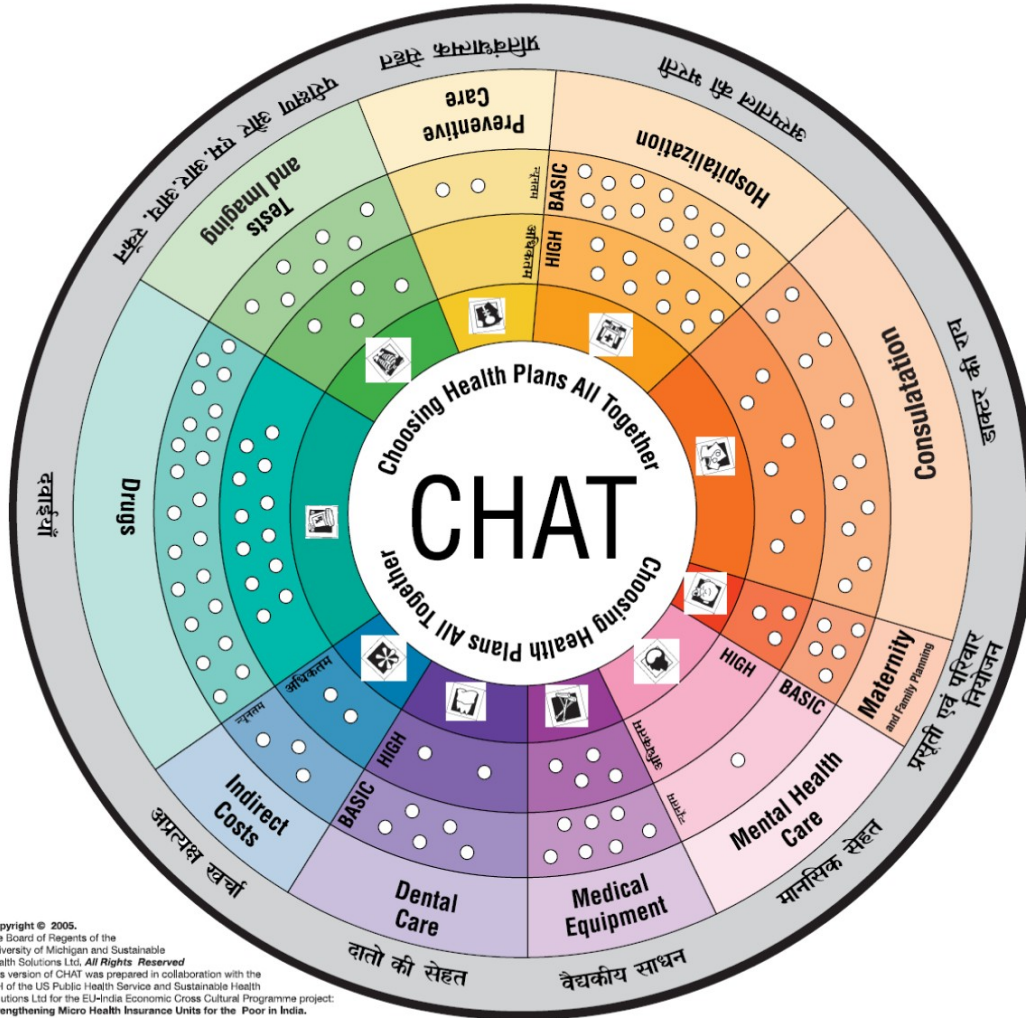# Health insurance benefit package design by the poor:

can we predict their choice?

Dirk Wolbers

276623

ABSTRACT

Only 3-5% of the Indians are insured under some kind of health insurance. A mechanism that is developed in order to bring the poor in a community health insurance scheme is CHAT (Choosing Healthplans All Togethers). In a CHAT experiment each participant has to select a health insurance package individually and as a group with a budget of Rs. 600 (±US$13). Till now two CHAT experiments have been conducted in India. This research is based on the second CHAT experiment, which was conducted in Maharastra, Karnataka and Rajasthan. The objective of this research is to see whether the decisions made could be explained and predicted. Therefore two analyses have been conducted. First, the individual choice has been analyzed. The results show that the choice for the three major benefits is highly influenced by the state the individual lives in. A probable explanation for this is that the health care services differ between the three states. The choice for the minor benefits is highly influenced by the selection of the major benefits. This result leads to the conclusion that the choice for the minor benefits highly depends on the remaining budget. Therefore three suggestion have been proposed in order to adjust the CHAT experiment in such a manner that this effect could be narrowed down. First, the participants could be asked to prioritize their selected benefits. Second, in the post-questionnaire of the CHAT experiment participants could be asked why a certain benefit has been selected and a third suggestion is that the budget of the participants and groups should not be fixed in advance, but instead the participants and groups are free to decide their own budget. The second analysis that has been conducted, was to see whether the background characteristics of the individuals correlate with a so-called matching-score (which shows the similarity between the individual and the group choice). Unfortunately the results show that only eight variables have a correlation coefficient that is statistically significant and the correlation is extremely weak (between -0.1 and 0.1). This leads to the conclusion that in fact non of the background characteristics could explain why some individuals have a higher matching-score than other individuals. Overall, the conclusion is that the choices could not be explained and predicted accurate. This is probably because the CHAT exercise is not suitable for this kind of analyses. The main goal of the CHAT exercise is to bring the poor into a community based health insurance scheme and not to predict and explain the choices made.

CONTENTS

1   INTRODUCTION

India is the second most populated country in the world, with approximately 1.2 billion inhabitants. Roughly 350-400 million of them live below the poverty line. The proportion of people that is insured for health care costs is also very low. An estimated 3-5% of the population is covered under some kind of health insurance scheme (Devadasan et al. 2006:225; Dror et al. 2007b:885; Dror 2006:4541; NCMH 2005:275). Because the participation of health insurance is very low, private expenditure is very high. Almost 80% of the total health expenditure is paid out-of-pocket (Dror et al. 2007b:885; Devadasan et al. 2006:225). Lack of health insurance and high out-of-pocket costs, means that health care usually is far away for the poor in India. Research suggests that the poorest quintile is 2.6 times more likely to forgo medical treatment than the richest quintile (Devadasan 2004:3179). Health risks thus pose the greatest threat to the lives of the poor (Jütting 2003:1), both directly and indirectly as a result of the strong interrelationship between health and income. After all, if a household member cannot work due to illness, the income of the household will diminish. At the same time, the household has to pay for health care, which means that the available income of the household will even decline further. Thus, that the poor avoid medical treatment because of the related costs is not strange, especially if you consider that almost a quarter of the people who are hospitalized drop below the poverty line (Devadasan 2004:3179). Many agree that health insurance is a good and equitable alternative to out-of-pocket payments and that it is an effective way to protect people from indebtedness and impoverishment due to medical expenditures (WHO 2000:xviii; Wiesmann & Jütting 2000:193; Jütting 2003:1; Devadasan 2004:3179; Dror 2006:4541; Dror et al. 2007b:885). Not only can health insurance break down the vicious circle of poverty and illness, but it can also increase health. Namely, if the poor are insured for health care costs, there is less incentive to forgo medical treatment if necessary. But how can we get the poor to insure themselves against health care costs? The answer to this question is twofold; the poor will enter an insurance scheme if it meets their perceived needs and if it is affordable (Dror et al. 2007b:885; Wiesmann & Jütting 2000:202).

1.1   CHAT (Choosing Healthplans All Together)

CHAT (**C**hoosing **H**ealthplans **A**ll **T**ogether) is a mechanism designed to bring the poor in a community based health insurance scheme (Goold et al. 2005; Danis et al. 2002). In the CHAT experiment, the participants have to choose a health insurance package as an individual and as a group. The perceived needs of the participants are taking into account by letting the participants choose their own health insurance package out of ten benefit types,

and for most benefit types also between different coverage levels. Affordability is also taken into account, because participants receive a budget that reflects the willingness to pay for health insurance in this population (Dror et al. 2007a; Dror et al. 2007b:886).

1.2   The first CHAT experiment

The first CHAT experiment, in the states Karnataka and Maharastra, showed that people with low education, low-income and no previous experience can be involved in designing a health insurance package without compromising the judiciousness of rationing choices (Dror et al. 2007b). A total of 302 individuals, organized in 24 groups, participated in the exercise. Every participant received a budget of fifty stickers corresponding with 500 INR (±US$11), and had to choose between ten benefits at (sticker) costs as presented in table 1. The costs of all benefits at high coverage were 147 stickers, which is almost three times the available budget. A large majority of the individuals (88%) and 21 of the 24 groups selected at least three of the four so-called major benefits (namely drugs, outpatient medicine, hospitalization and tests) at basic coverage (Dror et al. 2007b:888-889). The remaining stickers were spend on the so-called minor benefits, where the choices highly depended on the size of the remaining budget because the minor benefits differed a lot in terms of costs (see for instance the difference in costs between the (minor) benefits dental care and mental health care) (Dror et al. 2007b:893).

Table 1 - Sticker costs of the benefit types (first CHAT experiment)

Benefit types		Coverage level		
		Basic	**Medium**	**High**
Major	Drugs	18	18+12	18+12+12
	Outpatient medicine	11	11+6	11+6+10
	Hospitalization	10	10+6	10+6+8
	Tests	8	8+5	8+5+5
Minor	Dental care	7	7+4	7+4+5
	Medical equipment	5	5+3	5+3+3
	Preventive care	1	1+1	1+1+1
	Maternity	1		1+1
	Indirect costs	1		1+1
	Mental health care	1		1+1

Source: Dror et al. 2007b:886

1.3   Key question

The purpose of this research is to see whether it is possible to predict the choices made by individuals in India based on their background characteristics. Therefore, the choices made in the subsequent CHAT experiment in the states Rajasthan, Karnataka and Maharastra (the second CHAT experiment) will be analyzed. First, the associations between individual choices and the background characteristics of the individual will be analyzed. Next, the group choice and the similarity with the prior individual choices will be analyzed in relation to the background characteristics of the individuals within the group.

2   METHODS

2.1   The second CHAT experiment

The experiment and data on which the analysis is based, is highly comparable to (the obtained data in) the first CHAT experiment, as presented in Dror et al. (2007b). In the second CHAT experiment a total of 1932 individuals (118 groups) was selected to participate. The participants were selected as groups from three different states; Maharastra (24 groups with a total of 445 individuals), Karnataka (24 groups with a total of 378 individuals) and Rajasthan (70 groups with a total of 1109 individuals). The individuals within a group all lived in the same village.

Before starting with the exercise, each participant completed a questionnaire covering background characteristics. Next, the CHAT exercise started, which was conducted in two rounds. In the first round, each participant received a budget of sixty stickers corresponding with 600 INR (±US$13) and a board (see appendix A) for selecting the health insurance package for their household. The benefit types, coverage levels and associated sticker costs were slightly different from the first CHAT exercise (see table 2). An detailed explanation of the benefit types and coverage levels is given in appendix B. In general, coverage at basic level means that the insurance will pay for half of the costs of health care services. This is also valid for the coverage at high level, but here the individual will never have to pay more than a certain amount. In the second round, the participants – which were already clustered in groups on the basis of the village they lived in – were asked to compose a health insurance package for the group as a whole. Finally, the participants completed a questionnaire asking for their evaluation of the (group) exercise and their willingness to join the health insurance package chosen by their group, if all group members would join.

Table 2 - Sticker costs of the benefit types (second CHAT experiment)

Benefit types	Coverage level	
	Basic	**High**
Drugs	22	22 + 13
Hospitalization	14	14 + 9
Consultation	12	12 + 6
Tests & Imaging	7	7 + 4
Medical equipment	7	7 + 4
Maternity & Family Planning	5	5 + 3
Dental care	5	5 + 2
Indirect costs	3	3 + 2
Preventive care	2	
Mental health care	1	
Source: CHAT user's manual		

2.2   Individual choice

2.2.1   Analysis of individual choice

As mentioned, each individual had to choose the benefits he or she wanted to include in their health insurance package. Eight of the ten benefits involved had three coverage levels (no, basic or high coverage) and the two remaining benefits only had two coverage levels (no or basic coverage). To analyze the relationship between the background characteristics and the selected benefits at a certain coverage level, multinomial logistic regression will be used for the eight benefits which have three coverage levels and binomial logistic regression will be used for the two benefits which have only two coverage levels. Binomial logistic regression is namely suitable if the dependent variable (in this case the coverage levels of the benefit) is nominal and there are two outcomes (Menard 1995). Multinomial logistic regression on the other hand is used when there are more than two outcomes (Borooah 2002:45). An important property of the multinomial logistic model is the independence of irrelevant alternatives, but this also is an important limitation of the model (Boorah 2002:45). According to McFadden (1974:113) the multinomial logistic model should be limited to the situations where the alternatives plausibly could be distinct and deliberated by the decision maker. Thus, the alternatives should not be close substitutes, which the coverage levels are indeed not.

The equation of the multinomial logistic regression is as follows:

$$\Pr(Y_i = j) = \frac{\exp(\beta_j X)}{\displaystyle\sum_{j=0}^{J} \exp(\beta_j X)}$$

$\Pr(Y_i = j)$ is the probability of choosing a 'basic' or 'high' coverage level of a certain benefit, with 'no coverage' as the reference category. J stands for the number of coverage levels in the choice set and $j = 0$ is no coverage. X is a vector of the background characteristics of the individual and β_j is a vector of the estimated parameters (Pundo & Fraser 2006:28; Borooah 2002:47; Robins & Dickinson 1985:369)

The equation of the binomial logistic regression is as follows:

$$P(Y = 1) = \frac{\exp(\alpha + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_k X_k)}{1 + \exp(\alpha + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_k X_k)}$$

$P(Y = 1)$ is the probability that the benefit is selected, α is the intercept, β is a vector of the estimated parameters and X is a vector of the background characteristics of the individual (Menard 1995:13).

The coefficients of the estimated parameters reflect the change in the logit for one-unit change in the explanatory variable, with the assumption of ceteris paribus (keeping all other explanatory variables constant). A parameter with a positive coefficient implies an increase in the likelihood that an individual will choose the coverage. A coefficient that is negative implies that there is less likelihood that an individual will choose the coverage.

When interpreting the results, it is also important to see whether the estimated parameter is statistically significant. A logistic model estimates the significance of the variables that are expected to be of influence to the individual's choice for benefits (i.e. differ from zero). In other words, does the variable statistically significant affect the choice compared to the reference category? When the so-called p value of the variable is below 0.05, the variable is statistically significant. If the p value of a variable lies above 0.05, than there is not enough evidence that the variable significant differs from zero, and thus it is not clear whether it affects the choice. In the findings therefore only the variables that are statistically significant will be discussed.

Prior to the analysis, the benefits are split into major and minor benefits. The benefits "drugs", "hospitalization" and "consultation" are classified as major benefits, for three reasons. First, the assumption is that individuals will choose under the condition of bounded rationality, because they cannot perfectly judge all possible alternatives and related

consequences due to limited knowledge (Simon 1955:100-101). In a CHAT experiment participants can choose between a large number of different health insurance packages. For the individuals it is impossible to look at all of these different alternatives, therefore the assumption is that an individual will choose his or her health insurance package in several steps (framing-effect (Kahneman 2003:1458-1460)). One of the first steps could be looking at those benefits with the highest sticker costs. Second – as we will see – these three benefits are most frequently chosen by the individuals from Maharastra and Karnataka and also in Rajasthan, drugs is selected most frequently. Third, if we look at table 3, we see that in every chosen health insurance package at least one of the major benefits is included. The table furthermore shows that almost 90% of the individuals selected one of the first six health insurance packages, so there is apparently a strong concentration around these six packages, which contain one or even more of the major benefits.

Table 3 - Chosen benefit package with the major benefits

	Health insurance package (with at least one of the major benefits)	Total	%
1	D (b) + H (b)	569	33,6%
2	D (b) + H (b) + C (b)	491	29,0%
3	D (b) + C (b)	199	11,8%
4	D (h)	96	5,7%
5	D (h) + H (b)	81	4,8%
6	D (b)	69	4,1%
7	H (b) + C (b)	40	2,4%
8	D (b) + H (h)	35	2,1%
9	D (h) + C (b)	26	1,5%
10	H (h) + C (b)	17	1,0%
11	D (b) + C (h)	17	1,0%
12	D (h) + C (h)	14	0,8%
13	D (h) + H (h)	14	0,8%
14	D (b) + H (h) + C (b)	8	0,5%
15	H (h) + C (h)	5	0,3%
16	H (b) + C (h)	4	0,2%
17	D (b) + H (b) + C (h)	4	0,2%
18	C (h)	1	0,1%
19	H (h)	1	0,1%
		1691	100%

The other seven benefits ("tests & imaging", "medical equipment", "maternity & family planning", "dental care", "indirect costs", "preventive care" and "mental health care") are subsequently characterized as minor benefits.

2.2.2   Explanatory variables

For the analysis of the major benefits in total eighteen variables – which are expected to influence the choice – will be selected from the data; "gender", "age", "caste" (scheduled caste/tribe and other backward caste), "marital status", "household size", "education", "standard of living index", "source of income", "illness in the past three months", "hospitalization in the past twelve months", "health care costs in the past twelve months", "kind of hospital used", "three propositions concerning the kind of payment by the insurance" (strongly agree with the proposition "the insurance pays a small part when the bill is small, and a big part when the bill is big", "the insurance pays a part of every bill", "the insurance pays everything of a big bill") and finally "state" (living in Maharastra, living in Rajasthan). These eighteen variables will also be used in the analysis of the minor benefits, with in addition the variable "selection of the major benefits" (choice for drugs at basic or high coverage level, choice for hospitalization at basic or high coverage level and choice for consultation at basic or high coverage level). In both analyses all the variables will be entered as one block in the analysis, except for the variable "state", which will be entered forward (it will only be entered into the model when it is statistically significant). The variable state is entered forward because the state should only contribute to those effects that are not already entered in the model such as age and gender. If state is entered simultaneously, the predicted parameter of the state variable probably contributes also to the effects that should be predicted with the corresponding variable. A description of the variables that will be used in the analysis can be found in appendix G. In the following section the expected effects of these variables will be discussed.

2.2.3   Expectations

The expectation is that the *gender* of the individual at least influences the choice for the benefits "maternity & family planning" and "indirect costs". The prediction is that females are more likely to choose for maternity & family planning, since these health care services are mainly used by females. Males probably are more likely to insure for indirect costs, since – in general – the male is the wage earner and therefore probably has better insight in the finances and the consequence of disability.
The explanatory variable *age* is expected to influence the choice for all the benefits. An older individual has more chance of getting ill and thus the chance of needing health care services increases. Therefore the expectation is that the increase of age positively affects the choice for all benefits. Yet this is impossible, since there are only sixty stickers to spend and a choice has to be made. The expectation is that older individuals are more likely to choose for coverage for catastrophic costs and frequently used health care services.

The effect of belonging to a certain *caste* to the choice for a benefit is unfortunately unclear.
The *marital status* is expected to at least influence the choice for "consultation" and
"maternity & family planning". A married individual presumably is less likely to choose for the
benefit consultation, because such an individual will – first – consult his or her partner.
Further, being married probably has a positive effect on the choice for maternity & family
planning, which is obviously of relevance for married couples.

The *size of the household* presumably affects the choice for the benefits "drugs",
"hospitalization", "consultation" and "indirect costs". The expectation is that the choice for the
benefits drugs, hospitalization and consultation is positively affected in case of a larger
household, because the chance that someone within that household becomes ill increases. A
larger household presumably negatively affects the choice for indirect costs, because there
are probably more wage earners, so illness of one wage earner will not be catastrophic to the
household.

The *level of education* of the individual will presumably effect the choice for "consultation".
It is possible that no level of education will negatively effect the choice, because the
individual does not see the risk(s) and thus will not seek care, nevertheless it is also possible
that it will positively affect the choice because the individual does not know whether he is ill
and therefore consults a health care worker.

The *standard of living index* is expected to influence the choice for the benefits that cover
catastrophic costs. A high score on the standard of living index presumably positively effects
the choice for these benefits, because an individual with a high score is prosperous and
probably could pay the inexpensive health care services himself. This in contrast to
expensive health care services, which he either could not afford or will lead to a drop in his
prosperity.

The explanatory variable *source of income* (i.e. being self-employed or not), is expected to
affect the choice for the benefits "drugs", "indirect costs", "preventive care", "consultation"
and "hospitalization". The expectation is that being self-employed will positively effect the
choice for drugs and will negatively effect the choice for consultation and hospitalization.
After all, drugs can be taken during work by an ill individual, with the result that there will
probably be no wage lost. This in contrast to consultation and hospitalization, which could
cost the self-employed a lot of time and thus income. The choice for indirect costs will
presumably be positively affected, because a self-employed individual wants to prevent that -
due to illness - wage lost will occur. The choice for the benefit preventive care will
presumably be positively affected, because it could prevent serious diseases and related
costs. For an individual who is self-employed this is very important, because it means that
the individual probably will not become ill or that the illness will be less severe and thus in
general the individual can stay at work or return to work more quickly.

The variables *illness in the past three months*, *hospitalization in the past twelve months* and *health care costs in the past twelve months* are expected to be of influence on the choice for correlated benefits. If the individual or a household member has been ill in the past three months, presumably this will affect the choice for the benefits that were needed positively. This is also valid if the individual had health care costs in the past twelve months. In general both explanatory variables are expected to positively affect the choice for the benefit "consultation". If the individual or a household member has been hospitalized in the past twelve months, it is also more likely that the benefit "hospitalization" will be selected.

The *kind of hospital used* is probably of influence on the choice for the benefit "hospitalization". An individual who normally visits a public or charitable hospital, is more likely to select the benefit, because in general the assumption is that an individual who visits a public or charitable hospital instead of private hospital, is poorer. Thus coverage for hospitalization would be preferred by those individuals, so that private hospitals are also available for them.

In the post-questionnaire of the CHAT exercise the individual also is asked to respond on *three propositions concerning the kind of payment by the insurance*. The expectation is that these variables will be of influence on the selected coverage level. An individual who strongly agrees on the proposition "the insurance should pay a small part when the bill is small, and a big part when the bill is big", is expected to select the benefits at high coverage more likely, since high coverage suits best with this proposition. An individual who strongly agrees on the proposition "the insurance should pay some part of every bill", is more likely to select the benefits at basic coverage, since basic coverage suits best with this proposition. An individual who strongly agrees on the proposition "the insurance should pay everything for a very big bill" is more likely to select the benefits at high coverage, since only high coverage will pay more than half in the case of a big bill. Yet it is important to notice that the individuals cannot select all the benefits, since only sixty stickers could be spend, thus a choice has to be made.

The influence of the variable *state* is unfortunately unclear. The state could be of influence because in some states certain health care services are not or at least rarely available or they are of bad quality.

Finally all six variables within "selection of the major benefits" (all six variables) are expected to negatively affect the choice for the minor benefits, because choosing one or more of the major benefits results in less stickers that are remaining for the minor benefits. As already noted, the choice for the minor benefits in the first CHAT experiment also highly depended on the size of the remaining budget (Dror et al. 2007b).

2.3   Group decision

2.3.1   Analysis of group choice

After the analysis of the individual choice, the group choice will be analyzed. The choice made by the individual will be compared to the choice made by the group and – more important – whether there is a correlation between this comparison and the explanatory variables which are listed below. The analysis will be conducted as follows. First a score-system will be created which tells how well the choice in round 2 (group) corresponds with the choice in round 1 (individual). If in round 2 the same benefit and coverage level is selected as by the individual in round 1, he or she will receive one point. If the chosen coverage level differ, the individual will receive a half point. If a benefit is selected in round 2 which was not selected in round 1, the individual will receive no point at all. Since there are ten benefits to choose from, the maximum score is 10 points (i.e. perfect match between round 1 and round 2).

The variables that will be entered in the analysis are either interval or dichotomous variables. The matching-score variable is a continuous variable. When the variable is continuous, there will be an analysis between an continuous and other continuous variable. When the variable is dichotomous, the analysis will be between an continuous and dichotomous variable. The correlation coefficient of the first (continuous-continuous) will be expressed with a Pearson's correlation coefficient. This coefficient lies between –1 (which means a perfect negative correlation) and 1 (which means a perfect positive correlation) (de Vocht 2006:187-188; DeCoster 2004:28). The correlation coefficient of the second (continuous-dichotomous) will be measured with the Point-biserial correlation coefficient. This coefficient also lies between –1 and 1. The Point-biserial correlation coefficient can be calculated the same way as the Pearson's correlation coefficient (DeCoster 2004: 28-29)

2.3.2   Explanatory variables

The variables that will be used in this analysis are, except for the "three propositions concerning the kind of payment by the insurance"which are excluded), the same as used in the analysis of the individual choice of the major benefits, with in addition four new variables; "exercise was easy", "group reached decisions in a fair manner", "discussion were open and honest" and "will join health insurance package selected by the group". In order to discuss the results easier, the values of the variables will be turned.

2.3.3 Expectations

If an individual has a high matching-score, the decision of the group does not differ (much) from his own individual decision in round 1. The expectation is that either the individual has much influence within the group or it is merely a coincidence that the compromise of the group equals his or her individual choice. In this section the expected correlation between the variables and the matching-score will be discussed.

The variable *gender* is expected to correlate negatively with the matching-score, which means that females probably have less influence in the group decision. Presumably the opinion of the male has more weight.

Further it is expected that the variable *age* is positively correlated with the matching-score, which means that an older individual probably has more influence within the group. An explanation therefore is, that older people are presumably taken more seriously (for instance because of the experience of life).

The variables related to the *caste* are also expected to influence the group decision. An individual belonging to a general caste is expected to have a higher matching-score, thus a positive correlation. Individuals belonging to a scheduled caste/tribe or an other backward caste are expected to have a lower matching-score, and thus a negative correlation. The general caste namely is a higher caste than the scheduled caste/tribe and the other backward caste.

The variable *education* is expected to be negatively correlated with the matching-score, which means that an individual with education has more influence in the group decision than an individual with no education. This because an individual with no education probably thinks that the individual with education knows better.

The variable *standard of living index* is expected to be positively correlated with the matching-score, which means that an individual with a high score has more influence to the group decision. An explanation probably is that the opinion of someone who is more prosperous is of more importance.

The variables *illness in the past three months*, *hospitalization in the past twelve months* and *health care costs in the past twelve months* are expected to be positively correlated with the matching-score, which means that individuals which were in contact with illness have more influence on the group decision. This because such an individual can tell the group what the consequence of illness are, and thus what is needed.

The variable *kind of hospital used* is expected to be positively correlated with the matching-score, which means that an individual who normally visits a private hospital has more influence. This because such an individual is probably more prosperous and – as earlier mentioned – thus his or her opinion is felt to be of more importance.

The variable *exercise was easy* is expected to be positively correlated with the matching-score, which means that someone who is of the opinion that the exercise was easy, has more influence in the decision of the group, because he probably understands the exercise better and thus could take the lead in the decision of the group.

The variable *group reached decisions in a fair manner* also is expected to be positively correlated with the matching-score, which means that someone who is of the opinion that the group decision was reached in a fair manner, has more influence to the group decision. This because such an individual probably did agree with the decision made by the group.

The same is valid for the variables *discussion were open and honest* and *will join health insurance package selected by the group* are correlated with the matching-score.

Finally, the variables *marital status*, *household size*, *source of income* and *state* are not expected to be of influence to the group decision. For the variable state this is easy to explain, because all group-members are from the same village (and thus state). For the other variables it is unclear why it should be of influence to the group decision. If appears that there is a correlation, this is probably a coincidence (that the compromise of the group equals the individual choice).

2.4 Statistical analysis

The statistical analysis of this research is preformed by using SPSS 15.0 for Windows (release 15.0.0 (6 Sep 2006)).

3   FINDINGS INDIVIDUAL CHOICE

3.1   Characteristics participants

A total of 1932 individuals from Maharastra, Karnataka and Rajasthan participated in the second CHAT exercise. From the dataset, 242 individuals (12,5%) were excluded, mainly due to missing values (for instance individuals who withdraw themselves). The characteristics of the remaining 1691 individuals (Maharastra, n=405, Karnataka, n=350, Rajasthan, n=936) are given in appendix C, split by the three different states. In general we could say that the participants from Maharastra are nearly all women (only 1 of the 405 participants is male), are educated and have a high level of welfare. The participants of Karnataka are the least prosperous and they also seem to have the lowest health status. The participants from Rajasthan are on average the oldest, the majority is self-employed and when they had to go to a hospital, they visited a public hospital. Even though the morbidity is the lowest in Rajasthan, they have the highest health care costs in the past twelve months and non of the participants in Rajasthan is insured for health care costs.

3.2   Frequency selected benefits and coverage level

The frequency by which the benefits are selected is given in table 4. The overwhelming majority of the individuals included drugs as a benefit in their health insurance package (96%). Other frequently selected benefits are test & imaging (83%), indirect costs (81%) and hospitalization (75%). State specifically we see that individuals from Maharastra chose drugs (92%), hospitalization (82%) and consultation (82%) most frequently. These benefits are also most frequently selected by the individuals from Karnataka; 91% included drugs, 85% included consultation and 78% included hospitalization. The individuals from Rajasthan also included drugs most frequently (99%), other frequently chosen benefits are tests & imaging (91%) and indirect costs (89%). If we take a look at the preferred level of coverage, we see that basic coverage is the most preferred coverage level (8640), followed by no coverage (6493) and high coverage is preferred least (1957)

Table 4 - Frequency benefits

Benefit type	Maharastra (n=405)			Karnataka (n=350)			Rajasthan (n=936)			Total (n=1961)		
	Nothing	Basic	High	Nothing	Basic	High	Nothing	Basic	High	Nothing	Basic	High
Drugs	8%	90%	2%	9%	89%	1%	0%	76%	23%	4%	82%	14%
Hospitalization	18%	74%	8%	22%	77%	1%	29%	66%	4%	25%	70%	5%
Consultation	18%	76%	6%	15%	83%	2%	79%	20%	1%	51%	46%	3%
Test & Imaging	22%	65%	13%	30%	64%	7%	9%	46%	45%	17%	54%	29%
Medical equipment	62%	35%	3%	57%	40%	3%	53%	41%	6%	56%	39%	5%
Maternity	76%	19%	6%	55%	39%	6%	70%	22%	8%	69%	24%	7%
Dental care	45%	45%	10%	48%	41%	11%	38%	38%	23%	42%	40%	18%
Indirect costs	34%	42%	24%	23%	53%	24%	11%	43%	45%	19%	45%	36%
Preventive care	43%	57%		27%	73%		41%	59%		38%	62%	
Mental health care	83%	17%		67%	33%		54%	46%		63%	37%	
Total (n=)	1653	2104	293	1235	2070	195	3605	7891	1469	6493	8460	1957

3.3 Predicting the individual choice for the major benefits

In the following sections the results of the multinomial logistic regression of the three major benefits (i.e. drugs, hospitalization and consultation) at the basic and high coverage level (see appendix D) will be discussed. The reference category is 'no coverage'. As earlier mentioned, only the variables that are statistically significant will be discussed.

3.3.1 Drugs

At basic coverage, two of the variables are statistically significant; "age" and "living in Rajasthan". At high coverage, the same variables are statistically significant, with in addition; "gender" and "living in Maharastra" .

First, the results show that being female negatively affects the choice for drugs at high coverage. An explanation for this could be, that females do not have a clue about the costs related to drugs and assume that they will never exceed the amount of Rs. 150 (the maximum the individual has to pay with high coverage), so high coverage gives them no extras. Another possibility is that females only use generic drugs (instead of the more expensive branded drugs) and therefore assume that they will not exceed the amount of Rs. 150. A final explanation for this effect could be that females have a wider scope and thus prefer a broader package, with more benefits (at basic coverage).
Further, the results show that an increase in the age of the individual negatively affects the choice for drugs at both coverage levels and that this effect increases if the age of the individual increases further. The negative effect is not in accordance with the expectation, but this can be explained by the fact that the increased needs of older people in fact strike all the

benefits, so the individual has to make a choice. Probably the priorities for older individuals lie with other benefit types than the benefit type drugs.

Third, living in Maharastra or Rajasthan positively affects the choice for drugs at high coverage and living in Rajasthan also positively affects the choice for drugs at basic coverage. This positive effect could lie – as noted in the expectations – in the organization of the health care services within the state. Perhaps there are good health care services in Maharastra and Rajasthan concerning the purchase of drugs. When the individual lives in Rajasthan, this effect can also be explained by the large size of self-employed individuals. Visiting a physician or hospital costs time and during this waiting-time, the individual cannot work and thus waste income. With drugs the illness may also be cured, with the advantage that in the meantime the individual can stay at work (there is less waste of time, because of traveling, waiting and the visit itself).

3.3.2   Hospitalization

At basic coverage, four of the variables are statistically significant; "gender", "strongly agree with the proposition that the insurance should pay a part of every bill", "living in Maharastra" and "living in Rajasthan". Except for "living in Rajasthan", the same variables are statistically significant at high coverage.

First, the results show that being female negatively affects the choice for hospitalization. A reason for this effect could be that females have to stay at home caring for the other household members (such as care for the children and housekeeping). Yet living in Maharastra – strangely enough, since nearly all individuals from Maharastra are female – positively affects the choice for hospitalization. Again this effect can be due to the organization of the health care services within the states, in this case the quantity and/or quality of the hospitals available. For woman living in Maharastra it means that these effects probably will be balanced against each other.

Third, the results show that an individual who strongly agrees with the proposition "the insurance should pay some part of every bill" is less likely to select hospitalization. This in contrast to the expectation, as far as the basic coverage level is concerned. Probably this is due to the design of the CHAT-exercise (individuals cannot choose all the benefits, but have to make a choice).

Finally, the choice for hospitalization is affected by the state where the individual lives in. Above, the effect of living in Maharastra is already discussed. If the individual lives in Rajasthan, the choice for hospitalization at basic coverage is negatively affected. This could also here lie in the organization of the health care services. But it could also be due to the number of self-employed individuals, which is already explained in the section drugs.

3.3.3   Consultation

Two of the variables at basic coverage are statistically significant; "living in Maharastra" and "living in Rajasthan". "Living in Rajasthan" also is statistically significant at high coverage and this is also valid for the variable "strongly agree with the proposition that the insurance should pay some of every bill".

First, living in Maharastra or Rajasthan negatively affects the choice for consultation at basic coverage and living in Rajasthan also negatively affects the choice for consultation at high coverage. If we take a closer look at table 4, we can see that almost 80% of the individuals from Rajasthan did not choose consultation as benefit in their health insurance package. Consultation is even the less preferred benefit type in Rajasthan, but why? An explanation for the unlikelihood for choosing consultation when living in Maharastra or Rajasthan could be that – comparable with the other benefits – individuals are dissatisfied with the quality of the health care workers and/or maybe the quantity of health care workers is too low in both states. Obviously you do not insure yourself for something you cannot or will not make use of. For the individuals living in Rajasthan, a reason can also be the number of self-employed individuals, which is already explained in the section drugs.
Finally, the results show that an individual who strongly agrees with the proposition "the insurance should pay some part of every bill", is more likely to choose consultation at high coverage. That high coverage is preferred, is not in accordance with the expectation. This effect could not be explained with the characteristics entered in the analysis, so maybe there are other characteristics that are of influence.

3.4   Predicting the individual choice for the minor benefits

In the following sections the results of the (multinomial respectively binomial) logistic regression of the seven remaining benefits, also characterized as minor benefits (i.e. tests & imaging, medical equipment, maternity & family planning, dental care, indirect costs, preventive care and mental health care) at the available coverage levels (see appendix E) will be discussed. Also here, the reference category is 'no coverage' and only the variables that are statistically significant will be discussed.

3.4.1 Tests & Imaging

At basic coverage, nine variables are statistically significant; "strongly agree with the proposition that the insurance should pay a small part when the bill is small, and a big part when the bill is big", "selected major benefits (all six variables)", "living in Maharastra" and "living in Rajasthan". At high coverage, ten variables are statistically significant. In addition to the variables at basic coverage, the variable "gender" is statistically significant.

First, the results show that an individual who strongly agrees with the proposition "the insurance should pay a small part when the bill is small, and a big part when the bill is big" is less likely to choose the benefit tests & imaging. This is an expected effect for the basic coverage level. Yet we see that – in contrast to the expectation – it also negatively affects the choice for the high coverage level. That high coverage also is less likely to be selected, may again be due to the design of the CHAT exercise (individuals have a limited number of stickers to spend).

Second, being female negatively affects the choice for tests & imaging at high coverage. As earlier noted, females probably have a wider scope and prefer a broader package, with more benefits at basic coverage level. Therefore coverage at high coverage is not preferred.

Further, the results show that having no health care costs in the past twelve months negatively affects the choice for tests & imaging at the basic coverage level. This is in accordance with the expectation.

Fifth, the variables related to the major benefits all negatively affect the choice for tests & imaging, which is also in accordance to the expectation.

Finally, living in Maharastra or Rajasthan positively affects the choice for tests & imaging on the basic coverage level. As already mentioned in previous sections, this effect is probably due to the health care services within the states.

3.4.2 Medical equipment

At basic coverage eight variables are statistically significant; "gender", "selection of the major benefits (all six variables)" and "living in Rajasthan". At high coverage, seven variables are statistically significant; "selection of the major benefits" (all six variables) and "health care costs in past twelve months".

First, the results show that a female is more likely to include basic coverage for medical equipment in her health insurance package. Here the same explanation could be used as in the previous sections; females may have a wider scope and therefore prefer coverage at basic level. So more benefits could be included and one of these benefits could be medical equipment.

Further, an individual without health care costs in the past twelve months is apparently more likely to choose medical equipment at the high coverage level. This in contrast to the expectation, but it can be explained by the design of the CHAT exercise. After all, a health insurance package must be selected, so a healthy individual probably selects those benefits that may be useful and medical equipment may be such kind of benefit.

Furthermore, the variables related to the major benefits all negatively affect the choice for medical equipment. This is in accordance with the expectation.

Fourth, the results show that living in Rajasthan negatively affects the choice for medical equipment at the basic coverage level. The coverage for this kind of care probably is felt not that important (in contrast to for instance drugs). An other explanation could be – as mentioned earlier – that this effect is due to the organization of the health care services within the states.

3.4.3   Maternity & Family planning

At basic coverage ten variables are statically significant; "gender", "household size", "selection of the major benefits" (all six variables), "living in Maharastra" and "living in Rajasthan". At high coverage eleven variables are statistically significant; "gender", "standard of living index", "illness in the past three months", "strongly agree with the proposition that the insurance should pay a small part when the bill is small, and a big part when the bill is big", "selection of the major benefits" (all six variables) and "living in Rajasthan".

First, the results show that – in accordance with the expectation – being female positively affects the choice for maternity & family planning at the basic coverage level, but in contrast to the expectation it negatively affects the choice at high coverage. Possibly this has to do with the correctness of estimating the coverage that is needed; females estimate better what is needed and believe that basic coverage is enough, whereas the male believes that high coverage is needed. Of course it can also be the other way around; that males better estimate what is needed, and therefore select high coverage, whereas woman believe that is not necessary. This effect could also be explained the same way as earlier; females may have a wider scope and prefer a broader package, with more included benefits (at basic coverage).

Further, the size of the household positively affects the choice for maternity & family planning. This can be explained by the fact that this benefit also offers coverage for regular check-ups and immunizing for children below the age of five, which could be an useful coverage for large households where presumably more members are under the age of five.

Furthermore, the results show that an individual with a high score on the standard of living index is more likely to choose a high coverage for maternity & family planning and that if the

score increases, the effect further increases. In households with a low score on the standard of living index, the welfare is less and possibly there are more individuals in the household who could care for the mother before, during and after delivery, as a form of informal care, so coverage for maternity & family planning is for these households not that necessary.

Fourth, the individuals who where ill themselves or had an ill household member in the last three months, are apparently less likely to choose maternity & family planning at high coverage. An explanation for this can be that the individual who experienced an illness in the last three months probably wants insurance for the care that was needed during the illness instead of coverage for maternity & family planning.

Fifth, the results show that an individual who strongly agrees with the proposition "the insurance should pay a small part when the bill is small, and big part when the bill is big", is more likely to choose a high coverage for maternity & family planning. This effect is in accordance to the expectation.

Sixth, like the other minor benefits that already are discussed, the choice for maternity and family planning is negatively affected by the six variables concerning the major benefits, which is in accordance to the expectation.

Finally, living in Maharastra or Rajasthan negatively affects the choice for maternity & family planning at the basic coverage level and living in Rajasthan also negatively affects the choice at the high coverage level. As already mentioned, the effect of the states may be due to the lack of health care services available and/or due to bad quality.

3.4.4 Dental care

At basic coverage nine variables are statistically significant; "gender", "size of the household", "illness in the past three months" and "selection of the major benefits" (all six variables). At high coverage, also nine variables are statistically significant; "gender", "age", "selection of the major benefits" (six variables) and "living in Rajasthan".

First, the results show that being female positively affects the choice for coverage of dental care. This effect has already been explained in the previous sections; females probably prefer a broad package, with a lot of benefits (at basic coverage level).

Further, age has a positive affect on the choice for dental care at high coverage, which effect was not really expected, yet it is – as already noted in the expectations – a plausible effect. An older individual is after all more likely to need dental care, for instance dentures.

Third, the results show that an individual who lives in a large household is less likely to choose dental care at basic coverage and that this effect increases if the household size increases further. An explanation can be that there are other priorities in a large household, such as coverage for more catastrophic costs.

Furthermore, the results show that if someone in the household was ill in the past three months, the individual is more likely to select dental care at the basic coverage level. This is in accordance with the expectation, if we assume that the illness in the past three months was related to dental care. If this is not the case, than this effect cannot be explained.

Fifth, all the variables concerning the major benefits negatively affect the choice for dental care. This is in accordance to the expectation.

Finally, individuals from Rajasthan are more likely to choose a high coverage for dental care. Again, the explanation could be that it is due to the availability and/or quality of the health care services within the states.

3.4.5 Indirect costs

At basic coverage seven variables are statistically significant; "gender" and "selection of the major benefits" (all six variables). At high coverage nine variables are statistically significant, the same as those at the basic coverage level, with in addition "hospitalization in the past twelve months" and "living in Rajasthan".

First, the results show that being a female negatively affects the choice for indirect costs. In general the male is the wage earner, so he has probably better knowledge of the finances and the consequence of disability. Females either could not estimate these effects or they estimate it to positive.

Further, the choice for indirect costs is negatively affected by the choice for the major benefits. For an explanation of this effect see the previous minor benefits.

Third, the results show that individuals who where ill themselves or had an ill household member in the last twelve months are less likely to choose indirect costs at high coverage. Probably the individual assumes that the chance of getting ill is decreased, because an illness already has occurred and therefore coverage against indirect costs is not necessary.

Finally, the results show that the individuals from Rajasthan are more likely to choose indirect costs at the high coverage level. An explanation for this, can be – as earlier mentioned – that the majority of the individuals from Rajasthan are self-employed. Coverage for indirect costs is than highly preferred, because it means that the household is not immediately in trouble due to the great influence of hospitalization.

3.4.6   Preventive care

At the basic coverage level (the only available coverage) nine variables are statistically significant; "gender", "source of income", "selection of the major benefits" (all six variables) and "living in Rajasthan".

First, the results show that a female is more likely to choose preventive care. Probably this is because a female is more convinced of the effectiveness of preventive care.
Further, being self-employed negatively affects the choice for preventive care. This is not in accordance with the expectation. An explanation for this could be that medical check-ups costs time, time – as already mentioned – also could be used for working. If we look specific to the individuals who are self-employed we see that almost 65% of the self-employed selected preventive care in their health insurance package. Presumably this variable interacts with another variable in the model.
Third, the results show that – in contrast to the previous minor benefits – the choice for the major benefits positively affects the choice for preventive care. An explanation for this could be that the stickers had to be consumed (the benefit preventive care only costs two stickers). Finally, living in Maharastra or Rajasthan positively affects the choice. Again, this is probably due to the organization of the health care services within the states.

3.4.7   Mental health care

At the basic coverage level (the only available coverage) nine variables are statistically significant; "gender", "household size", "selection of the major" (all six variables) and "living in Maharastra".

First, the results show that being female positively affects the choice for mental health care. An explanation can be that females are less ashamed when they need mental health care. Males probably are more ashamed and rather deny that they are mentally ill.
Second, the size of the household also positively affects the choice, which effect is decreasing when the size of the household further increases. This probably is a coincidence effect, the stickers had to be consumed (the benefit mental health care only costs two stickers).
Further, the results show that the effect of the major benefit is – just like preventive care – positive. This effect could be explained in a similar way as the effect within preventive care. Mental health care costs only one sticker and thus the main reason for selecting this benefit probably is to consume all sixty stickers.

Finally, living in Maharastra also positively affects the choice for mental health care. An explanation can again be that the health care services are better organized in Maharastra than in the other two states.

4   FINDINGS GROUP DECISION

4.1   Correlation between matching-score and individual characteristics

In this section the correlations between the background characteristics of the individuals and the matching-score will be discussed. A total of 36 individuals (of the total 1691) did not answer at least one of the questions in the post questionnaire, these individuals are therefore taken from the group analysis (i.e. 1655 individuals are included in the analysis). Finally, there should be noted that the value labels of the variables are turned, so that the results are easier to interpret. Before discussing the results of the correlation, there will more specifically be looked at the matching-score.

4.1.1   Matching-score

As reminder, the matching-score is defined as the similarity of the benefits chosen by the individual in round 1 and by the group in round 2 (for an extensive explanation see the methods section).

In table 5 the frequencies are given of the matching-score. More than 75% of the individuals have a matching-score equal or above the 5.0. Thus, for 75% of the individuals the benefits that are included and excluded in the health insurance package in round 2 correspond for at least 50% with the choice they made by themselves in round 1. For almost 3% of the participants (48 individuals) the selected benefits in the health insurance package in round 2 equals the selected benefits in round 1 perfectly (i.e. are a perfect match). The lowest matching-score is 1.5, which means that the included and excluded benefits in round 2 for only 15% match with round 1.

Table 5 - Frequencies of the matching-score

Matching-score	#	%
0.0	0	0,00%
0.5	0	0,00%
1.0	0	0,00%
1.5	1	0,06%
2.0	7	0,42%
2.5	20	1,21%
3.0	44	2,66%
3.5	70	4,23%
4.0	136	8,22%
4.5	129	7,79%
5.0	207	12,51%
5.5	128	7,73%
6.0	240	14,50%
6.5	175	10,57%
7.0	259	15,65%
7.5	59	3,56%
8.0	105	6,34%
8.5	19	1,15%
9.0	8	0,48%
9.5	0	0,00%
10.0	48	2,90%
	1655	
Mean:	5,86	
Std:	1,57	

4.1.2 Correlation

In appendix F the calculated correlations between the background characteristics of the individual and the matching-score are given.

Eight of the variables used are statistically significant correlated with the matching-score, namely "gender", "age", "caste" (other backward caste and general caste), "source of income" and "state" (living in Maharastra, living in Rajasthan and living in Karnataka). Yet we see that all the correlation coefficients are very close to zero and thus are extremely weak. The correlation coefficient of seven variables is between -0.1 and 0.1. The correlation coefficient of the other variable ("living in Rajasthan") is somewhat higher (0.110). In spite off these extremely weak correlations, the variables with a statistically significant correlation coefficient are discussed below.

First, the variable *gender* is negatively correlated with the matching-score, which means that if the individual is a female, the matching-score decreases. This is in accordance to the expectation. When we look at Maharastra (where only one participant is male), we see that the male has a perfect matching-score of 10, which suggest that he indeed influenced the group decision by far.

Second, the results show that the variable *age* is negatively correlated with the matching-score, which means that if the age of the individual increases, the matching-score decreases. This is not in accordance to the expectation. Maybe this is due to the fact that the older individuals listen to the younger individuals because either they assume that the younger individual have better knowledge of western-medicine or because they find it of more importance that the health insurance package suits the younger individuals.

Third, the variable *belonging to an other backward caste* is positively correlated with the matching-score, which means that the matching-score increases if an individual belongs to an other backward caste. The variable *belonging to a general caste* is on the other hand negatively correlated with the matching-score, so the matching-score increases if an individual does not belong to a general caste. These two effects are not in accordance with the expectation. Yet if we look at the distribution of the caste within the groups, we see that in almost every group one caste is most frequently presented, thus presumably this correlation coefficient is more a coincidence.

Fifth, the results show that the variable *being self-employed* is positively correlated with the matching-score, which means that an individual who is self-employed has a higher matching-score and thus has more influence within the group and can steer the group decision. An explanation for this could be that that self-employed individuals better stand up for themselves.

Sixth, the variables *living in Maharastra* and *living in Karnataka* are negatively correlated with the matching-score, so the matching-score of an individual decreases when the individual lives in Maharastra or Karnataka. The variable *living in Rajasthan* on the other hand, is positively correlated with the matching-score, which means that the matching-score increases when the individual lives in Rajasthan. These results suggest that the difference between round 1 and 2 is larger (i.e. lower match-score) in Maharastra and Karnataka than for those individuals living in Rajasthan, where the correlation coefficient is positive. Thus, the individuals from Rajasthan all choose a health insurance package in round 1 that was quite similar. An explanation for this effect could not be easily given, perhaps it has to due with the organization of the health care services – as also noted in the discussion of the individual choice.

5   CONCLUSION & RECOMMENDATIONS

In this research several background characteristics of the individuals are used to see whether it is possible to predict the choices made by the individuals and if it is possible to see which background characteristics correlate with the group decision.

The results of the individual analysis show that in spite of the large number of variables that are entered in the analysis, the strength of the models is not very strong. The model for the minor benefit medical equipment 'scores' best with a pseudo R^2 (Nagelkerke) of 0,506 and the model for the major benefit hospitalization 'scores' worst with a pseudo R^2 (Nagelkerke) of 0,078. So the conclusion is justified that – with the available characteristics – the choices made by the individuals cannot be accurate predicted, as also mentioned in the findings.

The analysis of all the major benefits shows that the "state" (living in Maharastra and living in Rajasthan) affects the choice and the results show moreover that the estimated values of these variables are the highest. So the selection of the major benefits by the individuals, mainly depends on the state he or she lives in. As discussed in the findings, this effect is probably due to the difference in the quantity and/or quality of the health care services within the states. Yet this is only a suggested explanation for the effect that is found, further research is necessary to see whether this effect really lies in a difference between the quantity and/or quality of the health care services within the states.

The analysis of the minor benefits shows that "state" is of influence, yet the estimated values are high, but not the highest. The "selection of major benefits" (all six variables) influences the choice for the minor benefits most. For the five minor benefits with the largest sticker costs (tests & imaging, medical equipment, maternity & family planning, dental care and indirect costs) is valid that the selection of the major benefits negatively affects the choice. For the other two minor benefits (preventive care and mental health care) is valid that the choice is positively affected by the selection of the major benefits. The results further show that the estimated values in general are the highest when drugs is selected, followed by hospitalization and consultation. Furthermore the results show that the negative effect of (the choice for) the major benefits decreases when the sticker costs of the minor benefit decreases (and the effect becomes even positive for the two cheapest minor benefits) and that the negative effect of the choice for the major benefits increases if high coverage is selected instead of basic coverage. Overall, the selection of the minor benefits thus highly depends on the selection of the major benefits, which also came to the force in the findings and was also valid for the first CHAT experiment (Dror et al. 2007b).

The explanation of the negative effect in the five minor benefits could be – as already noted in the findings – that selecting one ore more of the major benefits leaves less stickers to spend on the minor benefits. An explanation for the positive effect in the two other minor benefits could be that these benefits are cheap (cost only two respectively one sticker(s)) and the only possible way to consume the sixty stickers.

An overall conclusion is that some of the variables that are statistically significant cannot be really explained. The suggested explanation is that it may be due to the design of the CHAT exercise. After all, since the participants have only sixty stickers to spend, the chance is present that – as also suggested above – the minor benefits are only selected because the stickers have to be consumed. Therefore three suggestions are listed below for adjusting the CHAT exercise in order to overcome this problem;
First, the priorities of the individuals could be taken into account. For instance by letting the individuals write down which of the selected benefits have the highest priority. A suggestion that is related to the previous one, is to ask the individuals afterwards why the benefits are selected. This for instance could be done within the post-questionnaire. A final suggestion is to give the individuals no minimum and maximum amount of stickers, but to leave this option open. In round 1 the individuals can decide which of the benefits they want to include in their health insurance package with no limitation of stickers costs, but with of course the notion that it should be affordable. In round 2 the group has to reach a decision, since also here there is no minimum and maximum budget, the exercise will be somewhat more complicated. In round 2 it is therefore necessary that the individuals not only discuss the benefits they want to include, but they also have to discuss the affordability.

Finally, the results of the group decision show that only eight variables correlate with the matching-score (i.e. the similarity between the choice of the group and the individual) but also that the correlation coefficient of all these variables are extremely weak. This leads to the conclusion that in fact none of the characteristics have a correlation with the matching-score, and thus it seems to be that having a high matching-score is more a matter of coincidence than that it is related with one of the background characteristics of the individual.

Let us now return to the main question of this research, can we predict and explain the choices made by the individuals and groups? The results show that the choices made by the individuals cannot be predicted accurately. The same is true for the group decision, we cannot explain why some individuals have a higher matching-score than other individuals. There could be two explanations for this, either the choices cannot be predicted and explained with the characteristics or the dataset (and CHAT experiment) is not suitable in order to answer the main question. I think that with the characteristics it should be possible to

predict and explain the choices. So, I assume that it is mainly due to the dataset and CHAT exercise. Yet this is not shocking, since the main goal of the CHAT experiment is not to predict and explain the choices made, but to let the poor design their own health insurance package with the ultimo goal that the poor will enter a community based health insurance scheme. And if the CHAT experiment can take care of this, we can say that the mechanism works.

REFERENCES

Borooah, V.K. 2002. *Logit and probit: ordered and multinomial models*. (Sage University Papers Series On Quantitative Application in the Social Sciences, 07-138). Thousand Oaks, CA: Sage.

Danis, M., A.K Biddle, S.D. Goold. 2002. 'Insurance benefit preferences of the low-income uninsured'. *Journal of General Internal Medicine* 17 (2):125-133.

DeCoster, J. (2004). *Data Analysis in SPSS*. Retrieved <August 28, 2007>
from http://www.stat-help.com/notes.html.

Devadasan, N., K. Ranson, W. van Damme & B. Criel. 2004. 'Community Health Insurance in India: An Overview'. *Economic and Political Weekly* July 10 (2004):3179-3183.

Devadasan, N. K. Ranson, W. van Damme, A. Acharya & B. Criel. 2006. 'The landscape of community health insurance in India: An overview based on 10 case studies'. *Health Policy* 78 (2006):224-234.

Dror, D.M. 2006. 'Health Insurance for the Poor: Myths and Realities'. *Economic and Political Weekly* November 4 (2004):4541-4544

Dror, R.M., R. Radermacher, & R. Koren. 2007a. 'Willingness to pay for health insurance among rural and poor persons: Field evidence from seven micro health insurance units in India'. *Health Policy* 82 (2007):12-27.

Dror, D.M., R. Koren, A. Ost, E. Binnendijk, S. Vellakkal & M. Danis. 2007b. 'Health insurance benefit packages prioritized by low income clients in India: Three criteria to estimate effectiveness of choice'. *Social Science and Medicine* 64 (2007):884-896.

Goold, S.D., A.K. Biddle, G. Klipp, C.N. Hall & M. Danis. 'Choosing Healthplans All Together: A Deliberative Exercise for Allocating Limited Health Care Resources'. *Journal of Health Politics, Policy and Law* 30 (4):563-601.

Jütting, J. 2002. 'Health insurance for the poor? Determinants of participation in community-based health insurance schemes in rural Senegal'.

Kahneman, D. 2003. 'Maps of Bounded Rationality: Psychology for Behavioral Economics'. *The American Economic Review* 95 (5):1449-1475.

Menard, S. 1995. *Applied logistic regression analysis*. (Sage University Papers Series On Quantitative Application in the Social Sciences, 07-106). Thousand Oaks, CA: Sage.

NCMH. 2005. *Financing and Delivery of Health Care Services in India*. New Delhi (India): National Commission on Macroeconomics and Health, Ministry of Health & Family Welfare, Government of India.

Pundo, M.O. & G.C.G. Fraser. 2006. 'Multinomial logit analysis of household cooking fuel choice in rural Kenya: The case of Kisumu district'. *Agrekon* 45 (1):24-37.

Robins, P.K. & K.P. Dickinson. 1985. 'Child support and welfare dependence: a multinomial logit analysis'. *Demography* 22 (3):367-380.

Simon, H.A. 1955. 'A Behavioral Model of Rational Choice'. *The Quarterly Journal of Economics* 69 (1):99-118.

Vocht, A. de. 2007. *Basishandboek SPSS 14 voor Windows*. Utrecht: Bijleveld Press [2006].

WHO. 2000. *The World Health Report 2000 Health systems: Improving performance*. Geneva World Health Organization.

Wiesmann, D. & J. Jütting. 2000. 'The Emerging Movement of Community Based Health Insurance in Sub-Saharan Africa: Experiences and Lessons Learned'. *Afrika spectrum* 35 (2):193-210.

APPENDICES

Appendix A - CHAT board
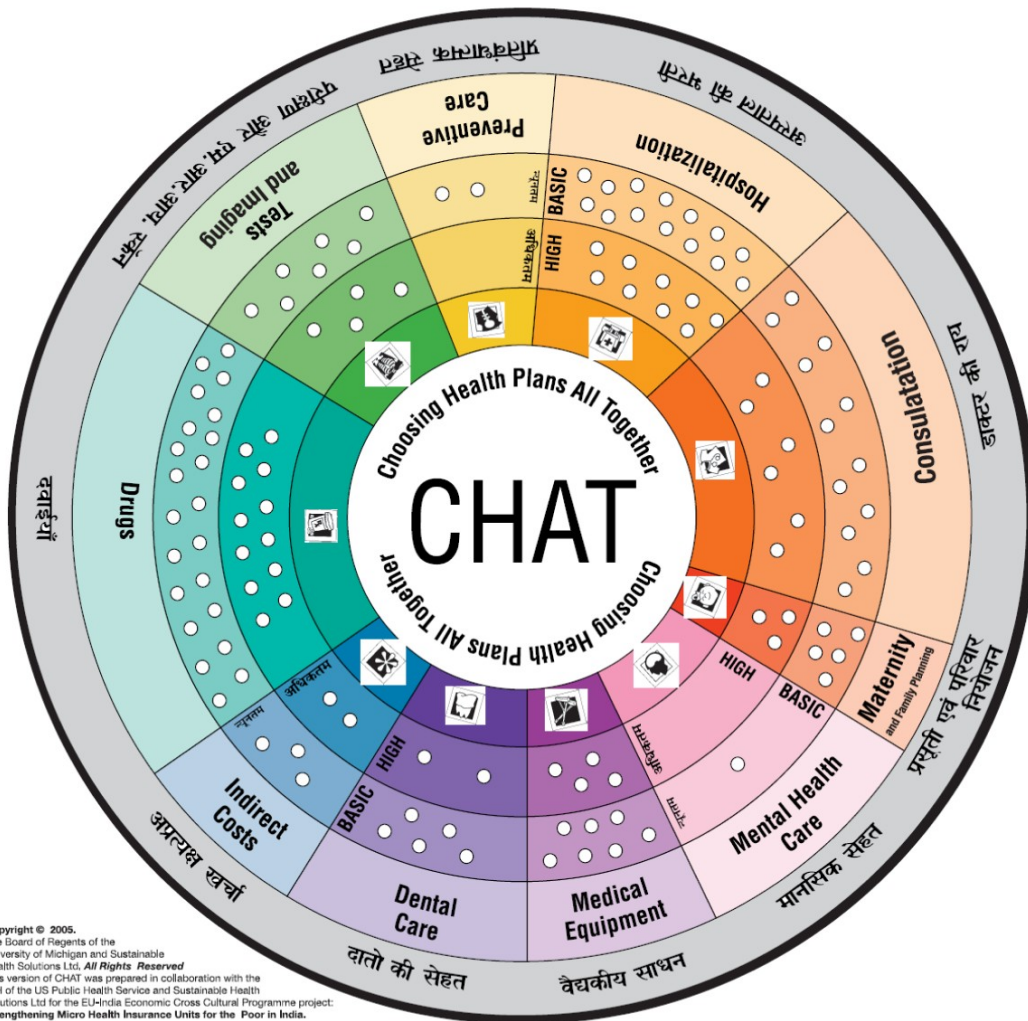
Appendix B - Explanation of the benefit types and coverage levels

Drugs

Insurance pays for allopathic medicines (branded and generic), bandages and other consumable medical supply used in an outpatient setting and prescribed by a health care worker licensed to write prescriptions.

Basic (22 stickers)
Insurance pays for half the costs of services

High (35 stickers)
Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 150

Hospitalization

Insurance pays for all direct costs occurring during hospitalization except for mental illness and childbirth. Both public and private providers are included and treatment of acute as well as chronic conditions.

Basic (14 stickers)
Insurance pays for half the costs of services

High (23 stickers)
Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 2.500

Consultation

Insurance pays for consultation with / visit to an allopathic health worker licensed to establish a diagnosis and provide medical advice (physicians, specialists and nurses), but without staying overnight.

Basic (12 stickers)
Insurance pays for half the costs of services

High (18 stickers)
Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 60

Test & Imaging

Insurance pays for lab tests, x-rays and computerized scanning done in an outpatient setting and ordered by a licensed health care worker.

Basic (7 stickers)
Insurance pays for half the costs of services

High (11 stickers)
Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 125

Medical equipment

Insurance pays for equipment such as eye glasses, hearing aids, wheel chairs, crutches.

Basic (7 stickers)
Insurance pays for half the costs of services

High (11 stickers)
Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 100

Maternity and family planning

Insurance pays for the mother's care before, during and after delivery. Insurance pay for the delivery. The insurance pays for the regular check-ups of the baby for growth monitoring and immunizing till the age of 5. Insurance pays for family planning.

Basic (5 stickers)
Insurance pays for half the costs of services

High (8 stickers)
Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 2.750

Dental care

Insurance pays for the necessary care of your teeth, including dentures. Excluded are cosmetic treatments.

Basic (5 stickers)
Insurance pays for half the costs of services

High (7 stickers)

Insurance pays for half the costs of inexpensive services; you will never have to pay more than Rs. 50

Indirect costs

Insurance pays for wage loss due to hospitalization for hospitalized household members between 18 and 50 years old. Insurance pays for continued health insurance coverage in case of death or permanent disability of the head of the household. Insurance pays for emergency transportation of the severely ill patient to the hospital.

Basic (3 stickers)

1. Members requiring inpatient treatment are paid Rs. 50 per day to cover lost wages. The maximum amount paid is Rs. 500 per hospitalization
2. Health insurance coverage is continued for 3 months in case the head of the household dies or gets permanently disabled
3. Insurance pays for emergency transportation

High (5 stickers)

1. Members requiring inpatient treatment are paid Rs. 100 per day to cover lost wages. The maximum amount paid is Rs. 1.000 per hospitalization
2. Health insurance coverage is continued for 6 months in case the head of the household dies or gets permanently disabled
3. Insurance pays for emergency transportation

Preventive care

Insurance pays for an annual health check-up for all adults in the household (age 18 to 50).

Basic (2 stickers)

Insurance pays for an annual health check-up for all adults in the household between the age of 18 and 50

Mental health care

Insurance pays for treatment of mental illness. Insurance pays for treatment of alcohol or drugs abuse.

Basic (1 sticker)
Insurance pays for half the costs of services.

Source: CHAT user's manual version 5 (July 20th 2006)

Appendix C - Background characteristics of the individuals

Characteristics	Maharastra			Karnataka			Rajasthan			Total		
	n	%	mean (±SD)	n	%	mean (±SD)	n	%	mean (±SD)	n	%	mean (±SD)
Gender												
Male	1	0,2		180	51,4		629	67,2		810	47,9	
Female	404	99,8		170	48,6		307	32,8		881	52,1	
Age												
Years old			34,59 (±9,13)			38,29 (±11,79)			42,03 (±16,01)			39,48 (±14,15)
Marital status												
Married	357	88,1		290	82,9		825	88,1		1472	87,0	
Single / Widowed / Divorced	48	11,9		60	17,1		111	11,9		219	13,0	
Education level												
No education	116	28,6		181	51,7		446	47,6		743	43,9	
Education	289	71,4		169	48,3		490	52,4		948	56,1	
Caste												
Scheduled Caste / Tribe	44	10,9		35	10,0		122	13,0		248	17,5	
Other Backward Caste	103	25,4		68	19,4		536	57,3		707	41,8	
General Caste	258	63,7		247	70,6		278	29,7		783	46,3	
Household size												
Number of members			5,50 (±2,36)			5,89 (±2,62)			7,50 (±3,74)			6,69 (±3,37)
Source of household income												
Self-employed	217	53,6		187	53,4		733	78,3		1137	67,2	
Not self-employed	188	46,4		163	46,6		203	21,7		554	32,8	
Standard of Living Index												
Standard of Living Index			16,42 (±7,57)			8,98 (±4,70)			10,19 (±6,03)			11,43 (±6,82)
Morbidity												
Number of members ill in the last three months			1,45 (±1,39)			3,66 (±2,39)			0,75 (±0,80)			1,51 (±1,82)
Someone hospitalised in the last year	167	41,2		265	75,7		264	28,2		696	41,2	
Health costs last year												
No health care costs	48	11,9		3	0,9		124	13,2		175	10,3	
Health care costs	357	88,1		347	99,1		812	86,8		1516	89,7	
Hospital service used usually												
Public / Charitable	29	7,2		42	12,0		579	61,9		650	38,4	
Private	376	92,8		308	88,0		357	38,1		1041	61,6	
Health Insurance												
Have HI	296	73,1		10	2,9		0	0,0		306	18,1	
Not have HI	109	26,9		340	97,1		936	100,0		1385	81,9	

Appendix D - Results major benefits

	Drugs basic[a]		Drugs high[a]		Hospitalization basic[a]		Hospitalization high[a]		Consultation basic[a]		Consultation high[a]	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Intercept	6,058*	2,054	1,541	2,226	1,442**	0,580	-2,816**	1,429	2,198*	0,642	-1,250	1,767
[Gender=0]	0,025	0,392	-1,028**	0,445	-0,427*	0,153	-1,359*	0,430	0,285***	0,171	-0,685	0,575
age	-0,209**	0,099	-0,222**	0,103	0,014	0,022	0,035	0,056	-0,021	0,025	-0,056	0,063
agesq	0,003**	0,001	0,002	0,001	0,000	0,000	-0,001	0,001	0,000	0,000	0,001	0,001
[No_Edu=0]	-0,310	0,314	-0,056	0,364	0,042	0,145	0,138	0,304	-0,162	0,156	-0,317	0,409
SLI_total	-0,041	0,072	0,014	0,084	0,005	0,031	0,069	0,073	0,020	0,034	0,038	0,085
SLI_totalsq	0,000	0,002	-0,001	0,003	-0,001	0,001	-0,004	0,003	-0,001	0,001	-0,001	0,003
[Scheduled=0]	-0,325	0,404	0,055	0,472	-0,322	0,185	-0,464	0,439	0,082	0,214	0,373	0,483
[Other_backward=0]	0,081	0,330	0,299	0,375	0,030	0,137	0,076	0,290	0,091	0,149	-0,076	0,389
[Married=0]	-0,414	0,444	-0,427	0,512	0,004	0,179	0,176	0,425	-0,039	0,197	0,152	0,519
[own_income=0]	0,379	0,278	0,174	0,332	0,104	0,133	-0,308	0,281	0,050	0,145	-0,491	0,346
HHnumber	0,244	0,161	0,285	0,176	-0,057	0,057	0,103	0,146	-0,033	0,063	0,125	0,209
HHnumbersq	-0,010	0,009	-0,011	0,010	0,001	0,003	-0,005	0,007	0,001	0,003	-0,007	0,012
[Hosp=0]	-0,219	0,297	0,286	0,342	0,100	0,135	0,221	0,287	0,083	0,145	0,358	0,356
[D_ill=0]	-0,027	0,403	0,396	0,441	0,028	0,146	-0,512	0,299	-0,012	0,158	-0,136	0,412
[Hospital=0]	0,586	0,520	0,443	0,543	0,031	0,140	-0,351	0,314	-0,041	0,155	-0,743	0,473
[poQ7_D2=0]	-0,509	0,276	-0,164	0,331	-0,227	0,132	0,142	0,288	0,136	0,145	0,135	0,360
[poQ8_D2=0]	-0,126	0,341	0,037	0,385	-0,345**	0,139	-0,593**	0,303	0,114	0,154	0,991*	0,372
[poQ9_D2=0]	-0,070	0,283	-0,240	0,335	0,178	0,130	-0,037	0,284	-0,193	0,140	-0,292	0,360
[Costs_0=0]	-0,581	0,522	-0,077	0,577	0,105	0,218	-0,029	0,422	0,000	0,233	0,638	0,527
[Maharastra=0]	0,713	0,399	1,898**	0,741	0,521**	0,227	2,903*	0,629	-0,488**	0,247	1,015	0,687
[Rajasthan=0]	2,834**	0,712	6,079*	0,884	-0,403**	0,200	1,024	0,567	-3,096*	0,223	-2,049*	0,639

Pseudo R-Square Nagelkerke: 0,288

Pseudo R-Square Nagelkerke: 0,078

Pseudo R-Square Nagelkerke: 0,448

[a] the reference cat. is nothing

* p < 0.01
** 0.01 < p < 0.05

Appendix E - Results minor benefits

	Test & Imaging basic		Test & Imaging high		Medical equipment basic		Medical equipment high		Maternity basic		Maternity high	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Intercept	9,016*	1,363	12,096*	1,522	8,688*	0,934	13,402*	1,732	2,704*	0,801	5,568*	1,302
[Gender=0]	-0,131	0,227	-1,131*	0,279	0,778*	0,163	0,220	0,341	0,453*	0,168	-0,842*	0,306
age	0,017	0,034	0,027	0,040	-0,026	0,026	-0,023	0,051	-0,002	0,025	0,015	0,045
agesq	0,000	0,000	0,000	0,000	0,001**	0,000	0,001	0,001	0,000	0,000	0,000	0,001
[No_Edu=0]	0,135	0,190	0,246	0,236	-0,021	0,154	-0,246	0,337	0,062	0,155	0,268	0,268
SLI_total	0,030	0,043	0,027	0,052	-0,038	0,034	-0,036	0,073	0,049	0,035	0,127**	0,060
SLI_totalsq	-0,001	0,001	-0,001	0,002	0,001	0,001	0,002	0,002	-0,002	0,001	-0,004	0,002
[Scheduled=0]	-0,376	0,263	-0,437	0,322	-0,076	0,214	0,277	0,418	-0,128	0,213	0,168	0,348
[Other_backward=0]	-0,169	0,188	-0,248	0,228	0,071	0,147	-0,009	0,327	-0,035	0,147	0,316	0,253
[Married=0]	-0,406	0,245	-0,386	0,312	0,241	0,200	0,501	0,475	0,086	0,199	-0,169	0,338
[own_income=0]	-0,149	0,176	-0,422	0,223	0,064	0,147	0,220	0,327	0,050	0,144	-0,341	0,243
HHnumber	0,031	0,081	0,182	0,099	-0,113	0,064	-0,219	0,130	0,209*	0,062	0,103	0,104
HHnumbersq	-0,002	0,004	-0,010**	0,005	0,005	0,003	0,007	0,006	-0,005	0,003	-0,002	0,005
[Hosp=0]	0,256	0,180	0,157	0,223	-0,133	0,144	-0,457	0,347	0,172	0,144	0,012	0,257
[D_Ill=0]	-0,020	0,227	0,044	0,258	0,061	0,158	0,283	0,337	-0,194	0,162	-0,541**	0,258
[Hospital=0]	0,292	0,213	0,170	0,245	0,034	0,155	0,388	0,334	-0,259	0,157	0,161	0,261
[poQ7_D2=0]	-0,360**	0,168	-0,439**	0,218	-0,009	0,148	0,272	0,326	0,056	0,142	0,560**	0,253
[poQ8_D2=0]	0,273	0,197	-0,002	0,239	-0,220	0,157	-0,387	0,340	0,074	0,156	-0,116	0,268
[poQ9_D2=0]	0,140	0,173	0,132	0,217	-0,037	0,143	-0,109	0,316	-0,040	0,138	-0,059	0,249
[Costs_0=0]	-0,542	0,300	-0,474	0,348	0,363	0,236	1,016**	0,459	-0,231	0,257	-0,280	0,377
[D_basic=0]	-4,843*	0,901	-8,038*	0,936	-4,605*	0,552	-9,528	0,804	-2,409*	0,382	-4,786*	0,506
[D_high=0]	-7,543*	0,975	-12,193*	1,044	-8,380*	0,653	-14,062*	1,032	-4,320*	0,485	-6,475*	0,666
[H_basic=0]	-1,837*	0,261	-4,138*	0,319	-3,143*	0,210	-6,301*	0,453	-1,101*	0,168	-3,125*	0,305
[H_high=0]	-4,524*	0,479	-6,865*	0,549	-6,194*	0,554	-10,823*	1,276	-3,148*	0,547	-3,570*	0,555
[C_basic=0]	-2,201*	0,259	-4,192*	0,320	-2,702*	0,198	-5,405*	0,533	-1,291*	0,178	-2,565*	0,350
[C_high=0]	-4,689*	0,551	-6,117*	0,634	-4,142*	0,516	-5,123*	0,790	-1,928*	0,550	-1,975*	0,559
[Maharastra=0]	0,822*	0,266	2,414*	0,423		-		-	-1,270*	0,235	-0,238	0,466
[Rajasthan=0]	0,927*	0,302	3,379*	0,419	-0,619*	0,224	-0,513	0,552	-1,254*	0,237	-1,121**	0,453

Pseudo R-Square		Pseudo R-Square		Pseudo R-Square		Pseudo R-Square	
Nagelkerke: 0,483		Nagelkerke: 0,506		Nagelkerke: 0,298			

[a] the reference cat. is nothing

* p < 0.01
** 0.01 < p < 0.05

41

	Dental care basic		Dental care high		Indirect costs basic		Indirect costs high		Preventive care basic		Mental health care basic	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Intercept	5,546*	0,837	5,604*	1,047	6,624*	1,071	9,744*	1,127	-8,524*	1,081	-8,591*	0,989
[Gender=0]	0,803*	0,160	0,911*	0,210	-0,607*	0,209	-1,137*	0,228	0,5182*	0,139	0,464*	0,150
age	0,023	0,024	0,075**	0,033	-0,025	0,031	-0,040	0,033	-0,031	0,021	0,000	0,022
agesq	0,000	0,000	-0,001**	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
[No_Edu=0]	-0,193	0,149	-0,169	0,202	0,119	0,176	0,049	0,194	-0,126	0,131	0,154	0,136
SLI_total	-0,004	0,034	-0,010	0,045	-0,071	0,039	-0,032	0,043	-0,036	0,029	-0,035	0,031
SLI_totalsq	0,000	0,001	0,000	0,002	0,002	0,001	0,001	0,001	0,001	0,001	0,000	0,001
[Scheduled=0]	0,119	0,211	0,099	0,266	0,090	0,247	0,289	0,265	-0,195	0,185	-0,003	0,185
[Other_backward=0]	0,083	0,144	-0,352	0,192	0,205	0,170	0,227	0,185	-0,088	0,125	0,063	0,127
[Married=0]	0,244	0,189	0,290	0,267	-0,397	0,229	-0,456	0,252	0,067	0,168	-0,214	0,180
[own_income=0]	0,215	0,142	0,334	0,192	0,018	0,160	-0,047	0,177	-0,447*	0,123	0,048	0,128
HHnumber	-0,193*	0,067	-0,129	0,084	-0,002	0,071	-0,029	0,075	0,029	0,054	0,124**	0,056
HHnumbersq	0,010*	0,003	0,008	0,004	-0,002	0,003	-0,002	0,004	-0,004	0,003	-0,006**	0,003
[Hosp=0]	0,199	0,140	0,195	0,189	-0,253	0,159	-0,531*	0,177	0,114	0,122	0,178	0,130
[D_Ill=0]	0,388**	0,160	0,333	0,201	-0,014	0,197	-0,075	0,207	0,121	0,137	0,044	0,136
[Hospital=0]	0,092	0,155	0,066	0,196	-0,073	0,192	-0,355	0,204	0,006	0,133	0,090	0,127
[poQ7_D2=0]	0,032	0,141	0,311	0,191	-0,020	0,158	-0,003	0,175	0,001	0,123	0,148	0,129
[poQ8_D2=0]	0,251	0,152	0,112	0,200	-0,247	0,175	-0,061	0,188	0,018	0,130	-0,003	0,135
[poQ9_D2=0]	-0,194	0,138	-0,145	0,186	-0,025	0,158	0,088	0,174	0,041	0,120	-0,022	0,123
[Costs_0=0]	0,341	0,230	0,102	0,305	-0,462	0,274	-0,562	0,288	0,287	0,198	0,260	0,207
[D_basic=0]	-2,961*	0,462	-5,273*	0,516	-2,114*	0,598	-4,084*	0,604	2,735*	0,445	2,307*	0,300
[D_high=0]	-5,840*	0,543	-7,186*	0,605	-4,061*	0,649	-5,693*	0,656	3,944*	0,486	3,242*	0,359
[H_basic=0]	-2,211*	0,197	-3,472*	0,238	-0,626*	0,204	-1,943*	0,213	1,630*	0,163	1,544*	0,150
[H_high=0]	-3,948*	0,395	-5,773*	0,577	-0,907**	0,398	-3,274*	0,453	2,905*	0,326	1,484*	0,295
[C_basic=0]	-2,141*	0,180	-2,349*	0,246	-1,362*	0,207	-2,150*	0,224	0,691*	0,147	1,207*	0,145
[C_high=0]	-3,874*	0,493	-3,887*	0,557	-2,243*	0,498	-2,727*	0,461	2,152*	0,376	0,719**	0,361
[Maharastra=0]	-	-	-	-	-0,160	0,243	0,506	0,291	-	-	0,690*	0,211
[Rajasthan=0]	-0,337	0,220	0,805*	0,298	0,428	0,278	0,947*	0,308	0,755*	0,191	-	-
	Pseudo R-Square Nagelkerke: 0,404				Pseudo R-Square Nagelkerke: 0,289				Pseudo R-square Nagelkerke: 0,175		Pseudo R-square Nagelkerke: 0,224	

a the reference cat. is nothing

* p < 0.01

** 0.01 < p < 0.05

Appendix F - Results correlation matching-score and variables

Correlations (match-score and gender)

		Total match score of difference between R1 and R2	Gender
Total match score of difference between R1 and R2	Pearson Correlation	1	-,071(**)
	Sig. (2-tailed)		0,004
	N	1.655	1.655
Gender	Pearson Correlation	-,071(**)	1
	Sig. (2-tailed)	0,004	
	N	1.655	1.655

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations (match-score and age)

		Total match score of difference between R1 and R2	Age
Total match score of difference between R1 and R2	Pearson Correlation	1	-,050(*)
	Sig. (2-tailed)		0,040
	N	1.655	1.655
Age	Pearson Correlation	-,050(*)	1
	Sig. (2-tailed)	0,040	
	N	1.655	1.655

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations (match-score and household size)

		Total match score of difference between R1 and R2	Household size
Total match score of difference between R1 and R2	Pearson Correlation	1	0,029
	Sig. (2-tailed)		0,241
	N	1.655	1.655
Household size	Pearson Correlation	0,029	1
	Sig. (2-tailed)	0,241	
	N	1.655	1.655

Correlations (match-score and standard of living index)

		Total match score of difference between R1 and R2	Standard of living index
Total match score of difference between R1 and R2	Pearson Correlation	1	0,016
	Sig. (2-tailed)		0,515
	N	1.655	1.655
Standard of living index	Pearson Correlation	0,016	1
	Sig. (2-tailed)	0,515	
	N	1.655	1.655

Correlations (match-score and scheduled caste or tribe)

		Total match score of difference between R1 and R2	Scheduled Caste/Tribe
Total match score of difference between R1 and R2	Pearson Correlation	1	0,006
	Sig. (2-tailed)		0,799
	N	1.655	1.655
Scheduled Caste/Tribe	Pearson Correlation	0,006	1
	Sig. (2-tailed)	0,799	
	N	1.655	1.655

Correlations (match-score and other backward caste)

		Total match score of difference between R1 and R2	Other backward caste
Total match score of difference between R1 and R2	Pearson Correlation	1	,050(*)
	Sig. (2-tailed)		0,040
	N	1.655	1.655
Other backward caste	Pearson Correlation	,050(*)	1
	Sig. (2-tailed)	0,040	
	N	1.655	1.655

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations (match-score and general caste)

		Total match score of difference between R1 and R2	General caste
Total match score of difference between R1 and R2	Pearson Correlation	1	-,054(*)
	Sig. (2-tailed)		0,028
	N	1.655	1.655
General caste	Pearson Correlation	-,054(*)	1
	Sig. (2-tailed)	0,028	
	N	1.655	1.655

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations (match-score and marital status)

		Total match score of difference between R1 and R2	Marital status (married)
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,019
	Sig. (2-tailed)		0,449
	N	1.655	1.655
Marital status (married)	Pearson Correlation	-0,019	1
	Sig. (2-tailed)	0,449	
	N	1.655	1.655

Correlations (match-score and education)

		Total match score of difference between R1 and R2	Education (no education)
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,027
	Sig. (2-tailed)		0,277
	N	1.655	1.655
Education (no education)	Pearson Correlation	-0,027	1
	Sig. (2-tailed)	0,277	
	N	1.655	1.655

Correlations (match-score and source of income)

		Total match score of difference between R1 and R2	Source of income (self-employed)
Total match score of difference between R1 and R2	Pearson Correlation	1	,052(*)
	Sig. (2-tailed)		0,036
	N	1.655	1.655
Source of income (self-employed)	Pearson Correlation	,052(*)	1
	Sig. (2-tailed)	0,036	
	N	1.655	1.655

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations (match-score and hospitalization in past twelve months)

		Total match score of difference between R1 and R2	Hospitalization in the past twelve months
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,019
	Sig. (2-tailed)		0,439
	N	1.655	1.655
Hospitalization in the past twelve months	Pearson Correlation	-0,019	1
	Sig. (2-tailed)	0,439	
	N	1.655	1.655

Correlations (match-score and illness in the past three months)

		Total match score of difference between R1 and R2	Illness in the past three months
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,018
	Sig. (2-tailed)		0,454
	N	1.655	1.655
Illness in the past three months	Pearson Correlation	-0,018	1
	Sig. (2-tailed)	0,454	
	N	1.655	1.655

Correlations (match-score and kind of hospital used)

		Total match score of difference between R1 and R2	Kind of hospital used (public/charitable)
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,043
	Sig. (2-tailed)		0,079
	N	1.655	1.655
Kind of hospital used (public/charitable)	Pearson Correlation	-0,043	1
	Sig. (2-tailed)	0,079	
	N	1.655	1.655

Correlations (match-score and health care costs in the past twelve months)

		Total match score of difference between R1 and R2	Health care costs in the past twelve months
Total match score of difference between R1 and R2	Pearson Correlation	1	0,035
	Sig. (2-tailed)		0,152
	N	1.655	1.655
Health care costs in the past twelve months	Pearson Correlation	0,035	1
	Sig. (2-tailed)	0,152	
	N	1.655	1.655

Correlations (match-score and Maharastra)

		Total match score of difference between R1 and R2	Maharastra
Total match score of difference between R1 and R2	Pearson Correlation	1	-,050(*)
	Sig. (2-tailed)		0,043
	N	1.655	1.655
Maharastra	Pearson Correlation	-,050(*)	1
	Sig. (2-tailed)	0,043	
	N	1.655	1.655

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations (match-score and Rajasthan)

		Total match score of difference between R1 and R2	Rajasthan
Total match score of difference between R1 and R2	Pearson Correlation	1	,110(**)
	Sig. (2-tailed)		0,000
	N	1.655	1.655
Rajasthan	Pearson Correlation	,110(**)	1
	Sig. (2-tailed)	0,000	
	N	1.655	1.655

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations (match-score and Karnataka)

		Total match score of difference between R1 and R2	Karnataka
Total match score of difference between R1 and R2	Pearson Correlation	1	-,083(**)
	Sig. (2-tailed)		0,001
	N	1.655	1.655
Karnataka	Pearson Correlation	-,083(**)	1
	Sig. (2-tailed)	0,001	
	N	1.655	1.655

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations (match-score and "exercise was easy")

		Total match score of difference between R1 and R2	"exercise was easy"
Total match score of difference between R1 and R2	Pearson Correlation	1	0,002
	Sig. (2-tailed)		0,948
	N	1.655	1.655
"exercise was easy"	Pearson Correlation	0,002	1
	Sig. (2-tailed)	0,948	
	N	1.655	1.655

Correlations (match-score and "group reached decision in a fair manner")

		Total match score of difference between R1 and R2	"group reached decision in a fair manner"
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,030
	Sig. (2-tailed)		0,221
	N	1.655	1.655
"group reached decision in a fair manner"	Pearson Correlation	-0,030	1
	Sig. (2-tailed)	0,221	
	N	1.655	1.655

Correlations (match-score and "decisions were open and honest")

		Total match score of difference between R1 and R2	"decisions were open and honest"
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,027
	Sig. (2-tailed)		0,276
	N	1.655	1.655
"decisions were open and honest"	Pearson Correlation	-0,027	1
	Sig. (2-tailed)	0,276	
	N	1.655	1.655

Correlations (match score and "join health insurance package as defined by group")

		Total match score of difference between R1 and R2	"join health insurance package as defined by group"
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,017
	Sig. (2-tailed)		0,480
	N	1.655	1.655
"join health insurance package as defined by group"	Pearson Correlation	-0,017	1
	Sig. (2-tailed)	0,480	
	N	1.655	1.655

Correlations (match score and "join health insurance package as defined by group")

		Total match score of difference between R1 and R2	"join health insurance package as defined by group"
Total match score of difference between R1 and R2	Pearson Correlation	1	-0,017
	Sig. (2-tailed)		0,480
	N	1.655	1.655
"join health insurance package as defined by group"	Pearson Correlation	-0,017	1
	Sig. (2-tailed)	0,480	
	N	1.655	1.655

Appendix G - Description of the variables used

Variables	Stands for …	… as compared to
[Gender=0]	Female	Male
Age	Age of the individual (continu variable)	-
Agesq	Age of the individual square (continu variable)	-
[No_Edu=0]	No education	Education
SLI_total	Total score on the standard of living index (continu variable)	-
SLI_totalsq	Total score on the standard of living index square (continu variable)	-
[Scheduled=0]	Belonging to a scheduled caste or tribe	Belonging to an other backward caste or general caste
[Other_backward=0]	Belonging to an other backward caste	Belonging to a scheduled caste or tribe or general caste
[Married=0]	Married	Single, divorced or widowed
[own_income=0]	Self-employed	Not self-employed
HHnumber	Size of the household (continu variable)	-
HHnumbersq	Size of the household square (continu variable)	-
[Hosp=0]	Household member has been hospitalized in the past 12 months	No household member has been hospitalized in the past 12 months
[D_ill=0]	Household member has been ill in the past 3 months	No household member has been ill in the past 3 months
[Hospital=0]	Normally visit a public hospital	Normally visit a private hospital
[poQ7_D2=0]	Strongly agreeing on the proposition that insurance should pay a small part when the bill is small and a big part when the bill is big	Not strongly agreeing on the proposition that insurance should pay a small part when the bill is small and a big part when the bill is big
[poQ8_D2=0]	Strongly agreeing on the proposition that insurance should pay some part of every bill	Not strongly agreeing on the proposition that insurance should pay some of every bill
[poQ9_D2=0]	Strongly agreeing on the proposition that insurance should pay everything for every big bill	Not strongly agreeing on the proposition that insurance should pay everything for every big bill
[Costs_0=0]	No health care costs in the past 12 months	Health care costs
[Maharastra=0]	Living in Maharastra	Living in Karnataka or Rajasthan
[Rajasthan=0]	Living in Rajasthan	Living in Maharastra or Karnataka
[D_basic=0]	Selected drugs at basic coverage	Selected no or drugs at high coverage
[D_high=0]	Selected drugs at high coverage	Selected no or drugs at basic coverage
[H_basic=0]	Selected hospitalisation at basic coverage	Selected no or hospitalisation at high coverage
[H_high=0]	Selected hospitalisation at high coverage	Selected no or hospitalisation at basic coverage
[C_basic=0]	Selected consultation at basic coverage	Selected no or consultation at high coverage
[C_high=0]	Selected consultation at high coverage	Selected no or consultation at basic coverage