Chapter 5



RESULTS AND DISCUSSION

In this chapter the results are presented in light of the effect of road accident victim, accident and hospital characteristic on an initial payment claim and the burden of payment for medical treatment to several funds. The analyses are structured as follows:-

- (1) One-tabulation analysis of characteristics of factor determines a claim.
- (2) Estimation logit model of characteristic of factor determines a claim.
- (3) Descriptive analysis of payment mechanism

5.1 One-tabulation Analysis of Characteristics of Factors Determine a Claim.

According to the methodology design in the previous chapter, the initial payment claim will be determined by the personal characteristic of road accident victim, accident characteristic and hospital characteristic. This chapter provides all characteristics of determinants effecting the claim.

The data was collected from 213 cases of road accident victims that were admitted to public hospitals in Trang province, during 5-19 April 1999. The characteristics of road victim, accident and hospital are presented as following.

Table 5.1 Sex and an Initial Payment Claim of Road Accident Victims.

Sex	Number of cases	% of total cases	Claim	Claim as % of sex
Male	176	82.63	76	43.18
Female	37	17.37	8	21.62
Total	213	100.00	84	39.44

The table 5.1 shows that 82.63% of road accident victims were males and 17.37% were females. 39.44% of road accident victims wanted to claim an initial payment within 15,000 baht. 43.18% of male victims claimed for the initial payment while only 21.62% of female victims do.

Table 5.2 Age and an Initial Payment Claim of Road Accident Victims.

Age	Number of cases	% of total cases	Claim	Claim as % of age group
1 – 20	90	42.25	30	33.33
21 – 30	57	26.76	25	43.86
31 – 40	33	15.49	14	42.42
41 – 50	21	9.86	7	33.33
> 50	12	5.63	8	66.67
Total	213	100.00	84	39.44

There were 42% of road accident victims with age under 21 years old and 26.76%, 15.49%, 9.86% and 5.63% of road accident victims were age between 21-30 years old, 31-40 years old, 41-50 years old, and over 50 years old respectively. There were 66.67%, 43.86% and 42.42% of road victims with age over 50 years old, between 21-30 years old and 31-40 years old claimed for initial payment respectively. And 33.33% of road victims with both age between 1-20 years old and 41-50 years old claimed for initial payment.

Table 5.3 Education and an Initial Payment Claim of Road Accident Victims.

Education	Number of cases	% of total cases	Claim	Claim as % of education
Primary school	95	44.60	37	38.95
High school	87	40.85	33	37.93
Diploma degree	12	5.63	5	41.67
Bachelor degree	13	6.10	5	38.46
Above bachelor degree	6	2.82	4	66.67
Total	213	100.00	84	39.44

Table 5.3 shows that 44.60%, 40.85%, 5.63%, 6.10% and 2.82% of the road accident victims were educated in primary school, high school, diploma degree, bachelor degree, and above bachelor degree respectively. It notes that 85.45% of road victims had education under diploma degree.

There were 38.95%, 37.93%, 41.67%, 38.46% and 66.67% of the road accident victims with were educated in primary school, high school, diploma degree, bachelor degree and above Bachelor degree, claimed the initial payment for medical treatment expenses respectively.

Table 5.4 Income and an Initial Payment Claim of Road Accident Victims.

Income (baht)	Number of cases	% of total cases	Claim	Claim as % of income
<3001	95	44.60	28	29.47
3001 – 6000	72	33.80	35	48.61
6001 – 9000	19	8.92	6	31.58
9001 – 12000	18	8.45	8	44.44
12001 – 15000	7	3.29	5	71.43
>15000	2	0.94	2	100.00
Total	213	100.00	84	39.44

Table 5.4 shows that 44.60%, 33.80% and 21.60% of road accident victims had income of less than 3,000 baht, between 3001-6000 baht and over 6000 baht respectively. There were more than 70% of road accident victims with income over 12,000 baht claimed an initial payment for medical treatment expenses, while only 29.47% of those road victim with income within 3,000 baht do. It notes that 44.60% of road victims had income of less than 3,000 baht and only 29.47% of them claimed an initial payment for medical treatment expenses

Table 5.5 Occupation and an Initial Payment Claim of Road Accident Victims.

Occupation	Number of cases	% of total cases	Claim	Claim as % of Occupation
Farmer	65	30.52	28	43.08
Labor	60	28.17	28	46.67
Merchant	21	9.86	10	47.62
Government officer	17	7.98	6	35.29
Student	50	23.47	12	24.00
Total	213	100.00	84	39.44

There were 30.52%, 28.17%, 23.47%, 9.86% and 7.98 % of road accident victims were farmers, laborers, students, the government officials and merchants respectively. 47.62%, 46.67%, 43.08%, 35.29% and 24.00% of road accident victims who were merchants, laborers, farmers, the government officials and students claimed the initial payment for medical treatment expenses from insurance company respectively.

Table 5.6 Privilege for Healthcare Services from Medical Welfare Scheme and the Initial Payment Claim of Road Accident Victims.

Healthcare privilege	Number of cases	% of total cases	Claim	Claim as % privilege
Social security	22	10.33	8	36.36
Health card	17	7.98	6	35.29
Life insurance	5	2.35	4	80.00
Government officer	27	12.68	9	33.33
Social welfare	17	7.98	4	23.53
Total	88	41.31	31	35.23

Table 5.6 shows that 41.31% of road victims had privilege for healthcare services. The biggest group of privilege for healthcare services of road victims was the government officials (12.68%). 10.33%, 7.98% 7.98% and 2.35% of road victims had the social security insurance, health card, the social welfare and life insurance respectively.

There were 80.00%, 36.36%, 35.29%, 33.33% and 23.53% of road victims with life insurance, social security insurance, Health card, government official benefit and social welfare claimed the initial payment for medical treatment respectively.

Table 5.7 Type of Road Accident victim and an Initial Payment Claim for Medical Treatment Expenses.

Victim type	Number of cases	% of total cases	Claim	Claim as % of victim type
Driver	142	66.67	53	37.32
Passenger/pedestrians	71	33.33	31	43.66
Total	213	100.00	84	39.44

There were 66.67% and 33.33% of road accident victims were driver and passenger and pedestrians. The passenger and pedestrian claimed the initial payment (43.66%) higher than driver does (37.32%).

Table 5.8 The Car Insurance Contract and an Initial Payment Claim of Road Accident Victims.

Car insurance	Number of cases	% of total cases	Claim	Claim as % of insurance
Yes	134	62.91	83	61.94
No	79	37.09	1	1.27
Total	213	100.00	84	39.44

Table 5.8 shows that 62.91% and 37.09% of road accident victims had accident with the insurance car and non-insurance car respectively. 61.94% of those road victims who had accident with the insurance car claimed initial payment and only 1.27% of those road victims who had accident with non-insurance car do.

Table 5.9 Driver License and an Initial Payment Claim of Road Accident Victims.

Victim type	Number of cases	Driver license	% of total cases	Claim	Claim as % of license
Driver	142	72	50.70	53	73.61
Pedestrian	71	23	32.39	31	134.78
Total	213	95	44.60	84	88.42

There were 50.70% of driver victims had driver license and 73.61% of them claimed the initial payment for medical treatment.

Table 5.10 The Police-Notice and an Initial Payment Claim of Road Accident Victims.

Victim type	Number of cases	Police notice	% of total cases	Claim	Claim as % of
					police notice
Driver	142	70	49.30	53	75.71
Pedestrian	71	28	39.44	31	110.71
Total	213	98	46.01	84	85.71

Table 5.10 shows that 49.30% of driver victims had police-notice and 75.71% of them claimed the initial payment for medical treatment. While 39.44% of pedestrian and passenger victims had police notice and 110.71% of them claimed also.

Table 5.11 Having Litigant and an Initial Payment Claim of Road Accident Victims.

Having Litigant	Number of cases	% of total cases	Claim	Claim as % of having litigant
Yes	180	84.51	79	43.89
No	33	15.49	5	15.15
Total	213	100.00	84	39.44

There were 84.51% of road accident victims had litigant in accident, 43.89% of them claimed the initial payment for medical treatment. While 15.49% of road accident victims had no litigant in accident and 15.15% of them claimed the initial payment.

Table 5.12 Awareness and an Initial Payment Claim of Road Accident Victims.

Awareness	Number of cases	% of total cases	Claim	Claim as % of awareness
Yes	121	56.81	61	50.41
No	92	43.19	23	25.00
Total	213	100.00	84	39.44

Table 5.12 shows that 56.81% of road accident victims were aware of claiming an initial payment, 50.41% of them claimed initial payment for medical treatment. While 43.19% of road accident victims were not aware of claiming an initial payment and 25.00% of them made the claim.

Table 5.13 Hospital Size and an Initial Payment Claim of Road Accident Victims.

Hospital size (bed)	Number of cases	% of total cases	Claim	Claim as % of hospital size
10	25	11.74	11	44.00
30	87	40.85	36	41.38
60	22	10.33	11	50.00
370	79	37.09	26	32.91
Total	213	100.00	84	39.44

There were 213 cases of road accident victims were collected for this study. 11.74%, 40.85%, 10.33% and 37.09% of road victim cases were collected from 10-bed hospital, 30-bed hospital, 60-bed hospital and 370-bed hospital respectively. 44.00%, 41.38%, 50.00% and 32.91% of road accident patients that were admitted in 10-bed hospital, 30-bed hospital, 60-bed hospital and 370-bed hospital claimed the initial payment for medical treatment respectively.

Table 5.14 Patient department and an Initial Payment Claim of Road Accident Victims.

Patient department	Number of cases	% of total cases	Claim	Claim as % of department
Emergency Room	129	60.56	24	18.60
Inpatient	84	39.44	60	71.43
Total	213	100.00	84	39.44

Table 5.14 shows that 60.56% of road victims were admitted in emergency room, only 18.60% of them claimed the initial payment for medical treatment. While 39.44% of road victims were admitted in inpatient department and 71.43% of them made the claim

Table 5.15 Charge and an Initial Payment Claim of Road Accident Victims.

Charge (baht)	Number of cases	% of total cases	Claim	Claim as % of each charge
< 1000	104	48.83	26	25.00
1001 – 2000	25	11.72	11	44.00
2001 – 3000	16	7.51	7	43.75
3001 – 4000	9	4.23	1	11.11
4001 – 5000	2	0.94	0	0.00
5001 – 10000	7	3.29	5	71.43
10001 – 15000	34	15.96	22	64.71
15001 – 20000	10	4.69	7	70.00
20001 – 25000	1	0.47	1	100.00
> 25000	5	2.35	4	80.00
Total	213	100.00	84	39.44

Table 5.15 shows that 48.83%, 15.96%, 11.72% and 23.49% of road accident victims were charged the medical treatment expenses by the hospitals with the charges less than 1,000 baht, between 10,001-15,000 baht, 1,001-2,000 baht and other amounts respectively. There were 25.00%, 44.00%, 43.75%, 11.11%, 71.43%, 64.71%, 70.00%, 100% and 80.00% of road victims with the charges under 1,000 baht, between

1,001-2,000, 2,001-3,000 baht, 3,001-4,000 baht, 4,001-5000 baht, 5,001-10,000,baht, 10001-15,000 baht, 15,001-20,000 baht, 20,001-25,000 baht and over 25,000 baht claimed the initial payment for medical treatment respectively.

Table 5.16 Sources of Payment of Road Accident Victims.

Sources of charge	Number of cases	% of total cases
Patients' pocket	85	39.91
Social security fund	10	4.69
Health card fund	6	2.82
Government officer fund	15	7.04
Life insurance company	0	0.00
Social welfare fund	13	6.10
Insurance company	84	39.44
Total	213	100.00

Table 5.16 shows that only 39.44% of road victims claimed the initial payment for medical treatment from the insurance company. While 60.56% of road victims paid the medical treatment from the other sources such as 39.91% of road victims paid by patients' pocket and 7.04%, 6.10%, 4.69% and 2.82% paid from the government official benefit fund, social welfare fund, social security fund and health card fund respectively.

5.2 Estimation of Logit Model

This section presents the estimation results of binomial Logit model for the characteristics of road accident victim, accident and hospital regarding the initial payment claim for medical treatment. The model of the characteristics of road accident victim, accident and hospital as proximate to an initial payment claim of medical treatment are estimated by Logit model as following.

$$Pr(CL=1) = 1$$

$$1 + e^{-zi}$$

Where Zi =
$$\beta_1 + \beta_2$$
 SEX + β_3 AGE + β_4 EDU+ β_5 OCC1+ β_6 OCC2+ β_7 PCC3+ β_8 OCC4 + β_9 OCC5+ β_{10} INC+ β_{11} PRI1+ β_{12} PRI2+ β_{13} PRI3+ β_{14} PRI4+ β_{15} PRI5+
$$\beta_{16}$$
VIC+ β_{17} INS+ β_{18} LIC+ β_{19} PN+ β_{20} LIT+ β_{21} AW+ β_{22} SIZ+ β_{23} DEP+
$$\beta_{24}$$
CHA

The result from Eviews program is showed in table 5.17

Table 5.17 The Coefficient, Standard Error, t-Statistic and Probability of Variable from Logit Model Testing.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SEX	3.2803	1.3211	2.4831	0.0139 *
AGE	-0.0120	0.0338	-0.3575	0.7211
EDU	-0.0187	0.1025	-0.1826	0.8552
OCC1	-5.8476	4.9971	-1.1701	0.2434
OCC2	-6.0977	4.9787	-1.2247	0.2222
OCC3	-6.0154	5.0282	-1.1963	0.2331
OCC4	-9.8759	5.7153	-1.7286	0.0856
OCC5	-7.2163	5.0309	-1.4343	0.1531
INC	0.0001	0.0001	1.2271	0.2213
PRI1	-1.8338	1.5010	-1.2217	0.2233
PRI2	-0.7405	1.2336	-0.6002	0.5491
PRI3	-3.1761	1.9248	-1.6500	0.1006
PRI4	1.9040	1.6590	1.1476	0.2526
PRI5	3.3094	1.4278	2.3177	0.0215 *
VIC	-5.7688	1.2506	-4.6126	0.0000 *
INS	5.9374	1.2455	4.7669	0.0000 *
LIC	4.6654	1.1098	4.2036	0.0000 *
PN	4.0371	1.0155	3.9754	0.0001 *
LIT	-1.0968	0.8765	-1.2513	0.2124
AW	-0.2729	,0.7081	-0.3853	0.7004
SIZ	0.0026	0.0020	1.2916	0.1981
DEP	2.2181	0.9760	2.2726	0.0242 *
CHA	-4.3000	6.7300	-0.6388	0.5237
С	-2.0665	5.2084	-0.3967	0.6920

Log likelihood = -43.7193

Note: " * ": the probability significant at 5% level.

The effect of SEX, PRI5, INS, LIC, PN and DEP on the probability of the initial payment claim are positively significant at 5% level which VIC has negatively significant effect on the probability of the initial payment claim.

The Findings Emanating from an Analysis are as Follows:

The coefficient of SEX is positive and significantly different from zero at the 1% level. This estimate coefficient implies that male claimed the initial payment more than female.

The age of road accident victim has a negative coefficient but is not significant in the initial payment claim for medical treatment equation and t-Statistic is very low. This result explains that AGE variable is not effecting the initial payment claim for medical treatment.

The education has negative coefficient but is not significant and very low t-Statistic implies that education might not effect the probability of the initial payment claim.

All occupations of road accident victim except government officer have negative coefficient but not significantly different from zero. The government officer has negative coefficient and significant at 10 % level. This result implies that only being the government officer will effect the claim, but not so much. Other occupations do not affecting the claim.

The income has positive coefficient but coefficient value is very low and not significantly different from zero. This implies that the higher income of road accident victim might not explain accurately the decision process of the initial payment claim for medical treatment.

The privilege for healthcare, social security, health card, life insurance of road accident patient has negative coefficient but not significantly different from zero. Being the government officer has a positive coefficient but not significant. The effect of social welfare is positive and significant at 5% level. This result indicates that the road accident victim who has social welfare such as low-income cardholder has greater (log) odds of the initial payment claim for medical treatment. In contrast, accident patients who has social security insurance, health card, life insurance make less the initial payment claim for medical treatment from insurance company than social welfare card holder. This is consistent with the fact that fund, implies that as benefit rises accident patient will be less likely to claim the medical treatment expenses from insurance company or Compensation fund.

Type of road accident victims has negative coefficient and significant effect.

This explains that the drivers make less an initial payment claim for medical treatment from insurance company than passenger and pedestrian.

The awareness of road accident victim has negative coefficient but not significant. Its' t-Statistic is quite low. This suggests that awareness is not affecting the initial payment claim for medical treatment of road accident victim.

The car insurance contract, driver license and police notice of road accident victim has positive coefficient and significantl effect. This result implies that the road accident victim who had car insurance contract, driver license and police notice claimed the initial payment more than those who do not had.

The hospital size has positive coefficient but not significantly different from zero. This result implies that the road victim who was admitted to a bigger hospital might not explain accurately the decision process of the initial payment claim for medical treatment.

The department of patient has positive coefficient and significant at 2% level. It explains that the road victim who was admitted to inpatient department has greater (log)odds of the initial payment claim for medical treatment. That means road victim who was admitted in inpatient department claimed the initial payment more than those who were outpatients.

The volume of medical treatment expenses has negative coefficient but not significantly different from zero. This implies that the volume of medical treatment expenses might not effect the probability to the initial payment claim.

Having litigant of road accident victim has negative coefficient but not significant different from zero. This result indicates that having litigant is not effect the initial payment claim.

The overall result of the Logit model suggests that the estimated coefficients with male, higher income, government officer, social welfare cardholder, having car insurance contract, having driving license, having police notice, admitted in inpatient department, a big hospital are positive. This implies that the probability that accident victim claimed the initial payment for medical treatment from insurance company increases with any positive changes in each of those attributes. The positive change means that if for example, the road victims were male, or high income, or the government official, or social welfare cardholder, or those accident car having a insurance contract, or having driver license, or having police notice, or inpatient, or admitted to a big hospital, then it was more likely to claim an initial payment for medical treatment expenses from insurance company or Compensation fund more than it would decide otherwise to disclaim. On the other hand, the coefficients associated with age, education, having a social security insurance, or having health card, or having life insurance, awareness of their right, having litigant, the amount of charges, passenger and pedestrian and the constant are negative effects on the road accident patients decision to initial payment claim for medical treatment expense.

The correction of forecasting of claim with all independent variable was 27.5%. It is quite low because there had seven out of twenty three independent variables were significant.

5.3 Payment Mechanism Analysis

The road accident patients can pay a medical treatment expenditure from every source of their fund. Although, the law suggests the accident victims ought to claim medical treatment expenditure from insurance company or Compensation fund first but the law does not strict to prohibit the payment from the other funds.

As showed in table 5.16 of previous section. There were only 39.44% of road accident victims claimed the medical treatment from the insurance company. 60.56% of road victims paid medical treatment by the other funds. There were 39.91%, 7.04%, 6.10%, 4.69% and 2.82% of road victims paid medical treatment by their own pocket, government official benefit fund, social welfare fund, the social security fund and the health card fund respectively. This result implies that the insurance companies and Compensation fund bore the medical treatment expense just 39.44% of total road accident victim. This burden proximate a paying by patient's pocket which was 39.91% of total road victims. And also can imply that the insurance companies and Compensation fund did not responsible for contributing to road accident victim, according to the Act.

Table 5.18 represents age and sources of paying medical treatment expenses of road accident victims. The major source of paying medical treatment expenses in each age group of road accident victims were 43.33% of road victims who age less than 21 years of age paid by their own pocket. 43.86% of road victims who age between 21-30 years old claimed from the insurance company, 42.42% of road victims which age between 31-40 years old claimed from the insurance company. 47.62% of

Table 5.18 Age and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

Age		Sources of Charge												
	Patients' pocket	%	Social insurance	%	Health card	%	Gov't official	%	Life insurance	%	Social welfare	%	nsurance compan	%
1 - 20	39	43.33	7	7.78	3	3.33	5	5.56	0	0.00	6	6.67	30	33.33
21 - 30	23	40.35	2	3.51	2	3.51	2	3.51	0	0.00	4	7.02	25	43.86
31 - 40	12	36.36	0	0.00	1	3.03	3	9.09	0	0.00	2	6.06	14	42.42
41 - 50	10	47.62	0	0.00	0	0.00	3	14.29	0	0.00	1	4.76	7	33.33
> 50	1	8.33	1	8.33	0	0.00	2	16.67	0	0.00	0	0.00	8	66.67
Total	85	39.91	10	4.69 *	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims in each age group pay medical treatment from several funds

Table 5.19 Sex and and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

Sex					_	Soi	urces of Cha	rge						
	Patients' pocket	s' pocket % Social insuranc % Health card % Gov't official % Life insurance % Social welfare % nsurance compan %												
Male	62	35.23	9	5.11	5	2.84	13	7.39	0	0.00	11	6.25	76	43.18
Female	23	62.16	1	2.70	1	2.70	2	5.41	0	0.00	2	5.41	8	21.62
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims by sex pay medical treatment from several funds

Table 5.20 Education and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

		Sources of Charge												
Education	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%
	pocket		insurance		card		Official		insurance		welfare		company	
Primary school	39	41.05	7	7.37	2	2.11	3	3.16	0	0.00	10	10.53	34	35.79
High school	40	45.98	3	3.45	4	4.60	3	3.45	0	0.00	3	3.45	34	39.08
Diploma	3	25.00	0	0.00	0	0.00	3	25.00	0	0.00	0	0.00	6	50.00
Bachelor degree	1	7.69	0	0.00	0	0.00	6	46.15	0	0.00	0	0.00	6	46.15
Above	2	33.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	66.67
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims by education pay medical treatment from several funds

Table 5.21 Occupations and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

Occupation		Sources of Charge												
	Patients' pocket	%	Social insurance	%	Health card	%	Gov't official	%	Life insurance	%	Social welfare	%	nsurance compan	%
Farmer	30	46.15	1	1.54	2	3.08	0	0.00	0	0.00	4	6.15	28	43.08
Labor	18	30.51	8	13.56	2	3.39	0	0.00	0	0.00	3	5.08	28	47.46
Merchant	9	42.86	0	0.00	1	4.76	1	4.76	0	0.00	1	4.76	9	42.86
Civil servant	2	11.11	0	0.00	0	0.00	9	50.00	0	0.00	0	0.00	7	38.89
Student	26	52.00	1	2.00	1	2.00	5	10.00	0	0.00	5	10.00	12	24.00
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims by occupation pay medical treatment from several funds

road victims who age between 41-50 years old paid by their own pocket. 66.67% of road victims who age over 50 years old claimed from insurance company.

Table 5.19 represents sex and source of paying medical treatment expenses of the road accident victim. The table shows that 43.18% of road victim were male which claimed medical treatment expenses from the insurance company. There were 35.23%, 7.39%, 6.25%, 5.11% and 2.84% of road victims who were male paid medical treatment expenses from their own pocket, the government official fund, the social welfare fund, the social security fund and the health card fund respectively. While 62.16%, 21.62% and 16.22% of female paid medical treatment expenses from their own pocket, claimed from the insurance company and paid by other funds respectively.

Table 5.20 represents education and source of paying medical treatment expenses of the road accident victims. The table shows that 41.05% and 45.98% of road accident victims who were educated in primary and high school paid medical treatment expenses from their own pocket respectively. There were 35.79% and 39.08% of road victims who were educated in primary and high school claimed medical treatment expenses from the insurance company respectively.

Table 5.21 represents occupation and source of paying medical treatment expenses of the road accident victims. The table shows that 46.15% of farmers paid medical treatment expenses by their own pocket and 43.08% claimed from insurance company. There were 30.51% of the laborers paid medical treatment expenses from their own pocket and 47.46% claimed from insurance company. 42.86% of the merchant paid medical treatment expenses from their own pocket and claimed from insurance company with the same percentage. 11.11% of the government official paid medical treatment expenses from their own pocket and 38.89% claimed from insurance company. And there were 52.00% of students paid medical treatment expenses from their own pocket and 24.00% claimed from insurance company.

Table 5.22 Income and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

Income			•			So	ource of char	ge						
(baht)	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%
	pocket		insurance		card		Official		insurance	1	welfare		company	
<3000	48	50.53	6	6.32	4	4.21	4	4.21	0	0.00	5	5.26	28	29.47
3001 - 6000	21	29.17	4	5.56	2	2.78	3	4.17	0	0.00	8	11.11	34	47.22
6001 - 9000	8	42.11	0	0.00	0	0.00	5	26.32	0	0.00	0	0.00	6	31.58
9001 - 12000	7	38.89	0	0.00	0	0.00	2	11.11	0	0.00	0	0.00	9	50.00
12001 - 15000	1	14.29	0	0.00	0	0.00	1	14.29	0	0.00	0	0.00	5	71.43
>15001	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims in each income level pay medical treatment from several funds

Table 5.23 Privilege for Healthcare Services and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

Privilege	_	Source of charge												
for health care	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%
	pocket		insurance		card		Official		insurance		welfare		company	
Social insurance	0	0.00	10	55.56	0	0.00	0	0.00	0	0.00	0	0.00	8	36.36
Health card	5	29.41	0	0.00	6	35.29	0	0.00	0	0.00	0	0.00	6	35.29
Life insurance	1	20.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	80.00
Civil servant	2	7.69	0	0.00	0	0.00	15	57.69	0	0.00	0	0.00	9	33.33
Social welfare	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	76.47	4	23.53
Total	8	9.64	10	11.36	6	6.82	15	17.05	0	0.00	13	14.77	31	35.23

Note: "%" as percentage of road victims by privilege for healthcare pay medical treatment from several funds

Table 5.24 Type of the Road Accident Victims and Sources of Paying Medical Treatment Expense.

Victims'						Sc	ource of char	ge						
type	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%
	pocket		insurance		card		Official		insurance		welfare		company	
Driver	60	42.25	6	4.23	3	2.11	10	7.04	0	0.00	7	4.93	53	37.32
Pedestrian	25	35.21	4	5.63	3	4.23	5	7.04	0	0.00	6	8.45	31	43.66
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims by victims' type pay medical treatment from several funds

Table 5.22 represents income and source of paying medical treatment expenses of the road accident victims. The table shows that 50.53% of road victims who had income less than 3,000 baht paid medical treatment expense from their own pocket and 29.47% claimed from insurance company. 47.22% of those road accident victims who had income between 3,001-6,000 baht claimed medical treatment expenses from the insurance company and 29.17% paid from their own pocket. There were 42.11% of road accident victims who had income between 6,001-9,000 baht paid medical treatment expenses from their own pocket and 31.58% claimed from insurance company. 50.00% of those road accident victims who had income between 9,001-12,000 baht claimed medical treatment expenses from insurance company and 38.89% paid from their own pocket. 71.43% of road victims who had income between 12,001-15000 baht claimed medical treatment expenses from insurance company and 14.29% paid from their own pocket. And all road victims who had income over 15,000 baht claimed medical treatment expenses from insurance company.

Table 5.23 represents privilege for healthcare services and source of paying medical treatment expense of road accident victim. The table shows that 45.45% of road victims who had social security insurance paid medical treatment expenses from their fund and 36.36% claimed from insurance company. 35.29% of road victims who had health card paid medical treatment expenses from their fund and 35.29% of them claimed from insurance company. 80% of road victims who had life insurance claimed medical treatment expenses from insurance company. 55.56% of road victims who had government official benefit welfare paid medical treatment expenses from their fund and 37.04% of them claimed from insurance company. And there were 76.47% of road victims who were social welfare cardholder paid medical treatment expenses by their fund and 23.53% of them claimed from insurance company.

Table 5.24 represents type of road victims and source of paying medical treatment expense of road accident victims. The table shows that 42.25% of the drivers paid medical treatment expense from their pocket and 37.32% of them claimed from

Table 5.25 Car insurance Contract and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

		Source of charge												
Insurance	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%
	pocket		insurance		card		Official		insurance		welfare		company	
Yes	42	31.34	2	1.49	1	0.75	7	5.22	0	0.00	0	0.00	82	61.19
No	43	54.43	8	10.13	5	6.33	8	10.13	0	0.00	13	16.46	2	2.53
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims with the car insurance contract pay medical treatment from several funds

Table 5.26 Having Litigant and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

		Source of charge													
Litigant	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%	
	pocket		insurance	j	card		Officia		insurance		welfare		company		
Yes	72	40.00	7	3.89	4	2.22	11	6.11	0	0.00	7	3.89	79	43.89	
No	13	39.39	3	9.09	2	6.06	4	12.12	0	0.00	6	18.18	5	15.15	
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	6.10	

Note: "%" as percentage of road victims with having illegal party pay medical treatment from several funds

Table 5.27 Awareness and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

		Source of charge												
Awareness	Patients'	%	Social	%	Health	%	Government	%	Life	%	Social	%	Insurance	%
	pocket		insurance		card		Official		insurance		welfare		company	
Yes	41	33.88	2	1.65	1	0.83	12	9.92	0	0.00	5	4.13	60	49.59
No	44	47.83	8	8.70	5	5.43	3	3.26	0	0.00	8	8.70	24	26.09
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims with aware this law pay medical treatment from several funds

Table 5.28 The Amounts of Charge and Sources of Paying Medical Treatment Expenses of the Road Accident Victims.

Charge	Sources of charge													
(baht)	Patients' pocket	%	Social insurance	%	Health card	%	Gov't official	%	Life insurance	%	Social welfare	%	nsurance compan	%
< 1000	60	57.69	6	5.77	1	0.96	4	3.85	0	0.00	7	6.73	26	25.00
1001 - 2000	9	36.00	1	4.00	1	4.00	1	4.00	0	0.00	2	8.00	11	44.00
2001 - 3000	5	31.25	0	0.00	1	6.25	1	6.25	0	0.00	2	12.50	7	43.75
3001 - 4000	6	66.67	1	11.11	0	0.00	1	11.11	0	0.00	0	0.00	1	11.11
4001 - 5000	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	0	0.00
5001 - 10000	0	0.00	1	14.29	0	0.00	1	14.29	0	0.00	0	0.00	5	71.43
10001 - 15000	2	5.88	1	2.94	3	8.82	5	14.71	0	0.00	1	2.94	22	64.71
15001 - 20000	2	20.00	0	0.00	0	0.00	1	10.00	0	0.00	0	0.00	7	70.00
20001 - 25000	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00
> 25000	0	0.00	0	0.00	0	0.00	1	20.00	0	0.00	0	0.00	4	80.00
Total	85	39.91	10	4.69	6	2.82	15	7.04	0	0.00	13	6.10	84	39.44

Note: "%" as percentage of road victims in each charge level pay medical treatment from several funds

insurance company. There were 35.21% of the pedestrian and passenger paid medical treatment expense from their own pocket and 43.66% of them claimed from insurance company.

Table 5.25 represents the car insurance contract and source of paying medical treatment expense of road accident victims. The table shows that 31.34% of road victim who had accident with insurance car paid medical treatment expenses from theirs pocket and 61.19% of them claimed from insurance company. There were 54.43% of those road victims who had accident with non-insurance car paid medical treatment expenses from their own pocket and only 2.53% of them claimed from insurance company.

Table 5.26 represents having litigant and source of paying medical treatment expense of road accident victims. The table shows that 40% of the road victims that had litigant paid medical treatment expense from their own pocket and 43.89% of them claimed from insurance company. There were 39.39% of those who had not litigant paid medical treatment expense from their own pocket and only 15.15% of them claimed from insurance company.

Table 5.27 represents the awareness and source of paying medical treatment expense of road accident victim. The table shows that 33.88% of the road victims who were aware of the claim paid medical treatment expenses from their own pocket and 49.59% of them claimed from insurance company. There were 47.83% of those who were not aware of the claim paid medical treatment expenses from their own pocket and 26.09% of them claimed from insurance company.

Table 5.28 represents the charge and source of paying medical treatment expense of road accident victims. The table shows that 57.69% and 25.00% of medical treatment expenses less the 1,000 baht hospital charged from patient's pocket and insurance company respectively. There were 36.00% and 44.00% of medical treatment

expenses within 1,000-2,000 baht the hospitals charged from patient's pocket and insurance company respectively. 31.25% and 43.75% of the medical treatment expenses within 2,001-3,000 baht the hospitals charged from patient's pocket and insurance company respectively. 66.67% and 11.11% of medical treatment expenses within 3,001-4000 baht the hospitals charged from patient's pocket and insurance company respectively. 50.00% of the medical treatment expenses within 4,001-5,000 baht the hospitals charged from patient's pocket and charged from social welfare fund with the same percentage. 71.43% of the medical treatment expenses within 5,001-10,000 baht the hospitals charged from insurance company. 64.71% of the medical treatment expenses within 10,001-15,000 baht the hospitals charged from insurance company and 14.71% charged from government official benefit fund. 20.00% and 70.00% of the medical treatment expenses within 15,001-20,000 baht the hospitals charged from patient's pocket and insurance company respectively. The medical treatment expenses within 20,001-25,000 baht the hospitals charged only from insurance company (100%). And there were 20.00% and 80.00% of the medical treatment expenses exceed 25,000 baht the hospitals charged from the government official benefit fund and insurance company respectively.

5.4 Discussion

5.4.1 The Characteristic of Factor Determines a Claim.

The evidence characteristics of the road accident victims from logistic model testing which affect the initial payment claim for medical treatment expenses are; male, passenger and pedestrian, the social welfare group, admit in inpatient department and having basic documents. The other characteristics were not explicit effect on the probability of the initial payment claim.

Evidence Characteristics of Determinants of an Initial Payment Claim.

Being "male" is the determinant of a claim, there were 82.63% of road accident victims and 43.18% of them claimed the initial payment. While 17.37% of road accident victims that were female and only 21.62% of them made the claim.

Passenger and pedestrian are also determinant of a claim. The regulation of the law provides a claim for both passengers and pedestrians without condition, they can claim all kinds of car accident. The insurance companies and Compensation fund require only a police notice and a hospital bill as documents for a claim. While the driver have to be responsible to accident and the police will prove that the road victim is not violated according to the traffic law. For example, If driver breaks the law, it would has complication to make a claim, and the insurance company or Compensation fund may not pay an initial payment because the Compensation fund will get the money back from the driver. So drivers have more complexity to make a claim than passengers and pedestrians.

The social welfare cardholder such as the low-income cardholder, the children under 12 years of age, the elderly over 60 years of age is the evidence characteristic determinant of the claim. Normally, the public hospitals provide free medical services for social welfare cardholders and get the medical treatment expense from the government budget. But if the social welfare cardholder have other funds such as insurance company and Compensation fund that hospital can charge, so hospital will then claim the initial payment from the insurance company and Compensation fund. While the other privileges except government official are negative direction of the effecting the initial payment claim because they are voluntary insurance. The funds will offer a better benefit for client, so these are the better choices to pay the medical treatment expense from these funds.

Inpatient department is one determinant of the claim. There were 71.43% of road accident victims who were admitted to inpatient department claimed the initial

payment from insurance company. The hospitals provide an approval for a claim in inpatient department, makes more comfortable to patient, and the hospitals can ensure that hospital will get a medical treatment expense. This condition may affect to the road accident victims who were admitted to outpatient department (emergency room) and want to claim will ask for admission to the inpatient department and then authorize hospital to make a claim. The road accident victims who were admitted to an emergency room take short time to get services. The hospital can not provide an approval for the claim because there are complications about the incompletion of documents required of the insurance company. Therefore the admittance to the emergency room does not affect a claim significantly.

The basic documents such as car insurance contract, driver license, police notice that was required by insurance company are important for the claim of the road accident victims. All documents relating to a car driver must be completed. The document requirement for the passenger and pedestrian is the police notice only. If they do not have the complete basic documents, they will not claim. Therefor the basic documents are evidence characteristic determinants of the claim.

5.4.2 Payment Mechanism

There were 39.44% of road accident victims claimed the initial payment means that the insurance companies pay the medical treatment expenses within 15,000 baht to the hospitals and patients were 39.44% of the total road victim. There are remainders 60.56% of road accident victims that do not claim medical treatment expenses from insurance company. Because they paid the medical treatment expense from their own pocket (39.91%), government official benefit fund (7.04%), social welfare fund (6.10%), social security fund (4.69%) and health card fund (2.82%). There were 48.83% of medical treatment expenses were within 1,000 baht. 15.96% were between 10,001 – 15,000 baht and 35.21% were others amounts.