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NURSING HOME LENGTH OF STAY Calendar Years 1990 - 1999

BASED ON CASE MIX REVIEW PROGRAM DATA

[PLEASE NOTE: The length of stay data in this report differs from that which was published in December, 1998 because we have discovered errors in our database. While the specific length of stay numbers for each year have changed, the trend toward a shorter length of stay remains unchanged. The methodological notes provide the detail for this corrected and updated report.]

One of the measures of change of the utilization nursing home services is length of stay. Since 1990 both mean (average) and median length of stay of has experienced a decline. The attached chart and graph titled "Length of Stay - Mean & Median" illustrate this decline. The median, where half of the residents are above and half are below that point, the length of stay in 1999 is 65.5 days. In 1990 the median was 99 days. This decline reflects a shift towards a short stay population receiving extensive rehabilitation or post hospital care and then discharged back to their home or previous residence.

Nearly, thirty-six percent of the residents discharged from nursing homes in 1999 stayed in the facility for thirty days or less. Nearly fifty-six percent were discharged within 90 days. The chart and graph titled "Length of Stay - Stays of Less Than 1 Year" present length of stay data based on thirty day periods.

In 1999 the number of persons discharged back to their home, apartment or assisted living settings exceeded the number of persons who died in nursing homes. This continues a trend that began in 1997. Attached is a chart and graph of "Reasons For Discharge from Nursing Home" that illustrate this change in disposition.

Methodological Notes

In computing the length of stay for this report errors were discovered in the data used to calculate the length of stay reported for 1990 through 1997 in the report made in December 1998. The most significant was the discovery that the original admission date was missing for residents admitted prior to 1994. This missing data caused an under reporting of the average (mean) length of stay, because not all the days that a resident was in facility were counted. The missing data also resulted in an under reporting of short stay residents thus overstating the median (half the residents above and half below) length of stay. The second error was a miscalculation in the way residents who were discharged in one year and subsequently readmitted in another year had the length stay calculated in the first discharge year. These errors have been corrected in this report and result in significant change in the data presented in the previous report on length of stay.

Length of stay for a resident is calculated by counting the number of days a resident is in the facility from the date of admission or readmission to the date of discharge. The length of stay is an aggregate length of stay for each resident. If a resident had several individual stays in a nursing home(s) the stays are added to get a total length of stay for the resident. The maximum number of stays counted for an individual included is 53.

In order to calculate a valid stay, an admission/readmission record must be followed by a discharge record. If this condition was not met then no calculation for that specific stay was made. Stays for the resident that met the condition were calculated and included in the resident's length of stay. The following scenarios illustrate how length of stay is calculated.

Scenario # 1 - Resident is admitted, for the very first time, on May 10, 1999 and is Discharged home on July 22, 1999. A total length of stay of 73 days would be calculated for 1999.

Scenario # 2 - A resident was initially admitted on December 12, 1996 and died at the nursing home on April 1, 1999. A total length of stay of 840 days would be calculated for 1999.

Scenario # 3 - A resident was initially admitted on August 1, 1997 and was discharged to the hospital on September 15, 1997. The resident was readmitted to the facility on March 1, 1998 and died in the nursing home on Dec 10, 1998. A length of stay of 45 days was reported for 1997. A total of 330 days would be reported in 1998 (45 days from 1997 plus 285 from 1998).

Scenario # 4 - A resident is admitted to facility A on May 15, 1998 and is transferred to facility B on June 10, 1998 then is discharged to home on June 30, 1998. A total of 45 days is reported for 1998 (25 days from facility A and 20 days from facility B).

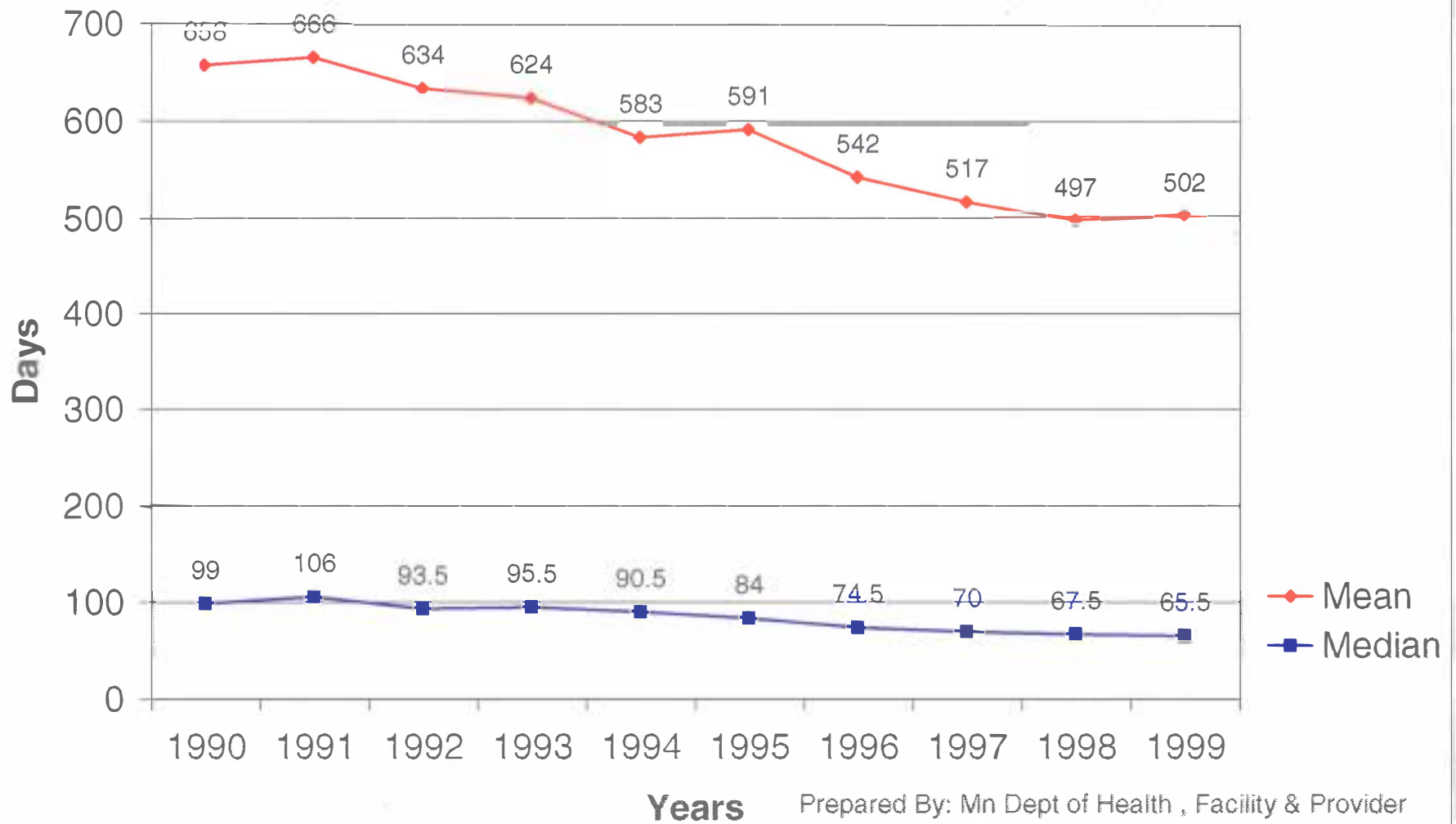
Scenario # 5 - A resident admitted to facility A on April 10, 1997 and was transferred to facility B on May 1, 1997 and then to facility C on Aug 12, 1998 and is still a resident at that facility . No calculation is made for either 1997 or 1998..

While many other scenarios exist these are illustrative of the method used to compute length of stay.

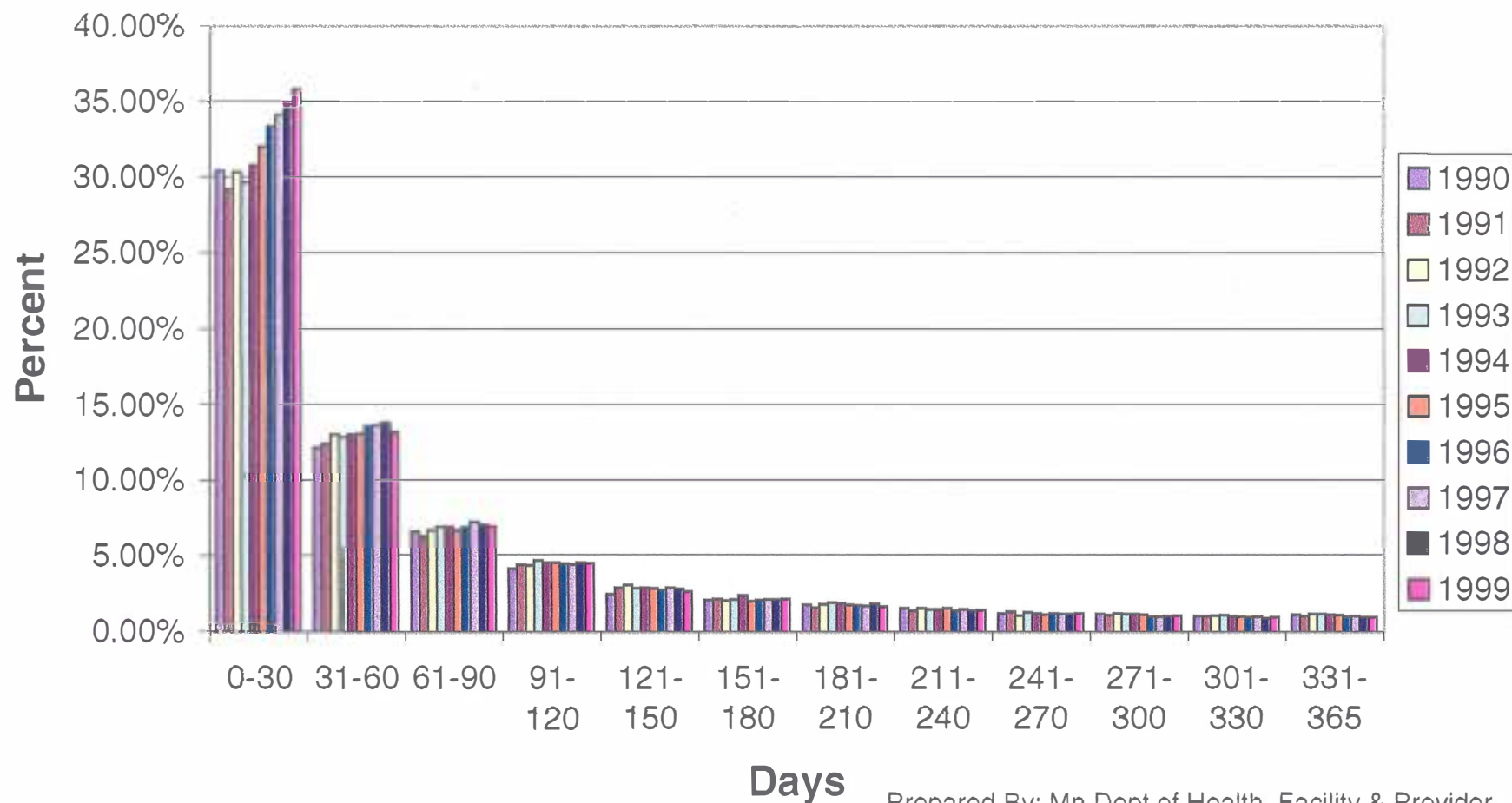
The Case Mix Review Program changed the method of collecting discharge information on residents in 1994 which improved the reliability of the information gathered. Prior to July 1994 facilities submitted every month a form listing the residents that had been discharged from the facility that month. Beginning in July 1994, the Department of Health changed the procedure so that four times a year the facility was sent a list of persons the department had as current residents of the facility and the facility was asked to return that list to Health Department with the date and disposition if the resident had been discharged. The change captured residents who were previously overlooked in the reporting of discharges.

July 2000

Nursing Home Length of Stay - Discharge Days



Nursing Home Length of Stay of One Year or Less



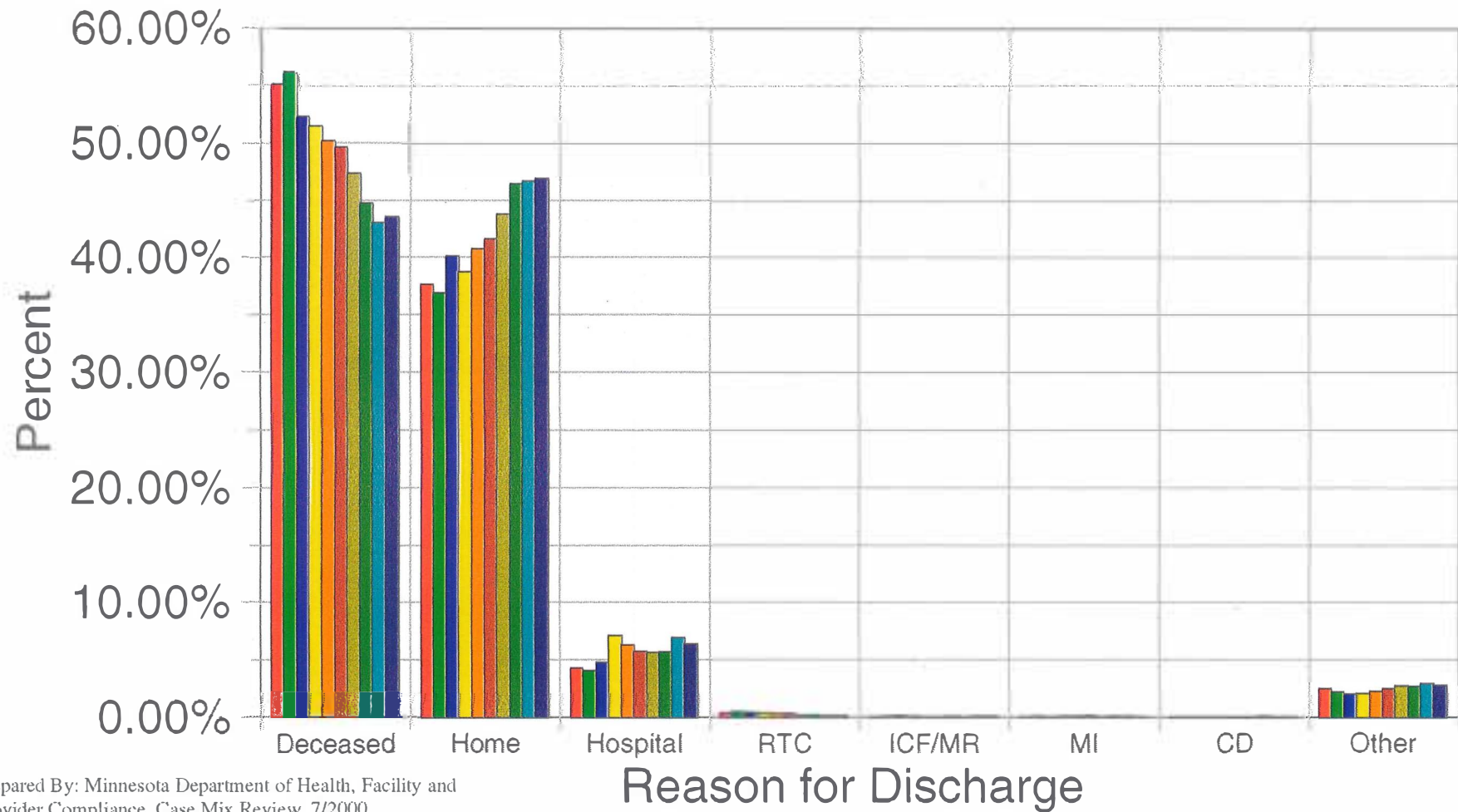
Prepared By: Mn Dept of Health, Facility & Provider Compliance, Case Mix Review 7/00

Case Mix Summary Data
Length of Stay
Calendar Years 1990 - 1999

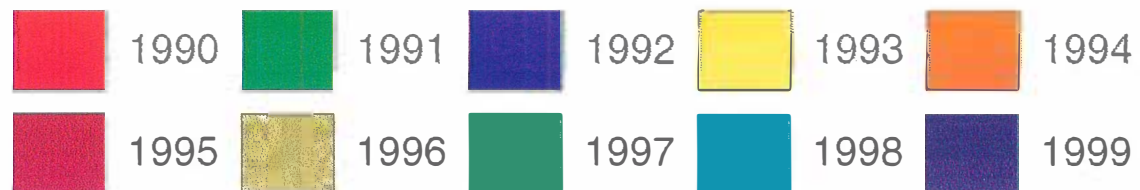
| Year | Days 0-30 | 31-60 | 61-90 | 91-120 | 121-150 | 151-180 | 181-210 | 211-240 | 241-270 | 271-300 | 301-330 | 331-365 |
|------|--------------|--------|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1990 | 30.42% | 12.16% | 6.62% | 4.10% | 2.42% | 2.06% | 1.73% | 1.54% | 1.20% | 1.16% | 1.03% | 1.13% |
| 1991 | 29.18% | 12.43% | 6.30% | 4.36% | 2.87% | 2.13% | 1.55% | 1.37% | 1.31% | 1.08% | 1.00% | 1.01% |
| 1992 | 30.35% | 13.04% | 6.68% | 4.32% | 3.06% | 2.05% | 1.78% | 1.54% | 1.06% | 1.19% | 1.04% | 1.16% |
| 1993 | 29.66% | 12.86% | 6.89% | 4.66% | 2.83% | 2.09% | 1.89% | 1.45% | 1.26% | 1.15% | 1.08% | 1.15% |
| 1994 | 30.78% | 13.03% | 6.90% | 4.49% | 2.88% | 2.37% | 1.86% | 1.45% | 1.21% | 1.18% | 1.01% | 1.12% |
| 1995 | 32.01% | 13.08% | 6.67% | 4.51% | 2.82% | 2.00% | 1.75% | 1.51% | 1.12% | 1.11% | 0.97% | 1.08% |
| 1996 | 33.34% | 13.57% | 6.85% | 4.42% | 2.74% | 2.06% | 1.70% | 1.37% | 1.19% | 0.99% | 0.95% | 0.98% |
| 1997 | 34.11% | 13.67% | 7.22% | 4.40% | 2.88% | 2.09% | 1.67% | 1.46% | 1.18% | 0.97% | 0.99% | 1.01% |
| 1998 | 34.81% | 13.82% | 7.03% | 4.49% | 2.78% | 2.11% | 1.81% | 1.37% | 1.17% | 1.02% | 0.89% | 0.94% |
| 1999 | 35.84% | 13.17% | 6.93% | 4.47% | 2.63% | 2.15% | 1.64% | 1.43% | 1.21% | 1.05% | 0.96% | 0.93% |

Minnesota Department of Health
Facility and Provider Compliance
Case Mix Review Program 7/00

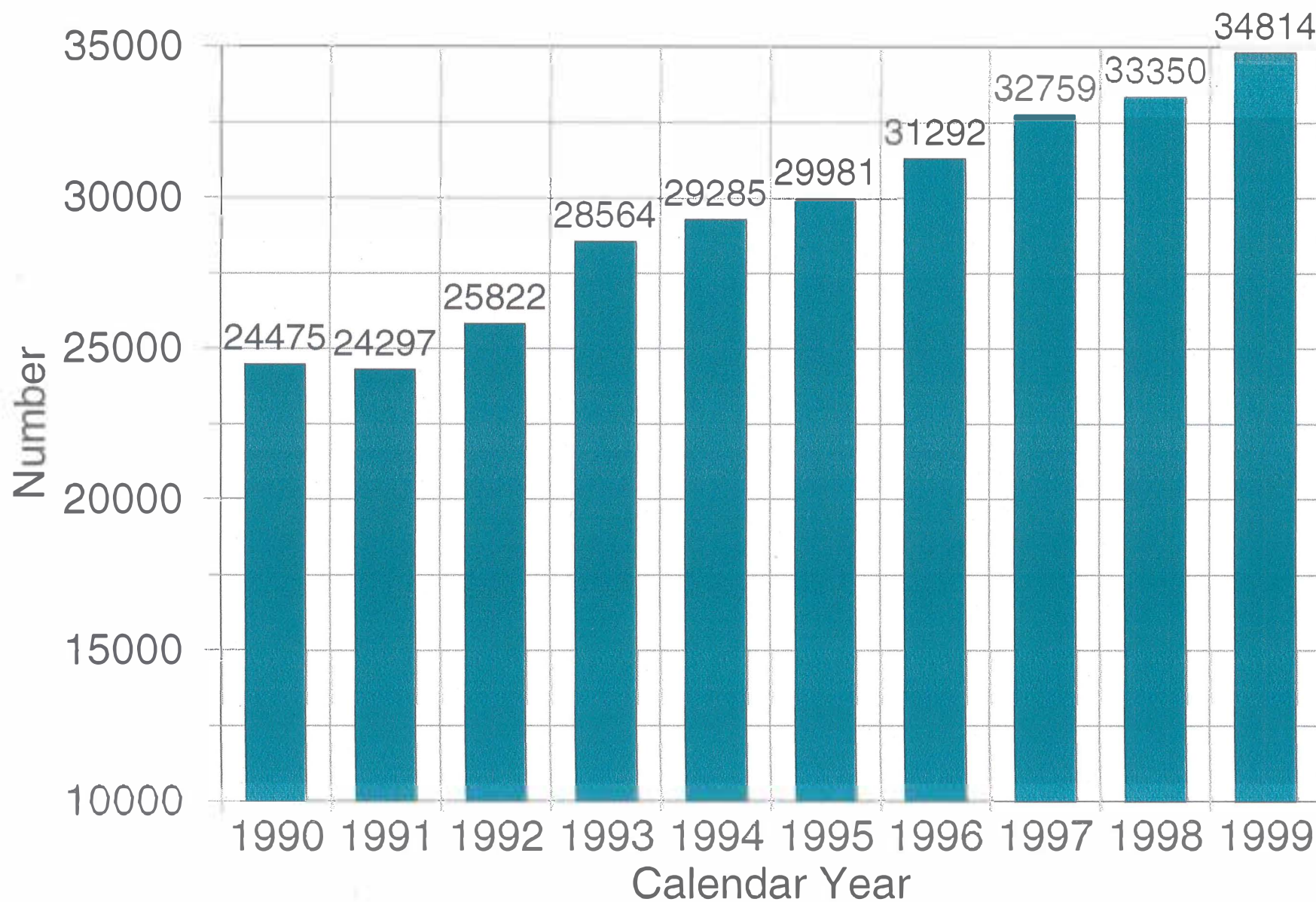
Discharges From Nursing Homes



Prepared By: Minnesota Department of Health, Facility and
Provider Compliance, Case Mix Review 7/2000



Number of Discharges



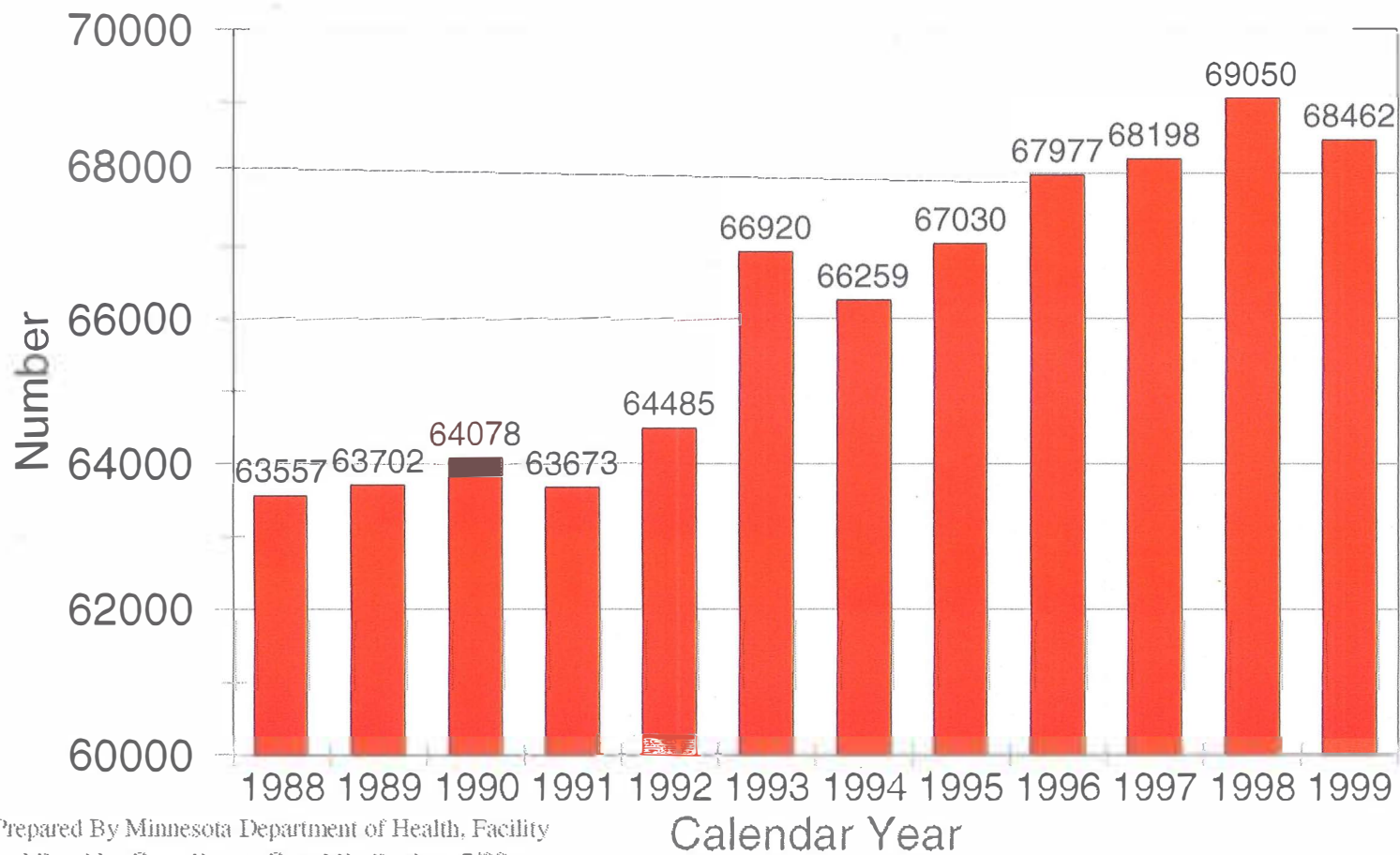
Minnesota Case Mix System
Discharges
Calendar Years 1990 -1999

| | | Deceased | Home | Hospital | RTC | Community ICF/MR | Community MI | Community CD | Other |
|------|---------|----------|--------|----------|-------|---------------------|-----------------|-----------------|-------|
| 1990 | Number | 13480 | 9214 | 1051 | 85 | 19 | 11 | 15 | 600 |
| | Percent | 55.08% | 37.65% | 4.29% | 0.35% | 0.08% | 0.04% | 0.06% | 2.45% |
| 1991 | Number | 13649 | 8962 | 980 | 121 | 24 | 29 | 8 | 524 |
| | Percent | 56.18% | 36.89% | 4.03% | 0.50% | 0.10% | 0.12% | 0.03% | 2.16% |
| 1992 | Number | 13504 | 10363 | 1245 | 113 | 39 | 19 | 18 | 521 |
| | Percent | 52.30% | 40.13% | 4.82% | 0.44% | 0.15% | 0.07% | 0.07% | 2.02% |
| 1993 | Number | 14693 | 11070 | 2040 | 99 | 25 | 35 | 20 | 582 |
| | Percent | 51.44% | 38.76% | 7.14% | 0.35% | 0.09% | 0.12% | 0.07% | 2.04% |
| 1994 | Number | 14692 | 11931 | 1851 | 97 | 16 | 36 | 19 | 643 |
| | Percent | 50.17% | 40.74% | 6.32% | 0.33% | 0.05% | 0.12% | 0.06% | 2.20% |
| 1995 | Number | 14872 | 12490 | 1725 | 97 | 15 | 46 | 15 | 721 |
| | Percent | 49.60% | 41.66% | 5.75% | 0.32% | 0.05% | 0.15% | 0.05% | 2.40% |
| 1996 | Number | 14829 | 13708 | 1771 | 74 | 27 | 16 | 21 | 846 |
| | Percent | 47.39% | 43.81% | 5.66% | 0.24% | 0.09% | 0.05% | 0.07% | 2.70% |
| 1997 | Number | 14672 | 15218 | 1862 | 61 | 21 | 29 | 28 | 868 |
| | Percent | 44.79% | 46.45% | 5.68% | 0.19% | 0.06% | 0.09% | 0.09% | 2.65% |
| 1998 | Number | 14367 | 15571 | 2323 | 49 | 33 | 33 | 25 | 949 |
| | Percent | 43.08% | 46.69% | 6.97% | 0.15% | 0.10% | 0.10% | 0.07% | 2.85% |
| 1999 | Number | 15163 | 16340 | 2225 | 55 | 33 | 19 | 24 | 955 |
| | Percent | 43.55% | 46.94% | 6.39% | 0.16% | 0.09% | 0.05% | 0.07% | 2.74% |

Prepared By: Minnesota Department of Health
Facility and Provider Compliance Division
Case Mix Review Program 7/00

Case Mix Review Program

Unduplicated Count of NH Residents



Prepared By Minnesota Department of Health, Facility
and Provider Compliance, Case Mix Review 7/00