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**MEXICO: A PRELIMINARY OVERVIEW OF  
MEXFAM SERVICE DELIVERY  
MANAGEMENT**

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**FAMILY PLANNING MANAGEMENT DEVELOPMENT**

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## EXECUTIVE SUMMARY

Rapid expansion of the number of medical services centers (MSCs)/clinics in the MEXFAM system over the past two years from two to seventeen has brought about new management challenges at national, regional and local levels. Essentially independent in their service mix, medical services centers offer an array of family medical services. Many of the MSCs are expected to provide an important source of revenue to support MEXFAM's financial sustainability. MSCs that serve a less affluent mix of clients need to be financially self-sustaining, even if not able to contribute revenue to the system. Service delivery quality and efficiency are important factors in attracting and maintaining a volume of clients sufficient to make each clinic financially viable.

The purpose of this visit by Joan Littlefield was to work with MEXFAM to initiate the process of addressing MSC level service delivery management issues related to productivity: a balance of efficiency, effectiveness and quality. In collaboration with Dr. Ruben Ramirez Sánchez, the Director of Medical Services Quality who was appointed in March 1995, the consultant aimed to: a) identify areas of existing productivity; and b) identify productivity areas that can be improved at clinic and central levels. Regional coordinators and clinic staff were closely involved in providing valuable information and perspectives on each medical services center.

Full-day visits were made to four full service "A" clinics: Centro de Servicios Medicos (CSM) La Villa, CSM Ciudad (Cd.) Neza, CSM Morelia and CSM Tampico, to observe clinic (medical services center, or MSC) flow and function. All offer family planning, gynecologic care, prenatal care, family medicine, pediatrics and other services. When construction at Cd. Neza is completed, all will have the facilities to provide surgical contraception for both men and women.

Salaried MEXFAM personnel are mostly the administrators, receptionists, limited core nursing personnel, and support staff. Doctors are not salaried but are paid either on a fee-for-service basis (La Villa and Cd. Neza) or a percentage of clinic revenues is paid to the doctors as a group (Morelia, Tampico). Additional nursing staff are paid by the doctors. Especially at Morelia and Tampico, staff are cross-trained and used for multiple purposes, leaving little slack time. Although efficient in the short-term, administrators need enough time to invest in planning and marketing so that the client base can grow. This is difficult in the short-term without revenue available to pay for additional staff.

Facilities at MEXFAM medical services centers are clean and well-kept. In sites where MEXFAM has purchased the land and buildings, these sites have had extensive renovations. Tampico's leased building is not ideal in its current state but cannot be renovated sufficiently unless purchased. A thorough market study should be carried out before purchasing it to ensure that this is the optimal site. Renovations at other sites have been very creative. In-patient care and surgery is very space-consuming and is competing with out-patient care space.

Infection control is off to a very good start in all of the facilities but will require leadership and training to ensure that optimal care is provided and the structural changes are the most useful in preventing infections. Training of key personnel and establishing a team to develop and update strategies are recommended.

Leadership and guidance are needed from headquarters in establishing MSC management guidelines for in-patient care, emergencies, and determining the need to transfer patients. Headquarters can also be most effective in leading the development of clinical guidelines and protocols for obstetrical emergencies and other areas not covered by the recently published family planning guidelines. The most up-to-date approaches for reproductive tract infections is an urgent topic. Norplant removal training must also be arranged by headquarters early on and coordinated so that all regions have access to a clinician skilled in removal.

In order to develop effective increasingly effective marketing strategies, including service mix and design, Morelia and Tampico need to further identify their target populations for out-patient care, deliveries and surgery. Coordinators and administrators at both of those sites are fully involved in public relations and marketing.

## **I. BACKGROUND AND PURPOSE**

The number of medical services centers (MSCs, or in Spanish, centros de servicios médicos (CSM))/clinics in the MEXFAM system has expanded rapidly over the past two years from the two original, now mature clinics in Mexico City, to 17 throughout the country. Funds for capital expenditures and subsidies for operating costs through an interim start-up period have been available through the IPPF Transition Project. Essentially independent in their service mix, these facilities offer an array of family medical services. Deliveries, basic surgery and specialty interventions are available at some sites. It is anticipated that many of the MSCs will provide an important source of revenue to support MEXFAM's financial sustainability.

FPMD has provided assistance to MEXFAM in financial and institutional sustainability and total quality management/continuous quality improvement. TQM/CQI activities have been instituted in six logistic centers, including the two original clinics. Client focus has been taken seriously in marketing strategies, emphasizing client satisfaction. Cost/revenue structures and reporting formats for service delivery have been evolving swiftly.

Rapid expansion has brought about a new need for medical services management system-wide and at the MSC level. Since a director of medical quality newly appointed two months prior to this visit, systems may now be developed to ensure quality of service delivery, to guide productivity and efficiency strategies, and to coordinate service delivery with marketing and financial self-sufficiency strategies. Now that the newer clinics have several months of experience, areas of emphasis for assistance and monitoring from the central level can be identified. Also, as these MSCs are not yet operating at peak capacity, potential problems can be identified early on and averted.

The purpose of this visit was to work with MEXFAM to initiate the process of identifying and addressing MSC-level service delivery management issues related to productivity: a balance of efficiency, effectiveness and quality. During the visit the consultant aimed to:

- a) identify some of the routines, staffing patterns, facility characteristics and systems that currently contribute to productivity;
- b) identify routines, staffing patterns, facility characteristics and systems to be improved at clinic and central levels in order to promote productivity.

The principal counterpart was Dr. Ruben Ramirez Sánchez, Director of Medical Services Quality.

## II. ACTIVITIES

Full-day visits were made to four of MEXFAM's medical services centers to observe clinic flow and function. Two of the visits were made with Dr. Ruben Ramirez Sánchez who is also the Coordinator for La Villa and Ciudad Neza.

Medical Services Center (Centros de Servicios; CSM) Site Visits:

- 2 May CSM La Villa (in México City); with Dr. Ramirez Sánchez
- 3 May CSM Neza (in México City); with Dr. Ramirez Sánchez
- 4 May CSM Morelia
- 8 May CSM Tampico

CSM La Villa and CSM Neza are well-established and the longest running clinics in the MEXFAM system. CSM Morelia and CSM Tampico have been in operation for out-patient care for approximately one year. Their in-patient and delivery/surgical services were recently initiated: in August 1994 in Tampico, and just one week before the visit (May 1995) in Morelia.

Extensive discussions were held with coordinators, clinic administrators, receptionists, medical doctors, laboratory personnel and nurses. Particular emphasis was placed on understanding and observing client flow for typical visits, particularly the receptionist/cashier activities. When possible, client visits with the provider were observed. Infection control facilities and processes were reviewed but not observed. One invasive procedure (cryotherapy) was observed. Since this visit coincided with two national holidays, client loads may have been unusually light, which allowed extra time for discussions with staff, but prevented an optimal assessment of peak level client and staff flow patterns during the busiest times. In-patient and surgical services were also discussed and toured.

At each site, the following inter-related components of productivity were considered:

- Service mix and intensity
- Client population
- Staff configuration and deployment
- Staff efficiency
- Space utilization
- Client focus; quality
- Materials management
- Infection control

After the site visits, Dr. Ramirez Sánchez and the consultant met with Mr. Gustavo Quiroz, the Marketing Director, to clarify some marketing issues and to share findings. Findings, impressions, and some preliminary recommendations were shared with the Director General of MEXFAM in a meeting with Dr. Ramirez Sanchez and Mr. Quiroz. An initial briefing was

provided to Ms. Marie McLeod at USAID by telephone and a debriefing meeting was held with her before departure.

### III. FINDINGS and CONCLUSIONS

#### A. Service and Client Mix

All four clinics meet the recent designation of an "A" Clinic, providing fully integrated medical and diagnostic services. Within this category, each offers a mix of specific services and interventions. All offer family planning, gynecologic care, prenatal care, family medicine, well-child care, pediatrics, and sexuality counseling. When construction at Cd. Neza is completed, all CSMs except La Villa will have the capacity to offer surgical contraception services for both men and women. All provide colposcopy. Some have psychologist/psychiatrist services and several have unaffiliated dental services on-site. Some of the sites have made a point to highlight identify appealing services, such as weight control or sexuality counseling. For most services, clients can choose between a general practitioner and a specialist, at a different fee.

CSM La Villa and CSM Cd. Neza, located in the greater Mexico City area, are strictly out-patient facilities with potential day-surgery capacity. Advanced interventions include cryotherapy and electrosurgery at La Villa and an X-ray facility under construction at Cd. Neza. Both offer ultrasound. Both sites can obtain laboratory samples from patients. La Villa sends samples to Cd. Neza for on-site processing or to be sent to a contracted laboratory. Neither is delivering babies.

Morelia and Tampico are of a different nature. They are 24 hour facilities with typical out-patient care, but they also have in-patient services, operating theater and delivery room. They were not among the clinic sites chosen in the expansion strategy for their potential to generate revenue. MEXFAM's local "médicos comunitarios" proposed the facilities as a venue to follow their prenatal clients through delivery, and for voluntary surgical contraception (VSC), basic surgery and short-stay in-patient care. Morelia has laboratory services and is planning a pharmacy. Tampico is planning a laboratory. Since they are open to out-patients 24 hours a day as well, they are also likely to see injuries and emergencies.

To support deliveries, including cesarean sections, and basic surgery, supplies such as intravenous fluids, urinary catheters, emergency drugs and equipment, and oxygen are available. Cardio-respiratory monitoring, blood gas analysis and oxygen saturation measurements are not. An infant incubator and some basic resuscitation equipment for newborns is available.

The "hospital-like" nature of Morelia and Tampico creates management issues not encountered in non-acute out-patient care. In addition to more complex standards of care, medical supervision and increased nursing staff, daily management issues include additional equipment and supplies management, infection control, laundry, food for patients and waiting areas for visitors. Care for newborns is an additional responsibility at Morelia and Tampico.

Recruiting out-patient clients is a greater challenge for these two sites because they were not developed out of great existing demand. Ongoing guidance from headquarters in analyzing whether outpatient services are worthwhile, in terms of contribution to the community and financial viability will be necessary.

Also, these MSCs are not fully equipped hospitals. There is a limit to the acuity that is reasonable to handle in such settings and long convalescence will become a problem as the MSCs become busier. Given that these centers are providing induced deliveries and Caesarean sections, they also need to be prepared for sicker newborns, including having guidelines on emergency care, guidelines on the point at which newborns should be transferred and protocols for care of mildly ill newborns. Guidance from central and regional levels will be needed to strengthen the medical management and administrative leadership at MSC level to set guidelines and make difficult decisions regarding when patients should be transferred out.

Throughout the MEXFAM system, emphasis is being placed on attracting an increased number of middle class clients, in particular, those who cannot not afford to continue using private practitioners during the current economic crisis. Coordinators, administrators and medical staff described their target clients as a mix of middle income (*medio-medio*) and lower-middle income (*medio-bajo*) clients. La Villa also targets some more affluent clients. Sliding scales and discounts are often available for clients with fewer resources, although it was unclear to the consultant how the client would know to inquire.

Given the purpose and strategies of CSM Morelia and CSM Tampico, they have the potential for self-sufficiency, but will not likely contribute excess revenue to the MEXFAM system. Although they have made a solid start, both CSM Morelia and CSM Tampico need some assistance in continuing to define their target population for out-patient care, deliveries and surgical services. They need a better picture of the potential demand from the middle class and their competitors who also supply services to this group. They need assistance in determining the volume of clients required to break even, including the mix of full and discount clients that is realistic for financial survival. After a better identification of target clientele, more research is required to determine what will attract those clients: how the facility should look, the desirable mix of services, payment options, etc. Much of this has been done, but a more targeted effort will allow for more focussed, and therefore efficient, interventions. For example, if the staffing pattern matches client expectations but the decor needs to be changed, funds will not be wasted on changing the personnel profile, etc.

Care is needed at all four sites to ensure that the primary mission of MEXFAM, to serve the most needy populations and to be a "standard setter" for quality reproductive health care, is served by the strategies of recruiting a more affluent clientele (in pursuit of financial self-sufficiency) and providing general family health care, rather than eclipsed by them. Without clarity of mission and goals, complementary strategies have the potential to create confusion in developing business plans and productivity strategies.

## B. Staffing

Salaried MEXFAM personnel consist primarily of the administrators, receptionists, a percentage of the Regional Coordinator's salary, some of the nurses, and facility support staff. Some sites also have laboratory and pharmacy workers and outreach programs.

Morelia and Tampico have very few full-time paid MEXFAM staff. Tampico has only two. Although this staffing pattern helps to contain fixed costs, it may in fact be too low to be productive. La Villa and Cd. Neza have more administrative and support staff, but also have the client loads to both warrant and support them. Morelia and Tampico are currently using other personnel as receptionists until either a receptionist becomes available or the client load demands reach a point where a receptionist is necessary. At this point both Morelia and Tampico seem to be running at peak capacity for full time staff. The next question is whether investment in more staff members might increase productivity by allowing administrators more time for marketing and management.

Patient care is provided almost completely by the doctor. The client can choose whether to see the general practitioner, at a lower fee, or to attend during the hours of the specialist. Appointments can be booked for both generalists and specialists if requested. Cd. Neza and La Villa both reimburse doctors on a per client basis. La Villa has one general medical doctor who only works there, but who is reimbursed by the same policy. Morelia and Tampico pay a group of MEXFAM community doctors (medical societies) 40% of clinic revenues. While reducing fixed costs, these reimbursement schemes also seem to provide a strong incentive for the doctors to recruit and retain clients.

Doctors at CSM Morelia and CSM Tampico leave their community practice to cover the clinic hours (both out-patient and in-patient). Tampico is beginning eight hour shifts with two doctors on days in order to cover both in- and out-patients. However, their load remains low and they don't even have a consult room for the general practice doctor from 10-2 unless the gynecologist is not busy. There is not yet enough work for 2 people, but the concern regarding covering both in-patients and out-patients is well placed.

The reimbursement rates should be evaluated periodically, particularly after patient volumes approach a stable number. Although the medical staff do not create added expense each day or shift they work at the MSC, the opportunity cost of not attending to patients in their community practice will be factored in when they negotiate the reimbursement rate for the medical society. Schedules should therefore limit, not increase, the number of days the doctors are away from their community practice, where they serve the primary target group, who is also the client base for whom the delivery and surgery services were developed.

Few nurses are directly paid by MEXFAM in any of the clinics. Most nurses essentially serve as assistants in the examination rooms and take care of equipment. Nurses who are caring for in-patients are largely supported by the medical societies. Nursing students and nurses fulfilling their social service obligations are also used in some clinics, which provides extra hands

at low cost. Few of the nurses' duties actually require much nursing training or experience. Nurses assist doctors in the consulting room, weighing the patient, taking blood pressure, giving injections and handing the doctor equipment. One (or more at busier sites) nurse processes equipment and manages stocks. Some nurses are qualified to counsel for family planning, but it was unclear under what circumstances that would happen. If well trained to do so, nurses could also be deployed to do more patient teaching, especially for routine instructions and health promotion information. Nurses could also be very helpful in taking private intake information for new clients.

Receptionists greet and register clients, collect fees, complete client records, perform initial intake interviews and direct clients to the provider. They also make appointments for clients, help to find laboratory results, solve problems or refer clients to the administrator. Some are administrative assistants who also help with clinic record-keeping and bookkeeping. At Cd. Neza they have the additional responsibility of providing instructions to clients on providing samples for lab tests or preparation. The receptionist is potentially one of the busiest workers in the MSC and will have an important impact on how the client perceives MEXFAM, maintaining client flow, accuracy of financial records, etc. The receptionist is likely to be one of the first bottle-necks encountered as client volumes increase. Receptionists can be relieved and assisted by the administrator as necessary.

The Administrator manages the staff, clinic records, budgeting and bookkeeping, general operations, problem-solving, and marketing issues. The Administrator is the key liaison with the doctors. At Tampico, the administrator also performs the receptionist duties. As a doctor, she can also provide medical assistance when necessary. The Administrator is supported by the Regional Coordinator, particularly in Tampico where the Administrator needs to be in the clinic most of the day.

Cleaning staff perform the usual duties. In Tampico and Morelia, new issues have come up around laundry and food for in-patients. Building facilities for laundry and/or cooking and supporting the staff for these duties is expensive, as is sending laundry out to a commercial laundry. Each site needs to price the options available. CSM Tampico will have families bring food for patients for the time being. However, they need to be aware of the preferences of the paying clients. It may be worth considering the option of offering a bed at two different prices: one with meals and the other without.

Laboratory technicians at Cd. Neza and Morelia draw blood, receive other samples, perform basic analysis, and send out samples requiring the services of another laboratory. At Morelia, one nurse functions part-time as a laboratory technician. Other sites developing laboratories might consider training nurses to draw blood and assist in the laboratory, particularly during busy morning hours. This would help the laboratories to function with a smaller core staff.

### C. Out-patient Client and Staff flow:

During the site visits, none of the clinics appeared to be over capacity, indeed Morelia and Tampico still relatively few clients. La Villa is the busiest.

#### 1. Client flow

In all four MSCs visited, clients report first to the registration desk where the receptionist determines the type of visit, provider the client will see and retrieves the chart. At Cd. Neza, clients pay upon arrival for anticipated services, then an adjustment is made when they leave. Receptionist service was exceptional at all sites. Every client observed was treated in a friendly, respectful and helpful manner.

All four MSCs visited use one central waiting area. The waiting area is visible from the registration desk, most of the consulting rooms and is near the front door. Although currently all but La Villa have seats only lining the periphery of the waiting area, an eventual increase in client load can be accommodated by providing rows of seats in the center. This arrangement appears to be quite suitable for these settings, allowing enough space to be comfortable, restrooms are nearby, and clients are always near the receptionist where they can make inquiries as necessary. Client waiting time is not a problem yet at these sites. At CSM Cd. Neza and CSM La Villa, where TQM/CQI have been active, this is an issue that is addressed when needed.

Except for blood drawing, the clients' care is provided in one stop, the examination room, for consultation, weight, blood pressure, procedures and teaching. The nurse takes the weight and blood pressure while the doctor is greeting the client, thus eliminating a stop. After the examination the doctor's findings are discussed with the client as the doctor documents in the file. Patient teaching is done by the doctor while she types instructions at her desk in the examination room, and is repeated when she hands the instructions to the client.

#### 2. Staff flow

##### a. File retrieval

At all sites but Tampico the receptionist retrieves the patient charts. A minor inefficiency at most site is that the receptionist often needs to leave her station to retrieve the chart, then deliver it to the doctor in the consulting room. Concerns with this pattern are: the receptionist loses time and momentum; clients waiting may feel abandoned to see the receptionist leave or find no one there; and this practice can disrupt a client's visit with the doctor. At Tampico, the receptionist collects the registration card, which provides the client number at her first visit, the nurse then uses this card to find the file.

##### b. Intake interviews:

At most sites, the receptionist interviews the client on her first visit. Questions on the client record that directly relate to the client's health history, especially family planning history, may be more comfortable and efficient for the provider to ask instead of the receptionist.

c. Problem-solving

In all the clinics, the administrators appeared to periodically check on the flow and functioning of the clinic, stepping in as necessary. For example, to maintain client flow, administrators deal with complex inquiries that are time consuming. CSM Cd. Neza and CSM La Villa, where the administrator works on the upper floor, both have good internal telephone systems for communication, which is very helpful.

The doctors usually stay in the same room for the consultation, examination and prescription/instructions. This appears to be efficient for the volume of clients at MEXFAM MSCs. Specialists with specialized equipment (eg. ultrasound, cryotherapy) that is not portable usually stay in one room as well. At CSM Morelia, competition for the use of the general examination room has developed when the doctors with in-patients make appointments with other clients while they are in town. When there are few clients, this does not cause significant waiting times, but could become a problem. This may indicate the need for additional examination space or specific hours for such appointments. Doctors currently type all routine instructions and prescriptions, which is very helpful to the clients. Although this practice is not excessively time consuming, photocopied handouts of common instructions would save some time.

Management of supplies and equipment appears to be fairly efficient. Changes made recently that are effective include using a large bucket of disinfectant at the foot of the examination table to soak specula until they are collected for processing. An adequate stock of equipment and supplies is kept in each room, while bulk quantities are stored elsewhere. While it is efficient to have some specula individually wrapped for IUD insertion so that entire packs are not contaminated when a new one is needed, the additional wrapping time and materials is not necessary for specula used for routine examinations only for IUD insertions. Intravenous fluids are appropriately stocked in generous quantities and returned to the supplier before expiration for use in the hospitals. Supply stocks are beginning to be computerized. While helpful in many ways, care will need to be taken to verify stock balances with visual checks and to not let documentation of every supply used interfere with patient care. Counting supplies at the end of the shift may help to make the process feasible. The MSCs are frugal in their use of consumables. They use bulk packaged items where possible and even re-use some materials where possible. This is cost-effective. If not terribly costly, it would probably be more appealing to middle income clients to have items such as tongue depressors disposed. However, the consultant is not familiar with customs in private doctors' offices and would use their practice as a guideline.

#### D. Facilities

In general, the sites visited are very clean and pleasant. Facilities are either owned by MEXFAM or leased, depending on the availability of sites. Remodeling in facilities that MEXFAM has purchased (rather than build from scratch) has been extensive. Moderate refurbishing has been carried out in Tampico, which is leased. MEXFAM hopes to buy the Tampico facility, along with the adjacent corner lot. Although there are advantages to this location, further market analysis should be done prior to purchase. MEXFAM also hopes to buy the land adjacent to the Morelia facility.

Each of the four sites, except Tampico, are multi-story with out-patient services on the ground floor and inpatient services and administration on the upper floor(s). While presenting some logistical challenges for infirm patients to arrive or leave, this arrangement provides the best access for out-patients. Morelia and Cd. Neza are still under construction and will have more extensive use of their space after completion. Smaller facilities like Morelia and Tampico use nearby MEXFAM regional offices for bulk storage, reducing the amount of on-site space used for storage.

Facilities need to be sufficiently attractive and compelling to bring in and retain target clients; in this case, middle- income clients. Waiting areas have received much attention in design for function, decoration and comfort. They are well lit, often with much natural light. The use of brick and tile at several sites is likely to be appealing to this class of client. Tampico has a freshly painted and air conditioned waiting area, although is the least decorated. Because Tampico is leased, they have little flexibility in terms of making structural changes. Consulting rooms are all very clean and relatively comfortable. Additional use of up-to-date, colorful pictures and scenic or educational posters would help to brighten them at little or no cost. Bathrooms at every site were exceptionally clean, all with toilet paper, soap and paper towels stocked.

Efficient use of space is a challenge in these facilities, most of which were built as homes. The MSCs have made extensive use of every corner of their buildings. Consulting rooms are generally multi-disciplinary unless they have specialized equipment, such as ultrasound or cryotherapy. Those rooms can be borrowed if there is a backlog of other patients and a provider is available.

The consulting rooms are of comfortable size and set up for easy access to the examination table and sinks (except Morelia where equipment is temporarily crowded around the sink while construction is being completed). Some consulting rooms are quite generous in size, but would not be easily partitioned to make other use of the space, although this could be considered, if necessary. The number of consulting rooms is limited; CSM Morelia and CSM Tampico would benefit from more rooms for consulting

The configuration of MSC space is more complex for in-patient care and surgery, mostly because infection control becomes an additional issue (See infection control). It is also more difficult to plan around space that may be used unexpectedly, such as the delivery suite. For

example, Tampico has one small room that used very little, but is awkward to use because it is the entrance to the OR and delivery suites, whose use is not always predictable. Temporary use of the space for blood drawing until a laboratory is built may be useful, understanding that the room may not be available if surgery or a delivery is taking place.

Waiting areas for family members is also becoming an issue. Family members tend to use the out-patient waiting area, which gives the clinic a feeling of being busy and will make it confusing for the reception and service provider staff to identify clients waiting for care. Tampico plans to build a patio for this purpose. Kitchens and laundry facilities for in-patient care have not yet been built at these sites except for Morelia (under construction).

#### E. Infection Control

Infection control is an area that requires constant attention and updating of practices to ensure optimal quality and efficiency so that funds for materials, construction and staff efforts are appropriately used. There was insufficient opportunity to thoroughly investigate current practices and needs at these MSCs, but some initial impressions were gathered.

The most cost-effective approach to infection control is one in which the system is built more around "process" than "environment". By focussing on interrupting modes of bacterial transmission, some costly structural changes and recurrent costs that have little impact can be avoided. For example, in general, anything below one's waist is considered dirty, so it is more effective to focus more on upper areas above the waist and less on floors. Transmission occurs more by contact than airborne, so the greatest efforts must be placed on the people and equipment in direct contact with the patient. Nevertheless, fungi growing on damp walls and ceilings can be a problem. In fact, impeccable hand scrubbing with effective solutions and use of good quality gloves will be the cornerstone of infection control in the operating room.

The MEXFAM MSCs visited, especially Morelia, have attempted to create very restricted environments for surgery. This will be useful in controlling traffic of personnel, but will only be effective if accompanied by sensible and consistent routines. Sinks for scrubbing have been built in and MEXFAM seems committed to supplying appropriate disinfectants; an excellent start. Some aspects of Morelia's construction may not need to be replicated at newer sites. For example, the most up-to-date guidelines do not require that the guerny (camilla) carrying the patient into the operating room to be changed at the "gray" area or scrub area, as is the arrangement in Morelia. Further assessment and technical assistance would help MEXFAM to determine structural characteristics that will be the most helpful and those which are not cost-effective.

All of these MSCs either have autoclaves or access to one. Tampico uses the nearby hospital. Equipment processing was not observed, but the facilities at each site were toured. In most of the MSCs visited, dirty equipment is soaked and scrubbed in a room separate from where it is packaged and autoclaved. A nurse is usually responsible for processing the equipment and may supervise students or other staff in these activities. Packages of autoclaved equipment are

labeled and dated. Some individually wrapped items, such as specula for vaginal examinations (other than IUD insertion), could be wrapped in bulk, as they are not required to remain sterile before use.

Sinks with running water are found in every examination room, laboratories and equipment cleaning rooms. All were freely accessible except for one in Morelia where some equipment was temporarily stored during construction. Handwashing is the most effective infection control intervention and needs to be actively encouraged. Most doctors observed washed their hands between client examinations. This should be reinforced both for infection prevention and to instill confidence in clients. Examination couches have the lower half covered with disposable paper, which is consistently changed between patients. At one clinic a pediatric cover for the couch was noted being used, but it did not appear to be cleaned or changed between infants. The same practice innovatively developed for adults would protect children.

The current ad hoc efforts at MEXFAM MSC level are a very good start. Next, guidelines and protocols for infection control need to be developed and disseminated throughout the MEXFAM system, with a capacity for frequent updating. To do so, leadership and teamwork will be required. This may be an area where nurses could take on an expanded role with the medical and administrative staff to develop and maintain an infection control system. Training of key personnel with observation in a progressive setting where cost-effective practices could be observed and modified for the variety MEXFAM contexts would be helpful.

#### F. Quality of Care and Client Focus

Clinical care was not the focus of this visit, and was not thoroughly observed. Further assessment should be carried out by the Director of Medical Services Quality. The following are observations and impressions of the MSCs' focus on the client and the few clinical quality aspects noted that have not already been mentioned.

Following the TQM/CQI approach, some MSCs are listening to their clients and making changes accordingly. For example, one site changed the seats in their waiting area based on feedback. In general, the clients at each of the four MEXFAM MSCs are greeted and treated in a friendly, respectful manner. It is quite obvious that the intentions of the facility are to do so. Receptionists do an admirable job of greeting clients, inquiring about the purpose of their visit and providing the next direction. Every client interaction observed was friendly and helpful.

In the consult (examination) room, the doctors were also supportive and not rushed. They asked open-ended questions to the client and gave explanations regarding their findings and instructions. One very nice practice is that the doctors type instructions and prescriptions. The client then has a written, legible, explanation of what she is to do. Curtains are available next to every examination couch and are used every time.

Minor disruptions to the client visits include the receptionist delivering files to the doctor for the upcoming patients and doctors' receiving telephone calls from patients. The telephone calls are helpful to clients overall, but may make the client in the room feel of second importance and delayed. Care also needs to be taken that privacy and confidentiality of the client on the telephone are not compromised. One possible solution is for doctors to set aside a specific time for phone calls and administrative tasks.

Pressure to survive financially is great in all of the MSCs. While revenue sharing with the doctors also shares the revenue generation responsibility, the doctors need to be supported and monitored to ensure that they do not subconsciously (or consciously) begin to order procedures, laboratory studies or medications that are not needed, in order to increase MSC revenue. This behavior can develop both deliberately and quite sub-consciously.

Adolescents need to be assured before they attend that services will be confidential. Many clinics in other countries allow adolescents to be served anonymously and do not require their address. While these MEXFAM CSMs seem friendly to adolescents, more directed outreach to this target group is needed for clinical services.

A new, bound set of medical guidelines, primarily for family planning was just made available during the consultant's visit. Dissemination workshops are planned. Further guidelines for general medical care and protocols for clinic management are also needed.

Norplant insertions have begun, but there has not been training for removals. While most women will continue the method for some time, anyone with side effects or change in plans must have access to skilled, atraumatic removal. The consultant's sense was that the doctors believe that removals are easier than insertions, while the reverse is generally the case. Training for sufficient numbers of key personnel in Norplant removal is very important.

An update on the management of reproductive tract infections is needed.

#### IV. RECOMMENDATIONS

1. Headquarters should continue to assist the newer clinics in market analysis, strategic planning and marketing strategies. Included should be continued assistance in conducting breakeven analysis for various strategies.
2. A market assessment should be conducted in Tampico before buying the lot.
3. Headquarters should provide leadership in developing protocols for managing the MSCs, including protocols for determining the need to transfer patients, prioritizing the use of beds (eg. MEXFAM doctors' patients vs. external patients, etc.) with clear lines of authority for decision-making on such matters.

4. MEXFAM should develop a dynamic infection control system, building on the equipment sterilization guidelines available, but including structural features, updated practices for managing a surgical suite, equipment management, client care, etc. The organization should consider the creation of a team of nurses and doctors to work with headquarters, regional and clinic levels. Training of key personnel would be helpful for state-of-the-art practices.
5. Clinical standards and guidelines that can be easily updated for obstetric, neonatal and general emergencies need to be developed and disseminated.
6. Visits to private practices used by the middle income clients may be helpful to regional and MSC level managers to identify affordable interventions for the ambiance or client visit that are appealing.
7. Each site that receives assistance from MEXFAM should periodically review reimbursement rates for doctors, especially after significant changes in client volume and types of visits.
8. Headquarters should assist MSCs in determining at what point the volume of clients is such that it would be productive for the MSC to hire a receptionist (or additional receptionist). This is especially important for Tampico.
9. MSCs who accept in-patients should identify a separate waiting area for visitors of in-patients.
10. Photocopied handouts of common patient instructions to save doctors time typing. This could be done at each clinic or made available from headquarters or regional offices.
11. MSCs should keep most patient files in an area that does not require the receptionist to leave the desk (eg. La Villa has two sections and keeps recent files close at hand). A staff member should retrieve files for clients with appointments at the beginning of the day or during free time before the client arrives.
10. Rather than interrupt the client's visit with the provider to put the chart in the room, options are: a) nurse can retrieve the next client's chart from a stack at the registration desk; b) install boxes outside the examination room in which to put the charts. These could be hand-made from wood or bought in plexi-glass form from medical office supply companies.
11. Multiple vaginal specula, preferably of the same size, can be packed together for use in routine examinations. Some individually wrapped specula should also be available for IUD insertion, but the additional wrapping/marketing time, wrapping paper and space is not necessary. After high-level disinfection (or sterilization), they only need to be kept clean before use.
12. Norplant removal training for each region is needed as soon as possible.