VEREINTE NATIONEN

EXPERIENTIA MUTUA OMNIBUS PRODEST

INTOSAI

THE AUDIT OF PUBLIC HEALTH-CARE SYSTEMS BY SUPREME AUDIT INSTITUTIONS

Report on the 14th UN/INTOSAI Seminar
on Government Auditing

Vienna
March 27 — 31, 2000

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Division of Public Economics and Public Administration,

Department of Economic and Social Affairs (DESA)

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I. INTRODUCTION

The joint UN/INTOSAI interregional seminar on "The Audit of Public Health-Care Systems by Supreme Audit Institutions" was held from 27 to 31 March 2000 in Vienna, Austria. This event was the 14th interregional seminar organised by the Division of Public Economics and Public Administration, Department of Economic and Social Affairs (DESA), in conjunction with the International Organization of Supreme Audit Institutions (INTOSAI).

In the past, DESA had initiated several training programmes, designed to support developing countries in strengthening their government audit systems. As part of these training activities, the United Nations, together with INTOSAI, organised international training programmes on government audit at biannual intervals. In the past 29 years, thirteen such events took place, which dealt with the following topics:

1. General principles, methods and goals of government audit and related institutional problems (1971)
2. Techniques and methods used by supreme audit institutions with a view to improving financial and performance auditing (1973)
3. Public budgeting and accounting, the position of Supreme Audit Institutions in the modern state, audit of public enterprises (1976)
4. Principles of audit, organisation audit, performance audit and state audit of public enterprises (1979)
5. Concepts of audit, audit of tax receipts, audit of government financial institutions for development and audit of performance in public enterprises (1981)
6. Nature and scope of internal management control systems; Role of Internal Audit in Internal Management Control Systems, Internal management control systems in developing countries (1984)
7. The audit of major development projects (1986)
8. Application of audit standards in the public sector (1988)
9. Accounting and auditing of foreign aid programmes and EDP audit (1990)
10. EDP Auditing - Sharing experiences, opportunities and challenges (1992)
11. The role of SAIs in the restructuring of the public sector (1994)
12. The role of Supreme Audit Institutions in fighting corruption and mismanagement (1996)
13. The Role of Supreme Audit Institutions in Auditing Public Works (1998)

The most recent seminar was devoted to the role of Supreme Audit Institutions (SAIs) in auditing public health-care systems.

Altogether, some 50 persons attended the event, including SAI staff from developing countries and Eastern European reform countries. The United Nations, the European Court of Auditors, and SAIs provided lecturers (for a list of participants see Attachement).

The seminar started on 27 March 2000 with a plenary meeting and ended on 31 March 2000 after a total of nine plenary sessions and three meetings of the four working groups and one excursion to a hospital.

The main topics addressed by the 14th UN/INTOSAI seminar were

1. The prevention of irregularities by SAIs in government health-care programmes
2. The audit of health-care programmes, the example of a care programme for drug addicts
3. The audit of hospitals by SAIs
4. Performance audit of the provision of public health-care services in economically and socially deprived areas
5. The audit of social security in France
6. EU financial activities in the medical field – Audit approaches of the European Court of Auditors

In addition, country reports on the audit of public health-care systems were presented by Lesotho (AFROSAI), Samoa (SPASAI), Antigua and Barbuda (CAROSAI), Malaysia (ASOSAI), Morocco (ARABOSAI), Malta (EUROSAI) and Bolivia (OLACEFS).

This agenda vividly illustrates the wide scope and depth of the topics covered.

Following the presentation of the main themes, a general debate and question-and-answer-sessions provided participants with an opportunity to engage in in-depth discussions and summarise the major contents. The meeting then broke up into working groups for a more in-depth exchange of experiences on the main issues of the seminar, and to draw conclusions and draft recommendations.

In a number of presentations the representatives of individual SAIs outlined their experiences and provided a good insight into the responsibilities and possibilities of government audit in the context of auditing public health-care systems, familiarising the participants with the various challenges and tasks in this area.

The creation of a legal and administrative framework to prevent and avoid mismanagement in awarding and implementing public health-care systems, further education and training of auditors with a view to improving technical audit skills needed to detect shortcomings in the system of public health-care systems implementation, the implementability of audit findings (e.g. sanctioning possibilities), the comprehensive audit of public health-care

systems including financial, economic (capital and follow-up costs) and technical aspects, audit competence with regard to performance audits, and questions of international or bilateral co-operation of SAIs in jointly funded projects were issues which the participants regarded important. Moreover, it was stressed that auditors need specialist know-how and skills as well as professional competence to be able to assess the efficiency and effectiveness of public health-care systems. These types of audits present an enormous challenge to SAIs with regard to the technical capabilities and skills of their staff.

II. SUMMARY OF THE INTRODUCTORY PRESENTATIONS

Dr. Franz Fiedler, the President of the Austrian Court of Audit and Secretary General of INTOSAI, welcomed the participants. He emphasised the importance of existing co-operation between the United Nations and INTOSAI as reflected by the long-standing organisation of interregional seminars and expert group meetings on government audit. The overall theme of the 14th UN/INTOSAI seminar was chosen in view of the significance of this topic for many countries, where governments spend significant amounts of public money on the erection and maintenance of hospitals and health-care systems and where requirement planning was often insufficient. The planning and installation of hospitals and health-care systems would frequently lead to mismanagement and not fulfil its aims, and give rise to enormous losses, with a negative impact on the national finances.

In his inaugurating speech, Dr. Fiedler stressed that it was one of the fundamental tasks of the public sector to maintain and preserve national health, and therefore the health of the individual. Health was a non-material asset which was not amenable to quantification. However, the preservation of national health would require an investment of material public resources. The state had to ensure that its inhabitants reach and maintain maximum health and that public funds were spent as effectively as possible. In providing for public health-care, the state was therefore permanently split between the challenge of protecting national health as a non-material asset, and the requirement of reaching this objective with limited material resources in the best possible manner.

In contemporary society, the notion of health-care was not limited to the provision of medical services to the population, but extended widely into the following areas:

1. Patient care: Medical services are administered in hospitals, where shortcomings, corruption and mismanagement may result from the construction and operation of a hospital, as well as by established physicians.
2. Preventive medicine
3. Care-programmes for drug addicts
4. Social insurance (sickness insurance)
5. Government health-care programmes

In order to accomplish these tasks, the state needed huge amounts of taxpayer's money. Auditing the use of these funds was part of the mandate of SAIs. In recent years, medical progress had prompted dramatic increases in health-care spending, which was partly due to the growing reliance on technology in medicine, the almost full-cover provision of medical services to an ever-increasing target group, and – owing to improved medical services – a substantive rise in life expectancy, which in turn generated new problems with regard to

old-age care, and related needs for additional funding, and placed an extra burden on national budgets.

It was a challenge for SAIs to examine whether scarce public funds were used optimally and effectively.

The large sums involved in public health-care harboured a vast potential for savings. SAIs have criticised inappropriate business practices, unlawful contracts being awarded in the construction of hospitals, excessive fees charged by physicians etc. However, SAIs should not limit themselves to voicing mere criticism, but should also come up with practicable recommendations.

By way of conclusion, Dr. Fiedler thanked the United Nations for the fruitful co-operation, as well as those SAIs which had sent speakers to the seminar. He called on the seminar participants to share their know-how and experience on the issue and thereby achieve a rewarding outcome of the seminar and contribute to improving financial management in their countries.

Welcoming the participants on behalf of the United Nations, Mr. Bouab, officer in charge, Division of Public Economics and Public Administration, Department of Economic and Social Affairs (DESA), stressed the high value accorded by the United Nations to these seminars and events and underscored the important role these training programmes played in particular in developing countries in improving their entire financial management.

The theme chosen for the 14th UN/INTOSAI seminar was of general interest, as public health-care was a concern of all countries and this sector benefited from considerable funding. Since auditing procedures were often ill-defined and the use of funds for public health-care often not subject to efficient controls, many national economies faced financial losses and a risk that resources were not utilised in the most effective manner. As one of their goals, SAIs should develop independent and valid information for decision-makers. This would presuppose highly-trained and motivated staff as well as useful standards. By means of clear-cut audit objectives, audit programmes and standards, financial audits, documentary audits and performance audits, and by drafting audit reports that would identify the major problems and suggest recommendations, a contribution towards achieving a more efficient use of funds in public health-care could be made.

Public health services will continue to remain a significant activity of governments both in terms of the profound humanitarian and equity issues it entails as well as the level of resources it consumes. Supreme audit institutions, through regular and properly planned audits of public sector health services, can contribute effectively to public accountability and to the efficient and effective use of resources. The challenges presented by such audits

are immense. By sharing of experiences and information the burden can be reduced and audits conducted more effectively.

Mr. Bouab expressed his hope that the 14th UN/INTOSAI seminar would turn out a practical aid for SAIs in delivering their tasks of auditing and reporting on public health-care and that it would contribute to strengthening financial management in the countries concerned.

The technical chair, Dr. James Robertson, stated in his opening address that the subject of this conference, the audit of public health systems, was a matter of importance to everyone. Health-care involved large expenditures, which were increasing through time as science was uncovering new drugs and treatments for illness. At the same time, medical equipment was becoming more sophisticated and more expensive, both to purchase and to operate in hospitals.

Demographic factors also added to the costs of providing health care. People were living longer and in many countries the population of young people was increasing. Both ends of the age spectrum were expensive in terms of the costs of health-care provision.

With limited resources available to provide health care, it was important that providers maximise the economy, efficiency and effectiveness of the services they provide. The auditor had an important role to play in helping to ensure that value for money was increased, as well as that the expenditure was lawful and accounted for properly.

At the same time, patients were rightly becoming more aware of the quality of the service they receive. This had led to calls for more transparency, more comparisons of health outcomes between providers and assurance that best practice was being adopted as part of their treatment.

This growing demand for transparency was another reason why health audit work was increasing in importance, and why this conference was so timely.

In auditing, it was important to define the correct criteria to measure performance and measure how they changed over time. This required suitable methodologies to be developed by the auditor, and the case studies to be considered during the seminar were to be helpful in what is often a problematic field.

A methodology required carefully planned implementation so that the appropriate evidence can be collected. But this was not the end of the auditor‘s work. Audit by itself can be sterile and futile if the results were not used to promote appropriate change. This implied that accountability arrangements are important so that lessons and recommendations resulting from audit are acknowledged and implemented. The independence of the auditor was as important in the field of health audit as in every other to ensure that there was an open and constructive debate.

III. SUMMARY OF THE OUTCOME OF THE SEMINAR

1. The performance of public health systems is of central interest and importance to all countries, irrespective of the level of resources available to them. The Seminar recognised the need to put the patient at the centre of the analysis, and the importance of achieving better standards of health within existing resources, or using additional resources to best effect. The central role of the auditor in facilitating this was recognised, and the Seminar took as its theme the objective of "Making a Difference" in terms of improvement of public health-care systems.

2. The work of Seminar delegates was based on the firm foundation of four in-depth keynote presentations from the United States, Switzerland, Austria and Mexico.

These covered respectively:

- the audit of a health-care system (Medicare);
- the audit of a specific health policy (intervention to address drug addiction);
- the audit of a health institution (Austrian hospital); and
- the audit of health provision directed towards socially and economically disadvantaged groups in the population.

3. In addition, delegates were able to draw on a wealth of information prepared by each country attending the seminar. This impressive body of information was augmented by presentations to the Seminar by the delegates of Samoa, Lesotho, Antigua and Barbuda, Malaysia, Morocco, Malta and Bolivia. Seminar participants also visited the Vienna General Hospital.

4. Four Working Groups examined the topics covered by the keynote presentations in more detail. Many common observations and conclusions emerged even though the field of audit being discussed by the Working Groups was very wide.

5. The Working Groups were unanimous that value for money audit of public health systems is essential, as well as regularity and lawfulness audit. The Groups were also unanimous that value for money work needs to be well planned, draw in a wide variety of skills and expertise, and adopt appropriate methodologies, evaluating against suitable audit criteria. The Groups emphasized the importance of generating feasible and practiced recommendations, ensuring that they are implemented, and that there is follow-up to gain assurance that recommendations deliver the desired results.

The selection and scope of health audit

6. The Working Groups considered how health audit subjects should be selected and identified considerations to be taken into account:

- financial regularity audit was important;
- value for money or performance audit (3Es audit) should also be conducted;
- assessment of value for money risks is useful in selecting and scoping health audit. A number of indicators of risk exist, including

  - lack of health policy, programme or project objectives,
  - lack of a hierarchy of objectives,
  - poor management information systems,
  - lack of prior health policy, programme, project appraisal,
  - poor or missing performance indicators for inputs, outputs and outcomes,
  - lack of adequate procedures for implementation or monitoring of policies programmes or projects;

- experts can help identify audit topics, but care must be taken to ensure that their advice is objective and comprehensive;
- financial materiality (amount of expenditure) provides a basis for selection of audit;
- the costs of the audit should not be greater than the benefits of the audit. But non-financial aspects of health expenditure are important, and may justify audit work even if the expenditure is small (materiality by nature);
- analysis by SAIs of performance indicators or variations in performance within the public health service.

Audit criteria

7. The Working Groups were agreed that criteria against which to measure performance are vital but also sometimes difficult to define. Indicators for the quality of health provision are particularly important but problematic. The Working Groups concluded that:

- work already carried out in some countries was a very useful basis (documents circulated by delegations) for measuring performance and quality of health provisions;
- accounting standards provided a clear basis for financial audit;
- health provision can be evaluated against programme guidelines or performance indicators used by programme managers;

- indicators can be developed to assess the economy, efficiency and effectiveness of the health provision process, outputs and outcomes;
- the auditor needs to be creative;
- Project results can be compared against targets and outcomes, and against the cost of resources used in providing public health care;
- there should be assessment against policy, programme or project objectives;
- specific audit criteria include

  - mortality
  - morbidity
  - equipment provision and/or utilisation
  - adequacy of record keeping
  - infant mortality, still births
  - ratios of medical personnel to beds
  - life expectancy
  - patient satisfaction.

Audit methodologies

8. The Working Groups identified many potentially useful audit methodologies. The use of particular methodologies depends on the context of the health audit, but the methods include:

- face-to-face interviews;
- using documentary evidence to gather information or confirm oral evidence;
- statistical analyses;
- meta-analysis (synthesising the results of existing research);
- questionnaire surveys (postal, telephone, face-to-face);
- advice and analysis by experts;
- on-site visits;
- test sampling;
- comparative studies and use of benchmarking;
- understanding the policy context and target populations;
- parallel running;
- simulations;
- mystery customers.

Requirements for audit skills, experience and training

9. The Working Groups were entirely agreed on the need for audit teams to have the right skills. The Groups concluded that:

- professional qualifications were needed in a wide range of subjects such as law, social sciences, engineering and statistics;
- skills did not always need to be provided from within the permanent audit team, but could be provided by consultants, or by persons joining the audit term on a temporary basis (perhaps from other SAIs). However, it is important to remember that this can be expensive.

Presentation and follow-up of audit results

10. The Working Groups were convinced that it is important to present audit findings work well. The Groups provided guidance on this that included:

- developing a strong evidence base for audit reports;
- making it clear to the auditee how the results and conclusions derive from the evidence;
- ensuring that the right of the auditee to be heard is honoured on the question of conclusions reached and recommendations made;
- work to ensure "buy-in" by the auditee, by making recommendations practical and not over-ambitions. Informal discussions with the auditee can be very helpful;
- setting out the objectives of the audit clearly;
- making it clear where the auditor has relied on secondary evidence not validated directly;
- ensuring that results are published;
- following-up the audit work by ensuring that audit recommendations are considered by the competent authority in a timely way;
- follow-up to ensure that audit recommendations are implemented;
- following-up the results achieved from implementing recommendations;
- carrying out further audit if necessary of specific issues.

11. In conducting audit work, the Groups stressed the need to maintain cordial and constructive relations with the auditee.

Conclusions

12. Delegates expressed appreciation for the opportunity to work together collectively, sharing information, experiences and knowledge on the important subject of audit of public health provision. Appreciation was expressed also for the quality of the presentations and for smooth running of the Seminar.

13. Participants looked forward to using the results of the Seminar in their audit work. They expressed the hope that they would be able to continue to share experiences and audit results and reports with each other and INTOSAI on a regular basis. They invited INTOSAI to disseminate this information by all appropriate means and to organise specific seminars on project evaluation. In addition they saw the advantage in INTOSAI facilitating training visits of auditors to SAIs having wider experience.

14. Overall, delegates rated the 14th UN/INTOSAI Seminar as a very valuable occasion and were confident that the intensive and fruitful work would indeed help to "Make a Difference" in improving the provision and delivery of public health care.

IV. MAIN PAPERS

1. United States of America: The Role of Supreme Audit Institutions in Preventing Irregularities in Government Health-Care Programs

When Willie Sutton, a career bank robber of the 1930s, was asked why he robbed banks, he replied, "Because that's where the money is." Sutton's answer provides the reason for national concern about fraud in Medicare, the largest government-funded health insurance program in the United States. Outlays for this program, which covers a range of health services and supplies for elderly and disabled Americans, total about US$ 200 billion annually. Given such expenditures, Medicare is inherently vulnerable to exploitation because "that's where the money is"[1]

Oversight of the Medicare program is somewhat complex. The key players include:

- Medicare contractors: private sector insurance companies hired by the government to perform the program's day-to-day administrative functions.
- The Health-care Financing Administration (HCFA): the agency in the Department of Health and Human Services (HHS) in the executive branch responsible for administering Medicare and for hiring, managing, and overseeing the work of the Medicare contractors.
- The HHS Office of the Inspector General (OIG): serves as the executive branch's internal auditor for the government's health and social programs.
- The U.S. General Accounting Office (GAO): serves as the legislative branch's external auditor for all government programs.

To further explore GAO's role in examining this federally funded program, let us first consider Medicare's basic structure. Medicare functions largely as an insurer—a third-party payer of claims made by private physicians, hospitals, equipment suppliers, and other providers of health-care services. Medicare is not a direct provider of services, and providers of Medicare services are not salaried government employees.[2]

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[1] Since 1990,GAO has annually identified government programs and agencies most vulnerable to waste, fraud, abuse, and mismanagement. The entities identified are considered "high risk" and are formally classified as such. Because of the hundreds of billions of dollars at stake, Medicare remains a permanent entry on GAO's high-risk list.

[2] The program is financed by payroll taxes paid by workers and employers, general U.S. Treasury revenues, and monthly beneficiary premiums.

HCFA contracts with private insurance companies, which already serve commercially as payers of health-care services, to administer Medicare payment functions. Currently, HCFA contracts with about 58 of these companies, also referred to as Medicare claims administration contractors. Responsible for receiving claims, judging their appropriateness, and paying them promptly, the Medicare contractors serve as the program's first line of defense against providers' erroneous and fraudulent billing practices that can result in serious financial losses if not prevented or detected. In fiscal year 1998, Medicare contractors processed claims worth an average of more than US$ 700 million each business day.

GAO's role is to report to the legislature—the U.S. Congress—on how well the contractors safeguard Medicare from payment errors and fraud and how well HCFA monitors the contractors' work.[1] At the request of congressional committees, GAO frequently conducts reviews of HCFA's management of its Medicare contractors and addresses such issues as the adequacy of contractors' internal management controls, management and financial data, and key program safeguards to prevent payment errors. (See the attached list of related reports.)

1. Nature of irregular billing practices found in Medicare

As long as substantial funds are involved, no reimbursement method is free from the natural incentive for offenders to cheat. It therefore behoves those conducting oversight activities to understand a system's vulnerabilities to fraud and systematic ways to identify it. In the case of Medicare, the contractors are the first in line to oversee the program and spot fraudulent activities.

Providers' billing errors and other irregularities occur in an environment in which contractors handle, in the aggregate, about 900 million claims a year from roughly a million providers of health services and supplies. In the Medicare program, each claim for reimbursement must comply with administrative requirements and payment rules. For example, a claim must have the correct spelling of a beneficiary's name, Medicare number, and other eligibility information before it is paid. It must also be a claim for a "covered" service—that is, a service provided to a beneficiary that is allowable in the Medicare program. Millions of medical claims are submitted for relatively small amounts, so the Medicare claims administration contractors cannot spend too much time or money scrutinizing them as they are submitted for payment. Instead, contractors must develop

[1] GAO also reviews Medicare's payment and pricing methods and current proposals to reform the program's financing structure. In addition, GAO conducts reviews of health-related programs in other HHS agencies—including the Centers for Disease Control and Prevention, the Food and Drug Administration, and the National Institutes of Health—and health programs in the Departments of Defense and Veterans Affairs.

analytical techniques that quickly identify suspicious claims and either deny them outright or set them aside for further review.

Improper billing practices include "upcoding," in which the provider misrepresents treatment provided and bills for a more costly procedure or item; "phantom" billing, in which a provider bills for services never provided; and delivering more treatment or services than is either necessary or appropriate for the patient's diagnosis. The table below presents examples of billing irregularities, showing how providers billing Medicare can, if inclined, attempt to cheat the program and why careful scrutiny of the bills is needed.

1.1 Examples of Billing Irregularities

- Medicare reimbursed a psychology group practice for individual psychotherapy visits of 45 to 50 minutes. Three psychologists in the group were billing for, and allegedly seeing, from 17 to 42 nursing facility patients per day. On many days, the leading biller of this group would have had to work more than 24 uninterrupted hours to provide the services he claimed.

- Nursing facilities are an attractive target for fraud because the facilities aggregate Medicare beneficiaries in a single setting, enabling unscrupulous billers of Medicare services to operate their schemes in volume. In some instances, patient records at nursing facilities are made available to outside providers who visit facility patients periodically, enabling the provider to obtain the information needed to bill Medicare. In one case, Medicare paid a podiatrist $143,580 for performing surgical procedures on at least 4,400 nursing facility patients during a 6-month period. For these services to be legitimate, the podiatrist would have had to serve at least 34 patients a day, 5 days a week.

- Automated claims processing systems can be designed to provide historical claims data "on line," that is, while a claim is in process and before payment is made. Such a system enables analysts to compare claims in process against claims for the same procedure or item previously submitted by the provider. Without this capability, analysts cannot spot, prior to payment, suspiciously large increases in reimbursements over a short period. For example, in the fourth quarter of one year, a Medicare contractor paid a medical equipment supplier $211,900 for surgical dressing claims. For the same quarter a year later, the contractor paid the same supplier more than $6 million--a 2,800-percent increase in the amount paid—without becoming suspicious.

Source: Medicare: Control Over Fraud and Abuse Remains Elusive (GAO/T-HEHS-97-165, Jun. 26, 1997).

2. Systematic approach to identifying billing irregularities

In some countries, the government's audit office may perform the direct oversight function analogous to that of the Medicare contractors, and the contractors' claims review experience may therefore be instructive. Contractors' antifraud activities include investigating leads from Medicare patients and checking the legitimacy of provider credentials, but their claims review activities are arguably the most systematic in identifying billing irregularities. Because checking every claim is not practical, contractors select samples of claims for review. Some samples are reviewed "prepayment," that is, before the claims are paid, whereas others are reviewed "postpayment," that is, after the provider receives payment.

2.1 Prepayment Claims Screening

The prepayment screening of claims is one of Medicare's key fraud prevention activities. Contractors screen claims for compliance with administrative billing procedures as well as medical coverage policies. Edits are programmed into claims processing software to reject claims that are incomplete or have inconsistent information. For example, if a digit in a provider's billing number is missing or the digits do not match other information correctly, the computer automatically denies payment until the data are corrected. Certain edits automatically deny duplicate claims. Others are used to weed out claims with services that, on their face, do not seem medically necessary. For example, an edit might suspend the processing of a claim for an ankle x-ray if the diagnosis recorded on the claim was heart disease. In such a case, the claim might receive further review by the contractor's claims review staff, typically a nurse or other medical professional.

2.2 Postpayment Review

Postpayment reviews consist of efforts to detect irregularities or patterns of improper billing through analyses of paid claims. Contractor analysts focus on identifying specific irregularities in a provider's billing patterns and then performing detailed audits of those claims data. In addition to spotting dishonest providers, this approach helps analysts identify specific services, procedures, or items that are subject to unclear Medicare payment rules.

Contractor analysts start by examining claims data to find patterns that deviate from a norm. They observe billing patterns to identify providers who bill for many more services per patient than their peers. They also observe expenditure trends, comparing current spending with spending in previous periods, for specific services and procedures.

This targeted approach can lead to the performance of detailed audits of providers' claims. Claims audits are typically conducted for providers whose billings have shown irregularities. In these cases, contractor analysts review a sample of claims for the provider's patients more carefully to determine whether services were appropriate—that is, medically necessary, covered by Medicare, and actually provided—and whether they were billed in compliance with Medicare rules. Audits are resource-intensive, often involving medical record reviews and patient and provider interviews. If an audit discloses that payments were made for unnecessary or inappropriate services, contractor staff are responsible for making efforts to recover the funds mistakenly paid. If there is evidence of criminal intent, the contractor may refer the case to enforcement authorities—often the HHS Inspector General—for further investigation and possible prosecution.

3. Oversight of Medicare's bill-payers

In countries that rely on the private sector to administer their publicly funded health-care programs, the government's audit office may play an oversight role similar to that which HCFA performs for Medicare. HCFA is responsible for ensuring that Medicare contractors do their jobs accurately and efficiently, which entails paying appropriate claims while identifying those that are inappropriate. The agency requires the contractors to submit complete and accurate information on their performance. In addition, the Federal Managers' Financial Integrity Act of 1982 and the Chief Financial Officers Act of 1990 requires each executive branch agency to establish and maintain a system of accounting and internal controls related to all assets for which the agency is responsible.[1] In complying with this requirement, HCFA requires Medicare contractors, which control many of the funds for which HCFA is ultimately responsible, to submit annual certifications regarding their internal accounting and administrative controls. These certifications must reasonably ensure that the contractors are complying with applicable law and that their operations are safeguarded against waste, loss, or misappropriation.

In its audits of HCFA's financial statements, the HHS Office of the Inspector General estimated that contractors improperly paid more than US$ 20 billion in fiscal year 1997 and US$ 12 billion in fiscal year 1998. Ninety percent of the improper payments for 1998 were detected through the medical review of records, which determines whether medical services are covered by Medicare and are reasonable, necessary, and appropriate. In addition, for both years, the Inspector General noted material internal control weaknesses for HCFA and its contractors.

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[1] GAO was very instrumental in providing evidence persuading the Congress of the importance and necessity of this legislation.

In July 1999 at the request of the U.S. Congress, GAO reported on HCFA's oversight of the Medicare contractors. The report painted a dismal picture of HCFA's efforts to manage the Medicare contractors, and thus, of the program's vulnerability to continued, expensive exploitation. The report noted that symptomatic of HCFA's poor management was that six Medicare contractors since 1993 had settled civil and criminal charges after they were accused of improper activities. The charges against the contractors included failing to check claims to ensure proper payment, falsifying performance data, and not maintaining adequate managerial controls. Despite these incidents, GAO found that HCFA continued to let contractors self-certify their management controls, rarely checking to ensure that controls were working as required and rarely validating contractors' self-reported data. By relying on financial and workload data reported by the contractors themselves, HCFA could not ensure that contractors' reports of the amount of accounts receivable or claims processing timeliness, volume, and accuracy were reliable.

HCFA's oversight process lacked focus and accountability, setting few clear performance standards for contractors to meet and using limited priority-setting in its oversight review efforts. As a result, GAO reported, essential payment safeguard activities had gone unexamined for years. In the course of GAO's study and in response to its report, HCFA acknowledged flaws in its oversight process and began to take steps to improve.

4. Conclusions

The message for the watchdogs of public programs is clear. The Willie Sutton philosophy warns us that a large, complex government program provides the defrauder an attractive target for cheating while remaining unnoticed. However, sustained vigilance can minimize the damage. In the case of the U.S. Medicare program, oversight is layered and complex: hired bill-payers scrutinize those who bill the program, a government agency oversees the bill-payers, and the government's internal and external auditors oversee the program agency. Sloppy management or poor oversight at any of the various levels translates into major financial losses. With potentially billions of dollars at risk, government-funded health programs must be carefully monitored, and audit institutions must ensure that the appropriate management controls are in place and working effectively.

RELATED GAO REPORTS

Medicare Contractors: Despite Its Efforts, HCFA Cannot Ensure Their Effectiveness or Integrity (GAO/HEHS-99-115, July 14, 1999).

Medicare Fraud and Abuse: DOJ's Implementation of False Claims Act Guidance in National Initiatives Varies (GAO/HEHS-99-170, Aug. 6, 1999).

Medicare: HCFA's Use of Anti-Fraud-and-Abuse Funding and Authorities (GAO/HEHS-98-160, June 1, 1998).

Medicare Fraud and Abuse: Summary and Analysis of Reforms in the Health Insurance Portability and Accountability Act of 1996 and the Balanced Budget Act of 1997 (GAO/HEHS-98-18R, Oct. 9, 1997).

Medicare: Recent Legislation to Minimize Fraud and Abuse Requires Effective Implementation (GAO/T-HEHS-98-9, Oct. 9, 1997).

Medicare Automated Systems: Weaknesses in Managing Information Technology Hinder Fight Against Fraud and Abuse (GAO/T-AIMD-97-176, Sept. 29, 1997).

Medicare: Control Over Fraud and Abuse Remains Elusive (GAO/T-HEHS-97-165, June 26, 1997).

High-Risk Series: Medicare (GAO/HR-97-10, Feb. 1997).

Medicare: Millions Can Be Saved by Screening Claims for Overused Services (GAO/HEHS-96-49, Jan. 30, 1996).

High-Risk Series: Medicare Claims (GAO/HR-95-8, Feb. 1995).

Medicare: Inadequate Review of Claims Payments Limits Ability to Control Spending (GAO/HEHS-94-42, Apr. 28, 1994).

Medicare: Greater Investment in Claims Review Would Save Millions (GAO/HEHS-94-35, Mar. 2, 1994).

High-Risk Series: Medicare Claims (GAO/HR-93-6, Dec. 1992).

2. Switzerland: Auditing Health-Care Projects – A Project for the Therapeutic Prescription of Narcotic Drugs

1. Introduction

This paper sets out to describe the audits conducted by the Swiss National Audit Office as the supreme audit institution (SAI) of Switzerland in the context of a project for the therapeutic prescription of narcotic drugs and the circumstances which gave rise to these audits. For a better understanding of the issue at stake, an introductory statement on the project environment and the players involved from the perspective of the Financial Supervision Authority is needed.

1.1 The drug problem in Switzerland in the late 1980s

In the late 1980s, the Swiss public was suddenly confronted with a drug problem as an open drug culture emerged in a number of Swiss cities.[1] The Federal government developed a 4-pillar drug-policy, which takes into account the need for help and therapy of drug addicts and their relatives, as well as the need of the population at large for security and public order.

1.2 A project for the therapeutic prescription of narcotic drugs

1.2.1 1992: A time-limited ordinance on the promotion of supporting scientific research on drug prevention and the improvement of drug addicts' living conditions

The legal basis for the launch of a research project for the therapeutic prescription of narcotic drugs was created in 1992, when a time-limited "Ordinance on the promotion of supporting scientific research on drug prevention and the improvement of drug addicts' living conditions",[2] PROVE for short, was adopted. The PROVE Ordinance is based on Article 8, paras. 15c and 30 of the Narcotic Drugs Act,[3] This Act is the basis for fighting illegal drug abuse in Switzerland. It governs the use of narcotic drugs for therapeutic purposes and bans the production, trading, possession and consumption of narcotic drugs for non-therapeutic purposes. The PROVE Ordinance was amended and prolonged in

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[1] cf: Heroin-based treatment, Federal Health Agency, April 1999, p. 6, p. 12

[2] SR 812.121.5; AS 1992 2213

[3] Federal Act on Narcotic Drugs and Psychotropic Substances, SR 812.121

1994, 1996 and 1997. After an amendment of December 1997, it was in force until a statutory provision on the therapeutic prescription of heroin entered into force.[1] The PROVE Ordinance contained provisions on scientific research on drug prevention measures, the improvement of the health and living conditions, and on bringing down the procurement crime rate.

1.2.2 1994 - 1996: Scientific research project

The research project on the therapeutic prescription of narcotic drugs (PROVE[2]), in particular of heroin, which was stipulated in the Ordinance, was to be incorporated in the federal government's 4-pillar model under the therapy pillar. The experimental therapeutic prescription of heroin was defined as a scientific research project, aimed at testing the prescription of heroin on therapeutic grounds as to its feasibility and success. Its aim was to target those drug addicts who had fallen through all the therapeutic and social meshes. These experiments required several authorisations, comprehensive preparatory measures and scientific support and evaluation[3].

The scientific research project per se was finalised in 1996. However, the federal government had to bear further expenditure later on as the PROVE Ordinance was prolonged.

1.2.3 1998: Creating a definitive legal basis

The outcome of the experiment was positive. The definitive introduction of the prescription of heroin as a recognized therapy required an adequate legal basis. Heroin-based treatment became a firmly integrated feature of the federal 4-pillar model, adopted by way of urgent Federal Resolution of 9 October 1998.

The Federal Resolution was subjected to a popular referendum on 13 June 1999. It was adopted after a lively debate in the media between advocates and opponents of the Federal Resolution on the Therapeutic Prescription of Heroin which revealed that this was a hot political issue.

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[1] by 31 December 2000 at the latest

[2] Translators's note: PROVE is a German acronym of the words project and prescription

[3] cf: Statement on a Federal Decision on the Therapeutic Prescription of Heroin of 18 February 1998, Bundesblatt No. 14, 14. April 1998

1.3 The main players from the perspective of the Federal Financial Supervisory Authority concerning PROVE

From the perspective of the Financial Supervisory Authority (SAI), the following players were involved in the PROVE project:

1.3.1 The Federal Health Agency (FHA)

The Federal Health Agency is an administrative unit of the central government. Pursuant to its legal bases[1] it is entrusted with carrying out inter alia the following tasks: the preparation and implementation of decrees on public health, in particular on fighting transmissible diseases, the prevention of addictions, narcotic drugs, radiation protection and the transport of toxic substances. The Federal Health Agency describes its general policy[2] in its mission statement as follows: "The Federal Health Agency contributes significantly to helping people lead a healthy life." It measures its activities by their impact on health." In 1998, the Federal Health Agency was endowed with a budget of approx. 131 million Swiss francs.

1.3.2 The treatment centres

18 treatment centres were authorized to carry out the experiments, one of which was located in a penal institution. All others are outpatient clinics.[3]

1.3.3 The Financial Delegation of the Swiss Councils

The Financial Delegation of the Swiss Councils (6 members of parliament) is endowed with specific rights. The Financial Delegation examines and monitors the federal budget. It has three divisions, consisting of one member of the National Council (Lower House) and of the Council of States (Upper House) each. It is responsible for the on-going close examination and monitoring of the federal budget. Amongst other things, it may commission the Swiss National Audit Office to conduct special audits[4],

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[1] Ordinance of 9 May 1979 on the tasks of departments, groups and agencies, Article 5, SR 172.010.15

[2] Mission statement, Federal Health Agency, November 1996, p.5

[3] cf: The Experimental Therapeutic Prescription of Narcotic Drugs, a summary report by the research experts Ambros Uchtenhagen, Felix Gutzwiller, Anja Dobler-Mikola (ed.), ("Summary Report") Department for Addiction Research and Department of Social and Preventive Medicine at the University of Zurich, June1997 p. 2

[4] Art. 7 FKG SR 614.0, Art. 13 par. 2 of the Regulation of 8 November 8. November 1985 for the Financial Commissions and the Financial Delegation of the Swiss Councils, SR 171.126

1.3.4 The Swiss Audit Office

The Swiss National Audit Office is the supreme financial supervisory authority at federal level and therefore the Supreme Audit Institution (SAI) of Switzerland. The Swiss National Audit Office supports the Financial Delegation and the Federal Council in monitoring and controlling government and state-held enterprises. The National Audit Office has a current staff of approx. 80 persons.

1.4 Scientific and financial supporting research

On the basis of the PROVE Ordinance, the Federal Health Agency commissioned different studies:

The final report on the experimental therapeutic prescription of narcotic drugs recommends continuing heroin-based treatment. However, restrictions should apply and it should remain targeted at severely heroin-addicted patients.[1]

A macro-economic evaluation of the PROVE experiments conducted as a cost/benefit analysis[2] revealed that the calculated average costs in out-patient treatment centres per patient and day amount to 51 Swiss francs. A total benefit of 96 francs was calculated for the overall economy, based on savings related to criminal examinations and imprisonments. After deduction of costs, the benefit amounted to 45 francs per patient day.

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[1] cf: Summary Report

[2] cf: A socio-economic evaluation of the experimental therapeutic prescription of narcotic drugs, Final Report of Health Eccon AG, 1997, p. 117 quoted in the statement on A Federal Decision on the therapeutic prescription of heroin of 18 February 1998, Bundesblatt Nr. 14, 14. April 1998 and in Heroin-based Treatment, Federal Health Agency, April 1999, p. 6, (figures have been rounded)

2. Audits conducted by the Swiss Audit Office at the Federal Health Agency

2.1 Audit assignment by the Finance Delegation to the Swiss Audit Office

Article 4 of the PROVE Ordinance governs the contribution of the federation to supporting scientific research and the experiments:

> 1 Within the framework of authorised appropriations, the federation assumes, either fully or in part, the costs of supporting scientific research on selected projects and experiments.
>
> 2 It may contribute financially to the cost of selected projects and experiments, in the implementation of which it has a particular interest.

Apart from the federation, these experiments are funded by the cantons, local communities, privates, health insurers and by the patients themselves.[1]

In August 1993, the Swiss National Office was commissioned by the Financial Delegation to develop a financial framework for the experimental therapeutic prescription of narcotic drugs. This conceptual framework was drafted by the Swiss Audit Office in co-operation with the Federal Health Agency and then adopted by the Financial Delegation.

It can be assumed that the above commission of the Financial Delegation was formulated in consideration of the political explosiveness of a project aiming to pass on heroin to addicts in a research programme that is supported financially by the government. The concept submitted to the Financial Delegation spelled out inter alia the following procedure:

- Written agreements are to be concluded for the federal contributions.
- Contributions are to be recorded in the accounts of the Federal Health Agency on a case-by-case basis.
- A statement of account of federal disbursements is to be drawn up for each year and experiment and submitted to the Financial Delegation.

2.2 A general plan of experiments

The scope of the scientific project was laid down in a general plan of experiments[1] of 1 November 1993, which was authorised by the directorate of the Federal Health Agency

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[1] cf: Statement on the federal decision on the therapeutic prescription of heroin of 18 February 1998, Bundesblatt Nr. 14, 14. April 1998, item 42

on 24 January 1994. This authorisation was based on Article 10 of the PROVE Ordinance which assigns the right to determine the sequence of experiments in a general plan and to select experiments from this sequence to the Federal Health Agency. The plan of experiments also allocated places of treatment. This allocation in turn was the basis for the agreements which the Federal Health Agency concluded with the treatment centre providers.

As early as October 1994, the Federal Council decided to re-allocate the treatment places available, authorising more heroin treatments and stepping up the number of treatment places. All in all, the number of treatment places increased from 700 to 1000, 800 of which were reserved for heroin treatment compared to 250 in the outset.[2]

2.3 Audit activities

Based on the audit request received from the Financial Delegation, the Swiss National Audit Office audited the expenditures of the Federal Health Agency for the years 1993 to 1998, basing itself on the information and the accounts prepared by the Federal Health Agency. Using a risk analysis, which takes account of the financial volume, the Swiss National Audit Office would probably not have devoted as much attention in its regular audit work within the framework of financial supervision of the Federal Health Agency to the annual expenditure of several million francs for PROVE. The annual expenditure for PROVE accounted for only some percentage points of the agency's entire budget of approx. 131 million francs (1998), which has already been mentioned. After reviewing the accounts, an annual report was directly transmitted to the Financial Delegation.

The agreements concluded with the treatment centre providers governed not only the financial contribution to be made, but also the following points:

- The financial support given to the Federal Health Agency for every allocated place of treatment.
- The modalities of payment: the amount of instalments and the final settlement.
- Payment is made against invoice submitted to the principal.
- The final settlement is made after authorisation of the final statement of account and the final report.
- The commission ends only after the final statement of accounts is approved by the Federal Health Agency.

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[1] The experimental therapeutic prescription of narcotic drugs, a general plan of experiments and implementing provisions, Federal Health Agency, revised version of 24 May 1995

[2] The Federal Council adopted the change of the General Plan of Experiments following an amendment of the PROVE Ordinance in October 1994.

- If the principal has paid amounts in excess of the approved settlement of accounts to the contracting party, the contracting party is held to reimburse these excessive amounts.

Agreements are also concluded for the performance of supporting scientific evaluation.

In terms of the time budget required, the audit the accounts for the first years was not a big affair. In particular, the audit looked into payments disbursed to the experiment centres, expenditure for the procurement of narcotic drugs and for supporting scientific evaluation. The project was still in its initial phase and fairly easy to understand. The amounts disbursed were audited on site at the Federal Health Agency based on the agreements concluded. It should be mentioned that the Federal Health Agency is situated a mere 10-minute ride by public transport from the Swiss National Audit Office. The on-going monitoring of all contracts by the Federal Health Agency was found to be a good practice. All audits were co-ordinated with the project management and the financial service of the Federal Health Agency.

For its contracting system, the Federal Health Agency introduced so called “collective agreements” according to which system-related expenditures accruing from the projects were collected under a uniform agreement number. Additional expenditure was incurred e.g. for meetings and workshops which were organised to allow for an exchange of experiences and for the further training of the project staff. Moreover, a number of events involving third parties who had an interest in the issue took place, such as a meeting with the cantonal chief police inspectors. Public relations and press work was another important field of activity.

When the general plan of experiments was renewed in 1995, a number of agreements had to be amended and new agreements were set up. From 1995 onwards, we had to distinguish between on-going projects and new projects.

In the course of the settlement of accounts for 1996, the lump-sum settlement per place of treatment gave rise to a debate between the Federal Health Agency and the Swiss National Audit Office owing to the amendment of existing and the conclusion of new agreements. This was due to the fact that according to the Federal Health Agency the actual number of places available for treatment was limited at 1,000 at the most; however there was no limitation to the number of places being actually funded. And indeed, the legal basis did not stipulate any limitations with regard to the number of places being eligible for funding. Based on this finding, the SAI recommended for future projects using the same or a similar funding system that federal grants be directly linked to the number of authorisations.

After the amendment of the PROVE Ordinance in 1996[1] drug addicts which had taken part in the experiments until the programme had expired could continue to receive therapeutic prescriptions of narcotic drugs despite the completion of the supporting research and the concluding publication of the results in June 1997[2]. The federal government was still able to contribute to the cost of therapeutic prescriptions to the extent it had supported the terminated experiments financially. Following the amendment of the Ordinance, the Federal Health Agency had concluded new agreements with the treatment centre providers. PROVE was continued as a project at the Federal Health Agency.

The Ordinance was again amended in 1997[3]. Within the framework of the general plan of experiments new test persons could be accepted if this was necessary for the scientific study of newly arising research issues.

With growing project complexity, the Swiss National Audit faced an increasing need to ask for clarifications and additional information, due to the renewal of agreements in the wake of the amendments of the PROVE Ordinance in the years 1996 and 1997. Moreover, the project managers at the Federal Health Agency – facing tightening resources and considering the primary task of the agency - paid closer attention to the scientific dimension of the project that to its financial side. This resulted in an ever-growing bulk of issues which the Swiss National Audit Office had to clarify with the agency, often in a tedious process of letter-writing.

In 1998 a new project management took over at the Federal Health Agency. The responsible person was contacted at an early stage and co-operation between the National Health Agency and the Swiss Audit Office became highly constructive again. This somewhat alleviated the burden of the Swiss National Audit Office in terms of the time invested.

The Federal Health Agency had a separate clearing account for the procurement of substances, i.e. for purchasing, processing and delivery. The SAI noted that by the end of 1996 this account showed a considerable balance due. The dispensing units were invoiced for the delivery of substances. After having identified this relatively high balance due, we asked that a full statement of account be presented for this account and that inventories be confirmed for the year-end 1998. By the end of 1998, the sizeable debit had been balanced by the income from invoices paid.

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[1] Amendment of 21 February 1996

[2] Summary Report

[3] Amendment of 15 December 1997

After the definitive legal basis had been created, the Financial Delegation asked for a final report by the Federal Health Agency on how it had handled the entire PROVE project financially in the years 1993 to 1998. From 1999 onwards the therapeutic prescription of heroin was included in the standard activities of the Federal Health Agency and was not longer expressly run as a project.

2.4 Audit findings

Based on the annual financial and regularity audits conducted by the Swiss National Audit Office as described above, it could confirm that all in all the Federal Health Agency had used the funds for experimental drug prescription as allocated. Some specific aspects of budget law had given rise to audit findings.

2.5 Lessons learnt by the Financial Supervisory Authority from this project

- The conclusion of agreements with the treatment centre operators was found to be useful.

- It turned out that the Swiss National Audit Office had to devote more time resources than expected to conduct these audits and to grasp the details of the issue, on account of the special circumstances, the complexity of the issue and the frequent changes of the general framework.

- These changes also increased the time pressure on the project management at the Federal Health Agency. It would have been useful to establish personal contacts at an earlier moment, in order to give additional weight to the concerns of the audit office. It is strongly recommended to establish personal contacts as soon as possible.

- Altogether, the uninterrupted involvement of the Swiss National Audit Office for a period of six years concerning the expenditures of the Federal Health Agency turned out a god policy considering the political explosiveness of the issue.

- Concomitant scientific and financial research that was commissioned with external institutions and consulting agencies confirmed that the federal funds had been used effectively.

3. Conclusions

Throughout six years, the Swiss National Audit Office as the supreme audit institution (SAI) of Switzerland audited the expenditure of the Federal Agency for Health for the research project on the therapeutic prescription of narcotic drugs based on a commission received from the Financial Delegation within the framework of its financial supervision. All in all, the annual financial and regularity audits yielded good results. The amount of time needed to conduct these audits was above average. For complex project with substantive changes of the framework conditions during the project term it is recommended to establish personal contacts with the implementing administrative unit as early as possible. Concomitant evaluation studies conducted by external experts confirmed the SAI in its assessment that the federal funds had been spent effectively.

3. Austria: The Audit of Hospitals by SAIs

1. Competence to audit

Pursuant to Article 121 par. 1 of the Austrian Federal Constitution, the Austrian Court of Audit is called upon to audit the financial operations of the federal government, the provinces (*Laender*), the community associations, the local communities and other legal entities stipulated by law. Financial operations means every act which has financial implications.

The competences of the Austrian Court of Audit to audit the financial operations of hospitals are governed by the Federal Constitution, the Court-of-Audit Act and the Hospitals Act (as a special law). The following provisions are of relevance:

1) Foundations, funds and (hospital) institutions which are administered by an organ of the federal government, a province, a local government or by persons who are appointed to do so by an organ of the federal, provincial or local authorities are subject to being audited by the Court of Audit (e.g. province or local community hospitals).

2) Public-law entities are subject to being audited by the Court of Audit to the extent they use federal, provincial or local government funds (e.g. hospitals run by religious orders).

3) The Austrian Court of Audit has competence for auditing social insurance institutions (e.g. special hospitals for rehabilitation)

Therefore, all hospitals with the exception of private hospitals which do not receive public grants, are subject to being audited by the Court of Audit.

2. Audit requests

Pursuant to the provisions of the Austrian Federal Constitution, the Court of Audit acts as an organ of the National Council (Lower House) in matters concerning the federal financial operations, and as an organ of the province parliaments in matters relating to the financial operations of a province, a local community association or local authority.

Moreover, the Austrian Court of Audit is independent of the federal government and the province governments.

This independence is reflected in the fact that the Court may determine its audit programme, the priorities of audit and audit methodologies independently.

However, the Court of Audit may be commissioned to conduct special audits by decision of the legislative assemblies at federal or province level or upon request of their members. Equally, the Court is held to perform special audits at the justified request of the federal government, a federal minister or a province government.

As far as the audit of hospitals is concerned, the Court of Audit has so far conducted its audits out of its own initiative. Only in rare cases did it perform an audit following a decision of a province parliament or province government. One example of an audit request by a province government was the audit of the procurement of large-scale medical apparatus and the construction of new hospitals.

3. Audit objectives

The Austrian Federal Constitution (Art 126b, par. 5) and the Court of Audit Act lay down the objectives of audit. Accordingly, the audits conducted by the Court shall cover

- the correctness of accounting,
- compliance with existing provisions,
- economy,
- efficiency, and
- effectiveness.

Moreover, when auditing, the Court of Audit must identify potentials to reduce or avoid expenditures and to increase or develop new sources of earnings. The Federal Constitution does not lay down priorities in its enumeration of audit objectives. However, there is a clear trend towards promoting the objectives of economy, efficiency and effectiveness. Over the past twenty years, this shift from financial and regularity to performance auditing has been characteristic in the field of hospital audits. With special emphasis on effectiveness as an audit objective, i.e. optimising the delivery of tasks to be performed by the auditee organisation, the Austrian Court of Audit is facing a wide-ranging field of action, which does not limit itself to the audit of hospitals, but extends into many areas of health-care in general.

4. Conflicting goals

Over the past few decades, Austrian hospitals have become modern service providers. From a technical perspective, the audit of hospitals is similar to the audit of business enterprises. However, the providers of hospitals enjoy a much more restricted scope for manoeuvre, owing to strict rules and regulations which govern the construction and management of hospitals. When auditing hospitals, the Austrian Court of Audit is faced with this conflict, when it has to consider the statutory requirement to provide for hospital-based health-care and at the same time assesses the running of a hospital as ineffective. When auditing hospitals, the Court of Audit therefore considers it a particular challenge to pinpoint the conflicting goals of regularity and efficiency and to recommend appropriate measures to be taken by parliament.

Another example of conflicting interests facing the Court is the assessment of the macro-economy/ micro-economy and the economy/ecology tradeoffs in hospitals and health-care. Some examples:

- Owing to their statutory mandate to ensure the provision of health-care, hospitals are businesses with low profitability; at the same time they are major employers;
- hospitals are largely funded by the public purse, and
- hospitals often are the only economic players that ensure the survival of a particular region.

Therefore, the Austrian Court of Audit must not focus exclusively on one objective when auditing hospitals (as indeed with all audit activities), but develop comprehensive findings and identify conflicting goals with all consequences they may imply. This is to ensure that the report users, the National Council and the province parliaments, are given all the information they need in order to take appropriate action to balance these conflicting interests. The Austrian Court of Audit refrains from assessing the underlying policies, but looks at their economic impact and at how efficiently objectives have been met. In audit areas where there is a lack of political objectives, either fully or in part, the Court is called upon to formulate such missing objectives and to use them as a basis for its audit activities. A case in point is the recent audit of the system of hospital funding, which was newly introduced in Austria in 1997, where the funding agreement between the federal government and the provinces, adopted in the form of an intergovernmental treaty, laid down objectives in a rudimentary form only.

5. The principles of hospital-based health-care

Legal bases

Article 12 of the Austrian Federal Constitution stipulates that legislation in general matters concerning rehabilitative and nursing institutions (hospitals) is a responsibility of the federal level, while the enactment of implementing legislation and their execution is a responsibility of the provinces. Therefore, Austria has one Federal Hospitals Act and nine different Province Hospitals Acts. Moreover, the second part of the Federal Hospitals Act governing university hospitals is immediately applicable federal law.

Funding

Austrian hospitals are funded through a dual-type system, i.e. by social insurance contributions and by taxpayers‘ money allocated in a process of intergovernmental revenue sharing (fiscal equalisation) between the federal, the province and the local levels. Other sources of hospital income are patient payments and contributions from private insurers. In 1997, a new comprehensive system of hospital funding was introduced. However, it did not create a uniform system of hospital funding, but accentuated the differences between the different provinces.

Hospital planning

The planning of hospitals must take account of ensuring a balanced and equitable provision of hospital services in response to actual needs. In Austria, the federal level is endowed with an overall planning authority, based on an intergovernmental treaty, while the individual provinces are generally authorised to lay down pertaining rules and regulations.

6. Audit fields

The Austrian Court of Audit has identified the following fields of examination in hospital auditing:

Ensuring the provision of public hospitals
- audit of hospital operators
- construction of new hospitals
- audit of medical needs in the context of hospital planning
- audit of the medical provision in the context of regional planning strategies
- full-cover provision of services (cardiology, psychiatry)
- different operational forms of hospitals
- organisational set-up and operations in a hospital

Funding of hospitals
- audit of funding concepts for hospitals (health-care)
- audit of aids and investments in health-care

General hospital audits
- staff, finding, procurement, organisation

Special audits
- rehabilitation centres
- first aid and emergency services

7. Auditees

The Austrian Court of Audit audits the following hospitals:

- general (acute-care) hospitals. These are hospitals which treat patients without differentiation by sex, age, or type of medical service needed, either in an in-patient or outpatient regime and are equipped with the necessary medical facilities;

- special hospitals for the treatment of patients with specific complaints or for persons of defined age groups (e.g. accident hospitals, rehabilitation centres, mental homes etc.).

There are 315 hospitals in Austria with a total of approx. 70,200 beds. The ratio of hospital beds per inhabitant is therefore approx. 8.8 beds for every 1,000 inhabitants. A breakdown by providing entities (owners in the wider sense of the word) shows the following picture:

Provider	number of hospitals	number of beds
Federal level	12	679
Provinces	83	34 546
Community associations	12	2 481
Local communities	56	9 780
Social insurance providers	39	5 833
Hosp. of religious orders	48	11 850
Associations	15	1 415
Privates	50	3 612
TOTAL	315	70 196

However, only such hospitals are subject to being audited by the Court which receive public grants. Therefore, the scope of hospitals for which the Court has a mandate to audit, it therefore narrower and is characterised by the following parameters:

Number of hospitals:	230
Number of beds:	55,300
In-patients:	1.9 million
Hospital occupancy/days:	14.8 million
Outpatient treatments:	60 million
Average length of treatment:	7.6 days
Annual total cost:	approx. 7.7 billion US$
Annual cost per bed:	approx. 98,500 US$
Cost of bedstay/day:	approx. 310 US$

As can be seen by what has been said so far, the Austrian Court of Audit needs to adapt its audit approach to the highly fragmented structure of hospital care in Austria, in contrast to a more uniform approach used in other fields of audit. On account of the variety of different providers, and the segmentation of hospital care by the nine provinces, auditors are confronted with different legal provisions and diverging interpretations of actual health-policy needs. It is fair to say that Austria has nine completely different systems of hospital care.

8. Audit organisation

The Austrian Court of Audit currently has a staff of 330 persons 247 of which work as auditors in a total of 36 departments. 4 departments employing 26 staff are currently involved in health-care audits. Hospitals in particular are audited by two departments (14 persons). These two departments divide their audit activities in the field of hospital audits according two the nine Austrian provinces. One department is also responsible for auditing the three university hospitals in Vienna, Graz and Innsbruck. This division is to ensure a most balanced assignment of tasks in due consideration of adequate audit intervals. Moreover, regions of health-care provision that go beyond the borders of individual provinces (e.g. Vorarlberg and Tyrol, Upper Austria and Salzburg) should be covered by the same audit.

Breakdown of staff in the two departments responsible for hospital audits:

Function	dept. 45	dept. 47
Department head	construction engineer	law graduate
Deputy	generalist	law graduate
Audit manager	economist	economist
Auditor	economist	economist
Auditor	law graduate	B-level civil servant
Auditor	B-level civil servant*)	B-level civil servant
Auditor	B-level civil servant	
Auditor	B-level civil servant	

*) B-level staff do not hold a university degree

Auditors from other departments or external experts may be used for special audits.

9. Audit planning

The Austrian Court of Audit uses an audit plan, which is prepared annually, on which it bases its audits. For the compilation of this audit plan, the audit departments submit three proposals drafted according to the following criteria:

- volume of financial transactions involved
- remarkable changes at the auditee organisation (e.g. construction of a new building)
- findings from the last audit
- time interval which has passed since the last audit
- change of major parameters.

The audit departments select the three audit proposals using the following instruments:

- an auditee database which includes general information, key economic data and organisational parameters of all auditees;
- in a benefit analysis the auditees are listed by means of characteristic cost data;
- long-standing familiarity of the audit department (cost accounting results);
- type of audit to be performed (general audit, priority audit, project audit, system audit, cross-sectional audit, follow-up audit).

The president of the Court of Audit then selects one of these three proposals and adopts the audit plan for the following year.

10. The audit process

Once a decision on the audit subject has been made, the actual audit takes place in the following phases:

- *Definition of responsibilities and tasks*
  Who has overall responsibility of the audit?
  determination of audit areas and audit approaches

- *Preparation of audit*
  pre-selection of subject-matters and of existing information
  audit letter is sent to auditee
  information gathering (e.g. by means of questionnaires)

- *On-site audit*
  interviews to gather information
  examination of written information
  fact-finding

- *Final interview*
  presentation of facts identified
  first assessment

- *Audit findings*
  drafting of contributions by audit staff
  editing of text by (responsible) audit manager
  findings officially transmitted to auditee

- *Commenting procedure*
  analysis of comments received from auditee organisation
  preparation of counter-statement (replication) by audit department
  counter-statement officially transmitted to auditee

- *Annual report*
  editing of contribution for inclusion in annual report
  submission of annual report to national or provincial parliament
  discussion of annual report in committee stage

11. Annex: Overview of audit fields

FINANCE		
Subject-matter	*Audit criteria*	*methods*
Revenue Social insurance Providing entity Privates Investment	Maximisation of revenue	Statutory provisions Contracts Comparison of budget and financial statement
Expenditure Staff expenditure Operating expenditure Investments	Compliance with the volume of expenditure set for the year	Comparison of budget and financial statement Profit and loss statement Balance sheet Budget statements Monthly reports
Controlling Management information system Cost accounting	Development of performance Development of operating results Development of human resources planning Statutory provisions	Internal and external comparisons Comparison of time series Cost allocation

STAFF		
Subject-matter	*Audit criteria*	*methods*
Staffing needs Specialists doctors Trainee doctors Nursing staff Administration Others	Manning, Ratios according to DKG*, Average values of other Hospitals	Comparisons of ratios Doctor/bed ratio Registered nurse/bed ratio Nursing minutes/patient Staff/bed or case
Duty plans Compliance with statutory provisions such as the Working Time Act for Hospitals	Weekly hours Overtime Weekend hours On-call duties Further education times Vacation	Review of the duty plans
remuneration Type of contract grading Allowances Additional benefits	Statutory provisions	Review of the personnel files
Quality assurance Skills Job satisfaction	Further training Staff fluctuation Sickness leave	Staff records

*) DKG *Deutsche Krankenhausgesellschaft* is an institution which publishes standard ratios for staff calculations

MEDICAL		
Subject-matter	*Audit criteria*	*methods*
Medical provision Hospital Medical wards Large medical apparatus	 Demand Demand Demand	 Catchment area, studies Diagnostic breakdown Referrals Capacity utilisation
Functional services Wards Out-patient services Operating theatre Anaesthetic/intensive care Pharmacy Diagnostic imaging Laboratory Physical therapy etc.	 Staff number and skills, Capacity utilisation of apparatus, Inventory management Compliance with provisions and regulations	 Duty plans, personnel files Performance ratios, Time analyses, Fact-finding on site
Quality assurance Mandatory statutory quality assurance Voluntary quality assurance	 Compliance with statutory provisions Quality reports Patient surveys	 Responsible officers Priorities Standards Implementation Recording Quality portfolio
External services External medical services External medical consultant First aid and rescue services	 Demand Scope of treatment Co-operation with the hospital	 Costs Diagnostic breakdown Efficiency

ORGANISATION		
Subject-matter	*Audit criteria*	*methods*
Organisational structure		
Providing entity	Administrative unit Public-law body Private institution	Statutory provisions Task assignment plan Bylaws
Management structure	Decision-making process Influence exercised by the hospital	Organisational regulations
Hospital management	Responsibilities	House Rules Performance records Service instructions
Flow of operations		
Human resources management Finance Patient administration	Authorisation to sign Authorisation to sign Management of patient admissions/ discharges	Procedures under the Service Code Budget management Documentation
Service functions		
Operating theatre Out-patient services Clerical staff Laundry Cleaning Engineering etc.	Economy Efficiency Effectiveness	Scheduling Performance ratios Staff ratios Statistics Logistics Comparison of ratios Regulations

CONSTRUCTION		
Subject-matter	*Audit criteria*	*methods*
Project Construction of new building Rehabilitation of old building Extension Enhancement	 Demand Improvement of performance Improvement of quality Official regulations	 Decisions Demand calculations Substance of existing building Provisions
Contracting Tendering procedure Awarding of contract	 Procurement regulations	 Mathematical correctness Assessment methods Ranking
Project management Date of completion Cost limit Meeting of purpose	 Construction schedule Cost calculations Confirmation of set purpose	 Compliance with schedule Determination of costs User interviews

4. Mexico: Performance Audit of Medical Services provided by a Public Health Institution in Economically and Socially Disadvantaged Areas

Beginning in the 1940's, when the process of industrialization began in Mexico, social security became a priority of government policy, receiving increasingly large yearly sums of public expenditure.

This effort was rooted in precepts set forth in the Political Constitution of the United States of Mexico that grant the right to health to the general public.

In terms of organization, social security in Mexico is managed by a national system that is charged with meeting the health-care needs of workers both in the countryside and the cities. Participating in this system are administrative entities such as the federally coordinated Public Health Services, which serve basic and specialized care needs in each of the 32 federated states that comprise the Republic of Mexico.

Also operating within this system is the Mexican Social Security Institute, which serves the health-care needs of farm workers, laborers, and business and service-sector employees and their families. The IMSS, as the Institute is called by its initials in Mexico, is an institution funded by the contributions paid by member workers, employers, and the federal government, as well as revenues from services provided to private individuals who request them.

Another component of Mexico's public social security system is the so-called institutes for the Social Security of Civil Service Workers, which covers employees of the federal government as well as of Mexico's 31 state governments. The operation of these institutes is funded through the fees paid by member workers and the payments made by the employer, in this case the government.

It is important to point out that within this social security system, the institution with the greatest coverage is the IMSS, serving 47% of Mexico's population of almost 100 million.

The IMSS was created by law in 1943 with the mission to provide workers and their families with sufficient, timely protection in case of illness, disability, old age, or death.

As the Institute evolved over its 57 years of existence, the protections provided for by law grew to include not only health care, but also means of subsistence in cases where the

illness or old age temporarily or permanently prevents the worker from continuing to perform his or her job. Moreover, it has added activities aimed at bolstering the income of member workers, as well as facilitating job training and helping them learn new ways to improve their standard of living and quality of life, encouraging artistic and cultural activities, and promoting better use of free time.

The broad and varied spectrum of services the Institute provides, the inclusion of social groups whose growing numbers have no contract for work paid by an employer (students, shoe shiners, poor peasants who receive no wages, among others), and the recurrent economic crises the country has suffered during the last two decades seriously hurt the Institute's financial situation and hence its ability to operate.

For this reason, a new Social Security Law was passed in 1996 that would seek to ensure the Institute's financial viability.

One can appreciate the Institute's relative importance in the area of social security in Mexico by observing that in the period from 1996 to 1998 its average annual share of federal social spending was 56.0 percent. For its part, social spending amounted to 15.0 percent of scheduled federal expenditures (which exclude interest on domestic and foreign debt, revenue sharing for states and municipalities, and outlays for the financial reorganization of banks).

During this same period, the number of IMSS beneficiaries grew at an average yearly rate of 6.9 percent, while the Institute's scheduled expenditures rose at an average yearly rate of 14.4 percent in real terms.

States such as Veracruz, Michoacan, Chiapas, Hidalgo, Oaxaca, and Guerrero, which represent the highest levels of social and economic disadvantagement in the country, have seen a faster growth in number of beneficiaries, and, at the same time, have shown an above-average real growth rate in their scheduled expenditures for the same period.

These factors, together with other causes, led to repeated budget deficits for the IMSS in recent years (spending above their approved levels), in particular in the category of "Materials and Supplies" for medical care.

Although there is an explanation for why the Institute has spent more than the authorized amount, Mexico's Supreme Auditing Authority is conducting a performance audit of the IMSS in response to its mandate from the Congressional Chamber of Deputies, which is the parliamentary body charged with authorizing and reviewing allocation and spending of the federal budget.

The review takes as its basic reference point the over-budget spending by 27.9 percent that the Institute recorded in 1998 for the purchase of medications and materials for treating its beneficiaries, who grew in number by 6.3 percent, or 2.7 million people, from 1997.

An operational framework for the review was defined to be comprised of the following three components: Planning, Execution, and Presentation of Results.

In this connection, it should be noted that the Planning component began with the establishment of the overall objective of the audit, and given that this would be a performance audit, the overall objective was complemented and refined with a set of specific objectives.

The planning stage also included the task of defining the appropriate strategic and methodological elements needed to reach the proposed objectives. The plan also called for a pilot test of the audit, to be conducted in a selected set of medical facilities, for the purpose of properly delimiting the scope of the audit.

For its part, the Execution of the audit will proceed in accordance with a work program which factored in the personnel and resources required to conduct the audit, setting a timetable of 18 work weeks to include phases for field work, drafting of the preliminary report, the meeting with the institution being audited, and the drafting of the final report containing the results of the audit.

Along these lines, and by way of example, a description of the most significant components of the performance audit that is being conducted follows, with the caveat that the results mentioned refer only to the results of the pilot review:

1. Overall objective
2. Specific objectives
3. Scope of the audit
4. Methodology
5. Process prior to audit (pilot review)
6. Results of the pilot study

JUSTIFICATION FOR AUDITING THE IMSS

In the Federal Public Treasury's 1998 accounts, the IMSS's spending on "Materials and Supplies" exceeded the budget set by the Chamber of Deputies by 27.9 percent, primarily because of outlays for medicine and medical supplies. Also, the total number of beneficiaries in 1998 was 6.3 percent (2.7 million people) higher than in 1997. For these reasons it was considered necessary to evaluate both the causes of this increase and the quality of medical services provided by the Institute.

1. Overall objective

To assess the efficiency and effectiveness of the process of purchasing medical equipment, medicine, and medical supplies, and of the delivery of the medical services the IMSS provides.

2. Specific objectives

- To verify that the IMSS has observed legal and administrative regulations governing the awarding of supply contracts and the purchase of medical equipment, medicine, and medical supplies.
- To review the accounting and budget records related to the purchase of medicines to ensure they meet with the corresponding standards, and to check inventory control.
- To evaluate the efficiency and effectiveness of utilization of diagnostic medical equipment at the selected medical facilities.
- To verify that the medications supplied to the selected medical facilities were sufficient and appropriate for serving the beneficiaries.
- To assess the quality of medical services at the three levels of care.
- To verify that the compilation of medical records complies with the Official Standards of Mexico and the Institutional Standard set forth in the Procedures Manual for the Areas of Medical Data Processing and Clinical Records.

3. Scope of the audit

The audit is focused on the process of acquiring medical equipment, medicine, and medical supplies, and on the delivery of medical services at health facilities at the primary (family medicine), secondary (area general hospital), and tertiary (specialized hospital) levels in the districts corresponding to the states of Michoacan and Veracruz.

4. Methodology of the audit

Total IMSS spending was determined for the six states defined as "most economically disadvantaged" (Veracruz, Michoacan, Chiapas, Hidalgo, Oaxaca, and Guerrero), of which Veracruz and Michoacan were selected because they accounted for 58.6 percent of spending within this group.

A sample was chosen of eight medical facilities covering all three levels of care, these units being those which spent the most on medicine, medical supplies, and medical equipment, so the selected sample represents 51.8 percent and 40.0 percent of Institute spending in the aforementioned areas in the districts of Michoacan and Veracruz (North and South) respectively.

In the course of field visits, a representative sample of diagnostic medical equipment will be selected, reports will be requested for evaluating the efficiency and effectiveness of its use, and questionnaires will be administered to the personnel that operate it.

We will request documents to corroborate that there is sufficient and appropriate medicine to treat the beneficiaries at these facilities; also, questionnaires will be administered to management personnel, doctors, nurses, pharmacy and storeroom staff, and beneficiaries.

We will request documents to confirm that there are sufficient and appropriate treatment materials to serve the beneficiaries. Questionnaires will be administered to management, storeroom staff, and nurses.

During the course of field visits a representative sample of patients per day will be selected and administered questionnaires to evaluate the quality of service and the availability of medicines.

A representative sample of patient records will be selected based on the number of beneficiaries who used health services in the year 2000, so as to verify that they comply with the Official Standards of Mexico and the standards established by the IMSS itself.

5. Process prior to the audit

Prior to the field visits, a pilot review was carried out for which medical facilities at all three levels of care were selected from poor urban areas, so as to become familiar with operational procedures, confirm the usefulness of the questionnaires and work sheets, identify the applicable regulatory framework and the documents generated for the control of medical equipment, medicines, and medical supplies. It should be noted that this pilot

review does not address any financial or legal aspects; the methodology for auditing these aspects is established because such operations have already been examined.

The results presented here cannot be generalized, since the sample size used in the pilot review for purposes of testing the thoroughness and quality of the questionnaires and the review process to be applied to the selected medical facilities was not representative. Nevertheless, these results do shed some light on the type of problems the Institute faces, as the partial information that has appeared in journals on the subject coincides with the findings of the review.

6. Results of the pilot study

This section contains only the principal results obtained from the aforementioned questionnaires and the review of the documents, records, logbooks, and receipts provided by the medical facilities involved in the pilot review.

6.1 Specific objective: To evaluate the efficiency and effectiveness of utilization of diagnostic medical equipment at the selected medical units.

ACTIONS TAKEN	RESULTS
1. Using the medical equipment report from the medical facilities, 35 units were selected for a physical inspection to verify that they were present at the facility, that they were being used, and that there was staff trained to operate them.	The 35 units were found to be physically present and in keeping with inventory numbers; 17 were in use, while the remaining 18 are not in demand or are used infrequently.
1 Questionnaires were administered to the physicians and/or technicians who operate the equipment so as to learn about how it is used and what problems there might be.	Results indicated that in three cases there were insufficient input materials to operate the units; 16 are used daily, and one sporadically. Only 14 units were in good condition.
3. The latest usage reports were requested for the 18 units which were not in use at the time of the visit, so as to determine frequency of use.	Thirteen of the 18 units are not used because there is no demand; 2 are not used because of lack of input materials, and for the remaining 3 there is little demand.

6.2 Specific objective: Verify that the supply of medicines to the selected medical facilities has been sufficient and appropriate for serving the beneficiaries.

ACTIONS TAKEN	RESULTS
1. Review of documents confirming receipt of medicines by medical facilities	Review of receipts revealed that the cost of medicines is higher than that estimated by the IMSS
2. Questionnaires were administered to physicians, nurses, beneficiaries, and pharmacy staff (regarding the use of medicines) at primary and secondary health-care facilities. (They were not administered at the specialized hospital because the pharmacy does not directly belong to the hospital.)	According to storeroom inventory, in some cases demand is greater than the authorized supply. Of 105 physicians surveyed, 58.1% frequently modify prescriptions for their patients because of the scarcity of medicines; 66.7% indicated that the schedule of covered medications is inadequate for the illnesses they treat. Of 192 nurses surveyed, it was found that 66.1% do not have the medicines they need to perform their duties. Of 300 beneficiaries surveyed, it was learned that 62.7% did not receive all the medications they were prescribed. In the pharmacy, the two employees surveyed indicated that they are not supplied with all the medications they should carry, and that the months with the greatest shortages are December and January.

6.3 Specific objective: Evaluate the quality of medical services provided at the three levels of health care.

ACTIONS TAKEN	RESULTS
1. Review of mechanisms by which medical personnel is supervised at the three levels of care.	There is direct supervision by the management of each medical facility; this is corroborated by the corresponding documentation.
2. Review of standards of physician-provided care at the Family Health Facility only, as such a standard cannot be established for hospitals because of the service they provide.	The facility met the patient care goal, with absenteeism on the part of physicians low -- only 4.0% in the case of the morning shift.
3. Review of standards of nurse-provided care on the hospital floor, by shift.	In the area general hospital, there was a 21.4% average decline in the quality of care received by hospitalized patients, owing to nurse absenteeism. In the specialized hospital, there was a 29.3% decline in the quality of care received by hospitalized patients, owing to nurse absenteeism.
4. Survey of 300 beneficiaries to assess the quality of medical services they received.	87.7% of beneficiaries felt that the doctors provided them with a clear explanation of their condition; 90.3% felt that they were provided with a clear explanation of treatment and cautionary measures they should take; 94.3% felt that the doctor treated them with respect. These figures are in line with the Guidelines for Improvement of Comprehensive Health-care as they pertain to delivery of medical services. 33.7% commented that they did not receive sufficient information or appropriate treatment from medical assistants or receptionists, which falls short of the Institute's guidelines.

6.4 Specific objective: Verify that the keeping of medical records complies with the Official Standards of Mexico and the Institutional Standard set forth in the Procedures Manual for the Areas of Medical Data Processing and Clinical Records.

ACTIONS TAKEN		RESULTS
1.	Forms were drawn up based on the standards for medical record-keeping established by the IMSS, and 338 records were reviewed to fill out these forms.	At the three medical facilities, average results were as follows: 98.2% contained the patient's file card (identification information); 23.8% did not contain a full medical history; and 95.7% contained doctors' notes and prescriptions.
2.	Survey of 105 physicians at all three levels of care to verify that they have all the necessary paperwork to put together a medical record.	60.3% indicated that they did not have enough forms, which was substantiated by the findings regarding medical record-keeping.

7. Conclusion

With all the information obtained once the performance audit of the IMSS is complete, the Accounting Office of the Treasury will be able to measure the efficiency, effectiveness, and economy with which the IMSS performed the tasks of purchasing and supplying medicines and medical supplies. At the same time it will evaluate the quality of service delivered in those States of the republic that were selected.

Based on the results obtained, pertinent recommendations will be made to help this very important institution optimize its operations so that it may better serve the people of Mexico.

5. France: The Audit of Public Health-Care by SAIs

1. Introduction - Attempt at a definition

The term health policy is a complex notion. It is based on the idea that improving the health status of a population is part of the standard repertory of tasks of the state. It can be defined as the setting and implementation of priorities in the allocation of financial, material and human resources for the fight against disease and health scourges; the precise identification of the health needs of the population, the effective development and deployment of the means of prevention, as well as the provision of health care. The contents of this policy and the ways in which it is implemented depend on several factors: the general level of development, the sharing of tasks between individuals and private institutions on the one hand and of public institutions on the other, the organisational set-up of the public authorities (especially the degree of decentralisation). Generally, a country's health policy consists of a range of different measures with a varying degree of integration.

As we take an interest in audit, there are three approaches which can be distinguished and complement one another in practical terms:

a) The approach by public policy

Only such areas are amenable to audit, for which a policy has been determined and for which specific means have been set aside, e.g.:

- the fight against health scourges,
- diseases which are the subject of specific programmes,
- the structured processes aimed organising the ways in which the players involved interrelate, in particular on the financial level,
- the management of the public dimension of the system of health-care provision.

b) The approach by the/supervisory an/or managing bodies and public entities

The players include the different public institutions, ranging from the World Health Organisation (WHO) and the national states to the local communities.

c) The institutions responsible for research, for the production of health-care goods and services: pharmaceutical laboratories, hospitals, health insurance companies, etc. ...

This list should be juxtaposed against that of the external audit bodies, most importantly those which are responsible for the evaluation of the quality and appropriateness of health-care and medical interventions: the control of sanitary safety, medical monitoring by the health insurance providers. One does not necessarily associate this type of control in a forum gathering supreme audit institutions.

The role of the latter can be most easily and comprehensively described on the basis of the approach adopted by the institutions and the players involved. It is a great deal easier to understand the system of health-care provision and the underlying funding mechanisms, than to evaluate needs and health policies, the scope and contents of which are all difficult to determine. Often, it is difficult to identify the object of audit, and moreover, every measure of some significance involves several players who often are subject to different external audit bodies

Finally, the scope of our subject is closely linked to the "socialised" portion of funds allocated by society for the betterment of its health status. In France in 1998, Social Security funded 75.5% of the current expenditure for medical goods and services, private households accounted for 11.3%, the remainder was shared by mutual insurance societies, provident societies and insurance companies. As Social Security is exclusively funded by mandatory levies, health is therefore an important area of work for external audit.

2. Institutional framework and reforms

The institutional framework and the funding mechanisms for health-care spending have changed significantly and have perceptively transformed the environment in which external audit operates.

2.1 The institutional framework

Health policy and, in more general terms, social welfare, is basically a responsibility of the state.

- There are four central government agencies subordinated to the Ministry of Health [1]
  - the General Health Agency,
  - the Hospitals Agency,

[1] Currently, the Ministry of Labour and Solidarity comprises the traditional ministerial departments of Employment and Labour on the one hand, and of Health and Solidarity on the other.

- the Agency for Social Security,
- the Agency for Research, Evaluation Studies and Statistics,

- and the decentralised services, mainly the
  - regional departments for social action and health,
  - regional hospital agencies acting as oversight bodies.

The system of health-care provision is divided into institutional health-care (80 % of all hospitals are public) and outpatient health-care services which are ensured by established doctors prescribing medication; access to health-care is virtually non-restricted.

Funding is provided by the health insurance scheme: the costs of medical visits are reimbursed on the basis of a conventional lump-sum tariff. Retentions are collected as a general rule, except for a number of serious diseases, which are compiled in a list that is subject to official authorisation.

The financial contribution allocated by the health insurance institutions to the health-care establishments covers approx. 95 % of their expenditure.

The health insurance scheme is administered by "ad hoc" institutions which are set up on a parity basis (employers/employees). Parallel to this general scheme, there are special schemes for staff in public-sector enterprises and services.

2.2 The emergence of persistent deficits and serious incidents in the system of health-care in the early 1990s have prompted several reforms.

2.2.1 A strengthening and diversification of the institutions responsible for public health. Several specialised agencies were set up:

- the National Agency for the Accreditation and Evaluation of Health (ANAES), with responsibility for the accreditation of health-care institutions,
- the French Agency for the Sanitary Safety of Health Products, which is i.a. responsible for drug licensing,
- the French Blood Agency,
- the French Grafting Institute,
- the Institute for Sanitary Monitoring,
- the Office for the Protection against Ionising Radiation.

These agencies are all overseen by the Ministry of Health.

2.2.2 The implementation of a legal regulatory framework

Ever since 1996, Parliament adopts an annual Finance Bill for Social Security. This law appropriates funds to the four branches of social welfare, i.e.

- health insurance
- pension and survivor' benefits
- occupational accidents
- family benefits

and fixes the spending targets for all of these branches.

Within the totality of health insurance expenditure, the law lays down the national spending targets for health insurance broken down into four categories, where ceiling figures are fixed for "out-patient services" "institutional health-care", "socio-medical institutions" and "private hospitals".

Targets for 1999:	- outpatient services	267.5
(in billion francs)	- institutional health-care	249.0
	- socio-medical institutions	44.0
	- private hospitals	38.0

The category "institutional health care" (hospitals) again is regionalised. Every region has a regional hospital agency, subordinate to the ministry, which allocates funds to the individual hospitals.

3. External audit

The external audit function is divided between the *Cour des comptes* and the regional audit chambers. Most recently, the traditional audit instruments have been expanded. The *Cour des comptes* is now obliged to submit a report every year to Parliament on the implementation of the Finance Bill for Social Security.

3.1 Traditional audit

The *Cour des comptes* conducts post-facto audits of the resources allocated by the state for health policy. The amount of these funds appropriated in the state budget is modest, totalling approx. 6 billion francs. They are audited as part of the audit of the implementation of the annual Finance Bill (the state budget).

The *Cour des comptes* is furthermore responsible for auditing national public institutions (the agencies mentioned further above), the umbrella institutions of the network of social security providers, specifically the National Health Insurance Provider for Employed Persons, the regional hospital agencies etc.

Furthermore it is responsible for co-ordinating external post-facto audits of the regional and local health insurance providers[1]. Audits are equally performed by audit teams from the field services of the Ministry of Finance, the Ministry of Social Affairs and of Agriculture, which are set up at the regional level within the framework of the Regional Committees for the Audit of the Accounts of the Social Security Institutions (COREC).

The audit extends to the accounts and the financial management of all these institutions. Audits are carried out at regular intervals (every 4 or 5 years). Audit may also include cross-sectional examinations of specific issues.

Likewise, the regional audit chambers carry out hospital audits at four to five-yearly intervals.

The *Cour des comptes* and the regional audit chambers organise joint audits on topics of common interest such as mental health policy, public sector hospital staff, and financial management in hospitals.

These audits will lead to:

- a qualified or unqualified audit opinion, granting or withholding discharge of the accounting officials,
- management observations which are addressed to the institutions concerned as well as to the supervisory authorities (prefects and/or ministers).

3.2 Reporting

In addition to these traditional audit activities, the *Cour de comptes* now draws up a report on the implementation of the Social Security Finance Bill for the preceding year (in September 99 in respect of the bill adopted in late 97 for the year 98). This report must have been submitted to Parliament before the debate on the bill for the following year starts.

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1 The number of institutions which receive funds earmarked for Social Security and manage the health, pension and family benefits exceeds one thousand.

This report includes mandatory features, such as

- an analysis of the framework governing the implementation of the bill,
- an analysis of the totality of the accounts of social security institutions,
- a summary of all reports and opinions by the committees responsible for the audit of the local providers.

Moreover, this report is designed to provide Parliament with information and analytical data to clarify the debates on social security and to formulate recommendations to the government and the social security institutions.

In addition to the mandatory features mentioned above, the report contains an in-depth study on a major theme, which alternates every year, as well as a close examination of issues having a direct impact on spending: the focal theme in 1998 and 1999 has been the control of medical expenditure including medication. In the year 2000, the interrelation between health policy and health insurance will be studied, using the example of cancer.

This report is elaborated using the methods and procedures commonly used at the *Cour des comptes*: field investigation, review of reports by the collegiate bodies, presentation of findings and recommendations for comment to the institutions concerned before being submitted to Parliament.

The *Cour des comptes* has been reorganised to be able to fulfil this new mandate in the best possible manner: one of the seven chambers is exclusively responsible for the audit of health policy and social security. This chamber is staffed with 40 people working full time, half of which work on the preparation of the annual report. Once introduced in Parliament, the report is presented and discussed in several special committee sessions in both houses of Parliament. Some of the audits, whose results are included in the report, are the outcome of audit commissions assigned by these committees.

4. Explanatory remarks

It is yet too early to evaluate the instruments recently put into place. However, some observations can be made concerning issues of a substantive nature which were revealed by audit, as well as procedural matters.

4.1 Issues of a substantive nature

The traditional management problems appear insignificant compared to the key issue of risk management, namely the ability to control expenditure. The recent return to balanced accounts is not so much due to the impact of measures designed to curb exploding costs, but rather to the pronounced economic upswing.

In the face of growing complexity of the system of health-care and its funding (75% of which are borne by social security contributions), curbing health expenditure is an increasingly difficult task. The earnings of some are the expenditures of others. The realms of hospitals and of established doctors operate on highly different logics, the highly fragmented representation of the medical profession makes it difficult to arrive at rules that are agreed by negotiation and consensus, etc…

There is no direct rational link between public health policy, especially with regard to prevention, and the framework governing the defrayal of health-care expenditure. The system of supply has developed spontaneously based on decentralised decisions.

4.2 Methodological issues

Thanks to the Social Security Finance Bill, the public authorities can make fundamental choices for the citizens in an environment of transparency, which does not always facilitate their task. However, two finance bills now coexist, which are different by their very nature, but interlinked in several ways: the total appropriations in the budget are lower than the receipts allocated in the Social Security Finance Bill. (1 660 billion versus 1 852 billion in 1999).

The very existence of this law has revealed gaps in the information and analytical tools available: the need to rapidly dispose of uniform accounts, exhaustive compendia of laws, sophisticated databases. In order to be able to control expenditures while at the same time leaving sufficient free scope for the players involved it is necessary to conduct wide-scale studies on morbidity, lifestyles, etc.

The effectiveness of hospital auditing is limited by the absence of reference parameters, standards, and monitoring tools that are uncontested by the medical profession. In law, every hospital is an autonomous entity. The local mayors usually chair the Boards …

SAIs which are endowed with a general audit mandate very often reach their limits when performing audits: their activities may extend to the regularity of operations and measures, they may try to detect inconsistencies, deficiencies, sources of excessive cost. However, they may not question the adequacy of health-care measures provided, or the merits of individual decisions by patients or doctors. They cannot replace rules and regulations which need to be determined and implemented first and foremost by professionals and experts, under the supervision of policy-makers. The actual goal is to encourage all stakeholders to translate their concerns about costs and effectiveness into their daily practice.

6. European Court of Auditors: The public health sector as a subject of the audit work of the European Court of Auditors

1. EU measures in the field of public health

1.1 Policy areas related to health.

The Treaties establishing the European Community make explicit reference in Article 152 to "public health" as a Community policy area. The main emphasis is placed on complementing the policies of the Member States, the improvement of public health, the prevention of human illness and disease, obviating sources of danger to human health and fighting the major health scourges.

EU funds must, therefore, be concentrated on these political priorities.

At present, the following fields can be singled out - from an organisational point of view - in which public health is the subject of political, legal and financial activities:

– health and consumer protection
– employment and social affairs
– the European Foundation for the Improvement of Living and Working Conditions
– the European Agency for Health and Safety at Work
– research and development.

(Also see: http://europa.eu.int/comm/health)

1.2 EU research and development policy

The largest single item of EU expenditure in the field of medicine and health is the 5th Framework Research and Development Programme and one of its "key actions" concerns the field of "Quality of life and management of living resources". (Also see: http://europa.eu.int/comm/research/fp5)

2. Medical research projects

2.1 Main activities under the Framework Research Programm

14.158 million ecus have been made available for the 5th Framework Research Programme (FRP) for the period from 1999 to 2002.

The funds for indirect research projects are managed by the "Research" Directorate-General in the European Commission and those for direct research are managed by the "Joint Research Centre - JRC" Directorate-General. The European Union's financial participation takes the form of co-financing (sometimes complex) research and demonstration projects ranging from pure research to applied research. Research projects are subjected to a multi-stage selection procedure where both scientific and financial criteria are applied. Direct payment to the project sponsor is basically carried out in three stages: an advance payment on conclusion of the contract, an intermediate payment in the form of reimbursements and a final payment after approval of the results of the research. As a rule, projects are carried out by project consortia in which at least 2 EU Member States must be represented.

2.2 The ECA's audit approach with regard to research projects

The audit is carried out in certain stages on the basis of the Court's general audit objectives, as defined in the Treaties and Financial Regulation, and using the Court's audit manual. After the scope of the audit has been defined, a preliminary study and, subsequently, an audit planning memorandum ("APM") are drawn up.

A phase of intensive scrutiny of files is followed by on-the-spot checks, the drawing-up of the reports and the communication of the findings.

2.2.1 Defining the scope of the audit

The limited resources available, in terms of time, staff and finances, make an exact definition of the scope of the audit necessary. A preliminary study serves this purpose. This study is followed by a detailed audit planning memorandum ("APM") which sets out the aims of the audit, the audit process and timetable.

2.2.2 The stages of the audit

The actual audit work then focuses on inspections of files in the Commission's offices in Brussels and on the premises of the recipients of the funds, throughout Europe and beyond. During the various stages of the audit, a multi-stage reporting system - "Flash mission

report", audit report, sector letter - ensures that the audit findings are systematically recorded and evaluated. In the "output" phase these are distilled down into reports for publication (Annual Report, Special Report) and form the basis of the European budgetary authorities' discharge procedure.

2.2.3 Addressees of the audit findings and follow-up

The audit findings are intended, primarily, for the European Parliament and the Council. However, they are published in the Official Journal and are thus available to the general public. Important potential users of this information are, naturally, the national administrations, research institutes and industry but also the national audit institutions which audit similar bodies at national level.

3. Controls in the medical and health field

Up to now the ECA itself has not carried out any audits of specific areas in the public health sector. However, it does conduct annual audits of the administrative appropriations of the satellite bodies which have specific tasks in the public health sector. The Court also has 42 reports by the Commission's internal audit unit, drawn up betweem 1992 and 1999, in respect of individual research projects in this sector.

4. The importance of cost/benefit analyses

In general, for audits of projects where the EU grants aid for the purchase of (large-scale) equipment or for infrastructure investments, including building projects, the evaluation of cost-effectiveness constitutes an important part of the audit. In addition, the impact of the projects and the extent to which their objectives have been achieved must be assessed as part of the evaluation of economic efficiency.

5. The distinction between the ECA's audits and the traditional public health sector audit

The EU does not finance any staff and administrative expenses in the public health sector so this traditional part of government operational expenditure is not the subject of ECA audits.

V. REPORTS OF THE WORKING GROUPS

1. Report of Working Group 1 (Report of the English Working Group)

1. Introduction

Over several days, representatives of the SAIs in the English speaking countries met to discuss various topics of interest to them in auditing health-care programs in their countries. Essentially, their concerns centered on basic auditing questions, such as how to select audit topics, developing sound criteria and methodologies to conduct their audits, and how to best present their recommendations. Although we were focused on some of the unique challenges of auditing health-care programs, it became clear to all of us that we experience many of the same basic audit challenges in auditing these types of programs as we do in our other work. Therefore, many of the points discussed in this paper reflect our broader interest in performing sound, useful and timely audits generally.

The following paper summarizes the results of our discussions. A more complete set of notes has been prepared, and captures the essence of the discussion in more detail.

2. Types of skills needed at the SAIs

It was generally agreed that although specialists were very important in auditing specialized health-care issues, it is both expensive and difficult to maintain people with these skills on staffs of SAIs. Rather, preference was given to developing auditors with strong basic auditing skills, and supplementing the staff with specialists, in the form of consultants, when needed.

The types of specialists, in addition to medical personnel, who could substantially contribute to audits of health programs, would be statistical analysts and computer experts. They, along with medical consultants, are expensive, but an important investment on a relatively large and possibly controversial topic. In regard to medical professionals, it should be noted that SAIs have found that they tend not to criticize others in their profession, so it might be best to hire retired professionals, or those who have a special interest in the integrity of the audit research. The importance of internal training

programs—both in basic auditing skills and in specialized subject matter—was mentioned as extremely important, but also expensive to develop.

3. How to select audit topics

Many SAIs, are by virtue of their constitution, obligated to perform certain types of audits on an ongoing basis. Many others see the value in performing certain work in areas that might be vulnerable to mismanagement or even fraud. These activities could take up substantial resources, so it is important to be prudent in selecting additional topics for audit or evaluation.

The notion of risk assessment was discussed at length, and judged to be a legitimate approach for deciding what additional audit topics should be addressed. Many factors go into making a solid risk assessment, but it ultimately must contain the most important factors, and proper weights, to produce the best outcomes. We concluded that risk assessments should be easily quantifiable and clear to an outside observer. Further, risk assessments are a tool to lead to important audit topics, but cannot replace the instincts of the audit staff. One example of a factor that could be considered is topics of national importance.

4. Relationship between SAIs and auditees

After much discussion, the group concluded that it is a responsibility of the SAI to use tact and diplomacy in conducting its audits. The greatest challenge is to gain the respect of the auditee, and the best way to do this is to convince him or her that the audit process is a professional one, with outcomes that will substantially improve the program. The challenge is much more difficult when the audit is revealing wrongdoing on the part of program managers or their staffs. But a professional attitude, and a certain degree of humility, goes a long way in creating an environment where the audit can be conducted successfully.

The SAI should think about the conflicts that might arise, depending on the conditions of the audit, and be prepared. For example, program managers might naturally revert to their home language—rather than English—when issues of a very technical nature arise. They might also so this when they feel they are being threatened, or when the auditor is identifying actions that need detailed explanations. In these cases, the SAI should have someone on their team who is fluent in the home language.

5. The value of performing effectiveness audits

The group concluded that effectiveness audits—where one reveals how well a program is working relative to its cost—are an extremely useful tool for SAIs. These audits could often be done in conjunction with financial or regularity audits, and provide the user with another dimension of the value of the program. Even when problems are identified during the effectiveness audit, the SAI can add constructive recommendations on how the program can be modified to perform its purpose better.

We have heard that some SAIs are prohibited in performing such audits, while others do not have the extra staff to do so. However, due to the ultimate value to be gained from these types of audits, there was agreement that SAIs should strive to obtain the ability to perform at least some effectiveness audits.

6. How to develop audit criteria

The working group agreed that developing criteria for financial and regularity audits is not difficult. In the case of financial audits, professionally accepted audit standards must be followed, and many of the audit procedures are set out as well. In the case of regularity audits, there was agreement that the SAI would start out by reviewing the laws and regulations governing the program, which would form the foundation of criteria with which to proceed. The more difficult issue is developing criteria for effectiveness audits, where no established standards have been set out.

In the case of effectiveness audits, the auditor must be creative in choosing the appropriate criteria. Various approaches could be to review the scientific or academic research on the topic, or to convene an expert panel that could suggest appropriate criteria for the audit at hand. Another approach would be to measure results from baseline information, such as performance during the previous year, or performance by a neighboring province with the same attributes as that under review. Finally, the notion of developing performance measures for the program under review—that is, quantifiable program goals that can be evaluated over time—could be useful for the program managers. Usually, performance measures are developed by the program manager himself, rather than the auditor, but the auditor can play a role in establishing mutually agreeable goals the program will try to achieve. Performance measures can be outcome oriented, such as lowering mortality or morbidity rates by a certain percentage. They can also be in the form of “process” measures, such as measuring the access to health-care in a particular location, or the time it takes to see a doctor for a particular ailment.

7. Selecting audit methodologies

After discussing many different methodologies at length, the group agreed on four that are particularly common and important in many audits. They are interviewing program participants, collecting documentary evidence, performing statistical analysis and performing meta-analysis. The first two methodologies are most common, and are often used together to corroborate the evidence collected by the other. It was agreed that interviewing alone (collecting testimonial evidence) is not the strongest evidence, and should usually be corroborated, if possible. Who to talk with, and under what conditions their information is believable has to be evaluated by the auditor. When there is less confidence in the truth of the evidence collected, additional interviews, and other documentary review becomes critical. The auditor should be open-minded and flexible to identify these situations, and should be willing to modify the audit plan to accommodate additional, or other audit verification techniques.

Statistical analysis is extremely useful for making conclusions about a universe, when only a sample of transactions or occurrences can be reviewed. Meta-analysis is also a very valuable tool—especially in professional topics where the auditor does not have mastery of the subject. Meta-analysis forms the basis of the auditor's background research, and often helps when developing criteria or audit procedures for the program under review.

8. Presenting audit findings

The working group agreed that audit findings need to be clearly stated and convincingly presented to improve the chances that they will be implemented. "Convincingly presented" means that audit findings should be complete, and should contain the supporting information that led the auditor to conclude as he or she did. The seriousness of the problem identified should be described in context so that the program manager understands the relative seriousness of the finding. Examples often help the reader understand the auditor's work, and could be a useful tool in demonstrating the importance of taking corrective action.

However, the most important determinant in assuring that findings are successfully communicated is the manner in which they are presented. This means that audit findings should be presented so that the reader begins to understand what recommendations will be flowing from the findings, and the particular types of actions that will be necessary to solve the problems reported.

9. Assuring that recommendations are implemented

No matter how sound the underlying findings are that support a recommendation, there are occasions where the program managers will be reluctant to take corrective action. Assuring that action is taken is not easy, but certain techniques may be attempted that increase this possibility. One approach is to discuss the matter with program mangers informally, and attempt to get their "buy in" that action is needed. This often requires that the auditor be open, or transparent, and share the evidence of the findings. It is also important to address recommendations to the person who has the authority to fix the problem. Otherwise, even if the desire to improve is there, authority may not be present.

Recommendations are more often implemented when they are constructive and specific. Instead of saying, "fix the problem" or "do better in the future", strong recommendations contain more specific actions that, if implemented, would improve the success of the program. Finally, the SAI should develop a process of following up on prior audit recommendations to assure that they have been implemented. If the SAI relies on an individual to remember to do this on his or her own, it will lose the institutional memory, and follow up may not happen. This would be especially true if the person responsible for follow up leaves the SAI or is assigned to another audit and becomes preoccupied with other audit tasks.

10. Conclusion

The English speaking working group concluded that there are many challenges for the auditor in producing relevant, timely and useful work. Many of these challenges—though they may be more severe in one SAI than another—are very common to almost all audit offices. A productive, motivated and trained workforce is essential to the success of any audit endeavor. And the training received at this seminar has been extremely useful in promoting professionalism and an understanding of the ways various SAIs succeed in supporting the audit needs of their respective countries.

With the importance of auditing health programs beginning to surface in most countries, specialized expertise in advanced audit procedures and medical issues would seem to be needed. But until ways can be found to augment audit staffs with highly trained but expensive specialized resources, going "back to basics" could be a very workable strategy. Health programs essentially contain the same elements as many other types of programs, and therefore, can benefit greatly from solid, and sometimes creative, audit methodologies.

2. Report of Working Group 2 (Report of the French Working Group)

The Evaluation of a Health-Care Project by an SAI

1. Introduction

To begin with, the working group noted that the evaluation of a health-care project by an SAI entails a number of difficulties, especially this is a novel type of work for SAIs. In order to address the subject matter proper of evaluating such a project, the working group formulated a number of underlying assumptions.

2. Underlying assumptions

Before beginning to consider project evaluation it is very important for the auditors to satisfy themselves of the financial regularity of the project to be evaluated. Indeed, it is inadequate to start evaluating a project when there may be doubts about its regularity. Financial regularity should be certified by the SAI itself, or, if necessary, by a private audit firm which is duly mandated.

Whenever this audit is entrusted to an outside auditor, the SAI must critically appraise the report delivered by the mandated auditor. This task should take up as few internal resources as possible.

3. Necessary phases in the evaluation of the quality of a health-care project

3.1 Selecting the audit approach

In order to define the scope for performing an audit of the economy, efficiency and effectiveness of such a project, it is useful to define a methodology before starting the audit. To begin with, a number of questions should be asked, verifying the following points for the project in question:

- Have objectives been laid down ?
- Have the objectives been ranked by priorities ?
- Are there indicators available (of inputs, of results)
- Is there a policy appraisal (e.g. of rationale, practicality) ?

- Are there procedures for project implementation ?
- Are there project monitoring procedures ?
- What general data are available?
- Is there a comprehensive list of all players involved in the project ?
- Is there general information on the system of health-care and on the project ?

This project identification phase should finally lead to the determination of those questions which are to be resolved by the audit. In other words, the focus of the audit should be defined.

3.2 Definition of audit focus

Once the focus of the audit has been defined, an audit programme can be drafted. An examination of a health-care project should include the following elements:

- expert opinions by health-care professionals (the auditor should then ask a number of critical questions, e.g. about the independence of such experts) ;
- study and examination of the project results from a purely technical (health) perspective ;
- review of costs and project management ;
- comparative review of project objectives and project outcome (study of indicators) ;
- comparative studies (identification of elements for comparison in order to make up for the lack of standards) ;
- identification and explanation of gaps between planned and actual results.

After the focus of the audit has been determined and validated, the evaluation can be planned and then carried out. Carrying out the audit along these lines will generate results from which conclusions can be drawn and suggestions and recommendations can be formulated.

Given the fact that evaluation is a special form of audit, the working suggests a number of instruments which might be useful for accomplishing this task, such as

- interviews (based on questionnaires prepared in advance)
- study of reports, statistical data
- development of ratios, and of indicators if possible
- macro-analysis and sampling (representative test sampling)
- simulation (projection, extrapolation, generalisation)
- study of project performance indicators
- use of local or international experts
- multidimensional comparative studies (taking account of points in par. 3.2).

4. Conclusion

Project evaluation is a specific type of audit and a difficult and sensitive task. The difficulties are compounded by the fact that we are dealing with health issues, regardless of the country in question. The complexity of the problem at stake shows the need for sustained international co-operation to be installed between SAIs in all countries. Such co-operation should be encouraged and supported by INTOSAI. It could consist, in particular:

- in inviting all SAIs to share their experiences in the field of project evaluation (methodology, reports) with INTOSAI on a regular basis;
- in inviting INTOSAI to disseminate this information by all appropriate means (by mail, publication on their websites, etc.)
- in organising specific seminars on project evaluation
- the facilitation of training visits by INTOSAI for auditors to SAIs having wider experiences in this field.

3. Report of Working Group 3 (Report of the German Working Group)

The audit of health-care institutions (hospitals)

1. Introduction

The conditions and criteria which the German-speaking Working Group considered important for the effective audit of in-patient health-care institutions (hospitals) comprise the aspects outlined in the main paper prepared by Austria and in the country papers presented at the seminar. The results of group work have been summarised under 6 major headings.

2. Audit preparation

In planning audits, SAIs should use a special database in which information on auditees is collected in a comprehensive manner and audit competences are recorded.

A constantly updated file of major hospital data e.g. performance and economic data, cost accounting data, medical treatment data (which are recorded e.g. in Austria by the competent federal ministry) and of legal standards to ensure in-patient provision of health-care services are important tools for effective audit preparation. The compilation is standards is important to verify whether the objectives of health-care as laid down in the law are actually achieved, while allowing the auditor to exercise his consulting function for political decision-makers.

When selecting auditees (hospitals) the following criteria should be observed, not least for a ranking of auditees in terms of auditability:

- obvious shortcomings in the medical and organisational fields
- conspicuous changes of performance data and costs
- volume of financial operations (annual budgets)
- current incidents and topics
- time interval which has passed since the last audit.

3. Audit criteria

The Working Group considered the following audit criteria as being paramount:

compliance, in particular with the statutory provisions enacted for the provision of health-care services,

accounting accuracy in terms of the completeness, legality, validity and correctness of the accounts,

effectiveness, i.e. examining whether a needs-oriented catalogue of medical services that is based on demographic and diagnostic needs has been drawn up and whether these services are rendered by the competent health-care institutions as a function of their level of equipment and service capabilities (starting with basic provision by alternative medicine and established doctors, followed by out-patient clinics, standard hospitals and central hospitals and right up to high-tech medicine provided by central university hospitals);

economy, in the audit of hospitals generally means the attainment of the required level of health-care provision with the least possible input of public resources; audit criteria in this field include compliance with contracting guidelines for investment and procurement, a well-balanced national staff management system, and the best possible utilisation of the hospital as well as its medico-technical equipment, and

efficiency, measured in terms of the use of public resources to ensure the provision of medical services while maintaining state-of-the art medical standards and by comparison with national and international ratios such as:

- by the number of examinations performed annually at large-scale medical apparatus (gamma knife, cardiac catheter, nuclear magnetic imaging etc.) and

- by means of calculation bases and formula which are generally accepted or developed by the competent ministry (see Table below).

Basis of calculation

Costs

Costs per bed

Costs per nursing day

Costs per in-patient

Costs per person employed

Costs per place of examination and treatment

Costs per out-patient

Total costs per service (treatment)

Total costs per frequency

Costs of meal per nursing-day

Costs per kg of laundry

Costs per workshop hour

Calculation formula

Average bed utilisation: $\frac{\text{nursing days}}{365\ (366)}$

Average utilisation: $\frac{\text{nursing days x 100}}{\text{beds x 365 (366)}}$

Average bedstay $\frac{\text{nursing days}}{\text{patients}}$

Staff ratio: $\frac{\text{average bed utilisation}}{\text{number of staff employed}}$

In-patients: $\frac{\text{admissions + releases + mortalities}}{2}$

4. Resources needed for audit

In general terms, the financial and staff resources needed by an SAI to audit a hospital should be commensurate to the savings or improvements which the audit findings are expected to generate based on previous experience and on an approximate quantification established beforehand. Exceptions may be made when non-quantifiable aspects such as the provision of medical quality or compliance with standards are audited.

5. Audit methodology

The major methods used for the successful audit of hospitals by SAIs should include:

- audit activities in the hospital itself, such as the on-site inspection of premises and records kept on-site, on-site interviews, the on-site audit of existing organisational structures and operations; identifying actual responsibilities and the functioning of internal control and EDP systems.

- request and analysis of written documentation such as balance sheets, vouchers, statistics, cost accounting data, staff records, protocols, questionnaires, planning data etc.

- comparison of target/actual data, i.e. comparison between the defined objectives of health-care provision and services actually rendered; and

- audit of quality assurance measures by examining the measures implemented or continuously strengthened by the hospital with regard to ensuring medical and operational quality.

With all audit methods applied it should be ensured that

- random samples are based on an adequate sample size,
- interview partners are carefully selected,
- questionnaires and additional questions are well-targeted and easy to understand,
- records and vouchers are complete and available as original documents,
- data protection provisions are not violated and that sufficient trust between the auditor and the auditee has been built.

6. Skills of the audit team

Considering the variety of different specialist areas in a hospital, the audit team should include preferably economists, law experts and engineers (construction and medical engineers). As required, external experts such as physicians, nursing staff, computer experts etc. should be relied on.

7. Presentation of audit results

For the successful presentation of audit findings which are conducive to shortcomings being remedied and recommendations being adopted, the audit report should be clear and easy to understand and made public in an appropriate fashion. The audit report should in any case include information on the subject or audit, the audit objective and on the attainment of objectives by the hospital, as well as characteristic indicators. It should be divided into a descriptive part with a statement of facts and a second part with criticism/recommendations, followed by the comment of the auditee in consideration of his right to be heard, and, if necessary, a counter-statement by the SAI. The report may be published in a long-form or a short-form version and should ultimately be made available to the public.

Unheeded criticisms and SAI recommendations that were not implemented should preferably form the basis for follow-up audits.

4. Report of Working Group 4 (Report of the Spanish Working Group)

Auditing Public Health Systems in Disadvantaged Areas

1. Audit scope

The audit scope should not only include financial aspects, but also evaluate the efficiency and effectiveness of public health services. This could be carried out by making inquiries among the providers and the recipients of those services. Also to be considered is the social impact on this special group of the population, which had been chosen for cost-benefit audits.

2. Information requirements

What has been said before means that there should be an extensive understanding of the following aspects:

- the details of the public policy and special programmes of public health for the most disadvantaged sectors and the entities in charge of their development
- exact quantity of resources
- the target population and target areas
- objectives associated with the programs
- indicators to judge the policy outcomes
- information system and internal control of the entities in charge of developing the programs.

In an audit of the medical services in a highly disadvantaged area of the population it is of importance to combine the aspects of effectiveness or performance audits with those of regularity and compliance audits. This means that:

- normally the internal control systems related to the development of special programs show a variety of deficiencies and in other cases they simply do not exist;
- it is necessary to stress the importance of examining expected objectives and outcomes of those programs to improve the health situation of the population and

therefore it would be necessary to know the impact achieved by using those resources;
- these resources are designed for an important group of the population and therefore they should have a positive impact.

3. Selection of audit subjects

It is obvious that an audit process should not generate higher costs than the benefits derived from carrying out the audit. Nevertheless, it is important when a decision is taken to go ahead with a specific audit, to take account not only of financial but also of qualitative aspects.

4. Relations with the auditee

The best way for the auditors to work with the auditee would be as follows:

- maintain a relation of cordiality with the staff of the institution, remaining impartial and supportive to management,
- maintain a good relation and co-operation with the internal control unit of the auditee,
- in general announce beforehand to the auditee that an audit will be performed.

5. Audit training skills and experience required

Taking into consideration audit standards and characteristics of the audit profession it is necessary that audit personnel should have a wide range of skills acquired in a formal education process, for example skills in the following fields: audit, administration, engineering, accountability, EDP systems and experience in the public health sector. They should also have an ethical approach to audit work, and accept the social responsibility to act objectively and independently in the public interest.

Nowadays it is necessary that audit professionals of different specialities should participate in an audit in order to have the required abilities to fulfil their work properly and come to an effective result.

Sometimes it is impossible to evaluate at the same time the aspects of efficiency and effectiveness due to the following reasons:

- lack of policy and strategic objectives
- absence of indicators
- necessary time to assess the results and impacts
- information not reliable for the evaluation.

6. Audit criteria

The following criteria allow an evaluation of the overall value for money. Some examples:

- Mortality rate
- Comparison of technical equipment of hospitals
- Number of consultations
- Babies born alive and still borne
- Ratio bed/doctor
- Ratio bed/nurse
- Life expectancy
- Patient satisfaction
- Utilisation of equipment.

7. Presenting audit findings

The opinion given by auditors is their own responsibility and should therefore be well-founded. In consequence auditors should only rely on facts they can personally verify and guarantee. Where reliance is placed on secondary evidence the auditors should indicate this fact in their report.

The presentation of the audit findings and recommendations should be objective, constructive and concise. Recommendations should also be formulated in a way that enables practical implementation by the auditee.

8. Follow-up audits

The audit methodology comprises planning, performance, reporting and follow-up. The follow-up is of great importance due to the fact that we can evaluate ex-post the audit on site if the auditee has adopted measures to correct detected deficiencies in accordance with the recommendations given by the auditors or due to changes proposed by the management of the auditee.

Therefore we think an audit does not finish with the production of the audit findings but when the follow-up has been done and the recommendations have been successfully implemented.

ATTACHMENTS

I. United Nations: Role of Supreme Audit Institutions and the Audit of Public Health Services

1. A brief note on Supreme Audit Institutions

SAI structures and relationships with INTOSAI

The structure, functions, and the status of the supreme audit institutions (SAI) vary from country to country due their respective historic development, political systems, culture, language and regional affiliations. Some SAIs have long traditions, developed over hundreds of years, while others are fairly new. Notwithstanding the variances, it is remarkable that SAIs from all over the world have joined hands under the common umbrella of the International Organization of Supreme Audit Institutions (INTOSAI) and have formulated common codes and standards to which they can individually and collectively subscribe. This, in part, reflects the march towards globalization.

Impact of globalization and accountability

The pervasive impact of globalization is causing countries to re-examine the role of the state in governance, including the types of and methods by which services to the citizens are delivered. Governments are responding by experimenting and implementing alternate ways of delivering service economically and efficiently with better assurance that planned results and outcomes are achieved. The citizens, armed with universally accessible information, on the other hand, are making increasing demands for responsive institutions and accountability for the resources used in delivering services and the results achieved in a transparent way.

INTOSAI has defined public accountability "as the obligation of persons or entities, including public enterprises and corporations, entrusted with public resources to be answerable for the fiscal, managerial and program responsibilities that have been conferred on them, and to report to those that have conferred these responsibilities on them." This implicitly assumes the existence of a well defined accountability structure – a structure that consists of systems for delegating authority and reasonably stable organizational structures governed by rules, regulations, procedures and systems that can account for the implementation of the delegated authority. The accountability structure, at the highest

level, encompasses the three branches of government – i.e. the legislature, executive and judiciary, found in most modern democratic governments and individuals at the lowest level of every department, office, branch or entity at all levels of government.

The SAIs' play a critical role in completing the final loop in the accountability cycle. The SAIs' have the onerous task of independently and objectively examining the accounts and other reports prepared by the executive and submitting reports of the results of audits directly or indirectly to the supreme authority, which in most cases would be the elected legislatures and by extension, the citizens. The publication of such audit reports is the most public manisfestion of the critical role SAIs play in the public accountability framework.

In the course of their efforts to reform their governance institutions, many countries have found that the capacity of their SAIs needed to be strengthened, partly because of the need to extend audit coverage to areas, which were previously not within their domain. International organizations, including the un, undp and the world bank group, having been assisting these SAIs through technical cooperation projects through the cooperation of INTOSAI and other more advanced SAIs.

SAIs and INTOSAI standards

Notwithstanding the fact that the roles and responsibilities of SAIs' are normally determined by the mandates bestowed on them by their national laws, the INTOSAI auditing standards provide invaluable professional guidance on how the SAIs may be organized and how they may implement their mandate more effectively. The standards have also identified the various types of audits that may be conducted. Full scope governmental auditing is defined to include regularity and performance audits. Regularity auditing encompasses the attestation of financial statements and reports as well as review of compliance with applicable laws, regulations and rules and established standards, policies and procedures. Regularity audit would also require the review of the adequacy of internal control systems and internal audits. Performance audits, on the other hand, includes the review of the "economy, efficiency and effectiveness" aspects of government operations.

The demands being placed on governments for greater accountability makes it almost imperative for SAIs to embrace full scope audits. As postulated in the INTOSAI guidelines, by undertaking full scope audits, the SAIs will be able to better fulfill their roles within the accountability framework of their respective countries. And in the process, SAIs could also become an important catalyst for change. SAIs can have a profound effect on the way governments formulate programmes and fund those programmes as well as the methods by which programmes are implemented and managed. In so doing, the SAIs would have added value to their work and contributed significantly to nation building efforts.

2. A brief note on public health services

Before discussing the specific role of SAIs in the audit of public health services, it will be useful to discuss some of the current issues in public health management.

Access to health-care and human rights

Access to reasonable health-care at an affordable cost has long been considered as a basic human right by most countries and all international organizations. It is noteworthy that this human right is even specifically enshrined in the constitutions of some countries. Chile's constitution, for example, states that the government has an obligation to "protect free and egalitarian access to actions that promote, protect, restore health and rehabilitate the health status of individuals".

Good health contributes to the overall quality of life as well as to productivity. Many diseases are not fatal, but disabling. For example some 1 billion people suffer from anemia and this has an obvious debilitating effect on productivity and on health-care costs. Good health contributes to human capital and this is essential to economic growth and national development. This indeed is recognized by the following decisions with respect to health made in recent world conferences:

- All countries should seek to make primary health care, including reproductive health care, available universally by the end of the current decade;

- Governments should promote full access to preventive and curative health-care to improve the quality of life, especially of the vulnerable and disadvantaged groups and in particular women and children;

- Governments should provide more accessible, available and affordable primary health-care services of high quality, including sexual and reproductive health-care.

Developments in world health

The last fifty years has seen impressive gains in world health. People live longer, fewer children and their mothers die in childbirth and many serious diseases have been controlled or eliminated. Factors influencing these trends include:

- Increasing income levels and reduction of poverty;
- Education, particularly of girls and women;
- Adequate food, clean water, and sanitation;

- Health-related public policies and intervention; and
- Scientific and technological advancements.

Because of the disparities in the factors mentioned earlier, the development of world health has been uneven not only among regions and countries, but also within countries. The average life expectancy in industrialized countries exceed 70, while the comparable figure in many developing countries, particularly those in the sub-sahara region, ranges from 45 to 55. A similar pattern is also evident in child mortality rates. Similar patterns, though not as drastic, are also noted among the poorer segments of populations of high- and middle-income countries.

The world bank estimates that a minimum package of public health and clinical interventions in low-income and middle-income countries would require USD 12 and USD 22 per person per year respectively. The world bank estimates that the majority of the world's 1.3 billion people who live in absolute poverty, with incomes of less than USD 1 per day, lack adequate access to essential health services and other basic amenities such a potable water, sanitation and elementary education. In a way, these facts points to the enormity of the problem faced by the world today.

Public health service expenditures

Global spending on health-care in 1994 amounted to about USD 2,330 billion or 9 per cent of gdp, making it one of the largest sectors in the world economy. Industrialized countries accounted for about USD 2,080 billion of the amount. On the other hand, low- and middle-income countries, which accommodate 84 per cent of the world's population, spent USD 250 billion or 11 per cent of the total health expenditure. Notwithstanding the disparities, the sheer size of the health expenditures and the criticality of health outcomes warrant critical examination of the economic and financial policies affecting health-care as well as the management of health systems.

Financing public health services - public and private sector mix

No government can provide health services to meet all the possible needs of its population. However, in many developed countries and middle-income countries, governments have become central to social policy and health care. In the industrialized countries, the publics sector finances nearly 60 per cent of health expenditures. Whereas, in the developing countries, the public sector's share varies from 40 to 60 percent. In some countries such as india and syria, the share is only 30 per cent.

The involvement of governments in health-care is justified both on grounds of: (i) equity – i.e. securing access by the population, particularly the disadvantaged, to health; and

(ii) economic efficiency – in many respects health is a "public good" and hence private markets are inefficient or incapable of providing the service.

On the basis of empirical evidence, economists have concluded that a mixture of both private-public involvement leads to the best results in health-care provision. The optimal mixture will obviously depend on the circumstances prevailing in each country and obviously there cannot be "one size fits all". The relative capacity of both government organizations as well as the private sector to finance and provide a reasonable package of services will mainly determine the mix.

In order to optimize the use of scarce resources, governments on their part need to carefully plan the provision of a universally accessible, publicly financed packages of public health measures and clinical services, which can help resolve major health problems. Where feasible, governments should actively promote private expenditure on the clinical interventions in the package.

Governments also have a special responsibility to ensure that the health service programmes are properly targeted at the poor and disadvantaged communities and also ensure easy accessibility.

Types of services and methods of delivery

The provision of public health services by governments normally involves a wide range of programmes or activities, some of which are as follows:

- Regulatory – ensuring standards of professionals and private sector services and quality and safety control of drugs, equipment, facilities, etc.;
- Preventive public health services – public hygiene education, nutrition, sanitation, health screening, surveillance, immunization etc.;
- Primary care – provision of general clinical and specialized clinical day care in hospitals and outreach clinics targeted at specific groups – general public, maternity and child care, dental care, dispersed rural population, senior citizens etc.;
- Institutionalized clinical care – hospitals, homes both for general and specialized cases etc.;
- Procurement of drugs, medical supplies and equipment;
- Construction of facilities;
- Research and development; and
- Human development – professional education and development.

The type of health systems chosen to deliver health services may vary from country to country. Many governments deliver the services directly through government departments, hospitals and clinics. Some governments, on the other hand, deliver much of the services

through private sector participation such as self-financing ngos and trusts using various systems of contracting. Most countries in africa and latin america follow the former model while many of the high-income countries, tend to follow the latter model. Many countries also delegate delivery of a mix of health services to sub-national governments through a combination of grants and subsidies.

While each model of health delivery may have its own advantages and disadvantages, it is clear that the competencies required to manage each model are different. Where governments contract private providers or delegate sub-national governments to deliver services, transparent quality and cost control systems need to be established and managed. Such institutional competencies are generally deficient in the low- and middle-income countries.

Many countries also charge user fees ranging from nominal charges to fill cost recovery. Many positive and negative issues arise in this respect and raises a range of issues relating from equity to the administrate efficiency of collection.

Enhancing performance of public health services

Increasing health-care budgets alone would not necessarily guarantee the achievement of desired outcomes. Health-care systems have not always been responsive and successful in delivering the right quantity and quality of services. Evidence shows that government spending on health services in many developing countries tends to have benefited the well to do more than the poor. On the other hand, the poor quality of services has caused patients, even in the poorest of countries, to frequently use their meager resources to turn to private providers.

In the last two decades, rich and poor countries alike, have been struggling to design more effective and acceptable policies and operating systems that are capable of delivering responsive, cost-effective and affordable health-care in the public domain. Studies of different policies and delivery systems continue to show that reforms are necessary for:

- Improving equity in access to a range of preventive and clinical services through: (i) reduced geographic, financial, cultural and other barriers; and (ii) interventions that address conditions that are frequent and inexpensive to treat;
- Raising efficiency in the use of scarce resources through better governance, management and accountability mechanisms that promote decentralization and the use of market incentives and minimize opportunities for waste and misuse;
- Improving the effectiveness of interventions through improved clinical management skills; design of more effective basic preventive and clinical packages; improvement in treatment protocols with limited drug formularies; and research and training in efficacy and cost of different interventions;

- Raising the quality of care through incentives, improved information, training and accreditation systems, peer reviews, inspection systems and routine surveillance; and
- Maximizing consumer satisfaction through improved interaction with clients.

3. Audit of public health services

Planning – macro level

Most SAIs have very wide mandates, but limited resources to fulfill the onerous tasks and therefore choices have to be made as to when specific audits are to be conducted and the amount of resources to be allocated to that effort. Auditing standards do provide guidance on the parameters that should be used in planning the work programme of SAIs.

However, based purely on the sheer size of national public expenditures, health-care services should rank very high on the list of activities requiring attention of most SAIs. Further, as noted earlier, the range of services involved; the various modes of service delivery; as well as the evolving political, ethical and economic issues surrounding health services are likely to present daunting challenges to even the most advanced SAIs in terms of the modalities and the audit approaches to be used. The audit of health service programmes would require a review of a wide range of inputs - staffing; travel; procurement or contracting for supplies, services, equipment, construction; maintenance of facilities and equipment and so on.

Audit scope

Subject to the respective mandates of each SAI, health services area would benefit from the application of full scope audits, which was alluded to earlier. The impact such audits are likely to accrue on policy makers as well as managers in terms of accountability for results could be profound.

Audit execution planning

In planning the audit of the health services itself, auditors no doubt would have to clearly identify and analyze the range of risks and vulnerabilities involved. The nature of some of the problems and issues identified in recent research reports were noted earlier. Among the highest risks are obviously: (i) the failure to attain results and outcomes expected of specific health service programmes; and (ii) improper use of resources due to bad management practices, including inadequate planning and coordination, uneconomic procurements, wastefulness, misuse through fraud, misappropriation and corruption etc.

Internal controls

The audit programmes formulated as a result of the risk analysis would obviously seek to determine if managers have indeed established efficient and effective internal control environments necessary to address the identified risks.

Some very interesting discussion papers have been submitted for this conference. We will note that in mexico, because of inadequate supply of appropriate drugs and nurse absenteeism, the quality of medical care suffered. In the us, on the other hand, it is estimated that care providers were overpaid about USD 12 billion and gao concludes that sloppy management and poor internal oversight could result in significant financial losses to the government. In switzerland, the SAI, after a complex audit of a small but controversial programme, concluded that the funds were used properly and effectively for the approved purpose., though subsequent clarifications had to be made with respect to entitlements. All the weaknesses noted could be attributed to the strength or weakness of the management control systems.

While on the subject of control, it must be noted that government systems have been widely criticized for being burdened with excessive regulations and bureaucracy that not only do not add value, but also inhibit efficiency and innovation. The need to control soaring health-care costs, as already pointed out, requires innovations. Auditors in reviewing control systems should carefully weigh the costs and benefits of existing controls as well as those that they recommend to management.

Performance measures

Many governments are reorienting public sector activities to performance and results. As you may know “results based budgeting” is slowly becoming the norm among public sector entities. Implicit in this budgeting system is that management would clearly define performance standards and quantify planned outputs or results. Such systems would also require management to establish proper management information systems, which can be used to collect pertinent data and analyze results. Such clear statements of objectives and expected results as well as supporting systems, if objectively developed, could greatly facilitate auditors establish audit criteria against which to measure their findings, such as shown in the paper submitted by austria.

SAIs should seriously consider making appropriate recommendations to management where: (i) programme objectives as well as credible and measurable performance targets are not clearly defined; and (ii) performance targets are not being used to monitor actual performance and correct programme directions in a timely way.

Benchmarking performance and best practices

Very often managers in the public sector do not establish performance measurement standards or if they do, they are not realistic or are not revised on the basis of actual experience. Auditors should be mindful of the benefits of using benchmarking and 'best practice' examples and ought to use these wherever possible and feasible. Benchmarks can be established on the basis of performances in different units within the organization, different public organizations within the country and by private sector organizations within the country. International benchmarks can also be used ,where appropriate adjustments can be made to local conditions.

Exchanging and obtaining information to improve quality of audit

Discussion forums such as this seminar provide the means for auditors the world over to exchange experiences in the different approaches and techniques used in audits. We further hope that this will provide SAIs and their staff the impetus to slowly establish networks across borders to compare notes and information as to how different approaches can be used in practical terms. The internet has made the world a global village and has enabled the exchange of information at almost no cost.

Numerous SAIs have established their own web sites and post their audit reports and other technical publications on these sites. For instance, you will find that the uk SAI web site has some interesting audit reports on health services, including one on 'inpatient admissions and bed management in acute hospitals'. Almost all-international organizations have useful web sites. The world bank and who web sites provide some very useful information on health-care services.

4. Conclusion

Public health services will continue to remain a significant activity of governments both in terms of the profound humanitarian and equity issues it entails as well as the level of resources it consumes. Supreme audit institutions, through the regular and properly planned audits of public sector health services can contribute effectively to public accountability and the efficient and effective use of resources. The challenges presented by such audits are immense. Through the sharing of experiences and information the burden can be reduced and more effective audits conducted.

II. List of papers

1. Country papers by SAIs

Algeria	Israel	Morocco
Antigua and Barbuda	Jordan	Namibia
Armenia	Lebanon	Nepal
Bhutan	Lesotho	Oman
Bolivia	Malawi	Poland
Burkina Faso	Malaysia	Qatar
Cape Verde	Maldives	Samoa
Chile	Malta	Tunisia
Ethiopia	Mauritania	Turkey
Guinea-Bissau	Mauritius	

2. Presentations by SAIs

Author	Country	Title
Mrs. Leslie Aronovitz	United States of America	The Role of Supreme Audit Institutions In Preventing Irregularities in Government Health-Care Programs
Mr. Didier Monnot Ms. Regula Durrer	Switzerland	Auditing Health-Care Projects – A Project for the Therapeutic Prescription of Narcotic Drugs
DI Heinrich Krautstofl Mag. Peter Straka Mr. Hermann Wawra Dr. Martin Bartos	Austria	The Audit of Hospitals by SAIs
C.P. Juan Calderón Montelongo	Mexico	Performance Audit of Medical Services Provided by a Public Health Institution in Economically and Socially Disadvantaged Areas
Mr. Gabriel Mignot	France	The Audit of Public Health-Care by SAIs
Mr. Hendrik Fehr	European Court of Auditors	The Public Health Sector as a Subject of the Audit Work of the European Court of Auditors

3. Papers by other organizations

Author	Country	Title
Mr. Abdel Hamed Bouab	United Nations	The Role of Supreme Audit Institutions in Auditing the Public Health-Care Sector

III. List of participants:

Ms. Khadidja MESSAOUDI
Présidente de Chambre
38 Avenue Ahmed Ghermoul
16000 Alger
Algeria
Tel: ++213 (2) 68 43 41, 67 17 46
Fax: ++213 (2) 67 18 58
E-mail: cdc@wissal.dz

Ms. Arah ARMSTRONG
Director of Audit
Member of the INTOSAI Governing Board
The Social Security Annex
High Street
St John's/Antigus W.I.
Antigua and Barbuda
Tel: ++1 (268) 462 - 0022, 5960
Fax: ++1 (268) 462 - 0357 (- 1622)

Mrs. Ruzan ZAZYAN
Head of International Loans and Credits Audit Dep.
Baghramian Ave. 19
375095 Yerevan
Armenia
Tel: ++374 (2) 52 33 32
Fax: ++374 (2) 58 85 42
E-mail: vpal1@parliament.am

Ms. Zhanna GEVORGYAN
Leading specialist of Brieth Analytical and Information Methodological Department
Baghramian Ave. 19
375095 Yerevan
Armenia
Tel: ++374 (2) 52 33 32
Fax: ++374 (2) 58 85 42
E-mail: vpal1@parliament.am

Mr. Dawa TENZIN
Deputy Chief Auditor
Post Box 191
Thimphu
Bhutan
Tel: ++975 2 32 23 88, 32 21 12,32 21 11
Fax: ++975 2 32 34 91
E-mail: raa-md@druknet.net.bt

Lic. Fidel QUISBERT Condori
Contador Publico
Casilla Postal 432
432, La Paz
Bolivia
Tel: ++591 (2) 37 00 78, 33 14 14 ext. 501 o ext. 408
Fax: ++591 (2) 811 35 22 (811 35 21)
E-mail: cgr@ceibo.entelnet.bo

Mr. Amos OUBDA
Inspecteur d'Etat
01 B.P. 617
Ouagadougou 01
Burkina Faso
Tel: ++226 31 16 09 (31 39 16)
Fax: ++226 30 57 04 (31 49 26)

Ms. Natalina LIMA de Fátima Spencer
Assistante de Vérification
C.P. 126
Prédio da Diocesana Center
Asa Praia
Cape Verde
Tel: ++238 62 35 52/66
Fax: ++238 62 35 51

Mr. Victor Manuel ASTUDILLO Parra
Contador Auditor de la Contraloria Regional del Biobío
calle O"Higgins N° 403
Concepción
Chile
Tel: ++56 (41) 24 17 01, 21 30 93 (244 208)
Fax: ++56 (41) 23 65 71

Ms. Kaie KARNIOL
Audit Manager
Narva mnt.4
EE-15013 Tallinn
Estonia
Tel: ++372 640 07 02, 640 07 00, 640 07 721 (Intern. Liaision)
Fax: ++372 661 60 12
E-mail: kaie.karniol@sao.ee

Mr. Negusie JEMBERE
Head of an Audit Department
P.O. Box 457
Addis Abeba
Ethiopia
Tel: ++251 (1) 56 18 40, 56 18 41
Fax: ++251 (1) 55 25 94

Dr. Francisco ROSA Cá
Juge-Conseiller du Tribunal de Comptes
Avenida Pansau na Isna
Caixa postal No 478
Bissau
Guinea-Bissau
Tel: ++245 22 20 40, 22 20 50
Fax: ++245 20 22 09, 20 34 95

Mrs. Ziona ALON
Assistant Director
Rashi St. 66
P.O. Box 1081
Jerusalem 91010
Israel
Tel: ++972 (2) 531 51 01, 531 51 06
Fax: ++972 (2) 531 51 50
E-mail: rothyosh@netvision.net.il

Mr. Ali Saleh ATEYYAT
Supervisor Auditor
P.O. Box 950334
Amman
Jordan
Tel: ++962 (6) 593 01 74 - 593 01 79, 593 01 91,
-08 30, -08 43, -19 14
Fax: ++962 (6) 593 11 80
E-mail: audit.b@nic.net.jo

Mrs. Mirvat MORKOS
Controller
Al Kantari - Rue de l'Armée
Immeuble Rizk Helou
Beyrouth
Lebanon
Tel: ++961 (1) 86 02 36; 86 02 52; 37 30 41
Fax: ++961 (1) 42 46 95, 37 30 40
E-mail: President@coa.gov.lb,
zmaalouf@coa.gov.lb

Mrs. Manako Leocadia RAMONATE
Senior Auditor
P.O. Box 502
Maseru
Lesotho
Tel: 00266 (3) 23 904 or 14 247
Fax: 00266 (3) 103 66

Mr. Laudon Alfred NAZOMBE
Assistant Auditor General
P.O. Box 30045
Capital City/Lilongwe 3
Malawi
Tel: ++265 78 07 00
Fax: ++265 78 30 71

Ms. Zainun TAIB
Senior Auditor
Pejabat Ketua Audit Negara
Jalan Cenderasari
MAL-50518 Kuala Lumpur
Malaysia
Tel: 0060 (3) 443 65 69, 294 64 22
Fax: 0060 (3) 227 37 497, 291 30 30, 293 02 64
E-mail: jbaudit@audit.gov.my

Mr. Mohamed HUSSAIN
Deputy Director of Audit
Huravee Building (3rd Floor)
Male' 20-05
Maledives
Tel: ++960 32 39 38
Fax: ++960 31 64 30
E-mail: maldago@dhivehinet.net.mv

Mr. Harold P. DARMENIA
Notre Dame Ravelin
Floriana CMR 02
Malta
Tel: ++356 22 40 13, 4, 5
Fax: ++356 22 07 08
E-mail: nao.malta@magnet.mt

Mr. BÂ SAÎDOU Moussa
Président de la Chambre des Finances Publiques
B.P. 592
Nouakchott
Mauritania
Tel: 00222 (2) 25 34 04, 25 51 55, 25 71 95,
25 33 37-549
Fax: 00222 (2) 549 64

Mrs. Kim Chow CHAN MOO LUN
Principal Auditor
14th Floor Air Mauritius Centre
John Kennedy Street
Port-Louis
Mauritius
Tel: ++230 212 20 96-97, 212 30 91
Fax: ++230 211 08 80
E-mail: auditdep@bow.intnet.mu

Mr. Abdelaziz EZZAIDI
magistrat à la Cour des comptes
44 Av. de France, Agdal
B.P. 706
Rabat
Morocco
Tel: ++212 (7) 77 21 00, 77 30 32
Fax: ++212 (7) 68 03 77, 77 31 68

Ms. L. VAN SCHALKWYK
Private Bag 13299
Windhoek 9000
Namibia
Tel: ++264 (61) 23 74 43
Fax: ++264 (61) 22 43 01
E-mail: lvanschalkwyk@oag.gov.na

Mr. Raja Ram SEDHAIN
Assistant Auditor General
P.O. Box No. 13328
Kathmandu
Nepal
Tel: ++977 (1) 262381, 262415, 262417, 262649
Fax: ++977 (1) 26 27 98
E-mail: oagnp@mail.com.np

Mr. Younis AL TOOBI
The Palace - Muscat
P.O. Box 727
Muscat, Postal Code 113
Oman
Tel: ++968 73 62 20, 73 62 17, 73 62 19
Fax: ++968 740 - 264

Ms. Danuta GAJDUS
Deputy Director of Health and Physical Culture
Dep.
P.O.Box P-14
PL-00-950 Warszawa
Poland
Tel: ++48 (22) 825 81 93
Fax: ++48 (22) 825 89 67
E-mail: wsm@nik.gov.pl, nik@nik.gov.pl

Mr. Abdullah Hilal AL-KUWARI
P.O. Box 2466
Doha
Qatar
Tel: ++974 44 10 00
Fax: ++974 41 21 01
E-mail: qsab@qatar.net.qa

Mr. Tamaseu Leni WARREN
Controller and Chief Auditor
P.O. Box 13
Apia
Samoa
Tel: ++685 254 23, 205 51
Fax: ++685 241 67

Mr. Taoufik BOUFAIED
magistrat conseiller à la Cour de Comptes
25, Avenue de la Liberté
1004 Tunis
Tunisia
Tel: 00216 (1) 83 10 33, 75 36 82, 83 13 75
Fax: 00216 (1) 83 12 53

Mr. Ömer KARAMOLLAOGLU
Auditor
06100 Ulus Ankara
Turkey
Tel: ++90 (312) 311 23 28, 311 21 69
Fax: ++90 (312) 310 65 45
E-mail: omer.karamollaoglu@hazine.gov.tr

IV. List of speakers:

DI Heinrich KRAUTSTOFL
Fach 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8239
Fax: ++43 (1) 711 71-8494

Mag. Peter STRAKA
Fach 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8342
Fax: ++43 (1) 711 71-8494

Mr. Herrmann WAWRA
Fach 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8180
Fax: ++43 (1) 711 71-8494

Dr. Martin BARTOS
Fach 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8344
Fax: ++43 (1) 711 71-8494

Mr. Gabriel MIGNOT
Président de la 6e Chambre
13, rue Cambon
F-75100 Paris
France
Tel: ++33 (1) 42 985 973
Fax: ++33 (1) 42 989 657
E-mail: Gmignot@ccomptes.fr

Prof. Dr. Hendrik FEHR
Head of Department
CDCG 2/04
12, rue Alcide de Gasperi
L-1615 Luxemburg
Luxembourg
Tel: ++352 43 98 - 45503
Fax: ++352 43 98 - 46503
E-mail: hendrik.fehr@eca.eu.int

C.P. Juan CALDERÓN Montelongo
Subcontador Mayor de Hacienda
Av. Coyoacán No. 1501, Cal del Valle
Delegation Benito Juárez
México D.F. C.P. 06600
Mexico
Tel: ++52 (5) 524 12 65
Fax: ++52 (5) 534 18 91
E-mail: cmhasesor@mexis.com

Mr. Didier MONNOT
Monbijoustrasse 51a
CH-3003 Bern
Switzerland
Tel: ++41 (31) 323 10 48
Fax: ++41 (31) 323 11 00
E-mail: didier.monnot@efk.admin.ch

Ms. Regula DURRER
Monbijoustrasse 51a
CH-3003 Bern
Switzerland
Tel: ++41 (31) 323 10 48
Fax: ++41 (31) 323 11 00

Dr. James ROBERTSON
Director, Health
157-197 Buckingham Palace Road
Victoria
London SW1W 9SP
United Kingdom
Tel: ++44 (171) 798 - 7821, oder ++44 (20) 7798-7821
Fax: ++44 (171) 931 - 9072
E-mail: nao@gtnet.gov.uk

Mrs. Leslie ARONOVITZ
Suite 700
200 W. Adams St.
Chicago, Il. 60606
United States of America
Tel: ++1 (312) 220-7767
Fax: ++1 (312) 220-7726
E-mail: aronovitzl.chro@gao.gov

V. List of observers:

Mr. Jens PETERSEN-THUMSER
Head of Department
German Foundation for Development
Postfach 27 06 61
D-13476 Berlin-Tegel
Germany
Tel: ++49 (30) 43 99 6 - 333
Fax: ++49 (30) 43 99 6 - 336
E-mail: j petersen@dse.de

VI. Conference secretariat:

Mr. Abdel Hamed Bouab
Officer-in-Charge Public Finance and Enterprise Management Branch
United Nations
PFBDB / DGPAF / DDSMS
Room DC1-0964
New York, N.Y. 10017
United States of America
Tel: ++1 (212) 963 - 8406, 963 - 2916
Fax: ++1 (212) 963 - 9681

Dr. Franz Fiedler
President of theCourt of Audit
Secretary General of INTOSAI
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71 - 8456
Fax: ++43 (1) 712 94 25

Mag. Reinhard Rath
Director
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71 - 8350
Fax: ++43 (1) 718 09 69

Dr. Gertrude Schlicker
Deputy Director
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8330
Fax: ++43 (1) 718 09 69

Mag. Michaela Ott - Spracklin
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8473
Fax: ++43 (1) 718 09 69

Mag. Monika Gonzalez-Koss
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8474
Fax: ++43 (1) 718 09 69

Ms. Claudia Simeonoff
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8478
Fax: ++43 (1) 718 09 69

Ms. Gabriela Eger
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8572
Fax: ++43 (1) 718 09 69

Ms. Andrea Vilimek
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8228
Fax: ++43 (1) 712 94 25

Mr. Georg Jerabek
Court of Audit
Box 240
A-1033 Vienna
Austria
Tel: ++43 (1) 711 71-8434
Fax: ++43 (1) 712 94 25