GUIDANCE

Practice Guide to Auditing Efficiency

CANADIAN AUDIT
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FOUNDATION

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The Canadian Audit and Accountability Foundation is a premier Canadian research and education foundation. Our mission is to strengthen public sector performance audit, oversight and accountability in Canada and abroad. We build capacity in legislative audit offices, oversight bodies, and departments and crown corporations by developing and delivering:

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Practice Guide to Auditing Efficiency

Published by:

Canadian Audit and Accountability Foundation
1505 Laperriere Avenue, Suite 100
Ottawa, Ontario CANADA
K1L 7J9

Tel: 613-241-6713

www.caaf-fcar.ca

ISBN: 0-919557-65-1

This publication is available in French under the title:

Guide pratique sur l'audit de l'efficience

Acknowledgements

The Canadian Audit and Accountability Foundation's mission is to foster confidence in the public sector by promoting effective performance audit and oversight of government operations. To support this, we provide education, research and capacity development for public sector auditors and oversight committees, in Canada and abroad, helping them to work with other public officials for accountable government.

The *Practice Guide to Auditing Efficiency* is part of our performance audit capacity-building program and is the first in a planned series of such guides. It has been made possible with funding provided by the Foundation's members.

The consultative process undertaken for the Practice Guide project was extensive and included consultations with many leaders and professionals, both on an individual basis as well as a collective, through networks such as the Canadian Council of Legislative Auditors (CCOLA) and the Government Internal Auditors Council of Canada (GIACC).

On behalf of our Board of Governors, we would like to acknowledge the support, thought leadership, and active contributions of the members of the core project team who guided the design and development of this Practice Guide[1]:

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Paul Lohnes, President and CEO, CCAF-FCVI
Wendy Loschiuk, Assistant Auditor General, Office of the Auditor General of Canada
Neil Maxwell, Assistant Auditor General, Office of the Auditor General of Canada
Lloyd Mills, Director, Internal Audit, BMO Group
Larry Munroe, Auditor General, Halifax Regional Municipality
Paul Nyquist, Director, Performance Audit, Office of the Auditor General of British Columbia
Dale Shier, Principal, Office of the Auditor General of Canada
Gigi Yip, Audit Manager, Office of the Auditor General of Ontario

We also wish to thank the many other audit professionals who supported this project and provided comments and suggestions, including:

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[1] Titles and organizations of individuals included in this publication were those in effect at the time of original publishing. The Canadian Audit & Accountability Foundation was then known as CCAF-FCVI Inc.

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Jennifer Fung, Audit Supervisor, Office of the Auditor General of Ontario
Eric Hopper, Director, Performance Audit, Office of the Auditor General of New Brunswick
Jacques Lamothe, Audit Manager at Statistics Canada and member of the IIA Canada Emerging Issues Committee;
Éric Lavoie, Associate, Risk Management and Performance, Lemieux Nolet, and Chairman of the IIA Canada Emerging Issues Committee
Jane MacAdam, Auditor General, Office of the Auditor General of Prince Edward Island
Lucie Roy, Director, Strategic Affairs and VFM (Value for Money) Advisory Services Branch, Auditor General of Québec
Terry Spicer, Assistant Auditor General, Office of the Auditor General of Nova Scotia

This project and the final Practice Guide would not have been possible without:

- the leadership provided by **John Reed**[2], CCAF-FCVI's Vice-President for Performance Audit and Chair of the core Practice Guide project team;
- the contribution of CCAF-FCVI Associate **Elaine Morash**, Lead Author and Researcher for this project; and
- the support of CCAF-FCVI staff members **Pierre Fréchette**, Research Officer, **Julien Raynaud**, Project Officer, and **Lynne Casiple**, Computer Specialist and Webmistress.

Finally, we would like to extend our thanks to the individuals who contributed their skills to the process of producing all the material for the Practice Guide website: **Nicole Plamondon** (translation), **Laurel Hyatt** (editing), **Paul Edwards** (graphic design), and **Jennifer Priest and the Envision team** (Web design).

With the current and continued emphasis of governments, in Canada and abroad, to find efficiencies in government operations, we hope this Practice Guide will be a useful and practical reference tool for audit and evaluation professionals as they address the important element of efficiency in the audits they conduct.

Brian Bost, Chair, CCAF-FCVI Board of Governors

Paul Lohnes, President and CEO, CCAF- FCVI

[2] Comments, suggestions and new ideas can be provided to John Reed at the Canadian Audit & Accountability Foundation (jreed@caaf-fcar.ca)

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Purpose of the Practice Guide to Auditing Efficiency

The purpose of this Practice Guide is to provide contemporary guidance for public sector auditors, both internal and external, on how to select, plan, conduct, and report performance or value-for-money audits of efficiency.

By combining theory and practical methodology, we seek to inspire high-quality and high-impact audits of efficiency at all levels of government—whether efficiency is the sole focus of an audit or only one of several aspects examined. In addition, we hope to help public sector auditors overcome common challenges to undertaking audits of efficiency. Auditors of the private sector will also find sections of the Practice Guide useful for their purposes.

The Audit Methodology part is the major focus of the Practice Guide. It includes guidance, good practices, and links to external sources of information. This guidance has been developed to be used within the context of each audit office's existing processes and procedures.

The Practice Guide is complemented by two Applied Guides, which contain potential audit objectives, audit criteria, and audit procedures for auditing the efficiency of two common government functions:

- *Auditing the Efficiency of Application Processes for Government Programs or Licences*; and
- *Auditing the Efficiency of a Regulatory Inspection and Enforcement Function*.

These Applied Guides were developed to assist auditors planning to audit the efficiency of these, or similar, functions.

The Practice Guide also includes a link to our *Focus on Efficiency* publication, which provides a general overview and summaries of selected audits of efficiency conducted by a number of Canadian and foreign legislative audit offices from 2008 to 2013. This publication is a valuable reference for auditors responsible for planning audits of efficiency.

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Practice Guide to Auditing Efficiency

Part 1 Concepts and Context

What Is Efficiency?

Efficiency is about making the most of available resources, ensuring that an organization is getting the most—in terms of quality and quantity—from its inputs.

Put another way, efficiency is the optimal use of resources to achieve a given output or outcome.

Traditional definitions of efficiency have tended to focus on the ratio of inputs to outputs. The definition from the Chartered Professional Accountants of Canada's *Handbook—Assurance* (PS5400.08(b)), for example, illustrates this concept:

> *"Efficiency refers to the use of financial, human and physical resources such that output is maximized for any given set of resource inputs, or input is minimized for any given quantity and quality of output provided."*

This Practice Guide does not adopt a single definition of efficiency. Rather, the Practice Guide encourages auditors to take a broad view of the concept and to consider different perspectives of efficiency, such as:

- doing the same with fewer resources,
- doing more with the same resources, and
- doing more with fewer resources.

For a long time, reducing waste, streamlining processes, reallocating resources, and using new technologies have been common means of "doing the same with fewer resources" or "doing more with the same." This has often improved service delivery at the same time, such as reducing wait times.

More recently, a challenging fiscal environment has generated additional efficiency concepts, which public sector managers have been required to consider as they develop budgets and strategies for their areas of responsibility. For example, budget reductions, coupled with increasing public expectations, have led to demands for the public sector to "do more with fewer resources"; that is, provide improved services while also using fewer resources than before.

Another trend driven by the need to reduce program budgets and deficits has been to eliminate unnecessary or unproductive outputs and to focus on the right outcomes, which is sometimes called "doing less with less, but focusing on the right things". This approach is based on the careful definition of desired program outcomes and on the reduction or elimination of resources that go into producing non-essential outputs and outcomes. However, since this approach is primarily focused on defining the right outcomes – as opposed to finding the most efficient ways of meeting them – it is closely related to the merits of government policy and, for this reason, may not constitute an appropriate audit approach.

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Why Audit Efficiency?

Auditing efficiency is important for internal and external public sector auditors. Indeed, auditing the efficiency of public sector operations and programs is arguably more important today than it has ever been.

Efficiency has received more attention in recent times because of a challenging economic context, evolving public perceptions, and new trends in public administration:

- **Economic context**—Most Canadian governments have been struggling with deficits and rising program costs. For example, in some provinces, health care expenditures are approaching 50 percent of total departmental expenses and are expected to continue to soar in response to the increasing needs of an aging population.
- **Public perceptions**—Faced with declining service levels and rising user fees, the general public is calling for governments to remove waste in the system and to improve the delivery, efficiency, and quality of public services through increased use of technology, innovation, partnerships, and new delivery models.
- **Public administration trends**—Public administration concepts are evolving and the public sector is demonstrating more willingness to experiment with new models and methods to achieve sustainable cost savings. Increasingly, frameworks applied in the private sector to achieve efficiency are being adopted by the public sector.

In attempts to reduce their deficits and improve service delivery, governments in Canada and abroad have sought to increase efficiency in a number of sectors. Opportunities to achieve "quick wins" or to target "low-hanging fruits" have been exploited, but sustainable, long-term cost savings have been more elusive.

The former Auditor General of Ontario, Jim McCarter, stressed the importance of auditing efficiency:

"*This Report comes at a time when the industrialized world is struggling with the twin challenges of an economic slowdown and high debt, issues that also confront Ontario. So in a number of this year's value-for-money audits, we paid particular attention to areas where efficiencies and cost savings in government operations may be possible*."

Source: News release accompanying the 2012 Report of the Auditor General of Ontario, December 12, 2012.

In the current environment, audits of efficiency could—and should—make a significant contribution to efficient government at all levels.

Specifically, by conducting performance audits of efficiency, auditors can:

- Provide objective and independent information to parliamentarians and public sector decision makers on the efficiency of key public programs and services.

- Issue recommendations that will help public organizations improve the efficiency of their programs and services and the quality of services delivered to the public.
- Establish good practice expectations for the broader public service.
- Help facilitate management accountability for improving productivity and hold management responsible for stewardship responsibilities.
- Make significant contributions that will broaden the continuing debates on the efficiency of the public sector.

Mandates to Audit Efficiency

Auditing efficiency is a critical component of the “value-for-money” mandate of legislative audit offices, often referred to as auditing the “3 Es”: economy, efficiency, and effectiveness. Value-for-money mandates were first introduced in Canadian legislative audit offices in the late 1970s.

For their part, internal auditors are mandated to audit efficiency (among other things) by the International Professional Practices Framework (IPPF), which sets out the standards for assessing adequacy of controls for the efficiency of operations and programs in achieving business objectives, in order to add value and improve organizational operations. Internal auditors fulfill this mandate by examining the controls that contribute to the management objective of efficiency.

However, there may be limitations to this mandate. In the federal government, for example, the mandate of the internal audit function is restricted to the specific areas of risk management, control, and governance processes. The assessment of program performance and results falls under the mandate of the evaluation function. To audit the efficiency of operations, internal auditors need to coordinate with evaluation teams in order to determine their respective roles and avoid overlap.

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Economy, Efficiency, and Effectiveness

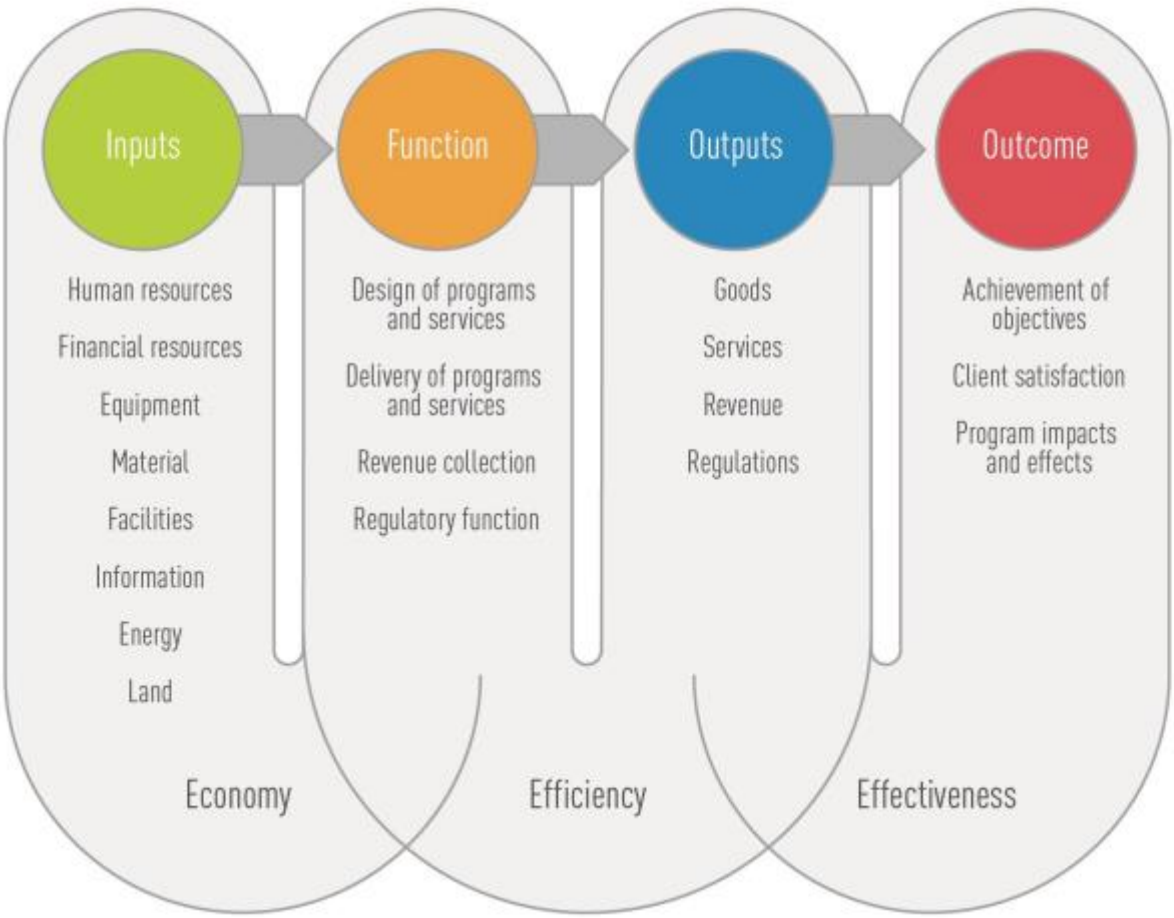
Economy, efficiency, and effectiveness are highly interrelated concepts. While this Practice Guide focuses on audits of efficiency, it recognizes that performance audits may often include components of economy and effectiveness as well.

Economy, efficiency, and effectiveness are commonly referred to as the “3 Es”, characterized as follows:

- **Economy**—Getting the right inputs at the lowest cost (or getting a good deal).
- **Efficiency**—Getting the most from the inputs (or getting a lot for the efforts).
- **Effectiveness**—Getting the expected results from the outputs (or doing the right things).

Figure 1 describes elements of the 3 Es as well as the relationships between inputs, outputs and outcomes.

Figure 1 – Relationships between Inputs, Outputs, and Outcomes



Economy, efficiency, and effectiveness are all essential components of sound program management, the goal of which is to deliver on program objectives defined in public policies, regulations, and legislation. In practice, this means that program managers and officials entrusted with public resources are responsible for carrying out functions and providing services to the public effectively, efficiently, and economically. **Figure 2** shows the roles played by the 3 Es in public sector program management and the interrelationships among them.

Figure 2 – Program Management and the 3Es

Figure 2 also shows that both economy and efficiency play a central role in ongoing program management, or day-to-day administration. Together, these two components support the achievement of value for money. **Figure 2** also suggests that economy and efficiency are interrelated but somewhat separated from effectiveness. In theory, a program could be economical and efficient without being effective; that is, it could be very good at producing the wrong outcome.

Can Efficiency Be Isolated from Economy and Effectiveness in Program Management?

Given the complex relationships that exist among economy, efficiency, and effectiveness, a key question arises: Can the concept of efficiency be isolated from economy and/or effectiveness in program management?

While the 3 Es are all interrelated, **Figure 2** suggests that economy and efficiency are especially closely linked. The International Organization of Supreme Audit Institutions' (INTOSAI) publication *Standards for Performance Auditing* (ISSAI 3000) argues that in some cases it may be difficult to totally separate the concepts of efficiency and economy from each other. Both concepts may, directly or indirectly, concern whether an audited entity is:

- following sound procurement practices;
- acquiring the appropriate type, quality, and amount of resources at an appropriate cost;
- properly maintaining its resources;
- using the optimum amount of resources (staff, equipment, and facilities) in producing or delivering the appropriate quantity and quality of goods or services on time; and
- complying with regulatory requirements that govern or affect the acquisition, maintenance, and use of its resources.

Isolating efficiency from effectiveness is generally an easier matter. Since objectives can be achieved in inefficient ways, and since it is possible to be efficient at doing the wrong thing, it is possible in theory to separate issues of efficiency and effectiveness. However, in some cases, there is a trade-off between efficiency and effectiveness: beyond a certain point, improvements in efficiency may compromise the quality of services being delivered to the public.

Whether or not efficiency can be clearly separated from economy and effectiveness, what is clear is that auditors should always develop a strong understanding (or knowledge of business) of the elements of economy, efficiency, and effectiveness in relation to the entity, program, or activity being audited.

Can Efficiency Be Audited Independently from Economy and Effectiveness?

The complexity of the relationship among the 3 Es, coupled with the nature of audit office mandates, gives rise to a second key question: should efficiency be audited separately from economy and effectiveness?

In theory, it is feasible to audit efficiency independently from effectiveness. However, an audit that focuses exclusively on efficiency (that is, a “stand-alone” audit of efficiency) would not answer questions related to whether a program is achieving its intended outcomes. Conversely, auditing program effectiveness exclusively would not answer questions related to whether a program is efficient.

So, while it may well be possible to do a stand-alone audit of efficiency, it may not be desirable to do so if the audit will not be able, in the end, to answer the key questions of its intended audience. For example, parliamentarians and decision makers may be equally interested in knowing that an entity is efficient and that it is effectively meeting its mandate.

Some practitioners believe that effectiveness outranks economy and efficiency because “there is no redeeming value in doing the wrong things well.” Similarly, some practitioners believe that effectiveness should be audited before efficiency, since there is no point in auditing efficiency if outcomes are not being achieved.

Ultimately, there is no simple answer to the question of whether efficiency can or should be audited in isolation from economy or effectiveness. The answer is influenced by the professional judgment of the auditor, the specific circumstances of the program being audited (that is, where the risk is), the audit office’s mandate, and the needs of parliamentarians, public sector decision makers, and audit committees.

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How Public Sector Organizations Achieve Efficiency

Efficiency in the Public Sector

Many factors influence how efficient a public sector organization is. These factors include the degree to which it has successfully implemented good governance and controls for key management practices, the nature of the services it provides, and the market forces (or other forces) the organization must respond to.

In the private sector, efficiency reviews (not necessarily audits) are common because of the importance of efficiency in increasing bottom-line profitability, which is often the overriding corporate goal.

In the public sector, there is no equivalent overriding goal. Rather, public sector organizations have multiple goals related to political and social objectives, such as growing the economy, achieving the fiscal plan, reducing poverty, maintaining the accessibility of services, and protecting the environment. Some of these objectives may conflict with increasing efficiency.

In fact, the public sector environment is characterized by several unique circumstances that may impede the achievement of efficiency. For example, in the public sector:

- Market forces do not play the same role as in the private sector.
- The obligation to implement certain government policies and regulations may limit the opportunities for achieving efficiency.
- The election cycle and term limits may make it difficult to launch and sustain initiatives to improve efficiency in the long term.
- The major revenue source is taxes, which, unlike user fees, are not directly related to services. As a result, citizens may feel less inclined to provide feedback and suggestions on how to improve the efficiency of specific services.

Measures to Improve Efficiency

The general public expects governments to move toward greater efficiency. To meet this expectation, public sector organizations have implemented measures and have taken specific actions to maintain or improve efficiency. These vary widely in terms of how explicit and direct the emphasis on efficiency is. These measures and actions include, for example:

- establishing government-wide or sector-specific spending and efficiency reviews;
- adopting recognized improvement frameworks developed by the private sector;
- conducting benchmarking exercises to compare internal practices and performance against those of similar organizations;
- supporting innovative service delivery models; and
- implementing day-to-day management activities, systems and internal controls.

A description is provided below for each of these categories.

In practice, the auditor may encounter any number of different situations in the entity or program being audited, or considered for audit. These situations may affect the decision to select – or not – the entity or program for audit. In addition, if an entity is selected for audit, the presence of efficiency improvement measures would likely affect the detailed design of the audit, including the audit focus, objectives, criteria, and use of benchmarking. (For more details, see "Assessing the Level of Emphasis Placed on Efficiency in an Entity").

Spending and Efficiency Reviews

Some spending reviews have been cost-cutting programs that have reduced programs, services, or service delivery levels. Other reviews, sometimes known as "efficiency reviews," have put emphasis on increasing the efficiency of government programs and service delivery. The goal of such efficiency reviews is usually to identify and implement a defined level of cash-releasing efficiencies every year over a given period of time in order to meet financial targets while not adversely impacting the delivery of front-line services.

In Canada, the federal government initiated in 2007 a continuous strategic review of existing spending based on a four-year cycle. While this review process is not exclusively focused on efficiency, it is aligned with the government's commitment to deliver services that are efficient and effective. The first cycle (2007–2010) has presented opportunities to change the way certain programs and services are delivered, to make them more efficient and effective.

Elsewhere, the governments of Northern Ireland and Scotland have implemented efficiency programs in recent years. The Northern Ireland Audit Office (2012) and Audit Scotland (2010) have published audit reports on these programs. More information on efficiency programs audits can also be found in our *Focus on Efficiency* publication.

Recognized Improvement Frameworks

There are many recognized "frameworks" to achieve and improve efficiency in the public sector. Many of these were originally developed in the private sector, where they are now used by well-managed organizations and promoted by management consultants. These frameworks have since been adapted to the public sector environment.

Each framework is based on a significant body of research and the methodologies can be complex. Some common frameworks are listed below, along with selected reference sources. Note that in many cases, the methodologies are not exclusively directed at efficiency, but also focus on quality and effectiveness.

- **Lean**—Lean is a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination. The core idea of Lean is to maximize customer value while minimizing waste. *(References)*
- **Six Sigma**—Six Sigma is a disciplined, data-driven approach and methodology for eliminating errors and minimizing variability in any process, from manufacturing of products to provision of services. The goal of Six Sigma is to improve the quality of process outputs. *(References)*
- **Total quality management**—Total quality management is an integrative philosophy of management for continuously improving the quality of products and processes. The philosophy is derived from W. Edwards

Deming's 14 points on quality management, a set of management practices to help companies increase their quality and productivity. *(References)*

- **Balanced scorecard**—The balanced scorecard is a strategic planning and management system used to align business activities with the organization's vision and strategy and to monitor organizational performance against strategic goals. By tracking regular scores in specific areas, organizations can identify those that are less efficient and take actions to improve performance. *(References)*
- **ISO standards**—The International Organization for Standardization (ISO) is the world's largest developer of voluntary international standards. International standards give specifications for products, services, and good practice, helping to make organizations more efficient and effective. *(References)*

In addition to these general frameworks, public sector organizations can also use tailored tools to support efficiency in their specific lines of business or sector. For example, health care organizations use various resource utilization systems, such as workload measurement and bed management systems, to support efficiency.

Benchmarking

Benchmarking is the process of comparing an organization's business processes and performance metrics to leading practices in its sector or best practices from other sectors. Items typically measured are quality, time, and cost.

Benchmarking can also relate to the process of comparing an organization's current performance with its performance in the past (sometimes also referred to as a baseline comparison).

The role of benchmarking in achieving efficiency is particularly important as it provides an organization's management with objective information on where its strengths and weaknesses are in terms of efficiency. Equipped with this information, an organization can identify priority areas for improvement and implement corrective measures to improve its overall efficiency performance.

Depending on the particular process to be benchmarked, the data can come from internal sources (such as the cost to process a similar transaction in another part of government), external sources within the jurisdiction (such as the cost to maintain a bus in another municipality), or other external sources (such as Canadian Institute for Health Information data on average length of stay in hospital for a particular diagnosis). However, it can be challenging for both management and auditors to obtain relevant, reliable, and comparable benchmarking data.

Innovative Service Delivery Models

Innovation is the application of new solutions to meet new requirements or existing needs. The introduction of new management approaches, new (or "alternative") service delivery models, and new partnership arrangements are all ways in which innovation can be harnessed to improve the efficiency of public sector programs, activities, and services.

Public-private partnerships (P3s), shared services, integrated service delivery, and online services are all examples of innovative approaches increasingly used by governments to deliver projects and services more efficiently and effectively.

Our 2010 publication *Innovation, Risk & Control* provides additional information on the role of innovation in the public sector.

Day-to-day Management Activities, Systems and Internal Controls

While efficiency in the public sector can be achieved through special efficiency savings programs or recognized improvement frameworks, it is perhaps most commonly pursued through the general, or day-to-day, management systems and functions found in every organization. In practice, this means that organizations must have strong systems and internal controls in place to ensure that their resources are allocated, used, and managed efficiently. The next section of this Practice Guide describes various management activities that can foster efficiency.

"Internal control" has been defined by COSO (the Committee of Sponsoring Organizations of the Treadway Commission in the United States) as "a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance."

The Chartered Professional Accountants of Canada's Criteria of Control Board (COCO) and COSO have each developed frameworks (in 1995 and 1992, respectively—COSO was updated in 2013) for control that help public sector organizations achieve their operational, reporting, and compliance objectives. The foundation of an organizational structure to support efficiency is set out in these control best practices. Public sector auditors generally stress the importance of control systems and practices and focus much of their work in this area.

In practice, there is a relationship between controls, risk and efficiency. For example, efficiencies can be achieved by eliminating unnecessary controls (e.g. duplicate controls or controls in low risk areas) and enhancing useful controls. Similarly, if an organization implements controls without considering risk, it may end up devoting too many of its resources to controls—reducing its overall efficiency at the same time. Conversely, overemphasis on efficiency can lead to an organization taking on too much risk and experiencing an unhealthy reduction in control.

Ultimately, the right balance between risk and control depends on appropriate risk analysis and on an organization's tolerance for risk.

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Management Activities that Can Foster Efficiency

Achievement of efficiency in public sector organizations depends primarily on good management. All the general management activities found in typical public sector organizations (for example departments and agencies) can help achieve efficiency if appropriate management systems, internal controls, and best practices are put in place and properly implemented.

In this section of the Practice Guide, seven management activities that can foster efficiency are highlighted and defined. Audit questions and audit criteria in relation to each of these management activities can be found in the Audit Methodology part of this Practice Guide.

The seven management activities are defined in **Table 1**.

Table 1 – Seven Management Activities that Foster Efficiency

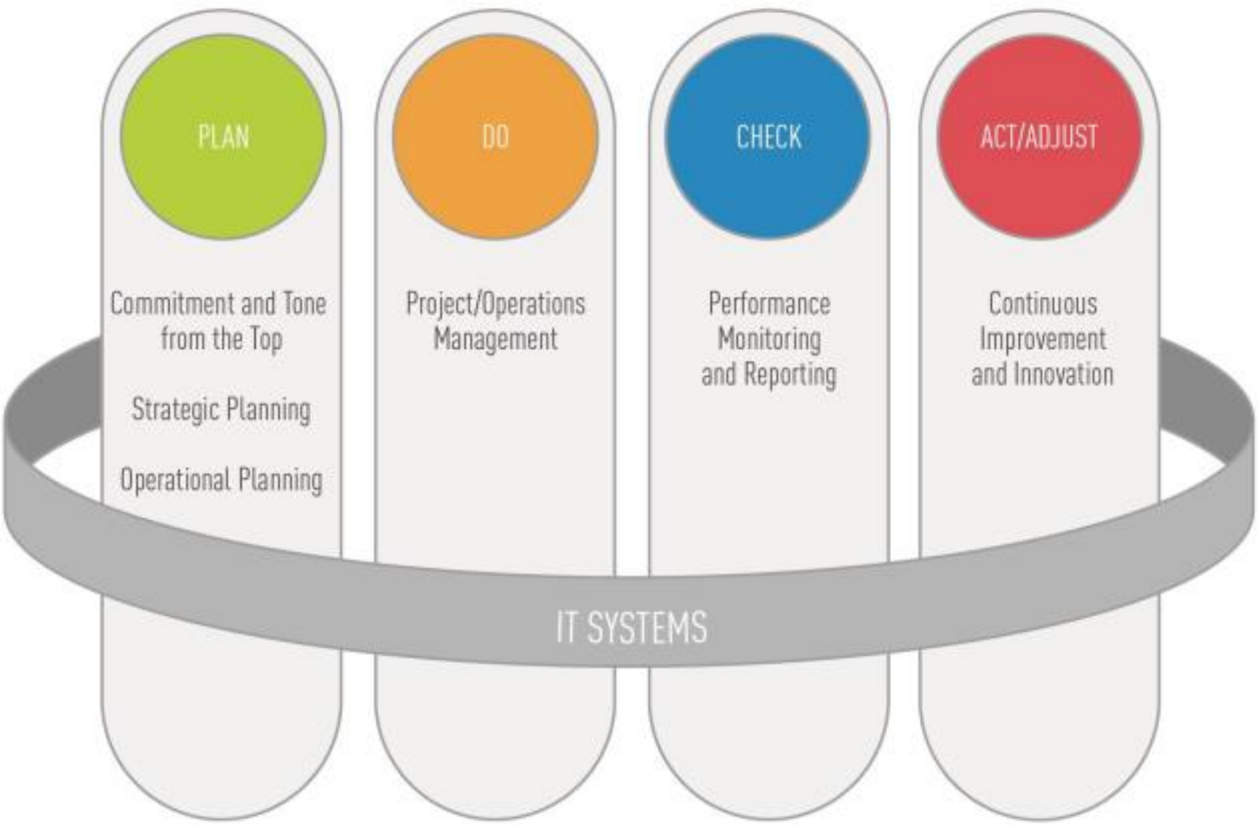
#	Management Activity
1	**Commitment and tone from the top** A strong commitment to efficiency on the part of senior management, sometimes referred to as the “tone from the top,” is crucial for instilling a strong awareness of efficiency among an organization’s personnel and to encourage compliance with regulations and relevant internal policies.
2	**Strategic planning** Strategic planning is an organization’s process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. In many organizations, this is viewed as a process for determining where an organization is going over the next three to five years.
3	**Operational planning** Operational planning is the process of linking strategic goals and objectives to tactical goals and objectives. Operational planning lays out milestones, budgets, and conditions for success, and explains how the different parts of a strategic plan will be put into operation during a given period. Two aspects of operational planning are particularly relevant to the achievement of efficiency: financial information and personnel allocation. Financial information In the context of efficiency, having complete and reliable financial information on the costs of inputs and the unit cost of delivering specific services is especially important. Organizations that track input costs and unit costs are better able to compare their services against those of sector leaders. This allows these organizations to identify areas where efficiency improvements are needed. Personnel allocation In the context of efficiency, the focus of human resource management is to optimize the allocation of

#	Management Activity
	personnel among various projects or business units, maximize the utilization of available personnel to achieve an organization's operational and strategic goals, and clearly define and assign the roles and responsibilities for achieving efficiency.
4	**Project and operations management** Project management is the discipline of planning, organizing, and controlling resources to achieve specific goals. A project is a temporary endeavour with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives. Operations management is an area of management concerned with overseeing, designing, and controlling the production of outputs and redesigning operations for the production of goods or services. It involves the responsibility of ensuring that operations and business processes are efficient in terms of using as few resources as needed, and effective in terms of meeting customer expectations and regulatory requirements. Operations are repetitive, permanent, or semi-permanent functional activities that produce products or services.
5	**Information technology (IT) systems** Information technology systems offer solutions to public sector organizations that want to improve their efficiency. These solutions include the automation of services, electronic documentation management systems, online services, and paperless processes. By using effective IT solutions, organizations can optimize their use of resources, reduce their costs, accelerate their processes, and better serve their clients.
6	**Performance monitoring and reporting** Monitoring of and reporting on performance is an important part of an organization's effective management and accountability. Performance reporting is not an end in itself. Rather, it is an integral part of an organization's ongoing decision-making processes. Performance reporting should help promote a "continuous improvement" feedback loop in which reports on activities and performance provide management with important information for decision making in the next planning cycle.

#	Management Activity
7	**Continuous improvement and innovation** A continuous improvement process is an ongoing effort to improve products, services, or processes. As part of this effort, processes, products, and services are constantly evaluated and improved in light of their efficiency, effectiveness, and flexibility. Innovation is the application of new solutions to meet new requirements or existing needs.

Figure 3 illustrates how each of these management activities fits into the classic Plan-Do-Check-Act management model.

Figure 3 – Management Activities that Foster Efficiency and How They Relate to the Plan-Do-Check-Act Management Model



In addition to the seven management activities that foster efficiency, this section also defines four support functions in **Table 2**. These support functions—financial management, human resource management, IT management, and asset management—are crucial for maintaining the day-to-day activities of any public sector organization. They support the seven management activities and make their efforts to improve efficiency possible.

However, for the purpose of this Practice Guide, these four support functions are not considered to be directly involved in the delivery of the programs and services that auditors would usually select when planning an audit of efficiency. For this reason, no specific audit questions and audit criteria are presented to support the audit of these support functions. That said, questions and criteria are provided for operational planning and IT systems, which cover certain subsets of financial, HR, IT, an asset management.

Table 2 – The Four Support Functions

#	Support Function
1	**Financial management** Financial management is the function of an organization that is concerned with the efficient and effective management of money (funds), with the ultimate goal of achieving the organization's strategic objectives.
2	**Human resource management** Human resource management (HRM, or simply HR) is the management of an organization's workforce, or human resources. It is the function responsible for the attraction, selection, training, assessment, and rewarding of employees, and for ensuring compliance with employment and labour laws.
3	**IT management** All modern public sector organizations operate in an environment in which their personnel use various electronic devices, applications, and networks in order to do their work and achieve their objectives. The function of IT management is to continuously keep these devices, applications, and networks current and operational so as to allow an organization to pursue its business and deliver its services without interruptions.
4	**Asset management** Asset management, broadly defined, is any system that monitors and maintains things of value to an entity or group. It may apply to both tangible assets such as buildings and to intangible concepts such as intellectual property and goodwill. Asset management is a systematic process of operating, maintaining, upgrading, and disposing of assets cost-effectively.

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Audit Experience in Canada and in Other Countries

Public sector auditors in Canada and in other countries have become involved in public sector efficiency issues and the achievement of cost savings.

For example, the National Audit Office (NAO) in the United Kingdom has been reporting periodically on government-wide progress, by department, in achieving the government's efficiency targets. It has published a number of best practice guides for management. (See for example *A Short Guide to Structured Cost Reduction*.)

In the United States, there is a statutory requirement for the Government Accountability Office (GAO) to identify federal programs, agencies, offices, and initiatives with duplicate goals or activities. The GAO reports to Congress annually on its findings. These reports identify potential cost savings and efficiencies in a number of areas.

Other public sector audit offices in Canada and abroad have put emphasis on auditing efficiency. For the period 2008 to 2013, the *Audit News* database contains about 30 audits of efficiency conducted by 10 legislative audit offices. These audits have covered a wide variety of public sectors, including:

- health care (cardiology services, orthopaedic services, emergency departments)
- justice (prosecution and correctional services)
- culture (radio production and grants in the culture and media sector)
- energy and environment (energy efficiency, recycling, and irrigation programs)
- transportation (rail transit)

After analyzing their focus, we have classified these audits under five categories (other classifications are possible):

1. audits of **spending reviews** with an efficiency focus ("efficiency programs");
2. audits of the **efficiency of public services** (in various sectors, including health care, justice, and culture);
3. audits of the **efficiency of shared services programs** (at the planning or implementation stage);
4. audits of the **efficient use of energy and natural resources** (often about the effectiveness of energy efficiency programs); and
5. audits of the **regulation of efficiency** (in situations where a public sector regulator oversees the efficiency of public services delivered by private or public organizations).

Full details on these audits and the five categories can be found in our *Focus on Efficiency* publication.

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Practice Guide to Auditing Efficiency

Part 2 Audit Methodology

Introduction to Auditing Efficiency

Audits of efficiency follow the same standards and general process as all performance, value-for-money, or internal audits. Auditors are required to follow the standards and audit process applicable to their body of practice and office mandate.

An overview of the generic audit process is presented in **Figure 4**.

Figure 4 – Overview of the Performance Audit Process

When designing an audit of efficiency of a given entity, program, or activity**,** auditors are confronted with many questions and choices specific to this type of audit, such as:

- Is the entity or program a good candidate for an audit of efficiency?
- If so, should the audit deal exclusively with efficiency (that is, should it be a “stand-alone” audit of efficiency) or should efficiency be part of an otherwise broader performance audit (i.e. where efficiency is only one of the topics covered by the audit)?

- Should the audit (whether stand-alone of efficiency or not) also deal with economy and effectiveness?
- Where can the auditor go to obtain key performance indicators, benchmarking information, and suitable criteria to audit efficiency?

This Practice Guide provides information and guidance that will help auditors to answer these questions and many more. This guidance is organized according to the standard phases of the audit process:

- Audit topic selection
- Planning
- Examination
- Reporting

In this part of the Practice Guide, auditors will find:

- a list of key audit questions that can be used during the audit selection and planning phases of the audit to acquire knowledge of business;
- a list of potential indicators that efficiency is at risk in an organization or a program;
- guidance on key questions to consider when determining the focus and approach of an audit of efficiency;
- examples of audit objectives and criteria for various focus areas that can be included in audits of efficiency;
- examples of audit procedures that can be used during the examination phase of audits of efficiency;
- guidance on key aspects to consider when reporting the results of an audit of efficiency and on effective ways of presenting audit observations; and
- a description of some of the common challenges to auditing efficiency and suggestions on how to overcome these challenges.

The Audit Methodology part of the Practice Guide also highlights good practices under each of the topics discussed.

Finally, auditors can also consult a list of references and use links to quickly access audit reports and other relevant documents on efficiency.

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Selecting an Audit Topic

The first step in the audit process is to select an audit topic. Because of resource constraints, audit offices, both internal and external, are not able to audit every aspect of government. Neither is it cost-effective—or even necessary—to try. The goal is to select the right topics at the right time in order to maximize the audit office's impact and contribution to better public sector management.

The approach to long-term audit planning varies from office to office. For example, there can be differences in how formalized the approach is, who is involved, what selection criteria are used, and the length of the planning horizon.

That said, office planning approaches typically involve consideration of risk and significance, the office's mandate and its strategic goals, the timing of the audit cycle, results from prior audits, auditability, and political and media interest. Many of these same factors are also considered when undertaking detailed planning and scoping for a specific audit.

When assessing different entities and programs to select a topic for an audit of efficiency, auditors should also consider the following questions:

- Is a given entity or program well-suited for an audit of efficiency?
- Has special emphasis been given to efficiency in the management of the entity or program? For example, has the entity or program implemented an efficiency-focused spending review and/or adopted a recognized improvement framework?
- Does the entity or program exhibit any of the potential indicators that efficiency is at risk?

Selecting an Entity Well-Suited to an Audit of Efficiency

Some entities or programs will be better suited to audits of efficiency than others. While there are no recognized criteria for identifying the better candidate entities or programs, some characteristics can be indicative of a good candidate:

- entities or programs that use large amounts of human, material, and/or financial resources and that have well-defined, discrete, and measurable outputs and outcomes;
- service delivery organizations that manage a high volume of standardized transactions (such as issuing licences and permits); and
- common public services where there is abundant performance data allowing the comparison of practices between similar institutions (such as hospitals and schools) within one jurisdiction or between jurisdictions.

Good Practice

Auditors can review the work performed by other legislative audit offices in order to gain a better understanding of the areas that commonly generate efficiency findings. Our publication *Focus on Efficiency* provides summaries of recent audits of efficiency as well as an analysis of the most common types of audits of efficiency.

Assessing the Level of Emphasis Placed on Efficiency in an Entity

Both the processes for selecting an audit topic and for planning a specific audit depend on acquiring a solid knowledge of business about the entity or program considered for audit. When assessing a candidate topic for an audit of efficiency, the auditor should assess whether special emphasis has been placed on efficiency in the entity or program. In developing this knowledge of business for audit selection, the auditor may determine that an entity or program falls under one of three scenarios:

1. The entity may have already implemented or is in the process of implementing an efficiency-focused spending review and/or a recognized improvement framework such as Lean or Six Sigma. (Such a review or framework could be a government-wide initiative or it could be specific to an entity.)
2. The entity may have existing management systems and service delivery mechanisms that place emphasis

on achieving efficiency or service improvement.

3. The entity may not be able to demonstrate that it places emphasis on achieving efficiency at all, despite being a good candidate to do so.

Each of these situations could influence whether the entity or program will be selected for audit and, if so, the focus and type of audit approach that will be adopted.

For example, in a case where an entity has successfully implemented a recognized efficiency improvement framework, the auditor may conclude that risks to efficiency are low and that an audit of efficiency is not warranted. Alternatively, if the implementation of the recognized efficiency improvement framework is recent, the auditor may decide to audit efficiency using design and implementation best practices for this framework as criteria to audit the framework.

Good Practice

It is important for the auditor to be aware of the methods, frameworks, and specific tools used by public sector entities to achieve efficiency. Where necessary, auditors should consult specialists to identify industry- or sector-specific tools and methodologies to support efficiency achievement.

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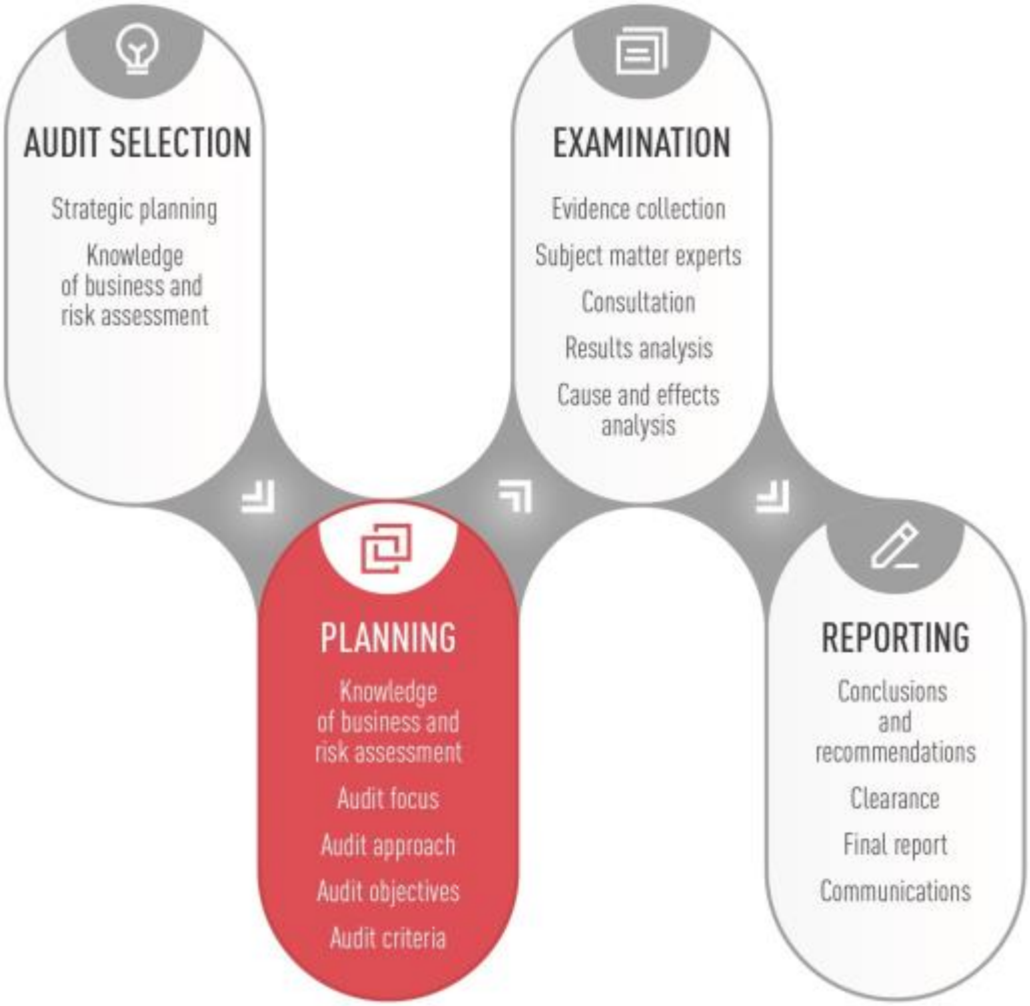
Planning an Audit of Efficiency



The Planning an Audit of Efficiency section of the Practice Guide is organized based on key actions and decisions that need to be taken during this phase of the audit process:

- Acquiring knowledge of business and assessing risk
- Determining the audit focus
- Determining the audit approach
- Drafting audit objectives
- Selecting audit criteria

Although these topics are presented in a specific order, planning a performance (value-for-money) audit is rarely a linear process. In fact, the planning process is often iterative, with decisions in one step requiring the audit team to review decisions taken in previous steps to ensure the overall coherence of the audit plan.

Acquiring Knowledge of Business and Assessing Risk

Auditing procedures typically require the auditor to acquire knowledge of the entity being audited and to prepare a risk-based audit plan. The audit team needs to collect knowledge of business with a focus on risks to the achievement of efficiency and the identification of significant areas that would benefit from an examination of efficiency.

As in all performance (value-for-money) audits, the auditor's understanding of significance and risks will be used to identify particular programs or areas to include in the audit and to develop audit objectives. This section of the Practice Guide is designed to help auditors acquire a sound understanding of significance (financial magnitude, socio-economic importance, current interest in the matter, etc.) and risks by providing them with:

- examples of questions to explore under each of the general management activities that support efficiency in public sector organizations;
- indicators that efficiency may be at risk in a program or organization; and
- information on efficiency constraints that may exist in public sector organizations and programs.

Acquiring knowledge of business

Once a topic has been selected for an audit of efficiency, the audit team should start conducting research and interviewing entity officials in order to acquire (or further develop) a sound knowledge of business and an understanding of the risks facing the entity and programs being audited. This information will be used to determine what the main risk areas are and what type of audit should be conducted.

Auditors may want to start by asking broad or high-level questions in order to obtain information that will help them understand whether:

- management has any concerns related to efficiency;
- expected outcomes are being achieved;
- the organization has to meet certain policy obligations that may limit its efficiency;
- there are critical dependencies that may affect the organization's efficiency; and
- there are any outstanding performance issues identified in previous audit reports.

Good Practice

During the planning phase, it is useful for the auditor to have a conversation with the auditee about the meaning of efficiency in relation to the program being audited. This could include a discussion about management's attempts to achieve efficiency and plans for future efficiency improvements and innovations. Having such a discussion will help the auditor to focus on the most relevant components of efficiency within the program's environment.

Once high-level questions have been addressed, auditors will need to obtain more detailed information on selected areas. One approach that can be adopted at this stage is to focus on some of the main management activities that foster efficiency in public sector entities and programs.

As presented in the Concepts and Context part of this Practice Guide, seven general management activities that can foster efficiency are:

1. Commitment and tone from the top
2. Strategic planning
3. Operational planning
4. Project and operations management
5. IT systems
6. Performance monitoring and reporting
7. Continuous improvement and innovation

Each of these categories is defined in the Management Activities that Foster Efficiency section of the Practice Guide.

For each of the seven management activities, **Table 3** includes suggested questions that auditors could use as starting points to obtain knowledge of business about an entity or a program in an audit of efficiency. These questions are equally applicable to audits that focus on systems and audits that focus on results.

Other sources of information can also help auditors to prepare relevant questions. For example, auditors can consult audits published by other audit offices on similar topics to identify common risk areas. Our publication *Focus on Efficiency* provides summaries of recent audits of efficiency published in Canada and in other countries.

Table 3 – Examples of Questions that Can Be Asked to Obtain Knowledge of Business Information about Management Activities that Foster Efficiency

Management Activity	Questions
1. Commitment and tone from the top	▪ Has senior management created a culture of efficiency? How has it communicated its commitment to the organization’s personnel and to the public? What have been management’s actions and messages? ▪ Has senior management established expected results, standards, targets and/or indicators for efficiency? If yes, how were they established and what are they? ▪ Has the organization set baselines for the cost, quality, and level of service for each of its main services and activities? If so, what are they? How were they established? ▪ Do senior management performance contracts (setting out annual performance objectives) include specific targets and measures related to the efficiency of the programs or services under a manager’s control? ▪ Does the organization have an internal audit function? If so, does its mandate specifically refer to efficiency? Have any recent audits of efficiency been conducted?

Management Activity	Questions
2. Strategic planning	▪ How does the strategic plan reflect the importance that the organization is placing on efficiency? Does the plan reflect specific, strategic efficiency initiatives in key areas such as shared services, human resources, procurement, asset management, IT systems, and business process redesign? ▪ Has the organization assessed the risks and potential consequences of inefficient operations? ▪ Has the organization assessed the feasibility of switching to less costly methods, including shared services, rationalizing the range of goods or services provided, and restructuring the organization, where appropriate, to function more efficiently?
3. Operational planning	▪ Does the organization have service level standards? ▪ Has an efficiency-focused spending review ben conducted? Has a recognized improvement framework been implemented? ▪ Has the organization identified and analyzed the input costs for all its major services and programs? ▪ Does the organization have information on the unit costs of delivering its main services and how the unit costs are changing over time? ▪ Does the organization have information on how costs change in response to changing levels of activity? ▪ What are operating budgets and resource levels? Are operating budgets established based on unit costs or performance standards (such as output/input ratios), or on historic funding levels? If the budget is based on unit costs or performance standards, what are the costs or standards reflected in the current budget? ▪ What are full-time equivalent (FTE) resource levels in relevant business units? How does the organization optimize the allocation of its personnel to its different services or business units? For example, does it use staffing formulas or other allocation methods? Does the allocation method consider workload or production levels? ▪ How does the organization maximize the utilization of allocated personnel to achieve its operational and strategic goals? For example, is staff utilization monitored? If so, how is it monitored? If third party service providers are utilized as part of the operational strategy, how are those contracts monitored? Is the efficiency performance of those third parties assessed? ▪ Are there required competencies for all staff? Do staff meet the required competencies? Have any competency gaps been identified? If so, is there an identifiable cause for the gaps (such as the fact that the labour market cannot meet demand)? ▪ Has the organization identified clear roles and responsibilities for managers and

Management Activity	Questions
	personnel delivering on efficiency objectives? If so, provide examples. ▪ Are incentives used to encourage managers and personnel to improve efficiency and meet established targets? If so, provide examples. ▪ What type of training is provided to managers and personnel in relation to efficiency?
4. Project and operations management	▪ Does the organization have documented operations management systems and practices that demonstrate due regard for efficiency? ▪ Does the organization have documented project management systems and practices that demonstrate due regard for efficiency? ▪ How does the organization optimize its available production capacity, facilities, equipment, and personnel to produce the targeted volumes of outputs (goods and services)? For example, are there systems for monitoring the utilization of major resources? ▪ How does the organization measure performance and efficiency? What are the key performance indicators and targets related to efficiency? Are targets and standards being met? ▪ Does the organization have means of tracking the performance and efficiency of operations where the outputs are difficult to measure? For example, does the organization monitor achievement of milestones and target dates? ▪ Has the organization performed an assessment of controls over efficiency? If so, did the assessment include comparisons with other organizations?
5. IT systems	▪ What IT systems are in place that have as their objective the enhancement of efficiency? ▪ Has the organization explored and assessed opportunities to use IT technologies (such as automation, online services, electronic documentation systems, and a paperless environment) to improve the efficiency of its activities and services? Has the cost-effectiveness of potential solutions been assessed? Have new IT systems been implemented? Have personnel been properly trained on these?

Management Activity	Questions
6. Performance monitoring and reporting	▪ Does the organization monitor, and report on, the efficiency, quality, and level of service of the main services it delivers? How and how often is this reporting done? ▪ Does the organization have information to show how efficiency, quality, and levels of service have changed over time for the services it delivers? ▪ Does the organization have information to show whether efficiency targets, standards are being met? What are the data sources for efficiency performance information? How often does management review this information and how is it used? ▪ Does management have concerns about the relevance, reliability, timeliness or completeness of performance information related to efficiency? ▪ Does the organization have a clear strategy for benchmarking each of its main services in order to assess their relative efficiency? Has the type of benchmark information required been clearly defined? What are the benchmarks? ▪ Has the organization found any barriers in providing and obtaining benchmarking information? What are the strategies for overcoming any barriers? ▪ Does the organization regularly report progress against its efficiency objectives and initiatives? To whom does it report? ▪ Is the organization able to demonstrate the efficiency gains achieved from individual projects? How have these gains improved the services delivered? Do reported efficiency gains include information on upfront investments and recurrent costs incurred in delivering efficiency gains?
7. Continuous improvement and innovation	▪ Does the organization periodically review its efficiency? If so, how is this done? Is a review of options for reducing waste and removing unnecessary activities conducted? ▪ Has the organization identified and assessed the merits of alternative service delivery methods and models as potential means of increasing its efficiency? ▪ Has the organization assessed opportunities for efficiencies that could be achieved through better collaborative arrangements (such as pooling of resources, removal of duplication, and implementation of shared services)? ▪ Does the organization know what continuous improvement models and frameworks are being used in similar public sector organizations?

Source: Some of these questions have been adapted from Northern Ireland Audit Office's *Improving Public Sector Efficiency: Good Practice Checklist for Public Bodies* (2010), as well as from recent audits of efficiency.

Identifying risks to efficiency

When reviewing documents, conducting interviews, or visiting sites during the planning phase of an audit of efficiency, auditors may come across information or situations that suggest that the achievement of efficiency is at risk in a given program or entity. In such cases, auditors should document their observations and obtain additional information as required.

The following is a non-exhaustive list of potential indicators that efficiency is at risk.

- ***There is a lack of performance information or insufficient attention is paid to available information.*** For example, basic information on inputs and output volumes is not collected and analyzed; performance information is not relevant, reliable, complete and timely; or performance reports are not made available to those charged with governance.
- ***Personnel are not deployed to foster efficiency.*** For example, there is high staff turnover or a lack of training.
- ***Costs of activities and programs are not known, or are not regularly collected and reviewed*.** For example, some program cost information is available, but the unit cost of each output is unknown; complete financial information is not made available to those charged with governance.
- ***Controls are excessive in relation to similar well-managed organizations.*** For example, there are multiple signoffs required for routine, low-risk transactions.
- ***No (or limited) internal audit function.*** This may mean that the organization does not pay sufficient attention to management controls and their impact on efficiency.
- ***Program design does not support efficiency.*** For example, there may be poor process flow and duplication of efforts or information. Review of key performance indicators and comparison with internal or external standards may identify issues.
- ***Opportunities for shared services have not been explored.*** For example, the efficiency gains that could result from sharing back office services such as financial transaction processing, procurement, human resource management, and payroll functions have not been assessed.
- ***Systems and processes do not make effective use of information technology.*** For example, files are paper-based and hard copy documents form the basis of the systems and procedures.
- ***The organizational culture does not stress the need for efficiency.*** For example, there is no indication that staff utilization and performance is monitored.
- ***Senior management challenge of the status quo is not sufficiently rigorous.*** For example, formal comparisons of program efficiency against similar programs in other organizations are not undertaken to provide objective information for decision making.
- ***Standards of service are not met.*** For example, client complaints are numerous and/or not addressed, there are long waiting lists for services or backlogs of files, and there is excess space (office, storage, and so on).

Good Practice

When acquiring knowledge of business for an audit of efficiency, it is useful for auditors to pay particular attention to potential indicators that the achievement of efficiency in a given program or entity is at risk. Auditors who observe the presence of risk indicators should complement their observations with analytical procedures, walkthroughs, and reviews of internal controls in order to properly assess and document the significance of the risk to efficiency.

Identifying efficiency constraints

While collecting knowledge of business, the auditor may conclude that efficiency is being limited by specific policies or some aspects of collective agreements.

For example, there may be explicit provisions governing working hours (such as no night shift) limiting the efficient utilization of expensive equipment (such as CT scanners in hospitals). As a result, the equipment may be idle in the evenings despite waiting lists and demand for services during those hours.

Similarly, there may be government policies prohibiting outsourcing or requiring decentralization of service delivery. These are situations where auditors need to tread carefully because audit mandates do not usually include commenting on the merits of government policy. However, auditors can sometimes effectively report the negative impact of such policies on efficiency without directly criticizing the policies. Legislators and governing bodies will then be better able to decide whether the impact is significant enough to justify a policy change.

Good Practice

When audit staff encounter policies, collective agreements, or similar issues that limit efficiency, they should flag these issues for further discussion with the audit office's senior management.

Back to Planning an Audit of Efficiency section

Determining the Audit Focus

When planning a performance (value-for-money) audit that will integrate efficiency considerations, auditors will need to decide the focus of the audit. Focus relates to the level or degree of attention given to efficiency in a given performance audit.

The spectrum of focus

There are many ways in which a performance audit can integrate efficiency considerations. Some audits will focus exclusively on efficiency while others will only cover efficiency as a secondary topic. This varying level of effort and focus directed at efficiency can be thought of as a spectrum (**Figure 5**) along which are different categories, from "marginal or no focus" to "exclusive focus":

- **Marginal or no focus**—There is no formal plan to audit efficiency, but the issue comes up during an audit.
- **Non-specific focus**—Some audit steps touch on efficiency even though there is no specific efficiency criterion.
- **Specific focus**—Structured audit work on efficiency is part of a larger audit.
- **Exclusive focus**—This is an efficiency-focused audit (or stand-alone efficiency audit).

Figure 5 – The Spectrum of Audits of Efficience

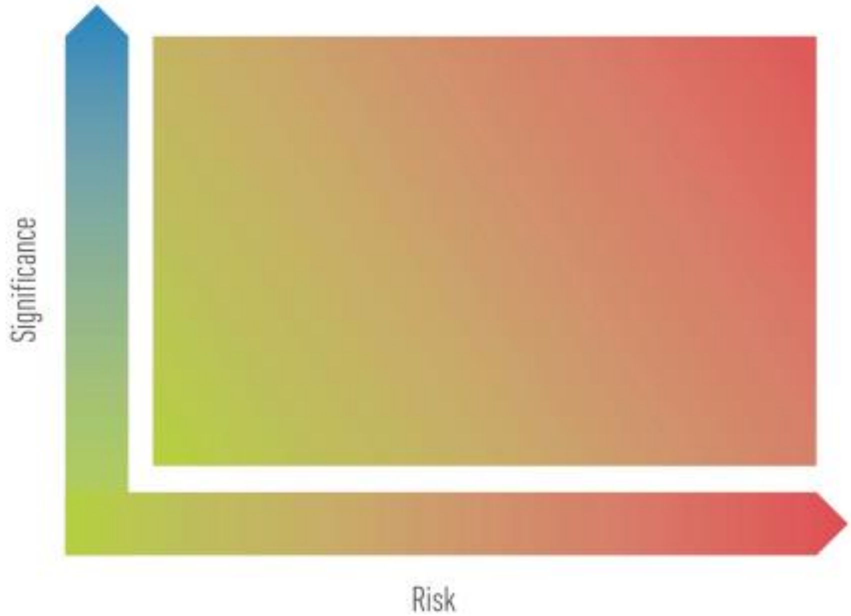
Audit work on efficiency will also vary along other dimensions. For example, an audit of efficiency could:

- Be government-wide, sector-specific, or entity-specific.
- Look at routine management systems or at specialized efficiency improvement frameworks or initiatives.
- Focus on the efficiency of controls, on the efficiency of operations, or both.

Significance and risk

Determining the focus of an audit generally involves assessing significance and risk. The auditor is to select areas with high significance in relation to achievement of efficiency and where there is also a risk to the achievement of efficiency. The upper right quadrant in **Figure 6** represents the area of high significance and high risk to achievement of efficiency that should be the preferred area of focus for an audit of efficiency.

Figure 6 – Selecting High-Significance, High-Risk Issues



Should an audit of efficiency also cover economy and effectiveness?

Economy, efficiency, and effectiveness are highly interrelated concepts. In the audit planning phase, the auditor must decide whether the audit should be limited to efficiency or whether it should also include economy and/or effectiveness.

Good Practice

While acquiring knowledge of business during the planning phase of an audit, the auditor should assess and document the elements of economy, efficiency, and effectiveness in relation to the program or activity being audited. It is particularly important to determine what the desired outcomes are, whether the audited entity is measuring and reporting on those outcomes, and whether they are being achieved. This will help the auditor to answer the question, "Are the desired outcomes being achieved efficiently?".

Audits of efficiency can have one or more objectives related only to efficiency, or they can have multiple objectives that also include economy and effectiveness. The appropriate choice depends in part on the audit office's mandate, priorities, and resources, as well as on the availability of information on the auditee's performance.

In practice, the relationships among the 3 Es may make the decisions on audit focus quite difficult. For example, it may be challenging to deal with one E while ignoring the other two. Also, it is not uncommon for issues initially thought to be economy or effectiveness to actually be efficiency issues, or vice versa.

Beyond overcoming these difficulties, auditors will have to consider three important questions:

- Would reporting solely on efficiency meet the need of the audit report's audience (including parliamentarians, audit committees, and decision makers), which may also be interested in effectiveness and economy?
- Could reporting solely on efficiency be done without being criticized for missing other important aspects of a given topic?
- If conducting a stand-alone efficiency audit, would it be possible to communicate the audit findings in such a way as to make it clear that the report does not conclude on effectiveness?

A review of recent audits shows that some have focused solely on efficiency, while others have combined efficiency with economy and/or effectiveness. For example, the Auditor General of Canada's 2008 audit Economy and Efficiency of Services—Correctional Service Canada looked at both economy and efficiency issues.

The Office of the Auditor General for Scotland's 2012 audit of Cardiology Services included an effectiveness objective in addition to an efficiency objective:

> *"We looked at how effectively the NHS [National Health Service] in Scotland manages Cardiology services, how much is spent and whether patients across Scotland have the same access to services.*
>
> *The audit also assessed whether there is scope to improve the efficiency of Cardiology services by comparing activity across Scotland and identifying areas of good practice where efficiencies have been made."*

The National Audit Office in the United Kingdom has performed a number of audits where the sole focus was efficiency. Two examples are the 2011 audit of the Office of Rail Regulation: Regulating Network Rail's Efficiency, and the 2011 audit of The BBC's Efficiency Programme.

Back to Planning an Audit of Efficiency section

Determining the Audit Approach

Legislative performance auditors often audit systems and practices, and a large portion of internal auditors' work focuses on internal control systems. Audits of efficiency can likewise be centered on systems.

Audits of efficiency can also be conducted with a focus on operational results, with or without the inclusion of audit work on systems and practices (controls).

Thus, in theory, auditors can choose a "systems approach" or a "results approach" for their audit. In practice, a well-balanced audit includes aspects of both; it is simply a question of relative emphasis between the two. Before deciding what the approach to the audit will be, auditors should be aware of the characteristics of both "systems audits" and "results audits."

Systems audits

In a systems audit of efficiency, the focus is on the management systems and practices, including systems of internal control, used by an organization to achieve, maintain, demonstrate, and improve the efficiency of its services or operations.

In practical terms, systems audit work means examining the key organizational systems, practices, procedures, and controls supporting efficiency, such as performance measurement and reporting systems, costing systems, and management's systems for benchmarking organizational performance. The seven management activities described in this Practice Guide can provide a useful framework for assessing the quality and effectiveness of the management systems that foster efficiency.

A systems approach may be used in audits of efficiency in one of three ways:

1. The audit may examine the entity's overall strategy and focus on efficiency.
2. The audit may examine the systems and practices that relate to efficiency in a particular program or activity.
3. The audit may combine these two options.

The particular option chosen will depend on the knowledge of business acquired, the auditor's mandate, and the auditor's analysis of significance and risk. Auditing an entity's overall strategy on efficiency may be a good entry point into auditing efficiency. Subsequent audits in particular programs could follow this first audit. This strategy would provide an audit office with a good overview of an entity's central approach to efficiency prior to undertaking more in-depth audits of the efficiency of specific programs.

Results audits

In a results audit of efficiency, the focus is on determining whether a program or activity is efficient. Generally, results audit work involves the comparison of current or recent performance against benchmarks, a baseline, or key performance targets. It is also possible to assess efficiency performance over time.

A results audit is only practical if an organization measures its efficiency or if the auditor is able to measure efficiency. In cases where management does measure efficiency, auditors will need to do additional work to validate the collected information in order to be able to rely on it in their audit. Reliance on primary or secondary performance data creates audit risk. As with any audit that relies on performance data, auditors must manage audit risks by assessing the reliability, accuracy, completeness and comparability of the data used to support their audit conclusions.

In cases where management does not measure efficiency, auditors may decide to measure efficiency themselves. However, measurement of efficiency is often a challenging task, so auditors should not decide to measure it directly without first determining whether such measurement is feasible at a reasonable cost.

Balancing systems and results

It is unusual to find a pure "systems" or pure "results" audit of efficiency. Although the starting point is usually systems, audits of efficiency typically include some results questions and procedures, particularly in cases where efficiency systems were found to be operating improperly. A balanced approach is advisable in situations where there is a system to achieve efficiency in place and efficiency results are measureable.

By using a balanced approach, auditors can provide assurance on both systems and results and tell a more complete story. This will increase the validity of audit conclusions and reduce the risk of reaching a conclusion that does not reflect the actual state of efficiency.

For example, an organization's systems may not function as intended but the organization is nevertheless very efficient in relation to its peers. If the audit team only concluded against a "system objective," its conclusion would be limited to the fact that systems are not functioning as intended, which does not inform the report's audience about actual efficiency.

A similar situation can also happen if an audit has only a "results" objective. For instance, it may be that an organization has poor control systems but is nonetheless very efficient. In this case, the audit team, looking solely at results, would conclude only that the organization is efficient, leaving readers with the impression that control systems must be sound.

Good Practice

An audit approach that combines both systems and results audit objectives and procedures will reduce the risk of reaching an incorrect conclusion, provide better assurance, and enable auditors to tell a more complete story.

Back to Planning an Audit of Efficiency section

Drafting Audit Objectives

As explained in the Determining the Audit Approach section of this Practice Guide, audits of efficiency will generally include audit procedures related to management systems and controls, or to results, or (preferably) both. Accordingly, audit objectives will tend to focus on systems and controls or on results.

Audit objectives need to be aligned with the focus of the audit. At this stage, auditors will have acquired knowledge of business information and should be able to answer the following questions:

- Has an entity implemented a recognized improvement framework?
- Does the management of an entity or program have general systems and practices that foster the achievement of efficiency?
- Are comparative efficiency benchmarks and standards, baseline data, or key performance targets and indicators available?
- Does management measure efficiency?
- Could the auditor measure efficiency?

Knowing the answer to these questions will help auditors to determine their audit focus and audit objectives.

The INTOSAI's *Fundamental Principles of Performance Auditing* (ISSAI 300) recognize three basic types of audit objectives: descriptive, normative, and analytical.

- **Descriptive** audit objectives ask the question, "How is it?" —How are the systems performing or what are the results? An example of a descriptive objective would be "*to assess the progress made by the organization in implementing its efficiency improvement program.*"
- **Normative** audit objectives ask the question, "Is it as it ought to be?" —Are systems meeting expectations or best practices, or are results meeting expectations, performance targets, or best practices? An example of a normative objective would be "*to determine whether the efficiency improvement program is meeting its stated objectives and targets.*"
- **Analytical** audit objectives ask the question, "Why is it not as it ought to be?" —Why are systems or results not meeting expectations? An example of an analytical objective would be "*to determine why the efficiency improvement program has not delivered its expected outcomes.*"

INTOSAI standards state that normative and analytical audit objectives are more likely to add value. While normative audit objectives are commonly used in practice by Canadian external and internal auditors, analytical objectives are not since they are an integral part of a problem-oriented audit approach, which is rarely used in Canada. For this reason, the following guidance focuses on descriptive and normative objectives.

Table 4 presents generic examples of descriptive and normative audit objectives related to potential focus areas of audits of efficiency.

Good Practice

When drafting audit objectives for an audit of efficiency, auditors should adopt normative or analytical objectives whenever possible. Normative objectives lead to conclusions against clear expectations and so are more likely to add value than descriptive objectives.

Regardless of the type of objectives that are selected for an audit of efficiency, their precise wording is very important. Objectives should always be written in a way that will allow auditors to provide informative conclusions to the audit report's audience. In particular, auditors should avoid objectives that only yield yes/no answers. For instance, if the audit objective was "*to determine whether management has a system for achieving efficiency in hospital emergency departments*," the logical conclusion would be either "yes, management has a system" or "no, management does not have a system." Neither conclusion would tell the reader anything about the quality or the efficiency of the system in place and would therefore not be informative.

Table 4 – Examples of Descriptive and Normative Audit Objectives in Relation to Specific Focus Areas

Focus area	Descriptive audit objective	Normative audit objective
Recognized efficiency improvement methods or frameworks	To assess the design and implementation of the recognized improvement framework.	To determine whether the design and implementation of the recognized improvement framework meets expectations or best practices.
Systems and practices (controls)	To assess the efficiency of management systems and practices (controls). To assess the effectiveness of management systems and practices (controls) at promoting the achievement of efficiency.	To determine whether management systems and controls that support the achievement of efficiency meet expectations or best practices.
Measurement of efficiency	To assess management systems and practices (controls) to measure and report on efficiency.	To determine whether management systems and practice (controls) to measure and report on efficiency meet expectations or best practices.
Efficiency results	To assess an organization's (or a program's) current operational efficiency	To determine whether an organization's (or a program's) operational efficiency

Focus area	Descriptive audit objective	Normative audit objective
	performance. To assess an organization's (or a program's) operational efficiency performance over time.	performance meets benchmarks, standards, or key performance targets.

In some cases, auditors will have the flexibility to select more than one type of objective. For example, an audit team may be able to adopt three different objectives:

1. To determine whether management systems and practices that support the achievement of efficiency meet expectations or best practices.
2. To assess management systems and practices to measure and report on efficiency; and
3. To determine whether an organization's operational efficiency performance meets benchmarks, standards, or key performance targets.

In this case, the audit team could select one or more of the three objectives depending on available resources, significance, risk, or other relevant factors.

In other cases, this flexibility may not exist. For example, if management does not measure efficiency and it is determined that it would not be possible or practical for auditors to measure efficiency themselves, then an audit objective related to efficiency results would not be possible. (The best approach in this case would be to have an objective on systems and practices to measure efficiency.)

Even when measurements of efficiency exist, the capacity to audit results will be limited if there are no benchmarks, baselines, or key performance targets available to provide a comparative basis. In such cases, the only option left would be to assess the improvement of efficiency over time.

Auditors can find more examples of published objectives for recent audits of efficiency in our *Focus on Efficiency* publication.

Back to Planning an Audit of Efficiency section

Selecting Audit Criteria

Audit criteria represent the standard expected of the entity being audited. Audit criteria are a key contributor to the strength of an audit and its potential impact. Audit procedures focus on determining whether criteria are met or not met. Suitable criteria are clear, concise, relevant, reliable, neutral, understandable, and complete. If the audit criteria are irrelevant or incomplete, then the audit will likely be irrelevant and incomplete as well.

Finding suitable criteria is a challenge for any performance (value-for-money) audit, not just for audits of efficiency. Each audit is unique due to the auditor's mandate, audit focus, audit objectives, and the way the organization being audited approaches the audit's subject matter. There are a number of valid approaches to an audit of efficiency and the focus can range from assessing the entire government's approach to efficiency, to assessing how a particular program achieves efficiency. Accordingly, there is no "one-size-fits-all" approach to criteria.

Generally, auditors attempt to locate appropriate audit criteria by:

- researching best practices, standards, and regulations;
- identifying reliable benchmarks in a given sector or using baseline data on an organization's past performance as benchmarks;
- reviewing prior audit files and published audit reports;
- contacting colleagues in other jurisdictions; and
- consulting with auditees, academics, and subject matter experts.

Good Practice

Since not all audit offices include criteria in their published audit reports, and since some audits are not made publicly available, it is advisable to contact other offices directly to obtain their audit criteria.

Subject matter experts can be a valuable resource during this phase of the audit. Literature reviews and searches of publicly available databases can be used, but they are time-consuming and may not identify the best criteria. The auditor who relies solely on published works may fail to identify the most appropriate source of criteria. Consulting internal or external subject matter experts will reduce this risk.

This Practice Guide does not provide a standard list of criteria since there are no universal criteria that would fit all audits of efficiency. The Practice Guide provides examples of potential criteria to:

- assess management's systems and practices (controls) for achieving efficiency; and
- assess the level of efficiency achieved in relation to reliable benchmarks, performance targets, or baseline data.

The following sections provide examples of criteria related to systems and to results. Auditors who want to see more examples of audit criteria can also consult companion documents to this Practice Guide:

- Applied Guides for auditing the efficiency of regulatory inspection programs and of programs that deliver licences, permits, and other standardized approvals; and
- *Focus on Efficiency* is a publication of the Canadian Audit & Accountability Foundation that provides audit summaries for about 20 recent audits of efficiency, including audit criteria where available.

Developing criteria for an audit with a systems emphasis

If the audit objective emphasizes or relates to assessing management's systems and practices for achieving efficiency, the audit criteria should be based on good management practices and systems for achieving efficiency.

The auditor may also want to select criteria related to the specific tools for efficiency improvement that the entity is using. For example, if the entity has implemented Lean manufacturing techniques, criteria related to best practices for Lean implementation and compliance with the organization's Lean policies may be included in the audit plan. (In effect, this is an effectiveness audit of an efficiency program.)

Criteria for a systems emphasis could also be derived from broad control frameworks such as the Chartered Professional Accountants of Canada's Criteria of Control or the US COSO control framework. Other criteria may need to be more specific to the program or entity being audited. Indeed, internal auditors must ascertain the extent to which management has established adequate criteria to determine whether its objectives have been accomplished; when these criteria are adequate, internal auditors must include them as part of their audit plan.

In addition to the above suggestions, criteria for an audit of efficiency that emphasizes systems can be based on the seven main management activities that can foster efficiency in public sector organizations.

As presented in the Concepts and Context part of this Practice Guide, the seven general management functions that foster efficiency are:

1. Commitment and tone from the top
2. Strategic planning
3. Operational planning
4. Project and operations management
5. IT systems
6. Performance monitoring and reporting
7. Continuous improvement and innovation

Each of these categories is defined in the Management Activities that Foster Efficiency section of the Practice Guide.

For each of the seven management activities, **Table 5** includes suggested audit criteria that auditors could use to assess whether or not an entity or a program meets the audit objective(s). Of course, the focus of the audit will usually lead to the selection of a subset of criteria rather than the complete list.

Table 5 – Examples of Criteria that Can Be Used as Part of a Systems Audit of Efficiency

Management Activity	Criteria
1. Commitment and tone from the top	▪ **Efficiency as a priority**—Senior management has emphasized that efficiency is a priority and that achieving it is a shared responsibility of all managers and staff. ▪ **Clear expectations**—Senior management has clearly established and communicated expected results in terms of efficiency, complete with targets and indicators. ▪ **Established baselines**—The organization has established clear baselines for the cost, quality, and level of service of each of it main services and activities.
2. Strategic planning	▪ **Strategic planning—**The organization has a strategic planning process that identifies organizational inefficiencies and prioritizes efficiency improvement initiatives. ▪ **Risk assessment**—The organization has assessed the risks and potential consequences of maintaining operations identified as inefficient. ▪ **Assessing opportunities**—The organization continually identifies and evaluates opportunities to improve efficiency.
3. Operational planning	▪ **Operational planning**—The organization's systems and practices to allocate financial, human, and material resources to its projects and operations are designed to increase operational efficiency (or designed to meet recognized best practices). ▪ **Service levels**—The organization has adopted service level standards that are used by operational planners to identify, budget for, and allocate required inputs. ▪ **Input costs**—The organization identifies and analyzes the input costs for all its major services and programs. ▪ **Unit costs**—The organization calculates the unit cost of delivering its main services and tracks how the unit costs change over time. ▪ **Cost variation**—The organization has a clear understanding of how costs change in response to changing levels of activity. ▪ **Comparable financial information**—The organization continually compiles relevant financial information and produces information that is comparable over

Management Activity	Criteria
	time. ▪ **Personnel allocation**—The organization's systems and practices to allocate its personnel to its various services or business units are designed to increase efficiency. ▪ **Qualified personnel**—Operations are designed and carried out by qualified personnel with clear roles and responsibilities. ▪ **Accountability**—Roles, responsibilities, authority, and accountability for efficiency matters are clearly defined, attributed, and communicated.
4. Project and operations management	▪ **Due regard to efficiency**—The organization's project and operations management controls, operational systems, and work processes demonstrate due regard to efficiency. ▪ **Operating systems and procedures**—The organization's service delivery operations are designed and carried out using efficient systems, processes, and procedures. ▪ **Utilization of production capacity**—The organization optimizes the available production capacity, facilities, equipment, and employees to produce targeted volumes of goods and services.
5. IT systems	▪ **IT systems**—The organization periodically assesses opportunities to use IT technologies to improve the efficiency of its activities and services.
6. Performance monitoring and reporting	▪ **Performance monitoring**—The organization continually monitors the performance of its main activities and services using reliable indicators of efficiency. ▪ **Quality and level of service monitoring**—The organization continually monitors the quality and level of service achieved for each of the main services it delivers. ▪ **Benchmarking**—The organization regularly benchmarks the main services it delivers in order to assess their relative efficiency and identify areas for improvement. ▪ **Reporting on efficiency initiatives**—The organization periodically reports on progress against its efficiency objectives and initiatives. o The reports include relevant, timely, reliable, and complete information on efficiency achievements. o The reports include information on the efficiency gains that have been achieved from individual projects and on how these gains have improved the services delivered by the organization. ▪ **Reporting efficiency savings**—In reporting efficiency savings, the organization:

Management Activity	Criteria
	○ Reports consistently over time, using valid and reliable measures and indicators. ○ Compares current values against baseline data. ○ Explains how efficiency savings are affecting cost, quality, and level of service, to show the full impact of changes. ○ Is transparent about the upfront investments and recurrent costs incurred in delivering efficiency.
7. Continuous improvement and innovation	▪ **Improving existing methods of operations**—The organization continually assesses the feasibility of streamlining its systems and procedures, optimizing the allocation of its resources, and eliminating duplication and waste. ▪ **Innovation**—The organization periodically identifies and assesses innovative ideas for improving the efficiency of its key activities and services. ▪ **Service delivery alternatives**—The organization periodically assesses the merits of alternative service delivery methods and models that could increase its efficiency. ▪ **Efficiency through collaboration**—The organization periodically assesses the merit and feasibility of increasing efficiency through new or improved collaborative arrangements (such as pooling of resources, removal of duplication, and shared services). ▪ **Continuous improvement process**—The organization has implemented a continuous improvement process to review and improve its service delivery systems and practices.

Source: Many of these criteria were adapted from the Office of the Auditor General of Canada's *Auditing of Efficiency* (1995), the Northern Ireland Audit Office's *Improving Public Sector Efficiency: Good Practice Checklist for Public Bodies* (2010), as well as from recent audits of efficiency.

Developing criteria for an audit with a results emphasis

As explained in the Determining the Audit Approach and Drafting Audit Objectives sections of this Practice Guide, auditing results in an efficiency audit is possible when:

- performance information is available;
- benchmarks, baselines, or performance targets are available; and
- management assesses its efficiency or the audit team could assess it.

In general terms, the objective of an audit with an emphasis on results will be to assess the level of efficiency achieved in relation to benchmarks, a baseline, or performance targets.

Accordingly, criteria and sub-criteria that would support a results objective could relate to:

- The reliability and other characteristics (such as timeliness, relevance, and completeness) of the efficiency information produced by the entity. For example: "*the organization uses timely, relevant, reliable, and complete information to assess its efficiency…*".
- The benchmarking processes used by an organization and the choice of appropriate benchmarks. For example: "*the organization has selected relevant and reasonable benchmarks to assess its efficiency performance.*"
- The comparison of an organization's efficiency performance with benchmarks, baselines, or performance targets. For example: "*the organization (or program) meets the efficiency targets set out in its annual operational plan*" or "*the organization (or program) meets recognized sectorial efficiency standards.*"
- The conclusions drawn by an organization on its efficiency performance. For example: "*the organization draws appropriate conclusions on its efficiency based on performance data and benchmarks, baselines, or performance targets.*"

In cases where auditors will rely on the organization's performance and benchmarking information, auditors will need to test the reliability of the data made available to them.

If such information is not available in the organization, auditors may decide to observe operations directly, take their own measurements, and conduct their own benchmarking exercise (as was done by Audit Scotland in its 2012 audit of Cardiology Services and its 2010 audit of Review of Orthopaedic Services). In such cases, auditors should consult with subject matter experts to identify appropriate benchmarks, striving to select benchmarks that will provide a comparison of the organization's efficiency against best practices.

Whether they plan to conduct their own benchmarking exercise or to audit the benchmarking processes used by an organization to assess its efficiency performance, auditors may benefit by consulting the short practice guide to benchmarking produced in 2008 by the Business Performance Improvement Resource (BPIR, a source of benchmarking information). This document includes principles of benchmarking and describes the four phases of a sound benchmarking process.

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Conducting the Examination Phase

In any performance or value-for-money audit, a challenge for the audit team is to plan and conduct audit procedures that are robust enough to allow auditors to determine whether audit criteria are met, to obtain sufficient appropriate evidence, and to conclude on the audit objective(s). Depending on the focus and approach of the audit, the selection of audit procedures related to efficiency may require special considerations.

For example, the audit team may need to be familiar with and use a variety of data collection and analysis techniques such as benchmarking, process mapping, data mining, direct observation, surveys, statistical analysis, and root cause analysis. It may also need to conduct financial analysis in order to produce estimates of potential cost savings that would result from improved efficiency.

In an audit of efficiency that emphasizes systems, the audit procedures may involve tests of controls, process mapping, document reviews, physical observation, and interviews. The auditor may also need to compare the entity's efficiency achievement process with best practices to determine if there are weaknesses. For example, if the organization has implemented Lean practices, the auditor should compare the organization's version of Lean with best practices for Lean implementation.

In an audit of efficiency that emphasizes results, the auditor will need to conduct audit procedures that focus on measuring efficiency and on assessing the reliability and completeness of efficiency-related information and benchmarks. This will require collecting information on relevant ratios (outputs to inputs or outcomes to inputs), the cost of inputs, and the detailed steps of selected processes. This means that the first step in many audit procedures will be to complement the information collected in the planning phase of the audit (see Knowledge of Business) in order to have a good understanding of:

- Inputs (human resources, materials, equipment, etc.) and their cost;
- Intended and actual outputs;
- Intended and actual outcomes; and
- Selected processes and their component steps.

When considering inputs, outputs and outcomes (see **Figure 1**), auditors should consider the “attribution” question: is there a reasonable causal relationship between the inputs and the outputs (or outcomes) of interest? Identifying this reasonable causal relationship can be especially challenging for outcomes, since public sector organizations are often working towards longer-term outcomes where various external factors may impact the final achievement of desired results. In such instances, audited organizations may only have a ‘contributory effect’ on the outcomes being sought (subject matter experts may also be of assistance with regard to the attribution question).

These contributory effects can be significant. However, the challenge of attribution will not necessarily preclude the auditor from concluding on the efficiency of the audited entity/program. In situations where the auditee’s influence over achievement of desired results has remained relatively stable over the time period under examination, auditors will also be able to assess the entity’s efficiency performance over time.

Calculating Ratios, Using Benchmarks and Quantifying Cost Savings

During examination, auditors will need to consider how the costs of inputs and outputs have been calculated and whether they have been calculated in a consistent manner over the complete period under audit. It may be necessary to determine whether all direct costs (labour, equipment, materials, etc.) and indirect costs (administration, utilities, maintenance, etc.) have been included and whether data on indirect costs will be required to complete audit procedures (subject matter experts or cost accountants may be able to provide valuable advice on this question).

Once auditors are in possession of good data on inputs, outputs and outcomes (see **Figure 1** for examples), they will be able to calculate efficiency ratios:

$$\boxed{\frac{\text{Outputs}}{\text{Inputs}}} \quad \text{or} \quad \boxed{\frac{\text{Outcomes}}{\text{Inputs}}}$$

Calculating these ratios is one of the two elements necessary to assess efficiency. A second element consists of comparing the ratios to a benchmark or a baseline figure. Benchmarks may represent best practices or a level of efficiency achieved in other organizations, whereas baselines usually represent a previous level of performance achieved by an organization (subject matter experts may know good sources of benchmarks). Equipped with current ratio data and reliable benchmarks or baselines, auditors can determine whether an entity, program or process is efficient compared to best practices or to other organizations, or whether efficiency has improved over time. **Table 6** provides some illustrations of ratios and their uses.

Table 6 – Examples of Ratio Calculations

<table>
<tr><th>Ratio</th><th>Purpose of Calculation</th></tr>
<tr><td>Number of transactions processed per labour hour (or per 1 FTE day, month or year)</td><td rowspan="2">To have an understanding of processing efficiency in terms of outputs.
Calculation could be done for different staff or different groups, to enable comparisons.
Calculation could be done for different times during day or for different days to identify changes or trends in efficiency.
Could be used to compare results achieved by the same staff/group/organization at different points in the past or to compare the entity’s results with the results achieved by similar organizations.
Could also be used to compare results against a good practice benchmark.</td></tr>
<tr><td>Number of licenses or permits issued per day in one department or one regional office</td></tr>
<tr><td>Number of inspections conducted per $100000 spent on an enforcement program</td><td rowspan="2">To provide information on the extent to which activities are conducted efficiently with regard to costs.
Comparisons within or between organizations or against a benchmark.</td></tr>
<tr><td>Administration costs in relation to total program costs (as a percentage)</td></tr>
<tr><td>Office space per employee</td><td>To provide information on the extent to which space is used efficiently.
Comparisons within or between organizations or against a benchmark.</td></tr>
<tr><td>Number of successful return to work outcomes for one physiotherapist for a specific period of time</td><td>To have an understanding of a public service’s efficiency performance in terms of outcomes.
Could also be measured at the aggregate level (i.e. for all physiotherapists in an organization).
Comparisons within or between organizations or against a benchmark.</td></tr>
</table>

This exercise may pose important challenges to auditors. For example, the ratio data and the benchmarks or baselines need to be calculated using similar variables, otherwise they won't be easily comparable. Also, if current ratios include a time component (i.e. inputs per hour, per day, etc.), then the benchmarks or baselines will need to have been based on similar time units. In cases where the calculations were not made in a similar manner, auditors will likely need to make adjustments to either the auditee's data or the benchmarks/baselines in order to ensure comparability.

Comparability of data may also be problematic when the only benchmarks available come from the private sector. Since private sector organizations have different objectives than public sector ones, it may not be fair or appropriate to use a private sector benchmark to assess the efficiency of a public entity or public service.

Good Practice

When auditors decide to adopt private sector benchmarks to assess the efficiency of a public sector organization, they should document their rationale for doing so. They should also obtain the opinion of a subject matter expert on the appropriateness of the selected benchmarks. A subject matter expert can also suggests adjustments that could improve the benchmarks' suitability.

In situations where auditors have access to good information on input costs, output costs, reliable benchmarks, and detailed process maps, they may attempt to identify system inefficiencies and quantify the estimated savings that could be made by enhancing the systems and improving their efficiency. Quantifying potential cost savings is a very effective way of demonstrating the significance of an efficiency issue and of providing a rationale for taking corrective actions. However, quantification of cost savings must be based on reliable data and sound assumptions.

Good Practice

Where possible, audit procedures can include estimating the potential cost and time savings that could result from correcting identified inefficiencies. Auditors can quantify estimated cost savings when they collectively possess the require expertise to do so and are confident that their data is reliable and their assumptions are sound. When electing to estimate costs savings, they should have their calculations and assumptions validated by a subject matter expert. Finally, auditors should be transparent in their report about the assumptions they made in estimating cost savings.

Direct Observation and Indirect Ways of Assessing Efficiency

When conducting audit procedures that require complete and reliable financial or performance information to assess efficiency, auditors may be confronted by a lack or absence of quality data. In such situations, auditors may have to reconsider their audit approach and put more emphasis on other types of audit procedures. In particular, auditors can make use of direct observation techniques.

For example, an audit team can select specific processes to audit, at one or more locations, and directly measure how much time (or some other input) it takes to complete distinct steps in the selected processes. This will allow auditors to compare their observations against expected results or to compare the efficiencies of different locations against one another. It should be noted, however, that these observations would be valid only for the period under observation and could not be extrapolated to produce representative data for a longer time frame.

Indirect ways of assessing efficiency may also be used by auditors to complement their main audit procedures. Surveys of service users, focus groups and interviews of various stakeholders will help auditors to identify areas where inefficiencies exist and where further audit procedures could be directed. Surveys and interviews may also provide auditors with useful information on potential solutions that could be further examined during the audit.

The two Applied Guides (on regulatory inspections and application processes for programs or licences) and the *Focus on Efficiency* publication that accompany this Practice Guide include more examples of audit procedures applicable in the context of audits of efficiency.

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Reporting the Results of an Audit of Efficiency

The focus of this section of the Practice Guide is on techniques that can be used to increase the impact of reports of audits of efficiency. Formats and writing styles for performance audit reports are specific to individual audit offices and are not discussed in this Practice Guide.

As with any audit report, it is important to consider how audit findings can best be presented to achieve maximum impact and to reduce the potential for misinterpretation of audit observations and conclusions. That being said, audit reports on efficiency pose particular risks that must be considered and managed.

For example, quantifying the potential cost savings that would result from efficiency improvements is an effective way of highlighting the significance of inefficient programs or processes. However, quantifying cost savings is a difficult exercise that must be based on reliable data and sound assumptions. Auditors should only use this tool when they are confident that their data and assumptions are solid. In addition, auditors should have their calculations validated by a subject matter expert before they are published.

In addition, audit reports on efficiency routinely use tables, charts, and graphs to convey audit findings. While these communication tools can be highly effective—they will capture the reader's attention if done well—they are susceptible to misinterpretation and could raise questions by readers. When using charts and graphs, auditors must take care to provide in the accompanying text all the information necessary to answer these potential questions.

Finally, because the media and public may have preconceived opinions of the level of efficiency in public sector organizations, it is possible that published findings will generate strong stakeholder reactions and potential unintended consequences. For example, there could be calls to outright cancel a program that presents some inefficiencies that could be fixed. The risk of sparking strong reactions is heightened in cases where the audit report involves comparison or benchmarking with other organizations. It is therefore important that audit reports and media communications contain very clear messages. In particular:

- When reporting on a stand-alone audit of efficiency, it should be clearly explained that the report does not conclude on an entity's effectiveness.
- When reporting that more could be done with the same resources, it may be appropriate to emphasize that in such a case efficiency could be achieved in a cost-neutral manner.
- When reporting on savings that could be achieved through efficiency improvements, it should be clarified whether these improvements will require upfront investments (such as a new IT system).

Finally, auditors should be aware that the successful use of quantification, tables, charts, and graphs often depends on thinking about presentation formats and the data required early in the audit. Waiting for the reporting phase to identify the data required for a chart or graph may not leave enough time for the auditor to obtain reliable information and still meet reporting deadlines. Auditors should also remember that information used in charts and graphs must be subjected to rigorous quality assurance in the same way as other types of audit evidence.

The following are samples of good presentations of efficiency findings from actual performance audit reports. More examples can be found in recent audits of efficiency – see our publication *Focus on Efficiency* for a list of recent audits with hyperlinks to the full reports.

Quantification

Quantification of findings increases audit impact. The Auditor General of Ontario's 2012 audit of the Ontario Provincial Police includes a good example of quantification of efficiency savings:

> *"We estimate that adjusting the current 24-hour fixed scheduling from equally manned 12-hour shifts to a mixture of shifts and less staff from 3 a.m. to 7 a.m. would either result in savings in the range of $5–10 million a year or lead to improved service to the public and officer safety by more effectively matching staffing to workload."*

The UK NAO's 2012 audit Improving the Efficiency of Central Government Office Property is another example of powerful quantification of audit findings:

> *"Departments have made good progress in improving the efficiency of the central government office estate since 2004. Achieving an average space standard of 10 m^2 per person would deliver a further reduction of*

£830 million in the annual running costs of the estate. £650 million of this should be achievable by 2020 by relying on leases expiring. However, in order to make this happen, departments will need to plan their estates requirements together."

Charts and Graphs

Good Practice

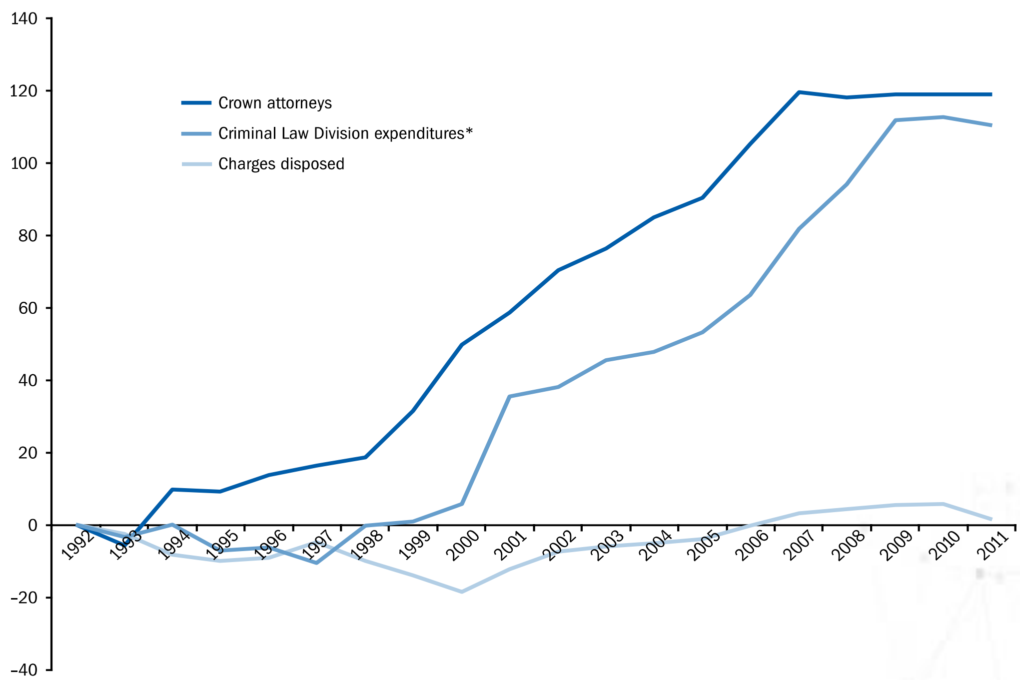
Using charts and graphs to present and simplify complex information makes audit observations easier to understand and increases their impact. Since efficiency is often about process improvement, process maps may be useful to help readers understand findings and recommendations.

Relationship of inputs to outputs over time

The example below is taken from the Auditor General of Ontario's 2012 audit of Criminal Prosecutions and allows the reader to quickly grasp the correlation between inputs (expenditures, staff) and outputs (charges disposed). This type of exhibit is a powerful way of presenting complex data found in many types of entities and programs. To support the exhibit, the audit report also includes a discussion of developments over the years that explain the trends portrayed in the exhibit.

Figure 1: Annual Percentage Change in Number of Crown Attorneys, Charges Disposed and Criminal Law Division Expenditures, 1992–2011

Source of data: Ministry of the Attorney General, Public Accounts

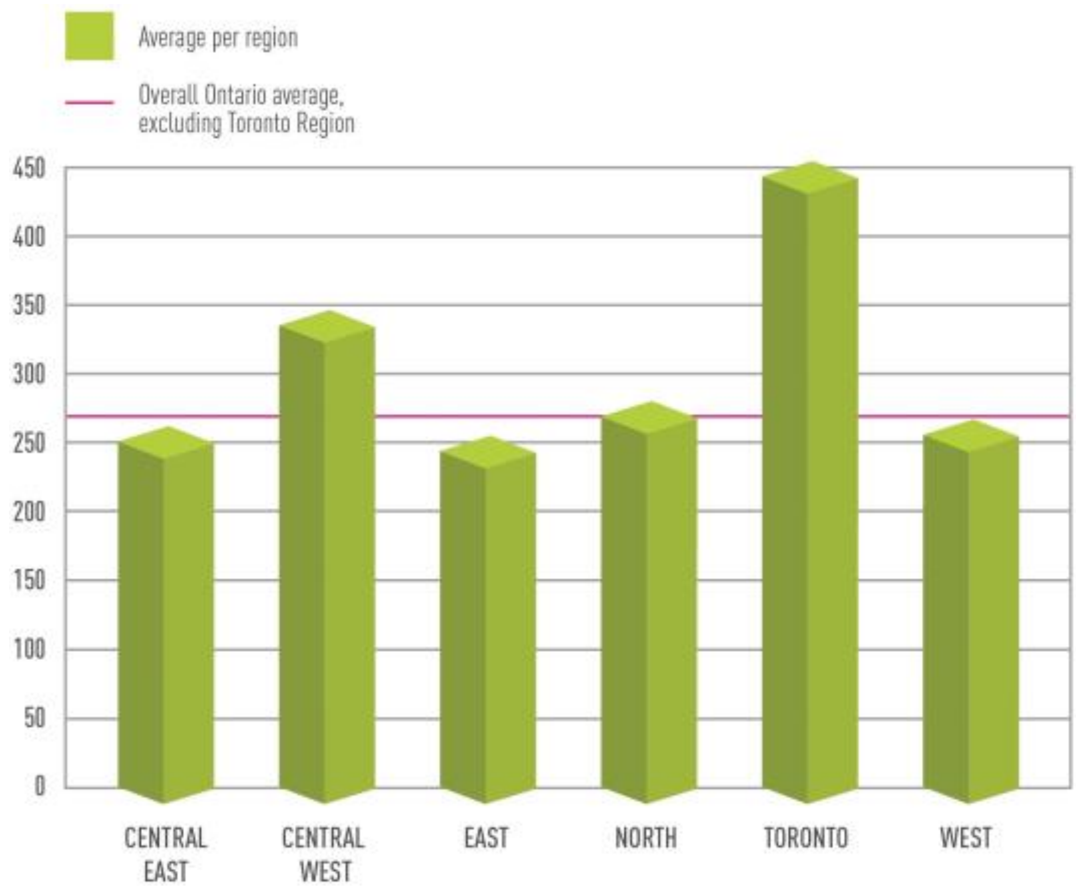


* Annual percentage change for expenditures were based on amounts adjusted for inflation to 2011 levels using Statistics Canada's Consumer Price Index.

Benchmarking comparison

The chart below, adapted from the Ontario Criminal Prosecutions audit, is a simple example of how the results of a benchmarking exercise can be presented in an effective manner. If this data had been provided in a table, it would have lacked the clarity of the chart.

Average Cost per Charge Disposed of by Region, 2011/2012 ($)

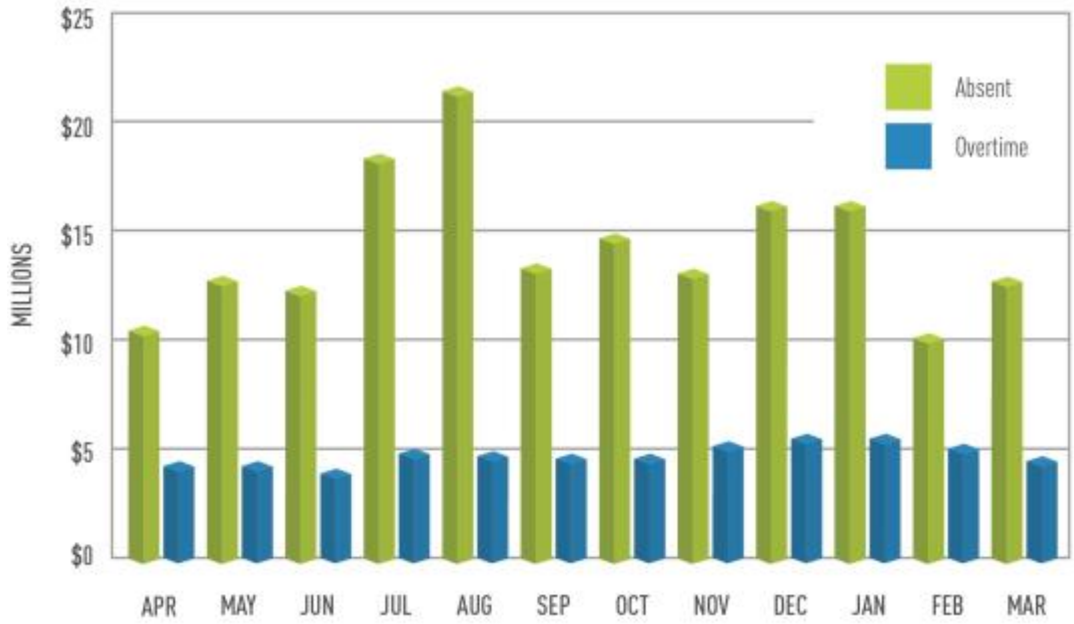


Analysis of cost drivers

In its 2011 Review of Benefits Budgeting and Overtime Drivers in HRM, the Auditor General of Halifax Regional Municipality provided the following narrative analysis of the relationship between the incurrence of overtime costs and absenteeism. The narrative explanation is strengthened by the accompanying chart (adapted from the original in the report).

> *"Analysis into absences across the organization showed no direct day-for-day correlation between overtime incurred and absences from regular employment. While the OAG was not able to establish a direct day-for-day correlation, overtime costs track on average, at 33% of the value of absences in any given month (i.e. in a period if there were $100 in absences, there would be approximately $33 in overtime). August, typically the highest period for vacations, has a ratio of only 22% overtime to absences."*

Absences and Earned Overtime Actual Costs for Fiscal Years 2007-2010 Combined

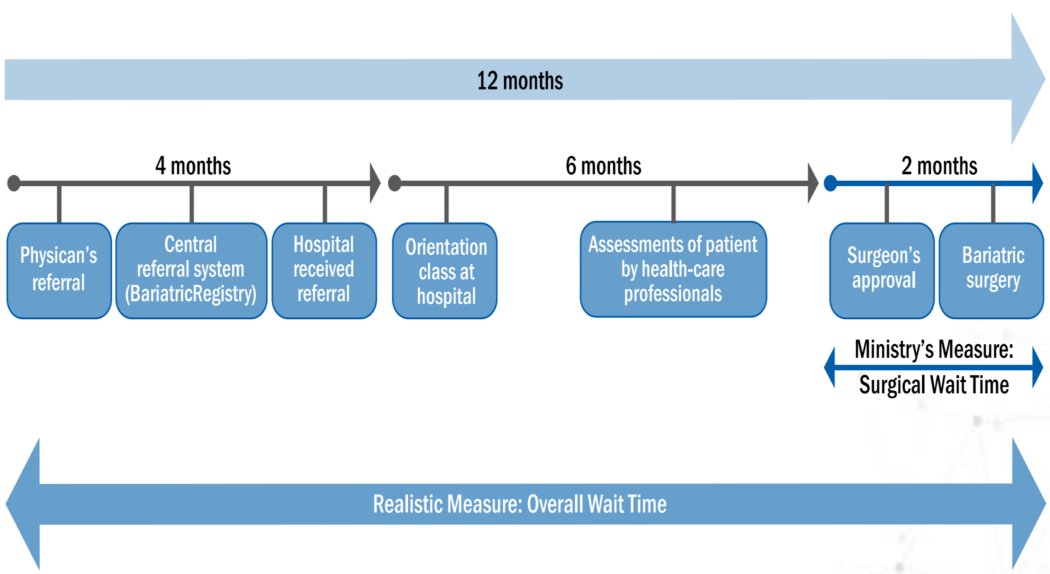


Process time

The need to convey an understanding of process time is common in audits of efficiency. The chart below, reported in the Auditor General of Ontario's 2012 audit of the province's Diabetes Management Strategy, was used to depict the actual wait time for bariatric surgery in Ontario as compared with the Ministry of Health and Long-Term Care's reported wait time.

Figure 7: Referral Process for Bariatric Surgery in Ontario

Prepared by the Office of the Auditor General of Ontario



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Overcoming the Challenges to Auditing Efficiency

There have been relatively few audits of efficiency undertaken in Canada as compared with audits of economy (procurement) or effectiveness. In this section, we describe some of the common challenges to auditing efficiency along with suggestions on how to overcome them.

Challenge #1—*Lack of specific audit methodology and related training*

The available guidance is very general or outdated and may be inadequate to support audits of efficiency.

Solution

This Practice Guide has been created to provide relevant methodology, including audit criteria. In addition, there are older publications that are still relevant, such as the Auditor General of Canada's 1995 guide *Auditing of Efficiency*. The References section of this Practice Guide includes additional sources of guidance.

Challenge #2—*Limited availability of appropriate benchmarks and other comparatives*

The audit procedures of audits of efficiency often include comparisons with benchmarks to assess efficiency in relation to similar programs or entities. Benchmarks must be generally accepted and reliable. Auditors have noted that it is difficult to find good benchmarking sources. Even when comparative information is collected from other jurisdictions directly by the auditor, there are often differences in the programs or entities, which make comparisons problematic.

Solution

Finding good sources of benchmarks is a challenge, but there are some good sources available. Subject matter experts may be able to point auditors in the right direction. Note that some organizations charge a fee to access the benchmarking information in proprietary databases but the resulting comparatives may be worth the cost. Auditees often benchmark their programs and may also be able to provide relevant sources.

In addition, it may be possible to compare an organization's current performance with its past performance or to compare one location or branch against other locations and branches. In some cases, the auditor will need to think creatively about internal sources of benchmarks. For example, the efficiency of a human resource recruiting function could be benchmarked against another government department's recruiting process.

Challenge #3—*Specialized expertise may not be available*

Audits of efficiency require a detailed understanding of existing processes and alternatives. In some areas, the knowledge required to assess efficiency and make practical recommendations is very specialized. This depth of knowledge may not be available in all audit offices.

Solution

Use of specialists is required if the audit office does not have the required proficiency and knowledge of the subject matter (Chartered Professional Accountants of Canada standards, sections 5025.27 and 5025.30). Efficiency specialists are available in many areas of the public sector. Auditors from other jurisdictions who have performed similar audits may be able to recommend specialists. Also, Canadian consulting firms with global practice affiliations may have links to international experts in certain areas.

Challenge #4—*Lack of performance information*

Outputs and outcomes for public sector programs are often not well-defined. Several programs may target the same client groups and it may be difficult to attribute specific outcomes to particular interventions. In other cases, a program may focus on areas where outputs and outcomes cannot be defined easily. When performance information is not available, it is difficult to audit efficiency.

Solution

When auditors begin to audit efficiency, they should select as their first topics programs that have well-defined output and outcomes. Many Canadian governments have established requirements for program performance reporting in recent years and progress is expected in this area. By recommending improvements to performance reporting, auditors can play a role in ensuring that continuing progress is made.

Challenge #5—*Staying clear of the policy arena*

Public sector auditors generally do not have the mandate to comment on the merit of public policies. However, some policies may create inefficiencies. For example, policy decisions on the location of service delivery offices in areas with small populations, or the maintenance of jobs in the face of declining service requirements, may be designed to meet a government's socio-economic goals at the expense of efficiency. In such cases, auditors are faced with the challenge of reporting inefficiency while avoiding comment on the merit of government policy.

Solution

Auditors can report factually on program inefficiency without directly criticizing government policy. For example, they can report the results of comparisons with other entities or other jurisdictions. It is important for legislators, governing bodies, and program management to understand the impacts of particular policies on program efficiency. If the impacts are well-articulated and quantified, then those responsible for the policies will be in a better position to decide whether they should be changed.

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References

Guidance and Standards

Business Performance Improvement Resource (2008). *Benchmarking*, BPIR Management Brief – Volume 4, Issue 5, available at: http://www.bpir.com/images/stories/Mbrief/mgtbriefvol4iss5_ben.pdf

CCAF-FCVI Inc. (2014). *Auditing the Efficiency of Application Processes for Government Programs and Licences,* available at: https://www.caaf-fcar.ca/en/performance-audit/research-and-methodology/practice-guides

CCAF-FCVI Inc. (2014). *Auditing the Efficiency of a Regulatory Inspection and Enforcement Function,* available at: https://www.caaf-fcar.ca/en/performance-audit/research-and-methodology/practice-guides

CCAF-FCVI Inc. (2014). *Focus On Efficiency,* available at: https://www.caaf-fcar.ca/en/performance-audit/audit-news/focus-on-series

CCAF-FCVI Inc. (2010). *Innovation, Risk & Control: A public sector guide to encouraging innovation, understanding control, managing risk, reducing red tape … and delivering better results for citizens,* available at https://caaf-fcar.ca/images/pdfs/research-publications/IRC-PublicSectorGuide-EN.pdf

CCAF-FCVI Inc. (1996). *Accountability, Performance Reporting, Comprehensive Audit – An Integrated Perspective*, available at: https://caaf-fcar.ca/images/pdfs/research-publications/APRCA-EN.pdf

Chartered Professional Accountants of Canada (CPA). Performance audit standards:

- CSQC-1 – Quality control for firms that perform audit and reviews of financial statements, and other assurance engagements
- 5025 – Standards for Assurance Engagements Other than Audits of Financial Statements and Other Historical Financial Information
- 5049 – Use of Specialists in Assurance Engagements Other than Audits of Financial Statements and Other Historical Financial Information
- PS 5400 – Value-for-Money Auditing in the Public Sector

CICA's Criteria of Control Board (1995). *Guidance on Control.*

Committee of Sponsoring Organizations of the Treadway Commission (2013). *Internal Control – Integrated Framework*, executive summary available at: https://www.coso.org/Pages/ic.aspx

Institute of Internal Auditors (IIA). International Professional Practices Framework (IPPF):

- Standard 2010 – Planning
- Standard 2100 - Nature of Work
- Standard 2200 - Engagement Planning
- Standard 2300 - Performing the Engagement

- Standard 2400 - Communicating Results

Institute of Internal Auditors (IIA). Practice Advisories:

- Practice Advisory 2130-1: Assessing the Adequacy of Control Processes
- Practice Advisory 2320-2: Root Cause Analysis
- Practice Advisory 2410-1: Communication Criteria

International Organization of Supreme Audit Institutions (2016). *Standards Performance Auditing* (ISSAI 3000), available at: http://www.issai.org/en_us/site-issai/issai-framework/4-auditing-guidelines.htm

International Organization of Supreme Audit Institutions (2016). *Performance Audit Guidelines – Key Principles* (ISSAI 3100), available at: http://www.issai.org/en_us/site-issai/issai-framework/4-auditing-guidelines.htm

International Organization of Supreme Audit Institutions (2013). *Fundamental Principles of Performance Auditing* (ISSAI 300), available at: http://www.issai.org/en_us/site-issai/issai-framework/3-fundamental-auditing-priciples.htm

National Audit Office - UK (2010). *A Short Guide to Structured Cost Reduction*, available at: http://www.nao.org.uk/report/a-short-guide-to-structured-cost-reduction-4/

Northern Ireland Audit Office (2010). *Improving Public Sector Efficiency: Good Practice Checklist for Public Bodies*, available at: https://www.niauditoffice.gov.uk/publication/improving-public-sector-efficiency-good-practice-checklist-public-bodies-0

Office of the Auditor General of Canada (1995). *Auditing of Efficiency,* available at http://www.oag-bvg.gc.ca/internet/English/meth_gde_e_20330.html

Efficiency Improvement Frameworks

Lean

Womack, James P. and Jones, Daniel T. (2003*). Lean Thinking: Banish Waste and Create Wealth in Your Corporation*, Productivity Press.

Six Sigma

Pyzdek, Thomas and Keller, Paul (2009). *The Six SIGMA Handbook, Third Edition*, McGraw-Hill Professional.

Maleyeff, John (2007). *Improving Service Delivery in Government with Lean Sigma Six*, available at: http://www.doh.wa.gov/Portals/1/Documents/1000/PMC-ImproveServiceDeliveryLeanSixSigmaReport.pdf

Total Quality Management

Demings, W. Edward (1982, reprinted in 2000). *Out of the Crisis*, The MIT Press.

Balanced Scorecard

Kaplan, Robert S. and Norton, David P. (1996). *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business Review Press.

Kaplan, Robert S. and Norton, David P. (2004). Alignment: *Using the Balanced Scorecard to Create Corporate Synergies*, Harvard Business Review Press.

ISO Standards

ISO standards are available at: http://www.iso.org/iso/home.htm

Recent Audits of Efficiency Cited in the Practice Guide

Audit Scotland (2010). *Improving Private Sector Efficiency*, available at: http://www.audit-scotland.gov.uk/docs/central/2010/nr_100225_improving_efficiency.pdf

Audit Scotland (2012). *Cardiology Services*, available at: http://www.audit-scotland.gov.uk/docs/health/2012/nr_120223_cardiology.pdf

Audit Scotland (2010). *Review of Orthopaedic Services*, available at: http://www.audit-scotland.gov.uk/docs/health/2010/nr_100325_orthopaedic_services.pdf

Auditor General of Halifax Regional Municipality (2011). *Review of Benefits Budgeting and Overtime Drivers in HRM*, available at: http://www.halifax.ca/AuditorGeneral/documents/WebOKFinalOTBen.pdf

Government Accountability Office (2012). *Opportunities to Reduce Duplication, Overlap and Fragmentation, Achieve Savings and Enhance Revenue*, available at: http://www.gao.gov/products/GAO-12-342SP

Office of the Auditor General of Canada (2008). *Audit Economy and Efficiency of Services—Correctional Service Canada*, available at: http://www.oag-bvg.gc.ca/internet/English/parl_oag_200812_07_e_31831.html

National Audit Office, UK (2011). *Office of Rail Regulation: Regulating Network Rail's Efficiency*, available at: http://www.nao.org.uk/report/regulating-network-rails-efficiency/

National Audit Office, UK (2011). *The BBC's Efficiency Programme*, available at: http://www.nao.org.uk/report/the-bbcs-efficiency-programme/

National Audit Office, UK (2012). *Improving the Efficiency of Central Government Office Property*, available at: http://www.nao.org.uk/report/improving-the-efficiency-of-central-government-office-property/

Northern Ireland Audit Office (2012). *Review of the Efficiency Delivery Programme*, available at: https://www.niauditoffice.gov.uk/files/efficiencyfinalpdf

Office of the Auditor General of Ontario (2012). *Ontario Provincial Police*, available at: www.auditor.on.ca/en/content/annualreports/arreports/en12/310en12.pdf

Office of the Auditor General of Ontario (2012). *Criminal Prosecution*, available at: www.auditor.on.ca/en/content/annualreports/arreports/en12/302en12.pdf

Office of the Auditor General of Ontario (2012). *Diabetes Management Strategy*, available at http://www.auditor.on.ca/en/content/annualreports/arreports/en14/403en14.pdf

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Glossary

Auditability – Auditability refers to the ability to carry out an audit in accordance with professional standards and internal audit policies. Although some areas may be significant, they may not be auditable for the following reasons:

- the audit team does not have or cannot acquire the required expertise,
- the selected area is undergoing significant and fundamental change,
- suitable criteria or approaches are not available to assess performance, or
- the information or evidence required is not available or cannot be obtained efficiently.

Auditee – The entity whose performance is being audited.

Audit conclusion – An informed judgment made by an auditor based on sufficient and appropriate audit evidence.

Audit observation – the outcome of an objective evaluation of audit evidence against selected audit criteria.

Audit program – A detailed outline of the audit work to be undertaken during the audit examination phase to gather sufficient and appropriate evidence. Each audit activity outlined in the program includes the applicable criteria to be used and the audit steps, tasks, resources and time required to complete the work.

Audit focus – Refers to the breadth and depth on an audit, the risk areas and issues selected. Since different audit offices use the term ‘audit scope’ in different ways, the Practice Guide avoids this word and instead uses the expression ‘audit focus’ to refer to the depth and breadth of an audit.

Audit recommendation – A measurable statement for corrective action made by the auditor and addressed to the audited entity. Recommendations must address the causes of deficiencies identified in audit reports.

Benchmarking – The process of comparing an organization’s business processes and performance metrics to leading practices in its sector or best practices from other sectors. (Items typically measured are quality, time, and cost.) Benchmarking can also relate to the process of comparing an organization’s current performance with its performance in the past.

Control objectives – There are three kinds of control objectives:

- Operations objectives that pertain to the effectiveness and efficiency of an entity’s operations, including operational and financial performance goals, and safeguarding assets against loss.
- Reporting objectives that pertain to the internal and external financial and non-financial reporting required of an entity.
- Compliance objectives related to the requirement for an entity to comply with the laws and regulations to which it is subject.

Economy – Refers to the extent to which resources are acquired at the lowest cost, taking into consideration their quality and quantity.

Efficiency – See the “What is Efficiency” section of the Practice Guide.

Effectiveness – Refers to the extent to which an entity’s or a program’s objectives have been achieved.

Inputs– The resources allocated to an organization to carry out activities, produce outputs and accomplish results.

Outcome – The consequences of a policy, program, initiative or activity. An intended outcome is the 'end' that is being sought by an organization, a policy, a program or an initiative.

Outputs – Outputs are the goods and services delivered in order to achieve desired outcomes.

Performance audit – A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources in a given sector of activity.

Results audit – In a results audit of efficiency, the focus is on determining whether a program or activity is efficient. Generally, results audit work involves the comparison of current or recent performance against benchmarks, a baseline, or key performance targets. It is also possible to assess efficiency performance over time.

Risk – The probability (likelihood and impact) that an event or action may have an adverse effect on an intended outcome.

Significance – The relative importance of a matter within the context in which it is being considered, including quantitative and qualitative factors. Such factors include the magnitude of the matter in relation to the subject matter of the audit, the nature and effect of the matter, the relevance of the matter, the needs and interests of third parties, and the impact of the matter to the audited program or activity.

Systems audit – In a systems audit of efficiency, the focus is on the management systems and practices, including systems of internal control, used by an organization to achieve, maintain, demonstrate, and improve the efficiency of its services or operations.

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