# FINANCIAL SUCCESS OF THE CRITICAL ACCESS HOSPITAL PROGRAM IN KANSAS: A COMPARATIVE STUDY

**Kansas Rural Health Options Project**


**Prepared by**

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## EXECUTIVE SUMMARY

To assist the Kansas Rural Health Options Project (a partnership of the Kansas Department of Health and Environment , Kansas Hospital Association, Kansas Board of Emergency Medical Services and the Kansas Medical Society) in evaluating the financial impact of Critical Access Hospital (CAH) conversion on small rural hospitals in Kansas, Wendling, Noe, Nelson & Johnson conducted a study of the operations of seven of the first eight certified CAHs (formerly Rural Primary Care Hospitals, or RPCHs) in the State. The study compares the financial status and trends exhibited by these CAHs to the financial status and trends exhibited by eight peer group hospitals during the period of Federal Fiscal Years (FFY) 1995 to 2000.

The study's key finding was that conversion to RPCH/CAH status stabilized losses in the group of study facilities. In FFY 2000, the average loss for the CAHs was about 19 percent less than in FFY 1995, the year immediately prior to conversion for most of these facilities. In contrast, average losses for peer group hospitals increased by 55 percent during the same period.

The CAHs performed better than the peer group hospitals on other measures of financial status as well. Average Outpatient Revenues increased at a faster rate in the CAHs than in the peer group, due in part to the integration of professional services in the CAHs under the All Inclusive Outpatient Payment Method. In addition, net revenues as a percentage of gross revenues in the CAHs remained relatively constant at about 98 percent over the study period, compared to a decline from 90 percent to 83 percent for the peer group hospitals. This points to an increase in contractual adjustments in the peer group hospitals and a benefit of cost-based reimbursement to the CAHs of 5 to 10 percent of gross revenues.

Contrary to the expectations and fears of many policy makers, CAH conversion did not result in an inappropriate increase in facility costs. Total Operating Expenses for the seven CAHs in the study group increased by 62 percent from FFY 1994 to 2000, compared to a 66 percent increase for the peer group hospitals. Consistent with expectations, however, acute inpatient utilization in the CAHs declined substantially in the first year following conversion as a result of the program's stringent length of stay limitations. These limitations have since been relaxed. Following the first year of operation as a CAH, acute inpatient volume has gradually increased. Average acute inpatient utilization in the peer group hospitals declined slightly during the study period.

This study clearly shows that conversion to CAH status enhanced the financial stability of the study group facilities relative to peer group hospitals. Although the CAHs as a group have not been able to significantly reduce their losses, these losses have been stabilized at seemingly tolerable levels. In contrast, the peer group hospitals have experienced consistent declines in financial performance, with losses reaching a level nearly two and a half times that of the CAHs in FFY 2000. While all small hospitals will not benefit from CAH conversion, the results of this study show that the CAH Program is an important component of the health care safety net in rural Kansas, helping ensure access to health care services to citizens in many rural communities across the state.

## INTRODUCTION

At the request of the Kansas Rural Health Options Project (KRHOP), a partnership of the Kansas Department of Health and Environment Office of Local and Rural Health, Kansas Hospital Association, Kansas Board of Emergency Medical Services, and the Kansas Medical Society, Wendling, Noe, Nelson & Johnson LLC, Certified Public Accountants, conducted a study of the operations of Critical Access Hospitals (CAHs) in Kansas.[1] The objective of the study is to assist the KRHOP in evaluating the financial impact that participation in the CAH Program has on small rural hospitals in Kansas.

The study focused on seven of the first eight certified CAHs in the State of Kansas (financial data was not available for the eighth CAH in this group). These facilities converted from general acute care hospitals to RPCHs during the period January 1994 to March 1996, and later became CAHs under the Medicare Rural Hospital Flexibility Program (see footnote 1). Five of these seven hospitals converted during their cost reporting periods that ended in federal fiscal year (FFY) 1996. One converted during its cost reporting period that ended in FFY 1995 and another during its cost reporting period that ended in FFY 1997.

## METHODOLOGY AND SCOPE OF WORK

Financial and statistical data for the seven CAHs were compiled from audited financial statements and Medicare Cost Reports (one of the CAHs did not have its financial statements audited for any of the years covered by the study; in this case, unaudited financial data were used). Financial statements and Cost Reports were obtained from the CAHs, or from the Medicare Fiscal Intermediary under the Freedom of Information Act.

Data was compiled for the periods prior to and after conversion to RPCH/CAH status. Because the objective of the study is to assist in evaluation of the CAH program and not to assess the performance of individual CAHs, the focus of the study was on group averages and trends and not on individual CAH data. Data was developed on each of the CAHs, however, to determine if the performance of any of the facilities significantly affected a given group average or trend.

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[1]CAHs were created as part of the Medicare Rural Hospital Flexibility Program (MRHFP), which replaced the Essential Access Community Hospital/Rural Primary Care Hospital Program. The CAHs in this study were originally Rural Primary Care Hospitals and became CAHs with the enactment of the MRHFP in 1997. The MRHFP is also referred to as the "CAH Program" in this report.

Evaluation of the success of the program encompasses assessment of both the results of operation of the CAHs and whether participation in the program enabled these facilities to improve their financial position relative to other hospitals that did not convert to CAH status. To conduct this comparison, financial and statistical data were compiled for eight peer hospitals that operated as general acute care hospitals during FFY 1994 through FFY 2000, the period covered by the study. Criteria such as size, services provided, and geographic location were used to ensure that the peer hospitals were as similar as possible to the CAHs prior to their conversion (as a validation of the similarity of characteristics and circumstances of the CAHs and the peer group, several of the peer hospitals are currently assessing conversion to CAH status). Medicare Cost Reports for peer group hospitals were obtained from the Medicare fiscal intermediary.

Financial and statistical data that were utilized for the study include:

- Excess of revenues over expenses before government appropriations, contributions and transfers;
- Gross patient service revenue;
- Gross inpatient revenue;
- Gross outpatient revenue;
- Gross swing bed revenue;
- Gross long-term care revenue;
- Gross acute inpatient revenue excluding clinics;
- Gross outpatient revenue excluding clinics;
- Net patient service revenue;
- Total operating expenses;
- Salary expenses excluding clinics;
- Supplies and other expenses excluding clinics;
- Adult and pediatric patient days;
- Swing bed Skilled Nursing (SNF) and Nursing (NF) patient days; and
- Contractual adjustments and discounts.

For each of these data elements, we calculated the group averages for the CAHs for their cost reporting periods ending in each of the FFYs 1994 through 2000. For selected data elements, we computed group averages of the peer group hospitals for the same period. To track trends in the CAHs during their transition from general acute care hospitals, we collected data from approximately two years prior to RPCH/CAH conversion and for approximately four years following conversion.

The seven CAHs in the study converted from general acute care hospital status at various times between January 1994 and March 1996. Accordingly, the calculated group averages for the CAHs for FFYs 1994 and 1995 generally reflect operations as acute care hospitals. The CAH group averages for FFY 1996 reflect the data for four hospitals that had converted prior the start of the fiscal year, one that operated as a general acute care hospital, and two that converted during that year. For FFYs 1997 through 2000, the group average amounts reflect operations of all of the facilities under the MRHFP. We do not believe that the group averages and trends are significantly distorted by the inclusion of data from facilities that operated as general acute care hospitals for parts of a year before they converted to the program.

## FINDINGS

A summary of the financial and statistical data compiled for this study are set forth in the graphs in Exhibits 1 through 15. It is noted that one of the peer group hospitals exhibited an unusual increase in its operations during FFY 2000. Total FFY 2000 revenues for this hospital increased by 56 percent from FFY 1999 and total operating expenses increased by 39 percent during this period. Because the operation of this hospital significantly influences the FFY 2000 financial and statistical data of the peer group, we have reflected two peer group trend lines on the comparative graphs. One trend line includes all eight peer group hospitals, while the other trend line excludes the hospital with unusual increases in FFY 2000. This issue is further discussed below, as well.

### Excess of Expenses Over Revenues Before Government Appropriations, Contributions, and Transfers

Conversion to CAH status affects various elements of the operations of a hospital, including revenues, contractual adjustments, and expenses. While the effect on each element is important, the overall financial impact of the program can best be measured by the effect on income from operations. Because various CAHs and peer group hospitals include different elements of revenue in income from operations, we focused on the Excess of Expenses Over Revenues, with adjustments to exclude government appropriations (i.e., property taxes or sales taxes), contributions, and transfers from other funds or entities.[2] The results of this analysis are shown in Exhibit 1.

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[2]Excess of expenses over revenues before government appropriations, contributions, and transfers is referred to simply as "Excess of Expenses Over Revenues" or "losses" for the remainder of this report.

In FFY 1995, the year prior to conversion for most of the hospitals in the study group, Excess of Expenses Over Revenues were greater than in the previous year for all but one of the CAHs, as well as for four of the eight peer group hospitals. During this year, the average loss for the seven hospitals who later converted to RPCH/CAH status was $392,139, an increase of 32 percent over FFY 1994. The average loss for the eight peer group hospitals went from $407,879 in FFY 1994 to $502,099 in FFY 1995, an increase of 23 percent.

In FFY 1996, the year that five of the hospitals in the study group underwent conversion, the average loss for the study group facilities decreased by 13 percent compared to an increase of 13 percent for peer group hospitals.

In FFY 1997 and succeeding years, the average Excess of Expenses Over Revenues for the CAHs remained relatively constant.

In contrast, the average Excess of Expenses Over Revenues for the peer group hospitals increased in each year except for slight decreases in FFY 1997 and FFY 2000. During those years, losses for the peer group hospitals decreased by 7 percent and 3 percent, respectively, from the prior year. The slight improvement in the financial operations of the peer group hospitals in both years was attributable entirely to better performance by just one facility. Excluding this facility, losses for the peer group increased by 14 percent in FFY 1997 and 2 percent in FFY 2000.

Recognizing that there are many factors that influence the profit or loss of a hospital, the results of the study indicate that the CAH program has stabilized losses in the CAHs as a group. On the other hand, the trend for the peer group reflects significantly greater losses during the study period. In FFY 2000, the average loss for the CAHs was approximately 19 percent less than in FFY 1995, the year immediately prior to conversion for most of the study group hospitals. In contrast, average losses for peer group hospitals increased by 55 percent during the same period. Only two CAHs exhibited worse operating results in FFY 2000 than in their last year as acute hospitals, while six of the eight peer group hospitals had worse operating results in FFY 2000 than in FFY 1995.

Although these data show that, as a group, conversion to CAH status has had a positive influence on financial stability, it should be emphasized that the same result should not be expected by all hospitals that make the conversion. All of the CAHs in the study group went through a careful evaluation of the expected financial impact of converting from general acute care hospitals to CAHs and concluded that conversion would have a positive financial impact on operations. Other hospitals made similar evaluations and did not convert to CAH status because their assessments did not reflect a positive financial impact.

It should also be noted that while the CAHs as a group improved their operations after conversion, on an individual basis, two of the CAHs incurred losses in FFY 2000 that were greater than losses incurred in the year prior to conversion. Based on a review of FFY 2000 operating data for these two CAHs, however, and their operating data in other years since conversion, we believe that the decreases in financial performance in FFY 2000 are related to factors other than conversion to CAH status. One of the CAHs showed improved results of operations for the first three years after

conversion with both adult and pediatric days and results from operation in FFY 1999 exceeding those of its last preconversion year. In FFY 2000, adult and pediatric days and results from operations reflected a sharp decline. The other CAH reflected improved results from operations in each of the first two years after conversion. In all years, including the two years prior to conversion, its adult and pediatric patient days averaged less than .5 per day and the CAH has not been able to generate sufficient revenues to cover increases in cost.

In comparison, all eight of the peer group hospitals had greater losses in FFY 2000 than in FFY 1994. Losses for two of these hospitals were significantly higher in FFY 2000, however, and greatly influenced the group average. Nevertheless, the peer group hospitals ended the study period with less favorable operating results than the CAHs.

In view of the fact that the CAHs group performed better than the peer group, it appears that CAH conversion provided the opportunity for these small rural hospitals to stabilize their operating results. The fact that not all of the CAHs enjoyed this success, however, underlines the notion that enhanced operating results as a CAH are not guaranteed. Nevertheless, after reviewing all of the relevant data, we believe that the improvement in operating results of the study group is strongly influenced by participation in the CAH program. Many other factors, however, affect actual operations and these factors may also have influenced the outcomes to some degree.

Revenues

As shown in Exhibits 2 through 9, average acute inpatient revenues and average outpatient revenues increased each year following conversion of the study group hospitals (these increases occurred even with a decrease in average acute inpatient days; the effect of the program on utilization is discussed later in the report). This change is most notable for Average Acute Inpatient Revenue Excluding Clinics, which increased by approximately 32 percent from FFY 1995 to FFY 2000. This data is shown in Exhibit 7.

Coupled with improvements in swing bed and long term care revenues, this increase in acute inpatient revenue led to a 35 percent increase in Average Inpatient Revenue for the CAH group from FFY 1995 to FFY 2000. This is displayed in Exhibit 3. Among the individual CAHs, however, the change in Total Inpatient Revenues varied considerably, ranging from a decline of 11 percent to an increase of 85 percent. This wide variation is primarily a function of changes in volume of acute and non-acute inpatient days provided by the CAHs.

As displayed in Exhibit 4, Average Outpatient Revenues in the CAH group increased by 133 percent from FFY 1994 to FFY 2000, compared to an increase of 117 percent among the peer group hospitals. This increase in CAH outpatient revenues, however, includes additional clinic revenues for professional services billed under the All Inclusive Outpatient Payment Method.[3] If clinic

[3]The All Inclusive Outpatient Payment Method in effect at the time these hospitals converted allowed facilities that integrated physician services and billed on behalf of these physicians to be paid on a cost basis for these professional services. Under the All Inclusive Outpatient Payment

services are excluded, Average Outpatient Revenues in the CAH group increased by 117 percent during the study period, a rate equivalent to the increase in the peer group hospitals.

Not all clinic services are affected by the All Inclusive Outpatient Payment Method. However, the additional amount of clinic revenues attributable to professional services billed under this methodology was not reasonably ascertainable. The results of this study indicate that other outpatient ancillary services increased as a result of the integration of professional services in the CAHs. While it is not possible to precisely measure the effect of the All Inclusive Outpatient Payment Method, the fact that outpatient revenues in the CAHs increased considerably faster than outpatient revenues in the peer group hospitals is a strong indicator that the integration of services under this payment system had a positive effect on revenues for other outpatient services.

Medicare Reimbursement

Because of low service volumes and other factors, it has become increasingly difficult for small rural hospitals to cover their costs with payments received under the Medicare Prospective Payment Systems (PPS) for inpatient and outpatient services. As a result, the chief perceived advantage of CAH conversion is the potential for significant financial benefits as a result of cost based Medicare reimbursement for inpatient and outpatient services. It is not possible, however, to measure the actual effect of the change to cost based reimbursement without creating comprehensive pro forma evaluations of what reimbursement would have been under PPS. To determine if the actual benefit of cost reimbursement compares reasonably with the perceived benefit, we compared the difference between gross and net revenues (gross revenues minus contractual adjustments and discounts) in the CAHs and the peer group hospitals. These data are shown in Exhibit 9.

In FFY 1994, net revenues for the CAH group were approximately 99 percent of gross revenues and in the following year, fell to approximately 94 percent of gross revenues. After CAH conversion, net revenues as a percentage of gross revenues in these facilities increased to approximately 98 percent and have remained consistent at this level..

For the peer group hospitals, net revenues represented approximately 90 percent of gross revenues in FFY 1994 and 86 percent in FFY 1995. In the following year, net revenues as a percentage of gross revenues declined to 83 percent and have remained consistent at this level through FFY 2000.

Better performance for this financial indicator in the CAHs is evidence of the positive effect that the change in reimbursement methodology has had on these facilities. It is not an absolute measure, however, because of the impact of gross charges on contractual adjustments. Gross charges have little relevance to Medicare reimbursement. If it is assumed that the CAHs and the peer group

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Method in effect today, CAHs are paid for professional services at 115 percent of the normal physician fee schedule.

hospitals have been consistent in their charge increases, it is reasonable to conclude that contractual adjustments decreased for the CAHs relative to the peer group hospitals and that the benefit of cost reimbursement is in the range of 5 to 10 percent of gross revenues.

Operating Expenses

As displayed in Exhibit 10, Average Total Operating Expenses for the seven CAHs in the study group increased by 62 percent from FFY 1994 to 2000, compared to a 66 percent increase for the peer group hospitals. From FFY 1995 to 1999, Average Total Operating Expenses in the CAHs increased by 32 percent, approximately the same rate of increase found in the peer group hospitals. In FFY 2000, however, the peer group experienced an increase in Average Total Operating Expenses of 15.9 percent, a significantly higher rate of increase than the 6.8 percent experienced by the CAHs. Again, the peer group increase was significantly influenced by one hospital. Removing this hospital's data from the analysis results in an increase in Average Total Operating Expenses in the other peer group hospitals of 11 percent for the year.

Many policy makers expected that operating costs would spiral upward when CAHs began to be reimbursed on a cost basis and were no longer subject to the restraints of PPS. This study shows, however, that operating expenses in the CAHs increased by 4 percent less than in the peer group hospitals from FFY 1995 to 2000. During this same period, gross revenues of the CAHs increased by 4 percent more than the peer group.

Adult and Pediatric Patient Days

When evaluating whether to participate in the CAH Program, all of the prospective CAHs assumed that the program's restrictions on length of stay would result in a considerable reduction in acute inpatient days.[4] In fact, average acute inpatient volume in the CAHs did drop significantly in the first year after conversion, a decline that did not occur in the peer group hospitals. In all succeeding years except FFY 2000, however, acute inpatient volume in the CAHs increased.

Average acute inpatient days for the peer group hospitals declined slightly from FFY 1994 to FFY 1999. Acute inpatient utilization for this group increased significantly in FFY 2000, the result of a large increase at one hospital. The other seven peer group hospitals experienced FFY 2000 inpatient volumes that were approximately the same or slightly lower than in FFY 1999. Average adult and pediatric days at these seven peer group hospitals decreased by 3 percent from FFY 1999 to FFY 2000. These data are displayed in Exhibit 13.

As expected, inpatient acute care volume did, in fact, decline significantly upon RPCH conversion, probably as a result of the program's length of stay limitations, which were more severe under the

[4]When these hospitals converted to RPCH/CAH status, the program limited acute care length of stay to a maximum of 72 hours for each patient. This limitation was gradually relaxed, and currently stands at a yearly average length of stay of 96 hours or less.

EACH/RPCH program than the subsequent CAH program. In subsequent years, however, inpatient utilization increased slowly, probably due in part to a gradual relaxation of these limits.

CAHs are also subject to a bed size requirement, which limited the number of acute care beds to 6 at the time that these hospitals converted. Like the length of stay limitation, the bed size requirement has been relaxed and CAHs may now have a maximum of 15 acute care beds (or 25 beds if the CAH participates in the swing bed program). These limitations on the number of acute care beds did not have a noticeable impact on the study group CAHs, however, which have historically operated at very low volumes.

## CONCLUSIONS

Because of our desire to examine CAH operations over a considerable period of time, the number of CAHs in the study is limited by the small number of facilities that have participated in the program since its early days. In addition, there is some variation in the operating experiences of these CAHs. Nevertheless, this study clearly shows that conversion to CAH status enhanced the financial stability of the majority of study group facilities. As a group, the CAHs reduced their losses by approximately 19 percent over the study period and only two CAHs had losses in FFY 2000 that were greater than the losses experienced in their last full year of operation as general acute care hospitals.

In comparison, losses in the peer group hospitals increased by 55 percent from FFY 1995 to 2000. Six hospitals in the peer group had greater losses in FFY 2000 than in FFY 1995 and only two experienced an improvement in bottom line performance over this period.

While the CAHs as a group have not been able to significantly reduce their losses, they have stabilized losses at a seemingly tolerable level, considering other sources of revenue such as local tax support and contributions. The peer group hospitals, on the other hand, have experienced consistent declines in their financial performance, with losses reaching a level nearly two and a half times that of the CAHs in FFY 2000.

It is important to emphasize that many factors influence the financial performance of hospitals and not all small rural hospitals can be expected to benefit from CAH conversion. As noted above, prior to conversion, all of the CAHs in the study group engaged in a careful evaluation of the effects of participating in the program and concluded that conversion would have a positive financial impact. Other hospitals conducted similar evaluations and chose not to convert based on assessments that did not reflect similar positive outcomes. The results of this study, however, show that the CAH program is a significant and important component of the health care safety net in rural Kansas. This program can provide hope that basic primary and acute health care services will continue to be available to residents in communities in which CAHs are located.

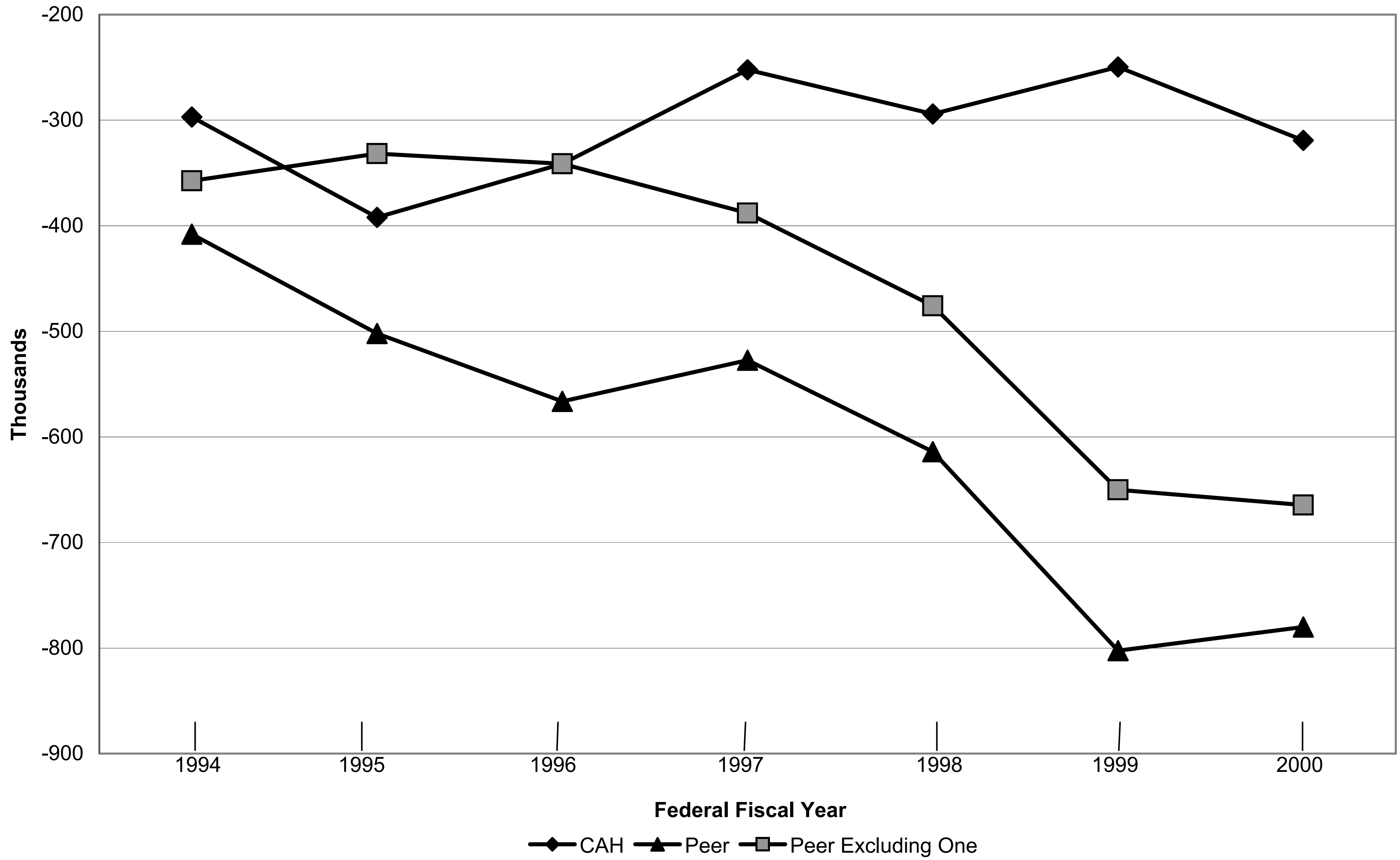


Exhibit 1. Average Excess of Revenues Over Expenses
-200
-300
-400
-500
-600
-700
-800
-900
Thousands
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One

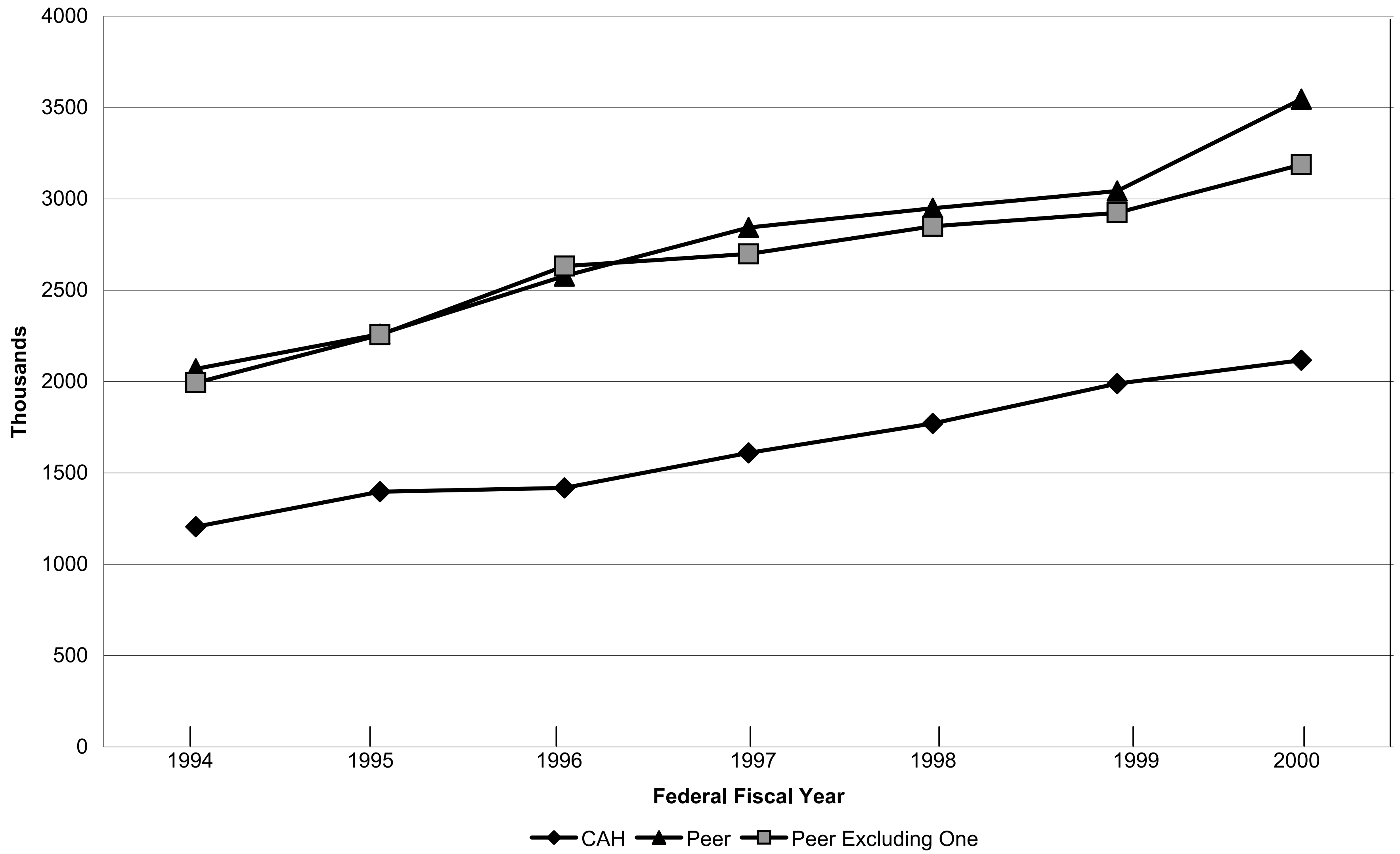


Exhibit 2. Average Gross Patient Service Revenue
4000
3500
3000
2500
2000
1500
1000
500
0
Thousands
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One

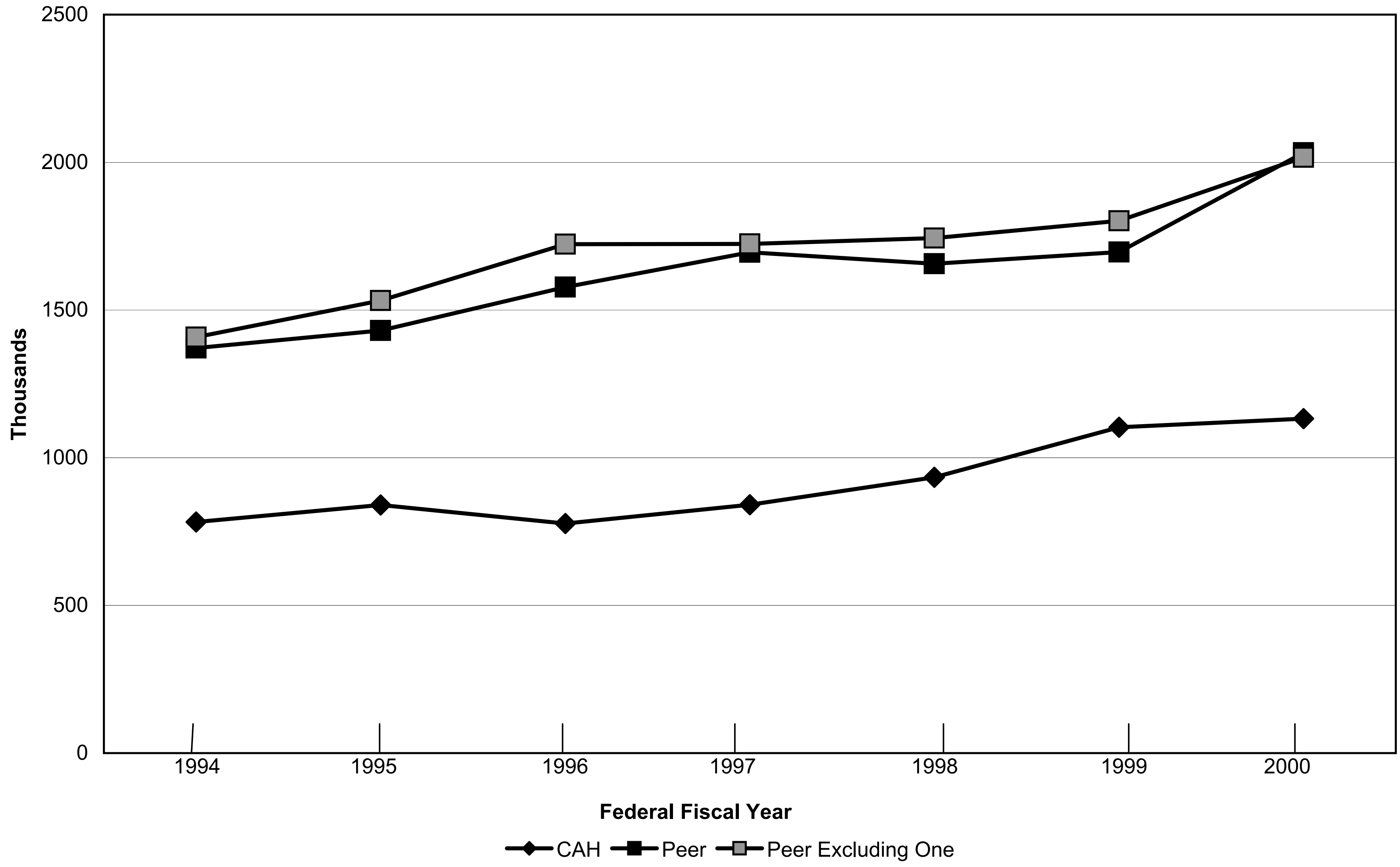
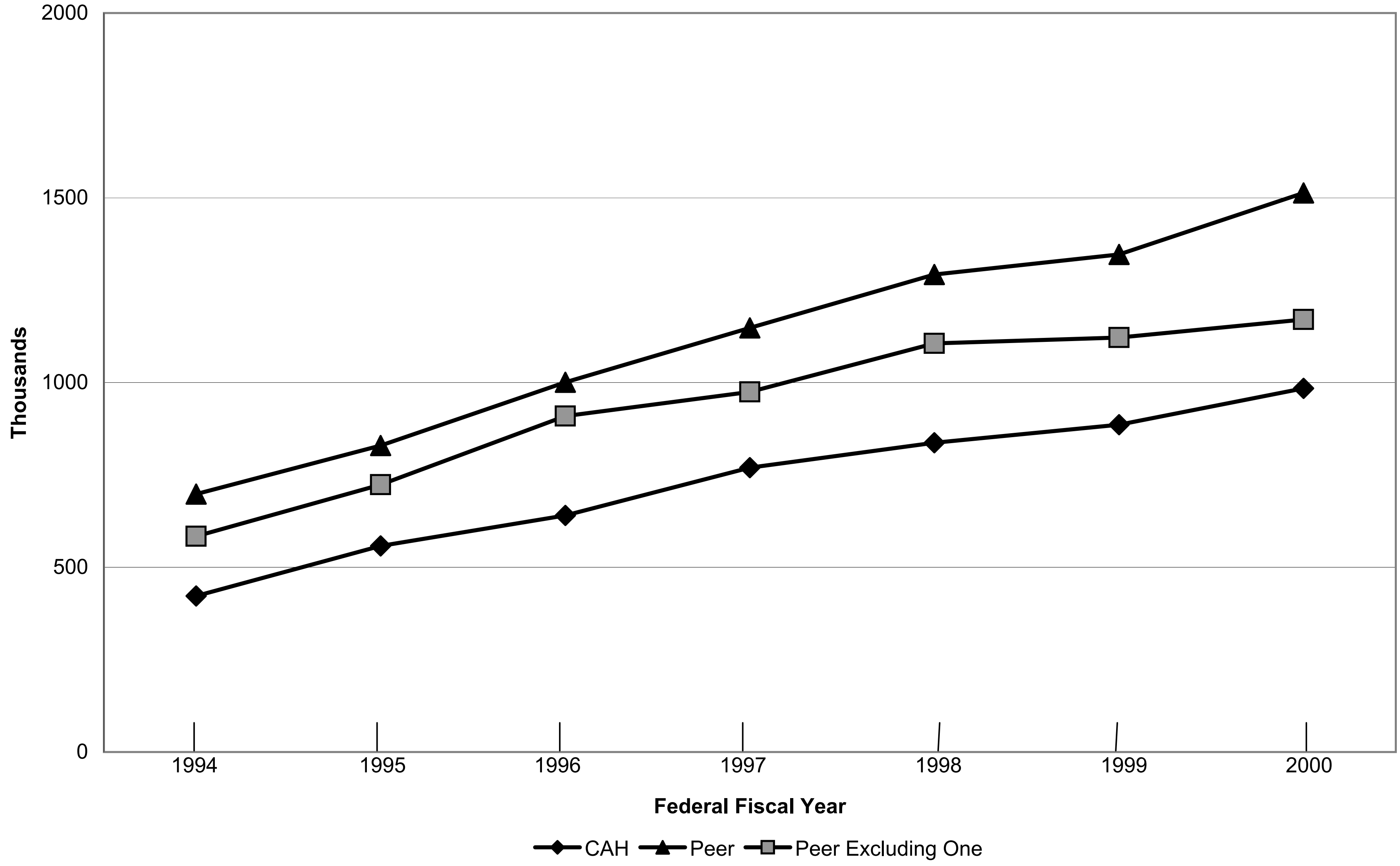
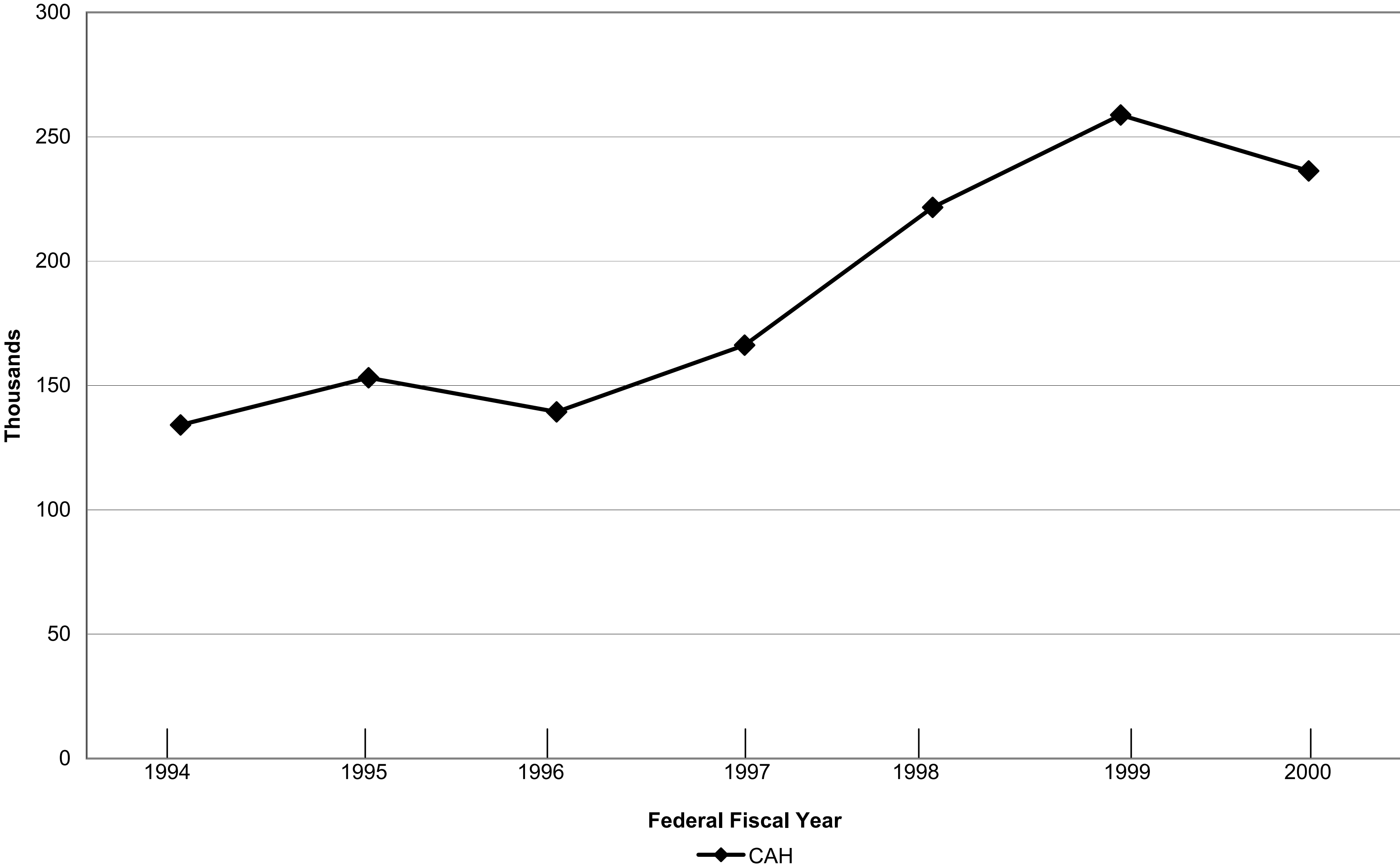


Exhibit 3. Average Inpatient Revenue (Incl. SB & LTC)
Thousands
2500
2000
1500
1000
500
0
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One

## Exhibit 4. Average Outpatient Revenue




Average Swing-Bed Revenue
300
250
200
150
100
50
0
Thousands
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH

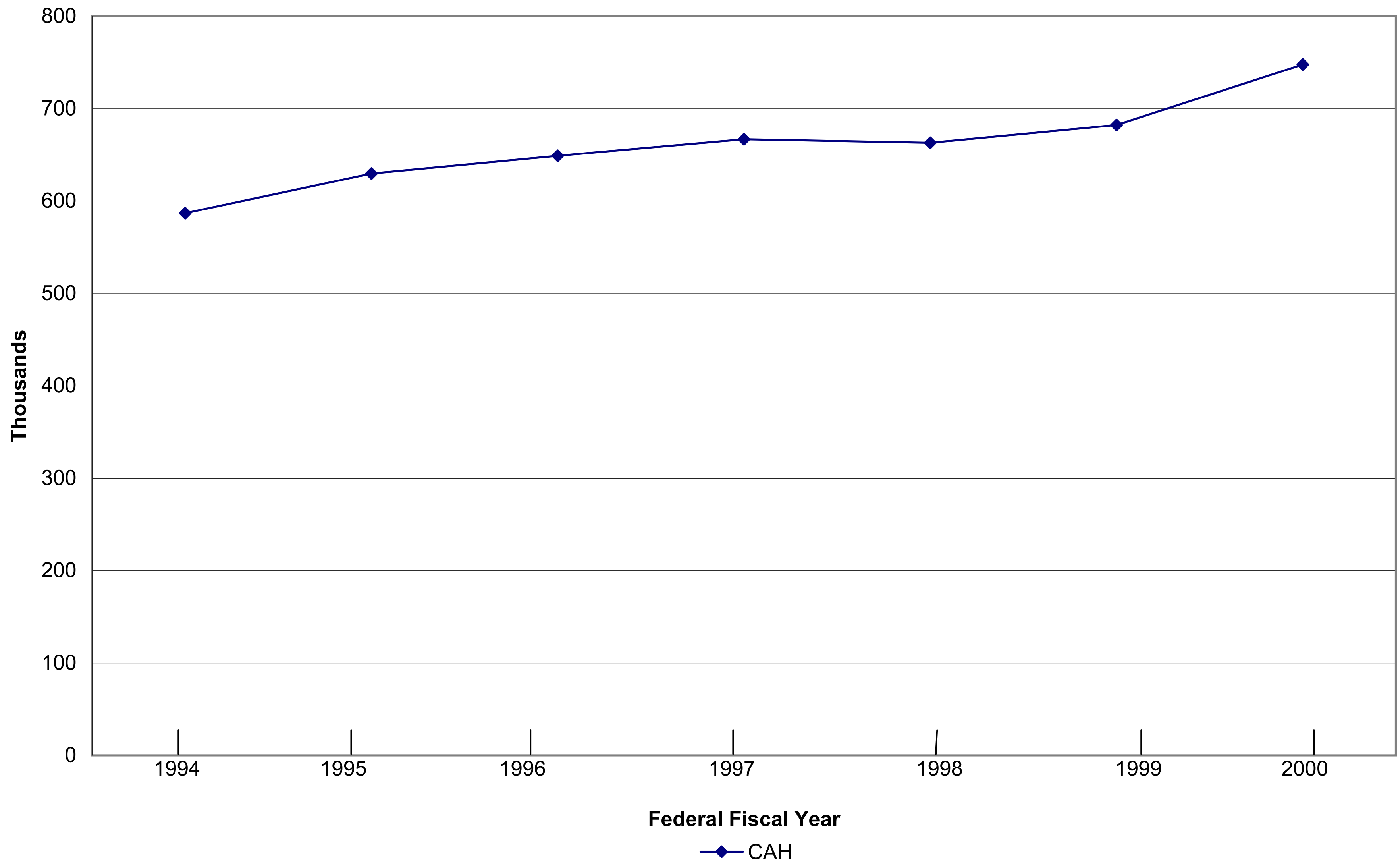


Exhibit 6. Average Long Term Care Revenue
800
700
600
500
400
300
200
100
0
Thousands
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH

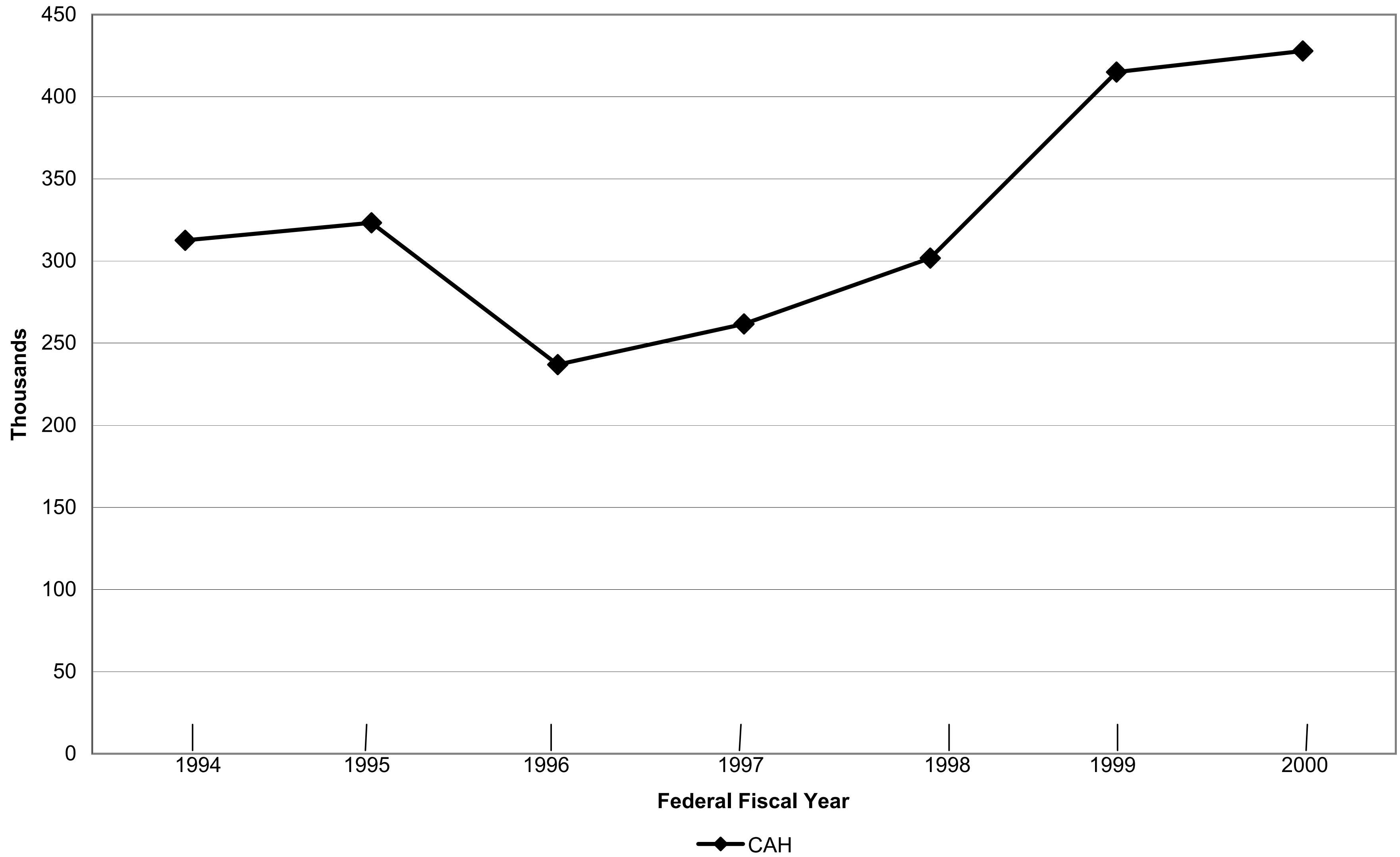
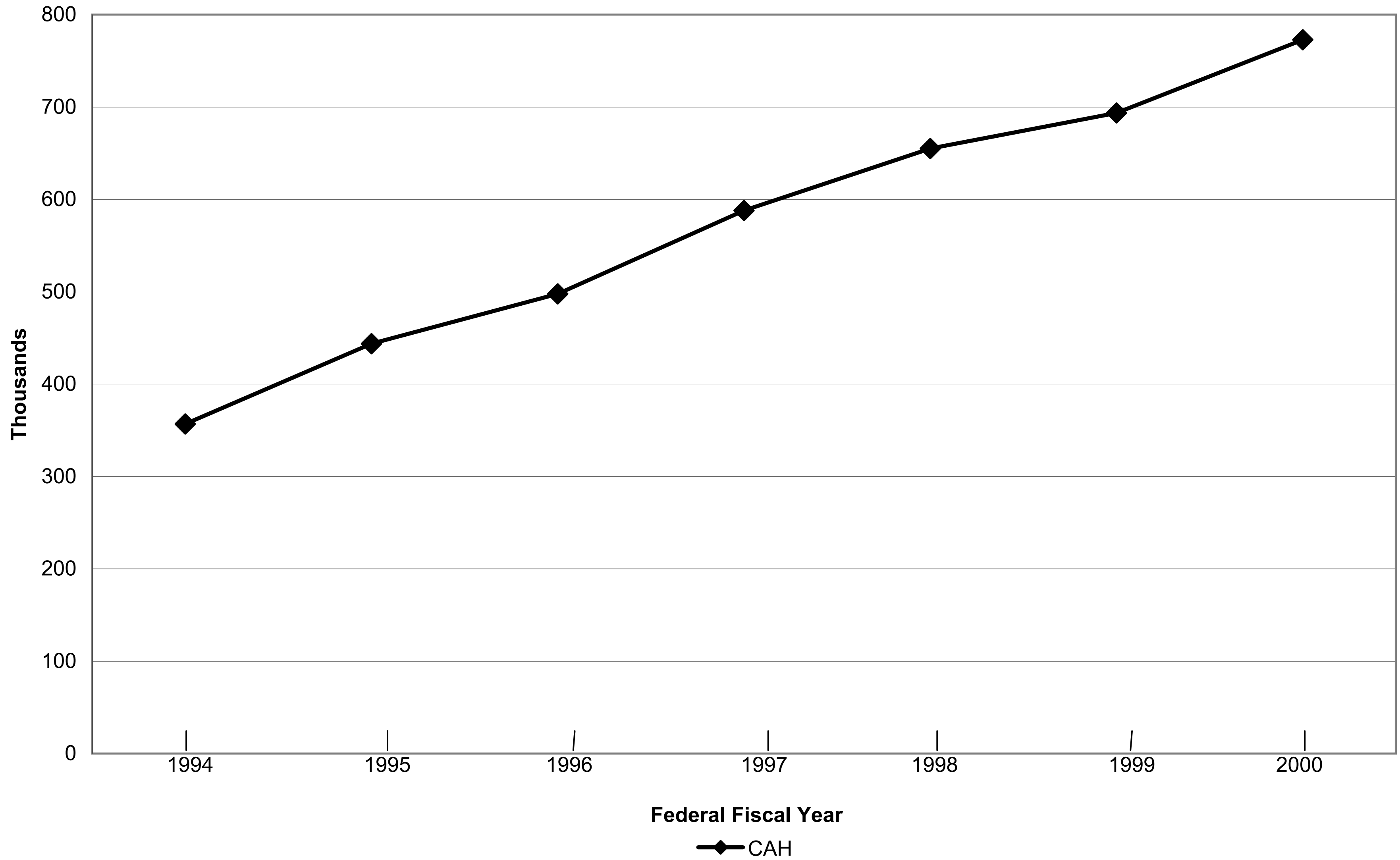


Exhibit 7. Average Acute Inpatient Revenue Excluding Clinic
450
400
350
300
250
200
150
100
50
0
Thousands
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH

**Exhibit 8. Average Outpatient Revenue Excluding Clinic**



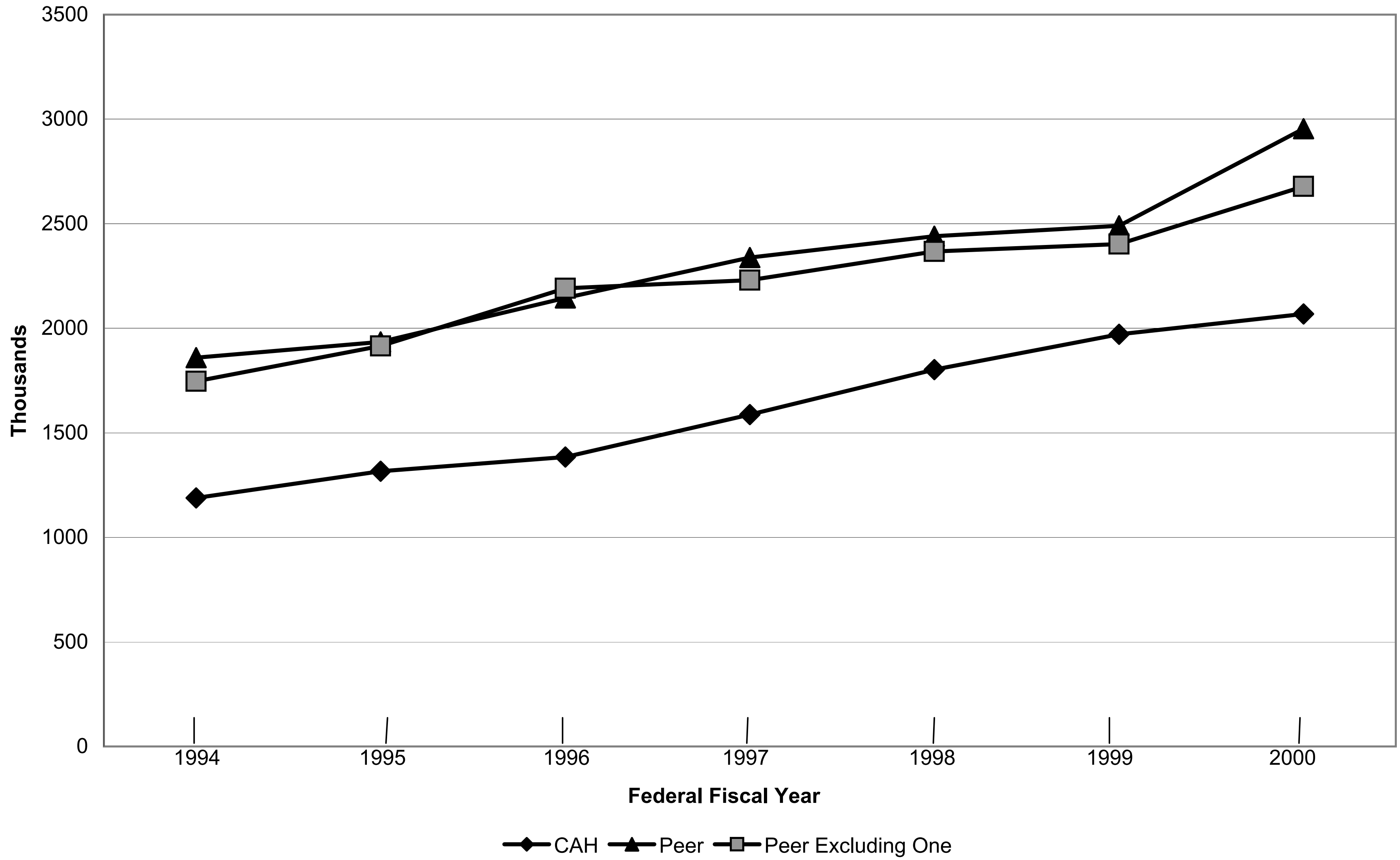


Exhibit 9. Average Net Patient Service Revenue
3500
3000
2500
2000
1500
1000
500
0
Thousands
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One

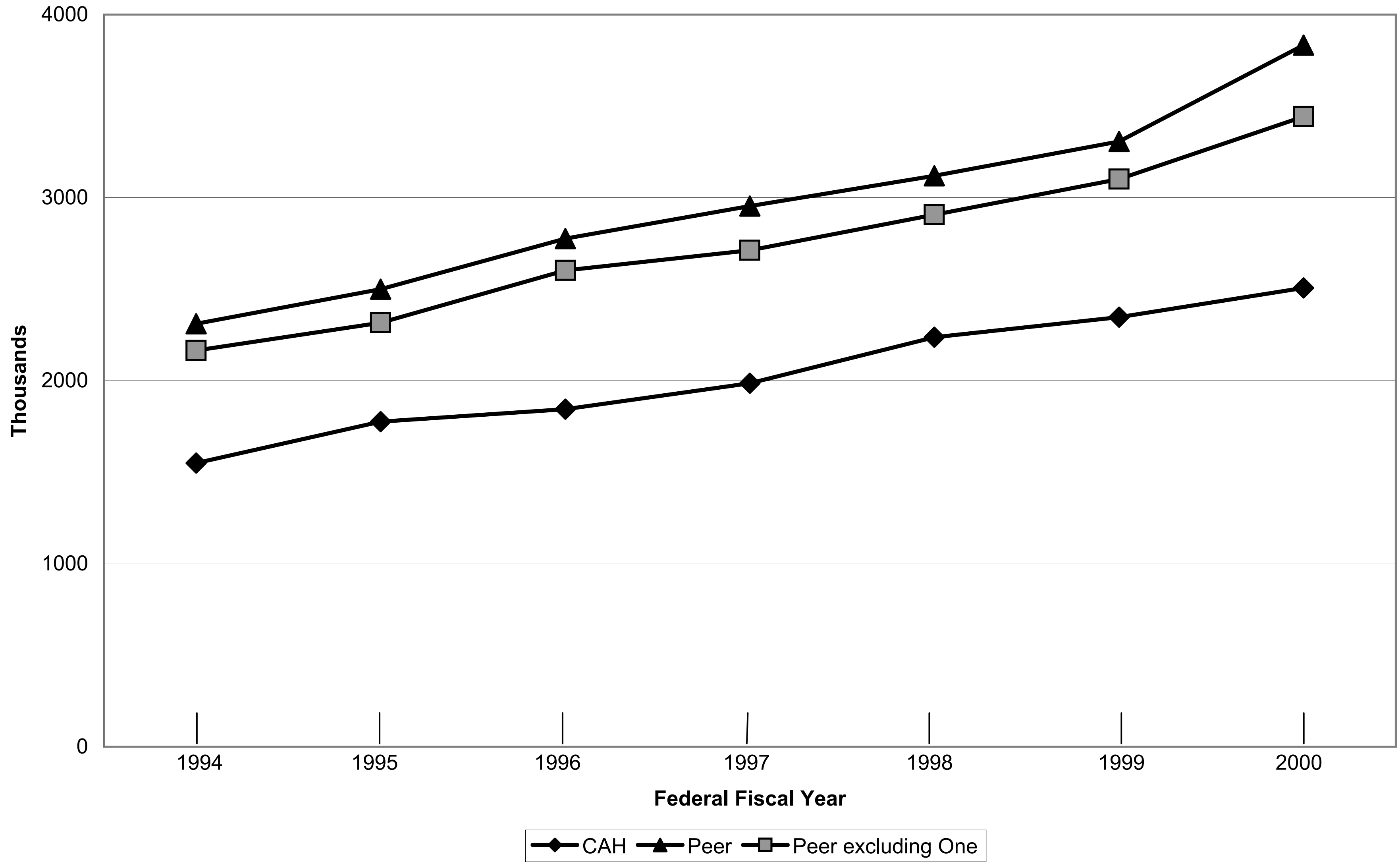


Exhibit 10. Average Total Operating Expenses
Thousands
4000
3000
2000
1000
0
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer excluding One

## Exhibit 11. Average Salary Expense Excluding Clinic

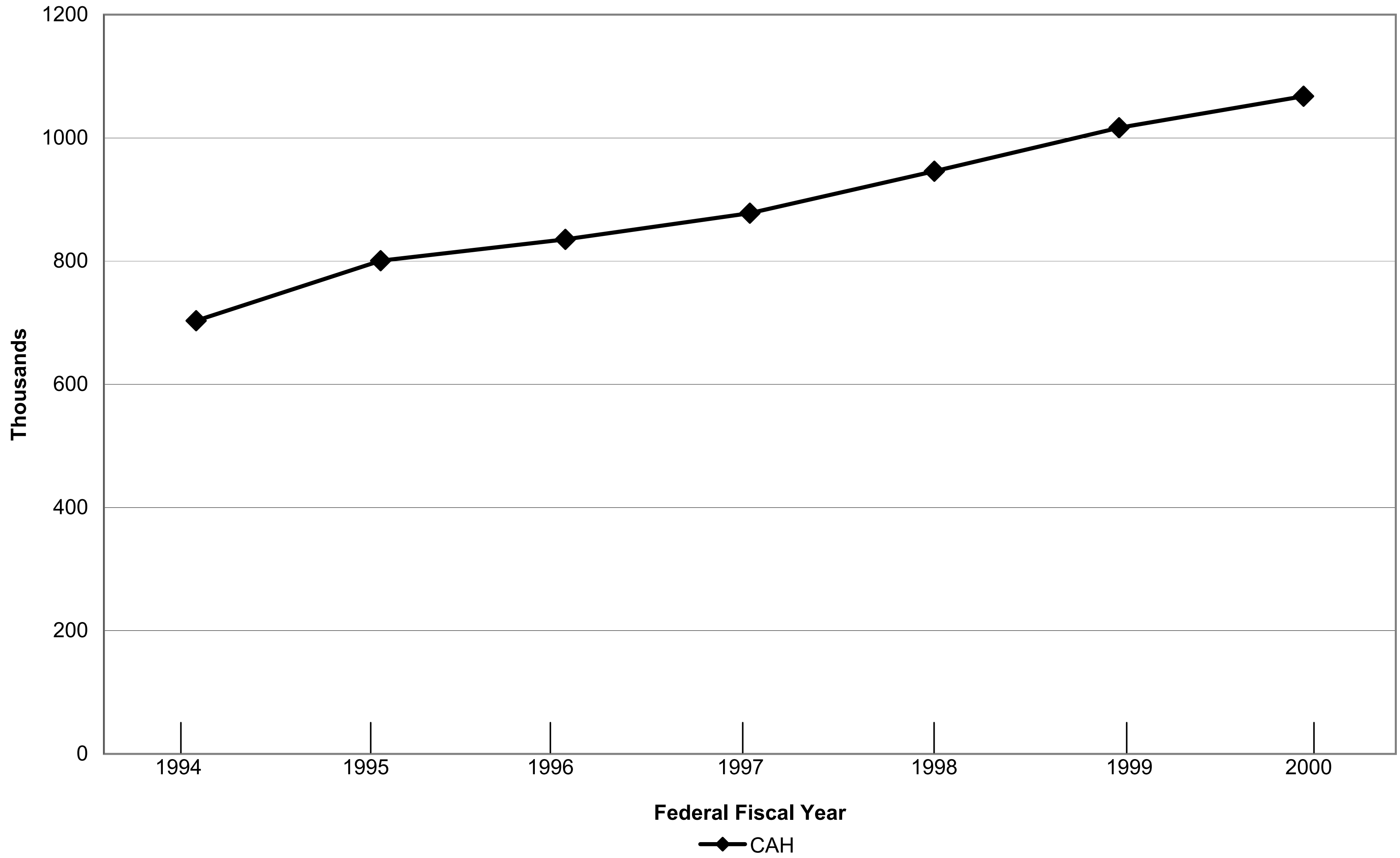
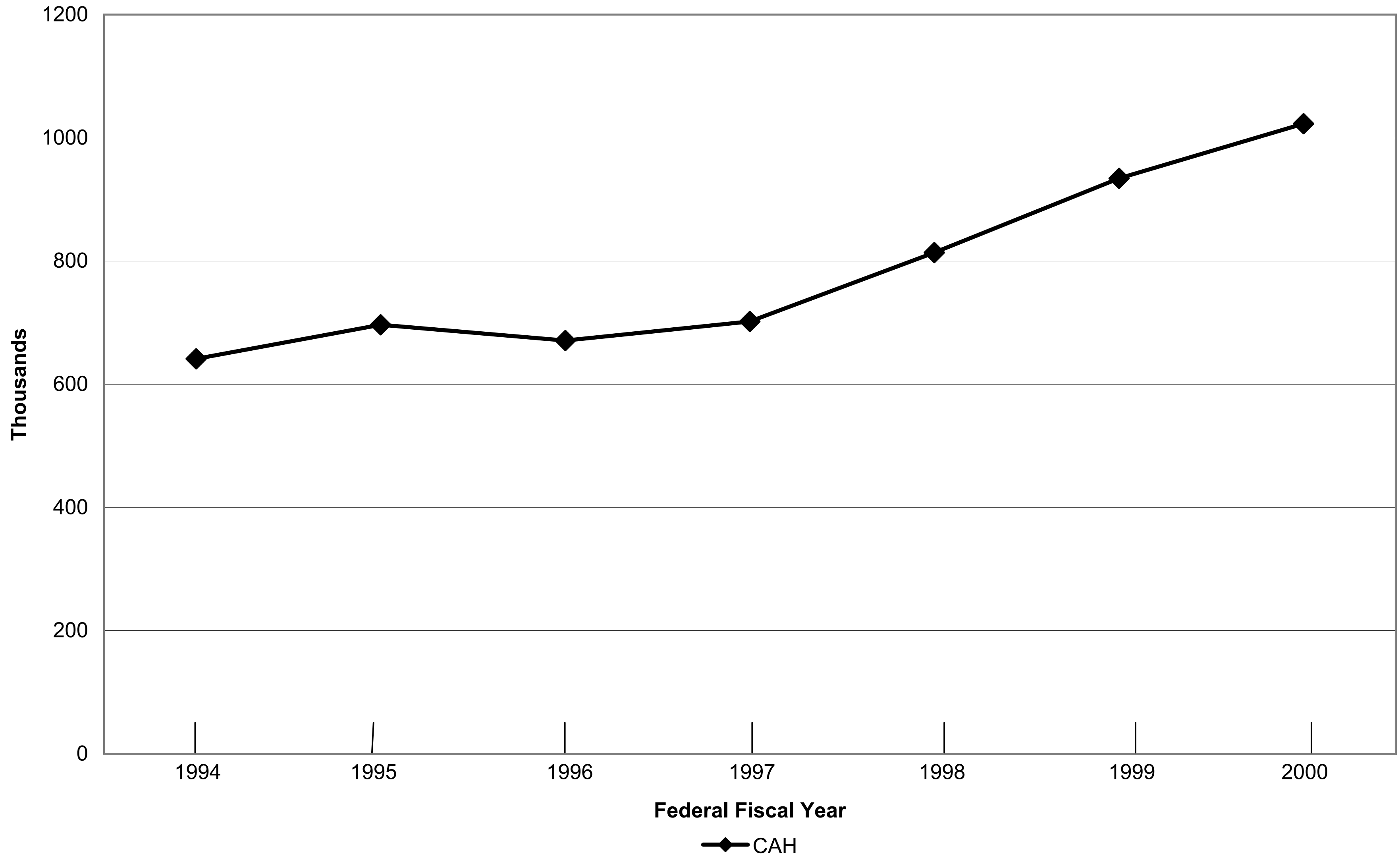


Exhibit 12.  Average Supplies & Other Expense Excluding Clinic



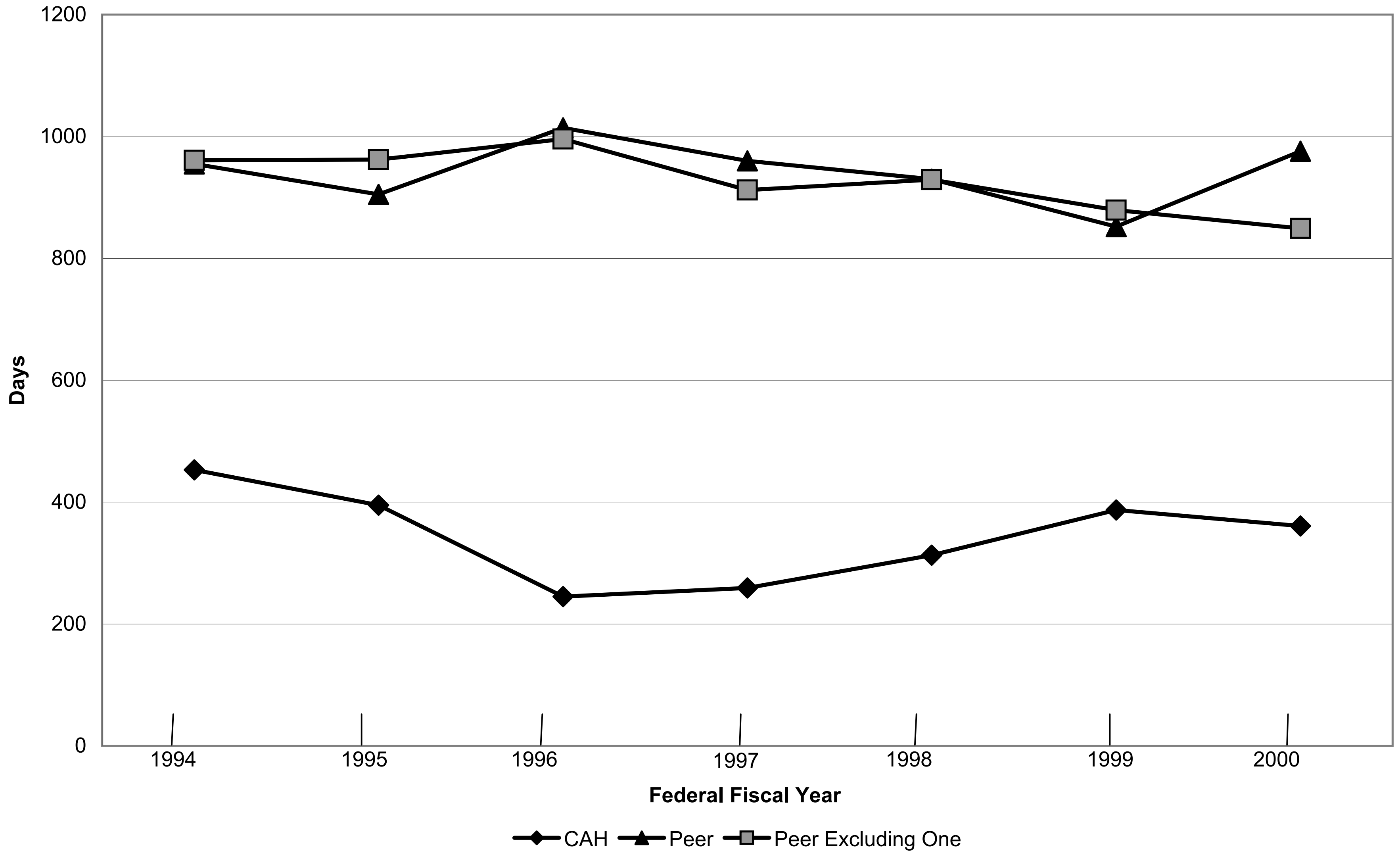


Exhibit 13. Average Adult and Ped Days
1200
1000
800
600
400
200
0
Days
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One

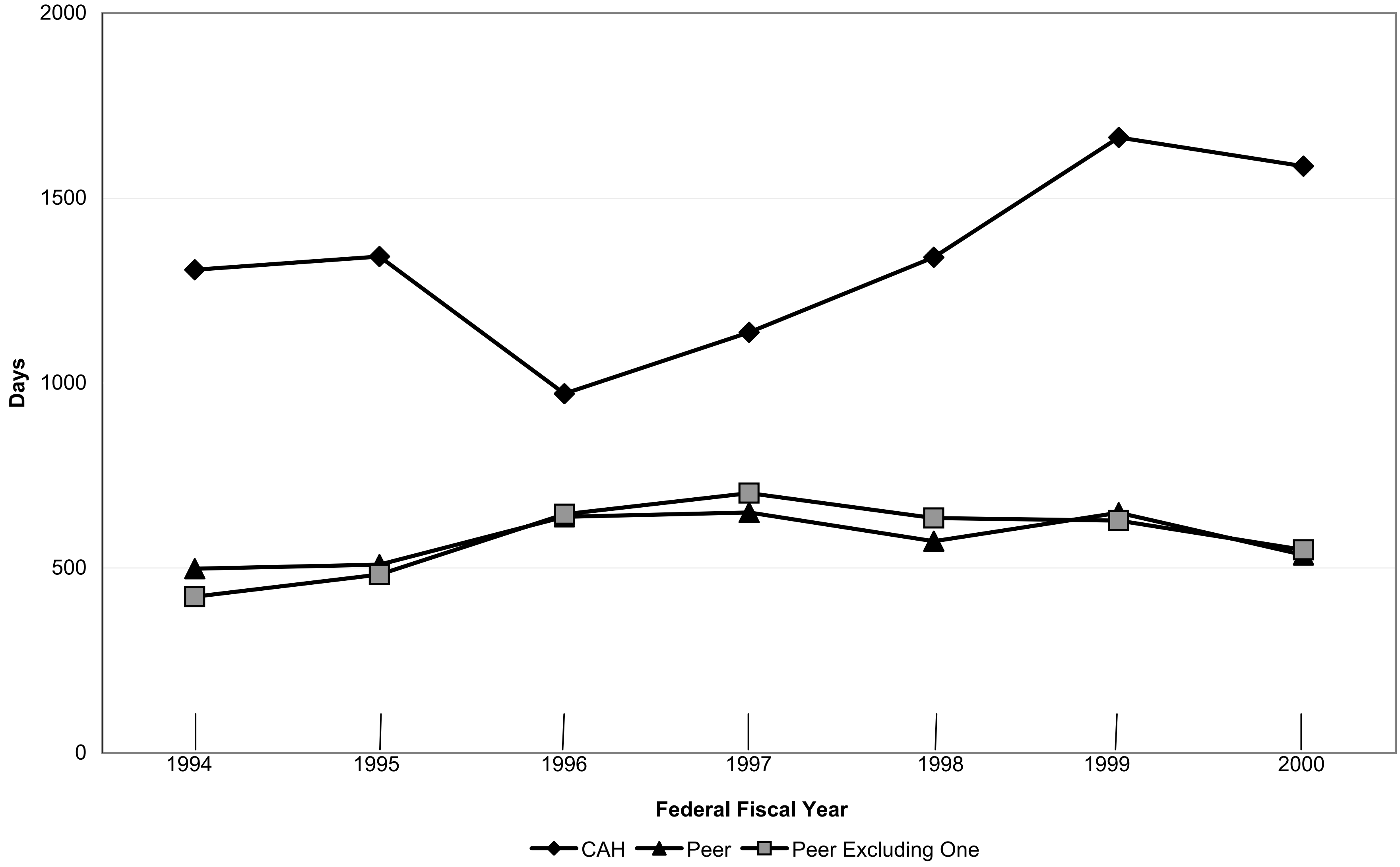


Exhibit 14. Average Swing-Bed SNF and NF Days
2000
1500
1000
500
0
Days
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One

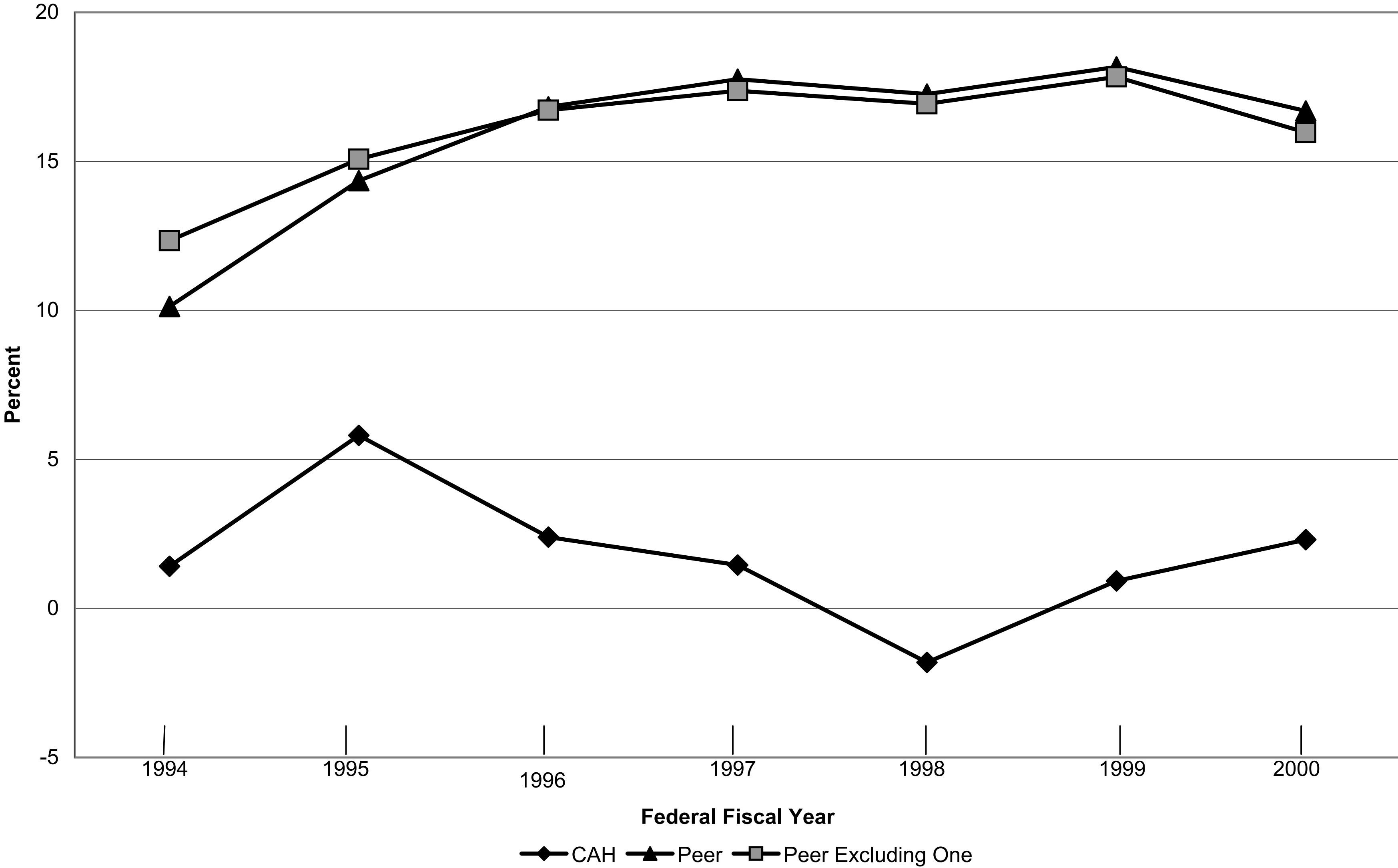


Exhibit 15. Contractual Adjustments & Discounts as a % of Gross Patient Service Revenue
20
15
10
5
0
-5
Percent
1994
1995
1996
1997
1998
1999
2000
Federal Fiscal Year
CAH
Peer
Peer Excluding One