insert and remove Implanon NXT. The focus of training is on the gap between the knowledge and skills required to insert previously available
Implanons, and the knowledge and skills required to insert Implanon NXT. The Implanon NXT OJT learning package is designed to fill this gap.

The OJT LRP includes the following components:

- Learner’s Workbook:
  - Introduction
  - Course Syllabus
  - Activity Schedule
  - OJT Study Guide
  - Case Studies
  - Implanon NXT Reference Guide (presents information on Implanon NXT including insertion and removal)
  - Coaching for Skill Competency
  - Revised 2015 WHO Medical Eligibility Criteria (MEC) and Quick Reference Chart
  - Implanon NXT Insertion Job Aid
  - Implant Removal Job Aid
  - Checklist for One-Rod (Implanon NXT) Implants Counseling and Clinical Skills: Insertion
  - Checklist for Implant Counseling and Clinical Skills: Removal
  - Implanon NXT OJT Log
  - Equipment and Supplies Checklist

- Facilitator’s Guide:
  - Introduction
  - Responsibilities Before the Course
  - Responsibilities During the Course
  - Responsibilities Conducting a Follow-up Visit
  - Responses to Exercises

**Overview of the Implanon NXT OJT Approach**

This goal of this course is to prepare competent Implanon NXT service providers. The course is a blend of short, group training and individualized practice back at learners’ own service delivery sites. It is designed for current implant (including Implanon classic) service providers and consists of two primary components:

1. *One-day group activity focusing on how to insert and remove Implanon NXT* that includes skill practice and assessment using models and working with clients. This activity may take place in a centralized hub-site, or within the learner’s own facility.

2. *Individualized facility-based skill practice* that includes self-study as well as one or more site visits by the course facilitator or trainer to observe, coach and assess provider competency with clients.
Because the final competency assessment and qualification will typically occur at the learner’s service delivery site, this learning approach is known as the Implanon NXT OJT course. (Note: In some cases, the training site and learner’s service delivery site will be the same facility.)

This OJT approach involves three categories of individuals:

- The learners, who are already qualified implant service providers, use the OJT course materials to self-assess, manage their skill development, complete learning activities, provide services, document their progress, and reflect on their experiences.

- The OJT facilitator, who is a proficient Implanon NXT provider, offers clinical instruction and guidance throughout the learning process at the one-day activity and follow-up visits. The facilitator will ensure client safety, demonstrate skills, observe learner skill development, provide feedback and suggestions, ask and answer questions, and evaluate the learner’s progress and mastery of skills. The Implanon NXT OJT facilitator also administers the final skill assessment. The recommended ratio of learner to facilitator is no more than 5 learners for each facilitator.

- The facility in-charge or site supervisor at the training site ensures that the learner’s service delivery site is appropriately equipped, orient site staff to the OJT program, and ensures documentation and client safety during the learning experience.

The focus of this OJT course is on the learner. As the learner moves through a series of activities (e.g., attending the one-day activity, reading information, observing the facilitator, completing practice exercises, practicing clinical skills using role plays and anatomic models, working with clients), there are corresponding activities for the facilitator and facility in-charge.

Key to the success of this individualized, structured OJT course is the motivation of the learner and facilitator. The learner must be willing to participate in providing Implanon NXT whenever the opportunity arises, as well as read, study, and complete assignments and work independently while staying on a schedule, in order to complete training in a reasonable period of time. The learner also must be willing to self-assess and self-reflect, observe the facilitator, and ask questions. The facilitator must be willing to take the necessary time to coach, teach, and work closely with the learner; ensure client safety; and provide quality services throughout the learning process.

**Learning Approaches**
The primary learning approaches used in this course are outlined below.

Mastery learning: 100% of those trained should master the desired competencies and be able to demonstrate the desired performance. Mastery learning assumes that all learners can become competent, given sufficient time and opportunity to study and practice.
Adult learning principles:

- Training builds on the learner’s abilities and is designed or revised to recognize the learner’s experience and expertise.
- Training is designed and continuously revised to ensure that it is efficient, effective, and relevant.
- Training actively involves the learners in setting their learning goals, assessing their progress, and completing self-paced tasks.

Humanistic: A humanistic approach means practicing and mastering clinical services in simulation before working with clients to reduce the risk of client harm or discomfort and increasing confidence by having learners practice in a safe environment. This type of approach reduces learner stress and protects the safety and dignity of the learners and clients involved in the learning process.

Coaching: focuses on making complex skills easy for a learner to observe and learn. In this process:

- The coach (or facilitator) demonstrates steps and models behaviors for the learner.
- The coach explains his/her decisions and thought processes while he/she works.
- The learner practices alongside the coach, getting continual mentoring and coaching.
- Over time, as the learner becomes more competent, she or he performs more and more independently.
Course Syllabus

Course Description
This Implanon NXT course consists of a one-day group activity followed by individualized skill practice and self-study at the service delivery site (OJT) requiring approximately three weeks, though that can be adapted for shorter or longer timeframes as needed. This course is designed to prepare the learner to competently insert and remove Implanon NXT and to manage side effects and other health problems associated with the use of contraceptive implants.

During the full course, learners will:

- Attend a one-day activity, self-assess, and prepare a plan for skill practice and competency assessment at their service delivery site.
- Provide services to clients with facilitator guidance and supervision.
- Practice inserting and removing Implanon NXT at their service delivery site.
- Be assessed for competency at their service delivery site.

The learner will follow the OJT study guide during and after the one-day activity, prioritizing opportunities to practice with clients and receive feedback (see Figure 1).

Figure 1. Summary of Learner’s Responsibilities during Implanon NXT OJT Process

Course Goal
The goal of this course is to enable current implant (including Implanon classic) service providers to insert and remove Implanon NXT. Service providers will also be able to counsel clients concerning the use of contraceptive implants as a contraceptive method.

Learning Objectives
After completion of this course, the learner will be able to:

- Identify the steps in the performance checklist to insert and remove Implanon NXT
- Insert Implanon NXT
- Provide follow-up care after Implanon NXT insertion
- Manage bleeding problems and other side effects
- Remove contraceptive implants

**Facilitator Selection Criteria**
- Competent Implanon NXT service provider
- Competent in course facilitation and presentation skills
- Competent skill evaluator using the performance checklist

**Learner Selection Criteria**
- Actively providing FP services, including implants
- Competent implant service provider
- Has commitment of service delivery site supervisor to provide Implanon NXT to clients
- Committed to coach other service providers to provide Implanon NXT (if requested by the facility in-charge or site supervisor)

**Training Site**
The one-day Implanon NXT group training activity should be held at a service delivery site that meets the following criteria:
- Clients available who want Implanon NXT
- Supply of Implanon NXT commodity and necessary consumables
- Space for classroom training
- Easily accessible for learners attending the activity

**Learner’s Service Delivery Site**
The service delivery site where a course learner works should meet the following criteria:
- Currently offers FP services, including implants
- Will be providing Implanon NXT
- Has a facility in-charge or site supervisor who is supportive of OJT and is willing and able to support the service providers participating in the OJT course

*Note that in some cases the training site may also be the learner’s service delivery site*

**Training and Learning Methods**
- Interactive classroom presentations and small-group exercises during the one-day activity
- Skill demonstration, practice, and feedback during role plays and with clients during the one-day activity and at the learner’s service delivery site
Self-assessments
Competency assessments during role plays and with clients during the one-day activity and at the learner's service delivery site
Individual exercises completed after training and prior to a site visit by the course facilitator

**Learning Materials**
The learning materials for this course include:
- Learner’s Workbook
- Facilitator’s Guide
- WHO 2015 MEC Wheel (when available)
The following additional materials may be provided on a USB flash drive:
  - Balanced Counseling Strategy Plus counseling toolkit
  - Implanon NXT insertion video
  - Implanon NXT removal video
  - FP reference materials

**Qualification of Learners**
In pursuit of qualification as competent Implanon NXT providers, learners will:

**During the One-Day Activity:**
- Demonstrate the ability to insert Implanon NXT using a model during the one-day activity
- Demonstrate the ability to insert Implanon NXT with clients during the one-day activity
- Make a plan for practicing skills and achieving competency at their own service delivery site

**At Their Service Delivery Site:**
- Complete all reading assignments and exercises in the Learner’s Workbook and have these available for review by the course facilitator
- If qualified, or under supervision of qualified provider or trainer:
  - Practice inserting Implanon NXT with clients
  - Complete a log at the service delivery site recording all Implanon NXT insertions and removals
- Be observed and determined to be competent by a course facilitator using the Implanon NXT insertion performance checklist

Upon demonstrating their capability to offer quality counseling, insertion, removal, and management of side effects and complications, learners may be qualified as competent.
Note: Some providers are quick learners and can demonstrate early competency on clients, even during the one-day activity if caseload is sufficient. In this case, these learners can be qualified at the completion of the one-day activity. These providers can then continue to practice to increase confidence and proficiency, and complete the self-study exercises in the following weeks. However, other learners will only achieve competency upon return to their service delivery site, after they've had time to practice and complete the self-study exercises.

Methods of Assessment

- Learners will use the Implanon NXT insertion performance checklist for self-assessments
- Skill competency will be measured by the course facilitator using the Implanon NXT insertion performance checklist
- Behavior, which is a manifestation of attitude, will be observed by the course facilitator in providers’ performance during role plays and when providing services to clients

Course Timeline

The amount of time required to complete this training and be determined to be a competent Implanon NXT service provider will depend on several factors (e.g., background of the service provider and availability of clients requesting this FP method). Table 1 shows an illustrative timeline for completion of the components of this training. Refer to the OJT study guide for more detail regarding specific activities completed during each of these three weeks.

Table 1. Illustrative timeline for completion of training components

<table>
<thead>
<tr>
<th>Before Training</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of pre-course reading assignments</td>
<td>Attend the one-day activity</td>
<td>Meet with facility in-charge or site supervisor to discuss service provision and OJT Complete self-study assignments</td>
<td>Provide services to clients at own service delivery site (if qualified at the completion of the one-day activity, or under supervision of qualified provider) Meet with course facilitator at own service delivery site for observation and competency assessment Coach other providers (if requested)</td>
</tr>
</tbody>
</table>

Note: For providers who demonstrate competency on clients during the one-day activity, their follow-up visits can be de-prioritized in favor of follow-up with learners that require additional practice and guidance.
One-Day Activity Schedule

The Implanon NXT OJT course uses a blended-learning approach that includes a one-day group activity followed by individualized skill practice at the service delivery site. This is the model schedule for the one-day activity.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM</td>
<td>Registration</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Welcome and Introductions</td>
</tr>
<tr>
<td>8:05 AM</td>
<td>Review the Table of Contents in the Learner’s Workbook</td>
</tr>
<tr>
<td>8:10 AM</td>
<td>Review the Course Syllabus</td>
</tr>
<tr>
<td>8:15 AM</td>
<td>Review the Implanon NXT Performance Checklists</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Trainer Demonstration of Implanon NXT and Simulated Practice on Models</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Insertion and Removal Clinical Practice, and Discussion of Clinical Experience (including 30 minutes for lunch)</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>Small-Group Exercises and Discussions Focusing on Implanon NXT</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Coaching for Skill Competency</td>
</tr>
<tr>
<td>4:30 PM</td>
<td>Discussion of Next Steps:</td>
</tr>
<tr>
<td></td>
<td>• Review of OJT Study Guide</td>
</tr>
<tr>
<td></td>
<td>• Expectations regarding completion of self-study, skill practice and exercises</td>
</tr>
<tr>
<td></td>
<td>• Scheduling of site visits</td>
</tr>
<tr>
<td></td>
<td>• Review of requirements for qualification as an Implanon NXT service provider</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Closing</td>
</tr>
</tbody>
</table>
Both you and your facilitator will use the OJT study guide, which tells you what to do during the individualized part of your training. It is structured for self-study, supported by your facilitator and facility in-charge (or site supervisor).

Activities are listed in a suggested weekly schedule (Table 2); however, learning should take place as opportunities arise. Activities may not all be completed in the suggested week, and this is okay. You must prioritize opportunities to provide Implanon NXT. Follow the general flow of observe—assist—perform with supervision, which begins during the one-day activity and continues at your service delivery site.

Check (✓) each activity in Table 2 as it is completed. Indicate dates where requested. Your facilitator will ask you to sign the table at the end of each week as part of the documentation for qualification.

### Table 2. Suggested weekly schedule of learner activities

<table>
<thead>
<tr>
<th>Time</th>
<th>Learner Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior to Training</strong></td>
<td><strong>You should have received the Learner's Workbook as an email attachment or as printed copy. You will be asked to carry out the following activities before attending the Implanon NXT one-day activity:</strong></td>
</tr>
</tbody>
</table>
| Prepare for the Course| _Read the Course Syllabus._  
|                       | _Read the Implanon NXT Reference Guide._                                                                                                                                                                         |
| **Week 1**            | **Attend the Implanon NXT one-day activity. This includes meeting your course facilitator(s) and the other service providers.**  
| Implanon NXT One-Day Activity| _Review the content in the Learner’s Workbook._  
|                       | _Demonstrate competency inserting Implanon NXT working with models to your course facilitator._  
|                       | _Demonstrate competency inserting Implanon NXT with clients under the supervision of a course facilitator._  
|                       | _Obtain the signature of your course facilitator indicating that you have been determined to be competent inserting Implanon NXT with clients and should be providing this service to clients at your service delivery site (with the approval of your facility in-charge)._  
|                       | _Complete the Implanon NXT OJT Activity Evaluation form (Appendix A)_  
|                       | If competency is not attained, facilitator should note why and provide recommendations for way forward, including any requested additional support visits needed from the facilitator: |
|                       | ___________________________________________________  
|                       | ___________________________________________________  
| Course activities completed: |  
| Learner: __________________________  Date: ____________  
<p>| Facilitator: ______________________  Date: ____________  |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Learner Activities</th>
</tr>
</thead>
</table>
| Meet with Your Facility In-Charge            | Upon returning to your service delivery site, meet with your facility in-charge (and other service providers if possible) to discuss the following activities:  
  ___ Review the information in the Implanon NXT Learner’s Workbook.  
  ___ Review the checklist for one-rod (Implanon NXT) implants counseling and clinical skills (Appendixes B and C).  
  ___ Review the list of required equipment and supplies for insertion and removal of Implanon NXT (Appendix D).  
  ___ Review the requirements for qualification, including completion of the reading assignments and exercises.  
  ___ Discuss how the course facilitator will be visiting the site in the next several weeks to observe, coach and assess your skill competency.  
  ___ Discuss how you will work with your facility in-charge and the other service providers to ensure your site is ready to provide quality contraceptive services that include Implanon NXT. |
| Provide Implanon NXT Services                | ___ Ensure that your site has all of the required equipment and supplies (refer to the list in Appendix D).  
  ___ Determine whether it is appropriate to ask one of the other competent implant service providers who has not been trained in the provision of Implanon NXT to observe as you prepare for and insert Implanon NXT.  
  ___ Review the Implanon NXT checklists (Appendixes B and C).  
  ___ Watch the Implanon NXT insertion video.  
  ___ If you were qualified at the completion of the one-day activity, counsel clients and insert Implanon NXT in clients who opt for this method.  
  ___ Enter the required information in the log found in Appendix E. |
| Work on Completion of Self-Study Exercises    | ___ Work on completing the assigned self-study exercises in this Learner’s Workbook in preparation for the course facilitator’s site visit.                                                                                                                                                                                                                                                                                                |
| Week 1 activities completed: Learner: ____________________________ Date: __________ |
| Week 2                                                                                     | ___ If you were qualified at the completion of the one-day activity, counsel clients and insert Implanon NXT in clients who opt for this method.  
  ___ Enter the required information in the log found in Appendix E. |
| Complete Self-Study Exercises                | ___ Complete the self-study exercises in this Learner’s Workbook in preparation for the course facilitator’s site visit.                                                                                                                                                                                                                                                                                                          |
| Prepare for the Facilitator Site Visit       | ___ Check with your course facilitator to determine when the site visit will be scheduled.  
  ___ Inform your facility in-charge of the date and time of the site visit.  
  ___ Have your Learner’s Workbook available to show your facilitator the completed exercises and the entries in your log (Appendix E).                                                                                                                                                                                                                     |
| Week 2 activities completed: Learner: ____________________________ Date: __________ |
| Week 3                                                                                     | ___ Greet your course facilitator when she or he arrives.  
  ___ Ensure that your facilitator has checked in with the in-charge. If not, then introduce the facilitator to the in-charge.  
  ___ Review your completed exercises with the facilitator.  
  ___ Review your log entries with the facilitator and discuss areas you think you did well and areas you would like to improve.  
  ___ Provide Implanon NXT to a client as your facilitator observes using the performance checklist. |
Following service delivery, meet with your facilitator to discuss steps you feel you did well and those you feel you could do better next time.

For those not qualified at the completion of the one-day activity, your facilitator will determine if you are competent:

- If you are competent, then this completes the training course.
- If you are not competent, then your facilitator will identify specific steps for practicing and improving service delivery and will schedule another site visit to assess skill competency.

Course activities completed:

| Learner: ___________________________ | Date: ________ |
| Facilitator: _________________________ | Date: ________ |
Case Studies

Case Study 1

Fransisca, 29 years old, received Implanon NXT four months ago and today came back to the clinic with complaints of on-and-off light bleeding. This has been disturbing to both Fransisca and her husband. They are greatly concerned as they think this will adversely affect her health. They have fears about the FP method and are requesting removal of the implant.

Question A
How will the service provider allay the fears of Fransisca and her husband?

Question B
What is the course of management of Fransisca?
Case Study 2

Maria is 33 years old, a mother of three, and came to your FP clinic. She has a nine-month-old baby. She has not been using any FP method since delivery and today she wants Implanon. Her last menstrual period was seven days ago. Her husband travels a lot and has been away on a work assignment.

Question A
Will you proceed to give her the method she wants? Explain your answer.

Question B
How will you confirm that Maria is not pregnant?
Case Study 3
Mary is a 26-year-old student at a local college and has come to your health facility. One week ago, she had gone to Naloka Health Centre for removal of Jadelle as she had used it for five years. After removal, as Mary still wanted to continue using a contraceptive until she finishes college, the nurse at the health center inserted Implanon NXT at Mary’s request. Mary is currently complaining of swelling and pain at the insertion site. This morning she developed a fever. On examination, the gauze bandage over her arm looks stained with pus.

Question A
What course of management should the health provider take?

Question B
What do you think could have caused the infection?

Question C
What are some of the factors that could have contributed to Mary’s current situation?
Case Study 4

Jane, 35 years old, is at an outreach event that is offering FP services. She has heard about implants from her friends and wants to have one inserted. She decides to visit the health worker providing services for counselling and provision of the method. When taking Jane’s history, the nurse learns that Jane’s mother has suffered from breast cancer and is currently being successfully treated.

Question A
Should the health worker proceed to provide Jane with contraceptive implants?

Question B
Which other methods of FP would be suitable for Jane?
**Case Study 5**
Caren, a 35-year-old mother of three, has been using contraceptive implants for the last 2 years. She has been amenorrheic. She visits the facility with bleeding episodes of spotting and heavy bleeding, especially after sexual intercourse, for the previous 5 months. Caren had visited your facility previously and was appropriately managed for bleeding with no improvement.

**Question A**
How will you manage this client?

**Question B**
What alternative FP methods would you give her?

**Question C**
The following medical conditions warrant stopping use or switching of contraceptive implants. (Indicate or tick True or False.)

- Unexplained vaginal bleeding __ True __ False
- Migraine without aura __ True __ False
- Spotting within the first three months __ True __ False
- Migraine with aura __ True __ False
Case Study 6
Fatuma is a 34-year-old mother of two children and visited your health center today. During her last pregnancy, she tested HIV positive and was put on antiretrovirals. On examination she is doing well on antiretroviral therapy (ART) of tenofovir + lamivudine + efavirenz treatment and on anti-TB medications rifampicin, isoniazid and ethambutol. She wants FP today.

Question A
Which methods can she benefit from?

Question B
What are the key messages that you give Fatuma?
**Case Study 7**

Carol, a 15-year-old client, has just delivered a bouncing baby girl at Bukoli Health Center. Carol plans to exclusively breastfeed her child for the first 6 months. She informs the midwife that she would like to use the three-year contraceptive implant and would like to know when she could start using the implant. A discussion commences among nurses in the ward regarding how soon to start FP methods after delivery. As a person who has just attended Implanon NXT training, you are called upon to give guidance on the following issues.

**Question A**

Which contraceptives can Carol use at the moment?

**Question B**

Explain why Carol is not eligible for combined hormonal contraceptives (CHCs).
Case Study 8
Idah, a 34-year-old woman, visited your clinic complaining of a headache. At the same time, she wanted an FP method. On examination, her blood pressure (BP) is 160/100 mmHg. Her last menstrual period was five days ago. She has a daughter aged 4 years and a son aged 2 years.

Question A
What should the FP provider do concerning her needs?

Question B
Which FP methods can Idah use?
Implanon NXT Reference Guide
Background

Insertion of contraceptive implants takes little time. An experienced health care provider can insert a set of two-rod implants in 3–5 minutes and a one-rod implant in 1–2 minutes.

Remember: While insertion can be quick, it is imperative that correct insertion happen—with the rod(s) inserted just beneath the skin (sub-dermally) to make removals relatively trouble-free.

Most problems associated with removal have been due to improper or careless insertion; therefore, only health care providers trained in both insertion and removal should perform these procedures. To further minimize post-insertion problems (e.g., infection, spontaneous expulsion), all phases of the insertion process must be performed carefully and gently, using recommended IP practices.

The material presented in this chapter is intended to reinforce practical training and to serve as a ready reference for any problems or questions. It cannot substitute for actual practice, which is absolutely necessary if a clinician is to become proficient in insertion of two-rod implants, Implanon, and Implanon NXT.

A refresher on client eligibility for contraceptive implant use, including an update on recent eligibility changes made by the WHO, can be found in Appendix F.
Timeline for Insertion

Contraceptive implants can be inserted for almost all women at the first clinic visit. To minimize the risk of problems, health care providers should conduct an assessment of the woman’s health and provide good counseling to ensure that the client is aware of side effects.

Implants may be inserted at any time during the menstrual cycle when it is reasonably certain that the client is not pregnant or at risk of being pregnant.

If the client has been using no contraception, and she is inserted with Implanon NXT within 5 days of the start of her menstrual bleeding, there is no need for a backup method. Consider advising the couple to use a backup method or refraining from sexual intercourse for 7 days when insertion is done more than 5 days since the start of her menstrual bleeding. If the client is using another contraceptive method and wants to switch to implants, the best time to do so is shown in Table 3. Inserting the rods at these recommended times will minimize the possibility of pregnancy.

### Table 3. Current Contraceptive Users: Optimal Times for Switching to Two-Rod or One-Rod

<table>
<thead>
<tr>
<th>Current Method</th>
<th>When to Insert</th>
</tr>
</thead>
</table>
| Having menstrual cycles or switching from a nonhormonal method | • If she is starting within 7 days after the start of her monthly bleeding for two-rod, or 5 days after for one-rod, no need for a backup method.  
  • If it is more than 7 days after the start of her monthly bleeding for two-rod, or more than 5 days after for one-rod, she can have implants inserted any time it is reasonably certain she is not pregnant. She will need a backup method for the first 7 days after insertion.  
  • If she is switching from an intrauterine device (IUD), she can have implants inserted immediately (see below). |
| Switching from a hormonal method                          | • Immediately, if she has been using the hormonal method consistently and correctly or if it is otherwise reasonably certain she is not pregnant. No need to wait for her next monthly bleeding. No need for a backup method.  
  • If she is switching from injectables, she can have implants inserted when the repeat injection would have been given. No need for a backup method.  
  • If she is switching from an IUD, she can have implants inserted immediately (see below). |
| Switching from copper or levonorgestrel (LNG) IUD         | • If starting during the first 7 days of monthly bleeding, insert implant now and remove the IUD. No need for a backup method.  
  • If starting after the first 7 days of monthly bleeding and she has had sex since her last monthly bleeding, start the implant now. It is recommended that the IUD be kept in place until her next monthly bleeding.  
  • If starting after the first 7 days of monthly bleeding and she has not had sex since her last monthly bleeding, the IUD can stay in place and be removed during her next monthly bleeding, or the IUD can be removed and she can use a backup method for the next 7 days. |

Adapted from: World Health Organization Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health Center for Communication Programs Knowledge for Health Project. 2011. Family Planning: A
Preparation for Implant Insertion

After you have greeted the client, determined that she wants an implant, ruled out pregnancy, and explained the procedure, it is important that you make sure the instruments and commodities have been sterilized or high-level disinfected.

Check to ensure the implants are packaged and sealed as expected. Two-rod implants are packed in sterile pouches, and their disposable insertion trocars are packed in a separate sterile pack designed for one-time use. One-rod implants come preloaded in the trocar and thus the implant and trocar are packaged together. In summary:

- Two-rod implants: two packages
- One-rod implants: one package

The following basic, non-sterile supplies are recommended for each insertion:

- Examining table for the woman to lie on
- Antiseptic solution
- Local anesthetic (1% concentration without epinephrine)
- Safety box
- Dust bins with color-coded liners
- 0.5% chlorine solution for decontamination
- Decontamination buckets

The sterile instruments and supplies necessary for insertion of implants include:

- Sterile surgical drape or a fenestrated towel
- Sterile gauze swabs
- Pair of surgical gloves
- 5cc syringe and 21 gauge needle
- Rods and trocar:
  - Two-rod implants: Set of two rods in sterile pouch; separate sealed packaged containing disposable trocar
  - One-rod implants: Rod loaded in trocar in sterile package
- Ordinary Band-Aid/Elastoplast
- Gauze bandage

Appendix D provides a checklist of basic items required for contraceptive implants provision.
**Instructions for Implanon NXT Insertion**

Note: A job aid for Implanon NXT insertion can be found in Appendix G and the Implanon NXT insertion skills checklist can be found in Appendix B.

**Location of Implants**

The rod should be inserted beneath the skin on the inner aspect of the upper arm (Figure 2) about 8–10 cm from the medial epicondyle of the humerus (usually in the non-dominant arm).

**Figure 2. Implanon NXT Implant Insertion Site**


Figure 3 shows a cross-section of the upper arm and identifies where the nerve bundle, major muscles, and vein are. The implant is placed correctly in this figure, well away from major blood vessels, muscles, and nerves.

**Figure 3. Transverse Section through the Left Upper Arm (middle third)**


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Step-by-Step Instructions for Insertion of Implanon NXT

1. Getting Ready
Step 1.1: Greet the client, rule out pregnancy, determine that the client wants an implant, is aware of common side effects, accepts them, and has no medical condition that makes implants an inappropriate method per WHO MEC.

Step 1.2: Explain the insertion technique and take the time to answer any questions the client may have.

Step 1.3: Help position the client on the table. Have the client lie on her back on the examination table with her non-dominant arm flexed at the elbow and externally rotated so that her wrist is parallel to her ear or her hand is positioned next to her head (Figure 4). Her arm should be well supported and able to be comfortably extended straight or slightly bent, as the clinician prefers.

Figure 4. Client Placement

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Step 1.4: Determine the optimal insertion area by measuring 8–10 cm from the medial epicondyle of the humerus.

Step 1.5: Prepare an instrument tray. Use clean linen to cover the tray. Assemble the syringe and needle, bowl with antiseptic and cotton balls or gauze, the adhesive tape, and pressure bandage. Check and prepare the local anesthetic bottle or vial of local anesthetic. Take out the Implanon NXT package from its box and set it on the tray for ready access.

2. Pre-Insertion Tasks
Step 2.1: Wash hands thoroughly with soap and water and dry them.

Step 2.2: Apply antiseptic solution to the incision area two times. Begin by wiping at the insertion site and move outward in a circular motion for 8–13 cm (3–5 inches). If an iodophor (e.g., Betadine) is used, allow to air dry for about 2 minutes before proceeding (iodophors require up to 2 minutes contact time to release free iodine.)

Step 2.3: After verbally checking again to be sure the client is not allergic to the local anesthetic agent or related drugs, fill a syringe with about 1 mL of local anesthetic (1%
without epinephrine). This is enough to numb the area while inserting Implanon NXT. Explain to the client that the injection of the anesthetic will be slightly painful but that she shouldn’t feel any pain while the Implanon NXT rod is being inserted.

Step 2.4: Insert the needle just under the skin at the incision site (point closest to the elbow). Inject a very small amount of anesthetic to raise a small wheal (raised area). Then, without removing the needle, gently advance it under the skin for about 4–5 cm along the track where the rod will be inserted (Figure 5). This will raise the skin up from the underlying soft tissue. Pull back on the plunger to be sure the needle is not in a blood vessel. As you withdraw the needle, slowly inject the remaining local anesthetic in a track.

![Figure 5. Injecting the Anesthetic](image)

Place the needle in a safety box to prevent accidental needle sticks. Finally, gently rub the area injected to spread the anesthesia around; this will increase its effectiveness.

Note: To prevent local anesthetic toxicity, the total dose should not exceed 10 mL (10 grams/liter) of a 1% local anesthetic without epinephrine.

Step 2.5: Put sterile gloves on both hands. (A separate pair of gloves must be worn for each client to avoid cross-contamination.)

Note: Do not use powder with gloves. The tiny powder granules may fall into the insertion site and cause scarring (fibrous reaction). If gloves are powdered, wipe powder off glove fingers with sterile gauze soaked in sterile water or alcohol swabs.

Step 2.6: Arrange instruments and supplies so that they are easily accessible. Make sure that the Implanon NXT package is intact and the tip of the rod is not protruding out of the trocar.

After inspection, open and remove the sterile preloaded disposable Implanon NXT applicator. If sterility is in question, open another pack.
3. Inserting the Rod

Before starting, gently touch the incision site with the tip of the forceps to be sure the anesthetic is working. If the client can feel sharp pain from the forceps, wait 2 more minutes and retest the incision site.

Step 3.1: Hold the applicator just above the needle at the textured surface area. Remove the transparent protection cap by sliding it horizontally in the direction of the arrow away from the needle (Figure 6). If the cap does not come off easily, the applicator should not be used. You can see the white-colored implant by looking into the tip of the needle. Do not touch the purple slider until you have fully inserted the needle subdermally, as it will retract the needle and prematurely release the implant from the applicator.

![Figure 6. Preparing the Trocar](image)


Step 3.2: With your free hand, stretch the skin around the insertion site with thumb and index finger (Figure 7).

![Figure 7. Stretching the Skin](image)

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Step 3.3: Puncture the skin with the tip of the needle angled about 30° (Figure 8).
Step 3.4: Lower the applicator to a horizontal position. While lifting or tenting the skin with the tip of the needle (Figure 9), slide the needle to its full length. You may feel slight resistance but do not exert excessive force. If the needle is not inserted to its full length, the implant will not be inserted properly.

Figure 9. Tenting the Skin and Inserting the Needle


Remember: It is important that the rod be placed subdermally. Deep placement will make removal much more difficult.

You can best see movement of the needle if you are seated and are looking at the applicator from the side and NOT from above. In this position, you can clearly see the insertion site and the movement of the needle just under the skin.

Note: To avoid contaminating the trocar when inserting and pulling back on it, try not to touch it with your gloved fingers, especially the part of the barrel that goes under the skin.

Step 3.5: Keep the applicator in the same position with the needle inserted to its full length. If needed, you may use your free hand to stabilize or keep the applicator in the
same position during the following procedure. Unlock the purple slider by pushing it slightly down. Move the slider fully back until it stops (Figure 10). The implant is now in its final subdermal position, and the needle is locked inside the body of the applicator. The applicator can now be removed.

Note: If the applicator is not kept in the same position during this procedure or if the purple slider is not completely moved to the back, the implant will not be inserted properly.

**Figure 10. Releasing and Removing the Applicator/Trocar**


Step 3.6: Always verify the presence of the implant in the woman’s arm immediately after insertion by palpation. By palpating both ends of the implant, you should be able to confirm the presence of the rod (Figure 11).

Note: At this point, and after covering the incision site, ask the client to feel the rod’s upper end and the length of the rod, taking care not to touch the point of insertion. Reassure the client that the implant is in place.
Procedure to Follow after Insertion of All Contraceptive Implants

Covering the Incision

- Bring the edges of the incision together and use surgical tape to close the incision. Apply a Band-Aid or sterile gauze and tape to cover the incision. Sutures are not necessary and may increase scarring.
- Check for any bleeding. Cover the insertion area with a dry piece of gauze (pressure dressing) and wrap gauze snugly around the arm to be sure there is no bleeding and to minimize the bruising (subcutaneous bleeding).

Waste Disposal and Decontamination

- Before removing gloves, place instruments into a container filled with 0.5% chlorine solution for decontamination. Dispose of the needle and syringe by placing them in a puncture-proof container.
- If cloth surgical drape was used, it must be washed and sterilized before reuse. Place the drape in a dry, covered container and remove to the designated washing area.
- While still wearing gloves, place all contaminated objects (gauze, cotton, and other waste items) in a properly marked, leak-proof container with a tight-fitting lid or in a plastic bag.
- Dispose of gloves, place in a leak-proof container or plastic bag.
- Wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.
- All waste material should be disposed of by burning or burying.

Client Care

- Complete the user card and give it to the client to keep. Also, complete the patient chart label and affix it to the woman’s medical record.
- Place a note in the client’s record indicating the location of the rod(s), type of rod(s), and duration of contraceptive effect (3, 4, or 5 years) and specifying any unusual
events that may have occurred during insertion. A simple drawing showing the approximate location of the rods in the client’s arm is helpful.

- Instruct the client regarding wound care (see below) and make a return visit appointment, if needed.
- Observe the client for at least 15 minutes. Check for bleeding from the incision and ask her how she feels before sending her home. She should be given written, post-insertion care instructions if available and appropriate.

Client Instructions for Insertion Site

- Keep the area around the insertion site dry and clean for at least 48 hours. The incision could become infected if the area gets wet while bathing.
- Leave the gauze pressure bandage in place for 24 hours and the surgical tape or Elastoplast in place until the incision heals (normally 5 days).
- There may be bruising, swelling, or tenderness at the insertion site for a few days. This is normal.
- Pain at the insertion site may require a mild analgesic (e.g., paracetamol or ibuprofen).
- Routine work can be done immediately. Avoid bumping the area, carrying heavy loads, or applying unusual pressure to the site.
- After healing, the area can be touched and washed with normal pressure.
- If the incision site becomes inflamed (red with increased heat or tenderness) or there is pus at the site, return to the clinic.
- Inform the client how soon the method is effective:
  - Implants become effective within 24 hours after insertion. If they are not inserted by the seventh day of the menstrual period for two-rod implants, or the fifth day of the menstrual cycle for one-rod implants, use of a backup contraceptive method for 7 days is recommended.
  - Implants lose effectiveness sooner for women weighing 80 kg or more. For these women, they are slightly less effective in their final year of use, and women seeking continued protection should visit the health facility for a replacement implant. Women weighing 80 kg or more should be encouraged to return a year earlier or use a back-up method.
- Discuss what to do if there are changes in menstrual periods or other minor side effects.
- Advise the client on how to protect against sexually transmitted infections (STIs), including HIV.

The client should also be given specific information such as:

- The name of the service center or clinic where she received the implant
- The number of rods inserted
- How long the contraceptive implant is effective
When and where to return for removal: The client should return to the service delivery site if she:

- Thinks she might be pregnant;
- Wants the implant removed for any reason;
- Wants to have a baby;
- Has any problems with the method that worry her;
- Wants to switch to another contraceptive method;
- Is moving and needs the address of a clinic in her new area that provides contraceptive implant services; or
- Has started any new medications that might decrease the effectiveness of her implant (e.g., rifampin and most anti-epileptic drugs).

When possible, the client should return to the same clinic or service center where the contraceptive implant was inserted if she has any worries or questions about the method or if she has any of the following warning signs:

- Delayed menstrual period (>6 weeks) after several months of regular cycles (may be a sign of pregnancy)
- Severe lower abdominal pain (may be a symptom of ectopic pregnancy)
- Heavy bleeding (twice as long or twice as much as normal)
- Pus or bleeding at the insertion site
- Expulsion of a rod
- Migraine (vascular) headaches, repeated very painful headaches, or blurred vision.
- Unilateral leg pain or swelling, sudden severe pain in the chest, or breathlessness (may be a symptom of thrombosis)

Finally, at any follow-up care visit, she should be told that she can return anytime there is a problem or she has questions.
Follow-Up Care

Long-term success, as defined by satisfied clients and high continuation rates, will occur only if clinic staff recognize the importance of providing follow-up care (including counseling) and prompt management of side effects as well as other problems, should they occur.

Most clients will not experience problems following insertion of contraceptive implants. The client does not need to return until the implant reaches the end of its effective life, but may return to discuss side effects or if she has decided to have the rods removed because she:

- Thinks she might be pregnant;
- Wants the implant removed for any reason;
- Wants to have a baby;
- Has any problems with the method that worry her;
- Wants to switch to another contraceptive method; or
- Has started any new medication that might decrease the effectiveness of the implants.

Below are some questions and answers that may arise during a client’s use of contraceptive implants.

Can a woman who is breastfeeding use implants?
In the revised MEC, implants are placed under MEC Category 2 (generally use the method) for breastfeeding women beginning immediately after birth. This means that yes, women can generally use implants after birth, even when breastfeeding.

Do other drugs interact with the hormones in contraceptive implants?
Certain drugs increase the ability of the liver to break down the hormone, thereby making the method less effective in preventing pregnancy. Such drugs include: anti-epilepsy (seizure disorder) drugs such as barbiturates (phenobarbital), phenytoin (Dilantin), and carbamazepine (Tegretol), but not valproic acid; the antibiotic rifampin; and certain ART medications (most likely protease inhibitors, the non-nucleoside reverse transcriptase inhibitors efavirenz and nevirapine, and cobicistat-boosted elvitegravir). Women on ART should receive counseling on the potential reduced effectiveness of implants when used simultaneously with certain ART regimens. During counseling, the woman should be offered alternative methods for consideration. However, when the woman decides to initiate or continue with implants, it is recommended that she be counseled on the consistent use of condoms for dual protection and to compensate for any possible reduction in the effectiveness of the implants.

Remember: Counsel the woman to tell the health care provider that she is using implants whenever a new drug is given to her.
Should a woman be concerned if her menstrual period is delayed?
Although contraceptive implants are highly effective, pregnancies occur occasionally. If a woman’s period is delayed (> 6 weeks) after an interval of regular cycles, she should be evaluated for pregnancy. If she is not pregnant, counsel her that there is no harm to her health if she doesn’t get her menstrual period (i.e., there is no “buildup” of blood in the uterus) and that not having menses will have no harmful effect on her future fertility.

Should a woman with prolonged bleeding (with or without anemia) have the implant removed?
Not usually. If the woman wants to continue using a two-rod or one-rod contraceptive, she should be checked to be sure there are no other causes for the bleeding. Following this, the first approach should be counseling and reassurance that prolonged spotting or moderate bleeding (equivalent to normal menstruation but longer in duration) is common and expected during implant use. If a woman is still concerned, she can be given low-dose oral contraceptives or ibuprofen 800mg three times daily (TDS) for 5 days.

For anemia, give nutritional advice on the need to increase iron intake. Use oral iron treatment (one tablet containing at least 100 mg of elemental iron, FeSO₄, daily for 1–3 months) if hemoglobin is ≤ 9 g/dL or hematocrit ≤ 27%.

What are the warning signs of problems?
The client should return to the clinic if she has any of the following problems:
- Delayed menstrual period after several months of regular cycles (may be a sign of pregnancy)
- Severe lower abdominal pain (may be a symptom of ectopic pregnancy)
- Heavy bleeding (twice as long or twice as much as normal)
- Pus or bleeding at the insertion site
- Expulsion of a rod
- Migraine (vascular) headaches, repeated very painful headaches, or blurred vision

When should one-rod and two-rod implants be removed?
The implant can be removed at any time if the user wishes to stop the method for either a personal or medical reason. The rod should be removed by a service provider trained in removal. One-rod implants should be removed after a maximum of 3 years. Two-rod implants should be removed at the end of a maximum of 5 years for Jadelle, or 4 years for Sino-implant (II). If the client wants to continue using contraceptive implants, she may receive a new implant in the same arm immediately after the old implant is removed.

In the case of two-rod implants, clients weighing over 80 kg may wish to have their implants removed a year early because the implant may lose effectiveness earlier for them.

See information in this guide for detailed instructions on how to remove an implant.
Where should the client go to have the rods removed?
The client should return to the same clinic where the rods were inserted, or to another clinic where contraceptive implants are provided.

What should a woman do if she cannot or does not want to have the implant removed at the end of its effective life?
Counsel the woman on her increased risk of pregnancy (especially intrauterine and ectopic pregnancy) and encourage her to reconsider her decision. If that doesn’t work, advise her of the importance of using another reliable FP method in the meantime.

See information in this guide on how to remove an implant.

What happens if contraceptive implant rods are left in for too long?
The main risk in delayed removal is an increased chance that the woman will become pregnant. The effectiveness of two-rod implants may decrease somewhat after 5 years while the effectiveness of one-rod implants may decrease after 3 years. If the implant is left longer than the recommended length of time, those women who do become pregnant are slightly more likely to have an ectopic pregnancy.

How long does removal take?
The removal process usually takes 5–10 minutes, but may take longer if the rod(s) were not inserted correctly or are difficult to locate.

See information in this guide on how to remove an implant.

In summary
As mentioned earlier, successful programs require well-trained staff who exhibit:

- Good clinical judgment in selecting acceptors;
- Care, sensitivity, and thoroughness in informing the user about common side effects and other problems;
- Skill in inserting and removing implants;
- Knowledge of and ability to recognize real or potential problems; and
- Capability to take appropriate clinical action in response to potential problems, including knowing when (and where) to refer clients with serious problems.

Helping Continuing Users
As mentioned previously, if clients are properly counseled and they know what to expect, the chances are good that they will use the contraceptive method for a longer time. It is important to ask the clients questions to see if they have understood the instructions and also to answer their questions. It should not be assumed that the clients understand everything they are told or that they do not have concerns when they remain silent.
Although no routine return visit is required until it is time to remove the implants, it may be necessary to see the client from time to time so she can have periodic health checkups or report on her experience with contraceptive implants. Particular attention should be paid to the client with prolonged bleeding (with or without anemia) because this may affect her daily life and increase the chances of requests for removal. A thorough evaluation of the bleeding and treatment is important to the client’s continued use of contraceptive implants.

During an opportune visit, the following questions may be asked: if the client is satisfied with the method; if there are concerns about bleeding changes; and if there are new health problems.

Examples of new health problems that may require contraceptive implants to be switched with other contraceptive methods are unexplained vaginal bleeding and migraine headaches with aura.

Remember to review the client’s long-term plan including whether or not she wants to become pregnant in the future. A significant gain in weight may indicate that her implants should be replaced a year early.

**Management of Bleeding Problems and Other Side Effects**

**Background**

The most frequently reported side effect of contraceptive implants is a change in the menstrual bleeding pattern. Because the changes vary widely, the kind of change a particular client may experience cannot be predicted. If increased frequency of bleeding occurs, the quantity of blood lost is rarely enough to cause anemia, but there have been a few cases that required treatment with iron tablets. Fortunately, these bleeding problems gradually diminish over time, becoming less frequent and bothersome after 9–12 months.

Despite the fact that medical treatment for prolonged or irregular bleeding usually is not necessary, the inconvenience caused by more or less continual bleeding or spotting interferes with the daily and sexual life of women. Any treatment that can quickly and reliably stop the bleeding contributes to the comfort and satisfaction of contraceptive implant users. Therefore, service providers should be sensitive to the importance of treating this problem if counseling and reassurance are not sufficient.

**Management of Vaginal Bleeding Problems**

Irregular bleeding and prolonged spotting or bleeding (8 days or more) are common and expected in contraceptive implant users: over 65% experienced this during the first year. In addition, moderate menstrual bleeding lasting more than twice as long as a normal menstrual period occurs in 20–30% of implant users during the first 3–6 months. For a woman with prolonged spotting or moderate bleeding, the first approach should be counseling and reassurance. It should be explained that in the absence of other causes (e.g., cervicitis or cervical polyp), this type of bleeding is not harmful, even if prolonged for several weeks. Furthermore, these prolonged bleeding or spotting episodes typically become lighter and shorter in succeeding months.
If, after reassurance, the woman is still unhappy with the irregular bleeding, but wants to continue using implants, a short course (1–3 cycles) of combined oral contraceptives (COCs) may be tried using:

- A low-dose COC (30–35 μg ethinyl estradiol [EE]) once daily for 21 days.

If COCs are not appropriate for personal or medical reasons, try:

- Ibuprofen (or another nonsteroidal anti-inflammatory drug) up to 800 mg TDS for 5 days or mefenamic acid 500mg TDS for 5 days.

COCs control or stop bleeding by rebuilding the endometrium while ibuprofen, which blocks prostaglandin synthesis, decreases uterine contractions and blood flow to the endometrium. COCs, which also contain a progestin, are preferred over estrogens (either 20–50 μg EE or 1.25 mg conjugated estrogens) because they are more effective.

Heavy bleeding (twice as long or twice as much as normal) is very uncommon with contraceptive implants but usually can be managed with low-dose COCs (with or without ibuprofen).

If the bleeding is not reduced in 3–5 days or is much heavier (1–2 pads or cloths per hour):

- Determine whether there are other causes for the uterine bleeding.
- Give 2 low-dose COC pills per day for the remainder of the cycle (at least 3–7 days), followed by 1 cycle (1 pill per day) of COCs.
- Alternatively, and if available, give a 50 μg EE-containing COC or 1.25 mg conjugated estrogen (Premarin) for 14–21 days.

Note: Check to be sure vaginal bleeding has decreased within 3 days.

If COCs or estrogens fail to correct the bleeding problem, the implants may need to be removed, if the client wishes.

Do not perform a dilation and curettage procedure unless another medical condition (e.g., endometrial polyp or incomplete abortion) is suspected. (If uterine evacuation is necessary, manual vacuum aspiration, not a dilation and curettage procedure, is the preferred method for emptying the uterine cavity.)

For anemia, give nutritional advice on the need to increase iron intake. Use oral iron treatment (one tablet containing at least 100 mg elemental iron, FeSO₄, daily for 1–3 months) if hemoglobin ≤ 9 g/dL or hematocrit ≤ 27%.

Management of Other Health Problems

Clients may present with health problems that may or may not be method-related. The assessment and management of these problems are presented in Table 4.
<table>
<thead>
<tr>
<th>Problem</th>
<th>Assessment</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acne</td>
<td>Ask how and how often she cleans her face. Ask if she is currently under great stress.</td>
<td>In some women, use of implants can make acne worse. Recommend cleaning face twice a day and avoiding use of heavy facial creams. Counsel as appropriate. If condition is not tolerable, help client choose another (non-hormonal) method.</td>
</tr>
<tr>
<td>Breast fullness or tenderness (mastalgia)</td>
<td>Check breasts for: - Lumps or cysts, and - Discharge or galactorrhea (leakage of milk-like fluid), if not breastfeeding. If she is breastfeeding and breasts are tender, examine for breast infection.</td>
<td>If physical examination shows lump or discharge suspicious for cancer (e.g., firm, non-tender, or fixed and does not change during menstrual cycle), refer to appropriate source for diagnosis. If no abnormality, reassure. If breasts are not infected, recommend a bra that provides additional support. If breast infection, use warm compresses, give antibiotics as appropriate, and advise to continue breastfeeding. For any of the above conditions, do not remove rods/capsules unless client requests it after counseling.</td>
</tr>
<tr>
<td>Chest pain (especially if it occurs with exercise)</td>
<td>Assess for possible cardiovascular disease (CVD). Also, check: - BP - Heart for irregular beats (arrhythmias)</td>
<td>If evidence for CVD, refer for further evaluation. Low-dose progestins do not increase the risk of CVD; therefore, removal of implants is not necessary unless the client requests it.</td>
</tr>
<tr>
<td>Depression (mood changes or loss of libido)</td>
<td>Discuss changes in mood or libido.</td>
<td>Depression or loss of libido may be associated with progestins; therefore, if the client thinks her depression has worsened while using implants, help her choose another method.</td>
</tr>
<tr>
<td>Excess hair growth (hirsutism) or hair loss</td>
<td>Review history, before and after insertion.</td>
<td>Pre-existing conditions such as excess facial or body hair might be worsened by use of implants. Changes usually are not excessive, may improve over time, and do not require rod/capsule removal unless client requests it after counseling.</td>
</tr>
<tr>
<td>Headache (especially with blurred vision)</td>
<td>Ask if there has been a change in pattern or severity of headaches since insertion of implants. Perform physical examination, measure BP. Examine as appropriate: - Eyes (fundoscopic) - Neurologic system</td>
<td>If headaches are mild, treat with analgesics and reassure. Re-evaluate after 1 month if mild headaches persist. If headaches have changed since starting implants (e.g., numbness or tingling accompanied by loss of speech, visual changes, or blurred vision), remove implants and help client choose another (non-hormonal) method.</td>
</tr>
<tr>
<td>Problem</td>
<td>Assessment</td>
<td>Management</td>
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<td>-------------------------------</td>
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<tr>
<td>High BP (&gt; 160/100 mmHg)</td>
<td>Ask if this is the first time anyone has told her that she has high BP.</td>
<td>Counsel client that a mild increase in BP (reading &lt; 160/100 mmHg) does not require removal of implants unless she requests it. If requested, help the client choose another method. In addition, tell her that high BP usually goes away within 3 months. Take BP monthly to be sure it returns to normal. If after 3 months it has not returned to normal, refer for further evaluation.</td>
</tr>
<tr>
<td></td>
<td>Ideally, ask the client to return in 24 hours and repeat BP reading.</td>
<td>If BP &gt; 160/100 mmHg or she has arterial vascular problems (e.g., heart attack, stroke, kidney failure, or retinopathy), the implants should be removed. Help her choose another method.</td>
</tr>
<tr>
<td></td>
<td>If she is unable to return, ask client to lie down and rest in a quiet area and then reassess BP in 30 minutes.</td>
<td></td>
</tr>
<tr>
<td>Rod/capsule coming out</td>
<td>Check for partial or complete expulsion of rod/capsule(s).</td>
<td>Remove partially expelled rod/capsule(s). If two-rod implant, check to determine whether remaining rod/capsule is in place.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If area of insertion is not infected (no pain, heat, and redness), replace rod/capsule(s) with new implant.</td>
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<tr>
<td></td>
<td></td>
<td>If area of insertion is infected:</td>
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<tr>
<td></td>
<td></td>
<td>● Remove remaining rod/capsules,</td>
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<tr>
<td></td>
<td></td>
<td>● Insert a new set in the other arm, or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Help the client choose another method.</td>
</tr>
<tr>
<td>Infection at insertion site</td>
<td>Check area of insertion for infection (pain, heat, and redness), pus, or abscess.</td>
<td>If infection (not abscess), wash area with soap and water and give appropriate oral antibiotic for 7 days. Do not remove rods/capsules. Ask client to return in 1 week. If no improvement, remove rods/capsules and insert a new set in the other arm or help client choose another method.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If abscess:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Prep with antiseptic.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Incise and drain.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Remove rods/capsules.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Perform daily wound care.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Give oral antibiotics for 7 days.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insert new set in the other arm or help client choose another method.</td>
</tr>
<tr>
<td>“Missing” rods/capsules</td>
<td>Usually due to rods/capsules being inserted too deep (not palpable) or, rarely, a rod/capsule spontaneously expelled and forgotten by the client.</td>
<td>Can be detected by sonography (or for Implanon NXT, by x-ray).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If regular sonography is used, the focal length needs to be increased to about 15 cm to focus accurately. Rods/capsules are best seen in cross-section (transverse) as a shadow (echo-free area) underneath each rod/capsule. If both rods or all capsules are present, note this in the client’s chart. If removal will be difficult, an expert on implant removal should be consulted.</td>
</tr>
<tr>
<td>Problem</td>
<td>Assessment</td>
<td>Management</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Jaundice</td>
<td>Acute jaundice occurring after insertion is not method-related. Check for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Active liver disease (hepatitis)</td>
<td>Limited studies suggest no significant elevation of liver enzymes. Further medical evaluation is recommended to rule out liver and/or gallbladder disease.</td>
</tr>
<tr>
<td></td>
<td>• Gallbladder disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Benign or malignant liver tumors</td>
<td></td>
</tr>
<tr>
<td>Nausea, dizziness and vomiting</td>
<td>Check for pregnancy by checking symptoms, performing a pelvic examination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(speculum and bimanual), and a pregnancy test (if indicated and available).</td>
<td>If not pregnant, reassure that symptoms are not serious and usually disappear with time.</td>
</tr>
<tr>
<td>Thromboembolic disorders (including</td>
<td>Assess for active blood clotting problem.</td>
<td>LNG implants do not increase the risk of blood clotting problems; therefore, remove rods/capsules only at client's request. If there is strong evidence of blood clotting disorder, refer for further evaluation.</td>
</tr>
<tr>
<td>blood clots in legs, lungs, or eyes)</td>
<td></td>
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</tr>
</tbody>
</table>
Implant Removal

Note: A job aid for implant removal can be found in Appendix H and the implant removal skills checklist can be found in Appendix C.

Background

Removal of contraceptive implants can be done at any time in the menstrual cycle. As has been stressed throughout other sections of this manual, correct insertion—with the implant rods placed subdermally and properly spaced—makes the removal procedure much easier.

While various levels of health workers (physicians, nurses, and midwives, etc.) can be trained to insert and remove contraceptive implants, a health worker skilled in removal should be consulted if difficulty in removing the rods is anticipated (difficulty in removing rods can be anticipated if the rods are not easily palpable and were likely inserted too deeply). Health workers need to work gently, carefully, and patiently when removing the rods. As with insertion, use of the recommended IP practices is essential to minimize post-removal infections as well as the risk of disease transmission.

The material presented in this “Implant Removal” section is intended to reinforce practical training and to serve as a ready reference for any problems or questions. It cannot substitute for actual practice, which is absolutely necessary if a clinician is to become proficient in removing contraceptive implants.

When to Remove Implants and Counseling

Before removing the rods, talk with the client about her reason for removal and answer any questions. Ask the client about her present reproductive goals (e.g., Does she want to continue spacing or limiting births? Is she hoping to become pregnant again?). If she wants to continue FP, ask if she wants another contraceptive implant. Briefly describe the removal process and what she can expect both during the removal and afterward.

Preparation for Removal

It is important that the instruments and other items have been sterilized or high-level disinfected.

The following items are needed for removal:

1. Examining table for the woman to lie on (optional)
2. Arm support or side table
3. Soap for hand washing
4. Sterile fenestrated surgical drape
5. Sterile gauze swabs
6. Small gauze bandage
7. One bowl for antiseptic solution
8. Pair of sterile surgical gloves
9. Antiseptic solution
10. Local anesthetic (1% concentration without epinephrine)
11. Sterile syringe (5 or 10 mL) and 2.5–4 cm long needle (22-gauge)
12. Scalpel with #15 blade
13. 1 curved and 1 straight mosquito forceps
14. Kidney dish
15. Gallipot
16. Elastoplast or sterile gauze with surgical tape
17. Epinephrine for anaphylactic shock (readily available for emergency use)
18. Chlorine to decontaminate used instruments.
19. Safety box to dispose of used sharps

**Removal Technique**

An easy removal depends on correct insertion. Routinely, removals take slightly longer than insertions: usually from 5 to 10 minutes. If the rod(s) are placed correctly—subdermally in the middle third of the upper arm—they will be easier to remove. If they are placed too deep (in the fascia muscle), removal could be difficult and could potentially damage the nerves or blood vessels in the neurovascular compartment.

Locate the rod(s) first with ungloved fingers. Mark the position of each rod with a marking pen (if available). When tissue swells after infiltration of the local anesthetic, these marks help identify the location of the rods. Then, the client’s arm is swabbed with an antiseptic before the local anesthetic is injected. The anesthetic should be injected under the ends of the rods nearest the incision site; anesthetic applied over the rods makes them difficult to feel (palpate).

Note: If the rod(s) cannot be palpated, a provider inexperienced in removal should not begin the procedure. An experienced provider should be consulted.

**Removal Procedure**

**Step-by-Step Instructions for Removal of Implant Rod(s)**

1. Getting Ready

Step 1.1: Before starting the procedure, check to be certain the client is not allergic to antiseptic solutions or local anesthetics.

Step 1.2: Help position the client on the table. Ask her to lie down on the table so that the arm with the rods rests on the table or arm support. Her arm should be well supported and able to be comfortably extended straight or slightly bent, as the clinician prefers.

Step 1.3: Place a clean, dry cloth under the client’s arm.
Step 1.4: Wash hands with soap and water.

Step 1.5: Prepare the instrument tray by carefully opening the implant removal kit (see contents of kit in Appendix D). Arrange the instruments (see list of equipment and supplies in Appendix D). Check that local anesthetic is 1% without epinephrine.

Step 1.6: Locate the rod(s) by palpation (Figure 12). To gauge where to make the incision, palpate the ends of the rod(s) with bare (ungloved) fingers.

Figure 12. Location by Palpitation for Implant(s)

Tip: To make locating the rods easier, moisten fingertips with a small amount of soapy water or antiseptic solution. Doing this decreases friction between the clinician’s fingertips and the client’s skin and allows the rods to be more easily felt.

Step 1.7: Confirm the position of each rod by making a mark at both ends of the rod(s) using a ballpoint or marking pen. If an antiseptic containing alcohol will be used to prep the arm, a pen with permanent ink must be used.

2. Removing the Implant(s)
Step 2.1: Prepare the removal site with antiseptic by wiping in circular motion two times. Let dry for about 2 minutes. Where the incision will be made, drape with sterile surgical drape such as an “eye sheet” or alternatively place a clean drape over the lower part of the arm.
Step 2.2: At the marked incision site, anesthetize the area with up to 1 mL of 1% lidocaine at the marked site where the incision will be made (Figure 13). Be sure to inject the local anesthetic under the implant to keep the implant close to the skin surface.

Figure 13. Administration of Anesthetic
Note: Before making an incision, check that the anesthetic has taken effect by testing with a forceps tip.

Step 2.3: Push down the proximal end of the implant (Figure 14) to stabilize it; a bulge may appear indicating the distal end of the implant. Starting at the distal tip of the implant, make a longitudinal incision of 2 mm long toward the elbow and deep enough to expose the rod.

**Figure 14. Stabilizing the Implant**

Step 2.4: Gently push the implant toward the incision until the tip is visible. Grasp the implant with forceps (preferably curved mosquito forceps) and gently remove the implant (Figure 15).
Step 2.5: If the implant is encapsulated, use the straight mosquito forceps to gently grasp and stabilize the exposed but encapsulated rod, then make a small incision into the tissue sheath to expose the tip of the rod. With a set of curved mosquito forceps, grasp the implant. Release the stabilizing (straight) forceps, then gently remove the implant using the curved forceps (Figure 16).

Step 2.6: If the tip of the implant does not become visible in the incision, gently insert a forceps tip into the incision. Flip the forceps over into your other hand (Figure 17).
Step 2.7: With a second pair of forceps, carefully dissect the tissue around the implant and grasp the implant (Figure 18). The implant can then be removed.

Step 2.8: Confirm that the entire implant, which is 4.0/4.3 cm long, has been removed by measuring its length. If a partial implant (less than 4.0/4.3 cm) is removed, the remaining piece should be removed.

Step 2.9: If removing two-rod implants, repeat the procedure for the second rod.

If the client desires to continue contraception with implants, see section below titled “Follow-On Contraception.” If not, continue on with the next section for “Covering the Incision.”

Covering the Incision

- Press down on the incision with a gauzed finger for a minute or so to stop any bleeding. Remove the drape.

---

1 Two-rod implants are 4.3 cm, one-rod implants are 4 cm.
If the client does not want another implant, clean the area around the incision site with a small amount of sterile or high-level disinfected water or alcohol (“spirits”) applied to a cotton or gauze swab. Use gauze-covered fingers to hold the edges of the incision together briefly (10–15 seconds). This will help reduce bleeding from the incision.

Bring the edges of the incision together and close with an Elastoplast or surgical tape with sterile gauze or cotton. Sutures are not necessary and may increase scarring.

Check for any bleeding. Cover the insertion area with a dry piece of gauze (pressure dressing) and wrap gauze snugly around the arm to be sure there is no bleeding and to minimize the bruising (subcutaneous bleeding).

Waste Disposal and Decontamination

Before removing gloves, place instruments into a container filled with 0.5% chlorine solution for decontamination. Fill syringe (with needle attached) with 0.5% chlorine solution and either place in solution or dispose of needle and syringe by placing in a puncture-proof container. Soak for 10 minutes. After soaking, rinse metal items immediately with clean water to avoid discoloration or corrosion.

If the scalpel blade will be discarded, remove the scalpel from the chlorine solution. Then take the blade off the scalpel using forceps and place it in a puncture-proof container.

The surgical drape (if used) must be washed and sterilized before reuse. Place in a dry covered container and remove to the designated washing area.

While still wearing gloves, place all contaminated objects (gauze, cotton, and other waste items) in a properly marked, leak-proof container with a tight-fitting lid or in a plastic bag.

Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning inside out.

If disposing of gloves, place in a leak-proof container or plastic bag.

If reusing surgical gloves, submerge them in the 0.5% chlorine solution for 10 minutes for decontamination.

Wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.

All waste material should be disposed of by burning or burying.

Client Care

Place a note in the client’s record indicating the date of removal and specifying any unusual events that may have occurred during removal.

Instruct the client regarding wound care (see “Client Instructions for Wound Care at Home” section below) and make an appointment for a return visit, if needed.

Observe the client for at least 15 minutes. Check for excessive bleeding from the incision and ask how she feels before sending her home. She should be given written, post-removal care instructions if available and appropriate.
Tips for Successful Removal

- Most important, the clinician should work gently, carefully, and patiently to avoid injuring the client’s arm.
- An easy removal depends on correct insertion. If the implant was placed correctly, it will be easier to remove. If placed too deeply, problems can occur.
- Routine removals should take only slightly longer than insertions—usually from 5 to 10 minutes.
- Palpate the area to identify the location of each rod and mark the position of both rods with a pen.
- Use recommended IP practices to avoid infections.
- Inject small amounts of the local anesthetic (usually not more than 1 mL total) under the rod end(s) nearest the original incision site. If anesthetic is applied over the rods, it will obscure them and make removal more difficult.
- If the rod(s) are positioned correctly, only one small incision (up to 4 mm) should be necessary for removal of both rods.
- If removing two-rod implants, remove the rod that is nearer the point of the incision or closer to the surface of the skin first.
- Add incremental amounts of anesthetic only under the rod ends.
- Control bleeding by applying pressure.
- If removal of one or both rods is difficult (i.e., the rods are not removed in 30 minutes), please see Box. Rods That Are Difficult to Remove to address difficult removals.
Box. Rods That Are Difficult to Remove

Occasionally the rods cannot be removed readily at the first visit. If removal of either rod is difficult (i.e., both rods are not removed within 30 minutes), it may be better to stop the procedure for the client’s comfort. In the event that one rod is left in the arm, the client should be provided with a backup contraceptive method. She should be asked to return when the area is fully healed (in about 4-6 weeks) and a second attempt can be made. Usually the remaining rod will be readily located and removed at the second visit.

**Remember:** The client should be given a backup contraceptive method to use while waiting to have the remaining rod removed if she does not wish to become pregnant.

Rods That Cannot Be Palpated

There are two ways to locate rods that have been inserted too deeply to feel with the fingers: x-ray and ultrasound. By using a radiopaque object to mark the original incision site, the rods, which are also radiopaque, usually can be detected by x-ray (set at 50-55 kilovolts and 4-5 milliamperes, exposure time 0.03 seconds). Their depth usually cannot be determined by a single x-ray. Thus, further examination may be required to establish their exact location.

With ultrasound, the image caused by the rods also can be detected (i.e., a shadow—echo-free area—will be present under each rod). Special adjustments (positioning of the ultrasound probe) may be necessary to focus the ultrasound image.

Rods That Are Broken

Removal of the rods is more difficult if they are broken during attempts to get them out. Once the rod is damaged, it may break again with each attempt to grasp it with the curved forceps.

Rarely, removal of a broken rod may require an additional incision at the proximal end of the rod (end nearest the shoulder) so that the remaining piece can be removed more easily. Because two-rod contraceptives are highly elastic and do not immediately return to their original length after being stretched, it may be difficult to determine if all pieces of a broken rod have been removed.

To remove remaining pieces of a broken rod through the original incision:
- Re-palpate the arm to locate the missing piece(s),
- Inject more anesthesia if necessary, and
- Grasp the end of the rod with curved (mosquito or Crile) forceps and gently pull it out of the incision.

Client Instructions for Wound Care at Home

- Keep the area around the insertion site dry and clean for at least 48 hours. The incision could become infected if the area gets wet while the client is bathing.
- Leave the gauze pressure bandage in place for 24 hours and the Elastoplast or surgical tape in place until the incision heals (5 days).
- There may be bruising, swelling, or tenderness at the insertion site for a few days. This is normal.
- Routine work can be done immediately. Avoid bumping the area, carrying heavy loads, or applying unusual pressure to the site.
- After healing, the area can be touched and washed with normal pressure.

Note: Giving antibiotics before or after removal does not reduce the risk of infection and is not necessary.

- If signs of infection develop, such as inflammation (redness plus heat and increased tenderness) or pus at the site, or persistent arm pain for several days, return to the clinic.
The fibrous tissue envelopes that surrounded the rods (tracks where the rods were located) may be felt for some time. This sensation will disappear within a few months.

**Follow-On Contraception**

If the client wants to continue using contraceptive implants, a new implant can be inserted at the time the current one is removed. The rod(s) may be placed through the incision used for removal and inserted in the same general direction as the previous set or rotated slightly to the left or right.

In the unlikely event that the removal site is unsuitable, or at the client’s request, the new set can be inserted in the other arm.

It’s important to consider IP when removing and inserting follow-on implants. To reduce the risk of infection, after completing the removal procedure—including decontaminating instruments, gloves, and other items and disposing of waste materials:

- Cover the incision with a sterile gauze pad;
- Remove gloves and wash hands thoroughly with soap and water;
- Put on a new pair of sterile or high-level disinfected gloves;
- Prep the incision area again; and
- Put a drape on the arm (if required).

Note: Hands should be washed after removing gloves because the gloves may have invisible holes or tears. In this instance, washing hands protects the provider from any contact with blood.

Because the local anesthetic for removal is injected only in the incision area (i.e., under the ends of the rods), additional anesthetic is needed for an insertion.
Coaching for Skill Competency

To help a service provider develop the skill to insert Implanon NXT, the facilitator will follow specific steps. A provider returning to a service delivery site after completing the one-day activity will follow these same steps to help other providers (often referred to as cascade training) develop the same skill (if requested to do so by the facility in-charge or site supervisor). These steps include:

1. Explain each step in the Implanon NXT performance checklist (see Appendix B). If available, watch the insertion video.

2. Demonstrate the steps in the Implanon NXT performance checklist. Narrate each step as it is being performed (e.g., “I am now going to wash my hands”). Ask the service provider(s) to follow along using a copy of the checklist.

3. Ask the provider(s) to practice inserting Implanon NXT using the arm model. You will observe using the checklist and provide feedback (this is known as coaching).

4. After adequate practice, use the checklist to evaluate each provider’s performance. When the provider is determined to be competent, then he or she is qualified to work with clients.

5. Ask the provider to work with clients inserting Implanon NXT. You will observe using the checklist and provide feedback.

6. You will determine if the provider is competent working with clients or if more practice is required.

Note: When observing a service provider working with a client, do not allow the provider to make an error that could harm the client. To prevent this from happening, observe each step closely and if you see the provider about to make a mistake, guide their performance through targeted questions.

For example, you observe that the provider is holding the applicator at an incorrect angle. You would say, “Do you remember the angle at which you are to puncture the skin?”

Do not interact with the provider in a manner that will alarm the client or make her nervous.

Sandwich Feedback

An effective course facilitator uses “sandwich” feedback during a training course. This means starting and ending the feedback (top and bottom of the sandwich) with positive feedback. Here are the steps to provide sandwich feedback:

1. Ask each provider what they think they did well (focus on the positive).
   Example:
   “Dorothy, tell me what you feel you did very well when providing Implanon NXT.”

2. Ask the provider what they would do differently if they were repeating the skill performance.
   Example:
   “Lunah, are there any steps in the checklist that you feel you need to do differently the next time you insert Implanon NXT?”
3. Share your observations of the steps performed well (refer to notes on your completed checklist).
   Example:
   “James, I agree with your comments regarding the steps you did very well. In addition I think the way you communicated with the client was very well done.”

4. Offer any additional suggestions for improvement (build on what the provider indicated that she or he would do differently).
   Example:
   “Catherine, you indicated that you forgot to rule out pregnancy during the pre-insertion counseling. In addition to making sure that you perform all of the steps in pre-insertion counseling, be sure that all of the required materials are available. This will prevent you from having to stop and look for gloves next time.”

5. Close with several positive observations.
   Example:
   “Emmanuel, I thought that you did a very good job inserting the implant. I specifically liked the way you communicated with the client and how you competently performed the steps in the checklist.”
Appendix A: Implanon NXT OJT Activity Evaluation

Instructions: This is an evaluation of the one-day Implanon NXT training activity. Please do not indicate your name. Provide honest and clear feedback by using the following rating scale as you respond to each of the items.

1 = Strongly Disagree  2 = Disagree  3 = Neutral  4 = Agree  5 = Strongly Agree

<table>
<thead>
<tr>
<th>Evaluation Items</th>
<th>Tick Appropriately</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The course facilitator had sufficient technical knowledge to lead the course</td>
<td></td>
</tr>
<tr>
<td>2 The course facilitator was able to transfer skills to learners</td>
<td></td>
</tr>
<tr>
<td>3 The course facilitator was available and demonstrated commitment to the OJT process</td>
<td></td>
</tr>
<tr>
<td>4 The training materials were sufficient for me to learn to provide Implanon NXT</td>
<td></td>
</tr>
<tr>
<td>5 The training materials were useful and helped me to achieve the course objectives</td>
<td></td>
</tr>
<tr>
<td>6 The skill demonstration and practice session was well organized</td>
<td></td>
</tr>
<tr>
<td>7 The service provision session with clients was well organized</td>
<td></td>
</tr>
<tr>
<td>8 The course facilitator effectively observed, coached and assessed my skill competency with clients</td>
<td></td>
</tr>
<tr>
<td>9 The time was adequate for this activity</td>
<td></td>
</tr>
<tr>
<td>10 I feel prepared to return to my site and provide Implanon NXT services to clients</td>
<td></td>
</tr>
</tbody>
</table>

In what ways can this course be improved?

______________________________________________________________________________

______________________________________________________________________________

In what ways can we better prepare you for the site-level service provision, self-study, and skill assessment components of this OJT course? Do you feel confident to go back and provide services?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________
Appendix B: Checklist for One-Rod (Implanon NXT) Implants Counseling and Clinical Skills: Insertion

Rate the performance of each step or task observed using the following rating scale:

Place a “Y” in the case box if step/task is performed satisfactorily, an “N” if it is not performed satisfactorily, or “X” if not observed.

**Satisfactory** Performed the step or task according to the standard procedure or guidelines

**Unsatisfactory** Unable to perform the step or task according to the standard procedure or guidelines

**Not Observed** Step, task, or skill not performed by the learner during evaluation by clinical trainer

### Checklist for One-Rod (Implanon NXT) Implants Counseling and Clinical Skills: Insertion

<table>
<thead>
<tr>
<th>Step/Task</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Insertion Counseling</strong></td>
<td></td>
</tr>
<tr>
<td>1. Greet the client respectfully and with kindness.</td>
<td></td>
</tr>
<tr>
<td>2. Rule out pregnancy by asking the six questions to be reasonably sure that the woman is not pregnant.</td>
<td></td>
</tr>
<tr>
<td>3. Display counseling cards, and if the client has already identified a method, provide focused counseling on that method. Otherwise, ask the following four questions and eliminate cards according to the client’s response:</td>
<td></td>
</tr>
<tr>
<td>- Does the client want more children in the future?</td>
<td></td>
</tr>
<tr>
<td>- Is she breastfeeding an infant younger than 6 months?</td>
<td></td>
</tr>
<tr>
<td>- Will her partner use condoms?</td>
<td></td>
</tr>
<tr>
<td>- Has she not tolerated an FP method in the past?</td>
<td></td>
</tr>
<tr>
<td>4. Continue with counseling, using the counseling cards to:</td>
<td></td>
</tr>
<tr>
<td>- Give information about the methods on the cards that are left.</td>
<td></td>
</tr>
<tr>
<td>- Discuss side effects and efficacy.</td>
<td></td>
</tr>
<tr>
<td>- Help the client to choose a method.</td>
<td></td>
</tr>
<tr>
<td>- Confirm method choice.</td>
<td></td>
</tr>
<tr>
<td>5. Review medical eligibility and explain to client in language the client understands: (e.g., “Method not advised if you…”).</td>
<td></td>
</tr>
<tr>
<td>6. Review Client Screening Checklist (Appendix I) to determine if implants are an appropriate choice for the client.</td>
<td></td>
</tr>
<tr>
<td>7. Perform (or refer for) further evaluation, if indicated.</td>
<td></td>
</tr>
<tr>
<td>8. Assess the woman’s knowledge about implants' major side effects.</td>
<td></td>
</tr>
<tr>
<td>9. Confirm that the client accepts possible menstrual changes with implants.</td>
<td></td>
</tr>
<tr>
<td>10. Describe the insertion procedure and what to expect.</td>
<td></td>
</tr>
</tbody>
</table>

**Insertion of One-Rod Implant**

**Getting Ready**

1. Determine that required materials and the one-rod implant are present.
2. Wash hands thoroughly and dry them.
3. Check to be sure that the client has thoroughly washed and rinsed her arm.
<table>
<thead>
<tr>
<th>Step/Task</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Tell the client what is going to be done and encourage her to ask questions.</td>
<td></td>
</tr>
<tr>
<td>5. Position the woman’s arm and place a clean, dry cloth under her arm.</td>
<td></td>
</tr>
<tr>
<td>6. Mark position on arm for insertion of rod 6-8 cm above the elbow fold.</td>
<td></td>
</tr>
<tr>
<td>7. Put on a pair of clean examination gloves.</td>
<td></td>
</tr>
</tbody>
</table>

**Pre-Insertion Tasks**

1. Prep the insertion site with antiseptic solution.
2. Inject 1 mL of 1% lidocaine applied just under the skin, raising a wheal at the insertion point and advancing up to 5 cm along the insertion track. Gently massage the area of infiltration.
3. Check for anesthetic effect before applying the sharp needle.

**Insertion**

1. Using no-touch technique, remove the sterile disposable one-rod implant applicator from its blister pack and remove the needle shield. (Make sure not to touch the part of the needle to be introduced into the body.)
2. Hold the applicator just above the needle at the textured surface area and remove the transparent protection cap from the needle containing the implant.
3. Visually verify the presence of the implant inside the metal part of the needle.
4. Stretch the skin around the insertion site with thumb and index finger, or alternatively, stretch the insertion site skin by slightly pulling with thumb.
5. Using the needle, puncture the skin at a 30° angle and insert only up to the bevel of the needle.
6. Lower the applicator to the horizontal position so that it is parallel to the surface of the skin while continuing to tent or lift the skin with the needle tip.
7. While lifting the skin with the tip of the needle, slide the needle to its full length toward the guide mark. Make sure that the entire length of the needle is inserted under the skin.
8. While keeping the applicator in the same position and the needle inserted to its full length with one hand, unlock the purple slider by pushing it slightly down using the other free hand.
9. Move the slider fully back until it stops, leaving the implant now in its final subdermal position and locking the needle inside the body of the applicator.
10. Remove the applicator.
11. Palpate to check that one rod is in place. Optionally ask the client to palpate the implant prior to dressing.

**Post-Insertion Tasks**

1. Wipe the client’s skin with alcohol.
2. Bring edges of incision together and close it using surgical tape, then cover it with a Band-Aid or tape on a sterile gauze (2x2).
3. Apply pressure dressing snugly.
4. Before removing gloves, dispose of materials by:
   - Placing used needle (without capping) and trocar in sharps container, and
   - Placing waste materials in leak-proof container or plastic bag.
<table>
<thead>
<tr>
<th>Step/Task</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remove gloves by turning inside out and place in leak-proof container or plastic bag.</td>
<td></td>
</tr>
<tr>
<td>2. Wash hands thoroughly and dry them.</td>
<td></td>
</tr>
<tr>
<td>3. Complete client record, including drawing position of rod.</td>
<td></td>
</tr>
</tbody>
</table>

**Post-Insertion Counseling**

1. Instruct the client regarding wound care and make appointment for return visit, if necessary.
2. Discuss what to do if the client experiences any problems or side effects following insertion.
3. Assure the client that she can have implant removed at any time if she desires.
4. Ask the client to repeat instructions and answer client’s questions.
5. Complete client card indicating which implant she received and by when she needs to return for removal.
6. Observe the client for at least 15 minutes before sending her home.

Comments:

________________________________________

________________________________________

________________________________________

**Observation Summary (Tick as appropriate)**

| Model practice satisfactory | Yes ___ No ___ | Clinical practice satisfactory | Yes ___ No ___ |
|___________________________|_______________|______________________________|_______________|
| Not Applicable            |                | Not competent in one-rod implants (Implanon NXT) |                |

**Action Plan - Check all that apply**

___ Could become competent with additional experience (more cases) supervised by a competent provider/trainer

___ Follow-up visit in 3–6 months

___ Other (specify)

Assessor’s name

Assessor’s signature Date
Appendix C: Checklist for Implant Counseling and Clinical Skills: Removal

Rate the performance of each step or task observed using the following rating scale:

<table>
<thead>
<tr>
<th>Placement of Rating</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Satisfactory: Performed the step or task according to the standard procedure or guidelines</td>
</tr>
<tr>
<td>N</td>
<td>Unsatisfactory: Unable to perform the step or task according to the standard procedure or guidelines</td>
</tr>
<tr>
<td>X</td>
<td>Not Observed: Step, task, or skill not performed by the learner during evaluation by clinical trainer</td>
</tr>
</tbody>
</table>

### Checklist for Implant Counseling and Clinical Skills: Removal

<table>
<thead>
<tr>
<th>Step/Task</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Removal Counseling</strong></td>
<td></td>
</tr>
<tr>
<td>1. Greet the client respectfully and with kindness.</td>
<td></td>
</tr>
<tr>
<td>2. Listen carefully to the client’s response for reason for removal to determine if she wants another method, is hoping to get pregnant, prefers to stop contraception for other reasons, or wants to replace her implant.</td>
<td></td>
</tr>
<tr>
<td>3. Confirm with the client what her intentions are. Provide FP counseling if appropriate.</td>
<td></td>
</tr>
<tr>
<td>4. Describe the removal procedure and what to expect. If she intends to have another implant, discuss with her where it will be inserted.</td>
<td></td>
</tr>
<tr>
<td>5. Ensure that the client is not allergic to the topical antiseptic or the local anesthetic that is available.</td>
<td></td>
</tr>
<tr>
<td><strong>Removal of Implant Rod(S)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Getting Ready</strong></td>
<td></td>
</tr>
<tr>
<td>1. Determine that sterile instruments and other required materials for removal are available. Make sure a new implant is available if inserting a new implant after removing the old one.</td>
<td></td>
</tr>
<tr>
<td>2. Check that the client has thoroughly washed and rinsed her arm.</td>
<td></td>
</tr>
<tr>
<td>3. Tell the client what is going to be done and encourage her to ask questions.</td>
<td></td>
</tr>
<tr>
<td>4. Position the woman’s arm and place a clean, dry cloth under her arm.</td>
<td></td>
</tr>
<tr>
<td>5. Palpate the rod(s) to determine point for removal.</td>
<td></td>
</tr>
<tr>
<td>6. With a waterproof marker, mark the client’s arm where the tip of the rod(s) is palpated.</td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Removal Tasks</strong></td>
<td></td>
</tr>
<tr>
<td>1. Wash hands thoroughly and dry them.</td>
<td></td>
</tr>
<tr>
<td>2. Put sterile gloves on both hands.</td>
<td></td>
</tr>
<tr>
<td>3. Arrange instruments and supplies.</td>
<td></td>
</tr>
<tr>
<td>4. Prep removal site with antiseptic solution twice.</td>
<td></td>
</tr>
<tr>
<td>5. Inject small amount of local anesthetic (1% without epinephrine) at the incision site and under the end of the rod(s).</td>
<td></td>
</tr>
<tr>
<td>Step/Task</td>
<td>Cases</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>6. Check for anesthetic effect before making skin incision.</td>
<td></td>
</tr>
</tbody>
</table>

**Removal**

1. Push down the proximal end of the implant to stabilize it; a bulge may appear indicating the distal end of the implant.

2. Make a small (2 mm) incision below ends of rod(s).

3. Push end of rod toward the incision to remove it.

4. Grasp end of rod with a curved (mosquito or Crile) forceps.

5. Clean off fibrous tissue sheath that covers tip of rod with sterile gauze (or scalpel—dull side).

6. Grasp exposed end of rod with second forceps, gently remove and inspect to ensure that the rod is intact before placing rod in bowl containing 0.5% chlorine solution for decontamination.

7. Ensure that the **complete** rod has been removed; show to the client.

8. If this is a two-rod system, repeat steps 1–7.

**Re-Inserting Implant (one or two rods)**

1. The new implant rod(s) can be re-inserted along the same track as the recently removed implant (if the woman chooses to have a new implant inserted).

2. Provide additional local anesthesia by infiltrating 1% lignocaine along the track(s) of the previously removed implant(s).

3. Wait for 1–2 minutes for the anesthetic to take effect.

4. Insert the one- or two-rod implant per insertion steps (including post-insertion steps and post-insertion counseling).

**Post-Removal Tasks**

1. Wipe the client’s skin with alcohol.

2. Bring edges of incision together and close it using surgical tape, then cover it with a Band-Aid or tape on a sterile gauze pad (2x2).

3. Apply pressure dressing snugly.

4. Before removing gloves, dispose of materials by:
   - Placing used needle (without capping) and trocar in sharps container, and
   - Placing waste materials in leak-proof container or plastic bag.

5. Remove gloves by turning inside out and place in leak-proof container or plastic bag.

6. Wash hands thoroughly and dry them.

7. Complete client record.

**Post-Removal Counseling**

1. Instruct the client regarding wound care and make appointment for return visit, if needed.

2. Discuss what to do if any problems occur and answer any questions.

3. Counsel the client regarding new contraceptive methods and provide one, if desired.

4. Observe the client for at least 15 minutes before sending her home.
Comments:

____________________________________

____________________________________

____________________________________

____________________________________

**Observation Summary (Tick as appropriate)**

<table>
<thead>
<tr>
<th>Model practice satisfactory</th>
<th>Yes ___ No ___</th>
<th>Clinical practice satisfactory</th>
<th>Yes ___ No ___</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competent in implants removal</td>
<td>___</td>
<td>Not competent in implants removal</td>
<td>___</td>
</tr>
</tbody>
</table>

**Action Plan - Check all that apply**

___ Could become competent with additional experience (more cases) supervised by a competent provider/trainer

___ Follow-up visit in 3-6 months

___ Other (specify)

Assessor’s name

Assessor’s signature    Date
Appendix D: Checklist of Basic Items Required for Quality Provision of Contraceptive Implants

Instructions: Course facilitators and service providers should use this checklist before initiating training to assist them in preparing their facilities to offer effective OJT training.

**Equipment and Supplies Checklist**

Facility: ________________ Date: ____________ Staff: ________________

<table>
<thead>
<tr>
<th>Item/Requirements</th>
<th>Available (Yes or No)</th>
<th>Observed (Yes or No)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commodities and data tools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implanon NXT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP Register or Record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption Report or other relevant consumption reporting tool</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumable supplies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Povidone-iodine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile Band-Aid/Elastoplast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 % lignocaine (without epinephrine)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile, distilled water for injection (in case of 2% lignocaine)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile gauze</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 cc syringes and 21 gauge needle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small gauze bandage</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Support equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A room dedicated for FP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant removal kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney dish (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical blade size 15 with handle (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallipot (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small mosquito forceps straight (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small mosquito forceps curved (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fenestrated towel (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant insertion kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney dish (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallipot (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fenestrated towel (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination couch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sphygmomanometer (or blood pressure monitor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IP materials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoclave with power source (or boiler for high-level disinfection)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste disposal mechanism in place (assorted bins with liners)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand washing soap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy duty gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item/Requirements</td>
<td>Available (Yes or No)</td>
<td>Observed (Yes or No)</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Chlorine (for decontamination)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety box</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: Implanon NXT Client Log

Instructions: Complete the information required for each client for whom you insert or remove Implanon NXT during the site-level period of your Implanon NXT OJT training course. This log is to be completed in addition to the regular MOH registers. Be prepared to discuss each case with your course facilitator.

### Insertions

<table>
<thead>
<tr>
<th>Procedure Number</th>
<th>Client Name</th>
<th>Client Number</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
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<tr>
<td>10</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Removals

<table>
<thead>
<tr>
<th>Procedure Number</th>
<th>Client Name</th>
<th>Client Number</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix F: WHO Revised MEC—2015

The WHO has developed a classification system for determining the suitability of different contraceptive methods in consideration of an individual’s other conditions. The conditions considered include age, reproductive history, and pre-existing medical conditions such as diabetes or hypertension. The eligibility criteria fall into one of four categories.

**WHO Categories**

<table>
<thead>
<tr>
<th>Category</th>
<th>With Clinical Judgment</th>
<th>With Limited Clinical Judgment (e.g., Level 1 CHW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use method in any circumstances.</td>
<td>Method can be used in any circumstances.</td>
</tr>
<tr>
<td>2</td>
<td>Generally use method (the advantages outweigh disadvantages), careful follow-up may be needed.</td>
<td>Initiate method and refer for evaluation as soon as possible.</td>
</tr>
<tr>
<td>3</td>
<td>Generally do not use the method (the risks outweigh the advantages). Refer as needed.</td>
<td>Do not use the method. Refer as needed.</td>
</tr>
<tr>
<td>4</td>
<td>Method should not be used. The condition represents an unacceptable health risk if method is used.</td>
<td>Do not use the method. Refer as needed.</td>
</tr>
</tbody>
</table>

**Changes in the WHO MEC—2015**

New methods added:
- Subcutaneously administered depot medroxyprogesterone acetate (DMPA)
  - Generally follow recommendations for intramuscularly administered DMPA
- Sino-implant (II)
  - Generally will follow recommendations for LNG implants
- Progesterone-releasing vaginal ring
  - For use by women who are actively breastfeeding and are ≥ 4 weeks postpartum without restrictions (MEC Category 1)
- Ulipristal acetate as emergency contraception
  - With specific recommendations for breastfeeding women (MEC Category 2)

Recommendations on specific topics:
- CHCs
  - Age group
    - Without restriction from menarche to 40 years (MEC 1)
    - 40 years and older can generally use (MEC 2)
- Breastfeeding women and post-partum women
  - Should not use CHCs if less than 6 weeks post-partum (MEC 4)
- ≥ 6 weeks to < 6 months postpartum generally should not use CHCs (MEC 3)
- ≥ 6 months postpartum can generally use CHCs (MEC 2).

- Women with known dyslipidemias
  - New terminology used (formerly known as hyperlipidemia), and to include only women without other known cardiovascular risk factors
  - Can generally use CHCs

- Progestogen-only contraceptive
  - Implants (LNG, ETG) and progestogen-only pills can now be offered to breastfeeding women in the immediate postpartum period.
  - LNG-IUD can be immediately inserted in first 48 hours postpartum.

- Hormonal contraception for women at high risk of HIV infection, and women living with HIV
  - For women at high risk of HIV or living with HIV, WHO recommends no restrictions for:
    - CHCs or progestogen-only contraceptives
    - Women and couples at high risk of HIV infection and using progestogen-only injectables (DMPA and NET-EN) should be informed about (and have access to) HIV preventative measures, including male and female condoms.
    - LNG-IUDs can generally be used; however, initiation should be generally avoided if advanced/severe disease

- For women living with HIV using ART, WHO recommends they are generally eligible to use hormonal contraception:
  - Special consideration for efavirenz or nevirapine and some protease inhibitors may be warranted
  - Consistent and correct use of condoms, male or female, is critical to protect against STIs/HIV and for prevention of HIV transmission

- Copper-bearing IUD (Cu-IUD) or LNG-IUD—use for women with increased risk of STIs
  - Initiation—Many women with increased risk of STIs can generally undergo IUD initiation (MEC Category 2); unless with a very high individual likelihood of STIs in which they generally should not have an IUD inserted until appropriate testing and treatment occur (MEC Category 3).
  - Continuation—Women at increased risk of STIs can generally continue use of either Cu-IUD or LNG-IUD (MEC Category 2).

The Quick Reference Chart for the WHO Medical Eligibility Criteria for Contraceptive Use is presented on the following page.
2015 Quick Reference Chart for the WHO Medical Eligibility Criteria for Contraceptive Use –
to initiate or continue use of combined oral contraceptives (COCs), depot-medroxyprogesterone acetate (DMPA), progestin-only implants, copper intrauterine device (Cu-IUD)

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>Sub-condition</th>
<th>COC</th>
<th>DMPA</th>
<th>Implant</th>
<th>Cu-IUD</th>
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<tbody>
<tr>
<td>Pregnancy</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>See I,</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Less than 6 weeks postpartum</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>See I,</td>
</tr>
<tr>
<td></td>
<td>6 weeks to &lt; 6 months postpartum</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>6 months postpartum or more</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Postpartum and not breastfeeding</td>
<td>&lt; 21 days</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>&lt; 21 days with other risk factors for VTE**</td>
<td>NA</td>
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</tr>
<tr>
<td></td>
<td>≥ 21 to 42 days with other risk factors for VTE**</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>&gt; 42 days</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Postpartum and breastfeeding or not breastfeeding</td>
<td>≥ 48 hours or more than 4 weeks</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>≥ 48 hours to less than 4 weeks</td>
<td>NA</td>
<td>NA</td>
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<td>Postabortion</td>
<td>Immediate postpartum</td>
<td>NA</td>
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<td>Smoking</td>
<td>Age ≥ 35 years, &lt; 15 cigarettes/day</td>
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<td></td>
<td>Age ≥ 35 years, ≥ 15 cigarettes/day</td>
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<td>Multiple risk factors for cardiovascular disease</td>
<td>Hypertension</td>
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<td>BP: blood pressure</td>
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<td>History of DVT/PE</td>
<td>History of (where BP cannot be evaluated)</td>
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<td></td>
<td>Elevated BP: systolic 140 – 159 or diastolic 90 – 99</td>
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<td>NA</td>
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<tr>
<td></td>
<td>Elevated BP: systolic ≥ 160 or diastolic ≥ 100</td>
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<td>NA</td>
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<td></td>
<td>Vascular disease</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Known thrombogenic mutations</td>
<td>Ischemic heart disease (current or history of) or stroke (history of)</td>
<td>NA</td>
<td>NA</td>
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<td>Known hyperlipidemias</td>
<td>Complicated valvular heart disease</td>
<td>NA</td>
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<td>Systemic lupus erythematosus</td>
<td>Positive or unknown antiphospholipid antibodies</td>
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<td>NA</td>
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<tr>
<td></td>
<td>Severe thrombocytopenia</td>
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<td>NA</td>
<td>NA</td>
<td></td>
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<tr>
<td></td>
<td>Immunosuppressive treatment</td>
<td>NA</td>
<td>NA</td>
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<td></td>
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<tr>
<td>Headaches</td>
<td>Non-migrainous (mild or severe)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
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<tr>
<td></td>
<td>Migraine without aura (age &lt; 35 years)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Migraine without aura (age ≥ 35 years)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Migraine with aura (at any age)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*Category 1: There are no restrictions for use.
*Category 2: Generally use; some follow-up may be needed.
*Category 3: Usually not recommended; clinical judgment and continuing access to clinical services may be required for use.
*Category 4: The method should not be used.


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Implanon NXT OJT Learner’s Workbook – 65
Appendix G: Implanon NXT Insertion Job Aid

**Requirements for Implanon NXT Insertion**

1. Kidney dish
2. Sterile surgical drapes
3. Bowl
4. Pair of sterile surgical gloves
5. Antiseptic solution
6. Local anesthetic (1% concentration without epinephrine)
7. Sterile syringe and long needle (21-gauge)
8. Pressure bandage
9. Sterile gauze
10. Implanon NXT
11. Sterile skin closure

**Steps for Implant Insertion**

1. Locate insertion site (8 – 10 cm from medial epicondyle of the humerus)
2. Clean insertion site with antiseptic twice
3. Anesthetize at the incision site with 3ml of 1% lignocaine (without epinephrine)
4. Prepare the trocar by removing the transparent protection cap. Do not touch the purple slider
5. Stretch the skin around the insertion site. Puncture the skin with the tip of the needle
6. Lower the applicator to a horizontal position. While lifting the skin with the tip of the needle, slide the needle to its full length. You may feel slight resistance but do not exert excessive force
7. Press the purple slider downwards. Release and remove the applicator/trocar
8. Verify presence of implant by palpation
9. Close the insertion site with a sterile skin closure
10. Apply pressure bandage to minimize bleeding and bruising. Client to remove bandage after 24 hrs and sterile skin closure after 5 days

Job aid developed in coordination with MOH, Kenya
Appendix H: Implant Removal Job Aid

**IMPLANT REMOVAL JOB AID**

### REQUIREMENTS FOR IMPLANT REMOVAL

1. Sterile surgical drape
2. Bowl
3. Kidney dish
4. Pair of sterile surgical gloves
5. Antiseptic solution
6. Local anesthetic (1% concentration without epinephrine)
7. Sterile syringe and long needle (21-gauge)
8. 1 scalp with blade
9. 1 curved mosquito forceps
10. 1 straight mosquito forceps
11. Pressure bandage
12. Sterile gauze
13. Sterile skin closure (Blastoplast)

### STEPS FOR IMPLANT REMOVAL

1. Locate presence of 1 or 2 rod implant by palpation. Refer for further examination if not located.
2. Clean the site with antiseptic solution.
3. Anesthetize the incision site and under the end of the capsule with up to 1ml of 1% lignocaine (without epinephrine).
4. Make a small (2mm) longitudinal incision.
5. Gently push the implant toward the incision until the tip is visible. Grasp the implant with a curved mosquito forceps and gently remove it.
6. If the tip of the implant does not become visible in the incision, gently insert a forceps tip into the incision.
7. Confirm that the entire implant has been removed.
8. If removing two rod implants, repeat the procedure for the second rod.
9. Press down on the incision for 2 minutes or so to stop any bleeding.
10. Bring the edges of the incision together and close with a sterile skin closure.
11. Apply sterile gauze with a pressure bandage to minimize bruising. The woman may remove the pressure bandage after 24hrs and the sterile skin closure after 5 days.

Job aid developed in coordination with MOH, Kenya
Appendix I: Checklist for Screening Clients Who Want to Initiate Contraceptive Implants

Checklist for Screening Clients Who Want to Initiate Contraceptive Implants

To determine if the client is medically eligible to use implants, ask questions 1–6. As soon as the client answers YES to any question, stop, and follow the instructions after question 6.

- **NO** 1. Have you ever been told you have breast cancer? **YES**
- **NO** 2. Do you currently have a blood clot in your legs or lungs? **YES**
- **NO** 3. Do you have a serious liver disease or jaundice (yellow skin or eyes)? **YES**
- **NO** 4. Have you ever been told that you have a rheumatic disease, such as lupus? **YES**
- **NO** 5. Do you have bleeding between menstrual periods, which is unusual for you, or bleeding after intercourse (sex)? **YES**
- **NO** 6. Are you currently breastfeeding a baby less than 6 weeks old? **YES**

If the client answered **NO** to all of questions 1–6, she can use implants. Proceed to questions 7–12.

If the client answered **YES** to question 1, she is not a good candidate for implants. Counsel about other available methods or refer.

If the client answered **YES** to any of questions 2–5, implants cannot be initiated without further evaluation. Evaluate or refer as appropriate, and give condoms to use in the meantime. See explanations for more instructions.

If the client answered **YES** to question 6, instruct her to return for implant insertion as soon as possible after the baby is six weeks old.

Ask questions 7–12 to be reasonably sure that the client is not pregnant. As soon as the client answers **YES** to any question, stop, and follow the instructions after question 12.

- **YES** 7. Did your last menstrual period start within the past 7 days? **NO**
- **YES** 8. Did you have a baby less than 6 months ago, are you fully or nearly fully breastfeeding, and have you had no menstrual period since then? **NO**
- **YES** 9. Have you abstained from sexual intercourse since your last menstrual period or delivery? **NO**
- **YES** 10. Have you had a baby in the last 4 weeks? **NO**
- **YES** 11. Have you had a miscarriage or abortion in the last 7 days? **NO**
- **YES** 12. Have you been using a reliable contraceptive method consistently and correctly? **NO**

If the client answered **YES** to at least one of questions 7–12 and she is free of signs or symptoms of pregnancy, you can be reasonably sure that she is not pregnant. The client can have implants inserted now.

If the client began her last menstrual period **within the past 7 days (5 days for Implanon)**, she can have implants inserted now. No additional contraceptive protection is needed.

If the client began her last menstrual period **more than 7 days ago (5 days for Implanon)**, she can have implants inserted now, but instruct her that she must use condoms or abstain from sex for the next 7 days. Give her condoms to use for the next 7 days.

If the client answered **NO** to all of questions 7–12, pregnancy cannot be ruled out.
She must use a pregnancy test or wait until her next menstrual period to have implants inserted.
Give her condoms to use in the meantime.