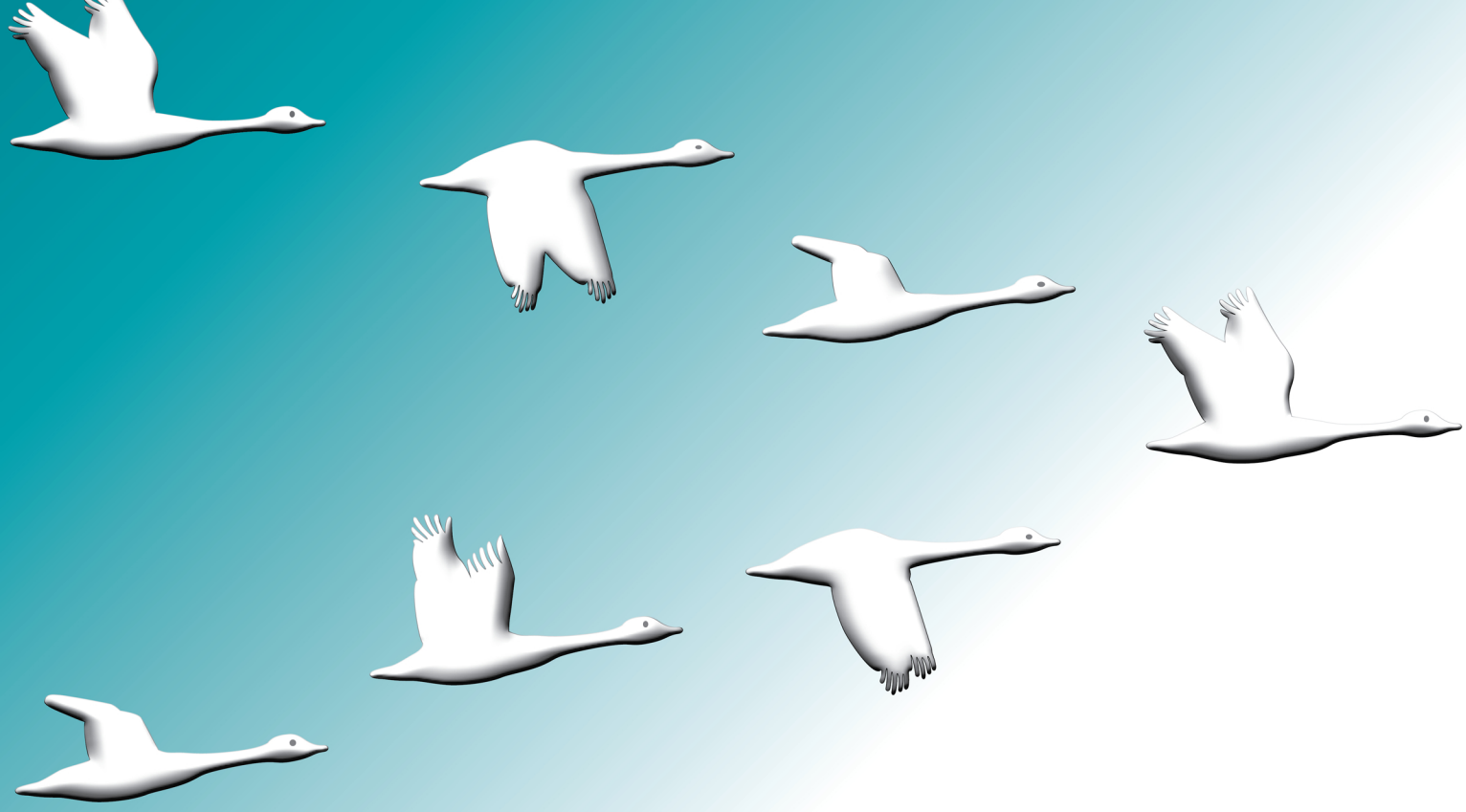

ACCOUNTABILITY AGREEMENTS IN ONTARIO'S HEALTH SYSTEM:

How Can They Accelerate Quality Improvement and Enhance Public Reporting?

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Ontario
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Conseil ontarien de la qualité des services de santé

JPPC

Accountability Agreements in Ontario's Health System: How Can They Accelerate Quality Improvement and Enhance Public Reporting?

Ontario Health Quality Council &
Ontario Joint Policy and Planning Committee
White Paper

July 31, 2008

Table of Contents

Index of Tables and Figures

Executive Summary

Service accountability agreements are contracts that describe the expectations on those who plan, manage and deliver health services. They identify the responsibilities of different parties and set out specific performance indicators and targets. Indicators in these agreements track performance related to financial health, organizational health, and quality of care. The targets and ranges define acceptable performance. Ontario's first such agreements appeared in 2005. Currently, they exist between the Ministry of Health and Long-Term Care and local health integration networks (LHINs), and between LHINs and hospitals. New agreements are being developed between LHINs and other organizations, such as community care access centres, community health centres, long-term care and other community service providers.

The Ontario Health Quality Council and the Ontario Joint Policy and Planning Committee have co-sponsored this white paper on how to improve these agreements in the future. Through key informant interviews and a review of documents and literature, we identify the following issues:

Quality Indicators: Indicators in future accountability agreements could be broadened to give a more complete view of quality. Current indicators in the ministry-LHIN and LHIN-hospital accountability agreements do not capture all of the Ontario Health Quality Council's nine attributes of quality,[1] and tend to measure narrow slices of quality. This is due to lack of data to measure what truly represents quality, and continuing problems with data quality. Further efforts are needed to establish common data sources, standards, measures, and analytical methods, as well as improved infrastructure for data collection and timely feedback on performance.

Indicator Targets and Corridors: Many of the current quality targets represent average performance and the target ranges (also called "corridors") are very wide. In future agreements, targets could represent international benchmarks for best performance, with progress towards best possible care expected over time. Tighter corridors or ranges would be calculated around these targets.

Alignment: To maximize effectiveness, accountability agreements need to be aligned with each other, from the ministry through the LHINs to health-care organizations and providers. It may be useful to create an indicator "cascade" with a relatively small set of system-level measures representing ministry priorities at the top and a larger, related set of micro-level measures at the service provision level that represent what those at the front line can do to improve system quality. Accountability agreements could also be better aligned with major quality improvement initiatives in the province. Having indicators and targets in accountability agreements that reflect the aim of these campaigns could accelerate improvement. Finally, the agreements could be better aligned with public reporting initiatives. Public disclosure of indicators, targets and variations in performance can show the public whether the health system is meeting its expectations for high-quality care.

Accountability agreements represent an important step forward in promoting better health system performance in Ontario. While much progress has been made in the past three years, there is great room for improvement in their design and implementation. Alignment between accountability agreements, public reporting, quality improvement initiatives, and strategies at all levels of the system will be essential to accelerating system-wide quality improvement.

[1] The Ontario Health Quality Council has defined a high-performing health system as one that is accessible, effective, safe, patient-centred, equitable, efficient, appropriately resourced, integrated, and focused on population health. See also Appendix F.

Introduction

Accountability agreements are contracts that describe the expectations for organizations that plan, manage and deliver health services. The agreements identify the responsibilities of different parties and set out specific performance indicators and targets. Accountability agreements are relatively new in Ontario, with the first ones established in 2005.[2] Currently, they exist primarily at two levels of the health-care system. The Ministry of Health and Long-term Care ("the ministry") holds local health integration networks (LHINs) accountable for local system performance. The LHINs in turn develop accountability agreements with local health service provider organizations, including hospitals, long-term care facilities, community care access centres, community health centres and others.

This white paper explores how these agreements are being used to support improved health care quality. It outlines the history of accountability agreements in Ontario and describes the experience in England with similar agreements. More importantly, it presents ideas for decision makers who are developing and planning future versions of accountability agreements and struggling with questions related to indicator selection and target setting. Lastly, it examines how accountability agreements could align better with overall system strategic goals, public reporting and quality improvement initiatives, recognizing that, while they fulfill different roles, their objectives overlap and they can complement each other.

This paper is co-sponsored by the Ontario Health Quality Council and the Ontario Joint Policy and Planning Committee secretariat. The Ontario Health Quality Council has a legislated mandate to report to the public and support continuous quality improvement. The Joint Policy and Planning Committee is a partnership between the ministry and the Ontario Hospital Association with LHIN participation at all levels. It has a mandate to recommend and facilitate hospital reform. As part of that mandate, the Joint Policy and Planning Committee has been the forum through which the current hospital service accountability agreements have been developed. In advance of the development of the next round of hospital accountability agreements, this paper fulfills a Joint Policy and Planning Committee deliverable and aims to stimulate discussion about the development of a framework for accountability agreements. The Ontario Health Quality Council and Joint Policy and Planning Committee secretariat present this white paper in the spirit of promoting the alignment of activities between all parties interested in improving the quality of health care and system performance.

The information in this paper is based on a review of accountability agreements between the ministry and LHINs and LHINs and hospitals, related documentation in Ontario, and a targeted literature review of performance agreements and quality improvement. It is also based on key informant input (see Appendix G for a list of reviewers and informants). The information is up-to-date as of the release date of this paper, but policies and the elements of the accountability agreements are dynamic.

[2] Contracts have, nonetheless, been in place with transfer payment agencies for many years.

Overview of Accountability Agreements in Ontario

Table 1 below describes the history of accountability agreements in Ontario.

Table 1: Milestones in Development of Accountability Agreements in Ontario

Year	Key Milestones
2003	Work begins under the auspices of the Joint Policy and Planning Committee to develop a multi-year funding and accountability framework for Ontario hospitals
2004	Commitment to the Future of Medicare Act requires accountability agreements in Ontario
2005	First accountability agreements are negotiated between the ministry and hospitals
2006	Local Health System Integration Act establishes LHINs
2007	LHINs become responsible for service accountability agreements with local providers
2007	Ministry-LHIN accountability agreements enter into force for three years (ending March 31, 2010)
2008	LHINs and hospitals negotiate two-year agreements
2009	LHINs to enter into agreements with community health centres, community mental health and addiction services, community service agencies and community care access centres
2010	LHINs to enter into agreements with long-term care facilities

Ministry-LHIN Accountability Agreements

General description

The Ministry-LHIN Accountability Agreements (MLAAs) describe the obligations of the ministry and LHINs in making sure LHINs fulfill their mandate to plan, integrate and fund local health-care systems. The agreements aim to support a collaborative relationship between the ministry and the LHINs in carrying out a made-in-Ontario solution to improve the health of Ontarians through better access to high-quality health services, and by co-ordinating and managing health care at the local level effectively and efficiently (see www.lhins.on.ca).

The current Ministry-LHIN Accountability Agreement includes a primary agreement and eleven schedules. The primary agreement states that "parties agree to adopt and follow a proactive and responsive approach to performance improvement" based on several principles. These include a commitment to ongoing performance improvement, an orientation toward problem-solving and a focus on the relative risk of non-performance (for more detail, see www.lhins.on.ca). The eleven schedules describe LHIN responsibilities in: community engagement; information management; financial management, financial protocols and budget allocation; local health system compliance, inspection and enforcement; local health system performance and e-health (see Appendix A).

Indicators

Table 2 below lists current indicators in the Ministry-LHIN Accountability Agreements. The performance indicators have targets for achievement. Pilot indicators are being tested and tracked, but have no targets and could become performance indicators in the future. Indicators are reviewed annually. The pilot indicators for 2008/09 are currently under review and additional ones will likely be included in the Ministry-LHIN Accountability Agreements.

Table 2: Current Indicators in Ministry-LHIN Accountability Agreements

Agreement Performance Indicators	**Agreement Pilot Indicators (2007-08)**
Access • 90th percentile wait times for cancer surgeries • 90th percentile wait times for cardiac bypass procedures • 90th percentile wait times for cataract surgeries • 90th percentile wait times for hip and knee replacements • 90th percentile wait times for diagnostic (MRI/CT) scans *Quality* • Readmission rates for acute myocardial infarction *Integration* • Rate of emergency department visits that could be managed elsewhere • Hospitalization rate for ambulatory care sensitive conditions • Median wait time for long-term care placement • Percentage of alternate level of care days (no target for 07/08)	• Change in hospital productivity • Percentage of chronic/complex continuing care patients with new stage 2 or greater skin ulcers • Perception of change in quality of care • In-hospital cancer deaths as a percentage of all cancer deaths • Psychiatric readmission rates to hospitals • Timeliness of first post-acute home care visit • Readmission rates of Community Care Access Centre clients referred by hospitals back into an acute care setting • Percentage of individuals with multiple psychiatric hospitalizations in the past fiscal year

The performance and pilot indicators were recommended by the Local Health System Performance Reference Group, comprised of LHIN and ministry representatives working under the direction of the Accountability Development Team. The reference group identified potential indicators based on the ministry health system scorecard, hospital accountability agreements and annual plans, community care access centre information, and other sources. A decision tree with defined criteria, similar to that used for hospital indicators, was used to create the list of indicators.

Targets, corridors and consequences

Each LHIN has specified targets for performance indicators presented in Table 2. These targets are set through negotiations between the ministry and the LHIN. Corridors or ranges are calculated around the targets to account for normal variation in performance results, measurement error and other factors. The corridors are set in the same way for every LHIN and are generally between ± 10 percent and 25 percent of the target, depending on the indicator. LHINs report quarterly to the ministry on whether they are outside the corridor. If so, they must explain the shortfall to their boards and the ministry, and they may enact strategic interventions to address the missed target.

Hospital Service between Local Health Integration Networks and Hospitals

General description

Hospital service accountability agreements (H-SAAs) were introduced in 2005/06 following negotiations between hospitals and the ministry that were facilitated by the Joint Policy and Planning Committee. These accountability agreements are complemented by the hospital annual planning submissions (HAPS) which provide additional details on hospitals' priorities and operations and serve as a means for reporting and monitoring performance during the term of the agreement. The hospital annual planning submission and hospital service accountability agreements together form a multi-year planning and funding framework for hospitals. The current agreement excludes cancer services and major capital projects, for which separate funding and accountability frameworks exist.

LHINs recently took over the hospital annual planning submission and related accountability agreement process from the ministry. The current hospital service accountability agreement covers the period from April 2008 to March 2010. Its stated goal is to create "a health care system that keeps people healthy, gets them good care when they are sick and will be there for our children and grandchildren." LHINs have indicated that the agreement will serve as a template for the other service provider agreements over which LHINs have responsibility.

Indicators

Hospital service accountability agreements and hospital annual planning submissions track indicators related to financial health, organizational health, patient access and outcomes, and system integration (see Table 4 below). While patient experience was approved as an additional domain, indicators for this fifth domain have yet to be approved. Indicator selection is based on the criteria listed in Table 3 (see Appendix B for details).

Table 3: Selection Criteria for Hospital Indicators

Primary Criteria for Indicator Selection	Secondary Criteria
• Direct measure (or potential measure) of ministry strategic goal or priority • Construct validity • Evidence basis • Within hospital control • Responsiveness to change	• Availability and timeliness of data • Data quality and reliability • Acceptability and familiarity

Hospital accountability indicators are categorized as follows:

- **Performance indicators** meet the indicator selection criteria. They have targets and consequences if hospitals miss the performance standard. Of the current 13 performance indicators in the hospital service accountability agreements, eight are indicators of service volume.
- **Monitoring indicators** meet all primary criteria, but fail at least one secondary criterion. There are no consequences if they are not met. However, they may help the LHINs and hospitals identify and solve problems and could potentially "graduate" to become performance indicators.

- **Developmental indicators** meet all primary criteria, but fail at least one of the secondary criteria. Due to data quality concerns and/or methodological issues requiring further work there are no consequences for underperformance.
- **Explanatory indicators** provide operational information and context for the interpretation of the performance or monitoring indicators. These indicators fail at least one primary criterion and are therefore not considered for graduation to performance indicators.
- **Additional performance obligations** are listed in the schedules that accompany the hospital accountability agreements (e.g., LHINs have the option of including additional indicators relevant to their regions), as well as in the supplementary funding letters related to ministry priorities (e.g., the Ontario Wait Time Strategy process and outcome measures).

Performance indicators are included in the hospital service accountability agreements. The monitoring, explanatory and developmental indicators that can be calculated, are reported quarterly in the Web-enabled Reporting System (WERS), an on-line planning and reporting system for hospitals and other institutions.

Targets, corridors and consequences

Targets and corridors (target ranges) vary across hospitals. Targets for performance indicators are negotiated between each hospital and the LHIN based on the accountability agreement between the ministry and the LHIN, the hospital's past performance and the hospital's capacity to manage risk. A performance corridor is set for each performance indicator, typically between ± 2.5 and 3 standard deviations from the target. For example, the corridor for 30-day readmission rates for specified case mix groups is the target *plus* three times the standard deviation of that number (Joint Policy and Planning Committee November 2007). Hospitals with performance indicator scores that miss the target, but fall within the corridors, are deemed to have met their performance obligations. The hospital accountability agreement lays out a process for LHINs and hospitals to follow if the performance standard is not met, although, to date, the focus has been on the financial indicators.

For the Wait Time Strategy (and other services covered in the hospital service accountability agreement supplementary funding letters), hospitals that do not meet their volume targets or other obligations face financial clawbacks and must return funds to the LHIN and the Wait Time Strategy office. Table 5 highlights some of the Wait Time Strategy performance requirements.

Table 4: Hospital Service Accountability Agreement (H-SAA) and Hospital Annual Planning Submission (HAPS) Indicators[3]

Indicator Type	Financial	Organizational	Patient Access and Outcomes	System integration
Performance Indicators	• Total margin • Current ratio	• Percentage of full-time nurses	• Readmissions to *own* facility for specified case mix groups (acute myocardial infarction, stroke, chronic obstructive pulmonary disease, pneumonia, congestive heart failure, cardiac, gastrointestinal, diabetes) *Complex continuing care* • Percentage of patients with new stage 2 or greater skin ulcers *Volume* • Total (inpatient and day surgery) weighted cases • Mental health inpatient days • Elderly Capital Assistance Program rehabilitation inpatient days • Complex continuing care resource utilization group-weighted patient days • Ambulatory care visits (outpatient and emergency department) • Emergency visits • Other volumes (wait times, pre-construction operating plans, protected services, critical care)	
Monitoring Indicators	• Operational efficiency	• Paid sick time • Paid overtime • Workplace safety: injury frequency	*Readmissions* • Readmissions to *any Ontario* facility for specified case mix groups • Readmissions to own facility for congestive heart failure *Complex continuing care* • Percentage of chronic patients with indwelling catheters • Percentage with improved performance of activities of daily living • Percentage with disruptive or severe pain • Percentage with worsened bladder/urinary continence • Percentage in daily physical restraints • Percentage with decline in ability to walk or wheel self • Percentage with increased depression or anxiety • Percentage with communication decline • Percentage with falls within 30 days of assessment • Percentage with pressure sores • Percentage with increased depression/anxiety • Percentage on antipsychotic medication without a diagnosis of psychosis	

[3] This table lists indicators used across all LHINs. Individual LHINs may add additional indicators for local use.

Indicator Type	Financial	Organizational	Patient Access and Outcomes	System integration
			• Percentage of short-stay patients with disruptive or severe pain *Emergency Department* Emergency department lengths of stay for the Canadian Emergency Department Triage and Acuity Scale levels 1-2, 3 and 4-5 *Stroke* • CT/MRI within 24 hours • Percentage discharged on ASA (acetylsalicylic acid)/antithrombotic therapy • Percentage discharged with anticoagulation for atrial fibrillation *Rehabilitation (stroke patients only)* • Change in Functional Independence Measure™ scores without length of stay adjustment • Rehabilitation length of stay	
Explanatory Indicators	• Total Margin – Hospitals	• Workplace safety: injury severity	*Rehabilitation (stroke patients only)* • Change in Functional Independence Measure™ scores with length of stay adjustment • Rehabilitation length of stay efficiency	
Developmental Indicators	• Capital health: facility condition index* • Capital health: information technology and medical equipment*	• Turnover rate* • Vacancy rate* • Training and development * • Staff satisfaction	• Complex continuing care quality of care index • Emergency department time to admission • Stroke quality of care index • Hospital standardized mortality ratio (HSMR) • Mental health indicators* • Others (patient safety, adverse events)*	*Community care access centres* • Receipt of first nursing home care visit within three days of discharge for patients in high-risk of readmission • Time to first nursing home-care visit post hospital discharge • Frequency of nursing home-care visits in post-acute period • Proportion of discharge abstract database-coded referrals who receive first home-care visit *Community integration* • Alternative level of care profile • Alternative level of care index • Propensity to identify alternative level of care cases

* Have not been calculated as indicator definitions or data sources have yet to be finalized.

Table 5: Wait Time Strategy Performance Requirements

Service delivery

- Percentage of surgical open wait list entries entered within two business days of decision to treat
- Percentage of surgical wait list entries closed within two business days of procedure date
- Percentage of diagnostic imaging cases that are timed procedures
- Percentage of wait list entries opened using decentralized data entry approach

- Base and incremental cataract, cardiac bypass, cancer, hip and knee surgical volumes and MRI/CT hours
- Wait Times: Percentage of wait times within Ontario wait time targets for cataract, cardiac bypass, cancer surgery, hip and knee replacement and MRI/CT scans
- Submit monthly data as part of Surgical Efficiency Targets Program

Board monitoring

- Hospital standardized mortality ratio
- Status of patients waiting longer that the wait time targets
- Central line infections and ventilator-associated pneumonia reported through the Critical Care Information System
- Collection of surgical site infections and publicly report by December 2008
- MRI rate
- Cataract survey: measure nosocomial infection rate, capsular rupture, and severe postoperative inflammation
- Three-month readmission rates post hip and knee replacement

Process

- Surgeons' use of the Wait Time Information System
- Work toward reporting paediatric wait times
- Implement Emergency Department Reporting System
- Board quality committee in place

Developmental

- Paediatric surgical wait times
- Emergency department wait times
- Patient safety
- Mental health continuity of care

Other Service Accountability Agreements

With input from the ministry, LHINs are currently developing service accountability agreements with community health centres, community mental health and addiction services, community service agencies, and community care access centres to be put in place by March 31, 2009. These will be the first such agreements for these organizations. Core performance indicators will be grouped within domains of a balanced scorecard, which could include financial health, organizational capacity, quality, the patient/client experience, and a health system perspective. LHINs aim to have as many common indicators across services as possible. As with the hospital service accountability agreements, individual LHINs may also include additional indicators.

While LHINs are responsible for local service integration, they currently have no jurisdiction over public health or family health teams (FHTs) and other primary care delivery models, apart from community health centres. Family health teams have business plans and contracts with the ministry which specify measures such as patient enrolment, volumes, and service and staffing type and levels. With time, these contracts may evolve into accountability agreements. For public health, a reporting scorecard is being developed that will reflect system and/or health unit performance based on public health standards.

Cancer Care Ontario has agreements with health care providers (mainly hospitals) that link standards and performance to funding. These agreements are focused on access and quality improvement. For example, the new Cancer Care Ontario colonoscopy agreements have volume and quality indicators linked to standards. Standards for each clinical portfolio (such as prevention and screening, diagnosis, treatment, and palliative care) are set by an expert panel. Contracts with hospitals provide for funding, stipulate volume targets, set out requisite quality improvement initiatives (e.g., lung cancer surgery standards), and require collection of data on access and wait times for all cancer procedures and public reporting each quarter.

Cancer Care Ontario sets priorities for quality improvement at a provincial and regional level annually. With input from experts and regional vice presidents, indicators are chosen to monitor performance on approximately ten priorities, each with associated performance indicators. Targets are based on provincial standards and/or expert input and these are negotiated with each region. Cancer Care Ontario meets quarterly with the regional cancer programs to discuss performance targets and progress made at the regional level. If targets are not met, strategies are developed to either meet targets or redistribute volumes to sites with greater capacity. Hospitals that miss their volume targets must remit some of their funding, which is then reallocated within the year to meet needs in other hospitals.

The English Model

General description

England's approach to accountability and performance monitoring demonstrates an integrated approach to setting, delivering and monitoring standards. In this system-wide model, quality and financial duties are given equal weight. A national performance framework outlines common indicators and explicit targets and standards for performance. Information on performance consistent with this framework is reported to the public in plain language. Quality improvement activities are aligned with targets and performance agreements.

England's National Health Service has established lines of accountability from the central to local level. The National Health Service's Department of Health sets system-wide priorities, policies, directives and timelines, which are carried out by ten strategic health authorities in different regions (similar to LHINs). Each strategic health authority has multiple primary care trusts which contract with local general practitioner practices for primary care services. Primary care trusts also commission hospital and mental health services from hospital trusts (which have multiple hospitals under their umbrella) and mental health trusts. Primary care trusts and strategic health authorities develop clinical governance frameworks through which local health service provider groups are held accountable for continuous quality improvement and standards of care (Baker et al. 1999).

Indicators

Health services are assessed against a national performance framework and the results of the national patient and user survey. The national performance framework aims to give a balanced view of quality, including outcomes from health care, patient experience, efficiency, patient/carer experience, effectiveness and accessibility. For example, in the primary care quality and outcomes framework,

there are 146 quality indicators related to clinical care for ten chronic diseases, the organization of care and the patient experience (see Appendix C).

This fiscal year (2008/09) is the beginning of the next three-year planning cycle in the National Health Service and the preparation of new agreements is underway. As part of this exercise, the National Health Service is developing new indicators or "vital signs," across a range of services to encourage primary care trusts and local authorities to work in partnership to deliver on outcomes in their operational plans.

Examples of "vital signs" include: reduced health care-associated infections; improved access through achievement of the 18-week referral to treatment target; improved access (including evenings and weekends) to general practitioners' services; improved health outcomes; reduced health inequalities; improved patient experience; and improved outbreaks responsiveness. Primary care trusts are not limited to "vital sign" measures; they are also expected to identify locally relevant measures. These new indicators will be monitored in addition to those outlined in Appendix C.

Targets and consequences

The National Institute for Clinical Excellence provides guidance on best practices to be adopted in England. This input is used to set national targets for performance. The National Health Service has national service frameworks which outline service standards and milestones for service improvements that service providers must adhere to. Frameworks exist for different clinical areas (such as mental health and coronary heart disease).

Some National Health Service goals represent target wait times (e.g., a two-week maximum wait from a general practitioner's referral to first outpatient appointment for all urgent cancer referrals). Other goals are volume targets (such as 7,500 new cases of psychosis served by early intervention teams per year). However, some targets represent "stretch" or "aspirational" goals for reliable delivery of evidence-based practice, based on the theoretical best (for example, 100 percent of people with diabetes are to be offered screening for the early detection and treatment, if needed, of diabetic retinopathy). See Appendix C for more examples of these targets.

Additional local targets are set by each primary care trust. For the 2008/09 annual operational plan, each primary care trust must describe how local targets have been agreed upon, define success, define milestones, and detail their proposed accountability agreements' content on health outcomes.

Health administrators face consequences for not meeting system-wide expectations. For example, hospitals that fail to meet certain targets face financial penalties and administrators can be fired. Examples from the standard National Health Service contract with acute-care hospitals can be found in Appendix D.

Public reporting

The Healthcare Commission is an independent body that monitors and reports to the public on the performance of the health-care system. The public can view annual ratings (weak, fair, good or excellent) in different domains (e.g., quality of services, wait times, resource use) for individual primary care trusts and hospitals (see http://www.qof.ic.nhs.uk/ for full results). Measures used for

public reporting are consistent with the national performance framework. Going forward, the Healthcare Commission will build the new measures described above into its monitoring activities.

Quality improvement strategy

The clinical governance frameworks describe not only accountabilities for performance, but also require provider organizations to specify clear quality improvement strategies, including:

- Comprehensive programs of quality improvement
- Plans for monitoring of clinical care with appropriate information technology
- Processes for integrating quality of care into organizations
- Clear risk management policies, including procedures that support professional staff in identifying and addressing poor performance
- Clear lines of responsibility and accountability for the overall quality of clinical care
- Workforce planning and professional development of staff.

As an example, recent results show a reduction in wait times to record low levels, and improvements in clinical outcomes for cancer and heart disease (National Health Service 2007).

Ontario Issues, Challenges and Opportunities

This section discusses the challenges shared by those who have developed and implemented accountability agreements, and identifies opportunities and ideas for improvement in the future. Learning from past experience can also help shape the new accountability agreements currently being introduced in those sectors that have not had them previously.

Addressing Gaps in Measurement of Quality and System Performance

As noted previously, the LHIN performance indicators are grouped under access, quality and integration. Hospital performance and monitoring indicators are grouped under financial health, organizational health, patient access and outcomes, and system integration. Hence, there have been deliberate attempts to create a balance between indicators of quality and fiscal performance. In the short history of accountability agreements, a variety of clinical indicators have also been introduced which did not exist previously. Thus, the ministry, LHINs and other stakeholders have made progress in raising the profile of quality.

Despite efforts to date, however, interviewees widely acknowledged that Ontario is still far from being able to capture a comprehensive picture of quality across the system, and that far more progress is needed. Some interviewees felt that the emphasis to date had been on developing quality indicators that can be measured with existing data, rather than investing in the development of more meaningful quality indicators.

Missing attributes of quality

The Ontario Health Quality Council uses nine attributes to assess and report on whether Ontario has a high-performing health system. Specifically, it looks at whether the system is accessible, effective, safe, patient-centred, equitable, efficient, appropriately resourced, integrated, and focused on

population health (see Appendix F for more detail). While there has been important progress in measuring accessibility, and some attempts at capturing effectiveness and safety, systemic indicators for population health, equity and resourcing are needed. Patient experience has been approved as an additional domain for hospital accountability agreements, but indicators have yet to be finalized.

Measuring quality across the system, not just narrow slices of the system

Current accountability agreements measure only a small component of a particular attribute of quality. The measurement of "narrow slices" of the system may occur because data are only available in those areas, or "by design" in instances where a particular strategy or disease focus has been identified as an improvement priority. For example, the hospital performance indicator measuring the percentage of complex continuing care patients with skin ulcers represents only one aspect of patient safety and one type of patient. Data on ulcers occurring in other patients are not available because data collection occurs only in complex continuing care. (Current efforts are underway to pilot a quality of care index for complex continuing care, but this is for one area only.) Also, there is no information on other areas of safety such as medication errors or misdiagnosis. The danger of holding the system accountable to only one small component of safety is that attention could be diverted from other important areas that are not being monitored.

Another example of measurement across narrow slices is the focus in the Ministry-LHIN Accountability Agreements on hospital-based care, without adequate coverage of population health, primary care, and community-based services. These agreements do track rates of ambulatory care sensitive hospitalizations and avoidable emergency department visits which represent the downstream impact of quality problems outside the hospital. However, these measures do not represent the specific steps needed in non-hospital settings to optimize quality, such as better chronic disease prevention and management. The agreements currently being developed with community-based organizations represent an important opportunity to address this imbalance.

A recent study based on interviews with LHIN administrators identified the development of better indicators of system integration as a high priority (Health System Performance Research Network 2008). Current measures of integration describe timeliness and frequency of home care visits, but do not capture the actual smoothness of the transition between care settings (such as ease of transfer of the client or the complete, accurate transfer of related information).

Ontario is considering designing system-level indicators and targets that mirror the goals laid out in the ministry's soon-to-be-released 10-year strategic plan. Lessons can be learned by examining the National Health Service system and the Institute for Healthcare Improvement's "big dots"or "whole system measures" of performance (see Table 6 and Appendix E for sample indicators). The Institute for Healthcare Improvement's "big dots" are designed primarily for hospitals and institutions, but could potentially be adapted for use in other settings.

Table 6: Suggested System-wide Measures of Quality from the Institute for Healthcare Improvement

Quality Dimension	Recommended Hospital Performance Measures (U.S.)
Safe	Adverse drug events
	Work days lost
Effective	Hospital standardized mortality ratio (HSMR)

	Unadjusted raw mortality rate
	Functional health outcomes
	Hospital readmission rate
Patient-Centered	Patient satisfaction score
	Patient experience score
Timely	Third next appointment available
Efficient	Costs per capita
	Hospital specific standardized reimbursement
	Hospital days per decedent during the last six months of life
Equitable	Measure of equity ("whole system measures" stratified)

(Institute for Healthcare Improvement 2007)

In some instances, Ontario is already using measures similar to those in Table 5 (such as hospital readmissions, worker injury severity and frequency, operational efficiency, and functional health outcomes, albeit for complex continuing care patients only). In other instances, there is no comparable measurement, and further indicator development may need to be considered. In some cases, data are now available (such as patient satisfaction or hospital standardized mortality ratios), but have not yet been incorporated into accountability agreements. If used for accountability, patient experience and satisfaction data would need to be expanded beyond the hospital sector, and for hospitals, mandatory hospital participation and greater clarity is needed regarding the data collection tools, sampling strategy, sample size, and appropriate targets and corridors. The Canadian Institute for Health Information began publicly reporting on the hospital standardized mortality ratio in November, 2007 (CIHI 2007). Some hospitals in Canada are using the hospital standardized mortality ratio to set and track improvement targets, and selected hospitals in England and the U.S. are achieving declines in mortality through quality improvement efforts. However, if used for accountability and quality improvement, it would be necessary to resolve variations in coding (e.g., the definition of palliative care), and clarify what specific evidence-based interventions hospitals can undertake to reduce the hospital standardized mortality ratio.

In addition to existing performance indicators, Ontario's health-care system could also consider adding the following indicators:

Safety

- A measure of global hospital adverse event rates using tools such as the Institute for Healthcare Improvement's trigger tool or the Canadian Adverse Event Study tool
- Indicators tracking Safer Healthcare Now! initiatives

Integration

- A measure of alternate level of care bed days based on objective criteria for designating alternative level of care
- Measures of continuity and co-ordination between primary care and hospitals

Access

- Global measures of access for all surgeries[4]
- Wait times for a broader number outpatient and community-based services

[4] The wait time information system aims to capture all surgery this year.

While the above suggestions address quality of care specifically, a similar "big dot" approach can also be applied to other domains related to financial and organizational health. Scorecards in other jurisdictions report "big dot" measures across these multiple domains (see, for example, www.premierinc.com).

Problems with data quality

Interviewees noted continuing problems with data quality, including lack of data, incomplete data, a lack of standardized definitions, data inconsistencies across sites, and over-reliance on administrative data, which give a limited view of quality, especially in the area of patient safety. These problems persist despite efforts to develop conceptual frameworks and high-level plans to improve data quality (Ministry of Health and Long-Term Care 2007, Canadian Institute for Health Information 2005). One of the most striking examples of poor data quality cited was the measure of alternate level of care (ALC) bed days, a critical indicator of inefficient use of hospital resources. The measure is subject to a large degree of physician discretion in coding, and sites that are attempting to introduce objective criteria are using different tools to do so.

Some interviewees suggested more investment in data quality, systematic assessments of data quality, and the inclusion of an indicator of data quality in future accountability agreements.

Data collection burden

Many interviewees expressed concern about the increasing burden of data collection for indicators in accountability and other related agreements. In particular, many in the hospital sector feel that there are too many indicators, are resistant to including more, and want greater assurance that the information required will actually be used. Interviewees also felt that there was a lack of dedicated resources and tools to support data collection requirements and conduct necessary analyses. Another burden reported was the need to report indicators quarterly within tight time frames. However, others felt the data collection burden was overemphasized, arguing that most of the indicators use readily available data that have been collected regularly for some time.

Although there are only 13 performance indicators to which hospitals are held legally accountable in the hospital service accountability agreements, at least 40 other indicators must be reported quarterly. As well, there are additional accreditation, ministry and other organizational reporting requirements (e.g., for Cancer Care Ontario, the Wait Time Strategy, critical care networks, cardiac care networks, the emergency department reporting system, trauma hospital reporting, radiation therapy, special data collection, LHIN growth funding for hospitals with unanticipated increases in volume). Individual LHINs may also require additional performance indicators. In most instances, funding is contingent on submitting data.

Excessive data collection burden has the danger of diverting attention away from quality improvement activities. To address the concurrent problems of incomplete information on quality, and concerns about the excessive burden of data collection, it will be important to achieve a balance between collecting new information to monitor health-system performance and phasing out old requirements. Alignment of indicator reporting across different initiatives could also reduce duplication of efforts and help ensure that only the most important data are collected routinely.

Interviewees suggested there be more centralized supports in human resources, information technology tools and analysis to facilitate timely and accurate reporting. It was also suggested that more data on quality could be housed in common repositories such as the Canadian Institute for Health Information and the Institute for Clinical Evaluative Sciences, for more efficient, centralized processing of information.

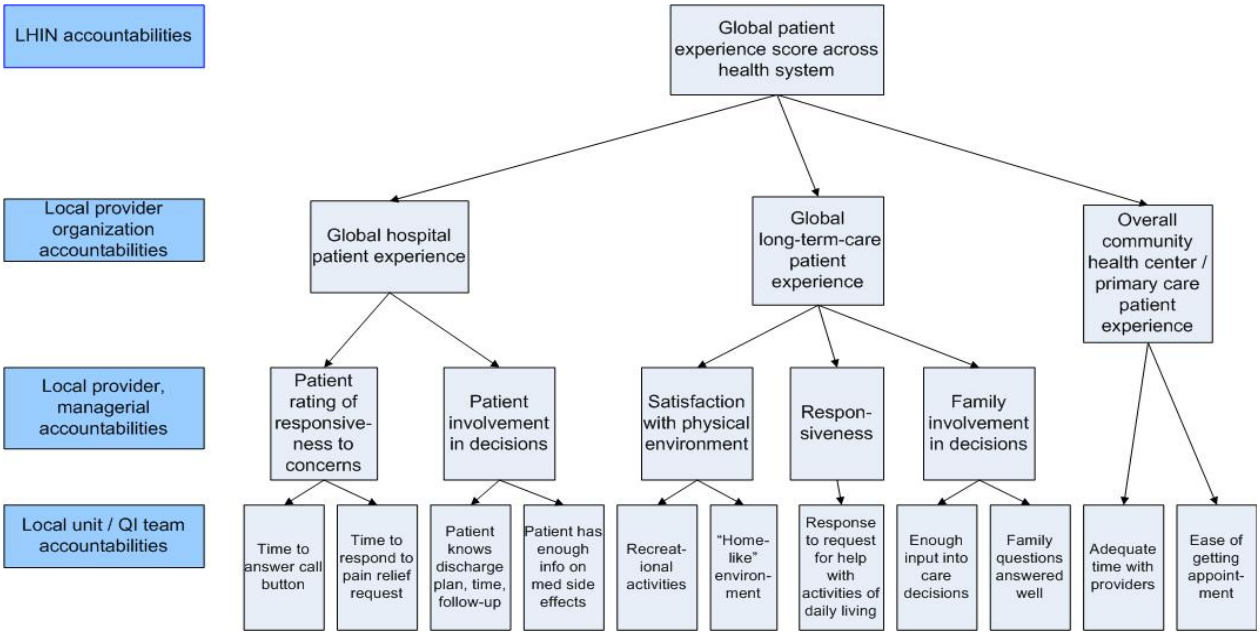
The Indicator Cascade: Aligning Accountability across Different Levels of the System

Health care, like other complex systems, has individuals working at different levels, each with different roles and responsibilities. At the top, the ministry is responsible for system-wide performance, which is driven by performance at the LHIN level. LHIN performance, in turn, is determined by the performance of local providers such as hospitals, long-term care sites, primary care, and community services. The performance of each provider is driven by its internal organizational units or teams. For example, overall hospital performance is dependent on performance of surgical and medical units, intensive care units, emergency departments and outpatient services.

Within the system, there are lines of accountability (from individual health-care providers to organizational units/teams to the LHIN to the ministry) which map out how performance at one level drives performance at the next level. One way to describe this is through an "indicator cascade," as shown in the hypothetical illustration in Figure 1.

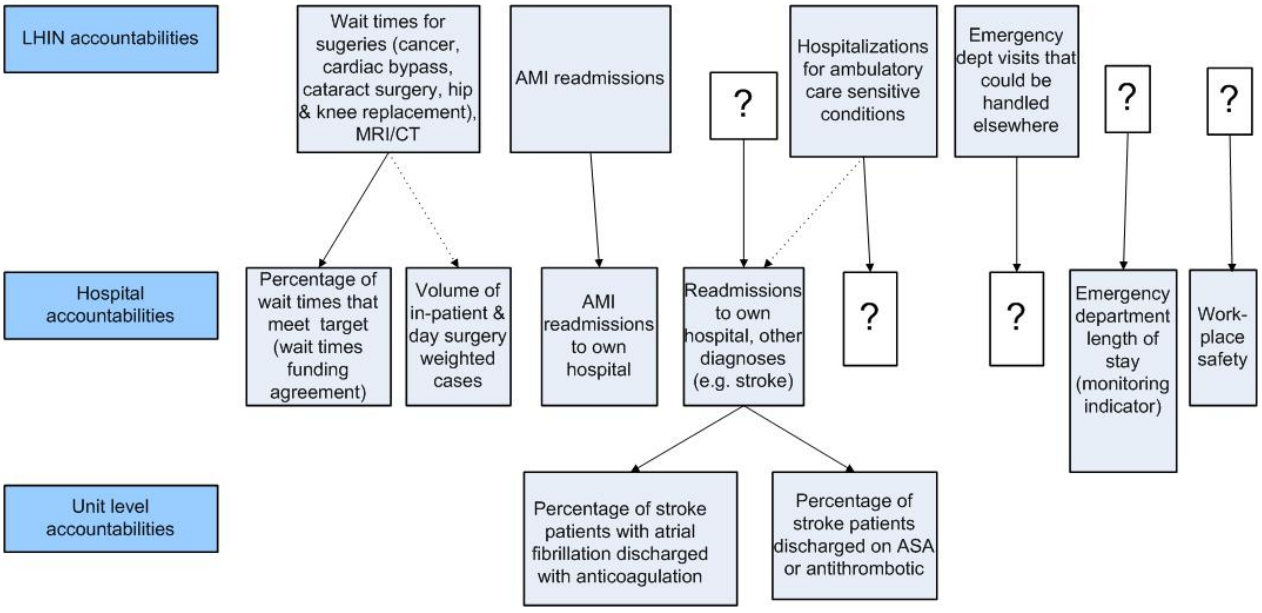
For each measure, there may be performance targets which, if met, would lead to improvements at the next level. Such a cascade can operate both as a top-down and bottom-up way of describing contributions to overall health system performance. The top of the cascade would reflect key indicators and targets of the health system strategic plan, with the full cascade showing the role of individual organizations, units or teams and health professionals in achieving system goals.

Figure 1: Hypothetical Example of an Indicator Cascade



Within current agreements, some indicators do align well, as shown in Figure 2 below. For example, the Ministry-LHIN Accountability Agreements specify wait time measures and targets, and hospital agreements have wait time volume targets. In some instances, there are "small dot" indicators which describe actions that need to take place at a unit level in order to drive improvements in hospital-level performance indicators (such as evidence-based practices that could reduce stroke readmissions). In other areas, however, there is not clear alignment. Hospitals are held accountable for readmissions for a variety of diagnoses, but only acute myocardial infarction readmissions are tracked at the LHIN level. Workplace safety is a hospital annual planning submission indicator at the hospital level, but there is no overarching measure of this at the LHIN level. LHINs are accountable for admissions for ambulatory care-sensitive conditions, and although hospitals have a small influence on this measure through readmissions to their own hospital, the bulk of the responsibility for reducing this measure lies with primary care, chronic disease programs, and other community-based services. Indicator cascades, with clear lines of accountability, will need to be developed as accountability agreements are developed with community-based providers.

Figure 2: Current Accountability Agreements and Relationships between Indicators at Different System Levels



Target Setting

As noted above, accountability agreements in Ontario specify targets and corridors for performance indicators. Interviewees noted that current hospital targets tend to describe average performance and that the wide corridors in both agreements allow for significant variation from the target. The impact of such an approach is that it promotes only average or minimally acceptable care. This is more of a quality assurance than a quality improvement approach. A quality improvement approach would set "stretch" or "aspirational" targets based on local benchmarks of high performance, performance levels achieved by the leading practices in the world, or a theoretical vision of optimal care with set time frames for achieving improvements. Other jurisdictions, such as Veterans Affairs in the U.S. or

the National Health Service in England have targets which are more aspirational in nature (Veterans Affairs 2006, National Health Service 2007).

Within current agreements in Ontario, there are a handful of aspirational indicators in development. These include emergency department wait times which were set by an expert committee, an evidence-based target for post-acute care for patients with congestive heart failure, and targets set out under the Ontario Stroke Strategy based on a combination of evidence and expert consensus. As accountability agreements become established, there will be opportunities to migrate towards more aspirational targets.

Cancer Care Ontario has taken some steps to move from a "minimally acceptable" approach toward performance standards. Cancer Care Ontario does not set corridors for its targets and, using input from expert panels, it negotiates targets with regional cancer centres which increase incrementally each year. Cancer Care Ontario also uses financial incentives for improvement. For example, to increase radiation capacity in the province, Cancer Care Ontario set the targets around the median and then provided incentives for a five percent increase in productivity through process reengineering.

Those providing input to this paper noted that to date, hospitals that fail to meet targets for financial performance undergo intensive scrutiny. Failure to meet Wait Time Strategy targets results in financial penalties. Yet, for indicators related to hospital quality, consequences tend to be more muted, with the follow-up mainly as discussions with the respective hospital board or between the hospital and its LHIN. It is not clear what concrete steps are being taken to respond to quality. Publicly accessible data on whether past performance targets were met on any of the indicators are not available.

Potential ways to improve responsiveness to missed quality targets include requiring submission of quality improvement plans, protocols for closer scrutiny, promoting public awareness of situations when targets are not met, removing disincentives that impede performance, recognizing high performance and providing greater assistance to underperformers. Some suggest stronger financial incentives for quality. Regarding this point, we caution that the scientific literature on pay-for-performance policies is currently inconclusive about the overall net benefit, with some studies showing improvements and others showing problems related to unintended consequences (Werner 2008, Lindenauer 2007, Glickman 2007, Ryan 2008, Sorbero 2008, Doran 2008, Joint Policy and Planning Committee 2004).

Target setting may be difficult given that it may take many years before a measurable impact is seen. Longer-term, multi-year agreements and targets could support long-term change. In the short term, changes in process indicators (e.g., wait times) can be more immediate and appropriate in some aspects of the accountability agreements, but supporting evidence is needed to confirm that a change in a process makes a difference to the outcome.

Integrating Accountability Agreements with Quality Improvement Initiatives

There are numerous quality improvement initiatives underway currently in Ontario as shown in Table 7.

Table 7: Quality Improvement Campaigns in Ontario

Campaign	Purpose
Wait Time Strategy	• Reduce waits for cataract, cancer, hip and knee replacement surgery and CT and MRI scans
Wait Time Strategy – Emergency Departments	• Reduce waits in emergency departments
Safer Healthcare Now! – Phase 1	• Deploy rapid response teams • Improve acute myocardial infarction hospital care • Medication reconciliation to prevent medication errors in hospital • Prevent central line infections • Prevent surgical site infections • Prevent ventilator-associated pneumonia
Safer Healthcare Now! – Phase 2	• Decrease infections from antibiotic-resistant organisms • Prevent venous thromboembolism • Prevent falls in long-term care • Medication reconciliation in long-term care
Flo Collaborative	• Improve patient flow from acute-care hospitals to other destinations (home care, long-term care)
Quality Improvement and Innovation Partnership	• Improve access to appointments, diabetes management and colorectal screening in family health teams and community health centres

Currently, there is only partial alignment between existing accountability agreements and major quality improvement initiatives in Ontario. The Wait Time Strategy is integrated into both the Ministry-LHIN Accountability Agreements and the agreements between LHINs and hospitals. There are performance indicators and targets for both volumes and wait times. Hospital boards are required to strike a quality committee and surgeons are required to use the Wait Time Information System as a condition of funding.

However, there is incomplete alignment between hospital accountability agreements and the "Flo" Collaborative, which has the potential to reduce alternate level of care bed days in cases when a patient in hospital could be managed elsewhere. A performance indicator for alternate level of care bed days was initially proposed in the hospital service accountability agreement, but was subsequently withdrawn following agreement that hospitals would not be held accountable for systemic issues beyond their control, and due to data quality issues related to inconsistent definitions being applied.[5] Instead, measures of alternate level of care exist as developmental indicators only in the hospital service accountability process. Likewise, alternate level of care is tracked in the accountability agreements between the ministry and LHINS, but for similar reasons, no target was set. Hence, province-wide accountability for improvement in this area is weak.

[5] Some LHINs opted to include alternate level of care (measured as people in alternate level of care beds per month, not based on data from the Canadian Institute for Health Information's discharge abstract database) in Schedule B in the 2008-10 hospital service accountability agreement.

Related to the Safer Healthcare Now! campaign, hospital accountability agreements track acute myocardial infarction readmissions, but this indicator mainly describes the quality of primary care after discharge, rather than care during the admission, which is one of the focus areas of the campaign. There is no performance indicators related to medication-related adverse events, although this is a major component of Safer Healthcare Now! and most hospitals are implementing medication reconciliation as a requirement for accreditation. On the positive side, the ministry has recently mandated hospitals to report information publicly on central line infections, ventilator-associated pneumonia, surgical site infections, antibiotic-resistant organisms, hospital standardized mortality rates and hand hygiene compliance (Ministry of Health and Long-Term Care May 2008), all of which are components of Safer Healthcare Now! A ministry working group is currently addressing data collection and indicator standardization issues.

Future accountability agreements could support specific quality improvement campaigns in identified provincial priority areas. They could set local expectations for having a quality improvement plan in place, participating in provincial campaigns, investing in quality improvement training, collecting data for quality improvement purposes, and delivering tangible results in improved outcomes, processes of care, patient experience or reduced costs. Alignment with accreditation activities, particularly those that have overlap with quality improvement initiatives will also help accelerate the pace of improvement. It may not be feasible to align all quality improvement initiatives in the system with accountability agreements, but aligning at least the most important initiatives may be most effective. When considering how these expectations might be incorporated into future agreements, policy makers may wish to consider phasing in these requirements over time (such as setting expectations for participating in a campaign in year 1 and delivery of results by year 2 or 3).

Aligning Accountability Agreements with Public Reporting

Public reporting is an integral part of a quality-focused health-care system. Some studies show a link between public reporting and quality improvement (Fung 2008, Sobero 2008, Doran 2008, Werner 2008, and Lindenauer 2007). Governments are ultimately accountable to the public for their spending decisions on health care and the quality of care delivered. The public has a right to know whether different parts of the system are meeting their expectations.

Accountability agreements could support and inform public reporting. The reporting of wait times on www.ontariowaittimes.com is an example of where accountability aligns with public reporting (although further efforts are required to ensure alignment with the Canadian Institute for Health Information's data holdings). Public reporting on variations in quality, when done constructively and accurately, can act as a stimulus to improve quality among providers with low performance rates compared to their peers. For example, the Agency for Healthcare Research and Quality (2005) provides evidence that publicly reporting on hospital performance promotes enhanced patient care. The Ontario Health Quality Council has a mandate to conduct such system-wide public reporting in Ontario.

Alignment between indicators in accountability agreements and in current public reports

"Hospital Reports" are annual publications on the performance of Ontario's hospitals, developed by the Hospital Report Research Collaborative (now renamed the Health System Performance Research

Network; see www.hsprn.ca for more details). Since 1998, these reports have covered acute care, emergency department care, complex continuing care, rehabilitation and mental health. Currently they track 40 indicators across four quadrants: 1) system integration and change; 2) clinical utilization and outcomes; 3) patient satisfaction; and 4) financial performance and condition. While the balanced scorecard used for Hospital Reports is similar to the domains in the hospital accountability agreements and a number of the indicators are similar, some indicators, such as readmission rates, are not aligned. One of the challenges related to alignment is that for accountability, providers must be able to monitor their performance within the year based on their internal data. However, some Hospital Report indicators (e.g. readmissions) rely on data from multiple hospitals or data that are unavailable quarterly.

Transparency of accountability agreements to the public

Several indicators in the accountability agreements are not reported publicly. While LHIN and hospital accountability agreements, including the negotiated schedules, are public documents, many performance results are not public. With the Cancer Care Ontario accountability agreements, the indicator values are publicly accessible, but the targets are not. Overall, England appears to have a broader scope of public reporting than currently exists in Ontario, and it could serve as a role model for this province. Specifically, Ontario could consider *selected* measures and other information from the *final negotiated* hospital annual planning submissions and subsequent quarterly reports for public reporting. Indicators from the hospital service accountability agreements and selected measures from the hospital annual planning submissions could be made public in an accessible format, given that the current accountability documents are not easily navigated by the public.

Some interviewees emphasized that while public reporting is essential, it is important to ensure that only validated and reliable indicators with common definitions are released to the public. Presenting inaccurate information on variations in quality can lead to local providers being pressured to set the wrong priorities for improvement. Thus, it may be necessary in early stages of indicator development to restrict public reporting, and then disclose information once validity and reliability have improved. However, others pointed out that public reporting requirements can drive improvement in data quality.

Another concern with public reporting is that a culture of fear in health-care organizations regarding reporting of errors could impact on reporting. As an example, public reporting of adverse events may inadvertently discourage open disclosure of such events. Thus, public reporting needs to take place in conjunction with efforts to promote a "just culture" of quality improvement, where the focus is on improving systems rather than assigning individual blame.

Need for centralized reporting

Currently, LHINs have minimal access to quality related-data. For the emerging patient safety indicators (such as ventilator-associated pneumonia, central line infections and antibiotic-resistant organisms), hospitals will be required to post results on their web sites. In the future, it will be advantageous to pool this information centrally in order to report province-wide rates and provide meaningful comparisons among institutions. Such analyses can help identify leading practices and opportunities for improvement. As suggested previously, centralized data analysis and reporting could be done by building on systems already in place, such as those within the Canadian Institute for Health Information and the Institute for Clinical Evaluative Sciences.

Conclusion

A great deal of progress has been made in terms of accountability agreements in Ontario. Hospital service accountability agreements have been in place for three years, LHIN agreements have been in place for over a year, and the agreements for other health service providers are currently under development. These agreements are important tools to accomplish quality improvement and there are opportunities to expand their scope as it relates to quality, although they cannot drive system-wide quality improvements alone. These agreements could reflect performance on quality in a similar manner to that of Veterans Affairs in the U.S. and England's National Health Service by including a greater number of the nine attributes of quality used by the Ontario Health Quality Council to assess and report on the performance of Ontario's health system. (The nine attributes are: accessible, effective, safe, patient-centred, equitable, efficient, appropriately resourced, integrated, and focused on population health). There may also be a need for focused access and outcomes indicators of relevance to specialty services, such as rehabilitation and mental health.

Accountability agreements aim to standardize measures and promote performance improvement in the health-care system, but they have faced challenges related to data availability, timeliness and quality. Renewed efforts are needed to improve data quality as defined by the ministry and the Canadian Institute for Health Information (Canadian Institute for Health Information 2005, Ministry of Health and Long-Term Care 2007). Ideally, indicators and targets would be evidence-based and focus on outputs and outcomes. In order to meet the deadlines for the next round of hospital agreements,[6] concerted effort, through further research and consensus-building, is needed to establish common data sources, standards, measures, definitions, and analytical methods, as well as an infrastructure for data collection and timely performance feedback. Efforts are also needed to help minimize the burden of reporting and improve quality improvement skills and analytical capacity in the field through centralized supports, practical, user-friendly tools and expert consulting assistance.

Achieving alignment will be a central theme for future development of accountability agreements. To maximize effectiveness, accountability agreements need to be aligned with each other, from the high-level ministry perspective to LHINs to health-care organizations and providers. Within organizations, internal accountabilities should be aligned with system accountabilities. A core set of system-level measures should reflect system priorities, in keeping with the ministry's strategic plan. In applying this approach, corridors could account for factors outside the control of individual health-care services, but targets would benchmark Ontario's best performance against international benchmarks. Organizational-level improvements would be expected over time.

Accountability agreements can be more effective if they are aligned with major quality improvement initiatives in identified priority areas. This means that performance indicators are consistent with measures used for improvement exercises, and "stretch" or "aspirational" targets are consistent between accountability agreements and the aims of the quality improvement initiatives. For example, the focal areas of Safer Healthcare Now! could be added as monitoring indicators, and the hospital standardized mortality ratio (if found to be an effective measure) and the stroke and complex continuing care index measures could graduate to performance status in next round of agreements. Health service organizations could also be encouraged to develop accountability frameworks and

[6] The hospital planning submission guidelines for the 2010-12 round of negotiations will be released in June 2009.

logic models to reflect the requirements of initiatives such as the Flo collaborative and Safer Healthcare Now!

Accountability agreements should also be aligned with public reporting initiatives, so that, within a common framework, there is full disclosure of core performance indicators, targets, and variations in performance. Public reporting of performance can strengthen the degree of accountability in the system. In doing so, it publicly addresses whether the health system is meeting expectations for high-quality care. Reporting local variations in quality can act as a stimulus for improvement, drawing on the natural competitive inclination of care providers to strive to be the best. At the same time, it is important to balance public reporting with the need for accurate data and the risk-taking required on the part of health services when undertaking quality improvement initiatives. These initiatives involve putting a particular service or process under a microscope and may highlight poor performance before improvement is seen.

A well-co-ordinated, aligned, multi-strategy approach to performance improvement can yield strong results, as shown in leading health systems around the world such as Jonkoping county in Sweden, the Henry Ford Health System and Intermountain Health in the United States (Institute for Healthcare Improvement 2007, Baker et al. *Quality by Design* pending). Ontario could also take the opportunity to evaluate the impact of accountability agreements on performance. Strong partnerships between the ministry, LHINs, Cancer Care Ontario, the Joint Policy and Planning Committee, the Ontario Health Quality Council, health service provider associations, local health care organizations, researchers, and other key stakeholders can yield the level of alignment and shared commitment to goals and strategies that will be essential to driving system-wide quality improvements.

Appendix A – Ministry–LHIN Accountability Agreement Schedules

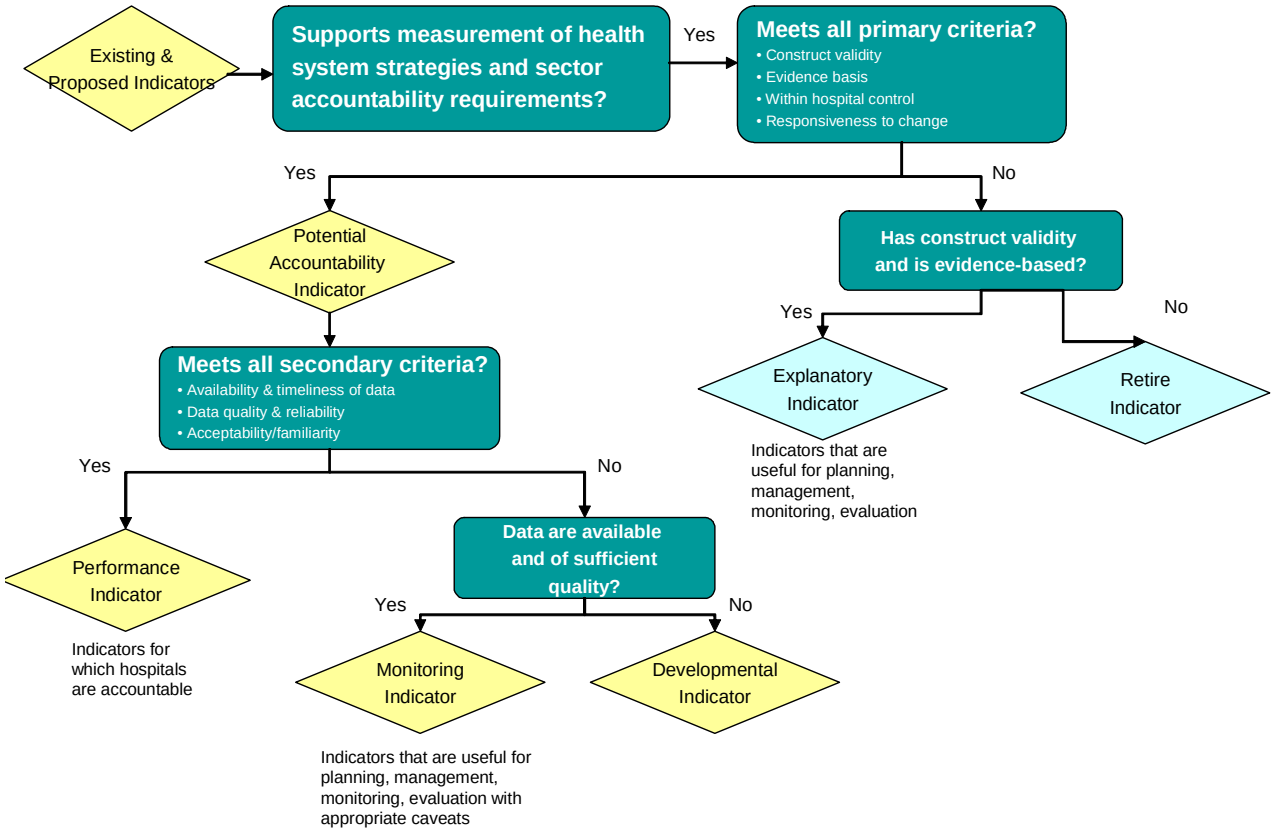
Table 8: Summary of requirements contained within Ministry–LHIN Accountability Agreement Schedules

Schedule	Summary of requirements
1. General	Provisions applicable to all schedules, including definitions and timetables
2. Community Engagement, Planning and Integration	• Performance obligations of the ministry and LHINs, such as ensuring regular reporting to stakeholders • LHINs requirements to consult with the ministry on integration decisions
3. Local Health System Management	• Scope of LHIN decision making and responsibility for the health system, including the assignment of the service accountability agreements with service provider • Identifies programs managed by the ministry and dedicated funding
4. Information Management Supports	• Ministry and LHIN individual and mutual performance obligations related to communication and the collection, storage and use of data • Ministry obligations on setting standards, definitions and reporting timelines, developing data sources, ensure data quality and timeliness, and ensuring the LHIN's access to data • LHIN responsibility to submit a health service plan, and to maintain and improve data quality and timeliness
5. Financial Management	• LHINs' obligations with respect to managing the budget, including, accounting, risk management, multi-year funding, capital and a balanced budget
6. Financial Process Protocols	• Processing of financial transfers to the LHINs by the ministry • LHINs agree to require service provider to submit financial information to the ministry and the ministry agrees to send financial reports to providers and LHINs • Ministry to establish a financial database
7. Local Health System Compliance Protocols	• Obligations of LHINs and the ministry regarding compliance, inspection and enforcement in the health system
8. Integrated Reporting	• LHINs reporting obligations and the supporting activities of the ministry
9. Allocations	• Reporting total LHIN allocation amounts and how LHINs may spend their funds
10. Local Health System Performance	• Performance indicators supporting achievement of provincial targets, with LHIN-specific targets and performance corridors *Access* - 90th percentile wait times for cancer surgery - 90th percentile wait times for cardiac bypass procedures - 90th percentile wait times for cataract surgery - 90th percentile wait times for hip and knee replacement - 90th percentile wait times for diagnostic (MRI/CT) scans *Quality* - Readmission rates for acute myocardial infarction *Integration* - Rate of emergency department visits that could be managed elsewhere - Hospitalization rate for ambulatory care sensitive conditions - Median wait time for long-term care placement - Percentage of alternate level of care days (no target for 07/08) *Productivity* is another domain to which indicators will likely be added in future. The agreements also include pilot indicators. These are indicators that may later be included in the performance agreement. These indicators are revised annually, and are currently under review for

Schedule	Summary of requirements
	the current year. The following are the 07/08 pilot indicators: - Change in hospital productivity - Percentage of chronic complex continuing care patients with new stage 2 or greater ulcers - Perception of change in quality of care - Percentage of in-hospital cancer deaths as a percentage of all cancer deaths - Psychiatric readmission rates in hospitals - Timeliness of first post-acute home care visit Readmission rates of Community Care Access Centre clients referred by hospitals back into an acute-care setting - Percentage of individuals with multiple psychiatric hospitalization in the past fiscal year • Ministry responsibility for calculating the results • Mutual obligations for developing baseline data, targets and corridors • Collaborative processes for developing and retiring performance indicators (the following areas were singled out for consideration: local health system productivity; paediatric surgeries wait times; emergency department wait times; patient safety; and mental health continuity of care)
11. e-Health	• LHIN and the ministry performance obligations related to provincial e-Health priorities and e-Health work plan • Ministry and LHIN obligations with respect to governance and co-ordination of e-Health and technology infrastructure

Appendix B – Hospital Service Accountability Agreements

Figure 3: Flow Chart of Criteria Used to Select Indicators for Hospital Service Accountability Agreements



Appendix C – Example of England's Service-level Commitments

The following are examples of levels of service from the previous service-level commitments in England, ending April 2008. The Healthcare Commission will assess these commitments (shown below) in conjunction with its assessment of performance on new indicators, the "vital signs."

- Four-hour maximum wait in accident and emergency from arrival to admission, transfer or discharge
- Guaranteed access to a primary care professional within 24 hours and to a primary care doctor within 48 hours
- A maximum wait of 13 weeks for an outpatient appointment
- A maximum wait of 26 weeks for an inpatient appointment
- A three-month maximum wait for revascularisation
- A maximum two-week wait standard for Rapid Access Chest Pain Clinics
- Thrombolysis 'call to needle' of at least 68 per cent within 60 minutes, where thrombolysis is the preferred local treatment for heart attack
- Guaranteed access to a genito-urinary medicine clinic within 48 hours of contacting a service
- All patients who have operations cancelled for non-clinical reasons to be offered another binding date within 28 days, or the patient's treatment to be funded at the time and hospital of the patient's choice
- Delayed transfers of care to be maintained at a minimal level
- All ambulance trusts to respond to 75 per cent of Category A calls within eight minutes
- All ambulance trusts to respond to 95 per cent of Category A calls within 19 minutes
- All ambulance trusts to respond to 95 per cent of Category B calls within 19 minutes
- A two-week maximum wait from urgent general practitioner referral to first outpatient appointment for all urgent suspected cancer referrals
- A maximum waiting time of one month from diagnosis to treatment for all cancers
- One hundred percent of people with diabetes to be offered screening for the early detection (and treatment if needed) of diabetic retinopathy
- Deliver 7,500 new cases of psychosis served by early intervention teams per year
- All patients who need them to have access to crisis services, with delivery of 100,000 new crisis resolution home treatment episodes each year
- All patients who need it to have access to a comprehensive child and adolescent mental health service, including 24-hour cover/appropriate services for 16- and 17-year-olds and appropriate services for children and young people with learning disabilities
- Chlamydia screening programme to be rolled out nationally

Appendix D –Standard National Health Service Contract for Acute Hospital Services

In 2007/08, a new standard National Health Service contract for acute hospital services was introduced. Providers and commissioners are expected to co-operate to ensure that the patient experience is of a seamless health service, regardless of organizational boundaries, and to ensure service continuity and sustainability.

The contract provides for nationally mandated sanctions. These include:

- **Breaches of the 18-week target**: A financial adjustment of 0. 5 percent of contract income for every one percent by which the 18-week target is breached, up to a cap of five percent of elective income or two percent of contract income, whichever is less
- **Inappropriate excess activity**: Non-payment for activity which has breached an agreed prior approval scheme, or has breached an activity management plan, etc.
- **Failure to provide required information**: Temporary withholding of 10 percent of the monthly contract value until the required information is provided
- **Breaches of the C difficult target**: A financial adjustment of 0.2 percent of contract income for each one percent by which the target is under-achieved, up to a cap of two percent. High-performing providers will be exempt, so long as they maintain current performance

The contract's requirements include:

- Explicit and agreed activity plans at the primary care trust, strategic health authority and department level
- Local processes agreed between the relevant bodies for planning, monitoring and reporting, and for delivery
- Plans that are well-fitted to local agreements in a form that encourages strengthened local ownership and accountability and that meets statutory public sector duties towards equality
- Robust arrangements to undertake 'co-ordinating primary care trust' or equivalent roles
- Focus on forward-looking risk assessment.

Appendix E – Examples of measures used in strategic improvement initiatives

The following examples are taken from the Institute for Healthcare Improvement (www.ihi.org).

Table 9: Examples of *System* Level Measures

Dimension	Measure	Performance Specification
Patient Experience	Response to question in How's Your Health database (www.HowsYourHealth.org): "They give me exactly the help I want (and need) exactly when I want (and need it)."	72% of patients report, "They give me exactly the help I want (and need) exactly when I want (and need) it."
Effective and Equitable Care	Self-reported health status	5% of adults self-rate their health status as fair or poor. (Response rate will not differ by income)
Efficient Care	Per capita health care expenditures	$3.000 per capita

Table 10: Examples of Measures at the *Service Delivery Organization* Level

Dimension	Measure	Performance Specification
Evidence-Based Care	Pervasive Reliability	Reliability Levels of 10^{-2}
Safe Care	Adverse Events per 1.000 Patient Days	5 Adverse Events per 1.000 Patient Days
Timely Access to Care	Days to Third Next Available Appointment	Primary Care: Same-Day Access Specialty Care: Within 7 Days
Effective Care	Hospital Standardized Mortality Ratio (HSMR)	HSMR = 25 Points Below the National Average
Effective Care That Crosses Barriers	Hospital Readmission Percentage	30 Day Hospital Readmission Percentage = 4.69%
Safe Work Place	Incidence of Nonfatal Occupational Injuries and Illnesses	0.2 Cases with Lost Work Days/100 FTEs /Year
Efficient Utilization and Resource Use	Hospital Days per Decedent During the Last Six Months of Life	7.24 Hospital Days per Decedent During the Last Six Month of Life
Efficient Care	Medicare Reimbursement per Enrollee	$5.026 per Enrollee
Patient-Centered Care	Patient Satisfaction	81% of Patients are very satisfied

Appendix F – Definitions

Accountability

"By "accountable" I mean making sure that the government and our health partners clearly agree on what outcomes we need to achieve together. Accountability means being answerable for our actions, not just our good intentions. We need clearer performance targets, greater transparency, and better lines of communication. And let me be clear: accountability isn't a burden we place on others, it's a responsibility we all accept and share — and I include this government and my ministry."

— George Smitherman, Ontario Minister of Health and Long-Term Care in 2004

Accountability agreements

Accountability agreements are contracts that describe the expectations on those who plan, manage and deliver health services. They identify responsibilities of different parties and set out specific performance indicators and targets.

The Ministry-LHIN Accountability Agreements set out ministry and LHIN obligations related to the fulfilment of the LHIN mandate to plan, integrate and fund local health care systems. Their purpose is to support the collaborative relationship between the Ministry of Health and Long-Term Care and the LHIN to carry out the made-in-Ontario solution to improve the health of Ontarians through better access to high-quality health services, to co-ordinate health care in local health systems and to manage the health system at the local level effectively and efficiently.

The Joint Policy and Planning Committee's 2005 policy statement on accountability related to hospital services can be found online at: www.jppc.org/new/files/acrobat/Policy%20Statement%20_%20Aug%202005.pdf.

Ontario Health Quality Council's Nine attributes of a high-performing health system

ACCESSIBLE — People should be able to get the right care at the right time in the right setting by the right healthcare provider.

For example, when a special test is needed, you should receive it when needed and without causing you extra strain and upset. If you have a chronic illness such as diabetes and asthma, you should be able to find help to manage your disease and avoid more serious problems.

EFFECTIVE — People should receive care that works and is based on the best available scientific information.

For example, your doctor (or healthcare provider) should know what the proven treatments are for your particular needs including best ways of coordinating care, preventing disease or using technology.

SAFE — People should not be harmed by an accident or mistakes when they receive care.

For example, steps should be taken so that elderly people are less likely to fall in nursing homes. There should be systems in place so you are not given the wrong drug, or the wrong dose of a drug.

PATIENT-CENTRED — Healthcare providers should offer services in a way that is sensitive to an individual's needs and preferences.

For example, you should receive care that respects your dignity and privacy. You should be able to find care that respects your religious, cultural and language needs and your life's circumstances.

EQUITABLE — People should get the same quality of care regardless of who they are and where they live.

For example, if you don't speak English or French it can be hard to find out about the health services you need and to get to those services. The same can be true for people who are poor or less-educated, or for those who live in small or far-off communities. Extra help is sometimes needed to make sure everyone gets the care they need.

EFFICIENT — The health system should continually look for ways to reduce waste, including waste of supplies, equipment, time, ideas and information.

For example, to avoid the need to repeat tests or wait for reports to be sent from one doctor to another, your health information should be available to all of your doctors through a secure computer system.

APPROPRIATELY RESOURCED — The health system should have enough qualified providers, funding, information, equipment, supplies and facilities to look after people's health needs.

For example, as people age they develop more health problems. This means there will be more need for specialized machines, doctors, nurses and others to provide good care. A high quality health system will plan and prepare for this.

INTEGRATED — All parts of the health system should be organized, connected and work with one another to provide high quality care.

For example, if you need major surgery, your care should be managed so that you move smoothly from hospital to rehabilitation and into the care you need after you go home.

FOCUSED on POPULATION HEALTH — The health system should work to prevent sickness and improve the health of the people of Ontario.

Appendix G – Interviewees and Reviewers

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