

## **APPENDIX C – METHODOLOGY**

### **Exhibit 1**

The number of national policies reported in this exhibit represents an aggregation of the number of national long-term care policyholders (or certificateholders) by year between 1997 and 2001 [Q.2 of the History Section of the 2002 Survey]. The total premium dollars reported in this exhibit represents an aggregation of the total premium dollars collected from national long-term care policyholders (or certificateholders) by year between 1997 and 2001 [Q.8 of the History Section of the 2002 Survey]. All figures reported for 1996 are taken from the July 15, 1997 report issued by the Division of Insurance entitled “A Report on Long-Term Care Insurance: The Results of a 1996 Survey” amended only when information reported by any company was corrected as part of the investigation of the data reported in the 2001 Survey.

### **Exhibit 2**

The number of Massachusetts policies reported in this exhibit represents an aggregation of the number of national long-term care policyholders (or certificateholders) by year between 1997 and 2001 [Q.3 of the History Section of the 2002 Survey]. The total premium dollars reported in this exhibit represents an aggregation of the total premium dollars collected from national long-term care policyholders (or certificateholders) by year between 1997 and 2001 [Q.9 of the History Section of the 2002 Survey]. All figures reported for 1996 are taken from the Division’s 1996 survey referenced in previous Exhibit notes.

### **Exhibit 3**

In order to calculate the percentage of national long-term care insurance policies intended to be federally tax-qualified long-term care policies, divide the number of policies issued nationally in 1998 and 2001 that were intended to be federally tax-qualified long-term care policies [Q.1 in the Federally Tax-Qualified Plans Section of the 2002 Survey] by the number of all policies sold in years 1998 and 2001 [Q.2b of the History Section of the 2002 Survey] respectively.

### **Exhibit 4**

In order to calculate the percentage of Massachusetts long-term care insurance policies intended to be federally tax-qualified long-term care policies, divide the number of policies issued in Massachusetts in 1998 and 2001 that were intended to be federally tax-qualified long-term care policies [Q.2 in the Federally Tax-Qualified Plans Section of the 2002 Survey] by the number of all policies sold in years 1998 and 2001 [Q.3b of the History Section of the 2002 Survey] respectively.

### **Exhibit 5**

In order to calculate the percentage of Massachusetts long-term care insurance policies intended to qualify for certain MassHealth exemptions, divide the number of policies issued in Massachusetts in 2000 and 2001 that were intended to qualify for certain MassHealth exemptions [Q.1 in the State MassHealth (Medicaid) Qualified Plans Section of the 2002 Survey] by the number of all policies sold in years 2000 and 2001 [Q.3b of the History Section of the 2002 Survey] respectively.

## **Exhibit 6**

In order to derive the national average age of long-term care insurance policyholders, a composite statistic of national policyholder age-years was calculated for each company. Based upon the information submitted for a company, each year's average age [Q.4 of the History Section of the 2002 Survey] was multiplied by the number of policyholders for that company in the corresponding year [Q.2 of the History Section of the 2002 Survey] to calculate that company's composite policyholder age-years for each year between 1997 and 2001. All the companies' composite policyholder age-years were aggregated and divided by the total of all long-term care insurance policyholders for that year to derive the weighted national average age for all long-term care policyholders for that year. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 7**

In order to derive the Massachusetts average age of long-term care insurance policyholders, a composite statistic of Massachusetts policyholder age-years was calculated for each company. Based upon the information submitted for a company, each year's average age [Q.5 in the History Section of the 2002 Survey] was multiplied by the number of policyholders for that company in the corresponding year [Q.3 in the History Section of the 2002 Survey] to calculate that company's composite policyholder age-years for each year between 1997 and 2001. All the companies' composite policyholder age-years were aggregated and divided by the total of all long-term care insurance policyholders for that year to derive the weighted Massachusetts average age for all long-term care policyholders for that year. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 8**

Information was based upon the information submitted by companies responding to an inquiry requesting that the company identify the average commission paid to an agent or broker for a new long-term care policy in Massachusetts [Q.9 in the Marketing and Agent Training Section of the 2002 Survey].

## **Exhibit 9**

The information reported in this exhibit represents company responses as to whether a company responded "yes", "no" or "not applicable" to Q.1 of the Nonforfeiture Benefits Section of the 2002 Survey for its national long-term care insurance offerings. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 10**

The information reported in this exhibit represents company responses as to whether a company responded "yes", "no" or "not applicable" to Q.2 of the Nonforfeiture Benefits Section of the 2002 Survey for its Massachusetts long-term care insurance offerings. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 11**

### National

In order to calculate the percentage of national long-term care insurance lapse rates, subtract the number of policies (or certificates) bought from each company in 1997 that were still in force in 2001 [Q.1 in the Lapse Rates and Policy Replacement Section of the 2002 Survey] from the number of national policies (or certificates) issued by each company in 1997 [Q.2b in the History Section of the 2002 Survey]. The national five year lapse rate represents the total number of all companies' lapse policies as of 2001 divided by the total number of all companies' policyholders or certificateholders issued policies in 1997. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

### Massachusetts

In order to calculate the percentage of Massachusetts long-term care insurance lapse rates, subtract the number of policies (or certificates) bought from each company in 1997 that were still in force in 2001 [Q.2 in the Lapse Rates and Policy Replacement Section of the 2002 Survey] from the number of Massachusetts policies (or certificates) issued by each company in 1997 [Q.3b in the History Section of the 2002 Survey]. The national five year lapse rate represents the total number of all companies' lapse policies as of 2001 divided by the total number of all companies' policyholders or certificateholders issued policies in 1997. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 12**

### National

In order to derive the national percentage of long-term care insurance policyholders who purchase inflation protection, a composite statistic was calculated for each company. Based upon the information submitted for a company, each company's national percentage purchasing inflation protection in 2001 [Q.1 of the Inflation Adjustment Benefit Section of the 2002 Survey] was multiplied by the number of national policies issued by the company in 2001 [Q.2b of the History Section of the 2002 Survey] to calculate the number of that company's national policies issued in 2001 that included inflation protection. The number of national policies issued with inflation protection was aggregated for all the companies and then divided by the total number of national long-term care insurance policies issued in 2001 to derive the percentage of national long-term care insurance policies issued in 2001 with inflation protection. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

### Massachusetts

In order to derive the Massachusetts percentage of long-term care insurance policyholders who purchase inflation protection, a composite statistic was calculated for each company. Based upon the information submitted for a company, each company's Massachusetts percentage purchasing inflation protection in 2001 [Q.3 of the Inflation Adjustment Benefit Section of the 2002 Survey] was multiplied by the number of Massachusetts policies issued by the company in 2001 [Q.3b of the History Section of the 2002 Survey] to calculate the number of that company's Massachusetts policies issued in 2001 with benefits for inflation protection. The number of Massachusetts policies issued with inflation protection was aggregated for all the companies and then divided by the total number of Massachusetts long-term care insurance policies issued in 2001 to derive the percentage of Massachusetts long-term care insurance policies issued in 2001 with inflation protection. All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 13**

### National

In order to derive the percentage of national long-term care insurance policyholders who purchase nursing home coverage, each company's total national number of policies with nursing home coverage by each year from 1997 through 2001 [Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section of the 2002 Survey and Q.1 of the Nursing Home Coverage Section of the 2002 Survey] was aggregated into a statistic of the national number of policies with nursing home coverage. This number was then divided by the total number of national long-term care insurance policies issued for each year [Q.2b of the History Section of the 2002 Survey] to derive the percentage of national long-term care insurance policies issued in each year with nursing home coverage.

In order to derive the national average nursing home daily benefit of long-term care insurance policyholders, a composite statistic was calculated for each company. Based upon the information submitted for a company, each company's national average daily benefit for nursing home coverage for each year from 1997 through 2001 [Q1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.1 of the Nursing Home Coverage Section of the 2002 Survey] was multiplied by the number of national policies issued by the company for the corresponding years with nursing home coverage [as calculated above based upon information in Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.1 of the Nursing Home Coverage Section the 2002 Survey] to calculate a total policyholder-average daily rate statistic for each company. This number was aggregated across all the companies and then divided by the number of national policies with nursing home coverage issued [an aggregate of what each company reported for Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.1 of the Nursing Home Coverage Section of the 2002 Survey] for the corresponding years to derive the average daily nursing home coverage maximum for national policyholders.

All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

### Massachusetts

In order to derive the percentage of Massachusetts long-term care insurance policyholders who purchase nursing home coverage, each company's total Massachusetts number of policies with nursing home coverage by each year from 1997 through 2001 [Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section of the 2002 Survey and Q.2 of the Nursing Home Coverage Section of the 2002 Survey] was aggregated into a statistic of the Massachusetts number of policies with nursing home coverage. This number was then divided by the total number of Massachusetts long-term care insurance policies issued for each year [Q.3b of the History Section of the 2002 Survey] to derive the percentage of Massachusetts long-term care insurance policies issued in each year with nursing home coverage.

In order to derive the Massachusetts average nursing home daily benefit of long-term care insurance policyholders, a composite statistic was calculated for each company. Based upon the information submitted for a company, each company's Massachusetts average daily benefit for nursing home coverage for each year from 1997 through 2001 [Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.2 of the Nursing Home Coverage Section of the 2002 Survey] was multiplied by the number of Massachusetts policies issued by the company for the corresponding years with nursing home coverage [as calculated above based upon information in Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.2 of the Nursing Home Coverage Section of the 2002 Survey] to calculate a total policyholder-average daily

rate statistic for each company. This number was aggregated across all the companies and then divided by the number of national policies with nursing home coverage issued [an aggregate of what each company reported for Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.2 of the Nursing Home Coverage Section of the 2002 Survey] for the corresponding years to derive the average daily nursing home coverage maximum for Massachusetts policyholders.

All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

## **Exhibit 14**

### National

In order to derive the percentage of national long-term care insurance policyholders who purchase home health care coverage, each company's total national number of policies with home health care coverage by each year from 1997 through 2001 [Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section of the 2002 Survey and Q.1 of the Home Health Coverage Section of the 2002 Survey] was aggregated into a statistic of the national number of policies with home health care coverage. This number was then divided by the total number of national long-term care insurance policies issued for each year [Q.2b of the History Section of the 2002 Survey] to derive the percentage of national long-term care insurance policies issued in each year with home health care coverage.

In order to derive the national average home health care daily benefit of long-term care insurance policyholders, a composite statistic was calculated for each company. Based upon the information submitted for a company, each company's national average daily benefit for home health care coverage for each year from 1997 through 2001 [Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.1 of the Home Health Coverage Section of the 2002 Survey] was multiplied by the number of national policies issued by the company for the corresponding years with home health care coverage [as calculated above based upon information in Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.1 of the Home Health Coverage Section of the 2002 Survey] to calculate a total policyholder-average daily rate statistic for each company. This number was aggregated across all the companies and then divided by the number of national policies with home health care coverage issued [an aggregate of what each company reported for Q.1 of the Comprehensive Coverage (Nursing Home and Home Health Policy) Section and Q.1 of the Home Health Coverage Section of the 2002 Survey] for the corresponding years to derive the average daily home health care coverage maximum for national policyholders.

All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.

### Massachusetts

In order to derive the percentage of Massachusetts long-term care insurance policyholders who purchase home health care coverage, each company's total Massachusetts number of policies with home health care coverage by each year from 1997 through 2001 [Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section of the 2002 Survey and Q.2 of the Home Health Coverage Section of the 2002 Survey] was aggregated into a statistic of the Massachusetts number of policies with home health care coverage. This number was then divided by the total number of Massachusetts long-term care insurance policies issued for each year [Q.3b of the History

Section of the 2002 Survey] to derive the percentage of Massachusetts long-term care insurance policies issued in each year with home health care coverage.

In order to derive the Massachusetts average home health care daily benefit of long-term care insurance policyholders, a composite statistic was calculated for each company. Based upon the information submitted for a company, each company's Massachusetts average daily benefit for home health care coverage for each year from 1997 through 2001 [Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.2 of the Home Health Coverage Section of the 2002 Survey] was multiplied by the number of Massachusetts policies issued by the company for the corresponding years with home health care coverage [as calculated above based upon information in Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.2 of the Home Health Coverage Section of the 2002 Survey] to calculate a total policyholder-average daily rate statistic for each company. This number was aggregated across all the companies and then divided by the number of national policies with home health care coverage issued [an aggregate of what each company reported for Q.2 of the Comprehensive Coverage (Nursing Home and Home Health Care Policy) Section and Q.2 of the Home Health Coverage Section of the 2002 Survey] for the corresponding years to derive the average daily home health care coverage maximum for Massachusetts policyholders.

All figures reported for 1996 are taken from the Division's 1996 survey referenced in previous Exhibit notes.