

**Payment for Quality in Palestine:  
the advantages of Real Data**

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## **Payment for Quality in Palestine: the advantages of Real Data Summary**

This paper is about comparing theoretically based approaches to surveys of actual behaviour for obtaining information that could help inform decisions about the most appropriate financing mechanism<sup>1</sup> to use in order to collect sufficient revenues to help provide equitable and efficient health services to all groups of the population.

The example taken is that of Mataria et al, (2004) who explored the willingness to pay for improvements on seven dimensions of health care quality in Palestine. Their data was taken from a random sample of those visiting Primary Health Care Centres in Ramallah. The average amounts reported were small, with the highest values for any dimension being around 8 NIS (about £1). The remainder of their paper is concerned with analysing the associations between characteristics of the respondents and their willingness to pay for improvements and variations in the amounts respondents were prepared to pay, and discussing the possible policy implications.

This paper (a) suggests that the values do not make much sense and cannot be generalised to the Palestinian population; and (b) argues that where there is existing data on actual health expenditures in different health care contexts, this is a better source of data than figures derived from responses to hypothetical questions. It should be emphasised here that no criticism is intended of the way the study was conducted, analysed or the presentation of the results; the argument here is entirely focused on the plausibility of the findings from these kinds of studies compared to those from surveys of actual behaviour and therefore whether, as these authors claim, “CV can lead to ....useful policy implications”.

The argument is based on comparing their results with two recent national surveys – one on Access to Health Care and one of Health Expenditures - carried out by the Palestinian Central Bureau of Statistics. The first showed that there was considerable disaffection with government Primary Health Care centres because of the perceived poor quality of care received and that most patients went to private GPs; and the second showed that the average cost of a private GP visit is 82 NIS (about £10). Further analysis demonstrates that current patterns of health care expenditure are strongly regressive; the introduction of user fees for governmental health centres would only exacerbate that.

The amounts reported in Mataria et al are therefore very small compared to actual expenditures; is it sensible to analyse the variations around those small figures?

Is this result just a fluke related to the unique situation in Palestine, or is there a general problem with using Willingness-to-Pay data obtained in situations where people already are ‘putting their money where their mouth is’?

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<sup>1</sup> Some are based on direct mobilisation of private resources through cost-recovery i.e. user fees; others are based on insurance-based approaches e.g. through micro-insurance and community financing.

# Payment for Quality in Palestine: the advantages of Real Data

## I Introduction

### I.1 Background

This paper is about comparing theoretical and empirical approaches to collecting information that could help inform decisions about the most appropriate financing mechanism<sup>2</sup> to use in order to collect sufficient revenues to help provide equitable and efficient health services to all groups of the population. In particular, experiences in cost recovery have demonstrated that, without visible and immediate improvements in quality of care, the introduction of user fees will cause service utilisation to drop (Alderman and Lavy, 1996; Mariko, 2003).

In principle, one should take account of the preferences of different stakeholders; and, in developed countries, various research tools have been used to help inform those decisions, including contingency valuation and willingness to pay methods. In practice, however, on the rare occasions when decision-makers use information, they tend to use data on actual activity and behaviours rather than the results of research using those methods.

In developing countries, the conventional view<sup>3</sup> is that there is even less likelihood that any kind of evidence will be used to inform decisions about financing mechanisms; and there has indeed been very little research effort on attempting to assess the suitability and the applicability of these valuation approaches

This paper is based on an attempt to employ these methods in the Occupied Territories of Palestine, by Mataria et al (2004), in order to provide information that could be the basis for planning a user fee schedule based on patients' preferences for improving the quality of delivered care that would reconcile increased efficiency and better and more equitable access to health services. The choice of this paper – rather than any other using similar techniques in developing countries – is serendipitous; I happen to be working there occasionally and came across the paper by chance. In particular, no criticism is intended of the way the study was conducted, analysed or the presentation of the results; the argument here is entirely focused on the plausibility of the findings from these kinds of studies compared to those from surveys of actual behaviour and therefore whether, as these authors claim, “CV can lead to ....useful policy implications”. For, even if the results of such a study are internally consistent, in order for those results to be useful for policy, three conditions have to be met:

1. The sample used as the basis of their study has to be reasonably representative of the population for which policies are being proposed or the differences have to be shown to be small and likely to have little impact on those policies.

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<sup>2</sup> Some are based on direct mobilisation of private resources through cost-recovery i.e. user fees; others are based on insurance-based approaches e.g. through micro-insurance and community financing.

<sup>3</sup> The picture is confused because of the attempt to compare across systems and across time, at the same time as controlling for the different levels of external interventions now and previously.

2. The factors introduced into the contingency valuation methodology have to be those that are seen by citizens as the most important factors
3. The results, in addition to being internally consistent have to be plausible in the sense that they correspond to the levels of out-of-pocket expenditure that they are prepared to spend on health care.

A further issue – as the authors themselves say in their Discussion section (p,???) - is that the distributional implications of any proposed policies have to be carefully examined. That was not possible with the limited sample for which they had data.

This paper therefore has four main aims:

1. First, to compare the sample used in their study (henceforth referred to as ‘the CV study’) with the recent national surveys of access and health care expenditure to assess whether their results can be generalised to Palestine and especially to the West Bank of Palestine (the locus of their study).
2. Second, to compare their results with the patterns of satisfaction shown in the Access survey, to examine whether their approach has identified what citizens believe are the most important aspects of quality that need to be improved.
3. Third, to compare their results with the Health care Expenditure survey, to assess whether their estimates of the levels of willingness-to-pay correspond broadly to the level of out-of-pocket expenditure that they are prepared to spend on health care.
4. Fourth to use the differentials by household income in the health care expenditure survey to explore the pitfalls in moving from either actual or hypothetical results to implications about an appropriate financing mechanism

## **I.2 Health Care in Palestine**

Following the “Oslo Peace Agreements” in 1993, a Palestinian Ministry of Health (PMOH) was established. Its main role was to provide comprehensive health care services to the population and to promote efficient and equitable utilisation of resources (NHSP, 1999). There were four main actors providing health care in the Occupied Territories: a weak governmental health care sector that has only lowly evolved from total dependency on the Israeli administration; a group of Palestinian non-governmental organisations (PNGOs) that play an essential role in primary health care delivery; the United Nations Relief and Welfare Agency (UNRWA) services the Palestinian refugees of the 1948 war; and, finally, there is a thriving private health care sector. It is said that the latter is only accessible to the wealthy (the authors cite Barghouti and Diabes, 1996), but the evidence presented later (see Section V) suggests that this is rather a partial view of the situation. Given limited resources, the PMOH decided to play a coordinating rather than management role.

Following the Oslo accords, the international donations that were the main sources for most PNGOs became centrally managed by PMOH. They promoted cost recovery in order to ensure efficient utilisation of health care services and prohibit service abuse. However, many of their plans and projects were upset by the political situation during the intifada. Check points have been installed by the Israelis at all the entries of cities and towns, impeding movement between rural and urban areas; these are still there.

### **.I.3 The Studies being Compared**

#### The CV Study in Palestine

This was carried out between July and August 2001 in two government PHC centres and two non-governmental centres in urban and rural parts of Ramallah district. Patients were directly addressed on exit from the doctor's room, given some information about the study to get their consent to participate. Once an interview terminated, the fieldworker approached to next patient to come out of the doctors room. Thus any adult leaving a consultation was eligible to take part in the study. During the study 785 patients were approached and 499 (63.6%) gave their consent. Interviews lasted between 15 and 90 minutes with an average of 28.4 minutes.

The CV questionnaire was designed to assess the value of improving the quality of PHC services. Improvements were assessed over seven attributes (geographical proximity, waiting time, attitude of PHC centre's staff, being able to see the same doctor, being able to discuss her/his problem with the doctor and receive sufficient information about her/his health status and the prescribed treatments, being able to purchase the prescribed treatments at the centre, and chance-of-recovery). The questionnaire was divided into three sections. An introductory section included some introductory information about CV and, in order to enhance the validity of the responses, examples of everyday trade offs were given, the expected association between value and WTP emphasised, and the approach was illustrated using improvements to 'Drug Availability' seen as being the easiest to understand. In the second section, respondents selected the level of each attribute that they thought corresponded to the status quo, and then assessed a transition from the status quo to the preferred 'quality' level. A general question about whether the patient would be willing to pay any extra user fee at all to benefit from better quality was asked before the partial valuation questions; and the same question was asked about each attribute before the respondent was asked to give a valuation based on a payment card, with options running from 0 to 10 NIS or more. Finally, respondents were asked to select the three attributes they thought most important to improve and give a monetary value for simultaneous improvement in all of them with scales running from 0-20 and -30 NIS. The last section solicited information about the respondents socio-economic characteristics.

#### The Two PCBS Surveys

The results on access to health care are all taken from the survey carried out by the Palestinian Central Bureau of Statistics carried out between 15th Nov 2003 and 7th Jan 2004. The objective of the survey was to establish a picture of the patterns of access to different providers of health care. The survey covered \*\*\*\*\*

The results on expenditure are all taken from the health expenditure survey carried out between 03/08/2004 and 04/09/2004. The objective was to provide data in order to establish National Health Accounts Designed to focus on expenditure on primary, secondary and tertiary care. The survey covered expenditure by households in last month on various items of health care expenditure and a record of health problems suffered by persons in the household in the last two weeks (and details of those health problems). For each of those persons who report a health problem, the survey

recorded visits to primary health care centres in past two weeks, services received and paid for and provider; treatment at hospitals without admission in past month, nature of problem, services received and paid for, provider and contributions by third party; treatment at hospitals with admission in past year, nature of problem, services received and paid for and provider and contributions by third party; and treatment at rehabilitation centres in past six months, services received and contributions by third party. The classifiers available are person's sex and age, household income over last month and mean monthly income over last year, sources of household income (up to three), region and locality type.

In both cases, the sampling frame was a master sample of Enumeration Areas based on the 1997 Census. The samples were a two stage stratified cluster samples, with stratification by governorates, by type of locality (urban, rural, refugee camps), by a proxy for wealth into three strata outside governorate centres, and by size of locality. The sample size for the Access survey was 4,077 of which 2,745 were from the West Bank and 1,332 from the Gaza Strip; the sample size for the expenditure survey was 4,496, interviewed 4,016 (2,666 West Bank, 1,350 Gaza Strip). In both cases, the data have been re-weighted to compensate for non-response and to recover the population profile as per the 1997 Census. Details of data collection, data processing and data quality are given in the corresponding User Guides ().

One query might be that the comparison here is between this survey and the Access Survey carried out at the beginning of 2004 and the Health Expenditure survey carried out in July/August 2004. The former comparisons are of course difficult because the pattern of provision of health care services could, in principle, easily have changed during the three intervening years; but the comparison of financial amounts is likely to be more or less correct, as there was very little monetary or real growth over the intervening years (see Table 1)

**Table 1: Macro-Economic Indicators of Palestine 1999-2004**

	1999	2000	2001	2002	2003	2004
<i>West Bank</i>	<i>1,681</i>	<i>1,576</i>	<i>1,193</i>	<i>983</i>	<i>1,052</i>	<i>1,072</i>
<i>Gaza Strip</i>	<i>1,199</i>	<i>1,147</i>	<i>920</i>	<i>717</i>	<i>729</i>	<i>722</i>
Palestine	1,493	1,409	1,087	879	925	934

Source World Bank: Stagnation or Revival: Israeli Disengagement and Palestinian Economic Prospects Annex, Table 1

## **II. Representativeness of Sample in CV Study**

The first point, that might not appear strange to an European audience, is the low response rate of 64%. Most surveys in developing countries, and also in Palestine, have response rates above 95%. No information is given about non-response.

Secondly, the authors say they chose their sample to represent the four different types of PHC facility in Palestine with two government PHC centres and two non-governmental centres in urban and rural parts of Ramallah district. About 70% of the sample was from urban areas and respondents were equally distributed between governmental and non-governmental centres. In fact, according to PCBS data (1997),

in 1997, there were 414 governmental and 183 non-governmental primary health care clinics and centres in Palestine (with over 80% of both being on the West Bank). These proportions are very different to those in the Cv study.

The Access survey showed that (Table 2), across Palestine and ignoring those who reported that they received health service from a private physicians clinic (N=811) or from a government *hospital* (N=378), of the remaining 1550, 433 or 28% received care from a private hospital or health centre, 119 or 8% from a NGO hospital or health center, 409 or 26% from a UNRWA hospital health center, and 551 or 36% from a government health center. Only just over one- third used the government health center; and the CV study appears to have ignored those who already went to private health centers. The results from the expenditure survey also demonstrated high levels of use of private facilities.

Moreover, the results for the West Bank, where the CV study was based, showed that the 973 (excluding those receiving care from a private physician or a government hospital) were more likely to report receiving health services at a private facility (406 or 42%) compared to a government health center (285 or 29%), an NGO (111 or 11%) or the UNRWA facilities (119 or 12%).

**Table 2: Which Facility Used in Different Areas**

	West Bank			Gaza Strip			Total
	Urban	Rural	Camps	Urban	Rural	Camps	Total
1. Physician Clinic	342	310	15	100	11	33	811
2. Governmental Hospital	97	100	19	72	8	61	357
3. Private Hospital/ Health Center	290	95	21	16	5	6	433
4. NGO's Hospital/ Health Center	50	57	4	4		4	119
5. UNRWA Hospital/ Health Center	52	20	57	110	11	159	409
6. Governmental Health Center	137	157	1	207	22	27	551
7. Other	11	20	1	6			38
	979	759	118	515	57	290	2718

Source Access Survey

The CV study obtained a low response rate by Palestinian standards, the design did not reflect the division between governmental and non-governmental health services in Palestine; and there appeared to be no attempt to cover the large and thriving private sector used by all segments of the population (see below).

### **III. Comparing Importance of Issues with Actual Data**

#### **III.1 The Factors included in the Questionnaire**

The attributes and their measurement scales included in the CV study are shown in Table 3. The authors note that attributes 2, 4, 5 and 7 were used in previous health care monetary valuation studies (Ryan et al., 2001); that attributes 1, 3 and 6 were included due to their relevance to the study context; and that respondents were also asked to add other quality attributes that they consider of importance; however, these were not included in the analysis (nor in the report in the article).

**Table 3 Quality attributes and their corresponding measurement scales**

Attributes: Measurement Scale

1. Geographical proximity: Very Far, Far, Average, Close, Very Close.
2. Waiting time: Very Long, Long, Average, Not Long, Not Long at All.
3. Attitude of PHC center's staff: Excellent, Good, Bad, Very Bad.
4. Being able to see the same doctor: Always, Often, Rarely, Never.
5. Being able to discuss her/his problem with the doctor and receive sufficient information about her/his health status and the prescribed treatment(s): Multi-item Likert-scaling; continuous: range [20,100]. Sub-items:
  1. I stayed sufficient time with the doctor.
  2. The doctor explained to me my health problem.
  3. The doctor explained to me how to use the prescribed treatment(s).
  4. The doctor explained to me what I should do to prevent (or not to complicate) my health problem in the future.
  5. The information was clear and sufficient.
6. Being able to purchase the prescribed treatment(s) at the center: All, Some of Them, None.
7. Chance of Recovery: Multi-item Likert-scaling; continuous: range [20,100]. Items:
  1. I usually recover after being examined by the doctor of the center.
  2. Many times, I need to go to a private clinic to be re-examined by a better doctor.
  3. The doctor who examined me was a good doctor who knows what he is doing.
  4. Private doctors are more competent.
  5. In general, I prefer to go to private clinic.

Source: Mataria et al (2004)

### III.1.1 Distance and Time

These were introduced as two of the seven attributes in the CV study. There is no direct comparative data from the Access Survey but respondents were asked how long it took them to reach the health facility; and, for those requesting a consultation (without diagnosis or treatment), what were their difficulties in receiving a consultation.

#### *Time Taken to Reach Health Service*

In the CV study, the mean travel time to the center was about 45 minutes with significant variations between respondents (+/- 40 minutes); and respondents declared that a travel time of 12 minutes would be considered 'Very Close'. But, in the national Access Survey, of the 2703 who provided information on how long it took them to reach the health service, 2008 (or 74%) took less than 15 minutes and only 315 (or 12%) more than half an hour (Table 4).

As one might expect, the physician clinics and the Government Health Centres were the most accessible (in terms of time) with 82% and 84% respectively arriving in less than 15 minutes; reaching the Government hospitals took longest with 27% taking more than half an hour and only 53% arriving in less than 15 minutes.

Mataria et al (2004) say that they included the question of proximity in the CV study as being specifically relevant to the Palestinian context; but, given the time people report that they actually take to reach health facilities in the national survey, there have to be doubts over the sample of health centers that they chose. Moreover, given the relatively low figures in the national survey, it seems unlikely that this would be a



serious issue if it were not for the extensive restrictions on movement as a result of Israeli security controls.

**Table 4: Time Taken to Reach Health Service by Kind of Health Service**

	Physician	Gvt. Hosp	Priv Facility	NGO Facility	UNRWA Facility	Gvt HC	Other	
Up to 5 mins	185	57	91	42	111	152	12	650
5 to 10 mins	259	75	154	23	165	212	9	897
10 to 15 mins	114	58	92	15	81	98	3	461
15 to 20 mins	56	30	36	8	23	35	2	190
20 to 30 mins	67	39	22	18	12	31	1	190
30 to 60 mins	87	61	21	5	13	17	4	208
Above 60 mins	38	36	14	8	2	3	6	107
	806	356	430	119	407	548	37	2703

### *Difficulties in getting a Consultation*

In the CV study, on average respondents reported waiting 35 minutes (maximum 270 minutes) and said that a waiting period of less than 20 minutes would be perceived as ‘Not Long At All’. In the Access survey, of the 1355 reporting needing and receiving a consultation, altogether 80 (or 6%) reported difficulties in receiving a consultation, 31 (or 9%) with physicians, 15 (or 19%) with UNRWA, 17 (or 11%) with government health center (Table 5). The main complaint – as everywhere in the world – is that the waiting time was too long. But the percentages reporting any difficulty is low; and much smaller than, say, the level of complaints about being able to make an appointment within 48 hours in the UK.

**Table 5: % reporting difficulties in receiving a consultation by Type of Provider**

	Any difficulties		N	Percent reporting each kind of difficulty				
	N	%		30A	30B	30C	30D	30E
AC28								
1 Physician Clinic	367	9	31	13	2	69	17	12
5 UNRWA Clinic	80	19	15	0	0	97	6	0
6 Government Health Center	152	11	17	6	0	88	0	17
Total	1349	7	80	16	5	81	14	10

Source: Access Survey.

Responses to question AC30 What was the difficulty?:

A. Difficult in Calling Consultant; B. Consultant Provider Phone not Available; C. Waiting Too Long Time; D. Frequent Visits to the Source

It is unclear whether one should be basing valuations on factors that are really only of interest to a small minority; perhaps this is an issue that has been introduced from outside?

### III.1.2 Interactions with Staff at Centre

*Attitude of Staff:* In the CV study, most respondents did not complain about the attitude of the staff; indeed 96% declared being received and treated in an ‘Excellent’ or ‘Good’ manner. In the Access survey, 75% were totally satisfied with their ‘Treatment by staff’ although this varied between 59% in the two government facilities and 65% in the UNRWA facilities to 87% to 89% with physician clinics or

in private or NGO facilities (see Table 6). The differences are most likely attributable to the known differences in responses to these kinds of questions when asked on medial premises when compared with responses obtained on people's doorsteps.

*Continuity and Doctor Patient Relationship:* In the CV study, about half reported that they were always examined by the same doctor, whilst about one fifth of the patients rarely meet or have never met the same doctor in the center. Patients reported spending an average of 8 minutes with the doctor and this was judged insufficient by about one third. Neither of these issues were raised in the Access Survey.

*Treatment Received:* In the CV study, 24% of patients were not able to find all the drugs that they had been prescribed in the local pharmacy of the center. In the Access survey, only 45% overall were totally satisfied with the 'availability of medicines', varying from 20% in government health centers to 85% in private facilities. The differences may be attributable to the same problem of bias as with the responses to the attitude question (see above)O, or to differences in the availability of drugs between 2001 and 2004.

In the CV study, patients were asked a series of questions and the estimated 'Chance of Recovery score was 63.4. Although there is no obvious scalar comparator, in the Access survey, overall 59% were totally satisfied with the 'experience and skills of the staff' (which sounds as if it might correspond to the 63.4 score out of 100) but this varied from below 45% in the government and UNRWA facilities to above 70% with physician clinics and private facilities.

**Table 6: Percent Totally Satisfied with Different Aspects of Service+ provided by in Different Kinds of Health Services**

	A	B	C	D	E	F	G
<b>All</b>	<b>75</b>	<b>73</b>	<b>63</b>	<b>62</b>	<b>45</b>	<b>36</b>	<b>59</b>
	<b>2717</b>	<b>2717</b>	<b>2714</b>	<b>2712</b>	<b>2567</b>	<b>405</b>	<b>2708</b>
1. Physician Clinic	89	87	83	78	53	49	75
<i>N responses</i>	811	811	811	809	693	26	804
2. Governmental Hospital	59	51	49	49	37	26	44
<i>N responses</i>	357	357	357	357	355	236	357
3. Private Hospital/ Health Center	87	88	73	89	85	67	76
<i>N responses</i>	433	433	433	432	423	64	433
4. NGO's Hospital/ Health Center	88	86	82	73	56	54	72
<i>N responses</i>	120	120	120	120	106	30	120
5. UNRWA Hospital/ Health Center	65	60	43	40	29	15	39
<i>N responses</i>	409	409	409	409	408	29	409
6. Governmental Health Center	59	60	45	41	20	12	42
<i>N responses</i>	549	549	549	549	546	15	549
7. Other	84	70	75	76	69	92	80
<i>N responses</i>	37	37	34	35	37	5	35

+ Columns are the following

A: Treatment by staff; B: Cleaning; C: Order in the place; D: Availability of equipment; E: Availability of medicine; F: Food if it was hospital; G: Experience and skills of staff

The findings of the Access survey are echoed for nearly all kinds of problems (see Annex A.1) and also when respondents are asked about needing and receiving a consultation (see Annex A.2)

### III.1.3 Have they Included the Appropriate Factors

Some of the aspects of quality seen by respondents to the Access survey as important - cleanliness, order in the place, availability of equipment (and food, if it was a hospital) - were not included in the CV study but they clearly vary substantially<sup>4</sup>. They probably also make a significant contribution to overall satisfaction - which was not assessed in the CV study because of the decomposition methodology used – which shows a similar disjunction between satisfaction with governmental and non-governmental facilities. Overall, 63% are totally satisfied, 31% partially satisfied and 5% dissatisfied (Table 7). The proportion totally satisfied with the overall service provided by government facilities is lower (46% with hospitals and 40% with health centres) – although the percentage is lower still for UNRWA (50%) - than with the overall service provided by physicians (78%) or by private facilities (85%)

**Table 7: Overall Satisfaction with different kind of health Services**

	Where Health Services Received*							Total
	1	2	3	4	5	6	7	
Totally Satisfied	634	166	370	98	205	222	22	1717
Partially Satisfied	147	155	58	22	181	279	11	853
Partially Unsatisfied	19	22	2		19	37	3	102
Totally unsatisfied	12	15	2		4	11	1	45
	812	358	432	120	409	549	37	2717

\* Based on question AC10: Mainly, where did you receive the health service?: 1. Physician Clinic; 2. Governmental Hospital 3. Private Hospital/ Health Center; 4. NGO's Hospital/ Health Center; 5. UNRWA Hospital/ Health Center; 6. Governmental Health Center

The CV study included seven attributes. For the first two of these (distance and waiting time), whilst the respondents to the CV study reported problems, this did not appear to be the case with the national Access Survey, and this raises questions about first the representativeness of the sample of health centers that they chose. The high levels of satisfaction reported by respondents to the CV study about their treatment by the staff was probably a consequence of the context of their interviews; and the relatively high level of reported availability of medicines could be similarly biased (although it might also be a real difference between 2001 and 2004). Among the remaining three attributes, one could question the salience of two of them (continuity and the doctor patient relationship), given the security situation in Palestine. Give that the study also excluded three attributes that respondents in the national survey saw as discriminating providers, the overall assessment is therefore that the CV study only captured the salient factors to a limited extent

<sup>4</sup> Overall, 73% were totally satisfied with 'cleanliness', but this varied from 51% in the government hospitals and 60% in government health centers or UNRWA facilities to between 86% and 88% with physician clinics or in private or NGO facilities. Overall, 63% were totally satisfied with the 'order in the service facility', varying from below 50% in the government and UNRWA facilities to 83% with physician clinics and 73% in private facilities. Overall, 62% were totally satisfied with the 'availability of equipment', but this varied from below 50% in the government and UNRWA facilities to 78% with physician clinics and 89% in private facilities.

#### **IV Plausibility of Estimated Amounts**

The Access survey shows very large differences between satisfaction with private and government services with NGO services usually being rated in between. Indeed, in respect of nearly all aspects of satisfaction, the level of total satisfaction with the quality of the service received from the private sector is over 80% and is always substantially (at least 25%) higher than the level of total satisfaction with the quality of services received from the government equivalent. Given that consultations – although not medicines - are free at the health centres, the prices paid in the private sector would therefore be reasonable estimates of the actual value of moving from the current level of quality to what people believe would be a considerably better level of quality that is immediately available. In any event, such estimates would be an underestimate. This section examines the findings of the Health Expenditure survey and compares them to the amounts estimated in the CV study.

##### **IV.1 Basic Data from Health Expenditure Survey**

The mean household monthly expenditure reported in the health expenditure survey, on different items of expenditure, compared between the regions is shown in Table 8.

**Table 8: Mean of out of pocket of households on health services in the past month by service and region 2004**

Health services	Mean of out of pocket /NIS		
	Gaza Strip	West Bank	Palestine
General practitioners	2	12	8
Specialists physicians	23	40	34
Dentists	9	87	61
Dental filling	17	65	49
Physiotherapy	3	5	4
Laboratory tests	10	13	12
X- ray	7	17	13
Transportation through ambulance	1	5	3
Medications & vitamins	74	102	93
First aid bags and other medical commodities	8	6	6
Eye glasses or lenses	15	46	36
Hearing equipment	0	11	7
Wheel chairs	0	7	4
Hospitalization costs at governmental hospitals	1	3	2
Hospitalization costs at private hospitals	3	17	12
Hospitalization costs at NGOs hospitals	1	6	5
Traditional medicine	1	3	2
Transportation	17	34	28
Health insurance	5	14	11
Other	3	7	6
<b>Mean of expenses</b>	<b>200</b>	<b>498</b>	<b>399</b>
<b>No. of Households (Un-weighted)</b>	<b>1,351</b>	<b>2,663</b>	<b>4,014</b>

Source: Health Expenditure Survey

Those figures are averages of household expenditure whether or not there was any expenditure during that month. *Of those who received a service*, expenditure in NIS (with comparison in brackets to the figures in the above table) on main items of expenditure:

- GPs was 82 (8)
- Dentists was 321 (61)
- Medications and Vitamins was 132 (93)
- Eye glasses was 326 (33)
- Private Hospital Costs was 789 (12)

In two out of three households someone buys medicines or vitamins each month, compared to one in five where someone visits a dentist, about one in ten households where someone visits a (private) GP or purchase eye-glasses each month, and one in sixty going to a private hospital.

## IV.2 Results of the CV Study

The percentage of respondents in the CV ‘willing to pay’ and the mean amounts they were willing to pay are reproduced in Table 9.

**Table 9 Percentage of respondents willing to pay for improvements over each of the attributes, and mean WTP values per attribute**

Attribute	Contributors (%) (WTP > 0)	WTP (NIS): mean ( $\pm$ S.D.) <sup>a</sup>
Geographical proximity	70.1	7.8 (15.0)
Waiting time	59.4	4.1 (8.9)
Attitude of PHC center’s staff	41.3	4.2 (11.2)
Seeing the same doctor	47.3	4.2 (8.9)
Doctor–patient relationship	65.7	6.4 (13.9)
Drugs availability	74.6	6.2 (10.4)
Chance of Recovery	78.5	8.0 (13.0)

Source: Reproduced from Mataria et al 2001 Table 4

<sup>a</sup> Non-contributors (WTP = 0) were included in calculated means.

Their analysis of the factors influencing the partial WTP values demonstrates that respondents are making consistent valuations: for example, the probability that a respondent living ‘Very Far’ from a PHC center is willing to pay in order to have a Very Close centre is 0.34 greater than those living close or very close; and, there is a clear gradient with those ‘Very Far’, prepared to pay 7.4 NIS every visit to have a ‘Very Close’ PHC center, compared to the 6 NIS and 4.5 NIS that patients living ‘Far’ or an ‘Average’ distance from the center were willing to pay. Similarly, respondents waiting ‘Very Long’ before meeting the doctor or feeling they were treated ‘Badly’ by the staff were willing to pay significantly more not to have to wait as long or to be treated better (3 and 6.5 NIS respectively). Only two of the items, ‘Continuity’ and ‘Drug Availability’ showed less consistency.

In their methodology, Mataria et al (2004) said that they asked respondents to give an overall valuation of how much they were willing to pay for the three most important attributes to be improved but these results are not reported. Nevertheless, even if we assume independence of the attributes and add up all seven mean values, the total mean value that respondents were willing to pay was only 40.9 NIS.

### IV.3 Comparing the CV Study and the Health Expenditure Survey

On average, those who went to a government PHC center in the West Bank paid 69 NIS compared to 95 NIS who went to a NGO PHC center and 205 NIS to a private clinic (Table 10). The breakdown by items in Table 11 shows that, on average, 51 NIS is spent on medications (51 NIS), followed by 18 NIS on X-Ray/Lab. and 14 NIS on transportation, with 52 NIS paid on doctors/ specialists.

**Table 10: Mean of out of pocket paid for treatment by persons who received primary health services in the past two weeks by place and region 2004**

Place of service	Mean of out of pocket paid /NIS		
	Gaza Strip	West Bank	Palestine
Gov. PHC center	26	69	52
NGOs. PHC center	67	95	90
UNRWA PHC Center	17	41	25
Private clinic	173	205	201
Pharmacy	47	50	49
Other*	136	105	106
Mean of expenses**	63	145	126
No. of Observations***	577	1,906	2,483

\* Includes Israeli PHC center

\*\* Includes medical and non-medical expenses for insured and non-insured persons.

\*\*\* Excluding those who received health care at more than one center

**Table 11: Mean of out of pocket paid for treatment by persons who received primary health services in the past two weeks by item and region 2004**

Item of expenses	Mean of out of pocket paid /NIS		
	Gaza Strip	West Bank	Palestinian Territory
Doctors (GP +Specialists)	14	52	43
Medications	37	51	48
X-Ray/Lab.	5	18	15
Transportation	5	14	12
Others	2	11	8
<b>Mean of expenses</b>	<b>63</b>	<b>145</b>	<b>126</b>
<b>No. of observations</b>	<b>577</b>	<b>1,906</b>	<b>2,483</b>

Source: Health Expenditure Survey

Detailed tabulations show that the difference between the payments in governmental and non-governmental health centers and the private clinics is, unsurprisingly, due to doctors' fees. The minimum difference between a health center and a private clinic in the West Bank is 110 NIS, nearly three times the maximum amount estimated in the CV study, and the maximum estimate from the CV study is half the average amount paid by those who use a private GP, although that is only a fraction of the population<sup>5</sup>.

It is clear that the levels of expenditure reported by households is much higher than any of the estimates provided through the WTP survey; and that, although the relativities between different dimensions of improvement appear plausible, the absolute levels are so different that it is unlikely that they could be useful.

## **V Distributional Implications**

The distribution of income within Palestine is shown in Table 12. Clearly it is very skewed towards the lower end.

Table 12: Percentage distribution of households by mean of monthly income and region 2004

Monthly income/NIS	Gaza Strip	West Bank	Palestinian Territory
Less than 1000	44.2	25.2	31.6
1000-1900	36.0	36.4	36.3
2000-2900	12.2	16.6	15.2
3000-3900	4.3	10.6	8.4
4000 +	3.3	11.2	8.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>No. of Households (Un-weighted)</b>	<b>1,351</b>	<b>2,663</b>	<b>4,014</b>

In terms of expenditure on health care services (Table 13), the amount increases from 273 NIS among households with an income of less than 1,000 NIS to 7834 among households with an income of more than 4,000 NIS.

Table 13: Mean of out of pocket of households on health services in the past month by monthly income and region 2004

<b><u>Monthly income/NIS</u></b>	<b>Monthly mean of out of pocket/NIS</b>					
	Gaza Strip		West Bank		Palestinian Territory	
	No. of HH	Mean	No. of HH	Mean	No. of HH	Mean
Less than 1000	597	163	672	273	1,269	221
1000-1900	486	201	970	437	1,456	357
2000-2900	166	254	441	629	607	529
3000-3900	58	333	281	628	339	580

<sup>5</sup> Only about 400 households reported someone going to a (private) GP in the previous month, whilst 2,483 reported using primary health services in the past fortnight.

4000 +	44	294	299	834	343	770
<b>Mean of expenses</b>	<b>1,351</b>	<b>200</b>	<b>2,663</b>	<b>498</b>	<b>4,014</b>	<b>399</b>

Similar tables have been analysed for the different services and, as expected

- \*Use of each service increases with income
- \*Use of acute and is more or less flat
- \*Use of chronic higher among poorer
- \*Use of injury increases
- \*Use of dental services increases sharply

Finally, dividing the expenditure distribution<sup>6</sup> into quintiles (defined internally to the survey) and looking at individual expenditures (Table 14), we see that just under a quarter of household income is spent on health care and that this is highly regressive.

Table 14 Percentage of Household Expenditure spent on Health Care

Quintile	West Bank			Gaza Strip			Total	N+	Std. Dev.
	Mean	N	Std. Dev.	Mean	N	Std. Dev.	Mean		
Up to 880	48.6	580	82.8	25.7	378	58.7	38.4	958 (4485)	73.9
890 to 1200	29.9	460	55.8	14.5	336	19.8	22.7	796 (5097)	43.5
1210 to 1980	27.4	469	42.2	15.4	299	28.6	22.3	768 (4957)	37.5
2000 to 2600	24.9	515	42.8	12.2	223	26.1	20.5	738 (5095)	38.3
2610 or more	20.6	650	39.0	9.4	102	16.4	18.8	752 (5017)	36.7
<b>All</b>	<b>28.8</b>	2674	<b>53.4</b>	<b>16.3</b>	1338	<b>35.2</b>	<b>24.2</b>	<b>4012 (24652)</b>	<b>47.9</b>

+ Note that quintiles have been defined for the survey population rather than the survey households by attributing household mean income to all members of the household

## VI Discussion and Conclusions

There is a wide range of providers in Palestine and there clearly needs to be coordination between them to promote effective use of public and private funds.

### **Relative Quality of Public and Private:**

Only about one third use government health facilities, and this varies only a little between different types of health problem. In terms of consultation for advice, the figures are even smaller, with only one fifth using government facilities as a source of advice; in fact almost as many ask the local pharmacist. Rather surprisingly, physical accessibility for services is good. There are the usual complaints about waiting times for consultations but only for a small percentage of the survey respondents.

<sup>6</sup> The survey did ask for mean monthly income over the last year but the PCBS judge that the expenditures are more accurate and definitely a better measure of disposable income.



Clearly, the fact that public facilities can only respond to a third of chronic diseases calls into question any programme for chronic disease management, unless private providers adhere to established protocols within a regulatory framework. It is, perhaps even more disappointing to see that under a quarter of antenatal care is taken to government facilities.

There is a marked difference between overall satisfaction with public and private services in favour of the latter; and these differences were reproduced across all aspects the service. The pattern was repeated for the perceived quality of the consultation. Whilst problems of equipment and training of staff can be blamed on lack of resources, problems of treatment by the staff, cleanliness and order cannot. If the government health facilities are to aspire to be a preferred provider, then those aspects need to be tackled urgently.

At the same time, it appears that most needs for health care are being met. Of those reporting they needed a health service in the Access Survey, 89% said they received care, but that there was shortage of medications (29%) and they had to wait too long (30%). Both these were more likely in camps and rural areas than in urban areas. Of the 11% not receiving care:

- \*Those in camps and rural areas were most likely to say service not available
- \*Those in rural areas most likely to say of high cost
- \*Of those receiving the service, about a quarter report shortage of medications and waiting

### **Willingness to Pay Approach**

There is clearly a willingness-to-pay quite large sums for health care services, as evidenced by the high level of private expenditure (see Annex B for overall national estimates). But public services are boycotted, there is extensive use of specialists, and a substantial proportion of private resources are being spent on apparently less important services. The real problem appears to be, not whether citizens are prepared to pay for quality – they very obviously are – but recognising the state of public provision and designing policies in the light of those findings.

Moreover, the hypothetical questions led to estimates that were much smaller than people actually pay; and this, in turn, led the authors to – cautiously– advocate user fees, taking account of distributional effects. But the current patterns of private health care expenditure are highly regressive; any additional – even small – user fee would only exacerbate that. The problems in applying the approach leads one to query whether the approach is at all realistic in the context of Palestine, a developing country that is recognised to be in rather an extreme situation, and therefore whether its conclusions can be generalised to other developing countries.

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## **Annex A Additional Tables**

### **A.1 Satisfaction according to Presenting Problem**

As would be expected there is less variation in overall satisfaction (the last column) according to the type of health problem from 61% of those reporting physical health problems to 73% of those presenting for antenatal care. The range of variation is equally narrow – although at a different level - for their view of 'treatment by staff' (71% to 84%) and 'cleanliness' (71% to 79%). There are, however, significant differences in respect of some of the other specific aspects of satisfaction. Thus, whilst most condition groups report between 61% and 69% total satisfaction with 'order in the place', those with antenatal care were more complimentary with 75% and those coming for child immunisation less with only 47%. Similarly, whilst most condition groups report between 53% and 66% total satisfaction with the 'availability of equipment', only 25% of those coming for child immunisation were totally satisfied compared to 79% of those coming for antenatal care (and 78% and 75% for those coming with an urgent case or injury/accident). In respect of the availability of medicines, it is once again those coming for child immunisation who are least satisfied with only 17% reporting total satisfaction compared to 63% of those coming for an urgent case. Finally, their assessment of the experience and skills of staff varied from 36% of those coming for childhood immunisation totally satisfied to 75% of those coming for an urgent case.

Table A.1: Percent Totally Satisfied with Different Aspects of Service+ according to their self-reported health problem

	A	B	C	D	E	F	G	Overall
1. Chronic Disease	75	76	66	66	53	40	60	63
<i>N responses</i>	516	516	516	516	494	96	514	
2. Routine Check up	84	72	62	64	46	62	59	71
<i>N responses</i>	76	76	76	76	70	8	74	
3. Physical Health Problem	73	71	61	59	41	27	56	61
<i>N responses</i>	1617	1618	1614	1613	1526	153	1613	
4. Urgent Case	80	75	69	78	63	39	75	71
<i>N responses</i>	142	142	142	141	128	69	142	
5. Psychological Case	71	75	65	53	40	43	43	64
<i>N responses</i>	12	12	12	12	12	2	12	
6. Injury\ Accident	74	71	67	75	53	17	48	69
<i>N responses</i>	31	31	31	31	31	5	31	

7. Child Immunization	86	73	47	25	17	46	36	69
<i>N responses</i>	52	52	52	52	52	3	52	
8. Antenatal Care	80	75	75	79	52	45	73	73
<i>N responses</i>	87	87	87	87	82	20	86	
9. More than One Problem	82	70	54	63	34	22	64	64
<i>N responses</i>	129	129	129	129	118	9	129	
Other	83	79	88	91	85	50	85	64
<i>N responses</i>	54	54	54	54	54	40	54	
All	75	73	63	62	45	36	59	63
<i>N responses</i>	2717	2717	2714	2712	2567	405	2708	

+ Columns are the following:

A: Treatment by staff; B: Cleaning; C: Order in the place; D: Availability of equipment; E: Availability of medicine; F: Food if it was hospital; G: Experience and skills of staff

Analysis of the tables showing which kinds of conditions were taken to which health care provider shows that the governmental; health centres are essentially the only providers of this service which accounts for the low rating.

## A.2 Needing and Receiving a Health Consultation<sup>7</sup> in Last 6 months

### Geographical Patterns of Consulting

Of the 1355 who reported a Medical Consultation, 367 were with a physician, 98 were at a government hospital, 147 at a private facility, 45 at an NGO facility, 80 at a UNRWA facility and 152 at a government health centre. Less than one fifth use government facilities.

Over three-quarters of the consultations were in the West Bank, and under a quarter from the Gaza Strip. On the West Bank of the 1048 who had received a consultation, only 38 had received a consultation at a Government hospital with 146 at a private facility, 44 at an NGO facility and 71 at an UNRWA facility. On the Gaza Strip, of the 307 who had received a consultation, apart from the 60 who had received a consultation at a government hospital the other three types of facility only provided 11 consultations between them, the largest provider (114) being the Physician clinic followed by Pharmacist (53) and by phone (48)

Table A.2: Where went to for Medical Consultation in Different Areas

	West Bank			Gaza Strip			Total
	Urban	Rural	Camps	Urban	Rural	Camps	
1. Physician Clinic	125	118	10	80	10	24	367
2. Governmental Hospital	9	28	1	20	3	37	98
3. Private Hospital/ Health Center	83	51	12			1	147
4. NGO's Hospital/ Health Center	28	16				1	45
5. UNRWA Hospital/ Health Center	30	13	28			9	80
6. Governmental Health Center	44	95	1	9	2	1	152
7. At Home	36	27	1	2		2	68
8. Pharmacy	100	85	9	38	1	14	247
9. By phone	51	26	6	31	3	14	131
Total	10	5		5			20
<i>N responses</i>	516	464	68	185	19	103	1355

<sup>7</sup> Understood as checking up any ailment or health problem. This could be done by phone call to someone in charge or visiting a health centre or clinic. The consultation is not considered a diagnostic or treatment service

### Quality of Consultation

Their assessment of the quality of the consultation varied by provider. Whilst 62% thought they had a good consultation overall, this varied from below 50% in government for UNRWA facilities to 84% with private facilities and 79% of those by phone.

Table A.3: Quality of Consultation by Provider

	A	B	C	D	E	F	G	H	I	J	Total
Yes, a good one	247	41	124	35	37	68	30	145	104	9	840
Yes, to some extent	109	52	22	9	40	70	29	97	24	9	461
No	12	4	1	1	2	14	9	3	3	2	51
Total	368	97	147	45	79	152	68	245	131	20	1352
% yes a good one	67	42	84	78	47	45	44	59	79	45	62

A. Physician Clinic; B. Governmental Hospital; C. Private Hospital/ Health Center; D. NGO's Hospital/ Health Center; E. UNRWA Hospital/ Health Center; F. Governmental Health Center; G. At Home; H. Pharmacy ; I. By phone

### **Annex B Overall Expenditure by Households and State**

Government health care expenditure is estimated at £70 million. The estimate of mean household monthly expenditure in the 2004 survey is NIS399 per month per household or c.£300 million. These estimates caused some surprise in Palestine and it was suggested that the focus of the survey had led to over-estimates. But, apart from being consistent with the previous survey on Access, the estimate of overall household expenditure on health based on an earlier Consumption and Expenditure survey covering all categories of expenditure and projected forward was c.£220 million. The two sources are reasonably consistent – certainly within sampling error. By European standards, this level of private expenditure is very high; but, in the MENA region, both Lebanon and Yemen, over two thirds of total expenditure on health is private.

Total expenditure on health care is therefore about £330 million (taking the average of the two estimate of household expenditure) or between 15% and 20% of national income – roughly a US level of expenditure.

Major items in this household expenditure total – NIS (estimated national spend in £ million per year in brackets) – were:

- Specialists 34 (£31 mn)
- Dentists 61 (£55 mn)
- Dental Filling 49 (£44 mn)
- Medications and Vitamins 93 (£84 mn)
- Eye glasses 33 (£30 mn)
- Hospitalisation Costs 50 (£45 mn)

The predominance of dental care also reflects a US pattern of health care expenditure,