

Designing a Family Planning User Fee System

*A Handbook for
Program Managers*



SEATS

Family Planning
Service Expansion And Technical Support Project

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1992

ACKNOWLEDGEMENTS

This Handbook was prepared by SEATS (Family Planning Service Expansion and Technical Support Project). SEATS is funded by the United States Agency for International Development under Contract Number DPE-3048-Z-00-9011-00, and managed by John Snow, Inc., based in Arlington, Virginia, USA. The Handbook was prepared by Laurence Day, with substantial assistance from Erika Finlayson and Anne Kheen of JSI, Lori Harris, and the Business Communications Group of Washington, Inc. David O'Brien of SEATS also provided substantial input. Earlier work prepared by JSI staff and consultants was drawn upon for some sections, especially work by Randall Ellis on waiver systems and by John Fiedler on various areas. The idea for this Handbook originated during discussions with Nancy Harris, Director of SEATS. This document would not have been possible without the support of Janet Smith (Director, OPTIONS Program) and Harriett Destler in the Office of Population at A.I.D. Notwithstanding this considerable support, the views expressed herein, and any errors or omissions, are the sole responsibility of the author.



Introduction

This booklet presents 10 steps for designing or redesigning a Family Planning User Fee System. If you already have a user fee system (UFS) in place, you may still find it useful to read through this manual to determine if your user fee system includes all of the parts set forth here. If you do not currently have such a system, but anticipate the need for one, you can use this manual to guide you through the design process. And if you don't know whether or not you need or want such a system, this text should help you decide. (*User Fees for Sustainable Family Planning Services*, which was prepared as a companion to this Handbook, provides further discussion of issues surrounding family planning user fees.)

As a first step, we encourage each of you to take a moment to reflect on your overall reason for starting (or redesigning) a user fee system at this time. Practically speaking, until you have established your purpose, it will be difficult to concentrate on the individual tasks involved. In other words, it is premature to start thinking about how you're going to set and collect fees if you have not decided why you're collecting them in the first place—that is, what you're going to do with the money.

The most common reason for establishing a user fee system is to ensure the long-term viability of your family planning (FP) delivery system, that is, to stay in business. But not *just* to stay in business; properly designed and implemented, a UFS can allow you to expand your range of services, can lead to improved management and administrative practices, and can generally enhance the overall quality of your facility. For those of you who already have a user fee system in place, working through this manual will enable you to improve your existing system and expand services beyond present limits.

After you have decided on your overall goals, you will then want to consider specific objectives. These will depend on local circumstances, such as the nature of the commitment from donors or certain chronic problems. Some typical objectives include:

- resupplying or increasing the stock of contraceptives
- covering salaries or other costs
- purchasing equipment or otherwise improving the facility
- expanding or increasing the availability of services
- undertaking other quality improvement measures

At this point, we invite you to reflect on why you have decided to establish a user fee system and what specifically you hope to accomplish:

Worksheet 1

Objectives and Goals

Our overall objective is:

We intend to use any funds collected to:

1.

2.

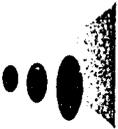
3.

4.

Now that you have reflected on why you want to establish a user fee system, and how you intend to use the revenues you collect, it is time to consider the design process, the 10 steps of which are given in Figure 1 below. For most of these 10 steps—which are elaborated one at a time—you will find:

- a **brief introduction** with an overview of the main considerations involved.
- one or more **worksheets** to get you started on some of the specific design tasks.
- end notes** which comment on certain elements in the worksheets.

Figure 1	
<i>Steps in the Design/Redesign of a User Fee System</i>	
Step 1	Set cost recovery targets.
Step 2	Establish prices.
Step 3	Develop mechanisms to ensure access to FP services.
Step 4	Estimate utilization and revenues.
Step 5	Evaluate original prices (as set under Step 2).
Step 6	Determine methods for payment of fees.
Step 7	Manage the fees collected.
Step 8	Determine the percent of fees to remain at the facility level.
Step 9	Plan priority activities for which revenues will be used.
Step 10	Monitor and evaluate the performance of the UFS. (Refer to Step 4.)



Step One

Set Cost Recovery Target

As we begin to think of what a UFS will look like, it is useful to set a preliminary and tentative target with a full range of possibilities. Figure 2 shows that cost recovery ranges from 0% (no user fees) to 100% (full self-financing). The figure also shows a number of intermediate levels of cost recovery.

Figure 2	
<i>Levels of Cost Recovery</i>	
<p>Level I</p> <p><i>No cost recovery</i></p>	the product or service is offered free of charge. (No costs are recovered.)
<p>Level II</p> <p><i>Nominal cost recovery</i></p>	a certain (usually minimal) percentage of the cost of the product is recovered. (For example, 5 to 10 percent of total costs are recovered.)
<p>Level III</p> <p><i>Marginal cost recovery</i></p>	all the additional costs directly associated with providing an additional unit of this particular product/service are recovered, but not operating or other ongoing expenses. (For example, 10 to 20 percent of the total costs are recovered.)
<p>Level IV</p> <p><i>Operating or recurrent cost recovery</i></p>	the costs of the product/service are recovered, plus all associated "prime costs," such as salaries or supplies. (Recovery may be in the range of 80 percent of total costs, including recurrent and capital costs.)
<p>Level V</p> <p><i>Full or capital cost recovery</i></p>	all operating costs are recovered as well as infrastructure expenses, capital goods, new building, etc. (100 percent of recurrent and capital costs are recovered.)

These conceptual “Levels of Cost Recovery” are not intended as definite or exclusive categories; in any given circumstance, cost recovery may not fall neatly into these categories. Indeed, we have intentionally left gaps between these levels; this has been done to stress that often the goal (assuming ability to pay) *is to move the UFS from one level up to the next level*, moving between the transitional stages, at once increasing cost recovery and making sure that more people have greater access to quality services. We can use this as a general framework within which we can define objectives and within which we can assess potential advantages and disadvantages. Thus, it serves to tailor the design of a UFS to maximize benefits of improved availability, access and quality.

Clearly, in order to select from among these levels for setting fees, you will have to undertake either a partial (for level III) or a complete (for levels IV and V) analysis of the expenses of running your FP facility—the costs of providing the various products and services you offer the public. Once you have calculated the relevant costs under each level, you will then know what the appropriate fee would be for that particular level. And this in turn should help you decide which option is appropriate for your situation.

We would point out, however, that the amount of the fee may not be the only—or even the most important—factor in selecting a level. We invite readers to study Figure 3 for a listing of some of the advantages and disadvantages of the various levels of recovery (except for Level V, which does not apply to most settings).

Figure 3

Advantages/Disadvantages of Cost Recovery Schemes

	Advantages	Disadvantages
I. No Cost Recovery	<p>No financial barriers to access.</p> <p>No administrative burden.</p>	<p>May be perceived to be low quality ("what's free can't be worth much").</p> <p>May indicate the lack of a system to track commodities.</p> <p>Facility is totally dependent on outside support.</p> <p>Future viability of facility is vulnerable due to a lack of any independent source of financial support.</p> <p>Facility lacks own funds to expand/improve services.</p>
II. Nominal Cost Recovery	<p>Perceived value increases.</p> <p>No real financial barriers to access.</p> <p>Lays groundwork for tracking commodities, estimating use, etc.</p> <p>Easier to raise prices in the future with a UFS already in place than to start a UFS from scratch.</p>	<p>Added administrative burden with little revenue benefit.</p>
III. Marginal Cost Recovery	<p>Permits expanding of services within existing infrastructure.</p> <p>Encourages more sophisticated monitoring of costs and more financial planning.</p> <p>Encourages more efficient operations.</p> <p>Contributes to sustainability.</p>	<p>Requires more sophisticated cost accounting.</p> <p>Requires more sophisticated pricing system.</p> <p>May require instituting fee waiver or exoneration system.</p> <p>Higher fees may be barrier for some users.</p>
IV. Operating Cost Recovery	<p>Provides significant resources for improvements in quality and services.</p> <p>Allows independent sustainability.</p>	<p>Fees may exclude more users.</p> <p>Even more sophisticated cost accounting required.</p>

The advantages and disadvantages that relate to your program or facility may differ from those suggested in Figure 3. Thinking through these issues will help to confirm whether the target level you have chosen is appropriate. This will, of course, depend on your own circumstances: whether you are interested in cost recovery at a facility level, a program level, or perhaps a district or regional level. It will also depend on the kinds of services you offer.

Using the information provided in Figure 3 as a starting point, you can now set your preliminary target level of cost recovery. Indicate that level by placing a mark in the appropriate box in Worksheet 2. Then, develop a list of advantages and disadvantages that relate specifically to your facility or program.

Worksheet 2

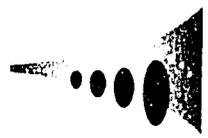
Selecting a Cost Recovery Level

check one

- I. No Cost Recovery**
- II. Nominal Cost Recovery**
- III. Marginal Cost Recovery**
- IV. Operating Cost Recovery**
- V. Operating & Infrastructure Cost Recovery**

Advantages: 1. _____
2. _____
3. _____
4. _____
5. _____

Disadvantages: 1. _____
2. _____
3. _____
4. _____
5. _____



Step Two

Establish Prices

To establish your prices, you will have to determine **(1)** how fees will be structured (for example, will there be a single fee for a visit including contraceptives provided during that visit, or a fee for the visit and another fee for contraceptives), and **(2)** what the specific fees will be for those products and services.

1. Determining the Structure

There are a number of simple ways to structure fees. In most instances, the main limitation will be unfamiliarity or a lack of experience with different ways of charging fees. Some of the most common ways that can be used individually or in combination are outlined in Figure 4, which follows.

Figure 4

Common Ways of Structuring Fees

	Advantages	Disadvantages
<p>Out-of-Pocket</p> <p>The most common payment mechanism, these are made at the time a service is provided. The full amount is paid based on the existing schedule when a client arrives at a facility or before the client leaves the facility.</p>	<p>Familiar to everyone, which makes it easy to introduce and continue.</p>	<p>Requires a detailed fee schedule.</p>
<p>Bundled Fees</p> <p>A single fee each time a patient arrives at a facility, which covers counseling, clinical services, laboratory services, and contraceptives.</p>	<p>Once payment is made, client has full access to services and commodities.</p> <p>Accounting is very simple.</p>	<p>Must take into account all costs involved in a visit or service.</p>
<p>Registration or Fee Cards</p> <p>Cards have been widely used in UFSs around the world, most commonly for well child care. A single fee is paid which is valid for a given period, and all regular services and goods are provided free thereafter until that period is over.</p> <p>Depending on preference, a single fee may be charged for any type of method, or a different fee for each type of method. The card can be issued for any length of time. It can be issued instead of fees for services, or it can be an option.</p>	<p>Provides a ready source of information on needed follow-up, timing, etc.</p> <p>The client may be more motivated to continue services to "get what is coming to them."</p> <p>If cards are used for other services (e.g., child immunization), people will be familiar with them and FP services can be built upon the local experience.</p>	<p>Cards have to be kept at the facility or by the client.</p> <p>Involves another item which must be filled out and kept.</p> <p>The up-front investment may discourage use.</p>

How will fees be structured in your program or in your facility?

Worksheet 3

Payment Structure

Out-of-Pocket

Description _____

Bundled Fees

Description _____

Registration or Fee cards

Description _____

2. Setting Fees

While you may change these prices as you work through the rest of this design, you need a rough figure to get the process started. Prices or user fees are normally established in one or a combination of three ways:

- A.** *Based on the market price of comparable products or services.*
- B.** *Based on the ability of users to pay.*
- C.** *Based on the costs of the products and services provided by the FP center.*

Each of these three ways is discussed in the following pages. It is recommended that you work through all three before deciding which will be most useful.

A. Setting User Fees Based on Market Price

In this approach, information is required to determine what is happening in the market. The program manager should address the questions outlined below in Worksheets 4 and 5. This should be done for each of the services offered (such as a medical consultation, an injection of Depo-Provera or an IUD insertion) and each of the products offered (such as a cycle of Lo-Femeral or a set of vaginal foaming tablets).

Worksheet 4

Looking at the Market

Service/product: _____

1. Is this product/service offered elsewhere? Yes No

If no, market information is, of course, not appropriate.

If yes, continue to 2.

2. Is the product/service truly the same (same quality product, same level of service)? Yes No

If yes, continue to 3.

3. Where is it offered? _____

4. What is the cost? _____

Once you have analyzed the market, you can then calculate your fee based on this information.

NOTES:

In the simplest case a FP product might be available to consumers at a nearby location. If so, you may want to base your price on “the market” and set your price at the same level, or slightly higher, or slightly lower, depending on other competitive factors. You may want to set a different price for a variety of reasons:

- To draw more clients to the clinic—so you set fees below the market price.
- To discourage use of a service or product at your clinic—so you raise fees above the market price.
- To take advantage of your convenient location—so you set fees above the market price.
- To subsidize the price of one product with revenues earned on another product.

Whatever considerations you, the manager, choose to emphasize, your understanding of the present market can only improve your decision-making about fees.

Worksheet 5

***Calculating the Fee
Based on Market Price***

A. FP product/service to be offered _____

Where is similar product offered?	Location	Price
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Average current market price of this FP product/service (add up all of the prices and divide by the number of prices obtained) _____

C. Adjustment factor (*percent you wish to charge above or below the market price*) _____

D. Price of FP product/service to be offered _____

(Multiply B x C)

B. Setting Fees Based on the User's Ability to Pay

To use this approach, you must be able to estimate the average per capita income of your target group; that is, you must be able to differentiate the average per capita income of your catchment area from broader (e.g., national level) data. Then you must estimate what percentage of per capita income is generally spent on health care and what percentage on family planning. If family planning services have not been available or have been underutilized in the past, you must determine whether spending on FP will replace spending on health or whether it will represent an additional expense. Realistic expenditure estimates are essential; in making these estimates, you may find it helpful to make comparisons with other areas, programs and even countries.

Once you have estimated yearly expenditures on FP services per capita or per household, you must set fees so that average FP expenditures over the course of a year do not exceed the estimated figure. To do this, you must determine a typical FP purchase pattern for a year. For example, if per capita (or per household) income is 1,000 and family planning expenditure is expected to be 2% of that, then the typical purchase package would not exceed 20. This target price would cover a year of family planning services and contraceptives. If the service involved clinical visits, then a visit and a year of contraceptives would total 20. If a visit is more involved (for an IUD insertion, for example), then the price can be increased so that it totals several years' worth of payments.

The following worksheet offers a formula for calculating the fee based on the user's income:

Worksheet 6

Calculating the Fee Based on User's Ability to Pay

- A. Per capita (or per household) income _____
- B. Percent spent on health care _____ %
- C. Percent spent on family planning _____ %
- D. Amount to be expended on FP per year _____
- E. Anticipated number of visits/services per year _____
- F. Anticipated units of product to be used per year _____

1	2	x	3	=	4
Service or Product	Estimated units/year		Price per unit		Charges per year

- G. **Total units/year**
Should correspond to total of item (E) + item (F) _____
- H. **Total Charges***
Should correspond to item (D) _____

* If H is substantially greater than D, then modify your prices until F = D.

C. Setting Fees Based on Recovering Costs to the Facility

Below we offer worksheets for calculating costs and fees under Levels II, III, and IV. We have excluded Level I (no cost recovery) for obvious reasons, and we have also excluded Level V, as it will not apply to most users and involves, in any case, a complicated series of calculations. For Level III, marginal cost recovery, we have offered two different variations: Worksheet 8 uses an example of recovering contraceptive costs, whereas Worksheet 8a offers an example based on recovering part of the salary costs. This alternative (8a) may be more useful if your program or facility receives all of its commodities free of charge, from the government, for example, or from other donors. Of course, these are only examples, and you will need to calculate costs and fees based on your own conditions.

Worksheet 7

Calculating the Fee Based on Nominal Cost Recovery (Level II)

	<i>Your calculations</i>	<i>Example based on commodity costs</i>
1. Bulk cost of product to facility	_____	<i>(500 condoms for 2500 francs)</i>
2. Cost per unit	_____	<i>(5 francs)</i>
3. Percent of (2) to be charged user	_____	<i>(e.g., 20%)</i>
4. Price to user	_____	<i>(1 franc)</i>

Worksheet 8

Calculating Fees Based on Marginal Cost Recovery (Level III)

	<i>Your calculations</i>	<i>Example based on commodity costs</i>
1. Bulk cost of product to facility	_____	<i>(500 condoms for 2500 francs)</i>
2. Cost per unit	_____	<i>(5 francs)</i>
3. Price to user	_____	<i>(5 francs)</i>

In this case, the facility or program completely recovers the cost of buying this product but not any associated operating expenses. This option assumes that all staff and infrastructure are already in place, and paid for by some other sources, when the product is bought. That is, the objective is to cover the additional cost of providing an additional unit of service, rather than to recover the costs of elements already in place.

Worksheet 8a

Calculating Fees Based on Marginal Cost Recovery (Level III)

An alternative example

	<i>Your calculations</i>	<i>Example based on salary costs</i>
1. Total cost of salaries to facility	_____	<i>(100,000 francs)</i>
2. Percent of salary costs to be recovered as marginal costs	_____	<i>(20%)</i>
3. Total amount to be recovered	_____	<i>(20,000 francs)</i>
4. Total patient visits per year	_____	<i>(5,000)</i>
5. Price to user	_____	<i>(4 francs)</i>

In this case, the facility or program recovers some part of the costs of providing services or products, in an attempt to cover the "marginal cost" of providing that service or product. The portion of salaries recovered is used as a very rough estimate of what that "marginal cost" would be.

In this case, the facility recovers completely the cost of buying this product but not any associated operating expenses. This option assumes that all staff and infrastructure are already in place when the product is bought.

Worksheet 9

Calculating Fees Based on Operating Cost Recovery (Level IV)

1. Annual operating costs of facility

contraceptives	_____
rent	_____
salaries	_____
supplies	_____
utilities	_____
repairs	_____
other	_____
Total	_____

2. Annual number of services provided or clients served _____

3. Operating cost per unit *[(2) divided by (1)]* _____

4. Average price to user *[same as amount in (3)]* _____

5. Price *[amount in (4)]* to be distributed as

Price per visit _____

Price for a year's worth of contraceptives _____

Total Price *[same as amount in (3)]* _____

NOTES:

You, the manager, should know that it is quite likely—and very desirable—for the facility or program to move from one level to the next over the medium- to long-term (always assuming the user's ability to pay). You thereby make more FP services available to more people, and increase the sustainability of the facility or program.

It is important to keep in mind that there is a relationship between cost, perceived value and quality—and to understand the effects of these on demand. As discussed in *User Fees for Sustainable Family Planning Services*, maximum utilization of products/services typically does not occur at Level I, but somewhere above it; highest utilization is *not* found where services are free. Your goal in this regard should be to find that equilibrium point where both utilization and cost recovery are at their highest.

In some cases the fees charged for one service can be used to subsidize other services. For example, the fees for high-demand services, like condoms or oral contraceptives, may be such that they generate more than their share of costs and could therefore be used to subsidize other services (which may even have a higher priority). If this is one of your goals, then you will need to take this factor into account when setting the fees for certain high-demand services.

Finally, there is the question of whether to have a sliding scale of fees. A sliding (or multi-tiered or differential) fee structure subsidizes services for those who cannot pay. In some countries, households that are certified as poor by community leaders are given vouchers for FP services. In other countries, a client's own word or documentation from a village chief determines an individual's income and hence his/her eligibility for a reduction of or waiving of user fees. Eligibility criteria for sliding-scale fees are similar to those for waivers, which are discussed under Step 3 below. Of course, while reduced or zero fees may be realistic with regard to certain methods of contraception, they may not be appropriate for all methods because of social implications.

Now, based on the calculations performed, you can fill in the following information:

Worksheet 10

Summary of Pricing and Fee Structures

1. Pricing method used _____
2. Cost recovery level expected _____
Including what % of contraceptive costs _____
Including what % of recurrent costs _____
3. The tentative fee schedule will be

Services

Consultation _____

IUD insertion _____

Surgical procedure _____

Contraception

Condoms (per ___) _____

Cycle of oral contraceptives _____

IUD _____

Injection _____

Other _____

Other _____



Step Three

Develop Mechanisms to Ensure Access to Family Planning Services

We have mentioned in several places the effect that prices have on the utilization of family planning services. Regardless of whether many, or even most, people may be willing to pay moderately increased prices, there are always those who cannot afford to pay at any price. And as these are often the people most in need of family planning assistance, we need to make special provisions to ensure that no one is excluded from these services.

The proportion of clients who are truly unable to pay in any given area of any given country can be difficult to ascertain. Typically, there are at least three groups of people who may have difficulty paying fees:

1. There are those who can pay even though payment may be difficult. This group will pay if the services and goods are seen as valuable and important, and if fees are within reach.
2. There are those who can pay a certain amount, but not the full fee set by the facility. Or they may be able to pay at certain times, such as during or immediately after the harvest, but not at other times.
3. There are those who are truly unable to pay any amount at all.

This section describes simple approaches to establishing and implementing a waiver system to ensure that everyone who is interested in family planning, regardless of their ability to pay, has adequate access. The proportion of people in your UFS who will be unable to use services if fees are introduced will depend on many factors, such as the fee structure and the local economy. The percent of exempt users is certain to have a considerable impact on the performance and success of any UFS. If the criteria for exemption are too loose, or are loosely applied, people who are in fact able to pay may be exempted and revenues thereby lost. On the other hand, if the waiver system is too stringent, needy people may be denied services. This latter consequence is especially counterproductive and undesirable, as unwanted pregnancy among the poorest people will have particularly disastrous results for the families involved. For this reason, you would normally want to err on the side of giving too many free services—rather than too few—and to figure this bias into your planning, pricing, and revenue projections. At the same time, it should be your goal to structure the waiver system in such a way that it exempts only those people who would otherwise have no access to services.

Thereafter, you should rely on regular monitoring and evaluation to make sure your system is working the way you intended.

To design an effective waiver system, you will need to answer the following questions:

1. How will eligibility for waivers be decided?
2. How many waivers, as a percentage of all services, will you allow?
3. What method of waiving will you use?
4. How long will waivers be valid?
5. Who will have authority for issuing waivers?
6. How will waived or free services be accounted for?

1. How will eligibility for waivers be decided?

Determining eligibility involves two steps: specifying criteria and specifying how each criterion will be weighed in deciding eligibility. It is important to be as specific as possible about these two steps so that your eligibility criteria are carefully formalized and clear to everyone. That is, if someone meets the criteria, he or she is eligible for waivers; if someone does not meet the criteria, he/she is ineligible. Clients may not agree with the decision, but they should not be able to fault the process. And while the facility or program can help clients to obtain waivers, it should be seen as the client's obligation to demonstrate that he or she qualifies for the waiver.

Below we offer a sample questionnaire you can use for collecting information on which to base your decision to waive or not to waive user fees. For each question, we offer suggestions on how to use the information to make your decision. Some questions may not be appropriate for your particular clientele, or there may be other information which you find to be more useful. In either case, these may serve as a useful beginning. (For those who wish to use this questionnaire, we offer a version without the commentary in the pocket in the back of this Handbook.)

Figure 5

User Questionnaire

1. Address of user: _____

(Certain locations may be known to be poorer than others.)

2. Apparent health of user: good fair poor

(Someone who is disabled or in poor health may not be able to work or may already have high health care costs.)

3. Marital status: married unmarried

(A single woman with children may be less able to pay. Married couples may have two incomes and therefore be more able to pay.)

4. Occupation: _____

(Certain categories of occupations would normally be required to pay: civil servants, teachers and other professionals, health care workers, etc. Someone who is unemployed would obviously be less able to pay.)

5. Occupation of spouse: _____

(This should shed additional light on the family's financial situation. Even if the spouse has a low-paying job, the very fact that there are two people employed is significant. Even if both husband and wife are unemployed, this doesn't automatically mean they should be eligible for a waiver.)

6. Education level: no formal education post secondary
 primary school only college graduate
 some secondary school

(People above a certain level of education can be assumed to have some income-earning potential. For example, most families in which either the husband or wife has at least a high school education should be able to pay. A low level of education may indicate the inability to pay, but not in and of itself (not all uneducated people are poor).)

7. Education level of spouse: no formal education post secondary
 primary school only college graduate
 some secondary school

(Even if the user in front of you has little education, the spouse might be better educated and therefore have earning potential.)

Figure 5

User Questionnaire - continued

8. Employer of user and user's spouse:

User _____

Spouse _____

(This information can be used to verify employment and salary. Knowing that his/her employer may be contacted may prevent the user from giving false employment information.)

9. Name/address of closest relative:

(This gives you another potential source for verifying eligibility information. Moreover, even if the user is unable to pay, perhaps a close relative is able to pay. Approaching relatives requires considerable discretion because of the sensitivity of the issue involved and the need to protect confidentiality.)

10. Name/address of community leader:

(This gives you someone else to contact to verify inability to pay.)

11. Number of children: _____

(People with large families may be less able to afford fees, especially someone who is unmarried. But you should try to find out if any of the children are employed.)

12. Ages of children: _____

(Children under 12 are likely to be in school or at least not generating any income.)

2. How many waivers, as a percentage of all services, will you allow?

Deciding what percentage of fees to waive is something of a balancing act. On the one hand, you want to serve the maximum number of potential users, but on the other hand, you want to collect enough revenue to be able to maintain and expand services. If you have too strict a policy, potential users may be denied access. If you have too lenient a policy, you will lose revenue, you will spend an inordinate amount of time issuing waivers, and you will be doing a fundamental disservice to those who are paying fees.

There is no recommended percentage; some programs increase use without issuing any waivers while others waive 5-10% of fees. What is most important is to monitor your system carefully and correct for mistakes. (See Step 9 for more information.)

3. What method of waiving will be used?

It is not always necessary to waive the entire cost of a product or service. You might want to consider using discount or "partial" waivers. While these are somewhat complicated and involve more paperwork, they are a legitimate option. There are at least three types of partial waivers:

- the user pays a percentage of the costs of his/her visit
- the user pays for the product (contraceptives, etc.) but not for the consultation
- the user pays for the consultation but not for the product

4. How long will waivers be valid?

Waivers can be issued on a one-time/per-visit basis, for a longer period of time or several visits, or even for a full year. If you plan to review and perhaps change your waiver system periodically, then you may not want to issue waivers for long periods.

5. Who will have authority for issuing waivers?

You should designate someone at the service delivery site to be responsible for authorizing and issuing waivers. If there is a social worker attached to your facility, he/she would be an obvious choice. This person would apply the agreed-upon criteria and decide whether a user was eligible or not. Normally, you would not select the clerk or cashier for this role as the waiver should be issued before the user comes to the payment point.

6. How will waived or free services be accounted for?

Waived services should be recorded in the same manner as any other service. That is, a fee or charge is recorded and the amount collected is noted. In the case of a waiver, the amount collected will not be the same as the charge or will be "0," with a notation in the ledger referencing the relevant waiver (ideally by number). See Step 6, parts 1, 2, and 3 for more details.

It will be important to monitor the waiver system closely to be sure it is having the intended effect. You may have to adjust your expectations of what percentage of fees can be waived and/or adjust your waiver criteria. See Step 9.

You should now have decided what the elements of your waiver system will be:

1. Instrument by which eligibility for waiver will be decided: _____
2. The total waivers allowed, as a percent of all services, will be: _____ %
3. The method used for waiving will be: _____
4. Waiver will be valid for: _____
5. Waiver will be authorized by: _____
6. Waived services will be accounted for by: _____



Step Four

Estimate Utilization and Revenues

Once you have set your fees, the next step is to estimate utilization and, based on utilization, projected revenues. Once revenues have been estimated, you can later compare actual revenues with the projected figures to help determine (1) whether you have set your fees too high or too low, and (2) whether your waiver/exemption system (see Step 4) is working as intended.

In and of itself, the process of developing utilization and revenue projections provides management with a number of useful tools and skills to improve health service delivery and efficiently manage resources. Specifically, you can use the process to:

- enhance your understanding of the dynamics of how your facility and how the broader FP service delivery system in your area function;
- enhance revenue, such as in response to recurrent cost crises;
- estimate the amount of “off budget” revenues which may become available for buying additional inputs (commodities, equipment, staff);
- plan pricing to encourage demand for a broader method mix;
- improve access to services and improve efficiency by, for example, identifying seasonal fluctuations in demand and scheduling increased outreach efforts by staff during off-peak periods;
- plan for improving the quality of services, e.g., by setting targets or milestones for monitoring and evaluating the use of specific methods or the use of a particular delivery site whose use has fallen off; and
- plan for improving the quality of services by buying additional drugs or other supplies with revenues generated through user fees.

Designing an Approach

While there are many methods for estimating use and revenues, the most common is to develop a forecast based on existing data from previous periods of operation. In this instance, such data would include any records of all products and services dispensed by the facility and any fees that were collected. The following worksheet presents some questions for you to think about before designing an approach suitable to your site.

Worksheet 11

Considerations in Designing Use/Revenue Estimates

1. Purpose or intended use:

How precise do your projections need to be?

- Very precise Somewhat precise Very rough

What are you going to use your projections for?

- For budgeting For strategic planning To estimate additional resources

2. Availability of data:

Is the data you need to collect available or easily obtained?

- Yes No

Is the data

- utilization-based (# of client visits per method) or
 population-based (# of people or households in area and estimated prevalence of contraceptive use)?

3. Special equipment:

Can the estimates be made with existing equipment (paper and pencil, calculator), or

- Yes No

is a computer necessary?

- Yes No

If a computer is necessary, is one available?

- Yes No

Worksheet 11 - cont.

Considerations in Designing Use/Revenue Estimates

4. Staff skill levels:

Does your staff have the skills to gather and sort the data and perform the necessary calculations? Yes No

If a computer is needed, is there someone available to run it? Yes No

5. Match between level of effort and intended use:

Are the time and effort involved reasonable given the intended use of the information? Yes No

Note: An effort which requires several weeks of data collection and analysis may not be justified.

6. Scope of analysis:

Will you be making estimates for

- | | |
|--|---|
| <input type="checkbox"/> a single facility or | <input type="checkbox"/> an entire district |
| <input type="checkbox"/> several facilities comprising one service network | <input type="checkbox"/> region |
| | <input type="checkbox"/> country |

Estimating Utilization

The revenue from a particular service is a function of the amount of use of that service multiplied by the fee per use, minus any waived or exempted fees. This can be expressed in a simple mathematical equation:

$$R = u (f) - w,$$

which means

Revenues = estimated use * (fee per use) - total of waived or unpaid fees

In other words, the key to being able to estimate revenues is to accurately estimate use. If you calculated your estimated revenues from each of your services, you would have the total estimated revenues for that particular period. (To take this a step further, if you were then able to estimate your costs for that same period, you would know whether to expect a revenue surplus or a shortfall. And this in turn would be an important consideration in deciding whether to raise or lower your user fees.)

In any estimating scheme, your starting point would have to be the previous period; that is, the *actual* use as documented by your records. From the actual use, you then project either an increase, a decrease or no change.

Below we offer a sample worksheet for estimating utilization and revenues for condoms:

Worksheet 12

Estimating Family Planning Utilization and Revenues

A. Calculating total estimated use:	<i>Your calculations</i>	<i>Example</i>
1. # of client visits in previous year:	_____	<i>(10,000)</i>
2. projected increase for coming year or:	_____	<i>(1,000)</i>
3. projected decrease for coming year:	_____	
4. total projected use for coming year:	_____	<i>(11,000)</i>
B. Calculating total estimated revenues:		
1. fee per visit:	_____	<i>(1 franc)</i>
2. total # for coming year:	_____	<i>(11,000)</i>
3. pre-waiver (projected gross) revenue total (#1 x #2):	_____	<i>(11,000 francs)</i>
4. % of #2 to be waived:	_____	<i>(20%*)</i>
5. revenue to be waived (% in #2 x #3):	_____	<i>(2,200 francs)</i>
6. projected total revenue (#3-#5):	_____	<i>(8,800 francs)</i>

** Based on previous year's percent plus/minus any estimated increase or decrease.*

Using this worksheet as a model, managers should be able to calculate use and revenue estimates for most services offered. For a more elaborate methodology for projecting utilization and revenues, see *Utilization and Revenue Projection Techniques*.



Step Five

Verify Consistency in Steps One Through Four

You have now defined objectives and goals, set cost recovery objectives, established prices, developed mechanisms to ensure access to family planning services for all men and women, estimated utilization levels, and projected revenues. At this point, it is important to confirm that all of these steps are consistent and to evaluate the prices set. The prices should be such that, given the estimated level of waivers which will be allowed, and given projected utilization, the estimated level of revenues will be sufficient to meet your cost recovery targets. If these numbers are not all consistent, you need to repeat the process this far and change either (1) targets, (2) prices or (3) percentage of fees which will be waived. This is the same kind of exercise that you will have to carry out periodically as part of the evaluation and monitoring process; by doing it at this point, you will be refining your user fee system before getting to the pilot testing stage.

Summary Worksheet

Verification of decisions made in Steps One through Four

We intend to use any funds collected to

1. _____
2. _____
3. _____
4. _____

Our target cost recovery level is

- I. No Cost Recovery
- II. Nominal Cost Recovery
- III. Marginal Cost Recovery
- IV. Operating Cost Recovery
- V. Operating & Infrastructure Cost Recovery

The percent of recurrent or operating costs we intend to recover is _____ %

The pricing method we are using is _____

(continued on following page)

Summary Worksheet - continued

The fee schedule will be

Services

Consultation _____

IUD insertion _____

Surgical procedure _____

Contraception

Condoms (per ___) _____

Cycle of oral contraceptives _____

IUD _____

Injection _____

Other _____

Other _____

Total projected use for coming year _____

Pre-waiver (projected gross) revenue total _____

Percentage of fees to be waived _____

Projected total revenue _____

These total projected revenues are consistent with cost recovery targets

yes

no

If not, repeat with modification to

prices

waiver level or

targets



Step Six

Determine Methods for Payment of Fees

While certain users will never be able to afford the fees—whatever the cost and whatever the payment method you choose—there are other users who may be able to pay at certain times but not at others. It is important not to automatically relegate these people to the waiver system, to offer them free services, but rather to devise ways to allow them to pay when they are able to. This not only captures otherwise lost revenues, but it is more fair to those users who are paying. And it may make it possible for you to lower your fees overall.

Users who can't pay at certain times—whose incomes are seasonal, who are presently paying off some kind of debt, etc.—could be accommodated through a variety of alternatives such as (1) prepayment, (2) deferred payment, (3) installment payment, and (4) third-party payment.

Prepayment

Some users may know that while they can afford certain services at the moment, they may not be able to afford them later. An example might be a pregnant woman who is presently working but will have to quit work when her child is born or a farmer who just got his semi-annual payment for his harvest. In these cases, you would estimate these users' FP needs for the next few months or even for the next year, and collect the fees in advance. These payments would be recorded, and there would be no additional payment at the actual time the product or service was delivered. This would allow you to “bundle” services into a prepaid fee and would also serve as an incentive to users to follow through and use the services they have already paid for.

Deferred payment

A client often needs a service at a time when he or she cannot pay. There is no need to waive this user's fees or postpone the service (which might discourage the user) if an arrangement can be made to collect the money at a later time. This approach works best where small amounts are involved. However, the bookkeeping burden involved for small amounts means that this is probably not a cost-effective practice. Deferred payment should therefore not be encouraged except when it is really necessary.

Installment payments

This is a variation on deferred payments, with the added advantage of making it possible for users to have access to certain more costly services (e.g., VSC) they might not otherwise consider. As with deferred payment, however, the bookkeep-

ing burden involved for small amounts means that this is probably not a cost-effective practice. This should only be used when it is really necessary.

Third-party payments

In many countries, someone other than the client may be able to pay for the service, such as insurance companies, employers, social security or cooperatives.

Each of these methods has its advantages and disadvantages, which are given in Figure 6 below. In all cases, it is important to remember that the success or failure of these approaches will depend on (1) the effectiveness of your bookkeeping system and (2) the extent to which your user population is familiar with these concepts (i.e., educated by facility or program staff).

Figure 6		
Alternate Payment Methods		
	Advantages	Disadvantages
Prepayment	<p>Guarantees user's access for an extended period.</p> <p>Especially useful in areas where income peaks at harvest time.</p> <p>Allows for a set of services to be bundled under a single prepayment.</p>	<p>Requires additional planning/commitment from user.</p> <p>Requires minimal additional paperwork by provider.</p>
Deferred payment	<p>Makes access easier for user.</p> <p>User may have more method choices.</p>	<p>Requires an extra bookkeeping entry and follow-up.</p> <p>Can be abused, as some users who can pay now will choose to pay later.</p> <p>May discourage those who owe from coming back to clinic.</p>
Installment payments	<p>User may be more able to pay over a longer period of time, thus increasing revenues.</p> <p>User may be able to afford more costly services.</p>	<p>Requires multiple bookkeeping entries and follow-up.</p> <p>Has potential to overburden client and facility with excessive debt.</p>
Third-party payments	<p>Increases revenue without adding direct costs to user.</p>	<p>Requires extra work to locate/arrange third-party contribution.</p> <p>May require special billing procedures.</p>



Step Seven

Manage the Fees Collected

Once you have set your fees and established a payment system, you are faced with the issue of how to handle the money that comes in. How to manage—that is, how to record, safeguard, and report on—revenue once it is in your hands is critical to the long-term success of your venture. This part of your work has six basic tasks given below.

1. Determining the amount to be collected.
2. Collecting the appropriate amount.
3. Recording total charges, any adjustments, and net amounts collected.
4. Reconciling the amounts collected.
5. Depositing fees collected.
6. Summarizing total amounts collected and preparing management reports.

You will perform steps 2 through 6 on an ongoing basis as you collect fees. Step 1, based on a combination of fee schedules and waiver policies, will only have to be performed occasionally, as part of the ongoing monitoring and evaluation of your UFS. Figures 7-12 below outline the specific procedures to follow when executing each step, while the notes following each figure discuss important considerations for each step. Sample forms for entering, reconciling and reporting revenues are provided in the pocket in the back of this Handbook.

Figure 7

Task 1: Determining the Amount to be Collected

- A. Obtain a completed registration or encounter form from the user which describes the service or services provided. This is usually filled out by the provider.
- B. Obtain the current fee schedule.
- C. Find and record the fee for each service listed on the form.
- D. Total all fees and record on the form.
- E. Determine payment classification of user and calculate amount due:
 1. Full-pay users will owe the amount listed under D above.
 2. Partial-pay users will owe a percentage of D.
 3. Exempt users will owe nothing.

NOTES

The encounter form may not be necessary in those instances where the facility offers only one service or charges only one fee regardless of the service provided. Note that under C the person who collects the fees (usually the cashier) will record the same fee for the same service whether or not the user will actually be charged that amount. This will enable you to keep track of the percentage of your fees that are being subsidized (waived) or otherwise absorbed by the facility.

Figure 8

Task 2: Collecting the Appropriate Amount

- A.** Request payment in full for the amount due from the user.
- B.** Collect cash from the user.
- C.** Record amount received in a daily cash log and, if separate, in the receipt book.
- D.** Give a receipt to the user as proof of payment.
- E.** Place cash received in locked cash box or cash drawer.

NOTES

The timing of collection may vary; you can either collect fees before the service is provided or after. Fees can be collected in advance if the provider has one charge for all services. This has the advantage of better control, i.e, users are not provided services until they have demonstrated the ability and willingness to pay for them. However, collecting fees prior to the visit can sometimes create a bottleneck and make patients late for their appointments.

Fees will normally be collected after the visit if different fees are charged for the various services and it is not known ahead of time exactly what services the user will require. For example, the user may be scheduled for a consultation but during the consultation it is determined that a pregnancy test is needed. In that case, the user should be charged for the consultation as well as for the lab test. If fees are collected after services are provided, controls are needed to ensure that users do not leave without paying.

Fees should always be collected in a professional manner. Cashiers should be considerate but firm in requesting payment. Most importantly, the collection policy should be applied consistently to all users.

It is also important that users be informed of the total amount of fees and the amount due even if the user is exempt from payment. Experience has shown that if users are aware of the "value" of services received, they tend to use the services appropriately.

Finally, collection policies and procedures should contain a contingency plan for those users who are unable or unwilling to pay for services. As discussed in a prior section, it is important that the policies do not deny access to services but that those who are able to pay do so. There are several options for those cases where users are either unable or unwilling to pay:

- ❑ Users can be requested to return for services when they have the necessary payment. Obviously, this policy is enforceable only if the ability/willingness to pay is determined prior to services being rendered. Furthermore, managers should be careful that such a policy does not deny access to care and result in undesirable outcomes.
- ❑ Users can be billed for services subsequent to the visit. While this policy may be a good one, it may not be cost-effective. Billing users for services subsequent to the visit requires an established accounts receivable system. That is, charges must be documented, an invoice must be produced and delivered to the user, and follow-up on payment must be performed until the amount is paid in full. Moreover, there is some probability that the amount may never be paid.
- ❑ Users may be exempted from payment on a case-by-case basis. The decision to exempt a user from payment should be made by a manager and, moreover, should never be the responsibility of the cashier. Individual exemptions from payment should be the exception rather than the rule; otherwise, collection policies will not be effective over the long term. Exemptions were discussed above under Step 2.

Figure 9

Task 3: Recording Total Charges

- A.** Record fees collected in a daily log (same as 2C in Figure 6).
- B.** Record gross charges and any waived (adjusted) charges in same or separate log.

NOTES

As noted earlier, it is important to keep a record of gross charges and of adjustments in order to determine whether your user fee system is really working. If you are waiving large percentages of your fees, then your fees may be too high. On the other hand, if you are waiving almost no fees, then perhaps your fees are too low.

Figure 10

Task 4: Reconciling the Amounts Collected

- A.** At the beginning of each day:
 - 1. Count the amount in the cash box and agree total to the amount shown as "beginning cash" from the previous day.
- B.** At the end of each day:
 - 1. Count out the beginning cash and set aside.
 - 2. Separate bills and coins by denomination; count, and record amounts on the cash reconciliation form.
 - 3. Total the amount on the reconciliation form.
 - 4. Total the amount of cash collected according to the daily log and record on the reconciliation form.
 - 5. Compare the total from the log to the total cash collected.
 - 6. If there is a difference:
 - a. Re-count cash, including cash on hand.*
 - b. Re-add cash total and cash collected total.*
 - c. Match encounter forms to daily cash log.*
 - d. Match receipt book, if separate, to daily cash log.*
 - e. If there is still a difference, record this on the cash reconciliation form.*
 - 7. Place cash, excluding cash on hand, in a deposit bag, and place the cash on hand back into the cash drawer.

Figure 11

Task 5: Depositing Fees Collected

- A.** Count the cash and agree to the cash reconciliation sheet.
- B.** Complete the deposit slip (with duplicate) in the total amount collected.
- C.** Deposit the amount with the appropriate financial institution.
- D.** Attach a copy of the deposit slip to the cash reconciliation form and file.

NOTES

All fees collected should be deposited in total; that is, before any expenditures are taken out. Deposits should be made by someone other than the cashier.

Figure 12

Task 6: Summarizing and Reporting

- A.** At the end of each day:
 - 1. Sum the total fees on all encounter forms and record in the daily log.
 - 2. Transfer total charges and collections from the daily log to the monthly summary.
- B.** At the end of each month:
 - 1. Sum daily charges and collections for all days during the month and record the total on the monthly summary.
 - 2. Transfer the monthly totals to the yearly summary.
- C.** At the end of each year:
 - 1. Sum monthly totals for all months during the year and record the total on the annual summary.

NOTES

The information thus summarized should make it clear to management if the user fee collection system is working. Two ratios are commonly used to measure the efficiency of the collection system: Gross Collection Percentage and Net Collection Percentage.

Gross Collection Percentage
is equal to:

$$\frac{\text{Cash Collected for the Month/Year}}{\text{Gross Fees for the Month/Year}}$$

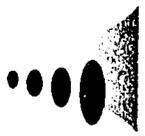
This ratio measures the amount collected as compared to the gross fees charged for services. It is thus a function of (1) the facility's collection policy, (2) the facility's mix of patients by payment classification, and (3) collection efforts by the cashier.

Net Collection Percentage
is equal to:

$$\frac{\text{Cash Collected for the Month/Year}}{\text{Gross Fees Less Exempted Fees}}$$

A third ratio will provide management with an indication of whether the UFS is achieving its purpose in terms of the percentage of cash being charged (prior to waiver adjustments), to determine if this is consistent with the targets which underlay the whole user fee system.

$$\frac{\text{Gross Fees Charged (before adjustments)}}{\text{Total Costs}}$$



Step Eight

Determine What Percent of Fees Will Remain at the Site

In deciding whether to charge user fees and what fees to set, it is important to know whether the fees collected—in whole or in part—can, in fact, be used at the site. In many countries the law requires that fees collected in public facilities be passed on to the Ministry of Health or Finance or to the Central Treasury. In this regard, you will need to answer at least three basic questions as you start to design your system:

1. Are there laws or regulations controlling the use of fees collected at a facility or in a program such as mine?
2. Do these laws require that all or just a percentage of fees be passed on?
3. Is there any mechanism whereby I can get back some of these fees for use at the service site, once I have passed them on?

If you are obliged to pass on your fees, you are unlikely to be able to expand or improve the quality of services at your facility, and thereby have very little incentive for demonstrating the advantages of a UFS to the public. And this, in turn, could discourage utilization. Moreover, though they may be of some benefit at the central level, you will in effect become fiscal agents for some other level of bureaucracy, taking on an additional administrative burden, complete with additional costs, with no benefits to your site.

There is ample evidence from around the world that collection rates are higher—and services more easily improved—when a high percentage of fees remain at the site where they were collected. Users tend to be more willing to pay when they know their fees will be used on them, that is, to improve the facility they frequent. Moreover, when spending its clients' own money, a clinic is much more likely to make decisions responsive to local needs.

If there are legal reasons why the facility cannot retain fees, there may still be acceptable alternatives. In some countries, fees are handed over to a community council, which can then allocate those revenues as it chooses. In this instance, site managers can argue strongly that revenues collected from family planning services should be used to support the continuance and improvement of such services. As a general rule, you can assume that the further away the final resting place of your revenues, the less likely you and your program will ever see the revenues again.

Worksheet 13

Disposition of Revenues.

Based on your review, the disposition of revenues will be

_____ % at the local level (clinic, facility or community)

_____ % passed on

100 % Total

And based on your earlier revenue projections (in Step 4) and the percentage of revenues which will be available to you for local use, this amount will be approximately _____ .



Step Nine

Plan Priority Activities For Which Revenues Will Be Used

At the beginning of this Handbook, you were asked to list the things that you expected to do with any funds generated by the UFS. Now that you have established prices, estimated utilization levels, and projected revenues, you can make some plans for what those funds will be used for. It is very important to make these plans because, as you will have already seen, there will not be any great surplus. Only by planning carefully will you be able to accomplish as much as possible with those limited funds.

First, some criteria are needed to compare possible uses of funds. For example, possible ways to use projected revenues may include purchasing contraceptives, paying a salary, operating a vehicle, buying new clinical equipment, or other needs. These can be compared by setting some simple criteria, such as the following:

- Will it directly improve the quality of services provided?
- Will it directly help guarantee a supply/resupply of contraceptives or other supplies?
- Will it enable an expansion of services?
- Will it be sustainable by not adding additional recurrent costs?

To these, other criteria can be identified and added. This is up to you and your co-workers or clients. The next step is to determine how important each of these criterion is. Perhaps one or more can be eliminated.

Now, each individual priority previously identified should be assessed against these criteria to see whether it “meets the test.” A simple way of doing this is to prepare an evaluation matrix. List each criterion against which a priority will be judged along the top of the matrix, and list the possible priorities along the left side. For each potential priority, determine whether it meets each criterion or not. If yes, place a “+” under that criterion; if not, place a “-” there. By adding up the number of “+” or “-” signs for each priority, you will more easily identify the relative importance of each in furthering your overall objectives.

Worksheet 14a

Evaluation Matrix

Example:

	Criteria				
Priority	1	2	3	4	Total "+"
1	+	+	-	++	4
2	+	-	+	-	2
3	-	+	-	-	1
4	+	-	-	-	1

As an alternative, you can choose a scoring system other than "+" and "-" signs; for example, a ten-point scale, under which a score is entered next to each potential priority for each criterion (see Worksheet 14b). As yet another variation, those criteria which are more important (e.g., resupplying contraceptives) can be given extra weight, such that the first criterion carries a weight of 3, the second criterion a weight of 2, and the others a weight of 1 (see Worksheet 14c). Then when the scores are added up, they are multiplied by the weight of each criterion.

Worksheet 14b

Evaluation Matrix

Example:

Alternative based on points

	Criteria				
Priority	1	2	3	4	Total
1	9	6	1	10	26
2	7	4	8	3	22
3	2	8	4	3	17
4	10	3	2	2	17

Worksheet 14c

Evaluation Matrix

Example:

Alternative based on weighted points

Priority	Criteria								Total weighted scores
	1		2		3		4		
	points	weigh= 3	points	weigh= 2	points	weigh= 1	points	weigh= 1	
1	9	27	6	12	1	1	10	10	50
2	7	21	4	8	8	8	3	3	40
3	2	6	8	16	4	4	3	3	29
4	10	30	3	6	2	2	2	2	40

This should result in a fairly clear picture of the rank order of priorities for which revenues will be used. If the order is still not clear, you can examine pairs of potential priorities. For example, the top priority may be clear, but there is a tied score for the second and third; simply look at these two, and decide which is more important to you, and place that one above the other on the priority ranking.

Next, you need to consider how far the expected level of revenues (projected in Step 3) will go toward completing these priorities. First, estimate how much it will cost to carry out the first priority. If you estimate that there will be resources left after this priority has been completed, move on to the second one. Once you have confirmed your priorities, estimate how much it will cost to carry out each one individually. Use the same time period you used for projecting revenues; if you projected revenues for one year, then estimate what each priority would cost for one year (e.g., purchase of one year's worth of contraceptives, one year's worth of a staff salary, one year's worth of vehicle operation).

Worksheet 15

Estimating Costs per Priority

		Total Revenue Available _____
Priority _____	Estimated Cost _____	(-) Revenues Available _____
Priority _____	Estimated Cost _____	(-) Revenues Available _____
Priority _____	Estimated Cost _____	(-) Revenues Available _____
Priority _____	Estimated Cost _____	(-) Revenues Available _____

Considering the costs and the criteria which you are using to determine priorities, are the priorities that you set before still correct? When you have balanced the costs of your priority activities with the amount of revenues projected, this exercise will be finished. You can summarize the results below.

The priorities are:

1. _____
2. _____
3. _____
4. _____
5. _____



Step Ten

Monitor and Evaluate the Performance of the UFS

A user fee system must be continually monitored to ensure that the new fees are not discouraging people from using the services. This is done by periodic studies of utilization levels and patterns to look for declines in use or other significant changes in demand.

Most FP programs already have a system in place for recording and reporting levels of use, with some detail about method mix. Any such form which provides basic FP service statistics can be used.

The simplest way to determine the impact of introducing user fees is to compare levels of use over a given time frame before and after the fee system is instituted. It is important to choose a long enough period in order to minimize the effect of seasonal fluctuations or some other kind of regular variation in use. If, for example, you compare the month just before fees are introduced to the month just after, it's quite likely that this two-month comparison would show a drop in utilization. But this doesn't necessarily mean that your fees are too high. One explanation may be that this is part of the normal monthly change or part of a seasonal change. Or it may be that people tended to concentrate their use of services in the previous month because they knew that new fees were to be introduced. Or, the introduction of fees could have led some people to use services elsewhere, if those services were an option. In these latter two instances, the drop in use is not necessarily permanent; you would need to observe use levels for several months to see if users started to come back, either because they ran out of goods purchased just before the change or because they stopped buying services at an alternative facility. In any event, it would be premature at this point to assume that there was a problem with your UFS.

The easiest way to determine if fees are really having a negative impact on utilization is to extend the period of observation, typically by looking at utilization data for six months prior to introduction of new fees and for several months after. If utilization levels for each of the several months after new fees are introduced fall below all of the earlier months (that is, the lowest month before introduction still had more users than the highest month after introduction), this would be a stronger indication that the fees were having a negative impact on demand and that modifications might be called for. Based on the tolerance levels you choose (see below), repeated utilization rates below the tolerance level (e.g., for two consecutive months) would trigger a revision in the system, unless there is another clear and obvious explanation. In any case, it is important to rule out the possibility that

these changes in utilization are normal or seasonal and would therefore be expected even without any user fees.

Determining Tolerance Levels

We have repeatedly emphasized that our objective in designing, implementing or updating a Family Planning User Fee System is to strengthen the ability to expand services. The purpose, therefore, of monitoring user fees is to make sure that those fees are not having the opposite effect. There may be some drop in levels of use, but such a drop, if fairly small, may be "tolerated," that is, acceptable, given the overall goal of expanding services. An acceptable drop in use is called a "tolerance level."

It has been suggested elsewhere that a drop in use of 20% would be a maximum tolerance level. This may be considered acceptable in some cases; if, for example, the need for revenues is so great that a program cannot continue without maintaining fee levels, or if it is known that this 20% of former users still have access to and use services somewhere else. But in most cases in which SEATS provides support, 20% would be considered too great a drop.

An easy way to specify the tolerance level is to look at the average (mean) number of users for each method in the preceding six months and to set the tolerance level at, for example, 90% of this mean. A drop below the tolerance level would then trigger a review, which would lead to changes in pricing or in a waiver policy. On the other hand, if utilization does not drop to the tolerance level, the next time you review and update user fees or your waiver policy, you may not have to be so cautious. You will, of course, set your tolerance levels consistent with your goals and local circumstances. Worksheet 16 shows mean utilization levels and tolerance levels for a typical FP clinic or program.

Worksheet 16

Mean Utilization and Tolerance Levels

- | | |
|--|---------------|
| A. Average monthly visits for previous six months | _____ |
| B. Tolerance level | _____ % |
| C. Expected average utilization levels | _____ (A * B) |

Next Steps

Now that you have developed a design for your UFS, you will be ready to begin your plans for implementation. A number of steps will be involved in this process. Specific steps which will be useful as you plan for implementation are as follows:

Pilot Tests

You may wish to test the UFS on a small scale before you introduce it systemwide. Such a test will be particularly important if you are going to introduce it on a regional or national level. A pilot test should be made for a specific period of time (e.g., three or six months), within specific service delivery sites (e.g., all of the sites in one town). At the end of the pilot test period, review each step described above and make modifications to prices, projections, waivers, fee collection, and priorities, as appropriate.

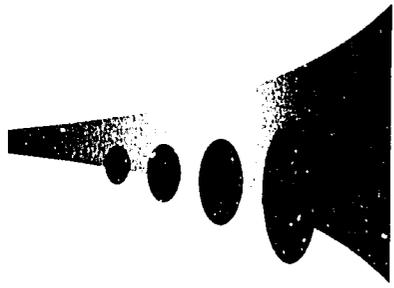
Systemwide Expansion

Once the system has been tested and revised, as needed, you can plan for systemwide introduction. This will involve:

- ❑ Training of personnel: All staff will have to be informed about the new UFS. Those staff directly involved in issuing waivers or in collecting and managing fees will have to be trained in their responsibilities and procedures.
- ❑ Notifying the public: Announcements should be made well in advance of introduction. These notifications should include the introduction date, the new fees, and positive information about what the fees will be used for. It must be clear that fees will be linked to improved quality or availability of services.
- ❑ Setting an introduction date: Set a date which will allow enough time to get everybody ready, and which allows enough time for planning, training, and informing the public.

After Implementation

One point that needs to be emphasized here is that you must review your UFS on a regular basis and look at each of the steps described above to revise and improve your system. If utilization drops below the tolerance levels, you must repeat the steps and reevaluate the pricing structure and the waiver system. If revenues are lower than expected, fees, waivers and utilization must all be examined. Moderate changes in prices and in the number of waivers allowed will be expected, and the system should be updated on a regular basis. At all times, you should be thinking of improving your UFS, moving the level of cost recovery up to the next level.



Utilization and Revenue Projection Techniques

Technical Reference



SEATS

Family Planning
Service Expansion And Technical Support Project

By Laurence M. Day

1992

UTILIZATION PROJECTION TECHNIQUES

There are a large number of projection techniques for forecasting health care utilization. Projections, by definition, require using information on past utilization to predict future utilization. Therefore, to make projections, one must have data on past utilization and select and apply a method by which to project that past pattern into the future. This undertaking can be a simple process or a fairly complex procedure depending upon the amount and types of data available and the number and type of projection techniques considered.

Recent data is preferred in making utilization projections. If data is available for only part of a year (e.g., a month or a quarter), it needs to be annualized; that is, adjusted to represent a year (by multiplying by twelve if the data is for one month, by multiplying by four if the data is for one quarter, and so forth). It should be noted, however, that if data is available for the entire year, it should be used, rather than relying on annualized data for some shorter period of time. Annualizing data always makes the projections less reliable because they do not necessarily contain all of the seasonal fluctuations which are likely to occur throughout the course of the year.

In this paper we have limited the complexity of the process by identifying a limited number of relatively simple projection techniques from which to choose. Our rationale for adopting this simplifying approach is a combination of (1) our general assessment of the selection criteria and (2) recognition that our objective in developing this document is not to present definitive, "state of the art" revenue projection techniques but rather to provide a simple, easily understood, cookbook-like approach which we believe will be effective and useful in helping to acquaint facility-level public health employees in developing countries with the aims and methods of utilization and revenue projection techniques.

The menu of projection techniques which we will consider in this paper is:

- 1) an assumed constant level of utilization (for example, equal to last year's level of utilization)
- 2) a specific assumed rate of growth of utilization (for example, equal to the annual population growth rate)
- 3) a linear extrapolation of the previous years' utilization levels
- 4) an autocorrelation model

Each of these projection techniques uses information about past utilization as its basis for forecasting future utilization. Each technique assumes a specific relationship between past and future health care services use. In any particular instance, one cannot say *a priori* with any great degree of certainty which of these four techniques is the "best" to use in developing utilization forecasts. It depends on data availability, what the analyst thinks is going to happen to utilization in the future—which is a guess—and which of four basic techniques most accurately captures the analyst's best-guess about the future utilization pattern which is to be forecasted.

Obviously, when a person is trying to forecast health services use for the first time, he or she may not have any idea or strong feeling about what the relationship between past and future utilization may be. In that event, if health service provision data from previous years are available, the analyst would do well to first analyze them, to attempt to identify patterns whose causes might still prevail. Usually, reviewing data from the past three to five years will provide some insights into what the next year might bring, providing the analyst with something more concrete than a "feeling" of what the trends have been.

But consideration of numbers alone will not necessarily provide the best estimates of what is to come, or provide the greatest insights into whether or not the future relationship between sequential years of utilization will continue to fairly accurately adhere to past service use patterns. Oftentimes, anecdotal information about changes in the local health care market is also important to take into account: for example, (a) rapid growth in the private sector, (b) the construction and opening of a new MOH facility, or (c) continuation of a public health system recurrent cost crisis which makes drug and medical supplies scarce and discourages utilization. All are factors which might be expected to affect utilization of a particular facility and which should, therefore, also be taken into consideration. Exactly how these types of health care market changes might affect the use of a given facility may not be difficult to gauge qualitatively—it might be easy to figure out if they are likely to increase service use or reduce it—but translating such factors into expected quantitative changes in utilization is not likely to be an easy matter. While such changes suggest to the forecaster that it is likely that there will be some deviation in the historical pattern which has traditionally characterized the relationship between past and future utilization, the forecaster is not likely to be able to do any better than simply select a projection technique which embodies the anticipated qualitative change; that is, select a technique which predicts, for example, a slightly lower or higher level of use than would have been forecasted on the basis of continued reliance on the historical pattern.

We now turn to a brief description of the four techniques. A numerical example of each of the techniques is provided with the intention of demonstrating how each particular technique embodies an assumption—a guess—about the relationship between past utilization and forecasted utilization. Our aim is to provide some concrete examples to help guide the analyst in identifying the technique which best represents what is believed (guessed) to be the relationship between past and future utilization so that the analyst can select that technique which is best.

Developing the necessary components to applying the direct method of projecting revenues

Assumptions

To minimize any ambiguities about the context and characteristics of the health care system being analyzed, five assumptions are made which apply to all of revenue projection exercises presented below. These include:

ASSUMPTION**EXPLANATION**

1. User fee policies have been determined.	Assumes that fees have been determined and will not change during the time period for which the projections are being made.
2. A fee structure is given.	Assumes that the policy and legislative arrangements to implement or update user fees have been set.
3. A waiver system is in place.	Assumes that guidelines and procedures concerning who is to grant waivers, who is to receive waivers, and who is to review waivers have been established.
4. A fee collection and administration system is in place.	Assumes that UFS guidelines and procedures have been established and individuals at all appropriate facilities have been charged with the responsibilities of collecting, depositing, and accounting for user fee revenues.
5. The revenue projections are annual projections.	Assumes that revenues are to be projected for a time period of one year and that the numbers of patients and visits are evenly distributed throughout the year (i.e., seasonality is not an important consideration).

Forecasting on the basis of a single year's data

Projecting Utilization 1: Expected Utilization is Assumed to be Equal to Last Year's Utilization Level

The simplest and one of the most common (albeit generally implicit) forecasting techniques is to forecast utilization to be the same next year as it is this year (or, depending upon the timing of data availability, the same as it was last year). This technique requires very little data—one year—and very little technical (mathematical) expertise.

Projecting Utilization 2: A Specific Assumed Rate of Growth of Utilization

The second utilization projection technique we consider is one in which it is assumed that next year's utilization level will be the result of growth at some specified rate. The assumed rate of growth may be derived any number of ways. (In some of the techniques discussed below, we will consider methods by which we might develop estimates of growth to incorporate into the projection.) In demonstrating this specific technique, however, we consider the simple example in which the projected rate of growth is assumed to be given. This would be the case, for instance, where health care service use is expected to grow at a rate equal to population growth. If, for example, population growth is anticipated to be 2.8 percent next year, then multiplying last year's utilization total by 1.028 will provide us with our estimate of next year's utilization.

Forecasting on the basis of several years' data

Illness and disease are not regularly occurring events. This is what makes them so difficult to predict. In turn, it is this fundamental unpredictability of illness that makes predicting levels of health care use—especially for the curative care to treat unpredictable illness—difficult. Oftentimes illness and health care utilization levels fluctuate markedly, particularly when a relatively small group of persons or a few health care facilities are being analyzed. Recognizing the existence of these wide variations in utilization from year to year suggests that forecasting next year's utilization rate on the basis of only last year's utilization rate may be subject to considerable error. There are several approaches available by which to reduce the magnitude of this potential error. One approach is to use an average of several years of utilization data rather than a single year as the basis for making the forecast. This requires a slight alteration in our basic model. Thus far we have always applied the utilization projection multiplier to the single year of available data, which we have thus far referred to as the actual, past utilization (A_t). Although the most recent available year's data may still be the utilization level to which we apply the utilization projection multiplier, this may not be the case when we are dealing with multiple years of data and different projection techniques. Accommodating this change in the basic model, however, is relatively easy; we simply substitute the more general concept of base period utilization (BP_t , where $BP_t = [n/\sigma_{i=1}^n]A_u/n$) for actual, past utilization (A_t). The rest of the basic model remains exactly the same.

Developing estimates of growth

Estimates of utilization growth may be developed several different ways. They might, for example, be derived from analyzing past growth rates and expecting (and therefore assuming) that the growth rate over the last two years for which there is available data will continue throughout next year. In this case, we simply derive the growth rate which existed between the two periods in question and apply it to the last available year of data to develop our forecast. Computationally, the procedure followed is very similar to that of the preceding technique, except that here rather than being given a growth rate, we compute the most recent actual growth rate and incorporate it into the analysis.

$$(1) \quad (\text{YEAR 2} / \text{YEAR 1}) = X$$

$$(2) \quad (\text{YEAR 2}) * (X) = (\text{FORECAST FOR YEAR 3})$$

For example, if in YEAR 1 there were 2,789 consultations and in YEAR 2 there were 2,892, then our forecast for YEAR 3 would be:

$$(1) \quad (2,892 / 2,789) = 1.037$$

$$(2) \quad (2,892) * (1.037) = 2,999$$

If more than two years of annual utilization data are available, we can extend the annual RATES of change analysis just presented to compute an average of annual rates of change over the multiple-year period, or, alternatively, we can compute the annual LEVELS of change and calculate the average of these amounts over the same multiple-year period. Two specific examples are presented in Exhibits 1 and 2.

Using the computed average changes in utilization to forecast utilization:
linear extrapolation and autocorrelation techniques

These two different types of average changes can be used to develop forecasts based on either of two techniques, linear extrapolation or autocorrelation, depending upon the assumption one makes about what is the appropriate base to which the average change should be applied. If it is assumed that the general utilization throughout the entire study period is to be regarded as the norm (i.e., what is to be expected on average) and all observed levels of utilization are equally plausible (as is most reasonable to assume when a facility has reached a relatively stable level of long-term service provision), then the technique of linear extrapolation is the most appropriate. In this instance, the mean of the annual utilization level of all of the years in the study period serves as the base period utilization (BP_1) estimate to which either the mean level of change or the mean rate of change is the utilization projection multiplier and is applied to generate the forecast.

In contrast, if during the study period, the facility's service provision record has been one of steady growth or one which changes over time relatively slowly (though annual fluctuations around the longer term trend may be much more marked), then the autocorrelation technique is the more appropriate one to use. Adoption of the autocorrelation technique entails making the assumption that rather than considering all of the years in the entire study period as being of equal importance in helping to explain the to-be-forecasted level of utilization, we consider the most recent year's record as the most important. Thus, in this case, rather than using the average (or mean) level of utilization throughout the base period, the most recent year's data serves as the base utilization estimate to which either the mean level of change or the mean rate of change is applied to generate the forecast.

In using either of these techniques—linear extrapolation or autocorrelation—we are still left with deciding which of the two measures of average change seems most appropriate to apply in a particular situation: the average amount or the average rate of change. Generally, this determination is made by simply looking at the differences in the year-by-year changes within each individual measure. The one which is most consistent is generally the preferred technique. For instance, if the annual level of change is very consistent while the annual rate of change fluctuates substantially, as in the case of the facility whose utilization data is presented in Exhibit 1, one could conclude that the historical pattern over time more closely approximated an arithmetic function and that the average amount of change would, therefore, be the better predictor. If, on the other hand, the amount of change has varied significantly over the base period, while the amount of change has remained very nearly constant—as in the example contained in Exhibit 2—the geometric measure or average rate of change is the preferred technique.

EXHIBIT 1

	ABSOLUTE		PERCENT	
	ACTUAL UTILIZATION	CHANGE	PROPORTIONATE CHANGE	CHANGE
YEAR 1	3,039 consultations	> + 122;	$(122 / 3,039) = 0.0401$	4.0
YEAR 2	3,161 consultations	> + 120;	$(120 / 3,161) = 0.0380$	3.8
YEAR 3	3,281 consultations	> + 119;	$(119 / 3,281) = 0.0363$	3.6
YEAR 4	3,400 consultations	> + 124;	$(124 / 3,400) = 0.0365$	3.6
YEAR 5	3,524 consultations	> + 119;	$(119 / 3,524) = 0.0338$	3.4
YEAR 6	3,643 consultations	> + 121;	$(121 / 3,643) = 0.0332$	3.3
YEAR 7	3,764 consultations	> + 118;	$(118 / 3,882) = 0.0304$	3.0
YEAR 8	3,882 consultations	> + 122;	$(122 / 4,004) = 0.0305$	3.1
YEAR 9	4,004 consultations	> + 123;	$(123 / 4,127) = 0.0298$	3.0
YEAR 10	4,127 consultations			
MEAN	3,583 CONSULTATIONS/YEAR			

1. AVERAGE LEVEL OF CHANGE (ARITHMETIC CHANGE)—AVERAGE OF ANNUAL ABSOLUTE CHANGES:

$$\{(122+120+119+124+119+121+118+122+123)/9\}$$

$$= (1,088/9)=121;(121/3,583)=3.38 \text{ PERCENT}$$

2. AVERAGE RATE OF CHANGE (GEOMETRIC CHANGE)—AVERAGE OF ANNUAL PERCENTAGE CHANGES:

$$\{(4.0+3.8+3.6+3.6+3.4+3.3+3.0+3.1+3.0) / 9\}$$

$$= (30.8 / 9) = 3.42 \text{ PERCENT}$$

EXHIBIT 2

	LEVEL OF CHANGE: ANNUAL ABSOLUTE ACTUAL UTILIZATION	CHANGE	RATE OF CHANGE: ANNUAL PERCENT PROPORTIONATE CHANGE	CHANGE
YEAR 1	2,464 consultations	> + 84;	$(84 / 2,464) = 0.0329$	3.4
YEAR 2	2,548 consultations	> + 85;	$(85 / 2,548) = 0.0334$	3.3
YEAR 3	2,633 consultations	> + 87;	$(87 / 2,633) = 0.0330$	3.3
YEAR 4	2,720 consultations	> + 92;	$(92 / 2,720) = 0.034$	3.4
YEAR 5	2,812 consultations	> + 95;	$(95 / 2,812) = 0.0338$	3.4
YEAR 6	2,907 consultations	> + 96;	$(96 / 2,907) = 0.0330$	3.3
YEAR 7	3,003 consultations	> + 103;	$(103 / 3,003) = 0.0343$	3.4
YEAR 8	3,106 consultations	> + 107;	$(107 / 3,106) = 0.0334$	3.3
YEAR 9	3,210 consultations	> + 110;	$(110 / 3,210) = 0.0343$	3.3
YEAR 10	3,320 consultations			
MEAN	2,872 CONSULTATIONS/YEAR			

1. AVERAGE LEVEL OF CHANGE (ARITHMETIC CHANGE)—AVERAGE OF ANNUAL ABSOLUTE CHANGES:

$$\begin{aligned} & \{(84+85+87+92+95+96+103+107+110)/9\} \\ & = (859 / 9) = 95 ; 95/3,320 = 2.86 \text{ PERCENT} \end{aligned}$$

2. AVERAGE RATE OF CHANGE (GEOMETRIC CHANGE)—AVERAGE OF ANNUAL PERCENTAGE CHANGES:

$$\begin{aligned} & \{(3.4+3.3+3.3+3.4+3.4+3.3+3.4+3.3+3.3) / 9\} \\ & = (30.1 / 9) = 3.3 \text{ PERCENT} \end{aligned}$$

REVENUE PROJECTION TECHNIQUES

A critical part of the process of projecting revenues is to integrate this activity into the regular planning and evaluation cycle. A single point estimate of the future availability of revenues will be the most immediately important output of this exercise. But, from a longer term, managerial skill-enhancing, institution-building perspective, what will be more important will be the use of the initial projections to (1) review the performance of the facility (or system) to attempt to explain why the revenue predictions did not coincide with actual experiences and (2) incorporate this information into the development of the new projections. It is this latter activity (as will be exemplified below) that can help managers to identify which of the assumptions made in the projections (such as utilization levels, or number of patients receiving waivers) were fairly accurate and which deviated substantially from the subsequent reality, by how much and why. For example, has utilization of certain services dramatically dropped? Or, is the percentage of patients receiving waivers significantly different from what was expected? Were waiver criteria documented which reveal the reason for this discrepancy? If such data are not maintained, wide variation in expected and actual waivers—especially if persistently experienced—suggest that perhaps waiver criteria data should be developed and maintained.

The review of differences in projected versus actual measures, the development of hypothetical explanations of the discrepancies, and the examination and testing of those hypotheses provide an important, systematic approach for the manager to first assess his or her knowledge and understanding of the functioning of the facility (or system), and then in each subsequent iteration of the projecting, reviewing and adjusting process, to improve the level of his or her knowledge and understanding as he or she seeks to reduce the variation in predicted and actual values of the various components of the revenue projection model, by, for example, adjusting prices, reviewing the waiver system, initiating other activities to make services more accessible, and so forth.

The most simple form of our basic model may be written mathematically as:

$R = F * P_u$, where:

R is projected revenues
 F is the fee charged for health care services (we assume there is only a single fee)
 P_u is projected utilization

and, $P_u = A_u * M$, where

P_u is the projected utilization
 A_u is actual, past utilization
 M is the total utilization projection multiplier (the precise value of M depends upon the particular type of utilization projection technique being used; i.e., linear extrapolation of autocorrelation techniques)

or, substituting: $R = F * (A_u * M)$

If the UFS has a waiver system, we can easily incorporate it into our basic model by subtracting the expected number of waivers from projected utilization and multiplying this difference by the fee.

This gives us:

$$R = F * (P_U - P_W), \text{ where:}$$

R is projected revenue
 F is the fee charged
 P_U is projected utilization
 P_W is the projected number of waivers

and $P_W = A_W * M_W$ where:

A_W is the actual, past number of fee-exempt services used/provided
 M_W is the fee-exempt services projection multiplier

substituting: $R = F * [(A_U * M_U) - (A_W * M_W)]$

This specification of the equation makes no assumptions about the relative magnitudes of the projection multipliers. If it is reasonable to assume that the proportion of total utilization for which waivers will be granted will remain constant (or that there is no compelling reason to believe that the proportion will change appreciably), then:

$$M_U = M_W$$

and we can write: $R = F * (A_U - A_W) * M$

Incorporating fee-exempt services into the basic model: Explicitly adding the use of fee-exempt (i.e., free) services into the equation gives us:

$$R = F * (P_U - P_W - P_X), \text{ and}$$

$$P_X = A_X * M_X, \text{ where:}$$

A_X is the actual, past number of fee-exempt services used/provided

substituting:

$$R = F * [(A_U * M_U) - (A_W * M_W) - (A_X * M_X)]$$

This specification of the equation makes no assumptions about the relative magnitudes of the projection multipliers. If it is reasonable to assume that the proportion of total utilization for which waivers will be granted and the proportion of total utilization which will consist of fee-exempt services will remain constant (or that there is no compelling reason to believe that their proportions will change appreciably), then:

$$M_U = M_W$$

and we can write: $R = F * (A_U - A_W - A_X) * M$

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Therefore, if it is assumed that the three utilization projection multipliers are equal, the most general form of the basic model may be written as:

$R = F * A_z * M$, where:

A_z is past, actual paid utilization, which, depending upon the specification of the equation, is equal to either:

- (1) past, actual utilization including waived services (A_{t_1}), or
- (2) past, actual utilization minus the past, actual number of waivers ($A_{t_1} - A_w$), or
- (3) past, actual utilization minus the past, actual number of waivers minus the past, actual number of fee-exempt services used ($A_{t_1} - A_w - A_x$)

and, since $A_z * M = P_z$:

$$R = F * P_z$$

Worksheet 1

Objectives and Goals

***Our overall
objective is:***

***We intend to
use any funds
collected to:***

1.

2.

3.

4.

Worksheet 2

Selecting a Cost Recovery Level

check one

- I. No Cost Recovery
- II. Nominal Cost Recovery
- III. Marginal Cost Recovery
- IV. Operating Cost Recovery
- V. Operating & Infrastructure Cost Recovery

Advantages:

1. _____
2. _____
3. _____
4. _____
5. _____

Disadvantages:

1. _____
2. _____
3. _____
4. _____
5. _____

Worksheet 3

Payment Structure

Out-of-Pocket

Description _____

Bundled Fees

Description _____

Registration or Fee cards

Description _____

NOTES

Worksheet 4

Looking at the Market

Service/product: _____

1. Is this product/service offered elsewhere? Yes No

If no, market information is, of course, not appropriate.

If yes, continue to 2.

2. Is the product/service truly the same (same quality product, same level of service)? Yes No

If yes, continue to 3.

3. Where is it offered? _____

4. What is the cost? _____

NOTES

Worksheet 5

Calculating the Fee Based on Market Price

A. FP product/service to be offered _____

Where is similar product offered?	Location	Price
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Average current market price of this
FP product/service (add up all of the prices
and divide by the number of prices obtained) _____

C. Adjustment factor (*percent you wish to charge
above or below the market price*) _____

D. Price of FP product/service to be offered

(Multiply B x C)

NOTES

Worksheet 6

Calculating the Fee Based on User's Ability to Pay

- A. Per capita (or per household) income _____
- B. Percent spent on health care _____
- C. Percent spent on family planning _____
- D. Amount to be expended on FP per year _____
- E. Anticipated number of visits/services per year _____
- F. Anticipated units of product to be used per year _____

1	2	x	3	=	4
Service or Product	Estimated units/year		Price per unit		Charges per year

- G. **Total units/year**
Should correspond to total of item (E) + item (F) _____
- H. **Total Charges***
Should correspond to item (D) _____

*If H is substantially greater than D, then modify your prices until F = D.

Worksheet 7

Calculating the Fee Based on Nominal Cost Recovery (Level II)

- 1. Bulk cost of product to facility _____
- 2. Cost per unit _____
- 3. Percent of (2) to be charged user _____
- 4. **Price to user** _____

Worksheet 8

Calculating Fees Based on Marginal Cost Recovery (Level III)

- 1. Bulk cost of product to facility _____
- 2. Cost per unit _____
- 3. **Price to user** _____

Worksheet 8a

Calculating Fees Based on Marginal Cost Recovery (Level III)

An alternative example

- 1. Total cost of salaries to facility _____
- 2. Percent of salary costs to be recovered as marginal costs _____
- 3. Total amount to be recovered _____
- 4. Total patient visits per year _____
- 5. **Price to user** _____

Worksheet 9

Calculating Fees Based on Operating Cost Recovery (Level IV)

1. Annual operating costs of facility

contraceptives	_____
rent	_____
salaries	_____
supplies	_____
utilities	_____
repairs	_____
other	_____
Total	_____

2. Annual number of services provided or clients served _____

3. Operating cost per unit [(2) divided by (1)] _____

4. Average price to user [same as amount in (3)] _____

5. Price [amount in (4)] to be distributed as

Price per visit _____

Price for a year's worth of contraceptives _____

Total Price [same as amount in (3)] _____

Worksheet 10

Summary of Pricing and Fee Structures

- 1. Pricing method used _____
- 2. Cost recovery level expected _____
Including what % of contraceptive costs _____
Including what % of recurrent costs _____

3. The tentative fee schedule will be

Services

Consultation _____

IUD insertion _____

Surgical procedure _____

Contraception

Condoms (per ___) _____

Cycle of oral contraceptives _____

IUD _____

Injection _____

Other _____

Other _____

Worksheet 11

Considerations in Designing Use/Revenue Estimates

1. Purpose or intended use:

How precise do your projections need to be?

- Very precise Somewhat precise Very rough

What are you going to use your projections for?

- For budgeting For strategic planning To estimate additional resources

2. Availability of data:

Is the data you need to collect available or easily obtained?

- Yes No

Is the data

- utilization-based (# of client visits per method) or
 population-based (# of people or households in area and estimated prevalence of contraceptive use)?

3. Special equipment:

Can the estimates be made with existing equipment (paper and pencil, calculator), or

- Yes No

is a computer necessary?

- Yes No

If a computer is necessary, is one available?

- Yes No

Worksheet 11 - cont.

**Considerations in Designing
Use/Revenue Estimates**

4. Staff skill levels:

Does your staff have the skills to gather and sort the data and perform the necessary calculations?

Yes No

If a computer is needed, is there someone available to run it?

Yes No

5. Match between level of effort and intended use:

Are the time and effort involved reasonable given the intended use of the information?

Yes No

6. Scope of analysis:

Will you be making estimates for

a single facility or

an entire district

several facilities comprising one service network

region

country

Worksheet 12

Estimating Family Planning Utilization and Revenues

A. Calculating total estimated use:

1. # of client visits in previous year: _____
2. projected increase for coming year or: _____
3. projected decrease for coming year: _____
4. total projected use for coming year: _____

B. Calculating total estimated revenues:

1. fee per visit: _____
2. total # for coming year: _____
3. pre-waiver (projected gross)
revenue total (#1 x #2): _____
4. % of #2 to be waived: _____
5. revenue to be waived (% in #2 x #3): _____
6. projected total revenue (#3-#5): _____

Worksheet 13

Disposition of Revenues

Based on your review, the disposition of revenues will be

_____ % at the local level (clinic, facility or community)

_____ % passed on

100 % Total

Worksheet 14a

Evaluation Matrix

	Criteria				
Priority	1	2	3	4	Total "+"
1					
2					
3					
4					

Worksheet 14b

Evaluation Matrix
Alternative based on points

	Criteria				
Priority	1	2	3	4	Total
1					
2					
3					
4					

NOTES

Worksheet 14c

Evaluation Matrix

Alternative based on 1 weighted points

Priority	Criteria								Total weighted scores
	1		2		3		4		
	points	weigh-	points	weigh-	points	weigh-	points	weigh-	
1									
2									
3									
4									

Worksheet 15

Estimating Costs per Priority

Total Revenue Available _____

Priority _____ Estimated Cost _____ (-) Revenues Available _____

Priority _____ Estimated Cost _____ (-) Revenues Available _____

Priority _____ Estimated Cost _____ (-) Revenues Available _____

Priority _____ Estimated Cost _____ (-) Revenues Available _____

Worksheet 16

Mean Utilization and Tolerance Levels

A. Average monthly visits for previous six months _____

B. Tolerance level _____ %

C. Expected average utilization levels _____ (A * B)

Summary Worksheet

Verification of decisions made in Steps One through Four

We intend to use any funds collected to

1. _____
2. _____
3. _____
4. _____

Our target cost recovery level is

- I. No Cost Recovery
- II. Nominal Cost Recovery
- III. Marginal Cost Recovery
- IV. Operating Cost Recovery
- V. Operating & Infrastructure Cost Recovery

The percent of recurrent or operating costs we intend to recover is _____ %

The pricing method we are using is _____

(continued on following page)

NOTES

Summary Worksheet - continued

The fee schedule will be

Services

Consultation _____

IUD insertion _____

Surgical procedure _____

Contraception

Condoms (per ___) _____

Cycle of oral contraceptives _____

IUD _____

Injection _____

Other _____

Other _____

Total projected use for coming year _____

Pre-waiver (projected gross) revenue total _____

Percentage of fees to be waived _____

Projected total revenue _____

These total projected revenues are consistent with cost recovery targets

yes

no

If not, repeat with modification to

prices

waiver level or

targets



User Questionnaire

1. Address of user: _____

2. Apparent health of user: good fair poor

3. Marital status: married unmarried

4. Occupation: _____

5. Occupation of spouse: _____

6. Education level: no formal education post secondary
 primary school only college graduate
 some secondary school

7. Education level of spouse: no formal education post secondary
 primary school only college graduate
 some secondary school

8. Employer of user and user's spouse:

9. Name/address of closest relative:

(continued on following page)

User Questionnaire - continued

10. Name/address of community leader:

11. Number of children: _____

12. Ages of children: _____

13. Number of children in school: _____

14. How did the user get to the facility? in own car in relative's car
 by taxi on foot

15. Does the user smoke? Yes No

16. Is the user wearing shoes? Yes No

17. What is the physical appearance of the person/any accompanying children?

18. Number of outpatient visits in the last 6 months: _____

19. Number of days in hospital in last 6 months: _____