Department of Veterans Affairs

# Office of Inspector General

## AUDIT OF VETERANS HEALTH ADMINISTRATION MEDICAL CARE USAGE PATTERNS AND AVAILABILITY OF RESOURCES

***The audit confirmed that historical funding inequities existed among VHA facilities and that VHA is taking action to correct the inequities.***

**Report No. 8R4-A01-048**
**Date: December 31, 1997**

**Office of Inspector General**
**Washington DC 20420**

**DEPARTMENT OF VETERANS AFFAIRS**
Office of Inspector General
Washington DC 20420

**Memorandum to the Under Secretary for Health (10)**

**Audit of Veterans Health Administration Medical Care Usage Patterns and Availability of Resources**

1. The Office of Inspector General audited the Veterans Health Administration's (VHA) medical care usage patterns and availability of resources. The purpose of the audit was to identify and display historical expenditures, and historical and projected workload demand for VHA facilities and Veterans Integrated Service Networks (VISNs) to show patterns of distribution of resources compared to demand. The audit also evaluated the potential usefulness of automated management information systems under development in helping managers control costs. The scope of the audit included historical VHA workload and expenditures from Fiscal Year 1992 through Fiscal Year 1995 and projected workload for Fiscal Years 1998, 2000, and 2005.

2. During the course of the audit VHA established the VISNs and implemented the Veterans Equitable Resource Allocation System (VERA), and legislation was passed that delineated new veteran eligibility requirements. As a result, the report of audit does not contain any recommendations because our analysis of VHA's data supports the actions taken by VHA. Our audit work confirms that inequities in resource distribution existed among the 22 VISNs that provide medical care to eligible veterans. Some VISNs received resources in greater proportion to their workload than others. These resource inequities were created over time due to resource distribution systems that did not adequately respond to changing veteran demographics. VHA is appropriately responding to resource allocation inequities by de-centralizing resource distribution authority to Network Directors, by initiating use of a new resource allocation system, and by developing automated management information systems which should help control costs.

3. In order to maintain an effective and efficient medical care program to meet the health care needs of its beneficiaries, VHA needs to be able to move resources to those facilities and geographic regions where workload demands them. We believe that VHA's introduction of VERA, a new resource distribution system, will help correct historical funding inequities created by changing demographics of America's eligible veterans. Data presented in the appendices to this report provides support for VHA top management's ongoing actions to reallocate funding in accordance with shifting

workload. VHA's resource allocation system, VERA, appropriately provides VHA with an equitable system for distribution of scarce medical resources. In addition, the appendices to the report present the types of analyses that are available to VHA managers from current VHA data systems, and our indicated actions are suggestions of the types of decisions that can result from the data analysis.

For the Assistant Inspector General for Auditing

*(Original signed by:)*
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# RESULTS

## 1. VHA Is Responding Appropriately to Resource Distribution Inequities Created by Changing Veteran Demographics

We support ongoing actions by Veterans Health Administration (VHA) top management to re-allocate health care resources. The changing demographics of the Department of Veterans Affairs (VA) patient constituency and changes in medical care treatment methods have created inequities in the distribution of medical care resources among VA facilities and regions of the country. VA's patient population is getting older, declining in numbers overall, and moving. Trends in medical care delivery methods are placing greater emphasis on outpatient care rather than on traditional inpatient care. Our audit confirmed that, in the past, resource allocations among medical facilities and geographic regions, and between outpatient and inpatient programs, did not keep pace with the need to allocate resources based on equity of access. However, ongoing management actions should address this situation.

In the past, an inability to effectively match increasingly scarce resources with those facilities, regions, and treatment modalities that demonstrated the most demand adversely impacted VA's ability to serve its total clientele. To respond appropriately to changing demographics, VHA officials need to be able to shift resources easily to facilities, regions, and modalities of care that require them. VHA management also needs the information systems necessary to make fair and responsible decisions on such resource shifts.

This is particularly important now that VHA has decentralized much decision making authority to 22 medical care networks, called Veterans Integrated Service Networks (VISNs). VHA officials need to make resourcing decisions affecting the efficiency and effectiveness of the various VISNs, and Network Directors need to make corresponding decisions affecting the efficiency and effectiveness of the facilities within their jurisdictions. Both VHA headquarters officials and Network Directors need specialized and reliable information to ensure the most effective distribution of VA's limited resources.

We analyzed workload and resourcing trends in VA's health care system from 1992 through 1995, and projected workload trends to the year 2005. Based on these analyses, we confirmed that, through 1995, resources available to many facilities (and their subsequent respective VISNs) were unequal to workload. We also confirmed that, through at least 2005, more resources will need to be provided to outpatient care and fewer resources will need to be provided to inpatient care.

These findings affirm conclusions already drawn by VHA officials, and we fully support efforts by these officials to distribute resources in VA's system of health care, to ensure that all veterans have equal access to VA care.

The Health Care Demands of VA's Patient Population Are Changing

Studies performed by VHA, the Office of Inspector General (OIG), and the General Accounting Office (GAO) have shown that:

- VA's veteran patients, as a group, are getting older and are declining in numbers overall.

- Both the health care industry, in general, and VA, in particular, are relying ever more heavily on outpatient treatment modalities of care, instead of traditional inpatient care.

- Veterans, like many other Americans over the last several decades, have steadily migrated to southeastern and southwestern states.

VA's increasingly aging clientele is creating a new balance between acute care needs and chronic, long term care needs. At the same time, VA's overall patient base is shrinking. However, because the decline in workload is not uniform nationwide, regional resource disparities have been created. In addition, although trends in VA have shown movement toward increased use of outpatient care, eligibility rules prevented VA from following this trend to the maximum extent possible until very recently. The recent expansion of veteran eligibility for outpatient care will likely result in increases in outpatient demand and concomitant increases in outpatient resource requirements.

Complicating and compounding these trends has been the veteran migration from the northeast and midwest to the south and west. In a February 1996 report, GAO noted that, "While considerable numbers of veterans have migrated to southeastern and southwestern states, there was little shift in VA resources. As a result, facilities mainly in the eastern states were more likely to have adequate resources to treat all veterans seeking care than other facilities."

Reviews of VA financial data show that resource allocation trends have not reflected patient migration trends. VA medical facilities (or the networks to which they belong) were, until very recently, funded on a largely incremental basis, as if their workload were still at levels experienced before demographic and treatment trends demanded fundamental shifts in resource allocations. As a result of historic funding patterns, facilities in some areas of the country were increasingly less able to meet growing patient demand due to resource limitations.

## VHA Officials Have Recognized the Need To Equalize Resource Allocations

VHA top management has been aware of the demographic trends for many years; and in the last few years, significant actions have been taken to address them. Field medical facilities were divided into the 22 VISNs. Resource allocation systems, designed to reduce historical funding inequities, were devised and partially implemented in many instances.

### *The VISNs*

The 173 medical facilities were organized into 22 VISNs in 1995. The Directors of these networks have substantial authority to move resources among the facilities within their jurisdictions to meet local demands for services or to ameliorate funding inequities.

### *Resource Allocation Systems*

The first attempt at reforming how VHA funded medical centers was the Resource Allocation Methodology (RAM) started in 1985. This system was not successful and, in 1990, VHA officials initiated use of a capitation based system designed to correct historical funding imbalances. This capitation based system, with refinements, led to the establishment in Fiscal Year 1994 of the Resource Planning and Management (RPM) allocation process. In theory RPM should have resulted in funds being shifted from the less efficient facilities and networks to those of greater efficiency. However, RPM's success was limited due to its complexity and a slow phase-in approach.

Before RPM's full potential for equalizing resources could be realized, events outside VA demanded a change. VA's overall funding levels became so restrictive by Fiscal Year 1997, that a departure from RPM's slow phase-in became necessary. In addition, RPM's complexity suggested that a change to a different allocation system was needed.

As a result of Congressional legislation, VHA officials introduced the Veterans Equitable Resource Allocation (VERA) system in mid-Fiscal Year 1997 to replace RPM. Like RPM, VERA is a capitation-based funding system, *i.e.*, it is based on the actual patients served. The most significant feature of VERA is its use of national per-patient cost averages divided into only two patient classes, "basic care" and "special care" patients. VERA makes no funding distinction between inpatient care and outpatient care. Some allowances are made for regional labor costs, physical plant circumstances, and a few other factors. While it is too soon to judge the success of VERA, if implemented without inordinate exceptions or modifications, it should help solve many of the funding inequities that have developed over time.

*Information Systems*

In addition to changing funding mechanisms for facilities and networks to help restore some balance between workload and resources, VHA has also made progress toward improving the information systems and analytical tools that are used in decision making processes at local and network levels. The Decision Support System[1] (DSS) in particular should, if successfully implemented, help local and network managers contain costs. As of October 1997, DSS was initially implemented at all medical centers,[2] although refinements will continue for several years.

DSS is designed to allow managers to identify ideal treatment pathways based on diagnosis, care giver, modality of care, costs, outcome, and other factors. It can identify efficient clinical programs and inefficient ones. It can be used by managers for daily clinical decision making as well as for long term policy planning. It will allow local and network managers to better identify and respond to changes in health care delivery and resource allocations. It should complement implementation of VERA.

## Conclusion

Significant changes are occurring in VA's medical patient base, in the way VA treats these patients, and in the way VA medical facilities are funded. The efficient and effective management of VA medical care programs at logistically appropriate medical facilities is essential to ensuring that the VA health care system remains viable and competitive in an era of decreasing resources and increasing competition for patient workload and market share.

In order for VA to maintain an effective and efficient medical care program for meeting the needs of its constituency, VA needs the capability to shift resources to those geographic locales and to those programs where workload demands it. We believe that VHA's introduction of the VERA resource allocation system in 1997 will significantly help correct historical funding inequities created by the changing demographics of America's eligible veterans. VHA's development of information systems should also help managers contain costs.

The data presented in the appendices to this report provides support to VHA top management's funding decisions necessitated by veteran demographic changes. The appendices to this report are provided for management information and contain several

[1] *The official title of this system in VA is the "Decision Support System." However, this phrase is also the generic name applied to any type of automated management information system that supports management decision making processes.*

[2] *As of November 1997, the last 54 sites that came on line most recently were in varying degrees of implementation.*

suggestions for "indicated actions" based on our analysis of the specific and relevant data.

**For More Information**

- *Further discussion of VHA's efforts to modify resource allocation methods and data systems may be found in Appendix III.*

- *Further discussion of the changing demographic and workload demands on VHA's health care delivery system may be found in Appendix IV.*

- *Further discussion and graphic illustrations of the changing demographics, workload demands, and resource allocations for VHA's health care delivery system may be found in Appendix V. This appendix also contains various proposals for "indicated actions" dealing with specific issues or locations.*

# OBJECTIVES, SCOPE, AND METHODOLOGY

## Objectives

The purpose of this audit was to identify and display historical expenditures and historical and projected workload demand for VHA facilities and VISNs. This was done in order to: assist VHA officials in making resource reallocation decisions for VISNs and for medical facilities within VISNs; and, provide suggested data analysis that will help officials subsequently measure the results of their decisions.

## Scope and Methodology

The VA Office of Inspector General (OIG) reviewed VHA utilization patterns, resource allocations, and supporting information systems.

The scope of the audit was limited to reviews of workload and cost data for Fiscal Years 1992 through 1995. Workload data was also projected to Fiscal Years 1998, 2000, and 2005. VA data systems used to perform this audit are:

- Integrated Planning Model (IPM)[3]
- Cost Distribution Report (CDR), RCS 10-0141
- Patient Treatment File (PTF), as used in the IPM
- Outpatient File (OPF), as used in the IPM

We arrayed medical care workload and cost data for VHA as a whole, for each VISN, and for each medical care facility[4] within each VISN. In general, we did not attempt any microanalysis of data, *i.e.*, we did not perform any analysis of medical care programs within facilities below the level of inpatient and outpatient components. We also reviewed reports related to this topic issued by the National Center for Veteran Analysis and Statistics, other relevant VHA elements, and GAO.

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[3] *The 1996 version of the IPM used for this report was not beta tested (i.e. an intermediate step in ADP applications development between "pilot test" and final version) due to time constraints imposed by the reorganization of VHA. It is noted that due to these constraints, this is the version that VA Planning Systems Support Group distributed to VHA, VISN, and medical center management for planning and decision making purposes.*

[4] *These facilities included medical centers, satellite outpatient clinics, independent outpatient clinics, and outreach centers that existed during the time periods covered by the data. Except where noted, data relating to satellite outpatient clinics and outreach centers were combined with parent facility data. We did not include workload and cost data relevant to inpatient activities at domiciliaries, independent or otherwise.*

The audit examined existing and developmental information systems, monitors, and analytical tools to determine if they were adequate to assist local, VISN, and VHA management in making resourcing decisions commensurate with present and projected workload demands. These included:

- Resource Allocation Methodology (RAM) system
- Resource Planning and Management (RPM) system
- Veterans Equitable Resource Allocation (VERA) system
- Decision Support System (DSS)

We did not perform detailed verification of data included in any of the automated systems employed in this audit. However, nothing came to our attention to show that the data in these systems was not sufficiently reliable for the limited purposes and broad analyses for which it was used in this audit.

With the one exception of verifying data in automated systems, the audit was conducted in accordance with generally accepted Government auditing standards and consisted of such tests as considered necessary under the circumstances.

# BACKGROUND

In Fiscal Year 1997, VA will spend about $17 billion to deliver health care to America's eligible veterans. The demographics of VHA's patient population base have changed dramatically in recent years and continue to change rapidly. Demographic studies show that VA's patient base is aging, declining in numbers overall, and moving. This results in:

- Creating new medical care requirements to the meet the needs of older patients.
- Reducing VA's overall patient constituency nationwide.
- Forcing relocation of resources from some locales to others.

From April 1989 through March 1990, approximately 465,000 veterans died. Demographic studies show that the trend of veteran deaths continues to accelerate, with veteran deaths projected to be 611,00 per year by 2008. In addition, since shortly after World War II, many veterans have migrated to the South and West, along with the general population. This has placed slowly increasing strains on many of the VA facilities in those regions because of the workload gains experienced.

VA has begun to take action to address various issues caused by changing demographics. In 1995, VHA established the 22 VISNs. These networks of medical care facilities will, among other innovative aspects, allow managers to quickly shift resources within a network as patient demand, economy, and other exigencies require. In mid-Fiscal Year 1997, VHA initiated implementation of the VERA capitation funding system which should allow managers to recognize and react to changing national demographics. Lastly, helped by recent changes in medical care eligibility laws, VHA has renewed its movement toward an integrated medical care delivery system[5] and away from the traditional inpatient, hospital-based system. Challenges to fully accomplishing these efforts occur in a fiscal environment that suggests that progressively fewer resources will be available to provide health care to veterans.

In light of the substantial changes now underway in age, number, and location of VA patients, it is vital that decision makers in VHA have information that will allow them to match VA's resources with the demand for those resources. Providing adequate access to care within constrained budgets requires informed decisions involving patient demand at

[5] *The net effect of a change to an "integrated system" is a substantially greater reliance on outpatient care rather than inpatient care. Outpatient care becomes the health care delivery modality of first choice.*

both individual facilities and within VISNs. VHA needs to identify those areas of health care delivery that will require resource realignments to meet the needs of current and future VA patients.

# DETAILS OF AUDIT

## The Effectiveness of Resource Allocation Methods and Cost Information Systems Are Improving

In response to changing demographics among its patient population base, VA has begun using resource distribution methods which are based on actual workload demand rather than historical funding demand. Also, under development, are information systems which are intended to allow local and network managers to identify efficiencies among their programs and procedures and thus to react to changing resource availability.

Resource Allocation Methodologies

In Fiscal Year 1985, VHA instituted the Resource Allocation Methodology (RAM). RAM was based on the actual care provided on an episode-by-episode basis, and tended to reward medical facilities for reliance on the more complex modes of care. RAM did not succeed because it proved to be a dis-incentive to the use of cost effective modalities of care and because it was vulnerable to manipulation.

In Fiscal Year 1994, VHA officials initiated use of the Resource Planning and Management (RPM) medical facility resource allocation process. Unlike RAM, RPM was a patient-specific, or capitation-based, allocation system by which facilities and, later, networks were funded based on historical and projected workloads with allowances for dissimilarities among facilities. In theory, RPM should have resulted in funds being shifted from the less efficient networks and facilities to those of greater efficiency. However, because a strict application of RPM would have generated radical funding shifts beyond the capability of some medical facilities to withstand, RPM was implemented in phases.

Ultimately, RPM resulted in the movement of only a relatively few dollars. GAO estimated in a February 1996[6] report that in the 1995 budget cycle, the maximum real decrease in budget allocation to any one facility was 1 percent. Although RPM actually called for shifts in Fiscal Year 1996 totaling about $150 million, actual shifts amounted to only $23 million, out of a $17 billion medical care budget.

[6] Facilities' Resource Allocations Could Be More Equitable, *GAO/HEHS-96-48, February 1996.*

Veterans Equitable Resource Allocation Model (VERA)

Before RPM's full potential for equalizing resources could be realized, however, events outside VA demanded a change. Public Law 104-204 (VA's Fiscal Year 1997 appropriations law) contained a provision requiring VA to develop a plan to allocate funds and personnel in a way that ensures that eligible veterans have similar access to VA care regardless of where they reside. To fulfill this requirement VHA instituted the VERA model to replace RPM in April 1997.

Like RPM, VERA is a capitation funding system and is based on the actual patients served, projected into subsequent funding years. The most significant feature of VERA is that funding to the networks is based on national cost of care averages, without regard to historical local and regional funding patterns. Because resource allocations are based on averages, no funding distinctions are made for modalities of care, *e.g.*, inpatient versus outpatient. However, the model does recognize certain differences that exist among networks. It makes funding allowances for research, education, equipment needs, physical plant maintenance needs, and for patients who routinely seek care in more than one VISN.

The bulk of resource allocations will be made on the workload represented by two patient groups, "basic care" patients and "special care" patients.[7] Under VERA, patients in the first group are those having what would be considered relatively routine health care needs. The second and more expensive to care for group consists of special needs patients, such as spinal cord injury, advanced AIDS, and blind rehabilitation patients, among others. For Fiscal Year 1997, the basic care funding level is $2,596 per unique patient. The special care funding level is $35,707 per unique patient. That is to say that, based on national cost of care averages for each group, each VISN will receive funding commensurate with the number of patients in each group under care within the VISN, with allowances for various adjustments.

Current plans call for VERA to be phased in over a 3-year period, with no network losing more than 5 percent of its Fiscal Year 1996 funding in the first year. Without a phase-in period, 7 networks (VISNs 1, 2, 3, 4, 11, 12, and 14) would have lost a total of $331 million in Fiscal Year 1997 for redistribution to the remaining 15 networks. However, under the phase-in plan, 6 networks (VISNs 1, 2, 3, 11, 12, and 14) will lose a total of only $36 million for redistribution to the remaining 16 networks.

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[7] *Approximately 96 percent of all patients treated by VA fall into the basic care group but consume only about 62 percent of VA's medical care resources. The much smaller special care group, on the other hand, consumes about 38 percent of VA's medical care resources.*

Cost Control at the Local and Network Levels

To help local managers maximize efficiencies, VHA officials have begun implementing the Decision Support System (DSS), an information system that will provide VISN and medical facility managers near real-time clinical cost and outcome information. Decision support systems of this type have been used extensively in the private sector, and VA is using a commercially acquired system that has been modified for VA. DSS has been in development in VA since 1991, and full nationwide implementation is expected during Fiscal Year 1998, although refinements are expected to occur on an ongoing basis indefinitely.

DSS will allow managers to identify ideal treatment pathways based on diagnosis, care giver, modality of care, costs, outcome, and other factors. It can identify efficient clinical programs and inefficient ones. It can be used by managers for clinical decision making, such as development of clinical pathways, as well as for long term policy planning. It will allow managers to better identify, and respond to, changes in health care delivery and resource allocations. It should complement implementation of the VERA process.

However, there currently could be limitations to DSS. While Network Directors may intend to use it to help them allocate funds among their facilities, that will only be effective if DSS is consistently implemented among all medical centers in the network. Implementation of DSS requires staff at each medical facility to develop cost data for all clinical events that are supported by DSS. Our exposure to DSS has demonstrated that some degree of judgment is required to do this, and any differences in implementation methodology, such as might be expected in defining and costing clinical events, could render comparisons among medical centers unreliable. The Under Secretary for Health, in an effort to make DSS as consistent as possible, has asked the OIG to perform an audit of DSS implementation to identify any differences in definition and costing of clinical events.

As a hypothetical example: hospital "A" may estimate staff time devoted to a cardiac catheterization procedure differently than hospital "B." Hospital "A" could, for example, consistently under-estimate prep and clean-up times, thus resulting in a lower per-procedure cost than hospital "B." While either hospital's estimates may result in perfectly adequate cost information for use by that hospital's own staff, the difference in costing methodology could render comparative analysis of the two cardiac catheterization programs unreliable.

DSS program staff informed us that, over time, such differences in costing methodologies should be identified through production of "outlier" data. This would eventually permit Network Directors to take action to make costing methods consistent. In the meantime,

we believe comparative analyses that a Network Director might be inclined to make among facilities within his or her jurisdiction should make use of DSS data with caution. It also should be noted that DSS is designed more to support programmatic decision making, rather than to support clinical decision making on the care of particular patients.

# DETAILS OF AUDIT

## An Analysis of Workload and Resourcing Trends in the VA Health Care System From 1992 to 2005

Limitations of Cost and Workload Data

To identify the distribution of medical care resources in VA, we used cost data from the CDR and workload data obtained from the IPM. While these sources were the best available in VA at the time of the audit and provide a reasonably accurate indication of gross costs and workload, they both have certain limitations which must be considered in interpreting our audit results.

*Cost Distribution Report (CDR) Data*

The CDR is used to form the basis of VA's requests to Congress for annual health care funding and is reasonably accurate for determining a medical facility's overall cost of operations and determining an approximate division of those costs among major operational components (such as inpatient or outpatient care). However, CDR data has frequently been shown, by past OIG audits and in claims made by VHA officials, to be increasingly unreliable as a facility's costs are subdivided into smaller and smaller programmatic pieces.

*Integrated Planning Model (IPM) Data*

The IPM was developed to assist medical facilities in planning their future space and resource needs. It does this by analyzing historical workload and demographic trends and projecting future workload on the basis of those trends.

While the IPM generally has been useful in that regard, both GAO reviews and OIG audits have shown that, in the past, the IPM has tended to overstate the need for inpatient resources and understate the need for outpatient resources. This tendency may be due, at least in part, to changes in medical care philosophy, which of late have increasingly emphasized outpatient care over inpatient care, and which the IPM could not fully consider through historical analysis.

Our analyses, using IPM projections, consistently show an increasing need for outpatient resources and, for the long term, a decreasing need for inpatient resources. This is discussed in greater detail in the following sections of this appendix. Given the IPM's inpatient orientation, we predict that the need for outpatient resources will likely be even

greater than our analyses show and the need for inpatient resources will likely be even less than our analyses show.

Workload and Resourcing Trends in the VA Health Care System

We analyzed workload and resourcing trends in VA's health care system from 1992 through 1995, and projected workload trends to the year 2005. Based on these analyses, we developed two conditions:

- Through 1995, resources available to many facilities, and to the VISNs of which they subsequently became a part, were not in proportion to workload.

- Through about 2005, more resources need to be provided to outpatient care and fewer resources need to be provided to inpatient care.

These conditions confirm VHA's conclusions and we fully support VHA's efforts to rectify the unequal distribution of resources in VA's system of health care. To ensure that all veterans have equal access to VA care, regardless of where they live or what their medical needs may be, VHA officials need to be able to proceed with plans to redistribute VA's increasingly scarce medical care resources.

*Declining Inpatient Workload*

In Fiscal Year 1992, VA's health care system experienced almost 1.3 million episodes of inpatient care. By Fiscal Year 1995, just 3 years later, inpatient episodes had declined to under 1.2 million. Inpatient episodes are further projected to decline to about 1.1 million by Fiscal Year 2005. These declines represent about a 12 percent drop in inpatient workload from Fiscal Year 1992 to Fiscal Year 2005.[8] The declines can be attributed to two factors:

- The nationwide decline in the eligible veteran population. As the graphics in Appendix V show, the decline will be more rapid in some VISNs than in others, caused, at least in part, by historical and present day migration patterns. Barring any large and unexpected increase in the eligible veteran population, these declines will likely accelerate after 2005 as the number of World War II veterans rapidly declines.

- There is also an ongoing shift toward outpatient care instead of inpatient care, mirroring trends in the whole health care industry.

[8] *The actual decline will probably be more than 12 percent, if our estimate of the IPM's limitations are correct.*

Some VISNs have experienced more rapid actual declines in inpatient workload than others. From Fiscal Year 1992 through Fiscal Year 1995, VISN 21 (Northern California and Northern Nevada)[9] experienced an approximate 22 percent decline in inpatient workload. Inpatient workload in VISNs 13 (Minnesota and North and South Dakota) and 22 (Southern California and Southern Nevada) declined roughly 15 percent each. These contrast with an average nationwide decline in inpatient workload of about 7 percent for the period. Inpatient workload actually increased slightly in VISN 5 (Maryland).

Projected declines through Fiscal Year 2005 show a similar, although not identical, pattern. From Fiscal Year 1992 through Fiscal Year 2005, inpatient workload is projected to decline in VISNs 3 (New York City and New Jersey), 21, and 22 from 20 to 25 percent. This compares to the expected national decline of 12 percent, while inpatient workload in VISNs 5 and 20 (Alaska, Idaho, Oregon, and Washington) is projected to increase slightly or remain stable.

*Increasing Outpatient Workload*

Similar to inpatient workload, long term projections for average outpatient workload nationwide also show declines. However, these declines occur later, and short term projections actually show increases in all 22 VISNs.

In Fiscal Year 1992, VA's health care system experienced a little over 23 million outpatient visits. By Fiscal Year 1995, this number had climbed to about 26.6 million visits, a 15 percent increase over Fiscal Year 1992. IPM projections show that outpatient visits will climb to about 27 million by Fiscal Year 1998 and will increase slightly through about Fiscal Year 2000. Only in Fiscal Year 2005 do the projections indicate the first decline in outpatient workload, to about 26.1 million visits.

Driving these increases has been a shift in medical care philosophy. In both the public and private sectors, this shift favors outpatient care over inpatient care wherever medically feasible. In addition, none of the projections beyond Fiscal Year 1995 take into account the recent liberalization of outpatient eligibility rules which, in all likelihood, will cause actual experience to exceed these projections. It is not yet known to what degree the figures will increase, nor is it known how far into the future any eventual declines will begin.

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[9] *The parenthetical references to the geographic locales of the various VISNs in this and subsequent paragraphs are intended to give the reader only a general idea of a VISN's location. In fact, VISN boundaries typically include parts of other neighboring states. See the map on page 0-A-3 of Appendix V for specific information on VISN boundaries.*

As also seen in inpatient workload changes, actual changes in outpatient workload have not been uniform among the 22 VISNs. Some VISNs have experienced more rapid increases than others. From Fiscal Year 1992 through Fiscal Year 1995, VISN 20 experienced an approximate 29 percent increase in outpatient visits. Outpatient visits in VISNs 18 (Arizona, New Mexico, and Western Texas) and 14 (Iowa and Nebraska) both increased about 23 percent. In contrast, outpatient visits increased by less than 10 percent in VISNs 15 (Southern Illinois, Kansas, and Missouri), 19 (Colorado, Montana, Utah, and Wyoming), and 22 during the same period. Projected declines, after the predicted peak year of Fiscal Year 2000, are relatively insignificant in most VISNs through Fiscal Year 2005, and may occur later given the recent liberalization of eligibility rules.

Detailed information on actual and projected workload levels nationwide and for each VISN is reflected in the graphs in Appendix V.

*Workload and Expenditures*

An analysis of historical workload and historical expenditures shows that, in recent years, the distribution of workload and resources among VISNs has not been in proportion. For example, in Fiscal Year 1995, VISN 3 performed about 5.5 percent of VA's inpatient workload, as measured by the number of episodes of care. However, VISN 3 expended about 7.5 percent of VA's total inpatient resources that year. In a contrary example, in the same year, VISN 15 performed about 5.2 percent of VA's inpatient workload while expending only about 4 percent of VA's inpatient resources. Small differences, such as these, between the percentage of national inpatient workload performed and the percentage of national inpatient resources expended, may seem insignificant. However, just a 1 percent difference in resources represents about $56 million.

The analysis shows that, generalizing, southern and midwestern VISNs essentially subsidized inpatient care for the northeastern VISNs and, to a lesser extent, the western VISNs during Fiscal Year 1995. However, it was also apparent that not every VISN in each of the four regions could be generalized to its respective region. It would be unfair, for example, to characterize VISN 5's workload and expenditures for inpatient care as representative of the other northeastern VISNs.

We performed a similar analysis for outpatient care provided during Fiscal Year 1995. Although similar, the results are not identical. Again, small differences in percentages translate into large dollar impacts. A 1 percent difference in outpatient resource expenditures represents about $31 million.

While the regional aggregations for outpatient care show results similar to those for inpatient care, at the VISN level there were differences between these results and the

results of our analysis of inpatient care. For example, during Fiscal Year 1995, VISN 16 (Oklahoma, Arkansas, Eastern Texas, Louisiana, and Southern Mississippi) performed 8.7 percent of VA's inpatient workload, while expending only 7.5 percent of VA's inpatient resources. However, VISN 16 performed only 7.9 percent of VA's outpatient workload while expending 8.3 percent of VA's outpatient resources.

Of the 18 VISNs that had percentages of expenditures that exceeded their percentages of workload for either inpatient or outpatient care in Fiscal Year 1995, only VISNs 6 (Virginia and North Carolina), 10 (Ohio), and 11 (Eastern Michigan, Indiana, and Southern Illinois) had percentages of inpatient and outpatient expenditures that exceeded both their percentages of inpatient and outpatient workload. Of the 19 VISNs that had percentages of expenditures that were less than their percentages of workload for either inpatient or outpatient care, only VISNs 5, 17 (Central Texas), 18, and 20 had percentages of inpatient and outpatient expenditures that were less than both their percentages of inpatient and outpatient workload. The table on the following page illustrates this.

## Comparison of Inpatient Expenditure and Workload Percentages to Outpatient Expenditure and Workload Percentages for Fiscal Year 1995

| VISN | Percent of *Inpatient* Expenditures Exceeded Percent of Workload? | Percent of *Outpatient* Expenditures Exceeded Percent of Workload? | Both "Yes" | Both "No" |
|---|---|---|---|---|
| 1 | Yes | No | | |
| 2 | Yes | No | | |
| 3 | Yes | No | | |
| 4 | Yes | No | | |
| 5 | No | No | | X |
| 6 | Yes | Yes | X | |
| 7 | No | Yes | | |
| 8 | No | Yes | | |
| 9 | No | Yes | | |
| 10 | Yes | Yes | X | |
| 11 | Yes | Yes | X | |
| 12 | Yes | No | | |
| 13 | No | Yes | | |
| 14 | No | Yes | | |
| 15 | No | Yes | | |
| 16 | No | Yes | | |
| 17 | No | No | | X |
| 18 | No | No | | X |
| 19 | No | Yes | | |
| 20 | No | No | | X |
| 21 | Yes | No | | |
| 22 | Yes | No | | |

It is evident from these analyses that, in general, during Fiscal Year 1995, southern and midwestern VISNs performed a greater percentage of VA's workload while expending a smaller percentage of VA's medical care resources. Generally, the implication of this situation is that, in relation to workload, the VISNs in the southern and midwestern areas of the country were likely to have had relatively fewer funds in recent years, while those in the northeastern and western regions were likely to have had relatively more funds. This conclusion assumes the correctness of a commitment to provide equal access to care for all of America's veterans, regardless of where they live.

Our analyses did not examine why some VISNs experienced percentages of workload lower than their percentages of resource expenditures. We did not, for example, determine the extent of regional salary differences, the cost impact of rural versus urban settings, or the impact of older versus newer facilities. We did not examine the mix of treatment options available in the VISNs or their relative costs, nor did we examine the actual number of unique patients served. Despite these qualifiers on our analyses, our conclusions are consistent with observations made by VHA officials and with our understanding of demographic trends that have been evident for many years. Namely, because some facilities in some VISNs consume funding resources at rates greater than justified by their workload, eligible veterans now living in those areas of the country have a better chance of receiving care from their local VA facility than veterans living in other areas.

We believe that the recent introduction of the Veterans Equitable Resource Allocation (VERA) system will correct the funding inequities evidenced in this report.

Because the rates of change in inpatient workload vary significantly from VISN to VISN, VHA officials need a mechanism to respond promptly and appropriately to workload pattern changes. As proposed, the VERA funding system appears to be capable of doing this. If it is allowed to function as planned, we endorse VERA's use to help establish and maintain funding levels within VISNs that are appropriate to their workloads.

# DETAILS OF AUDIT

## A VISN-By-VISN Analysis of Historical and Projected Workload and Historical Resource Allocation Trends With Indicated Actions

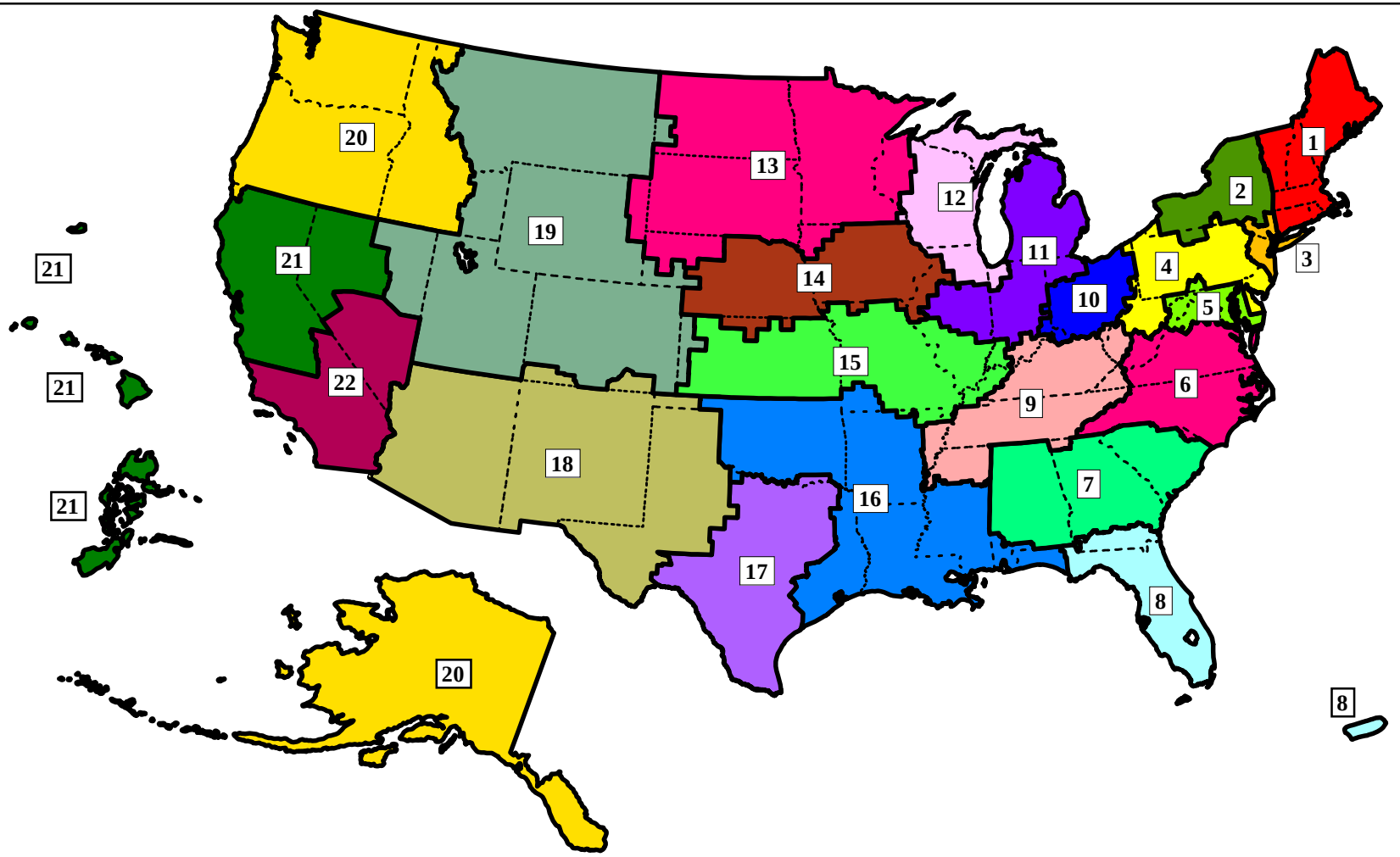
*In the pages that follow, workload is expressed as both "visits" and "stops." While a "visit" is defined as one outpatient episode by a veteran traveling to a VA facility, a "stop" is an interaction between a veteran and a particular practitioner(s) in a given specialty, of which there may be more than one during a "visit."*

# VETERANS INTEGRATED SERVICE NETWORKS

# VETERANS INTEGRATED SERVICE NETWORKS

**PURPOSE/SUBJECT:** In 1995, VHA was reorganized into 22 VISNs with 5 to 11 medical centers in each VISN. Although this organization structure was in place at the time of our audit, workload and resource allocation considerations may change facility alignments in the future.

# VETERANS INTEGRATED SERVICE NETWORKS



# INPATIENT EPISODES VA-WIDE

# FY 1992 - FY 2005

# INPATIENT EPISODES VA-WIDE

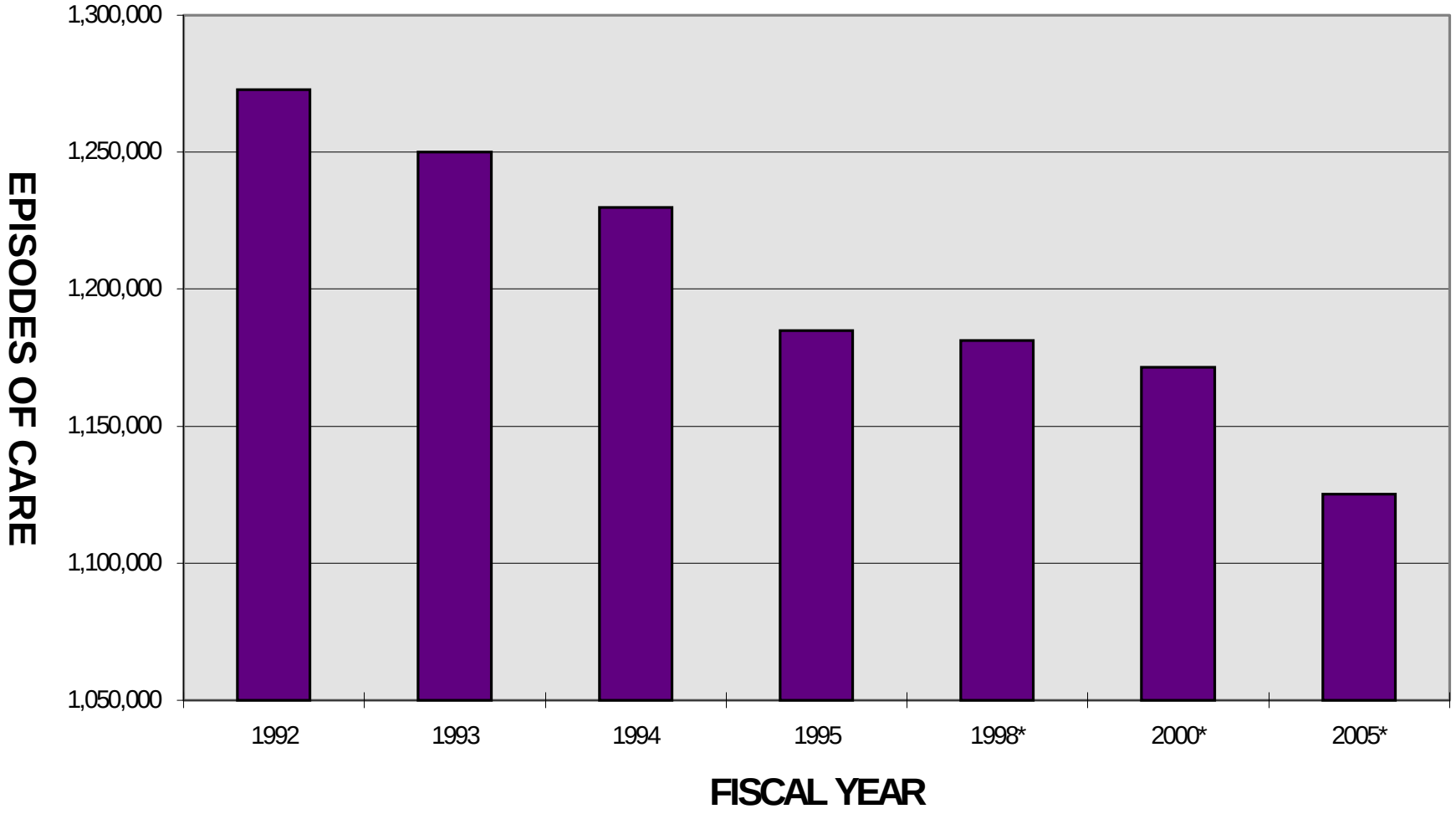
## FY 1992 - FY 2005

**PURPOSE/SUBJECT:** To show actual and projected inpatient workload for all VA medical centers by year.

**ANALYSIS/CONCLUSION:** For the period covered by this audit, total inpatient workload was at its peak in Fiscal Year 1992 with over 1.27 million episodes and is projected to decline on a yearly basis by a total of 12 percent to just over 1.1 million episodes by Fiscal Year 2005.

**INDICATED ACTION:** Monitor inpatient workload and shift resources to other modalities of care.

# INPATIENT EPISODES VA-WIDE
# FY 1992-FY 2005




*Projected

# INPATIENT EPISODES BY VISN

# FY 1992 - FY 2005

# INPATIENT EPISODES BY VISN

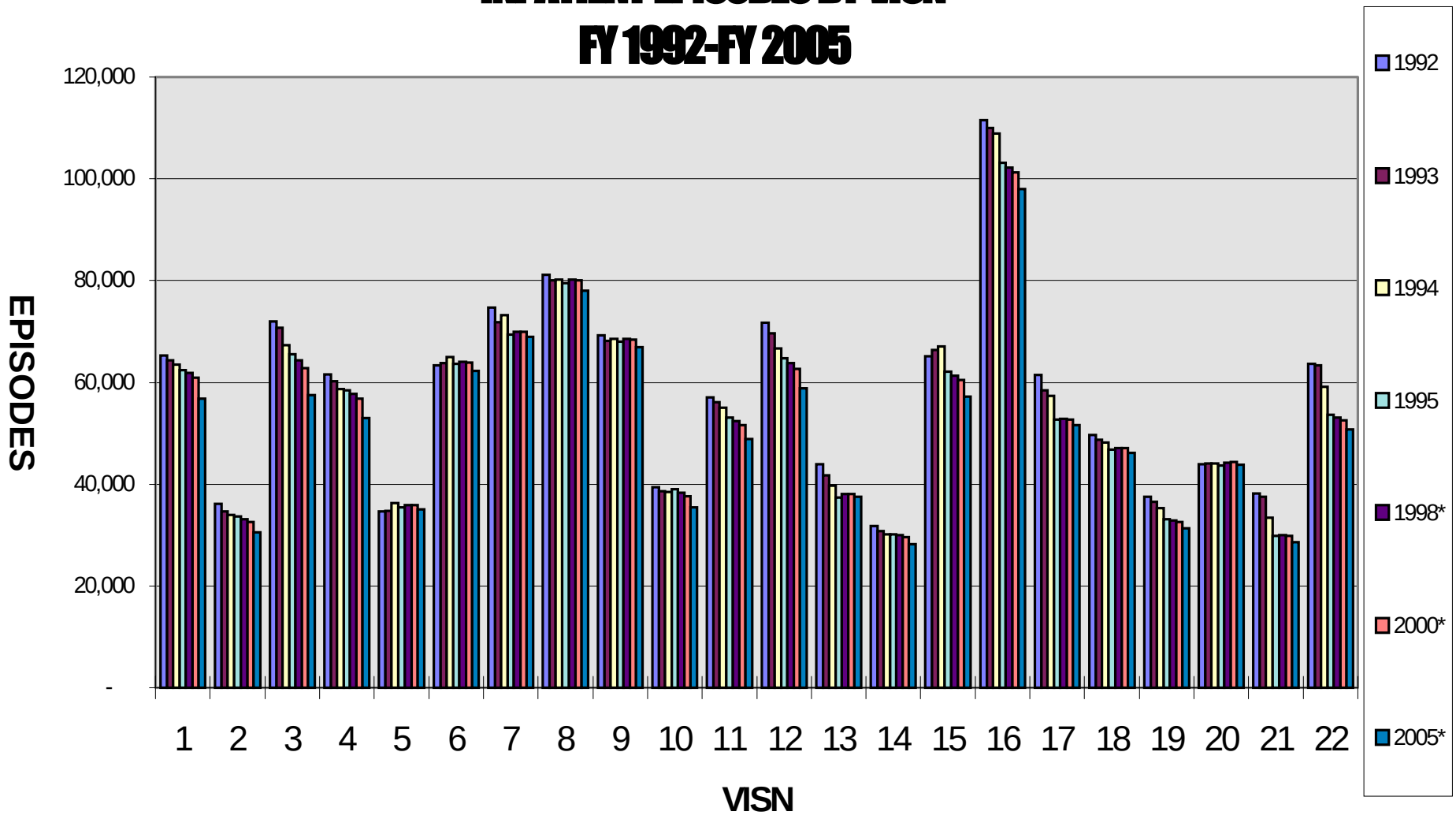
## FY 1992 - FY 2005

**PURPOSE/SUBJECT:** To show actual and projected inpatient episodes of care by VISN.

**ANALYSIS/CONCLUSION:** Twenty of twenty-two VISNs show a projected decline in inpatient episodes from Fiscal Year 1992 to Fiscal Year 2005, with VISN 21 showing the largest decline (-25 percent). VISN 16, which reported the highest workload levels, shows a projected decline of 12 percent. VISN 20 shows no change from Fiscal Year 1992 to Fiscal Year 2005, and VISN 5 shows a slight increase in inpatient episodes for the same period (+1 percent).

**INDICATED ACTION:** Monitor inpatient workload for all VISNs, and shift resources between VISNs and to other modalities of care.

# INPATIENT EPISODES BY VISN
# FY 1992-FY 2005




O-C-3

*Projected

# INPATIENT EPISODES PERCENT CHANGE

# FY 1992 - FY 2005 BY VISN

# INPATIENT EPISODES PERCENT CHANGE

## FY 1992 - FY 2005 BY VISN

**PURPOSE/SUBJECT:** To show the percentage change in inpatient episodes from Fiscal Year 1992 through Fiscal Year 2005 by VISN.

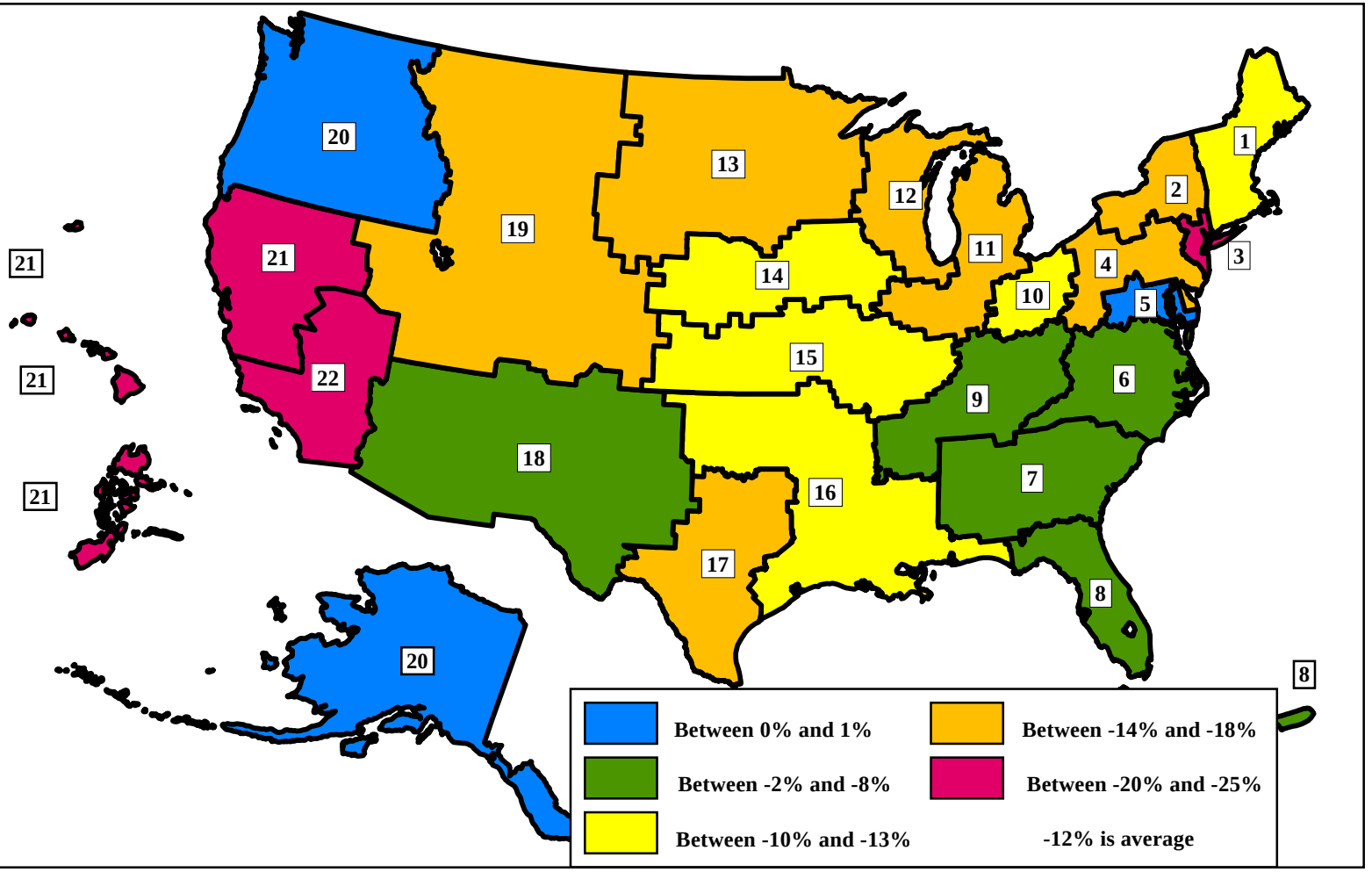
**ANALYSIS/CONCLUSION:** The following VISNs show between 0 and +1 percent change: 5, 20.
The following VISNs show a change between -2 and -8 percent: 6, 7, 9, 18.
The following VISNs show a change between -10 and -13 percent: 1, 10, 14, 15, 16.
The following VISNs show a change between -14 and -18 percent: 2, 4, 11, 12, 13, 17, 19.
The following VISNs show a change between -20 and -25 percent: 3, 8, 21, 22.

The average change is -12 percent.

**INDICATED ACTION:** Reallocate resources from inpatient care to other modalities of care and, perhaps, from VISNs with the greatest projected losses to those with lesser projected losses.

# Inpatient Episodes Percent Change

## FY 1992-FY 2005 by VISN



# INPATIENT DIRECT COSTS BY VISN

# FY 1992 - FY 1995

# INPATIENT DIRECT COSTS BY VISN

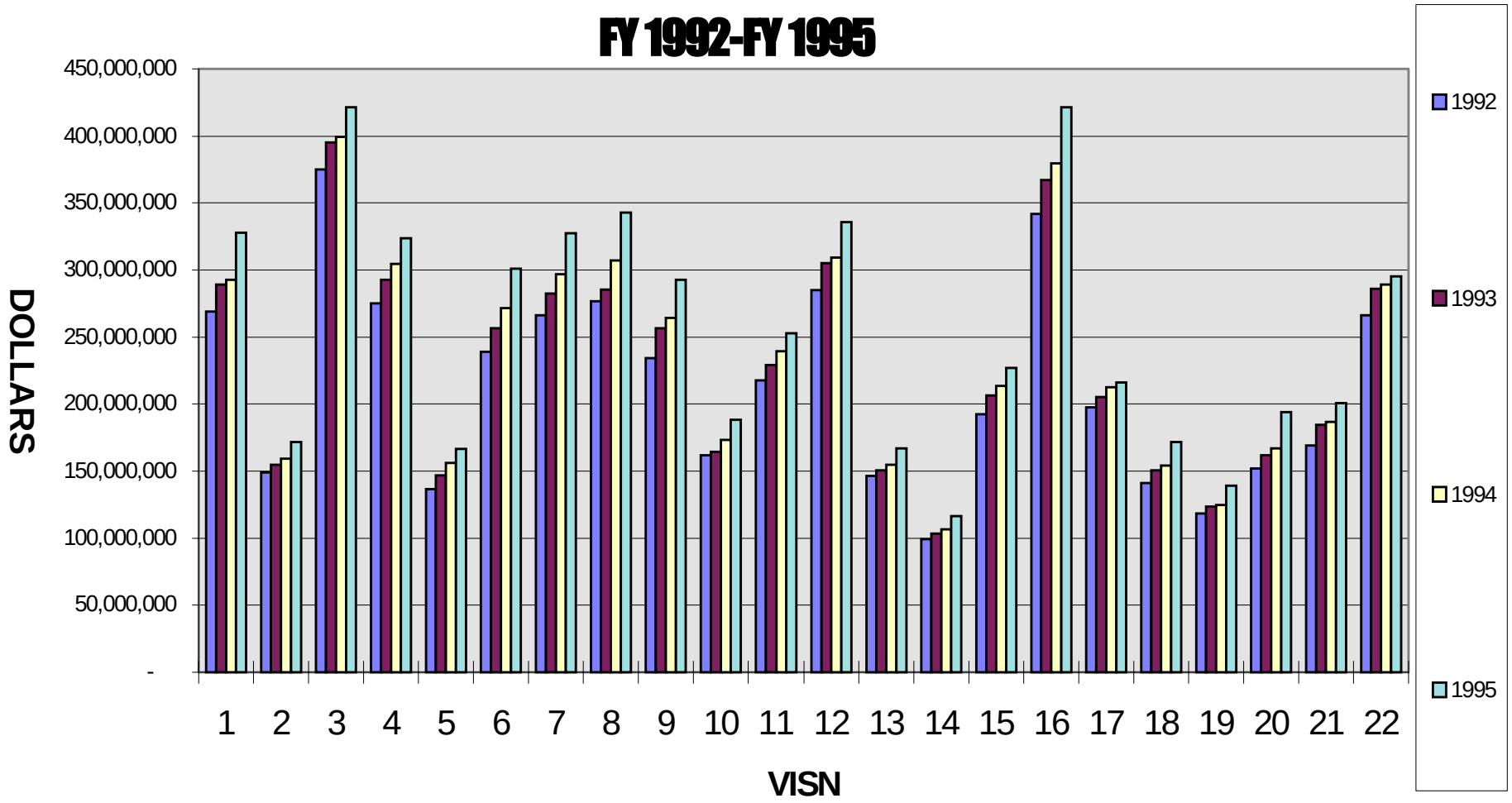
## FY 1992 - FY 1995

**PURPOSE/SUBJECT:** To show actual direct inpatient costs by VISN from Fiscal Year 1992 through Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** All VISNs show increasing inpatient costs. The greatest increase in costs is shown by VISN 20 (+27 percent) and the smallest increase is shown by VISN 17 (+9 percent). Nine VISNs show increases in excess of 20 percent.

**INDICATED ACTION:** Resources dedicated to inpatient care should be redirected to other treatment modalities for all VISNs based on workload trends. This action would be particularly appropriate for VISN 20, which shows an increase in costs of 27 percent from Fiscal Year 1992 to Fiscal Year 1995, while showing a decrease in inpatient workload of 1 percent over the same time period.

# INPATIENT DIRECT COSTS BY VISN
# FY 1992-FY 1995



# INPATIENT DIRECT COSTS PERCENT CHANGE

# FY 1992 - FY 1995 BY VISN

# INPATIENT DIRECT COSTS PERCENT CHANGE

## FY 1992 - FY 1995 BY VISN

**PURPOSE/SUBJECT:** To show the percentage change in inpatient direct costs by VISN from Fiscal Year 1992 through Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** All VISNs show an increase in inpatient direct costs.

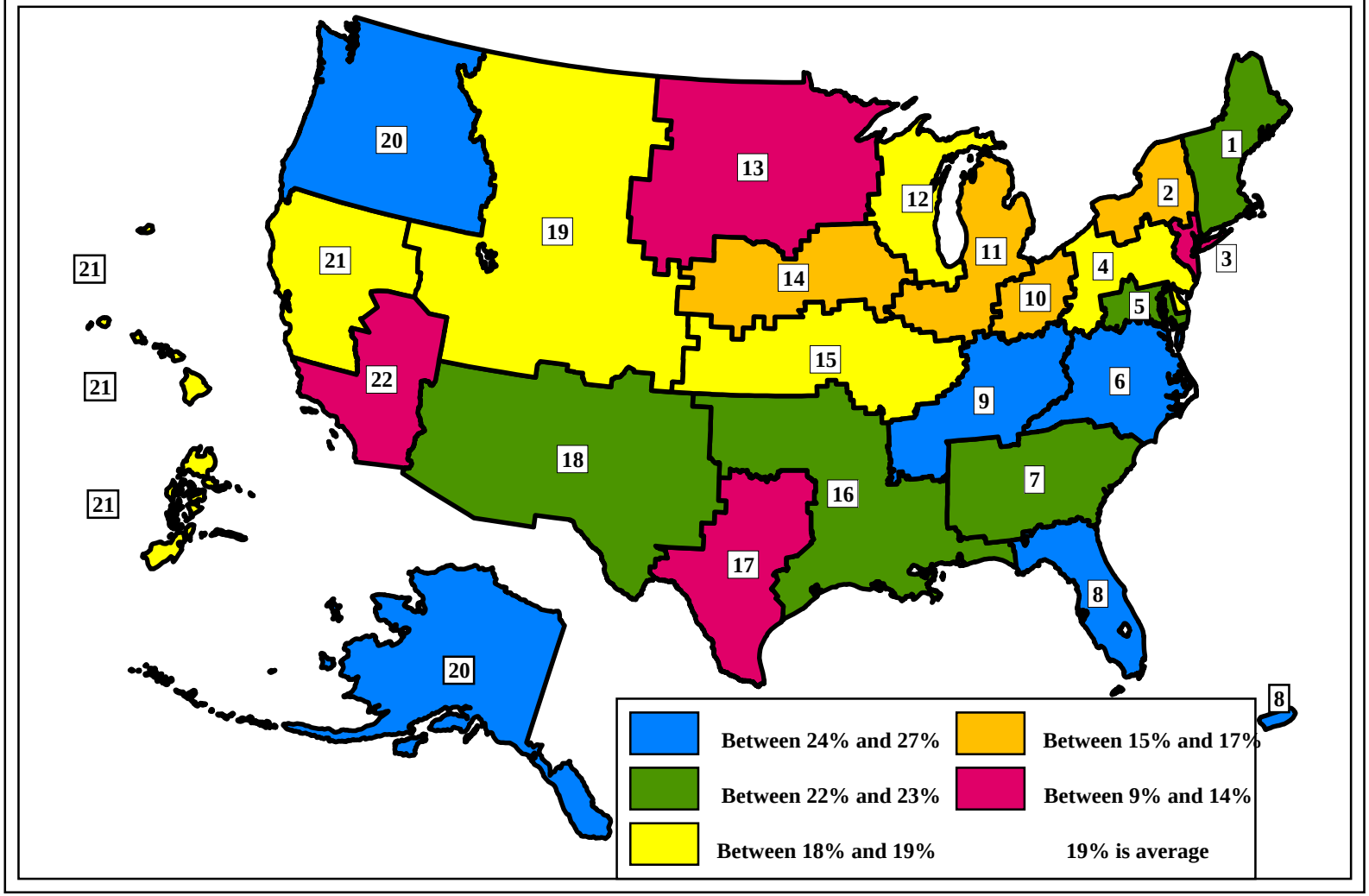
The following VISNs show an increase of 9 to 14 percent: 3, 13, 17, 22.
The following VISNs show an increase of 15 to 17 percent: 2, 10, 11, 14.
The following VISNs show an increase of 18 to 19 percent: 4, 12, 15, 19, 21.
The following VISNs show an increase of 22 to 23 percent: 1, 5, 7, 16, 18.
The following VISNs show an increase of 24 to 27 percent: 6, 8, 9, 20.

The average change is +19 percent.

**INDICATED ACTION:** Resources dedicated to inpatient care should be redirected to other treatment modalities for all VISNs, based on workload trends and increased costs.

# Inpatient Direct Costs Percent Change

## FY 1992-FY 1995 by VISN



# INPATIENT EPISODES AND TOTAL DIRECT COSTS

# FY 1995

# INPATIENT EPISODES AND TOTAL DIRECT COSTS

## FY 1995

**PURPOSE/SUBJECT:** To show how inpatient episodes compare with direct costs for each VISN for Fiscal Year 1995.

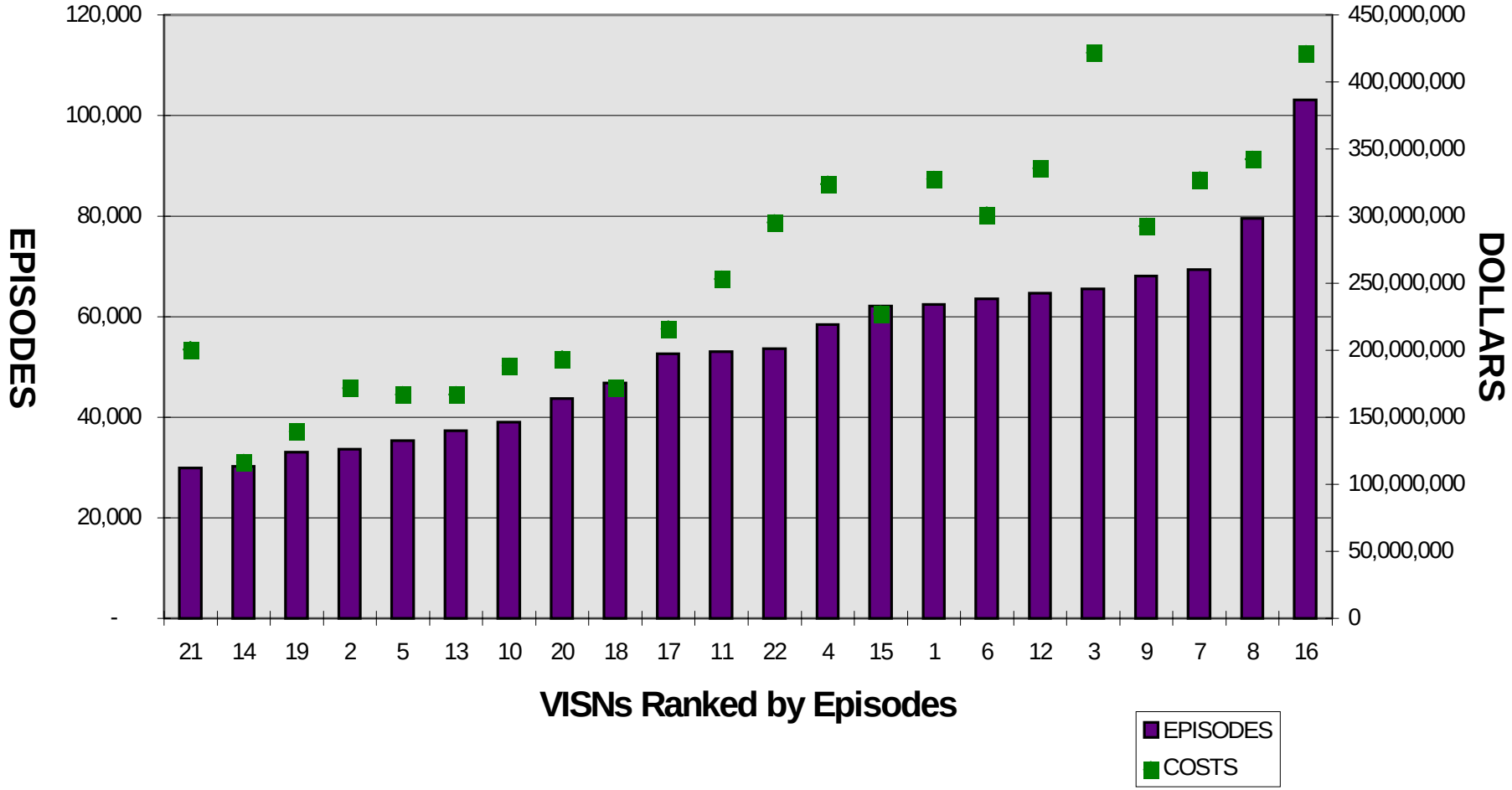
**ANALYSIS/CONCLUSION:** VISN 21 reported the least number of inpatient episodes with 29,892. VISN 16 reported the highest number of inpatient episodes with 103,148.

The following VISNs reported low costs when compared to the number of inpatient episodes: 9, 14, 15, 18.

The following VISNs reported relatively high costs when compared to the number of inpatient episodes: 3, 4.

**INDICATED ACTION:** Review VISNs 9, 14, 15, and 18 to determine if their relatively lower costs are due to "best practices" that should be emulated elsewhere. Resources dedicated to inpatient care should be redirected based on workload and costs data.

# INPATIENT EPISODES AND TOTAL DIRECT COSTS
# FY 1995



# INPATIENT EPISODES AND AVERAGE COST PER EPISODE

# FY 1995

# INPATIENT EPISODES AND AVERAGE COST PER EPISODE

## FY 1995

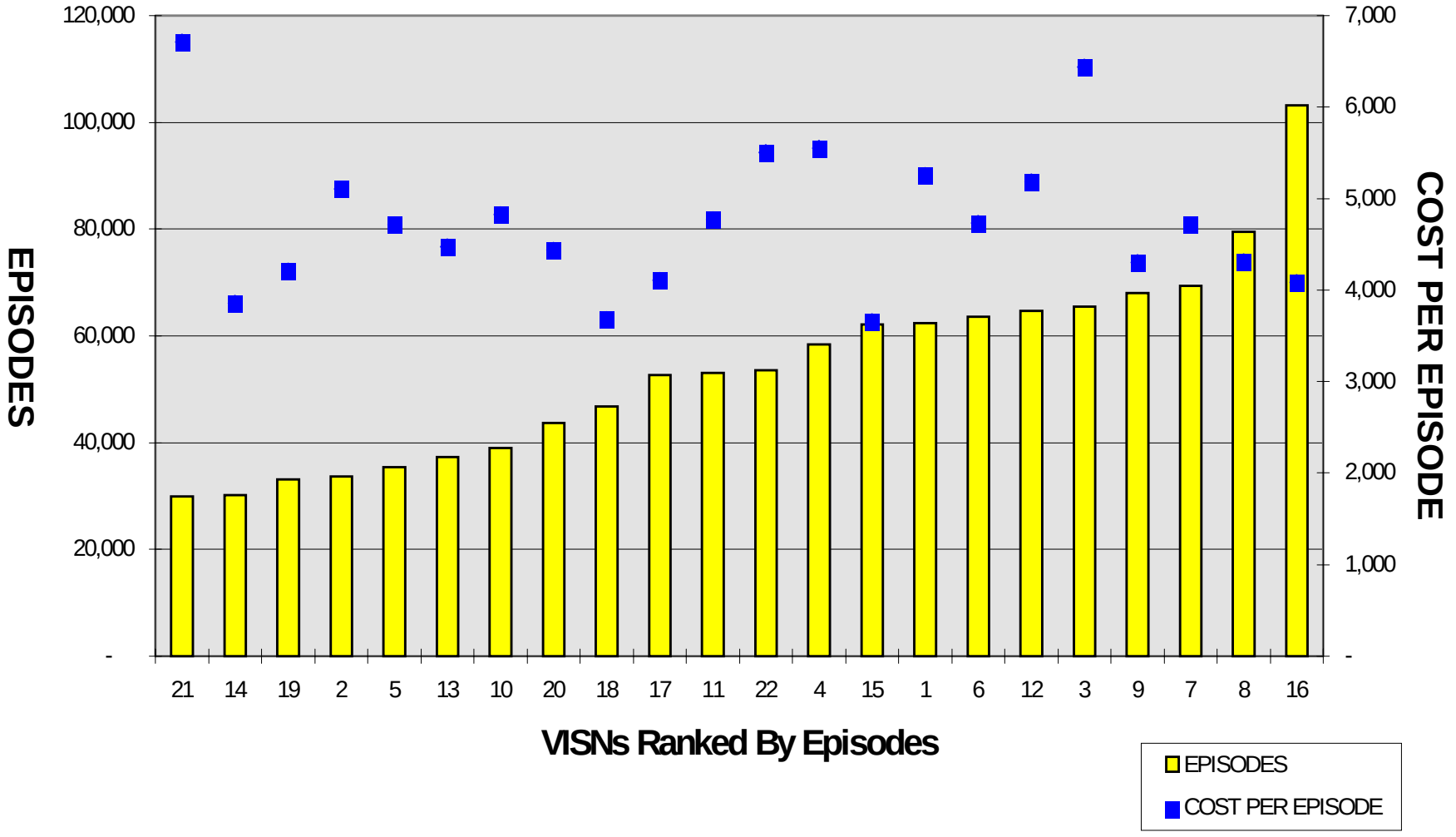
**PURPOSE/SUBJECT:** To show how inpatient episodes compare with average costs per episode for each VISN for Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** The following VISNs have relatively high costs per inpatient episode: 3, 4, 21, 22.
The following VISNs have relatively low costs per inpatient episode: 9, 14, 15, 16, 18.

The VA-wide average cost per episode is: $4,756.

**INDICATED ACTION:** Review VISNs 9, 14, 15, 16, and 18 to determine if their relatively lower costs are due to "best practices" which should be emulated elsewhere. Redirect resources to optimize costs per inpatient episode.

# INPATIENT EPISODES AND AVERAGE COST PER EPISODE
# FY 1995




O-H-3

**VA-Wide Average Cost Per Episode is $4756**

# PERCENT OF VA INPATIENT COSTS AND INPATIENT EPISODES

# FY 1995

# PERCENT OF VA INPATIENT COSTS AND INPATIENT EPISODES

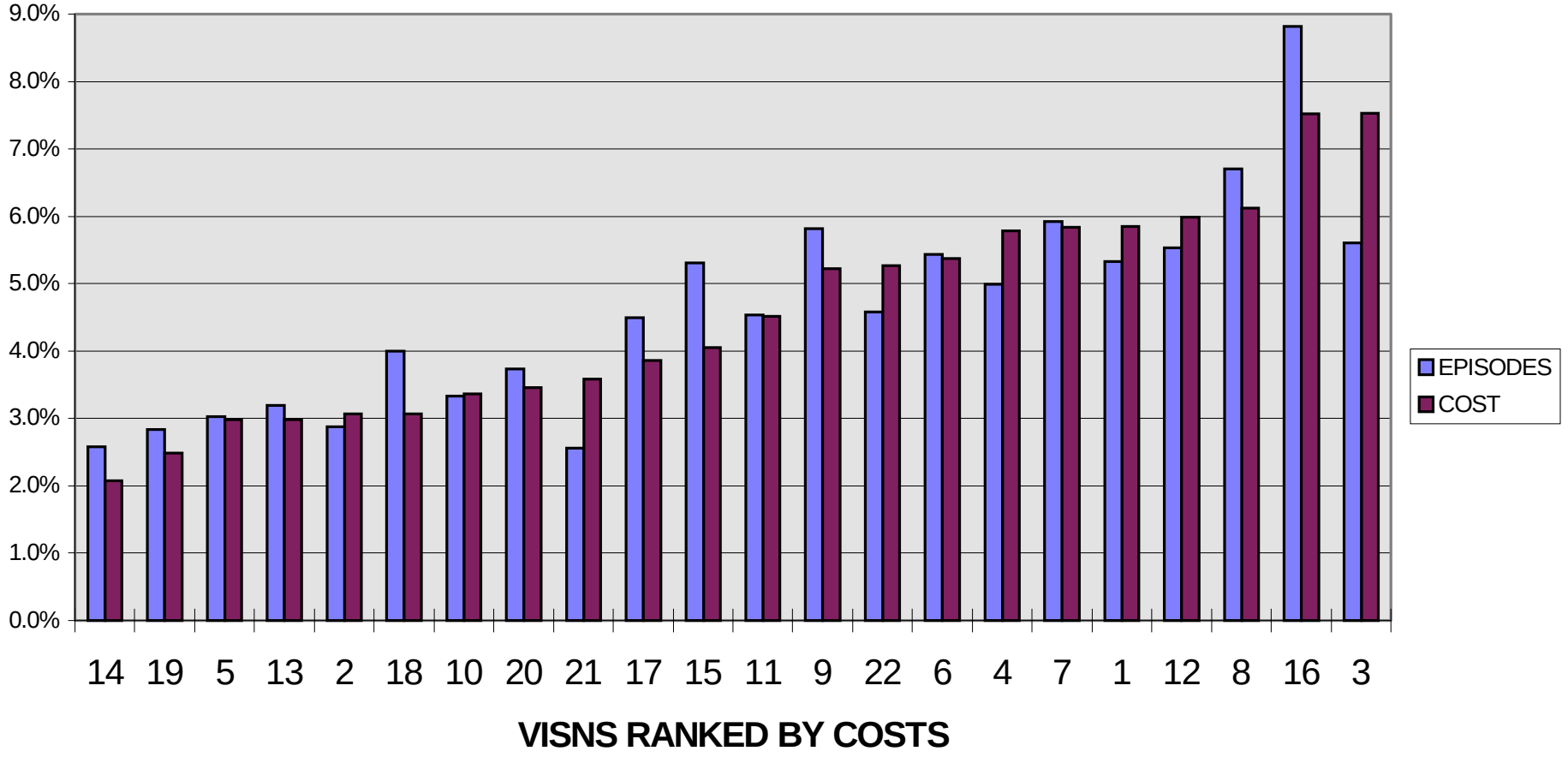
## FY 1995

**PURPOSE/SUBJECT:** To relate each VISN's percentage of inpatient workload and costs to VA's total nationwide inpatient workload and costs.

**ANALYSIS/CONCLUSION:** VISNs 14 and 19 represent the lowest percentage of total VA inpatient direct costs and VISNs 16 and 3 represent the largest percentage of total costs. In addition, VISNs 21 and 3 show the largest discrepancy between the percentage of the total inpatient episodes and the percentage of the total inpatient direct costs.

**INDICATED ACTION:** Review outlier VISNs to determine why costs are relatively high in relation to total workload. If necessary, redistribute resources for inpatient care in order to optimize each VISN's workload and costs.

# PERCENT OF VA INPATIENT COSTS AND INPATIENT EPISODES
# FY 1995



# OUTLIER ANALYSIS OF INPATIENT EPISODES AND COSTS

# FY 1995 BY VISN

# OUTLIER ANALYSIS OF INPATIENT EPISODES AND COSTS

## FY 1995 BY VISN

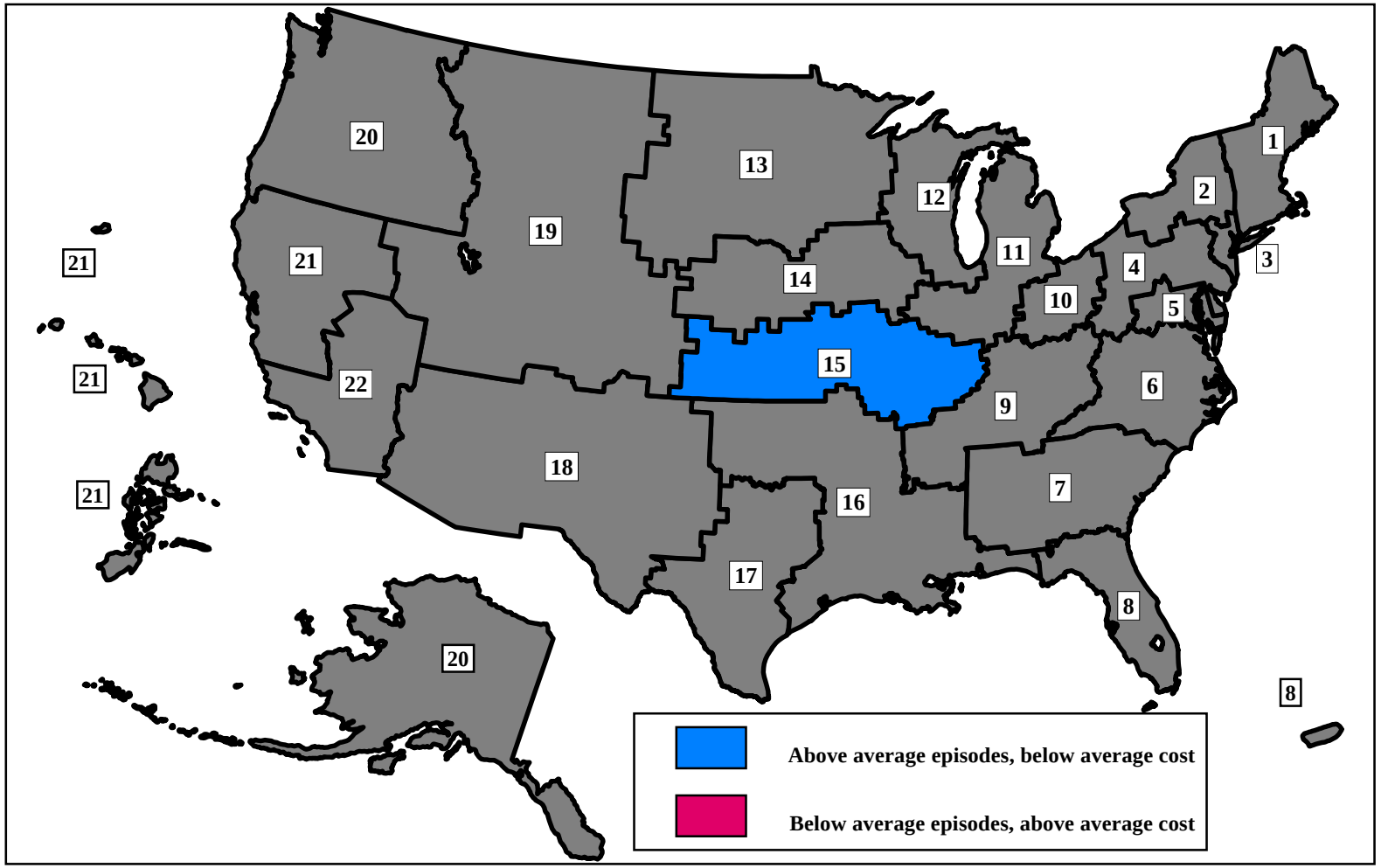
**PURPOSE/SUBJECT:** To show which VISNs are most efficient in regard to number of inpatient episodes and inpatient direct costs.

**ANALYSIS/CONCLUSION:** VISN 15 had above average inpatient episodes and below average costs. No other VISN reported above average workload and below average costs. Nor did any VISN report below average workload and above average costs.

**INDICATED ACTION:** Review VISN 15 to determine if its lower costs are due to "best practices" which should be emulated elsewhere. If necessary, redirect resources among VISNs to optimize inpatient workload and costs.

# Outlier Analysis of Inpatient Episodes and Costs

## FY 1995 by VISN



# OUTPATIENT VISITS VA-WIDE

# FY 1992 - FY 2005

# OUTPATIENT VISITS VA-WIDE

## FY 1992 - FY 2005

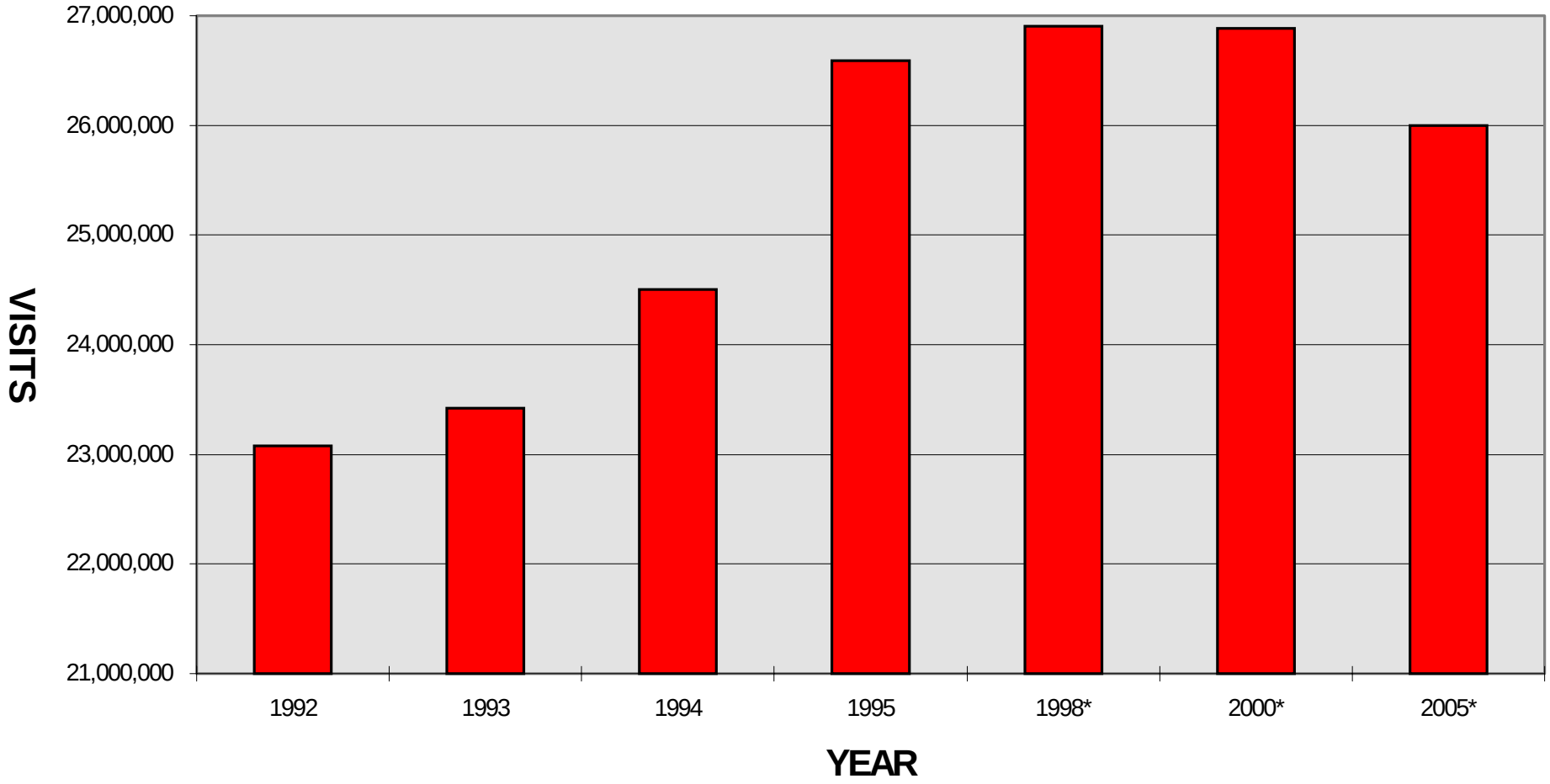
**PURPOSE/SUBJECT:** To show total actual and projected outpatient visits for all VA medical facilities by year.

**ANALYSIS/CONCLUSION:** Total outpatient visits are projected to rise from 23 million actual visits in Fiscal Year 1992 to a peak of approximately 27 million visits in Fiscal Year 1998. Outpatient visits are then projected to fall to approximately 26 million by Fiscal Year 2005.

**INDICATED ACTION:** Monitor outpatient workload and, if necessary, reduce or shift resources among VISNs.

***NOTE:*** This analysis does not take into consideration recent eligibility legislation which may significantly increase demand for outpatient care.

# OUTPATIENT VISITS VA-WIDE
# FY 1992-FY 2005




Projected

# OUTPATIENT VISITS BY VISN

# FY 1992 - FY 2005

# OUTPATIENT VISITS BY VISN

## FY 1992 - FY 2005

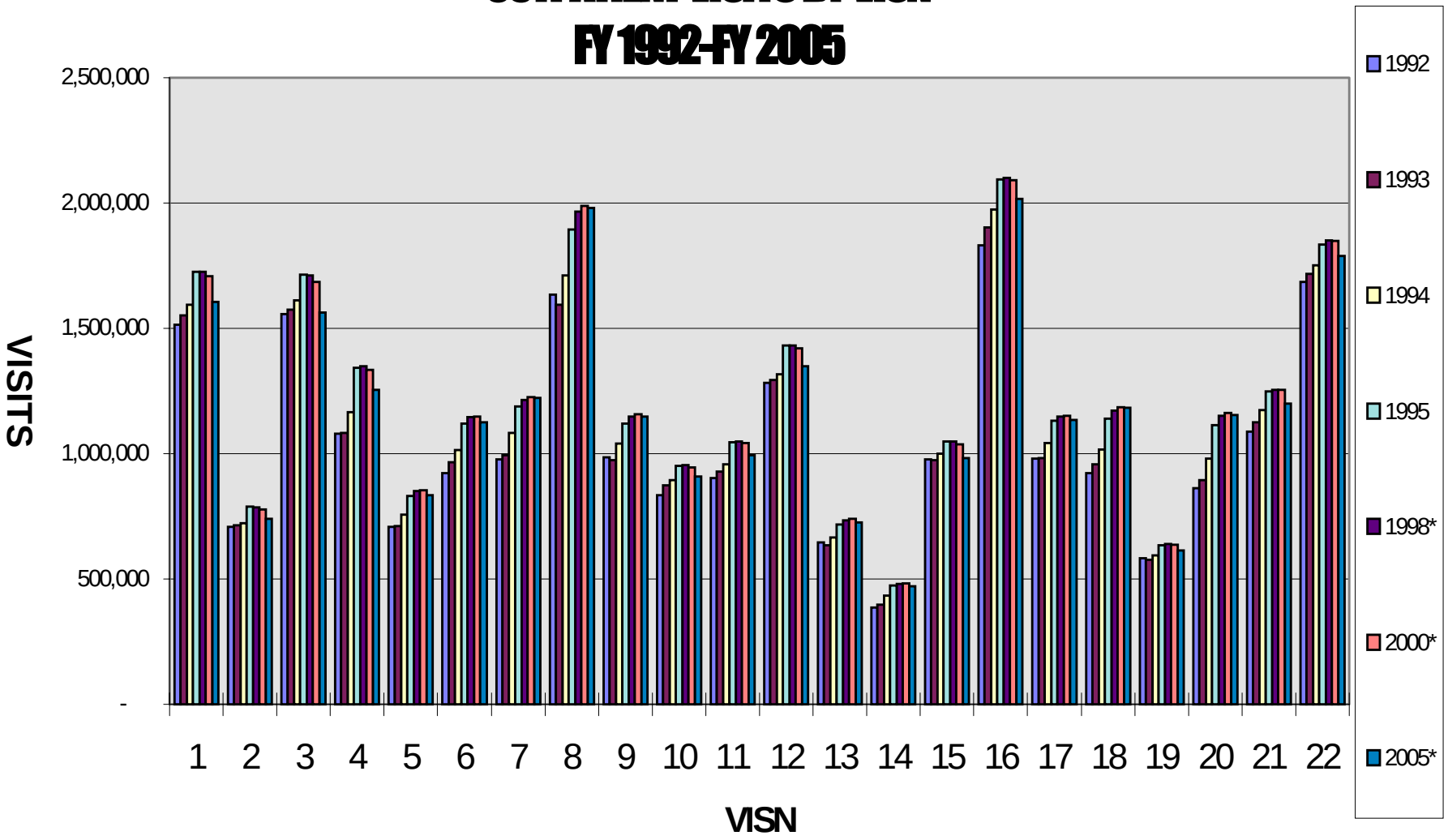
**PURPOSE/SUBJECT:** To show total actual and projected outpatient visits by VISN.

**ANALYSIS/CONCLUSION:** Twenty of twenty-two VISNs show an overall increase in outpatient visits from Fiscal Year 1992 to Fiscal Year 2005. (VISNs 3 and 15 show virtually no net change from Fiscal Year 1992 to Fiscal Year 2005.) However, all VISNs show outpatient workload peaking in Fiscal Year 1998 or in Fiscal Year 2000 with workload beginning to decline at varying rates by Fiscal Year 2005.

**INDICATED ACTION:** Monitor outpatient workload and, if necessary, reduce or shift resources among VISNs.

***NOTE:*** This analysis does not take into consideration recent eligibility legislation which may significantly increase demand for outpatient care.

# OUTPATIENT VISITS BY VISN
# FY 1992-FY 2005




*Projected

# OUTPATIENT VISITS PERCENT CHANGE

# FY 1992 - FY 2005 BY VISN

# OUTPATIENT VISITS PERCENT CHANGE

## FY 1992 - FY 2005 BY VISN

**PURPOSE/SUBJECT:** To show the percentage change in outpatient visits from Fiscal Year 1992 through Fiscal Year 2005 by VISN.

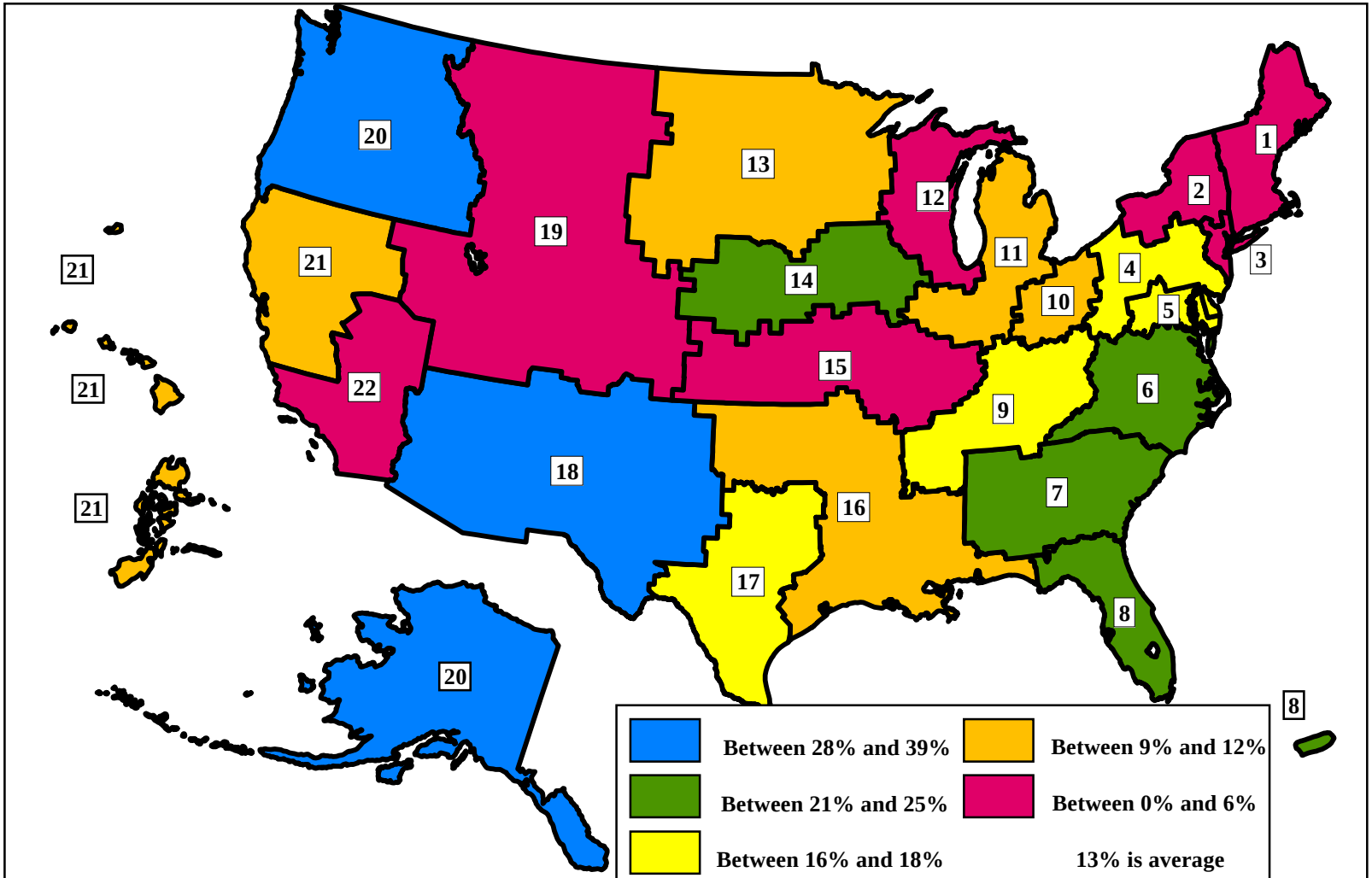
**ANALYSIS/CONCLUSION:** The following VISNs show between 0 and +6 percent change: 1, 2, 3, 12, 15, 19, 22.
The following VISNs show a change between +9 and +12 percent: 10, 11, 13, 16, 21.
The following VISNs show a change between +16 and +18 percent: 4, 5, 9, 17.
The following VISNs show a change between +21 and +25 percent: 6, 7, 8, 14.
The following VISNs show a change between +28 and +39 percent: 18, 20.

The average change is 13 percent.

**INDICATED ACTION:** Monitor outpatient workload and, if necessary, shift resources from other modalities of care and/or among VISNs.

# Outpatient Visits Percent Change

## FY 1992-FY 2005 by VISN



# OUTPATIENT DIRECT COSTS BY VISN

# FY 1992 - FY 1995

# OUTPATIENT DIRECT COSTS BY VISN

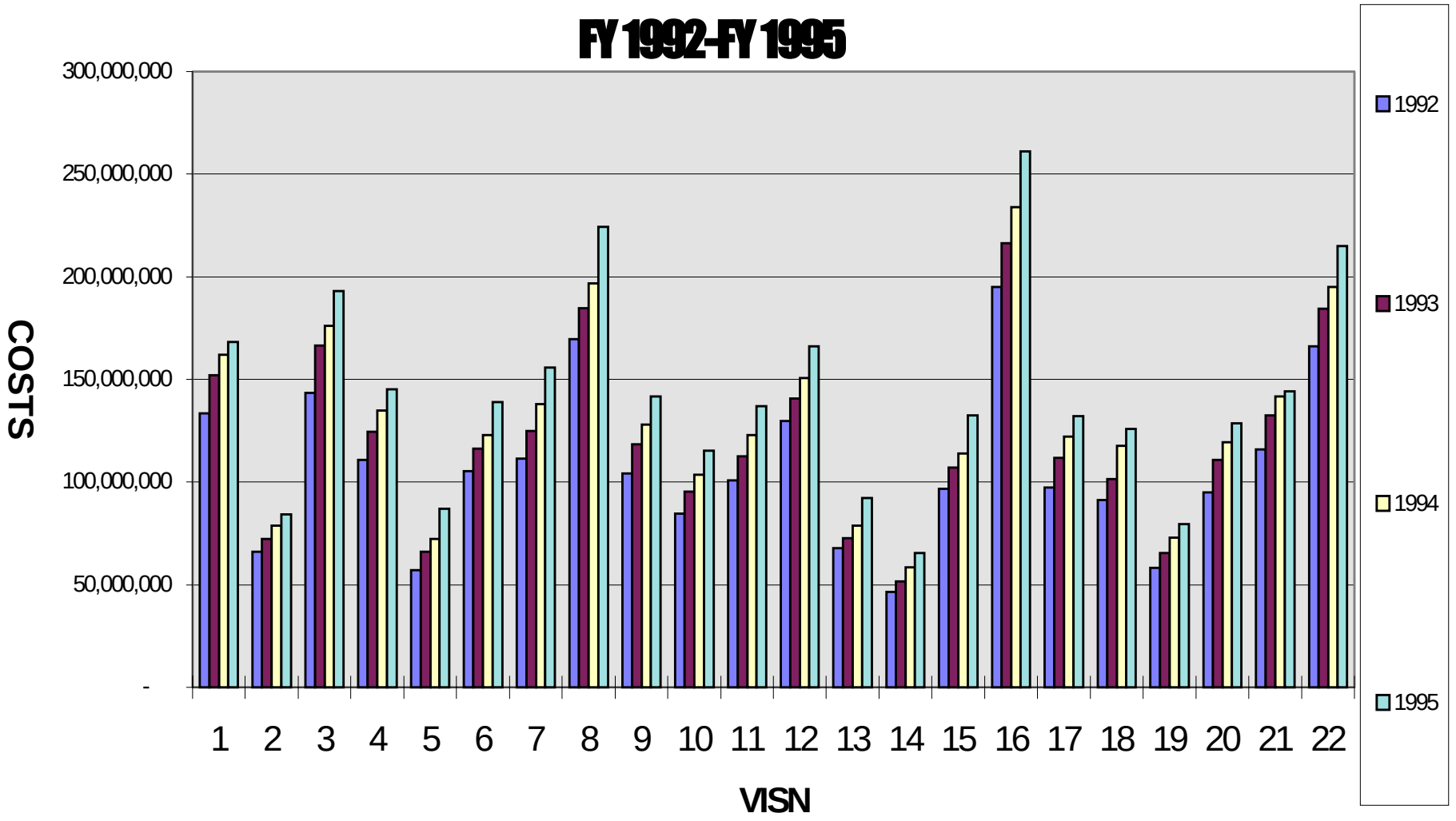
## FY 1992 - FY 1995

**PURPOSE/SUBJECT:** To show actual outpatient direct costs from Fiscal Year 1992 through Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** All VISNs show increasing outpatient costs. The greatest increase in costs is shown by VISN 5 (+52 percent), although workload only increased 17 percent. The smallest increase in costs is shown by VISN 21 (+24 percent), where workload increased 14 percent.

**INDICATED ACTION:** Determine why the relationship of outpatient costs to outpatient workload varies widely among VISNs. Redistribute resources as indicated.

# OUTPATIENT DIRECT COSTS BY VISN
# FY 1992-FY 1995



# OUTPATIENT DIRECT COSTS PERCENT CHANGE

# FY 1992 - FY 1995 BY VISN

# OUTPATIENT DIRECT COSTS PERCENT CHANGE

## FY 1992 - FY 1995 BY VISN

**PURPOSE/SUBJECT:** To show the percentage change in outpatient direct costs by VISN from Fiscal Year 1992 through Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** All VISNs show an increase in outpatient direct costs.

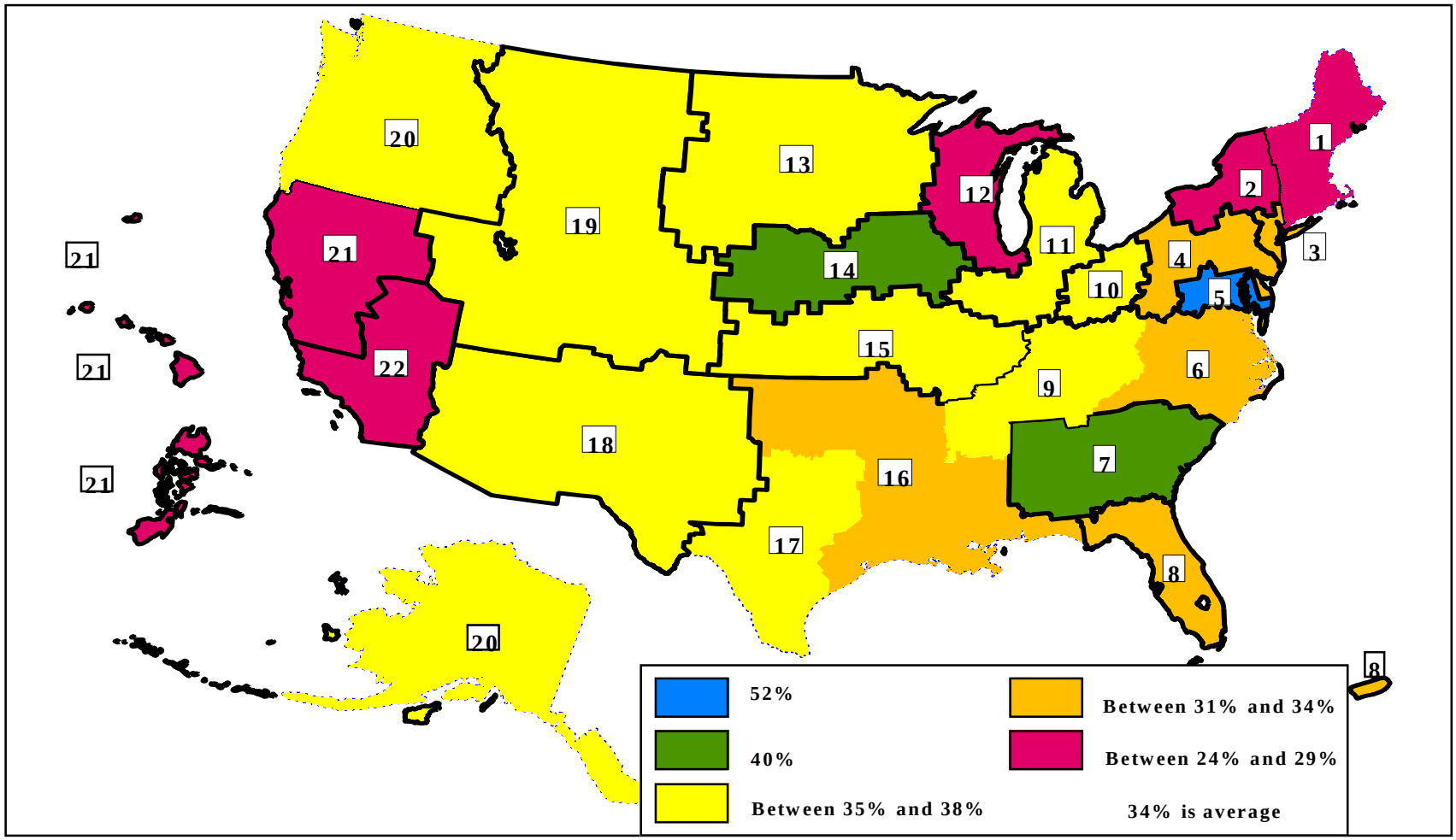
The following VISNs show an increase of 24 to 29 percent: 1, 2, 12, 21, 22.
The following VISNs show an increase of 31 to 34 percent: 3, 4, 6, 8, 16.
The following VISNs show an increase of 35 to 38 percent: 9, 10, 11, 13, 15, 17, 18, 19, 20.
The following VISNs show an increase of 40 percent: 7, 14.
The following VISNs show an increase of 52 percent: 5.

The average change is 34 percent.

**INDICATED ACTION:** Determine why increases in outpatient costs vary widely among VISNs. Redistribute resources as indicated.

# Outpatient Direct Costs Percent Change

## FY 1992-FY 1995 by VISN



# OUTPATIENT VISITS AND DIRECT COSTS

# FY 1995

# OUTPATIENT VISITS AND DIRECT COSTS

## FY 1995

**PURPOSE/SUBJECT:** To show how outpatient visits compare with direct costs for each VISN for Fiscal Year 1995.

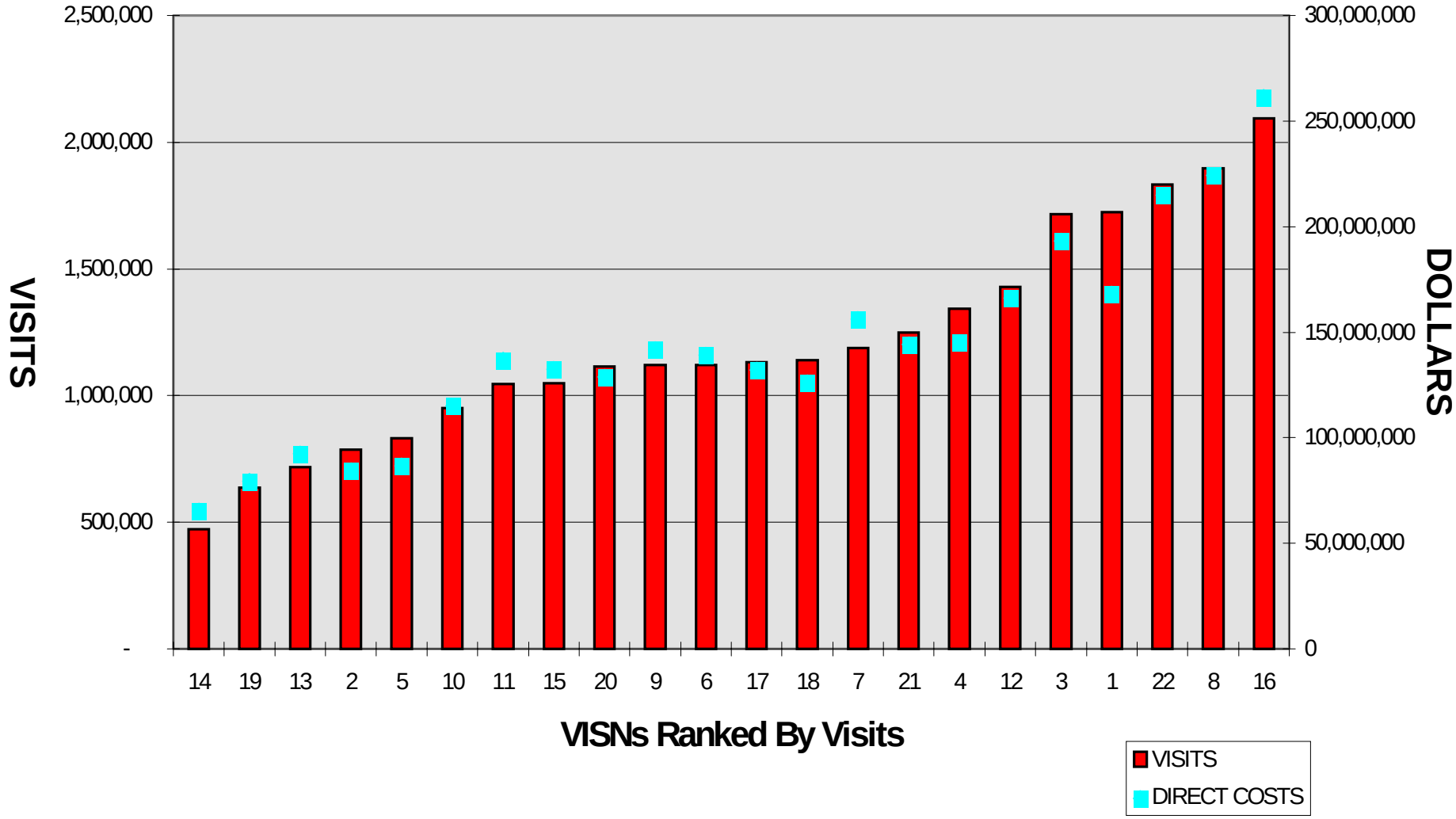
**ANALYSIS/CONCLUSION:** VISN 14 had the least number of outpatient visits with 473,709. VISN 16 had the highest number of outpatient visits with 2,094,477.

The following VISNs had relatively low costs when compared to the number of outpatient visits: 1, 3, 4, 12, 18, 21.

The following VISNs had relatively high costs when compared to the number of outpatient visits: 7, 11, 16.

**INDICATED ACTION:** Review relationship between outpatient workload and costs discussed previously. Determine and disseminate "best practices" and, if necessary, redistribute resources among VISNs.

# OUTPATIENT VISITS AND DIRECT COSTS
# FY 1995




O-P-3

# OUTPATIENT VISITS AND AVERAGE COST PER VISIT

# FY 1995

# OUTPATIENT VISITS AND AVERAGE COST PER VISIT

## FY 1995

**PURPOSE/SUBJECT:** To show how outpatient visits compare with average costs per visit for each VISN for Fiscal Year 1995. This graph is ranked by visits.

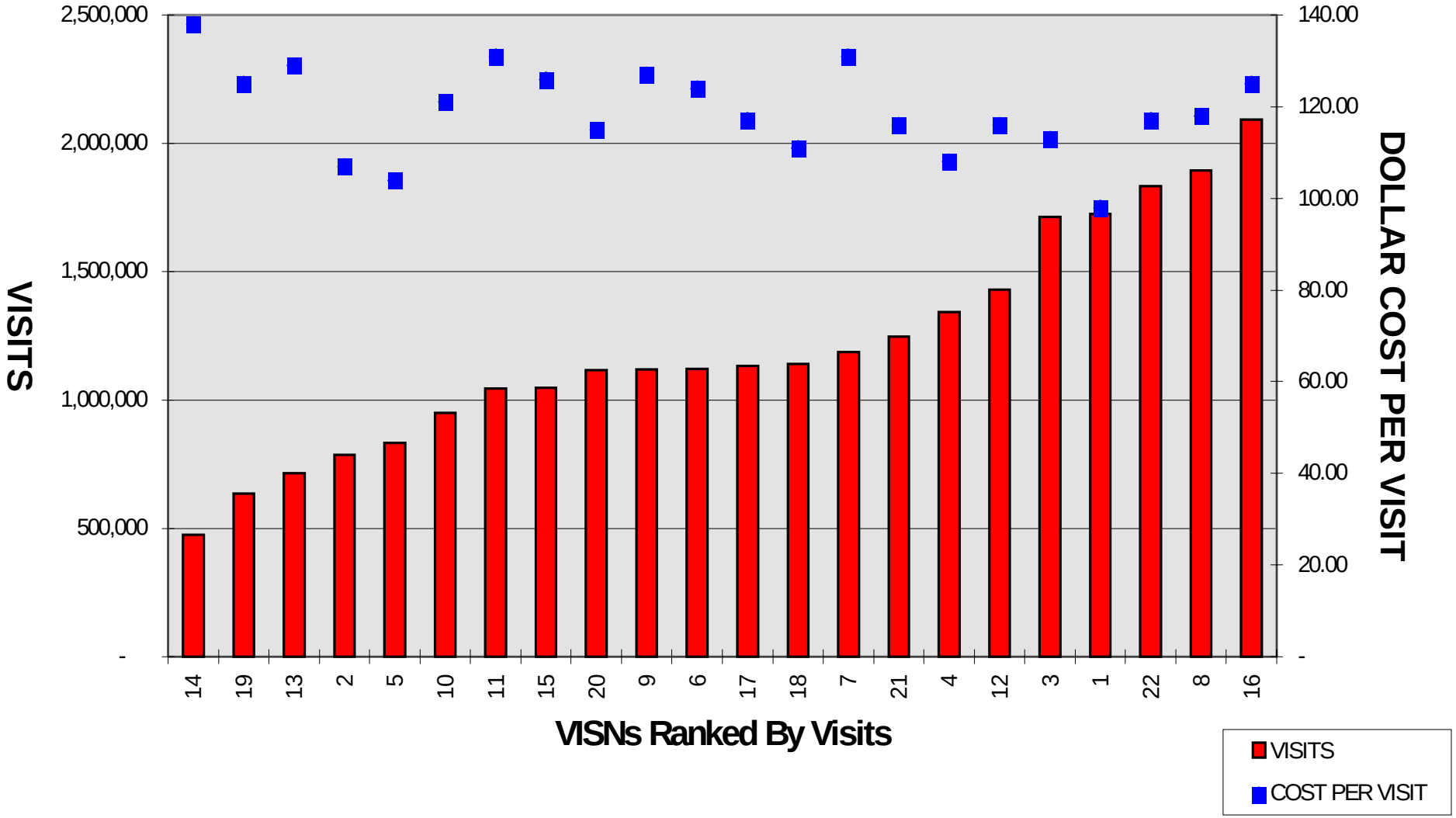
**ANALYSIS/CONCLUSION:** The following VISNs have relatively high costs per outpatient visit when compared with overall outpatient visit workload: 14, 13, 11, 7.

The following VISNs have relatively low costs per outpatient visit when compared with outpatient visits: 1, 4.

The VA-wide average cost per visit is $118.00

**INDICATED ACTION:** Review VISNs 1 and 18 and determine if lower costs are due to "best practices" which should be emulated elsewhere. Review funding of VISNs with high costs per visit compared to resources.

# OUTPATIENT VISITS AND AVERAGE COST PER VISIT
# FY 1995




**O-Q-3**

VA-Wide Average Cost Per Visit is $118

# OUTPATIENT STOPS VA-WIDE

# FY 1992 - FY 2005

# OUTPATIENT STOPS VA-WIDE

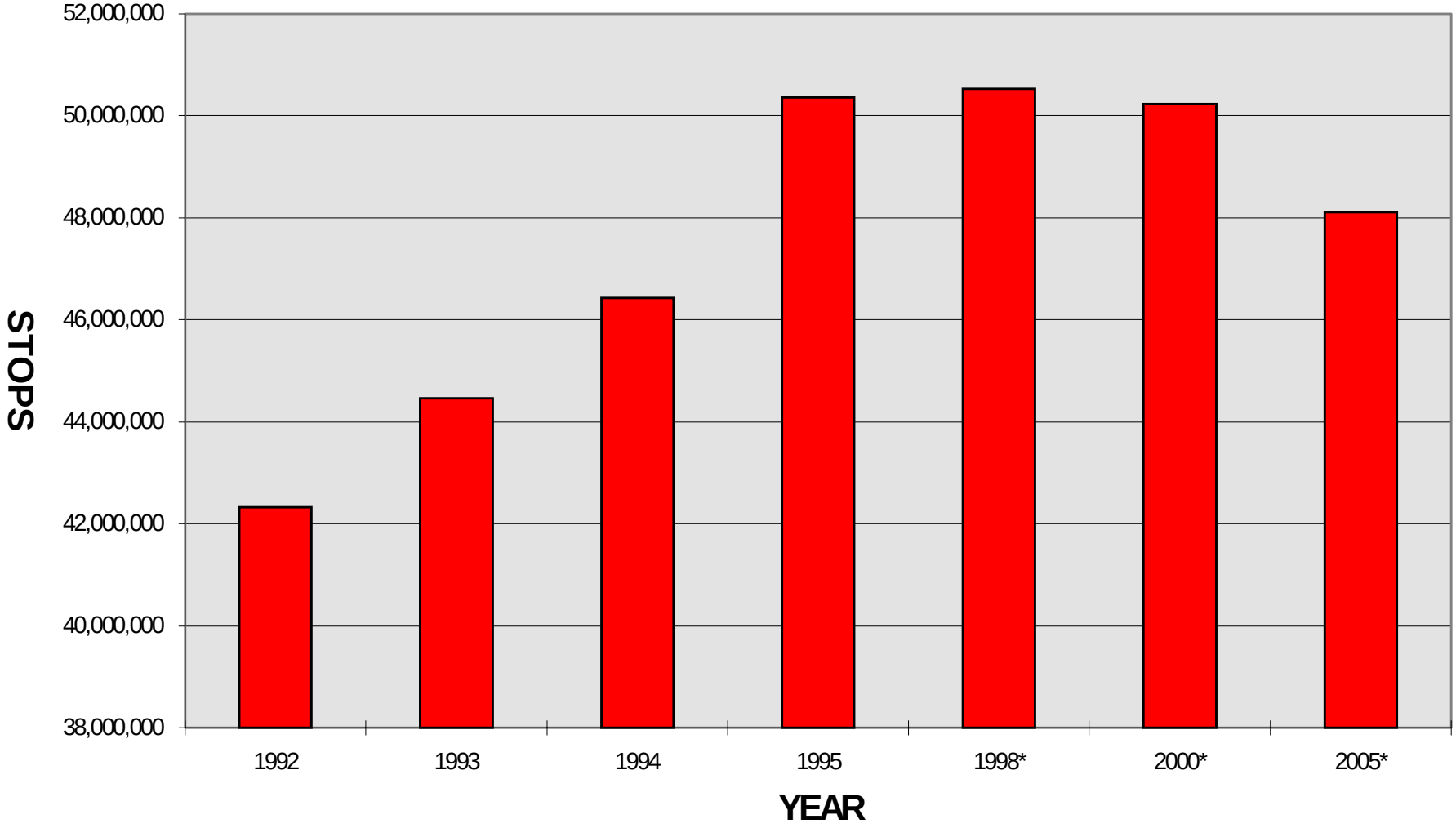
## FY 1992 - FY 2005

**PURPOSE/SUBJECT:** To show total actual and total projected outpatient stops.

**ANALYSIS/CONCLUSION:** Total outpatient stops are projected to rise from 42 million in Fiscal Year 1992 to a peak of approximately 51 million in Fiscal Year 1998. Outpatient stops are then projected to fall to approximately 48 million by Fiscal Year 2005.

**INDICATED ACTION:** Monitor outpatient workload.

# OUTPATIENT STOPS VA-WIDE
# FY 1992-FY 2005




O-R-3

*Projected

# OUTPATIENT STOPS BY VISN

# FY 1992 - FY 2005

# OUTPATIENT STOPS BY VISN

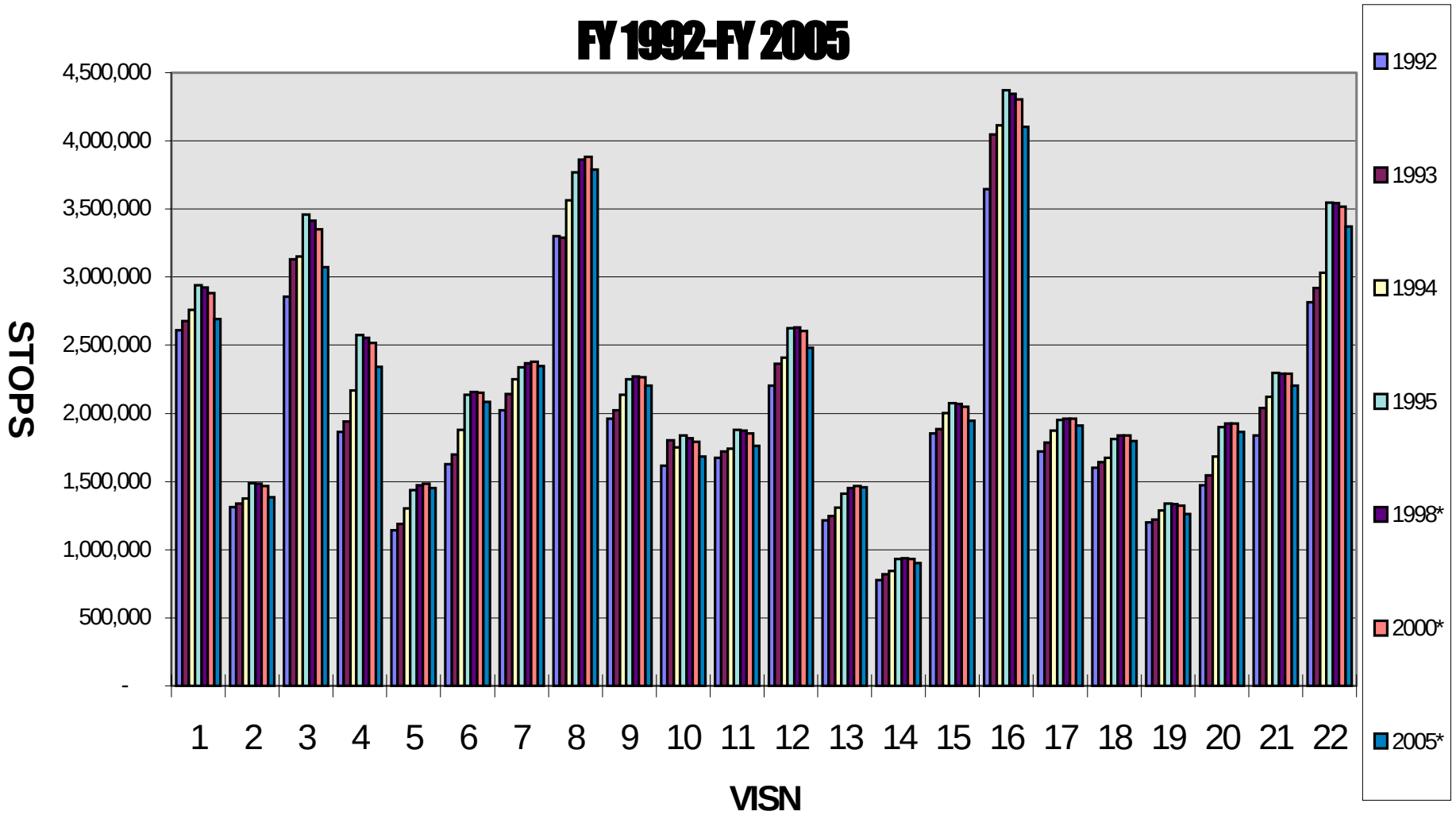
## FY 1992 - FY 2005

**PURPOSE/SUBJECT:** To show total actual and projected outpatient stops by VISN.

**ANALYSIS/CONCLUSION:** All VISNs show an increase in outpatient stops until Fiscal Year 1998 or Fiscal Year 2000 and then start to decline by Fiscal Year 2005.

**INDICATED ACTION:** Monitor outpatient workload.

# OUTPATIENT STOPS BY VISN
# FY 1992-FY 2005




*Projected

# OUTPATIENT STOPS PERCENT CHANGE

# FY 1992 - FY 2005 BY VISN

# OUTPATIENT STOPS PERCENT CHANGE

## FY 1992 - FY 2005 BY VISN

**PURPOSE/SUBJECT:** To show the overall percentage change in outpatient stops from Fiscal Year 1992 through Fiscal Year 2005 by VISN.

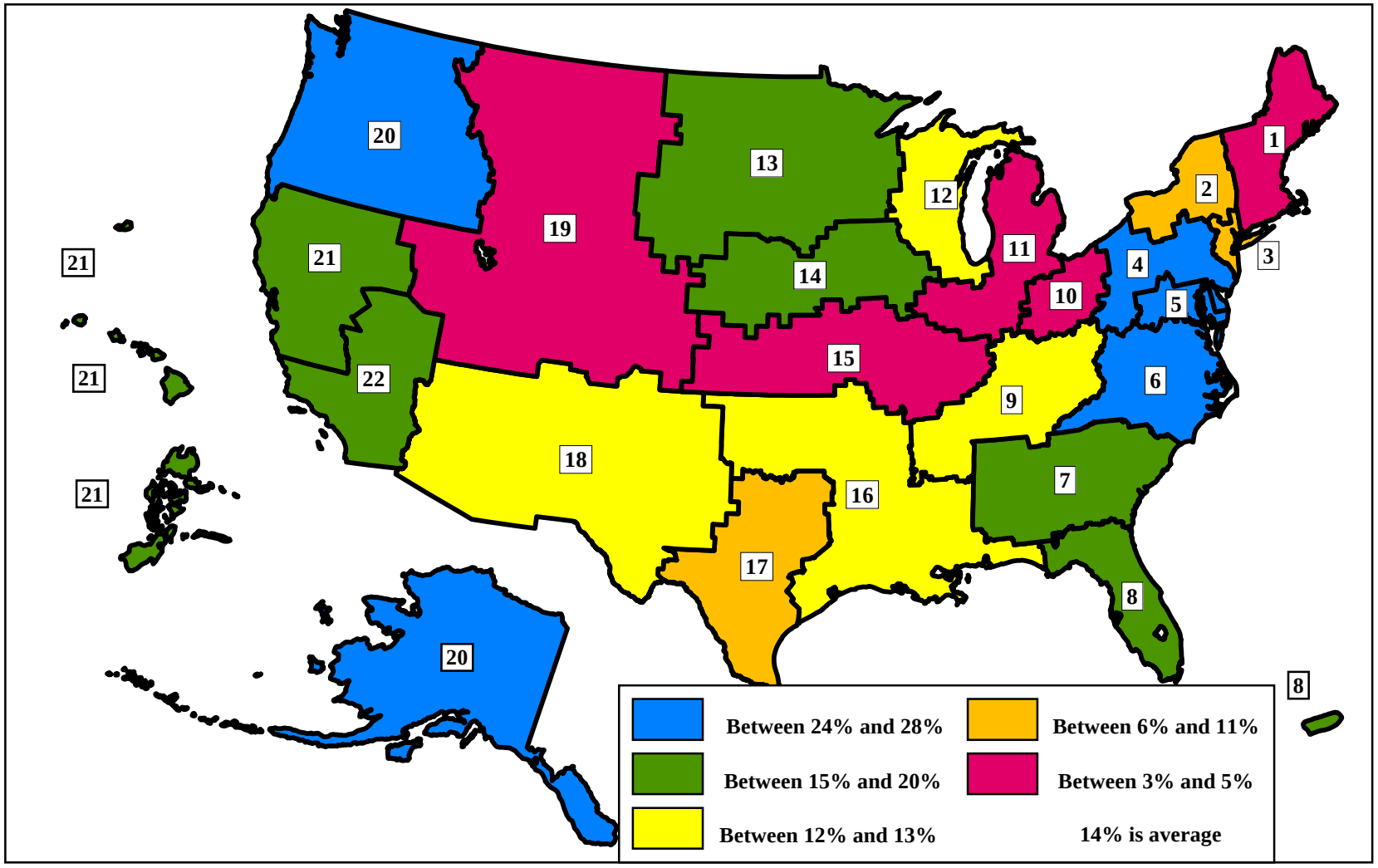
**ANALYSIS/CONCLUSION:** The following VISNs show between +3 and +5 percent change: 1, 10, 11, 15, 19.
The following VISNs show between +6 and +11 percent change: 2, 3, 17.
The following VISNs show between +12 and +13 percent change: 9, 12, 16, 18.
The following VISNs show between +15 and +20 percent change: 7, 8, 13, 14, 21, 22.
The following VISNs show between +24 and +28 percent change: 4, 5, 6, 20.

The average change is +14 percent.

**INDICATED ACTION:** Monitor outpatient workload and reduce increases in, or shift, resources accordingly.

# Outpatient Stops Percent Change

## FY 1992-FY 2005 by VISN



# OUTPATIENT STOPS AND DIRECT COSTS

# FY 1995

# OUTPATIENT STOPS AND DIRECT COSTS

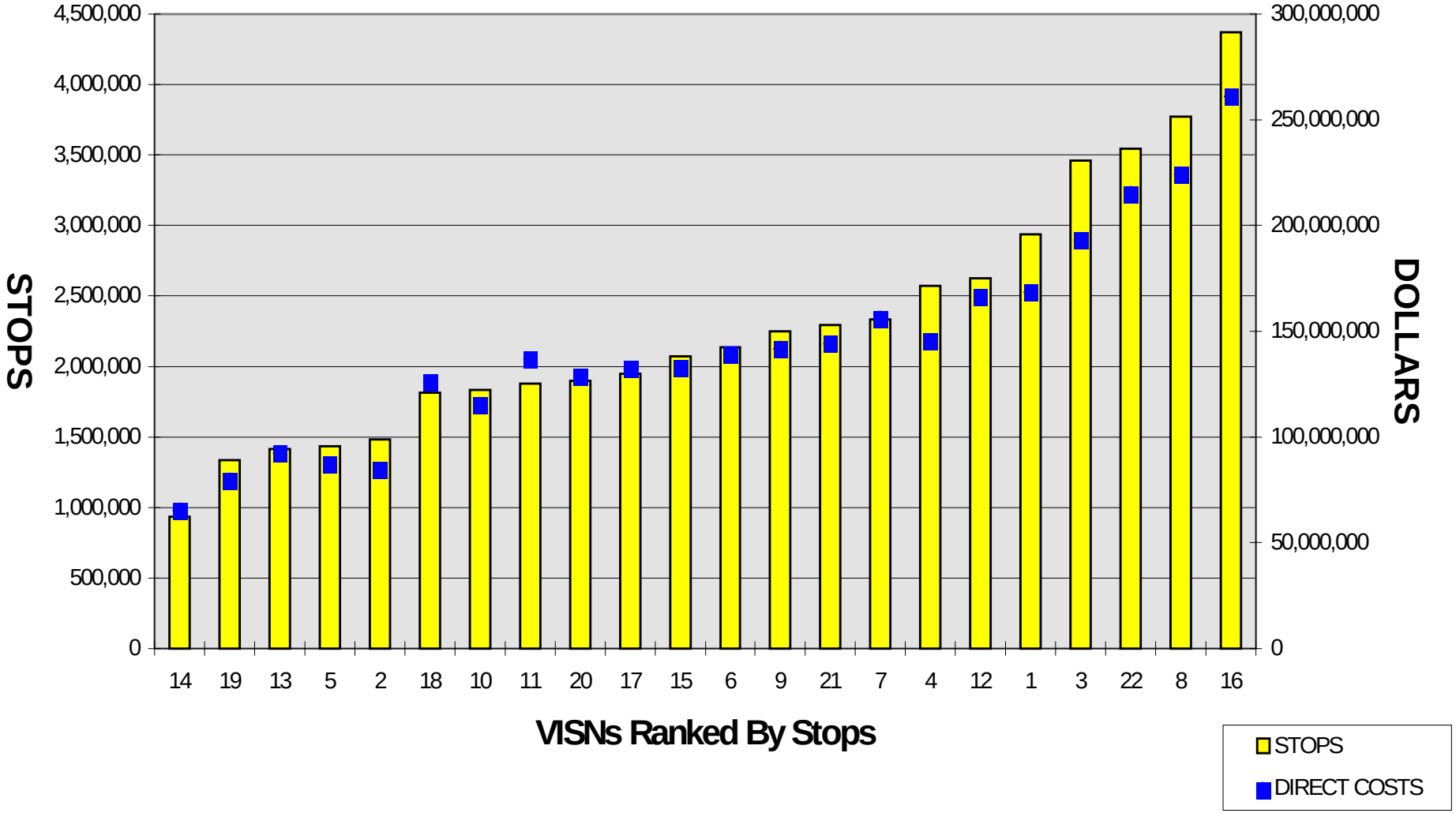
## FY 1995

**PURPOSE/SUBJECT:** To compare outpatient stops with direct costs for each VISN for Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** VISN 14 had the least number of outpatient stops with 932,557. All VISNs had relatively low costs when compared to outpatient stops, but VISNs 4, 1, 3, 22, 8, and 16 show the lowest costs when compared to outpatient stops. This appears to be due to a relatively high number of stops at these VISNs.

**INDICATED ACTION:** Review VISNs 4, 1, 3, 22, 8, and 16. Determine why these VISNs report a relatively high number of stops.

# OUTPATIENT STOPS AND DIRECT COSTS
# FY 1995



# OUTPATIENT STOPS AND AVERAGE COST PER STOP

# FY 1995

# OUTPATIENT STOPS AND AVERAGE COST PER STOP

## FY 1995

**PURPOSE/SUBJECT:** To show costs per stop for each VISN for Fiscal Year 1995.

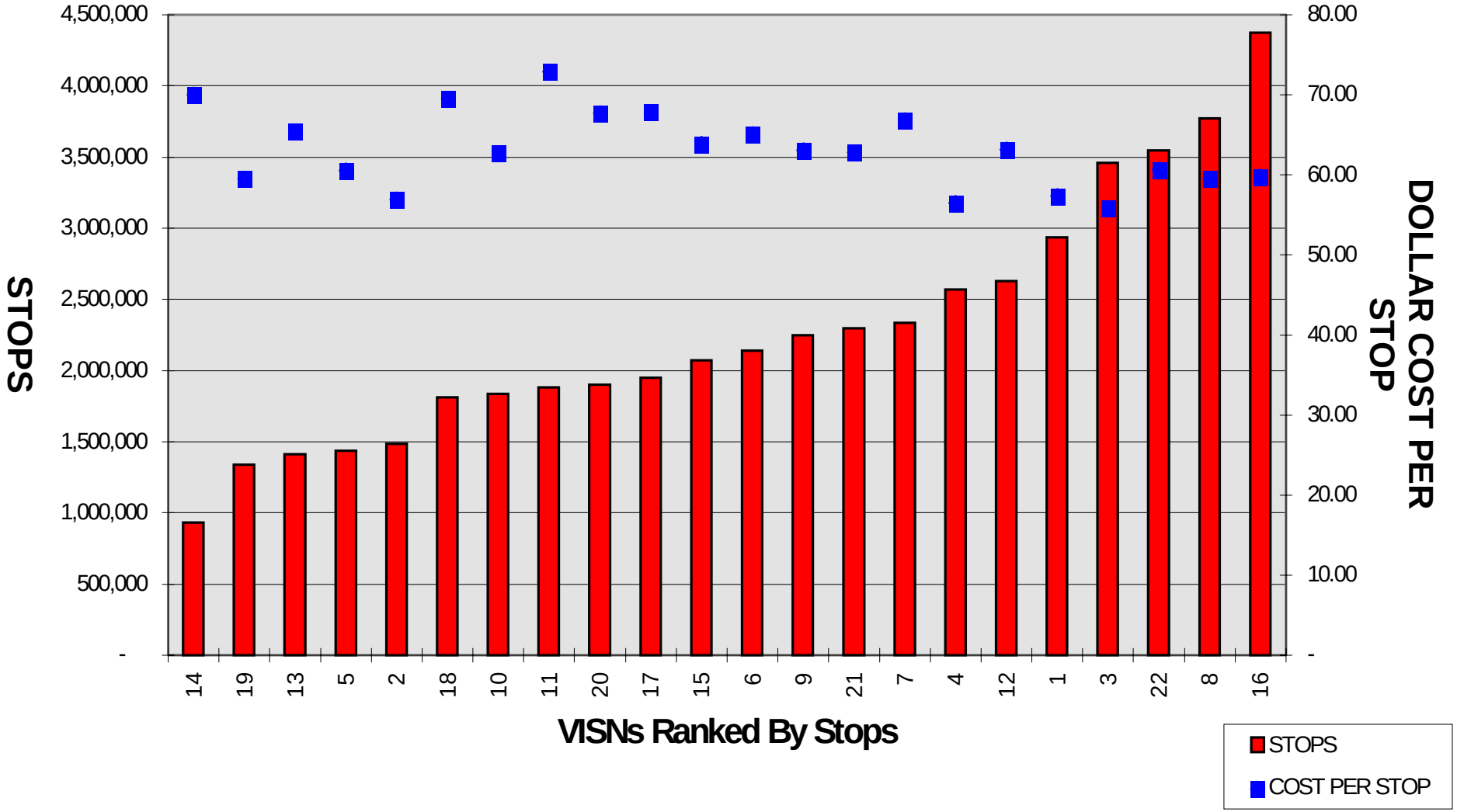
**ANALYSIS/CONCLUSION:** The following VISNs have relatively high costs per stop: 14, 13, 5, 2, 18, 10, 11, 20, 17, 15, 6, 9, 21, 7, 12.

The following VISNs have relatively low costs per stop: 4, 1, 3, 22, 8, 19, 16.

The average VA-wide cost per stop is $62.

**INDICATED ACTION:** Determine reasons for outliers and initiate emulation of "best practices" or corrective action as indicated.

# OUTPATIENT STOPS AND AVERAGE COST PER STOP
# FY 1995



# PERCENT OF TOTAL VA OUTPATIENT VISITS, STOPS, AND COSTS

# FY 1995

# PERCENT OF TOTAL VA OUTPATIENT VISITS, STOPS, AND COSTS

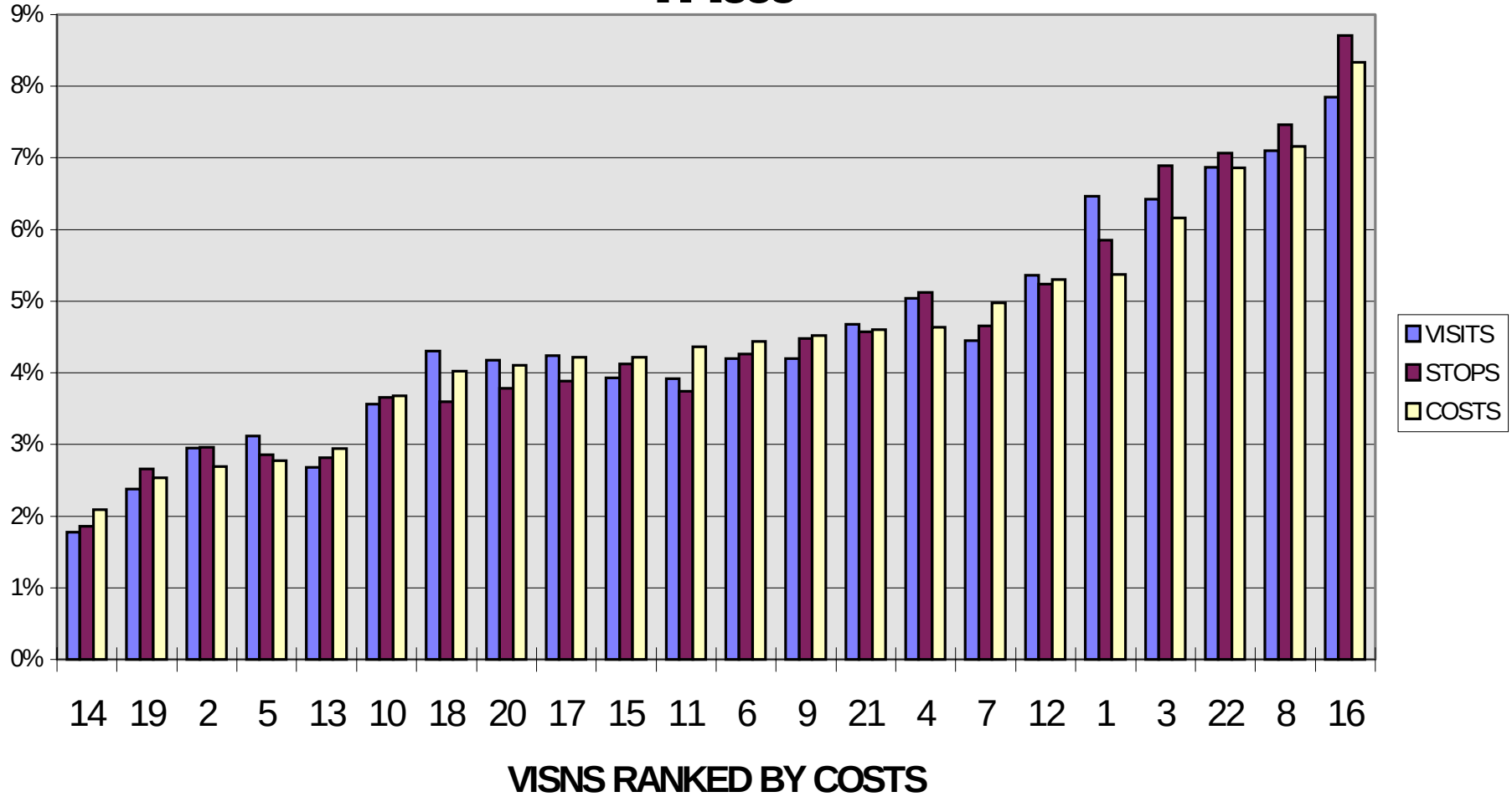
## FY 1995

**PURPOSE/SUBJECT:** To relate each VISN's percentage of outpatient visits, stops, and costs to VA's total outpatient visits, stops, and costs.

**ANALYSIS/CONCLUSION:** VISNs 14 and 19 represent the lowest percentage of the total VA outpatient direct costs and VISNs 8 and 16 represent the largest percentage of the total outpatient direct costs. VISNs 5, 18, 4, and 1 have relatively high visits and low costs. VISNs 19, 2, 4, 3, 22, 8, and 16, meanwhile, have relatively high numbers of stops to visits. The percentage of the total of visits and stops is closely correlated with the percentage of the total outpatient direct costs for all VISNs.

**INDICATED ACTION:** VISNs 5, 18, 4, and 1 should be reviewed for "best practices" which should be emulated elsewhere. VISNs 19, 2, 4, 3, 22, 8, and 16 should be reviewed for any needed reduction in the ratio of stops to visits.

# PERCENT OF VA OUTPATIENT VISITS, STOPS, AND COSTS
# FY 1995



# STOP TO VISIT RATIO BY VISN

# FY 1992 - FY 2005

# STOP TO VISIT RATIO BY VISN

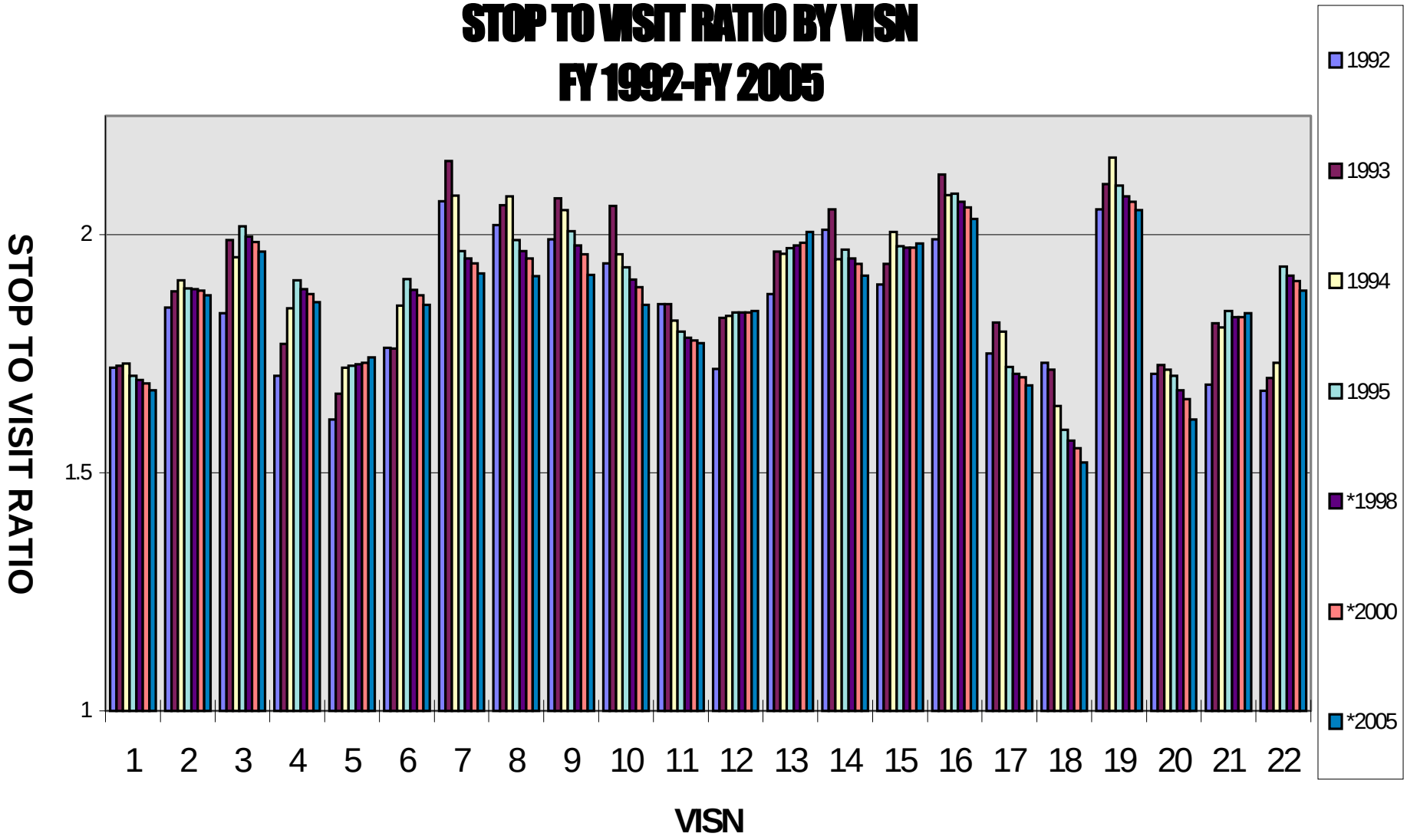
## FY 1992 - FY 2005

**PURPOSE/SUBJECT:** To show actual and projected stop to visit ratios for all VISNs from Fiscal Year 1992 through Fiscal Year 2000.

**ANALYSIS/CONCLUSION:** The following VISNs have relatively low stop to visit ratios: 1, 5, 17, 18, 20.
The following VISNs have relatively high stop to visit ratios: 7, 8, 9, 10, 16, 19.

**INDICATED ACTION:** Determine if such factors as complexity of care, staffing ratios, or the degree of affiliation impact the ratios of stops to visits.

# STOP TO VISIT RATIO BY VISN
# FY 1992-FY 2005




*Projected

# OUTLIER ANALYSIS OF OUTPATIENT VISITS AND COSTS

# FY 1995 BY VISN

# OUTLIER ANALYSIS OF OUTPATIENT VISITS AND COSTS

## FY 1995 BY VISN

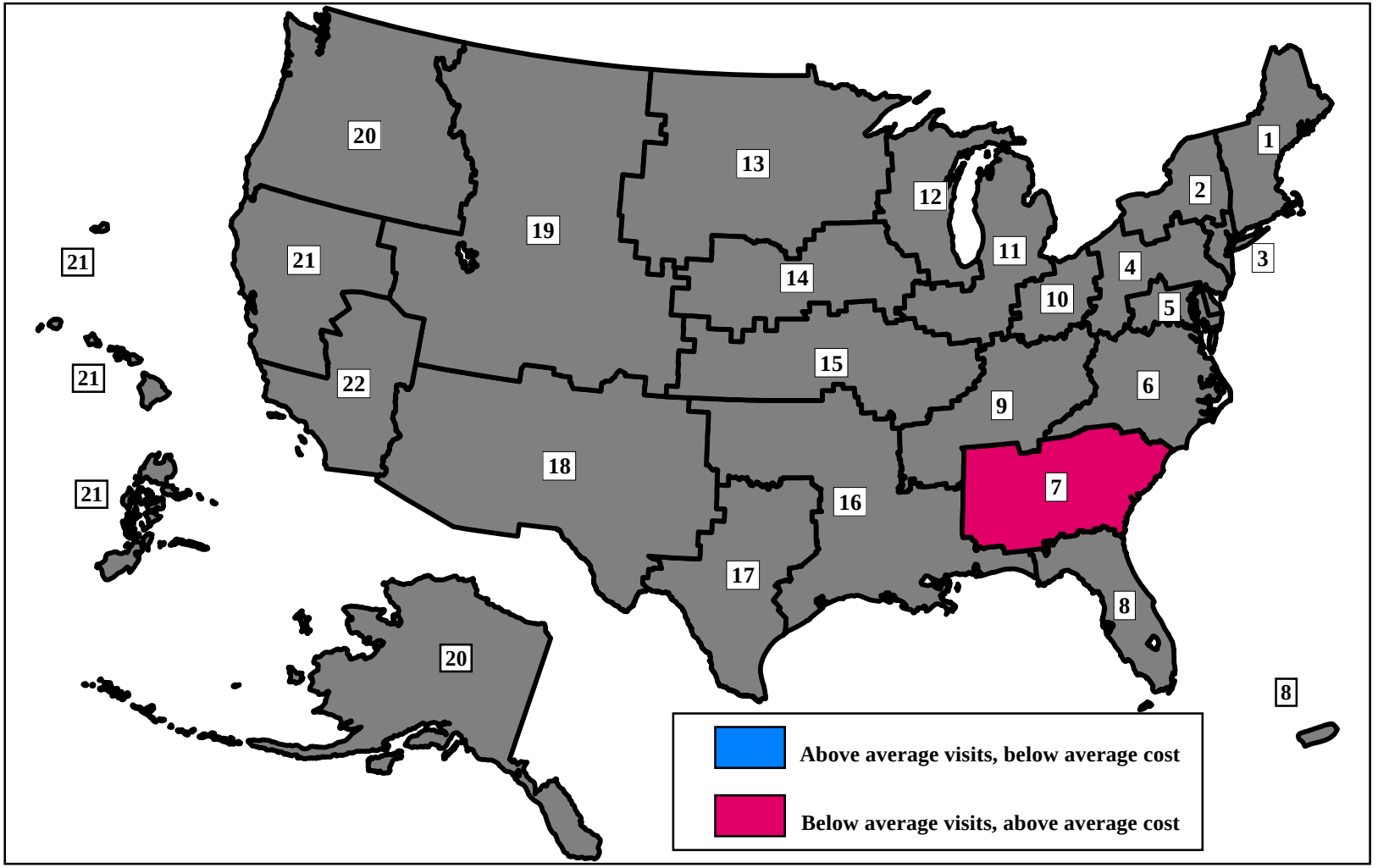
**PURPOSE/SUBJECT:** To compare VISN outpatient visits with direct costs for Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** No VISN had above average outpatient visits and below average costs.
VISN 7 had below average visits and above average costs.

**INDICATED ACTION:** Determine if outpatient unit costs are principally a function of workload levels. If so, assure that appropriate funding is provided to VISNs based on workload levels. Review VISN 7 for "best practices" to determine if corrective actions are warranted elsewhere.

# Outlier Analysis of Outpatient Visits and Costs

## FY 1995 by VISN



# OUTLIER ANALYSIS OF OUTPATIENT STOPS AND COSTS

# FY 1995 BY VISN

# OUTLIER ANALYSIS OF OUTPATIENT STOPS AND COSTS

## FY 1995 BY VISN

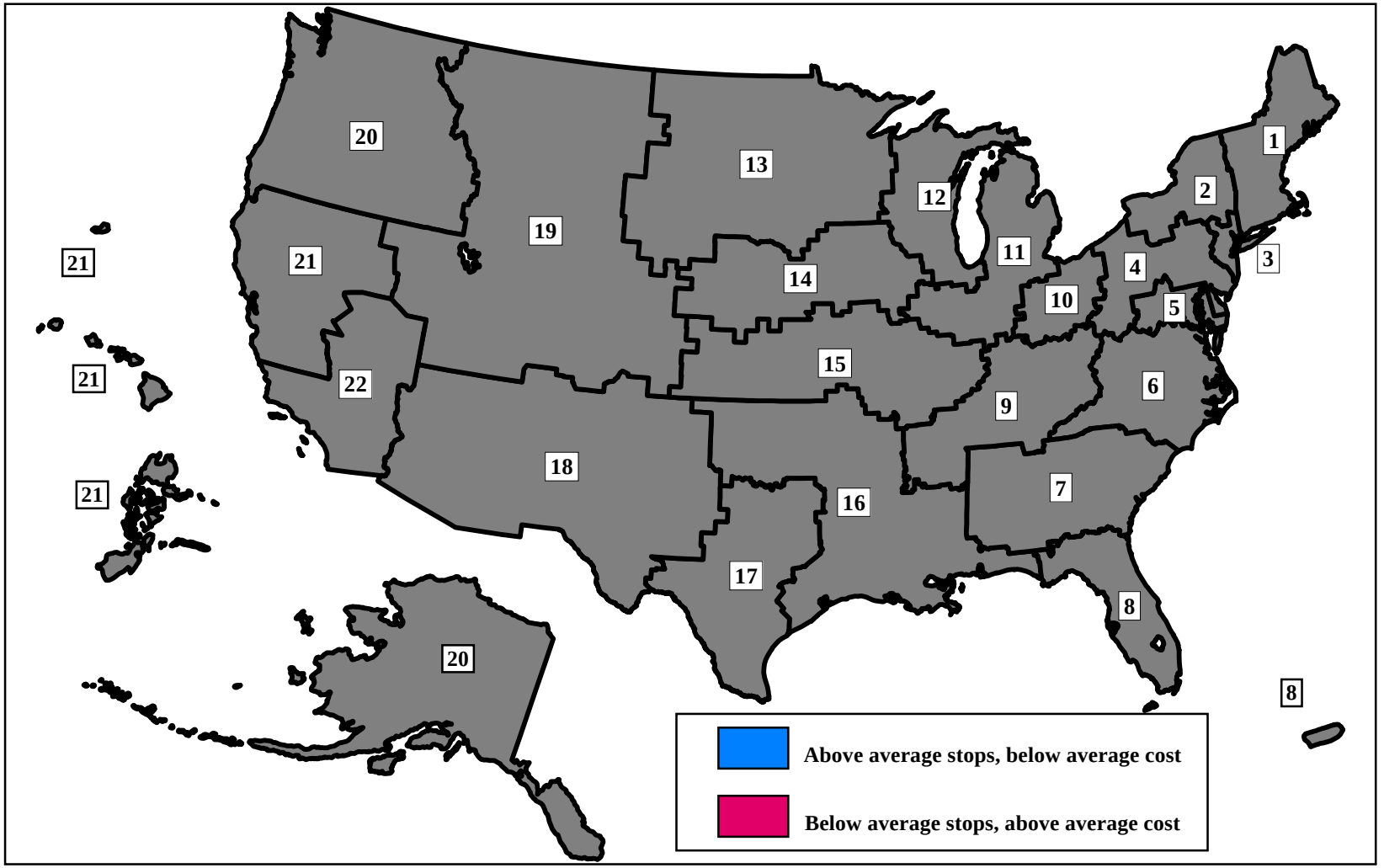
**PURPOSE/SUBJECT:** To compare VISN outpatient stops and outpatient direct costs for Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** No VISN had above average stops and below average costs. Nor did any VISN have below average stops and above average costs.

**INDICATED ACTION:** No action indicated.

# Outlier Analysis of Outpatient Stops and Costs

## FY 1995 by VISN



# PERCENT CHANGE FY 1992 - FY 1995 OF VA INPATIENT EPISODES AND COSTS

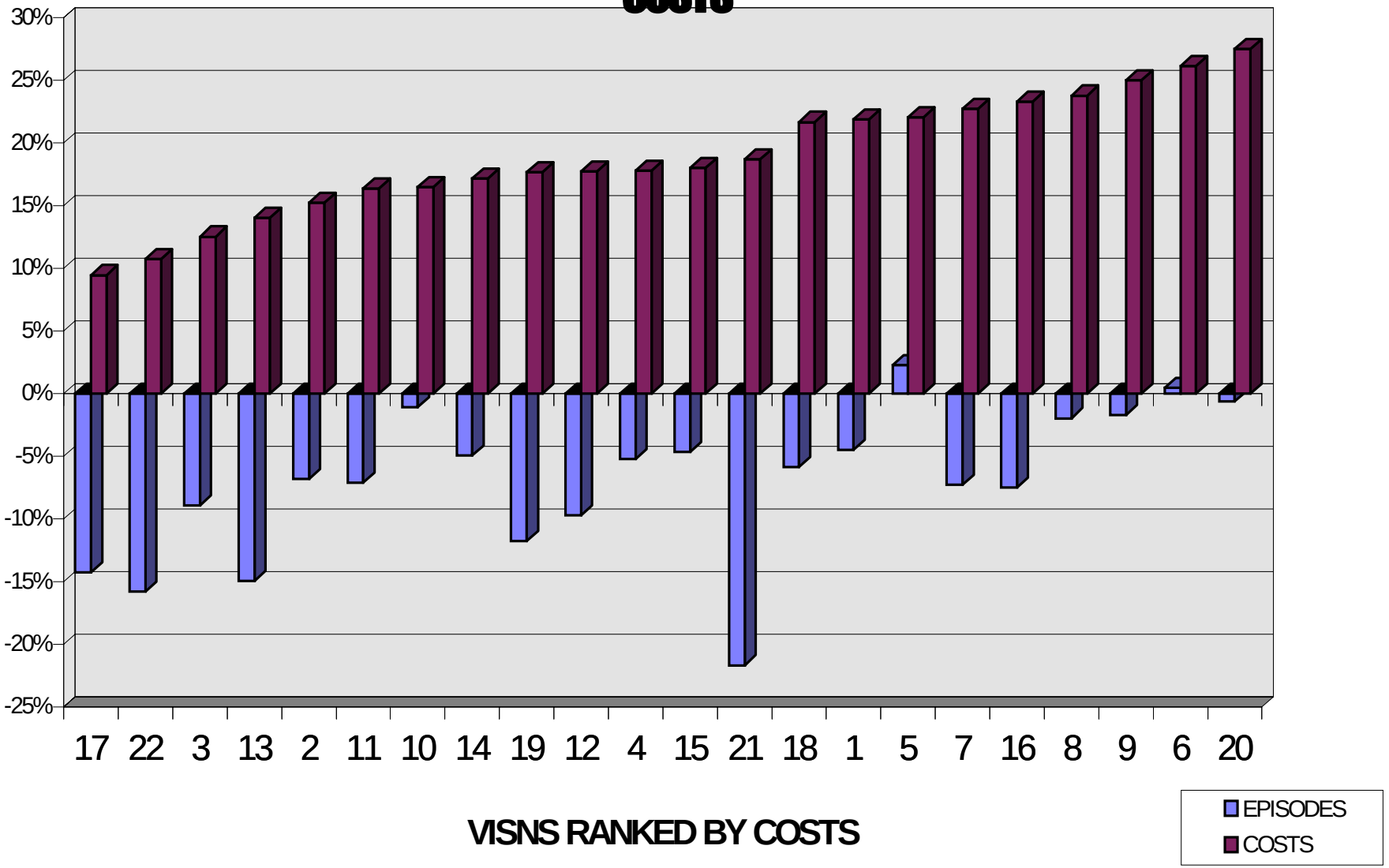
# PERCENT CHANGE FY 1992 - FY 1995 OF VA INPATIENT EPISODES AND COSTS

**PURPOSE/SUBJECT:** To display inpatient episodes and costs for Fiscal Year 1992 through Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** VISN 21 reported the greatest decline in inpatient episodes, 22 percent; it also reported a 19 percent increase in costs, tenth highest among the 22 VISNs. Only VISNs 5 and 6 reported increases in workload, 2 percent and .5 percent, respectively. However, the small increase in VISN 5 is accompanied by a 22 percent increase in costs, and the .5 percent increase in VISN 6 is accompanied by a 26 percent increase in costs. VISNs 8 (24 percent), 9 (25 percent), 6 (26 percent), and 20 (27 percent) show the highest increases in costs. Workload at these four facilities decreased minimally during the period, with the exception of VISN 6 for which workload increased slightly. VISNs 17 (9 percent) and 22 (11 percent) show the smallest increases in costs, and decreases in workload of 14 and 16 percent, respectively.

**INDICATED ACTION:** Determine why all VISNs apparently do not re-allocate resources in response to declining workload trends. Determine if lower increases in costs or costs which more closely reflect changes in workload are due to “best practices” which should be emulated elsewhere.

# PERCENT CHANGE FY 1992 - FY 1995 OF VA INPATIENT EPISODES AND COSTS




O-AA-3

# PERCENT CHANGE FY 1992 - FY 1995 OF VA OUTPATIENT VISITS AND COSTS

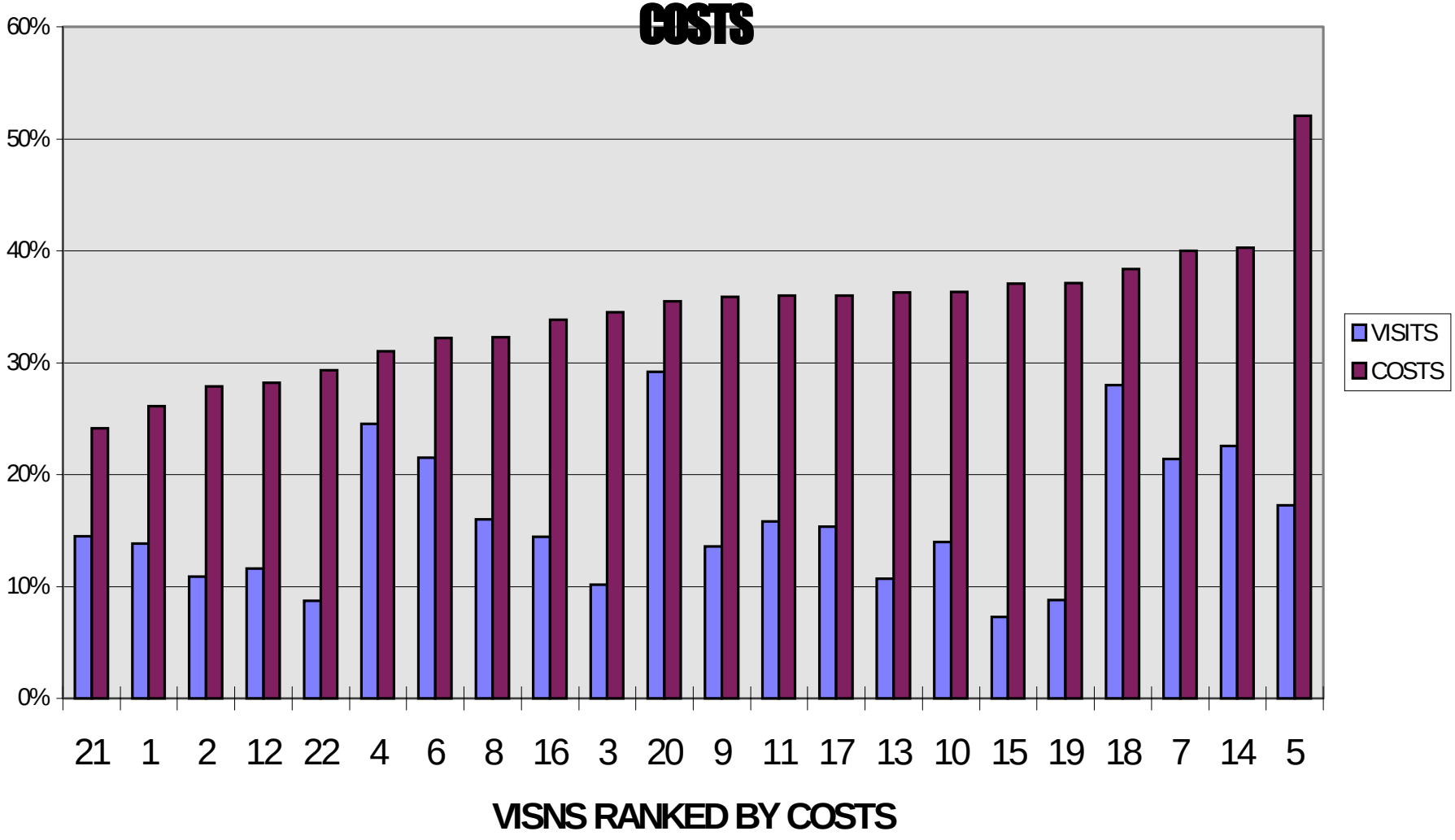
# PERCENT CHANGE FY 1992 - FY 1995 OF VA OUTPATIENT VISITS AND COSTS

**PURPOSE/SUBJECT:** To display percent of change in outpatient visits, stops, and costs for Fiscal Year 1992 through Fiscal Year 1995.

**ANALYSIS/CONCLUSION:** VISN 5 shows the greatest increase in outpatient costs (52 percent), while visits increased only 17 percent. VISNs 7 and 14 show the next highest increase in costs (40 percent), while showing increases in visits of 21 and 23 percent, respectively. VISNs 15 and 19 show a 37 percent increase in costs, while visits increased only 7 percent in VISN 15 and 9 percent in VISN 19. Among the 22 VISNs, increases in costs range from a low of 24 percent in VISN 21 to a high of 52 percent in VISN 5. Nevertheless, visit increases in both VISNs are similar, 14 percent in VISN 1 and 17 percent in VISN 5.

**INDICATED ACTION:** Determine why increases in outpatient costs in relation to visits vary so widely among VISNs. If necessary, reallocate resources among VISNs.

# PERCENT CHANGE FY 1992 - FY 1995 OF VA OUTPATIENT VISITS AND COSTS



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