This report summarizes the findings of the 2004 Egypt Service Provision Assessment (ESPA) Survey carried out by the Ministry of Health and Population. ORC Macro provided financial and technical assistance for the survey through the USAID-funded MEASURE DHS+ program, which is designed to assist developing countries to collect data on fertility, family planning, and maternal and child health.

Additional information about the ESPA may be obtained from the Ministry of Health and Population, Family Planning Sector, Cairo, Egypt (telephone 20-2-79444833; fax 20-2-7958097). Additional information about the MEASURE DHS+ project may be obtained by contacting: MEASURE DHS+, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (telephone 301-572-0200; fax 301-572-0999; e-mail: reports@orcmacro.com; internet: www.measuredhs.com).


The 2004 Egypt Service Provision Assessment (ESPA) gathered detailed information on health facility infrastructure, resources, and management systems, and on services for child health, family planning, maternal health (antenatal and delivery care), and selected communicable diseases: specifically, reproductive tract and sexually transmitted infections, and tuberculosis. By identifying both strengths and shortcomings in each of these service areas, the survey’s findings can aid in the development of priorities and strategies to improve health outcomes for all Egyptians.

The survey was undertaken jointly by the Egyptian Ministry of Health and Population (MOHP) and El-Zanaty Associates, with technical assistance provided through ORC Macro under the MEASURE DHS+ project. The United States Agency for International Development (USAID) provided financial support for the survey.

This report presents key findings of the survey with regard to principal aspects of facility infrastructure and service delivery on which information was collected.

**SURVEY OBJECTIVES AND METHODOLOGY**

The 2004 ESPA was designed to meet the following objectives:

- Describe the preparedness of government and non-government health facilities in Egypt to provide quality services for each service area included in the survey;
- Identify gaps in the support services and systems that may affect the ability of facilities to provide quality services;
- Describe the processes used in providing child, maternal, and reproductive health services and the extent to which accepted standards for quality service provision are followed;
- Provide comparisons on findings between regions in Egypt and, at a national level, between different types of facilities, as well as those operated by different authorities (i.e., governmental or non-governmental); and
- Describe the extent to which clients understand what they must do to follow up on the service received so that the best health outcome is achieved.

Sixteen teams of three members carried out data collection at 659 health facilities throughout Egypt. Each team consisted of at least two physicians and at least one woman. Data collection included a review of the facility’s resources, interviews with service providers, observation of consultations between providers and clients, and interviews with clients or child caretakers following consultations. In total, 5,745 consultations were observed, and 2,736 health service providers were interviewed.

The sample of facilities included general, district, and integrated hospitals (68), fever hospitals (13), mother and child health centers and urban health units (69), rural health units (304), mobile units (71), health offices (34) and non-governmental organization (NGO) facilities (100). The findings from the survey are representative for all facilities at the regional level (Upper Egypt, Lower Egypt, and Urban Governorates) and by facility type at the national level.
The ESPA gathered information on health service capacity and infrastructure, as well as supervision and support systems for quality assurance and infection control.

The ESPA specifically looked at the range of services provided, how often these services are available, and important infrastructure components such as water and electricity.

According to the ESPA definition, facilities provide an acceptable level of service at an acceptable frequency if they offer consultations for sick children at least five days per week, preventive services (child immunization, routine growth monitoring, and antenatal care) at least one day per week, and services for family planning and for sexually transmitted infections at least one day per week. In addition, at least one physician must be assigned to the facility.

### Availability of a Range of Services and Qualified Staff

A full range of maternal, child, and reproductive health services is available, at this defined minimum frequency, in 41 percent of all Egyptian health facilities. Rural health units, mother and child health centers and urban health units offer a full array of basic services more often than other types of facilities. Hospitals, with their expected focus on curative care, provide this range of services least frequently.

Growth monitoring and child immunization are offered least often. Immunization services are chiefly provided through health offices and rural health units; hospitals and urban health units often do not provide immunizations, especially when there is a lower-level facility nearby that does provide this service. However, accessing services in two different facilities on the same day might prove difficult for some clients, particularly since most facilities providing immunization services offer them only one or two days a week (see “Child Health Services”).

Virtually all facilities have at least one assigned physician.

Facilities in the Urban Governorates are the least likely to provide the full range of services at the minimum defined frequency, compared with facilities in Lower and Upper Egypt.

### Facility Infrastructure

To assess facility infrastructure, the ESPA looked for the presence of a regular, on-site water supply and a constant supply of electricity or a functioning generator.

Basic client comfort amenities were defined as a protected waiting area, a functioning client latrine, and a general level of cleanliness.

Slightly more than 50 percent of the facilities met all these standards. Almost 90 percent had electricity and/or a regular supply of water. About two-thirds had facilities for client comfort.

#### Availability of priority services

- All basic services: 50%
- Curative care for sick children: 84%
- STI services: 89%
- Family planning: 97%
- Antenatal care: 85%
- Child immunizations: 71%
- Growth monitoring: 62%
- At least one physician: 100%
- All basic services, minimum frequency*: 41%

*Facility offers the full range of basic services, with care for sick children available at least five days per week and other services available at least one day per week.

#### Water, electricity, and client amenities

- Regular supply of water: 88%
- Regular supply of electricity: 88%
- All client amenities*: 61%
- Regular water and electricity, and all client amenities: 52%

*Facility has a functioning client latrine, a client waiting area sheltered from rain and sun, and a basic level of cleanliness.
Supervision and Staff Development

Regular supervision and in-service training opportunities for health providers help support adherence to established medical standards and strengthen staff’s technical competence.

According to the ESPA definitions, if an external supervisor visited a facility during the past six months, the facility was considered to receive routine facility-level supervision. Facilities where at least half of the interviewed staff had been personally supervised in the past 6 months were considered to have routine staff supervision. Facilities where at least half of the respondents had received relevant in-service training during the past 12 months were considered to provide routine staff training.

The ESPA found that both external supervision and routine staff supervision are widespread. In-service training was far less common: less than one-fourth of the facilities had provided training for 50 percent or more of their staff in the past year. Facilities in the Urban Governorates were more likely to provide routine in-service training than those in Upper or Lower Egypt.

Logistics Systems for Pharmaceutical Commodities

To determine if logistics systems effectively ensured the quality and quantity of key pharmaceutical commodities, the ESPA evaluated storage conditions, stock monitoring, and maintenance of vaccines, contraceptive methods, and medicines.

Facilities had effective logistics systems for most pharmaceutical commodities. No fever hospitals or mobile units store vaccines; among the other facilities, 83 percent met standard guidelines for maintaining and monitoring the cold chain. This is an improvement over the 76 percent observed in 2002. Although expired vaccines were rarely found, only 66 percent of facilities stored their vaccines by expiration date. Up-to-date inventories for vaccines were maintained by 84 percent of facilities.

Eighty-nine percent of facilities storing contraceptive methods maintained them under good conditions (i.e. with commodities dry, off the floor, and stored out of the sun in a location free of pests or rodents). Expired items were rarely found, although only half of facilities stored contraceptive commodities by expiration date. Seventy-one percent of facilities maintained up-to-date inventories for contraceptives.

Storage conditions for medicines were adequate in 72 percent of facilities. Medicine storage areas for 19 percent of facilities had evidence of rodents or pests, and 16 percent of facilities did not store medicines off the ground and protected from water. Few facilities had expired medications, and 60 percent maintained up-to-date inventories.

There were no consistent changes noted from 2002 to 2004 in monitoring and storage of contraceptive and medical commodities.

Overall, stock monitoring systems (whether for vaccines, contraceptive supplies or medicines) were weakest in Upper Egypt and strongest at facilities in the Urban Governorates.

Infection Control

The ESPA assessed conditions and practices for infection control in each facility. These included
- capacity to follow standards for sterilization or high-level disinfection (HLD) of equipment prior to reuse
- availability of infection control items (soap and water,
sharps box, chlorine-based disinfecting solution, and clean latex gloves) in all relevant service areas.

- safe disposal of contaminated (biohazardous) materials
- observed adherence to standards for safe injection procedures (for therapeutic injections and immunizations).

The ESPA found that most facilities need to improve infection control capacity and practices.

Fifty-four percent of facilities had the necessary equipment or chemicals for sterilization or HLD; even fewer (35%) also had a timer and an adequately trained staff member. Only one-tenth of facilities had written sterilization or HLD guidelines available.

Facilities with all components for sterilization or HLD varied from 60 percent of mobile units to 8 percent of health offices.

The percentage of facilities where equipment, knowledge of proper processing time and temperature, and an automatic timer were all available has decreased from 45 percent in 2002 to 35 percent in 2004.

### Capacity for sterilization or high-level disinfection

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>54</td>
</tr>
<tr>
<td>Equipment and knowledge of processing time</td>
<td>43</td>
</tr>
<tr>
<td>Equipment, knowledge of processing time and auto timer</td>
<td>35</td>
</tr>
<tr>
<td>Written guidelines for sterilization or HLD</td>
<td>11</td>
</tr>
</tbody>
</table>

Only 4 percent of all facilities had all items needed for infection control in all of the assessed service delivery areas. Hand-washing soap was the item most commonly lacking in each service area assessed.

Half of the facilities had sharps boxes available in all relevant areas. Disinfectant solution was available in all relevant service areas in almost 2 in 3 facilities. Although thin, disposable gloves were universally available, only 2 in 10 facilities had latex gloves necessary for preventing infection. Latex gloves were less commonly found in 2004 than in 2002, in all relevant service areas.

About 8 in 10 facilities used appropriate systems for disposal of contaminated waste, such as collection and disposal by an external party, incineration, or burning and burying. However, only 23 percent of facilities also ensured that contaminated waste was kept in a protected environment prior to disposal (compared with 30 percent in 2002).

Practices for immunizations followed standards for good quality. Almost all facilities used new syringes and needles for injections. Sharps boxes are more widely used by providers of immunizations (more than 85 percent of observed injections) than by providers of therapeutic injections (more than 60 percent of observed injections). The overall use of sharps boxes increased from 73 percent in 2002 to 77 percent in 2004.
The ESPA used the guidelines established by the integrated management of childhood illnesses (IMCI) strategy as the basis for assessing essential child health services. The Ministry of Health and Population has adopted the IMCI program. The program is in an expansion phase, and was implemented in only 134 of 245 districts at the time of the survey.

Specifically, the ESPA assessed outpatient care for sick children, routine childhood immunization, and growth monitoring.

Observers of sick-child consultations looked for five practices: 1) full assessment of the child’s illness, including a physical examination, following IMCI guidelines; 2) assessment of immunization status; 3) assessment of nutritional status; 4) provision of instructions to the caretaker regarding preventive measures and proper use of prescribed treatment; and 5) adherence to practices to support continuity of care.

**Availability of Child Health Services**

Two-thirds of facilities offer the three assessed services (outpatient care for sick children, immunization, and growth monitoring). All three services are found most often at MCH/urban health units (74 percent) and rural health units (84 percent). These findings are similar to those from 2002, with some improvement noted in availability of the package of services for general services hospitals and facilities in Lower Egypt.

Outpatient care for sick children is the most commonly offered child health service (84 percent of facilities), and growth monitoring is the least offered (62 percent). The 2003 Egypt Interim DHS found that 23 percent of children 12 to 23 months are stunted. Considering these findings, more frequent growth monitoring is highly desirable.

Most facilities that provide immunization services offer them only one or two days per week. Only 7 percent of facilities provide immunizations five days per week.

**Assessment of Illness**

Health care providers treating sick children rarely (6 percent) assessed the three major danger signs (convulsions, vomiting all food and drink, and inability to eat or drink), according to ESPA observations. Assessment of vomiting was the most common.

Health care providers were more likely to check for the three major symptoms of difficulty breathing, diarrhea, and fever, than for the danger signs.

Providers do not commonly conduct all of the standard elements of a physical examination. They most often (74 percent) check the child’s temperature, but they counted the respiratory rate for only 17 percent of children and for 41 percent of children diagnosed with a severe respiratory illness. Dehydration, a major cause of child mortality, was assessed for only 25 percent of children overall, for only 69 percent of those with severe or persistent diarrhea, and for 43 percent of those with other types of diarrhea. Providers assessed just 1 in 5 children for anemia.

For other standard elements of a physical exam, providers had a mixed record. They checked children’s throat with a tongue depressor in two out of three observed cases; however, they rarely used a light to visualize the throat. Providers examined the ear, checked for pedal edema, or assessed the child for generalized wasting in 1 in 10 cases or fewer.

Antibiotics were prescribed for 94 percent of the children diagnosed with strep throat and for 87 percent of children diagnosed with a severe respiratory illness. Antibiotic treatment is appropriate for these illnesses, according to IMCI guidelines.

**Danger signs and symptoms assessed**

<table>
<thead>
<tr>
<th>Danger signs and symptoms assessed</th>
<th>Convulsions</th>
<th>Vomiting</th>
<th>Inability to drink/breastfeed</th>
<th>All danger signs</th>
<th>Fever</th>
<th>Cough/difficulty breathing</th>
<th>Diarrhea</th>
<th>Three major symptoms</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td></td>
<td>16</td>
<td>41</td>
<td></td>
<td>6</td>
<td>81</td>
<td>65</td>
<td>61</td>
<td>33</td>
</tr>
</tbody>
</table>
Materials and Essential Medicines

Basic equipment and supplies required for assessment of a sick child (minute timer, tongue depressor, thermometer) were present in most facilities. A thermometer was present in 3 in 4 facilities, and a minute timer and tongue depressor were available in half of facilities. Essential “first-line” medicines such as oral antibiotics and oral rehydration salts were available in 2 out of 3 facilities; pre-referral medicines (chloramphenicol) were available in 1 in 10 facilities. Other essential medicines, including injectable antibiotics for providing urgent treatment, were not commonly available, with the exception of penicillin, which was available in 73 percent of facilities.

Furthermore, in most cases (70 percent), prescribed medicines had to be purchased from outside the facility, thus reducing the likelihood that the child would be treated appropriately. However, there has been some improvement in the proportion of clients leaving the facility with at least some of their medicines. The number of clients leaving the facility with only a prescription has fallen by half (from 47 percent in 2002 to 28 percent in 2004).

Counseling on Child Health

According to the IMCI strategy, providers should give three educational messages to every child’s caretaker:

1) provide extra fluids to the child during the illness, 2) continue feeding the child during the illness, and 3) watch for signs and symptoms that should prompt the child’s immediate return to the facility.

These messages were provided to only 8 percent of observed cases. This is a slight improvement over 2002, when only 3 percent received these educational messages. Only 13 percent of caretakers were told when and why to bring a child back to the facility for immediate treatment. Although visual aids to support caretaker education were hardly ever used during consultations, they were available at a quarter of all facilities. There has been essentially no change since 2002 in the use of visual aids during consultations with caretakers.

Preventive Measures for Child Health

Preventive measures were not commonly included in sick child consultations.

Providers conducted a nutritional assessment of the child, or discussed nutritional status or feeding practices, during only about one in four observed cases. Normal feeding practices were discussed with the caretaker during 27 percent of consultations, most often for children under 24 months of age (36 percent of these consultations). This is an improvement over 2002 (19 and 26 percent, respectively).

Half of the sick children were weighed, and half of these had their weight plotted for comparison against a standard based on either height or age, which is a modest improvement over 2002 (42 and 20 percent, respectively).

Providers assessed children’s immunization status in only 18 percent of children under 24 months of age and only 10 percent of children 2 years and older. In addition, providers rarely used individual child health cards during most consultations, thereby limiting continuity of care.

### Preventive measures during sick child visits

<table>
<thead>
<tr>
<th>Preventive measure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child weighed</td>
<td>50</td>
</tr>
<tr>
<td>Weight plotted</td>
<td>25</td>
</tr>
<tr>
<td>Normal feeding assessed (children under 2)</td>
<td>36</td>
</tr>
<tr>
<td>Normal feeding assessed (children 2 and older)</td>
<td>16</td>
</tr>
<tr>
<td>Immunization status assessed (children under 2)</td>
<td>18</td>
</tr>
<tr>
<td>Immunization status assessed (children 2 and older)</td>
<td>10</td>
</tr>
</tbody>
</table>
For assessing family planning services, the ESPA focused on key factors that contribute to the appropriate, efficient, and continuous use of contraceptive methods, including:

- the availability of a variety of methods to accommodate client needs and preferences
- counseling and screening of clients for appropriateness of methods
- client education regarding options, side effects, and method use
- appropriate infrastructure and resources for quality family planning services (client privacy, infection control measures, guidelines and protocols)
- availability of other relevant health services, such as treatment of reproductive tract infections and sexually transmitted infections (RTI/STIs)
- providers’ adherence to quality service delivery standards for procedures such as pelvic examinations and insertion of intrauterine devices (IUDs).

The ESPA observed 1,959 clients at 523 facilities. Thirty-one percent of the women were first-time clients, and one percent had never been pregnant.

**Availability of Family Planning Services and Methods**

Family planning services are offered at least five days per week at 95 percent of facilities assessed. Modern, temporary contraceptive methods are available at nearly all facilities (97 percent), with 84 percent offering all four of the most common methods used in Egypt: IUDs, contraceptive pills, contraceptive injections, and male condoms. Of these facilities, 77 percent had all four methods available the day of the survey. Over the last 2 years, the proportion of eligible facilities offering modern methods of family planning has remained stable at 97 percent.

**Client Medical History and Exam**

For first-visit family planning clients, the provider should assess both personal and health issues in order to recommend the most appropriate contraceptive method. This includes a basic physical exam.

**Provider assessment of first-visit family planning clients**

<table>
<thead>
<tr>
<th>Client history</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>83</td>
</tr>
<tr>
<td>History of pregnancy</td>
<td>89</td>
</tr>
<tr>
<td>Current pregnancy status</td>
<td>35</td>
</tr>
<tr>
<td>Desired timing for subsequent birth</td>
<td>26</td>
</tr>
<tr>
<td>Breastfeeding status</td>
<td>53</td>
</tr>
<tr>
<td>Regularity of menstrual cycle</td>
<td>82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical history</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>1</td>
</tr>
<tr>
<td>Symptoms of RTI/STI</td>
<td>43</td>
</tr>
<tr>
<td>Any chronic illness</td>
<td>47</td>
</tr>
</tbody>
</table>

In 2004, as in 2002, providers rarely gathered thorough medical histories for new family planning clients. Given the fact that nearly all Egyptian women seeking family planning services have already had a pregnancy (99 percent), information on current pregnancy and breastfeeding status is particularly relevant. However, current preg-
nancy status was assessed for just 35 percent of first-visit clients, and breastfeeding status was assessed for slightly more than half.

In addition, fewer than half of all first-visit clients were asked about symptoms of STIs or chronic illnesses, and almost none were asked about smoking.

Basic physical assessment of new family planning clients was not widely conducted. Among all first-visit clients, 65 percent had their blood pressure measured, and about half had their weight measured.

RTI/STI Treatment for Family Planning Clients

Because they are sexually active, family planning clients are at increased risk for contracting RTI/STIs. In addition, since the IUD is the most common family planning method in Egypt, diagnosis, treatment, and preventive counseling for RTI/STIs are especially important elements of quality family planning care.

Eighty-one percent of facilities reported that providers also diagnose and treat RTI/STIs among family planning clients, similarly to 2002. However, the availability of appropriate medicines varied widely, and was slightly less than in 2002. While medicines for treating trichomoniasis and syphilis were available in 51 and 68 percent of facilities respectively, treatments for candidiasis and gonorrhea were each available in only 3 percent of facilities.

Few facilities had specific guidelines for treatment. Protocols for diagnosis and treatment of RTI/STIs were available in 10 percent of facilities, and World Health Organization syndromic approach guidelines in only 1 percent. This is a decrease from the 2002 findings.

Provider Practices During Pelvic Examinations and IUD Insertions

Almost all pelvic examinations and IUD insertions were conducted under private conditions. Providers almost always used sterilized or HLD-processed instruments. However, other quality standards for these procedures are inconsistent, including measures for infection control. Providers rarely washed their hands before procedures. Soap was available in 67 percent of family planning areas, an improvement from 51 percent in 2002. Latex gloves were available in only 30 percent of family planning service areas. This is a decrease from 51 percent in 2002. Providers used nonlatex disposable gloves, but
these are not sufficient for infection control according to the ESPA definitions. Providers commonly placed instruments in disinfecting solution immediately after use, but rarely decontaminated the examination table or bed after the procedure.

In addition, providers rarely explained the pelvic exams and IUD insertion to clients, either before or during the procedure.

**Resources and Procedures for Counseling Clients**

Whether they are new contraceptive users or continuing users, clients need information on how to use their method, its possible side effects, what to do for problems, and when to come for follow-up visits. The ESPA assessed client counseling practices, as well as visual aids and resources needed for counseling.

Observation of counseling sessions indicated that information on use of methods is provided more consistently than information on side effects and problem management.

For example, eight in ten clients who received hormonal methods of family planning were told when they should take the pill or injection; 38 percent were informed about menstrual changes, and 20 percent were told about other side effects. Only 28 percent of clients were told what to do if they missed a pill or injection.

**Information provided to hormonal method users**

<table>
<thead>
<tr>
<th>Information Provided</th>
<th>Client Reported</th>
<th>Provider Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to use method</td>
<td>61</td>
<td>86</td>
</tr>
<tr>
<td>Possible side effects</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>What to do for problems</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Mention followup visit</td>
<td>81</td>
<td>89</td>
</tr>
</tbody>
</table>

Overall, counseling on the use and side effects of IUDs was less consistent than counseling on hormonal methods. Only 40 percent of clients receiving IUDs were told to check the string, and 44 percent were told about spotting and bleeding; however, 80 percent of IUD users reported that they knew how to check the string, indicating that many of these clients may have received this information earlier.

Exit interviews indicated that client knowledge on key points was good for most methods. This suggests that although counseling on use, side effects and problem management may not have taken place on the day of the survey, it may have occurred during prior visits.

Although visual aids for client education were almost universally available, they were used with only 7 percent of all clients and 14 percent of first-visit clients. Guidelines and protocols for family planning — including information on screening for eligibility for different methods — were available in 37 percent of facilities. Client cards and conditions assuring some degree of privacy were available in over 80 percent of facilities. All conditions necessary for quality counseling were available in 29 percent of facilities.
Any woman may develop complications during pregnancy or delivery. Therefore, all pregnant women need antenatal care to prevent, detect, and treat problems that may arise during pregnancy and labor. They should also have access to life-saving emergency obstetric care when needed.

The ESPA asked whether facilities offered antenatal and delivery care and assessed their ability to support quality maternal health services. Observers of antenatal consultations noted whether providers conducted a physical examination appropriate for the gestational age, provided necessary counseling, and followed practices to support continuity of care.

A total of 1,093 women were observed in 320 facilities. For nearly half of these clients, this was their first antenatal care visit.

**Antenatal Care**

**Availability of Antenatal Care**

Antenatal care services are offered at most health facilities in Egypt (87 percent), and are available five days per week in over half of these facilities. They are available less often in hospitals (82 percent) than in rural health units and MCH/urban health units (96 percent each).

**Resources to Support Quality Antenatal Care**

Individual client cards, which allow providers to follow up on a woman’s pregnancy and health status, were available in 68 percent of facilities. Written guidelines or protocols on managing common problems during pregnancy were available in only 8 percent of facilities. Visual aids for client counseling were available in 19 percent of facilities. In total, just 5 percent of facilities had all these necessary items for quality antenatal care services. This is lower than the 9 percent found in 2002, mostly because fewer facilities have visual aids and written protocols and guidelines.

**Equipment and Medicines**

To provide basic antenatal care, providers need a blood pressure apparatus, a fetoscope, iron tablets, folic acid tablets, and tetanus toxoid (TT) vaccine. Only 18 percent of facilities had all five items available. Folic acid, iron tablets, TT vaccine, and a fetoscope were unavailable at about half of the facilities. Iron tablets in particular are less widely available than they were in 2002, when 73 percent of facilities had them.

<table>
<thead>
<tr>
<th>Medicines available for antenatal care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotic</td>
</tr>
<tr>
<td>Deworming</td>
</tr>
<tr>
<td>Trichomoniasis</td>
</tr>
<tr>
<td>Chlamydia</td>
</tr>
<tr>
<td>Gonorrhea</td>
</tr>
<tr>
<td>Syphilis</td>
</tr>
<tr>
<td>Treatment for four main STIs</td>
</tr>
<tr>
<td>Candidiasis</td>
</tr>
<tr>
<td>Antihypertensive</td>
</tr>
</tbody>
</table>

All types of facilities, including general service hospitals, commonly lacked basic medicines for managing pregnancy complications. Recommended antibiotics were available in 68 percent of facilities.

Overall, facilities in Lower Egypt are somewhat more likely than facilities elsewhere to have all the necessary antenatal care items assessed by the SPA.

**Client History, Assessment and Examination**

The first antenatal care visit should include a basic history to assess pre-existing risk factors. In 92 percent of
During first visits, providers asked the client when she had had her last menstrual period, and in 79 percent of first visits, providers asked the woman whether she had ever been pregnant before. In 82 percent of first visits, they asked the client’s age. During first visits with women who had been pregnant before, providers asked 66 percent if they had ever had pregnancy complications. It was less common for providers to ask first-visit clients about medicines they were taking (41 percent). Only 26 percent of women were asked all these basic questions during the first visit.

Antenatal care should focus on early detection and skilled and timely interventions for conditions known to affect maternal and infant health.

During all antenatal care visits, providers should monitor how the pregnancy is progressing and check for any risk factors. For women at least five months pregnant, providers listened for fetal heartbeat in only one out of five visits, but they asked if the client had noticed fetal movement in 62 percent of visits. They checked fetal position just as often (62 percent of visits for women eight months pregnant or more).

For all antenatal visits, the provider should check the client’s blood pressure and ask about spotting or bleeding. Nearly all providers checked blood pressure (93 percent), but only 25 percent of clients were assessed for vaginal bleeding. Overall, 15 percent of antenatal care visits included all the basic questions and procedures appropriate for the client’s month of pregnancy. While low, this is an improvement over 2002, when only 3 percent of observed clients received a complete assessment.

The antenatal care standards promoted in Egypt require anemia testing at a client’s first antenatal visit and a urinalysis at every visit. Six in ten antenatal visits included a urinalysis, and more than half of first visits included a blood test. This generally corresponds with ESPA findings on facilities’ ability to conduct laboratory tests: 77 percent of facilities could test for anemia, 66 percent could test for urine protein, and 59 percent could test for urine glucose.

Antenatal Counseling

Providers discussed nutrition with less than half of antenatal clients. Among women who were prescribed iron or folic acid, 36 percent received an explanation of why the supplements were necessary. Providers talked about the progress of the pregnancy with half of their clients.

### Elements of antenatal care visits

<table>
<thead>
<tr>
<th>Activity</th>
<th>First visits</th>
<th>Follow-up visits</th>
<th>Visits with women 8 months pregnant or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked or counseled about vaginal bleeding</td>
<td>25</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>Asked about fetal movement (5+ months)</td>
<td>62</td>
<td>12</td>
<td>51</td>
</tr>
<tr>
<td>Listened for fetal heart (5+ months)</td>
<td>19</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Checked fetal position (8+ months)</td>
<td>62</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Checked blood pressure</td>
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<tr>
<td>Blood test</td>
<td>53</td>
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</table>

### Counseling during antenatal care visits

Counseling during antenatal care visits is crucial for guiding clients through their pregnancy. Providers should ensure that clients are informed about their health status, the progress of their pregnancy, and the care they should receive. This includes discussions about nutrition, progress of pregnancy, any risk symptoms, delivery plans, exclusive breastfeeding, and family planning after birth.

- **Nutrition**: 38% in first visits, 46% in follow-up visits, 48% in visits with women 8 months pregnant or more.
- **Progress of pregnancy**: 48% in first visits, 51% in follow-up visits.
- **Any risk symptoms**: 12% in first visits, 18% in follow-up visits.
- **Delivery plans**: 8% in first visits, 9% in follow-up visits.
- **Exclusive breastfeeding**: 1% in first visits, 2% in follow-up visits.
- **Family planning after birth**: 5% in first visits, 6% in follow-up visits.
Counseling on risk symptoms was not a routine part of antenatal consultations. Less than 20 percent of women were told to seek help if they had specific risk symptoms. For example, about 10 percent of clients were told that vaginal bleeding and blurred vision are risk signs.

During exit interviews, interviewers asked antenatal care clients whether the provider had told them about pregnancy warning signs. Twenty-nine percent reported they had, either that day or during a previous visit. However, when asked to name any risk symptoms, only about one in ten women mentioned vaginal bleeding, headaches or blurred vision as warning signs; 16 percent mentioned swollen hands or face.

Delivery Services

The ESPA assessed the availability of comprehensive essential obstetric care components (including normal delivery and emergency obstetric services), and facility capacity to support quality delivery services. In addition, the survey assessed the availability of emergency transport to enable a woman’s timely transfer to a referral site in the event that needed services are not available at the facility.

Availability of Delivery Services

Although 87 percent of facilities offer antenatal care, only 26 percent offer delivery services, and just 24 percent provide both. In addition, only 6 percent offer caesarean sections. This finding reflects the organization of the health system in Egypt, where inpatient services, such as delivery care, are available at general hospitals or at MCH/urban health units.

Delivery services remain more widely available in Upper Egypt (35 percent of facilities) and least available in Lower Egypt, where the proportion of facilities offering delivery services has decreased from 26 percent in 2002 to 18 percent in 2004.

Emergency Transport

When a facility offers basic delivery services but cannot manage complicated deliveries or perform caesarean sections, emergency transport must be available so that women have access to life-saving care. However, only 26 percent of facilities offering delivery services, and 10 percent of all facilities, reported that they had an emergency transportation system in place.

Infrastructure and Resources for Quality Delivery Care

To offer quality delivery services and emergency obstetric care, facilities need certain equipment and resources available. Resources for delivery care assessed by the ESPA include partographs (documents used to monitor an individual woman’s labor), written guidelines on manag-
ing delivery complications, a provider who can handle deliveries available 24 hours (either on site or on call), a private environment for giving birth, a bed, and an examination light. Facilities should also have the resources necessary for infection control.

One in five facilities had all infection control items (soap, water, sharps box, disinfecting solution, and clean latex gloves) present in the delivery service area. The item most often lacking was hand-washing soap, which was available in fewer than half of the facilities. Partographs and written guidelines on delivery complications were rarely available.

Although nearly all facilities reported that a physician was always available (either on site or on call) to conduct deliveries, a 24-hour duty schedule was observed at only 57 percent of facilities.

Almost all facilities had a bed for delivery (98 percent) and a delivery area with both visual and auditory privacy (96 percent), and 84 percent of facilities had an examination light that could be aimed to view the perineum.

The ESPA assessed whether facilities had the supplies needed for normal delivery, including scissors or a blade to cut the umbilical cord, an umbilical cord clamp, any suction apparatus, antibiotic eye ointment for newborns, and skin disinfectant for the perineum. Only one-third of facilities had all of these essential supplies.

To manage delivery complications and emergencies, facilities should have additional medicines and supplies available. The ESPA looked for the presence of needles and syringes, intravenous solution and infusion sets, an injectable oxytocic to induce labor, and suture supplies, available in either the delivery room or an immediately adjacent area. Only 18 percent of facilities had all these items needed to manage common delivery complications. Even at general service hospitals, which are expected to handle obstetric complications, only 44 percent had all the necessary items.

To manage more serious complications, facilities need medicines such as anticonvulsants for eclampsia and broad-spectrum antibiotics for sepsis. Injectable antibiotics were available in 58 percent of general service hospitals, and 49 percent had injectable anticonvulsants.

In addition to the supplies and equipment mentioned above, a facility that is expected to manage complicated deliveries should be able to mechanically assist the deliv-
Because every pregnancy may have complications, and because most complications are unpredictable, preventing maternal mortality and morbidity depends on women’s having access to trained delivery care providers and life-saving emergency interventions at the time of labor and delivery.

ery when contractions are ineffective. Further, when life-saving emergency obstetric care is required, the capacity to perform a caesarean section and to transfuse blood is essential.

Less than half of general service hospitals had forceps or a vacuum extractor to mechanically assist delivery. Six in ten can carry out blood transfusions, and 67 percent have the capacity to perform caesarean sections.

Facilities in Upper Egypt are consistently least equipped to provide normal delivery services and to manage both common and serious complications of labor and delivery. Facilities in Lower Egypt (59 percent) and the Urban Governorates (42 percent) are more likely to have all essential items for delivery. This reflects a large improvement in Lower Egypt and a deterioration for facilities in the Urban Governorates since 2002.
Services for Reproductive Tract and Sexually Transmitted Infections (RTI/STIs)

Integrating RTI/STI diagnosis and treatment into other health services, such as family planning and antenatal care, increases providers’ ability to detect new RTI/STI cases and follow up effectively with clients. The ESPA observed client consultations for STIs and reproductive tract infections in order to assess facilities’ capacity to provide quality RTI/STI services. Observers noted whether the provider elicited relevant client history and social information, conducted appropriate physical examinations and laboratory tests, and offered client counseling for treatment and prevention.

A total of 622 RTI/STI clients were observed in 262 different facilities. All of the observed clients were women.

Availability of RTI/STI Services

Eighty-nine percent of facilities reported that they offered counseling, testing, diagnosis, or treatment for RTI/STIs, a substantial increase from 62 percent in 2002. Seven in ten of these facilities indicated that they integrate RTI/STI services into other areas, including general outpatient, antenatal, and family planning services. In addition, antenatal care providers offer RTI/STI care for clients in about one out of three facilities that reported they do not provide routine RTI/STI services; family planning providers offered RTI/STI care in about one-third of these facilities. RTI/STI services are equally available in all areas of Egypt.

Surprisingly, given that fever hospitals are a priority for training providers in diagnosing and managing HIV/AIDS, only 42 percent of fever hospitals report that they offer STI services.

Capacity to Support Quality RTI/STI Services

To offer quality RTI/STI services, facilities need resources to conduct examinations, laboratory capacity and diagnostic methods to test for STIs, and supplies and medicines for treatment.

Three in four facilities had all the resources necessary for pelvic examinations (bed, examination light, and privacy) in the service areas where RTI/STI clients are normally examined. However, only 18 percent of these areas had everything needed for infection control; latex gloves were the item most often lacking. Availability of hand-washing soap has improved, with 69 percent of facilities having soap in the RTI/STI service areas, compared with 53 percent in 2002. Overall, just 15 percent of facilities had all items needed for both infection control and examinations.
Facilities generally lack the capacity to provide laboratory tests for specific STIs. No fever hospitals had the capacity to test for syphilis on the day of the survey, and only 4 percent of general service hospitals can test for syphilis. However, 13 percent of fever hospitals and 4 percent of general service hospitals can test for gonorrhea.

Extremely few facilities (only 2 percent) had all the needed medicines available to treat trichomoniasis, gonorrhea, chlamydia, and syphilis. Guidelines for RTI/STI diagnosis and treatment are available in only 15 percent of facilities.

**Client Assessment and Examination**

Providers did not generally collect sufficient information from RTI/STI clients. Although providers asked nearly all clients about their symptoms, they less frequently asked how long symptoms had been present. About 22 percent of observed clients were asked about recent sexual contact and/or symptoms in their husband. In addition, only 16 percent of observed RTI/STI clients were explicitly assured about the confidentiality of the information shared between herself and the provider. Each of the elements of an STI consultation was more likely to be included than in 2002; however, the number of clients who receive every element of an RTI/STI consultation remains low.

Most clients received some type of physical examination: 25 percent received a pelvic examination, and when only 3 percent of providers washed their hands before an exam. Eighty percent placed used equipment in decontaminating solution. Almost half of providers wore clean latex gloves, a decrease from 70 percent in 2002.

**STI Counseling Practices**

Nine in ten facilities provided STI counseling under conditions that allowed visual and auditory privacy. In 82 percent of the observed consultations, the provider mentioned a diagnosis to the client; however, only 32 percent of clients were told that the infection was related to sexual activity, an increase from 18 percent in 2002. (In some cases, the diagnosed vaginal infection may not have been an STI.) Nearly all clients were prescribed antibiotics for the infection, and 18 percent also received medicine for their husband. Half of the clients were advised about a follow-up appointment.

Strikingly, despite the fact that most facilities (84 percent) had condoms available, they were hardly ever offered to clients; providers did not generally suggest using condoms until treatment was completed or for future STI prevention. Providers mentioned condoms or HIV/AIDS during only 3 percent of the observed consultations.

In addition, although half of the facilities had visual aids for client education on STIs, these were used in less than 1 percent of observed consultations.

**Services for Tuberculosis**

Services for tuberculosis (TB) are more widely available in 2004 (29 percent of facilities) than they were in 2002 (23 percent). TB services are offered essentially only in general service hospitals, mother and child health centers, and health units. More facilities are using the Directly Observed Treatment Short-course (DOTS) strategy (13 percent in 2002 compared with 22 percent in 2004). Less than 1 in 5 facilities offering TB services had all first-line drugs available on the day of the survey. Even among facilities implementing DOTS, only 19 percent had all first-line medicines available.

**Counseling during RTI/STI consultations**

- Any mention of client diagnosis: 82%
- Any mention of relationship between infection and sexual activity: 32%
- Follow-up appointment discussed: 49%
- Condoms discussed: 2%
- Visual aids used: <1%

<table>
<thead>
<tr>
<th>Elements of RTI/STI consultations</th>
<th>History</th>
<th>Examination</th>
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</thead>
<tbody>
<tr>
<td>Confidentiality assured</td>
<td>16</td>
<td>71</td>
</tr>
<tr>
<td>Symptoms</td>
<td>98</td>
<td>75</td>
</tr>
<tr>
<td>How long had symptoms</td>
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<td></td>
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<tr>
<td>Recent sexual history</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Husband’s symptoms</td>
<td>23</td>
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<tr>
<td>Marital status</td>
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<tr>
<td>External genitalia examined</td>
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<tr>
<td>Pelvic examination</td>
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<tr>
<td>Any lab tests</td>
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</table>

71 percent had their genitalia examined (either with or without a pelvic examination). Laboratory tests for confirming a diagnosis were conducted (or ordered) for 10 percent of clients.

Infection control practices during examinations varied. Only 8 percent of providers washed their hands before examinations, although this is an increase from 2002,
Following observation of consultations, clients in each assessed service area—child health, family planning, antenatal care and RTI/STI care—were asked to participate in an exit interview. The interviews sought to assess clients’ understanding and recall of key elements of the consultation, to learn if clients identified any problems with the care they received, and to better understand why the client chose to use that particular facility for that service.

Clients’ opinion of services has improved since 2002. Among the services where exit interviews were conducted, the caretakers of sick children were the most dissatisfied.

### CLIENT OPINION

Around half of the interviewed clients (across all services) most often cited proximity to their home as the reason they used the facility. Other frequently cited reasons for choosing the facility were the efficiency of the physician, good treatment of clients, and the facility’s good reputation. The availability of a female physician was cited most often by RTI/STI and family planning clients as a factor in their decision to use the facility, and this factor has become increasingly important to clients over the last two years.
Achievements and Challenges

Infrastructure, Resources, and Support Systems
- A full range of maternal, child, and reproductive health services is available at minimum frequency at 41 percent of all health facilities. Rural health units, mother and child health centers and urban health units offer a full array of basic services more often than other types of facilities. Nearly all facilities have at least one assigned physician.
- Although almost all facilities have a regular supply of electricity (or a backup generator), only 72 percent of facilities have a regular supply of water, and fewer than half of all facilities provide basic client amenities as well as regular water and electricity.
- Both external supervision and routine staff supervision are widespread. However, opportunities for formal in-service training, which enable health professionals to maintain their technical competencies and acquire new ones, are few.
- Practices for immunizations follow standards for safe injections, and use of new syringes and needles is universal.
- Capacity to adhere to infection control measures at all relevant service areas is weak; only 4 percent of all facilities have all the necessary items in all service delivery areas. Hand-washing soap and latex gloves are most often unavailable.
- Just over half of all facilities had the necessary equipment or chemicals for sterilization or HLD; only 35 percent had equipment, an automatic timer, and staff who knew the proper processing time and temperature.
- Written guidelines or protocols for specific services and procedures are rarely available in the relevant service area.

Child Health
- Outpatient care for sick children is widely available. Preventive services, such as growth monitoring and immunization, are less frequently offered, which reduces opportunities to offer preventive care.
- Growth monitoring is currently the least widely available child health service across all facilities. In light of documented levels of malnutrition, increasing the availability of this service is advisable.
- Providers do not commonly carry out thorough physical examinations of ill children or conduct a full assessment for major danger signs and symptoms of respiratory problems, diarrhea, and fever.
- Essential medicines for common child illnesses are unavailable in many facilities. In most cases, child caretakers must purchase prescribed medicines outside the facility.

Family Planning
- Almost all facilities assessed offer family planning services at least five days per week, and have supplies of modern, temporary contraceptive methods.
- Providers rarely gather all appropriate client information from new family planning clients. Since almost all Egyptian women seeking family planning services have been pregnant before, current pregnancy and breastfeeding status are important factors to consider when advising on suitable methods. However, when counseling first-visit family planning clients, providers asked only about one-third whether they were currently pregnant and slightly over half whether they were breastfeeding.
- Providers rarely ask about chronic illness, RTI/STIs and smoking when eliciting medical history from first-visit family planning clients.
- Medicines to treat candidiasis and gonorrhea are rarely available. Especially given the fact that the IUD is the most widely used contraceptive method in Egypt, treatment for these infections should be available in ample supply.
- Most facilities offering family planning have the appropriate equipment for pelvic exams and IUD insertion, as well as private examination areas. However, adherence to quality standards for these procedures, including infection control measures, is inconsistent.

Antenatal Care
- Antenatal care services are offered at 87 percent of all facilities, and are available five days a week in over half
of these facilities.

- Medicines for managing common problems and complications of pregnancy are lacking in all facilities, including general service hospitals.

- Women who come for antenatal care are not receiving relevant assessment and exams. Among observed clients, only 15 percent received all the relevant components of antenatal care for their month of pregnancy.

- Counseling on danger signs during pregnancy is inadequate. Clients were rarely advised on such symptoms as vaginal bleeding, blurred vision and headaches or swollen hands and feet, for which medical help should be sought.

**Delivery Care**

- Although most facilities (87 percent) offer antenatal care, only 26 percent offer delivery services, and only 24 percent of all facilities provide both.

- Basic infrastructure for delivery services is strong; visual and auditory privacy, beds, and examination lights are available in most delivery service areas. However, essential supplies for basic delivery are available in only one-third of these facilities, and medicines for managing common complications of labor are available in only 18 percent of these facilities.

- In Egypt, capacity to manage obstetric complications is expected primarily in general service hospitals. However, less than half of all general service hospitals have all basic medicines and supplies for managing common complications of pregnancy and delivery.

- Only 36 percent of facilities offering delivery services have systems in place to transfer clients to another facility in case of obstetric emergencies. Since few facilities have the capacity to perform caesarean sections, provide blood transfusion, or manage other complications, adequate emergency transport is vital in ensuring client access to life-saving measures.

**RTI/STI and Tuberculosis Care**

- Where available, services for RTI/STIs are integrated into general outpatient, family planning, and antenatal services, thereby promoting opportunities for diagnosis, treatment, and follow-up. However, very few facilities have medicines available to treat all four STIs assessed.

- Although condoms are available in most facilities, providers rarely gave clients information on their use for prevention of STIs or until completion of a treatment. Condoms or HIV/AIDS were mentioned during only 3 percent of the observed consultations.

- Fever hospitals are notably lacking in supplies for infection control and in supplies and knowledge for sterilizing or HLD processing of equipment for re-use. In light of the emerging role of fever hospitals in HIV/AIDS management and services, this shortcoming is of particular concern.

- One out of three facilities offers TB services; most of these use the DOTS approach. First-line TB medicines were available in less than 1 in 5 facilities offering TB services, and 19 percent among facilities implementing DOTS.

**Client Opinion and Communication Issues**

- Providers rarely use visual aids to support client counseling and education.

- Both observation of consultations and exit interviews indicate that clients do not receive sufficient explanations regarding the condition for which they visited the facility.

- When asked about problems with the health care they received at a facility, caretakers of sick children most often mention the unavailability of medicines and long waiting times.