

Alberta Quality Matrix for Health



Dimensions of Quality



Areas of Need

Being Healthy

Achieving health and preventing occurrence of injuries, illness, chronic conditions and resulting disabilities.

Getting Better

Care related to acute illness or injury.

Living with Illness or Disability

Care and support related to chronic or recurrent illness or disability.

End of Life

Care and support that aims to relieve suffering and improve quality of living with or dying from advanced illness or bereavement.

Acceptability

Health services are respectful and responsive to user needs, preferences and expectations.

Accessibility

Health services are obtained in the most suitable setting in a reasonable time and distance.

Appropriateness

Health services are relevant to user needs and are based on accepted or evidence-based practice.

Effectiveness

Health services are provided based on scientific knowledge to achieve desired outcomes.

Efficiency

Resources are optimally used in achieving desired outcomes.

Safety

Mitigate risks to avoid unintended or harmful results.

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For many years, industries throughout the world have been discovering that consistent delivery of the highest quality products and services results in growth and sustainability. Health care has discovered this same truth, and there is growing recognition that like other industries before it, health care is in the midst of an evolution toward the creation of higher quality health systems.

In the past few years, quality in health care has received increased provincial, national and international attention. Issues with the quality of health care have been highlighted by the public and in national and provincial health care reform reports. Albertans indicate there is room for improvement¹, and provincial commissions such as the Alberta *Mazankowski Report* and the Saskatchewan *Fyke Report* identified quality of care as a key principle in any health care reform initiatives.²

Understanding, defining, setting goals for and measuring quality is vital in creating a high performing health care system. The difficulty is that how quality is interpreted can differ between users, providers and organizations.

At any given time many individual quality initiatives are taking place for various services throughout Alberta's health system, echoing work that is taking place throughout the world. Even with these efforts, the ongoing challenge of making Alberta's health system a high performing one remains a long-term endeavour that requires everyone working together toward the same end. But what is this same end and what do we mean when we say quality?

To help overcome this, in 2004 the Health Quality Network developed the *Alberta Quality Matrix for Health*, a framework that helps organize information and thinking around the complexity of the health system. The matrix is intended to act as a lens through which the health care system can be viewed. The power of the matrix is that it provides a common language, understanding and approach to quality for health system users, providers and organizations.

¹ 81% rate the quality of health services received as excellent, very good or good, up from 74% in 2003. Health Quality Council of Alberta, *Satisfaction with Health Care Services: Survey of Albertans 2004*, www.hqca.ca

² *A Framework for Reform*, Report of the Premier's Advisory Council on Health, Edmonton, Alberta, December 2001; *Caring for Medicare: Sustaining a Quality System*, The Commission on Medicare, Regina, Saskatchewan, April 2001.

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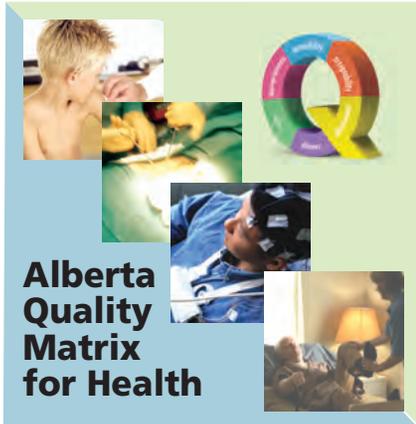
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Background

The quality matrix builds upon the experience of many organizations. Its genesis reaches back to 1998 when Alberta Health and Wellness consulted with stakeholders to develop a quality framework that included the six quality dimensions present in today's matrix. The framework was based on previous work done by other organizations such as the Canadian Institute for Health Information and the Canadian Council on Health Services Accreditation.

In spring 2003, Alberta Health and Wellness initiated a follow-up consultation process to review and validate the existing quality framework. The review examined developments in quality and health system performance including the use of quality frameworks and dimensions in other provincial, national and international jurisdictions. The assessment concluded that the quality framework and the six quality dimensions originally articulated for Alberta Health and Wellness in 1998 remained relevant.

Components of the Quality Matrix



The quality matrix has two components:

Dimensions of Quality and Areas of Need.

Combining the components yields a matrix with 24 cells.

In June 2005, the Health Quality Network approved a revised version of the Alberta Health and Wellness quality framework. Now called the *Alberta Quality Matrix for Health*, it includes revised definitions for the six quality dimensions and incorporates the four areas of need adopted from the U.S. Department of Health and Human Services Agency for Healthcare Research and Quality, which were developed under contract to the Institute of Medicine.³

The *Alberta Quality Matrix for Health* is a shared concept based on a common language that supports collaboration among health care organizations, health professionals and other stakeholders. It is a tool that has the power to clarify many aspects of health care quality, including how they affect each other and quality as a whole. It also has the potential to facilitate significant improvement in the quality of services for patients/clients.

The matrix is not an answer or formula. Using it is neither prescriptive nor mandated. Its success depends on its ability to help organizations and professionals frame their thinking and achieve their goals.

Dimensions of Quality

The six dimensions of quality focus on the patient/client experience, and are defined as:

Quality that is experienced when a patient/client comes in contact with the health system and the system is seen as Acceptable, Accessible, Appropriate, Effective, Efficient and Safe.

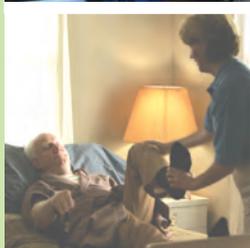
Acceptability	Health services are respectful and responsive to user needs, preferences and expectations.
Accessibility	Health services are obtained in the most suitable setting in a reasonable time and distance.
Appropriateness	Health services are relevant to user needs and are based on accepted or evidence-based practice.
Effectiveness	Health services are provided based on scientific knowledge to achieve desired outcomes.
Efficiency	Resources are optimally used in achieving desired outcomes.
Safety	Mitigate risks to avoid unintended or harmful results.

Further description of the dimensions is provided on page 6.

Quality is a balance of these six dimensions. All are interrelated and must be addressed, although in different circumstances one dimension may be emphasized over another. This results in creative tension among the dimensions. In one circumstance, accessibility and safety might be considered more critical than appropriateness or acceptability. In another, appropriateness might be the most critical dimension. Although tension exists between the dimensions, this can act as a catalyst for health system innovation. For example, it could promote an examination of ways services can be organized and delivered so all dimensions of quality can be improved.

³ Adapted from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services, Quality Tools found in <http://www.qualitytools.ahrq.gov/resources/glossary.aspx>.

Alberta Quality Matrix for Health



In the quality matrix, the range of services the health system provides has been separated into four distinct but interrelated areas of patient/client need. They are not divided according to who provides them. A person might receive services within any or all of these areas and can move back and forth between them as needed. The dotted line between each level illustrates that quality also relates to the experience of a patient/client transitioning between areas of need. The four areas of need are defined⁴ as:

Being Healthy	Achieving health and preventing occurrence of injuries, illnesses, chronic conditions and resulting disabilities.
Getting Better	Care related to acute illness or injury.
Living with Illness or Disability	Care and support related to chronic or recurrent illness or disability.
End of Life	Care and support that aims to relieve suffering and improve the quality of living with or dying from advanced illness or bereavement.

For example, a chronic condition such as diabetes can be viewed in each of the areas of need:

Being Healthy – health promotion and activities related to diabetes prevention.

Getting Better – diagnosis and treatment of the diabetes.

Living with Illness or Disability – supports and interventions related to sustaining a healthy lifestyle while living with diabetes.

End of Life – care and support for those at a terminal stage of the disease.

⁴ Adapted from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services, Quality Tools found in <http://www.qualitytools.ahrq.gov/resources/glossary.aspx>. These provide a patient/client centred perspective to the service categories used by Alberta Health and Wellness (1998): Diagnostic, Treatment, Supportive, Protection/Prevention/Promotion, and Service/System Integration.

How Can the Quality Matrix be Used?

A health care system that is successful in all quality dimensions and across all areas of need will be far better at meeting patient/client needs and providing quality health services. Patients/clients will experience care that is more responsive, more available, more integrated, more reliable, less wasteful and safer. Albertans could count on receiving care throughout the continuum of their lives, from preventive to acute to chronic to end of life services.

The matrix is a tool that allows users, providers and organizations to see possible combinations between the dimensions of quality and areas of need for the health system in general, or for specific conditions or programs. Doing this has the potential to increase understanding of how various aspects of the matrix and the health system relate to each other. Not all combinations will be relevant to evaluating quality and not all cells will be equally important to all audiences.

The quality matrix can be used at any level of an organization: governance, executive/management, program delivery, clinical/front line or support services. It can also be used by citizens or patients/clients at any aggregate– individual, clinic/practice, region, and health system. It can be used as a tool for developing a strategy as well as for day-to-day operations. The quality matrix provides a common language for multiple stakeholders in the health system.

Potential Uses of the Matrix

Examples of potential uses of the quality matrix include:

- facilitating linkages and aligning quality improvement initiatives between stakeholders;
- establishing new structures, processes and information requirements to support quality improvement initiatives;
- assessing whether or not to support a proposed initiative;
- assessing knowledge needs and identifying gaps;
- strategic and operational planning;
- policy development;
- describing, evaluating, measuring and assessing organizational performance and professional competence;
- identifying and assessing gaps in service delivery, program planning or information needs;
- developing a research agenda;
- determining, within a specific area of need and relative to the dimensions of quality, what value is achieved for the expenditure of resources; and,
- educating users, providers and organizations so they understand the importance of health care quality.

Using the matrix is intertwined with a commitment from health professionals and organizations to advance quality within the health system. We will know the quality matrix is a useful tool if it helps them achieve their goals. This will be demonstrated when:

- Quality is part of the culture of health care organizations, professions, etc.
- Terminology is used consistently.
- Discussions within the ministry and between health regions and service organizations are organized using the quality dimensions.
- Quality strategies are documented and aligned with each other in the business plan and annual reports of Alberta Health and Wellness, health regions and service delivery organizations.
- Quality dimensions are considered in developing performance standards and measures.
- The matrix is used as a tool to identify quality initiative opportunities.
- Research is advanced in priority areas expected to affect quality or the determination of quality.
- Partnerships between service delivery organizations and agencies that focus on quality are strengthened.
- Quality activities are coordinated among key stakeholders.
- Tracking quality on an ongoing basis allows patients/clients, health care providers, policy makers and educators to identify progress in improving the quality of services and determine where improvement efforts are most needed.
- Decision makers (health policy makers, boards and care providers) are guided by the matrix.



Dimensions of Quality



Acceptability

Health services are respectful and responsive to user needs, preferences and expectations.

Accessibility

Health services are obtained in the most suitable setting in a reasonable time and distance.

Appropriateness

Health services are relevant to user needs and are based on accepted or evidence-based practice.

Effectiveness

Health services are provided based on scientific knowledge to achieve desired outcomes.

Efficiency

Resources are optimally used in achieving desired outcomes.

Safety

Mitigate risks to avoid unintended or harmful results.

6 Expanded Definitions of the Dimensions of Quality



Acceptability: Health services are respectful and responsive to user needs, preferences and expectations.

This dimension includes qualities such as compassion, empathy and responsiveness and refers to care and service that establishes a partnership between providers, patients/clients and their families (when appropriate) to ensure decisions respect patient/client wants, needs and preferences. It also means patients/clients have the information and support they need to make decisions and participate in their own care.

providers of care avoid overuse (i.e. providing a service in circumstances where the potential for harm exceeds its potential benefit) as well as underuse (i.e. failure to provide a service when it would have produced a favourable outcome for a patient/client). It means that “people get the care they need” and “need the care they get”.⁵

Effectiveness: Health services are provided based on scientific knowledge to achieve desired outcomes.

This dimension is viewed primarily from the provider’s perspective but is also viewed from that of the user. Health care services are provided using evidence-based science and accepted practices that lead to improved outcomes in terms of health status and quality of life. It requires continuous monitoring and evidence of the results of care to know which services are likely to be effective and to use this information to improve care for all patients/clients.

Accessibility: Health services are obtained in the most suitable setting in a reasonable time and distance.

This dimension is characterized by smooth and continuous flow through the areas of need and stages of care within an area and by coordination across services and providers for specific or diverse problems. It means getting needed care and minimizing unnecessary delays.

Appropriateness: Health services are relevant to user needs and are based on accepted or evidence-based practice.

This dimension is viewed primarily from the user’s perspective but is also viewed from that of the health care provider. Quality health care includes selecting the intervention that is most likely to produce the optimal results. It is based on individually assessed needs, risk factors and costs. It requires that

Efficiency: Resources are optimally used in achieving desired outcomes.

Efficiency is about using resources wisely, including eliminating or avoiding waste. Concern for efficiency addresses short- and long-term value for money, and includes both the resources of the individual, family or community and the health system.

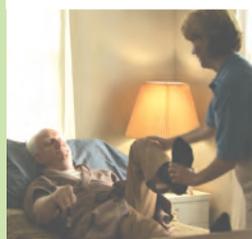
Safety: Mitigate risks to avoid unintended or harmful results.

Patients should not be harmed by the care that is intended to help them. Safety means designing and implementing health care service delivery processes to avoid, prevent and improve preventable adverse outcomes.

⁵ Source: Institute of Medicine, 2001.

Example of How the Matrix Is Being Used

Alberta Quality Matrix for Health



Program Evaluation: Alberta Hip and Knee Replacement Project

The Alberta Orthopaedic Society, which represents orthopaedic surgeons in Alberta, developed a redesigned innovative care delivery model for hip and knee replacements. The model involves primary care physicians preparing patients for surgery and caring for them after surgery. Three regional health authorities, Alberta Health and Wellness, the Alberta Orthopaedic Society and the Alberta Bone and Joint Institute agreed to pilot this innovative surgical model prior to field implementation.

These partners took the surgical components of the pathways and extended them to include the entire continuum of care from the initial contact with the family physician through to rehabilitation and home care. Each care path is based on medical evidence, scientific literature and the world's best practices with an overall objective of improving access to surgery and quality of patient care.

The project will take place over one year in three cities: Calgary, Edmonton and Red Deer. One assessment intake clinic will be established in each city. Twelve hundred arthroplasty patients will be followed prospectively through the entire continuum of the redesigned care paths.

The project evaluation includes measuring quality using the quality matrix dimensions of acceptability, accessibility, appropriateness, effectiveness, efficiency and safety. The matrix example on the last page illustrates some of the information and data that may be collected during the course of the evaluation.

How Does it Work?

Help us make the **Alberta Quality Matrix for Health User Guide** work for you.

Did you find the user guide helpful in understanding how the quality matrix can be applied to your specific area of interest?

Yes No

What suggestions do you have for making the user guide better?

How do you think the quality matrix can impact the quality of health care in your specific area of interest?

If you have any suggestions on how we could improve the guide or are willing to share how you have used the matrix, please fax them to **403.297.8258** or email **info@hqca.ca**. You may also mail them to us at:

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The Health Quality Network is a Health Quality Council of Alberta collaborative consisting of: Alberta Association of Registered Nurses, Alberta Cancer Board, Alberta Health and Wellness, Alberta Medical Association, Alberta Mental Health Board, Alberta College of Pharmacists, Aspen Regional Health, Calgary Health Region, Capital Health, Chinook Health Region, College of Physicians & Surgeons of Alberta, David Thompson Health Region, East Central Health, Federation of Regulated Health Professions, Health Quality Council of Alberta, Northern Lights Health Region, Palliser Health Region and Peace Country Health.

PROGRAM EVALUATION: ALBERTA HIP AND KNEE REPLACEMENT PROJECT

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Efficiency

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Safety

Mitigate risks to avoid unintended or harmful results.

- Patient satisfaction
- Service provider satisfaction including physician and other professionals

- Wait time from GP to specialist
- Wait time from specialist to surgery

- Compliance with redesigned care path

- Patient participation in weight loss and smoking cessation programs

- Improvement in patient's mobility
- Reduction in pain experienced by patient

- Preoperative utilization of physiotherapy and occupational therapy

- Morbidity rates including infections, complications and revisions