

*Building a System We Can Count On*

**Information Management  
Health Results Team**

# Why are Data and Information so Important Now?

- Accountability is a key priority of this government
  - Creation of independent Ontario Health Quality Council to report on health status, waiting times, and other important indicators
- Transformation agenda will increase reliance on information
  - To inform transformation strategies (e.g., what are areas ripe for integration?)
  - To evaluate the success of the strategies (e.g., did waiting times decrease?)
- Information management costs are increasing more rapidly than overall costs with evidence of waste
  - System-wide information management costs of \$600 million will rise by 25% per year over the short term
  - 4,000 performance indicators identified to date for the Ontario health system; many are simply volumes of services
- Need information to negotiate and manage accountability agreements
  - Reliable data and reporting structures with valid performance information
  - Access to best practices to support improvement

*Each of these factors points to the need for an Information Management strategy to ensure high quality data are available to produce meaningful performance measures to be used in decision-making*

# Information Management Strategy: Building a System We Can Count On

Producing Better Data	We are making the data that describes cost, quality, and resources in our system faster, accurate, and more comprehensive while reducing the overall costs of data collection.
<b>...Leads To...</b>	
Measuring Performance for Change	We are transforming the data into measures that allow us to track progress against key goals, predict future performance, and integrate the system around key strategies.
<b>...Leads To...</b>	
Supporting Evidence-based Decisions	We are integrating the data and measures into decision support structures that will help the Ministry respond to urgent requests for information, identify long-term risks and priorities and inform LHIN decisions.

# IM Strategy Progress

	<b>Producing Better Data</b>	<b>Measuring Performance for Change</b>	<b>Supporting Evidence-Based Decisions</b>
<b>Rationalize</b>	<ul style="list-style-type: none"> <li>• Ontario health data standards</li> <li>• Reduction in number of information holdings</li> <li>• <i>Elimination of low-value data (e.g., CCAC data rationalization)</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Strategy map</i></li> <li>• Alignment of publicly-funded performance reports and existing performance indicators</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce number of decision-support tools</li> </ul>
<b>Transform</b>	<ul style="list-style-type: none"> <li>• Improved timeliness and accuracy of collected data</li> <li>• Best practices for managing health data</li> <li>• Authoritative and reliable data sources for performance measurement</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Health system scorecard (e.g., sustainability measures)</i></li> <li>• Tools and reports for the Ministry to manage health system performance</li> <li>• Assessment of Ministry performance</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Short-term response capacity to apply evidence to immediate concerns</i></li> <li>• <i>Long-range scenario planning capacity</i></li> <li>• Decision support tool box</li> </ul>
<b>Sustain</b>	<ul style="list-style-type: none"> <li>• <i>Local partnerships to consolidate and standardize data collection, submission, and management</i></li> <li>• <i>Reduced data collection burden on providers (e.g., CCAC data rationalization)</i></li> <li>• Centre of excellence to manage consolidated, integrated, and authoritative information holdings</li> </ul>	<ul style="list-style-type: none"> <li>• Health care performance network to spearhead collaboration on performance measurement and improvement activities</li> <li>• Performance management tools for Local Health Integration Networks</li> </ul>	<ul style="list-style-type: none"> <li>• Local Health Integration Networks supported by specialized analytical and planning expertise</li> <li>• Comprehensive funding formula and financial analysis capacity</li> </ul>

# What's In It For Me?

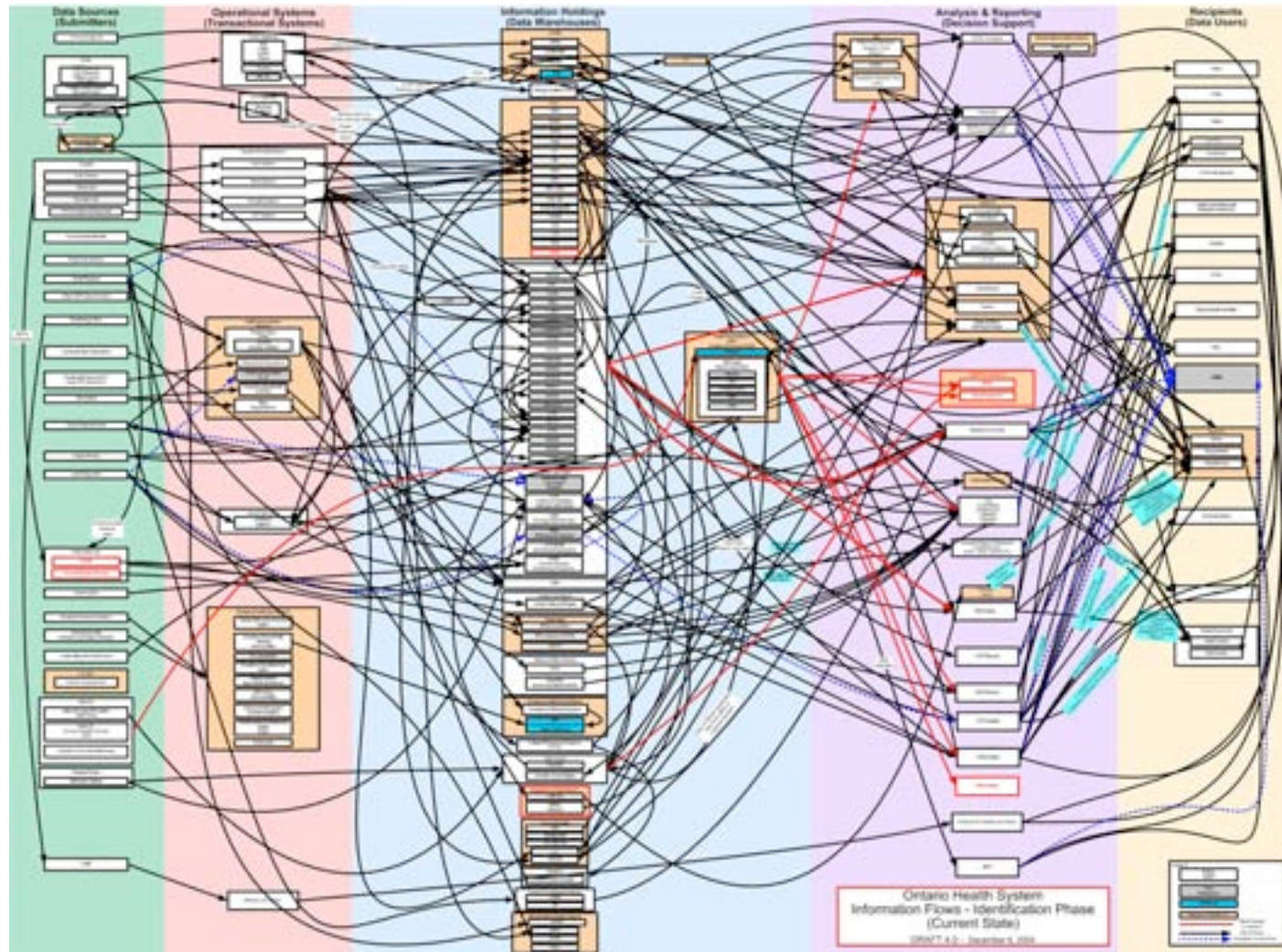
	<b>For Board Members and Senior Leaders?</b>	<b>For the Ministry?</b>
<b>New pieces of information</b>	<ul style="list-style-type: none"> <li>• Resource, quality, and cost information that supports institutional management, governance, and planning</li> </ul>	<ul style="list-style-type: none"> <li>• Resource, quality, and cost information that supports accountability, system planning, and stewardship</li> </ul>
<b>Quicker, better, cheaper information</b>	<ul style="list-style-type: none"> <li>• Information will be produced for quickly (50% improvement), accurately (50% improvement) and cheaply (reduction in data and indicator burden)</li> </ul>	<ul style="list-style-type: none"> <li>• Improved efficiency and timeliness of data collection/production</li> <li>• Contribution to a modern public service</li> </ul>
<b>Comparability, transparency</b>	<ul style="list-style-type: none"> <li>• The same data sets will be available to Ministry and providers to compare performance and benchmark</li> </ul>	<ul style="list-style-type: none"> <li>• Information will be available to compare performance across the system</li> </ul>
<b>Contribution to system goals</b>	<ul style="list-style-type: none"> <li>• Information will be available to show how your performance links with other organizations in your community to achieve common goals</li> </ul>	<ul style="list-style-type: none"> <li>• Information will be available to understand the contribution of various providers to system goals</li> </ul>
<b>Accountability</b>	<p>A set of cascading performance measures will be used to measure performance of all health sector organizations (including the Ministry), and to hold them to account for what they agreed to deliver</p>	

# Building on Existing Work and Living within Fiscal Constraints

- The following principles guide our work:
  - Build on existing strengths inside and outside the Ministry
  - Reduce impact and burden on providers and bureaucrats
  - Use technology as an accelerator, not a solution
  - Maintain transparency of process inside and outside the Ministry
  - Integrate information management reforms into existing structures

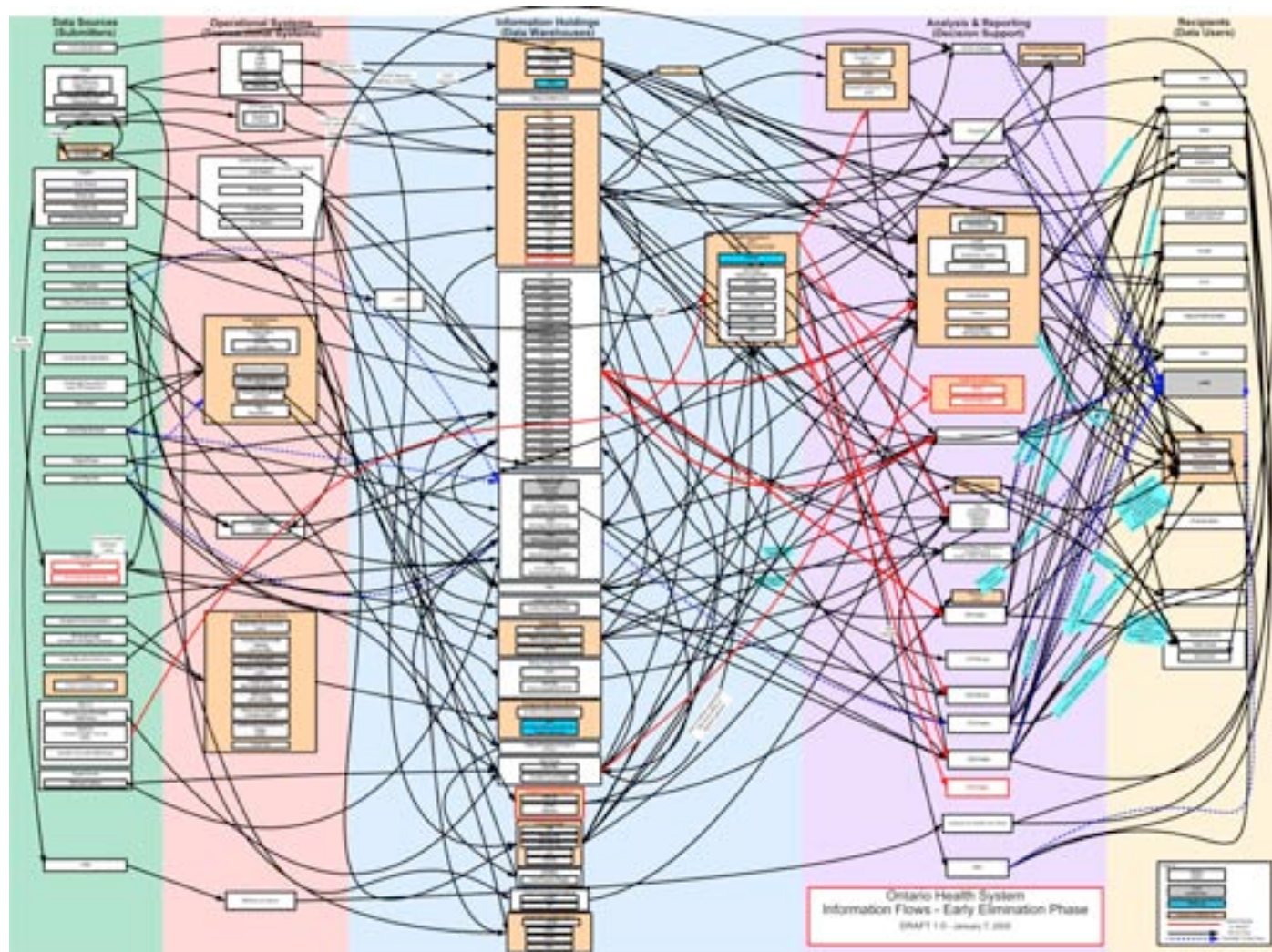
# 1. Producing Better Data

# Information Flows – September 9, 2004



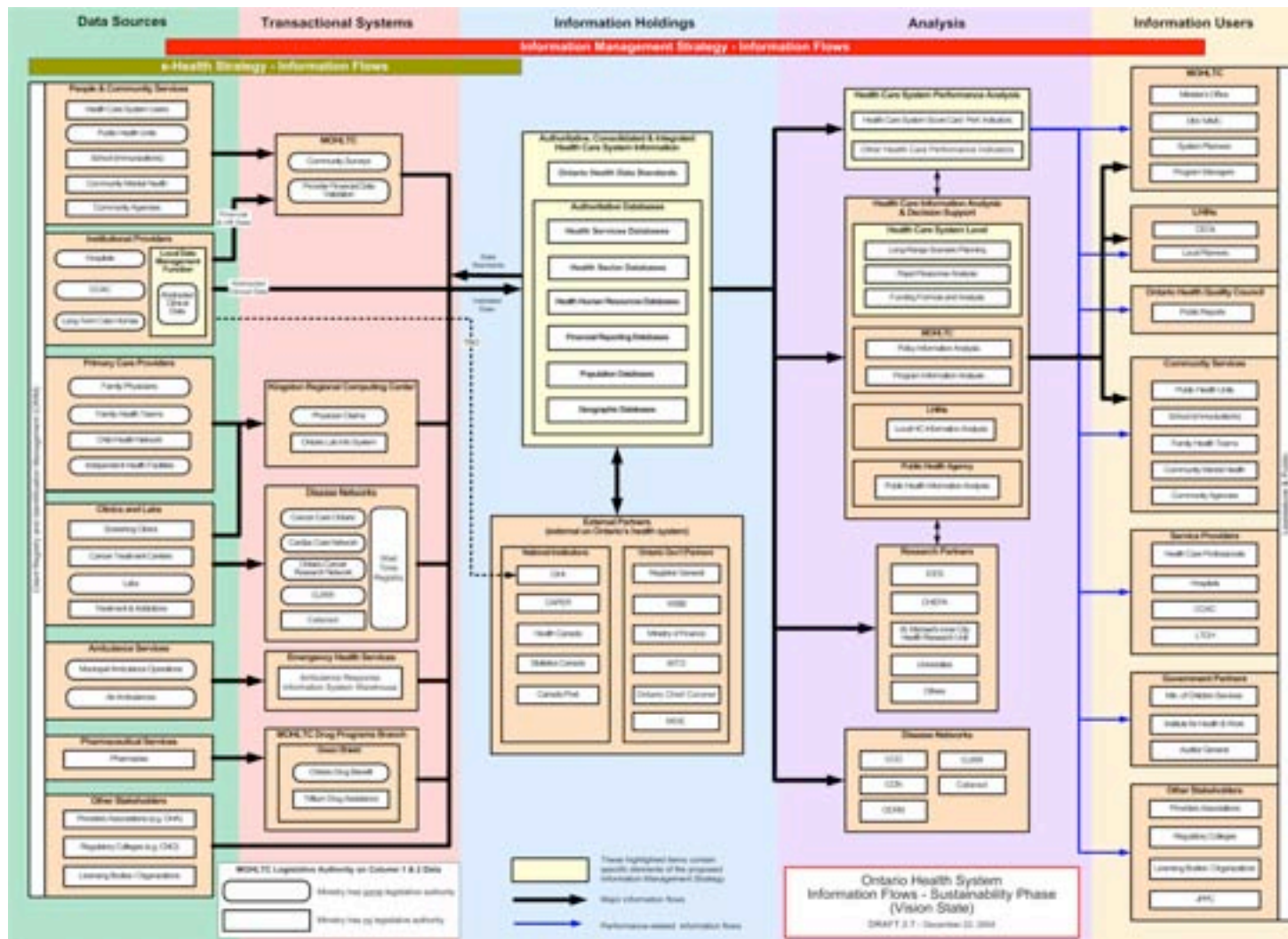
**Data sources**      **Information Holdings**      **Analysis & reporting**

# Information Flows – March 2005



**Data sources**      **Information Holdings**      **Analysis & reporting**

# Information Flow Vision – March 2007

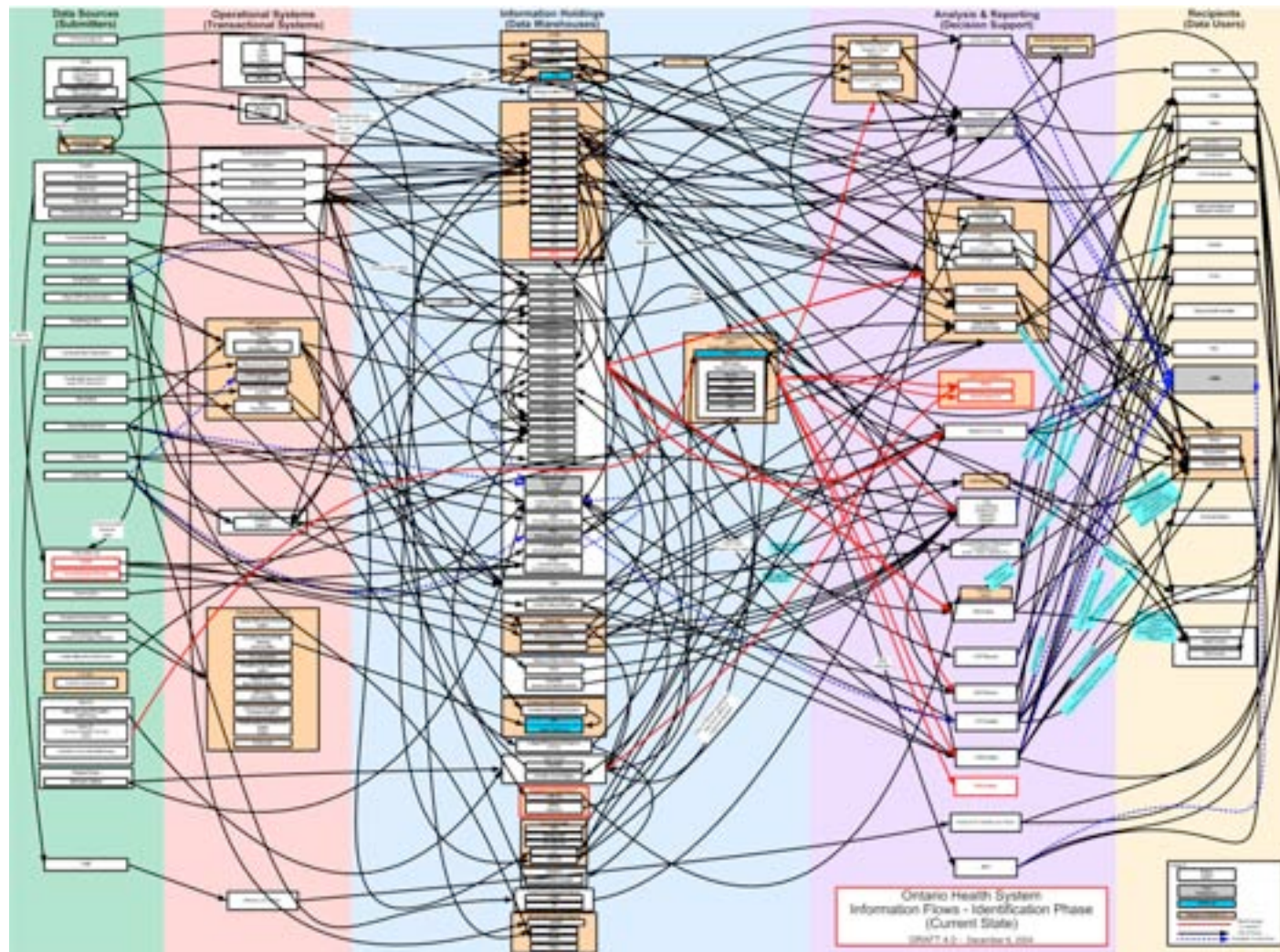


Data sources → Information Holdings → Analysis & reporting

# CCAC Data Rationalization Results

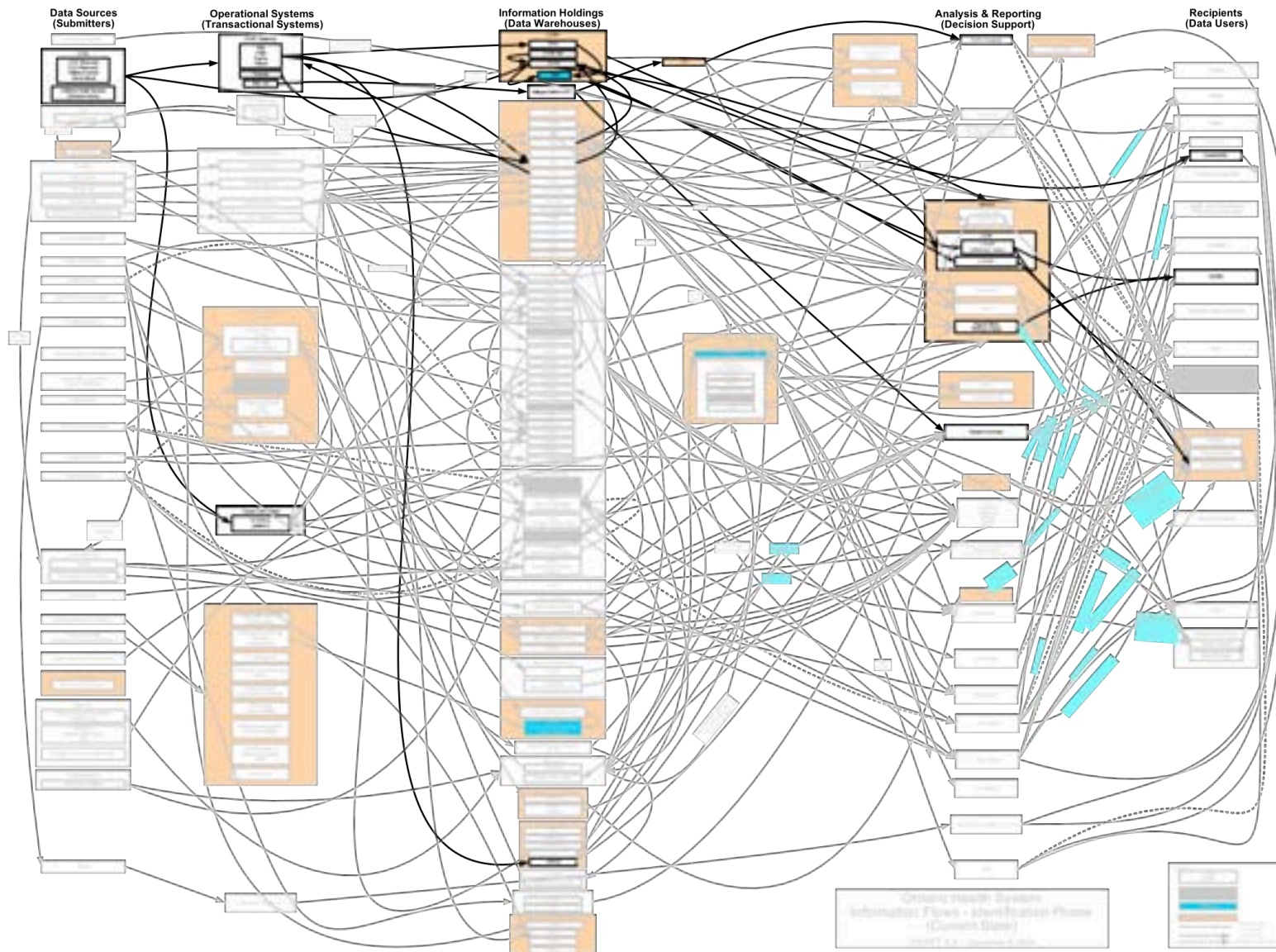
- To achieve system efficiencies, we have been working with the Home Care and Community Support Branch, the regional offices, and the Ontario Association of Community Care Access Centres (OACCAC) to review current data flows and reporting requirements
  - Key champions: George Zegarac, Michael Klejman, Perry Doody
- This initiative extends the strong work of the Report Requirements Project Team
- Each flow or report was assessed for its:
  - Usefulness and quality
  - Requirement within regulations
  - Duplication with another report
- One-year implementation plan developed to reduce the burden of reporting on CCACs

# All Information Flows – September 9, 2004



Data sources → Information Holdings → Analysis & reporting

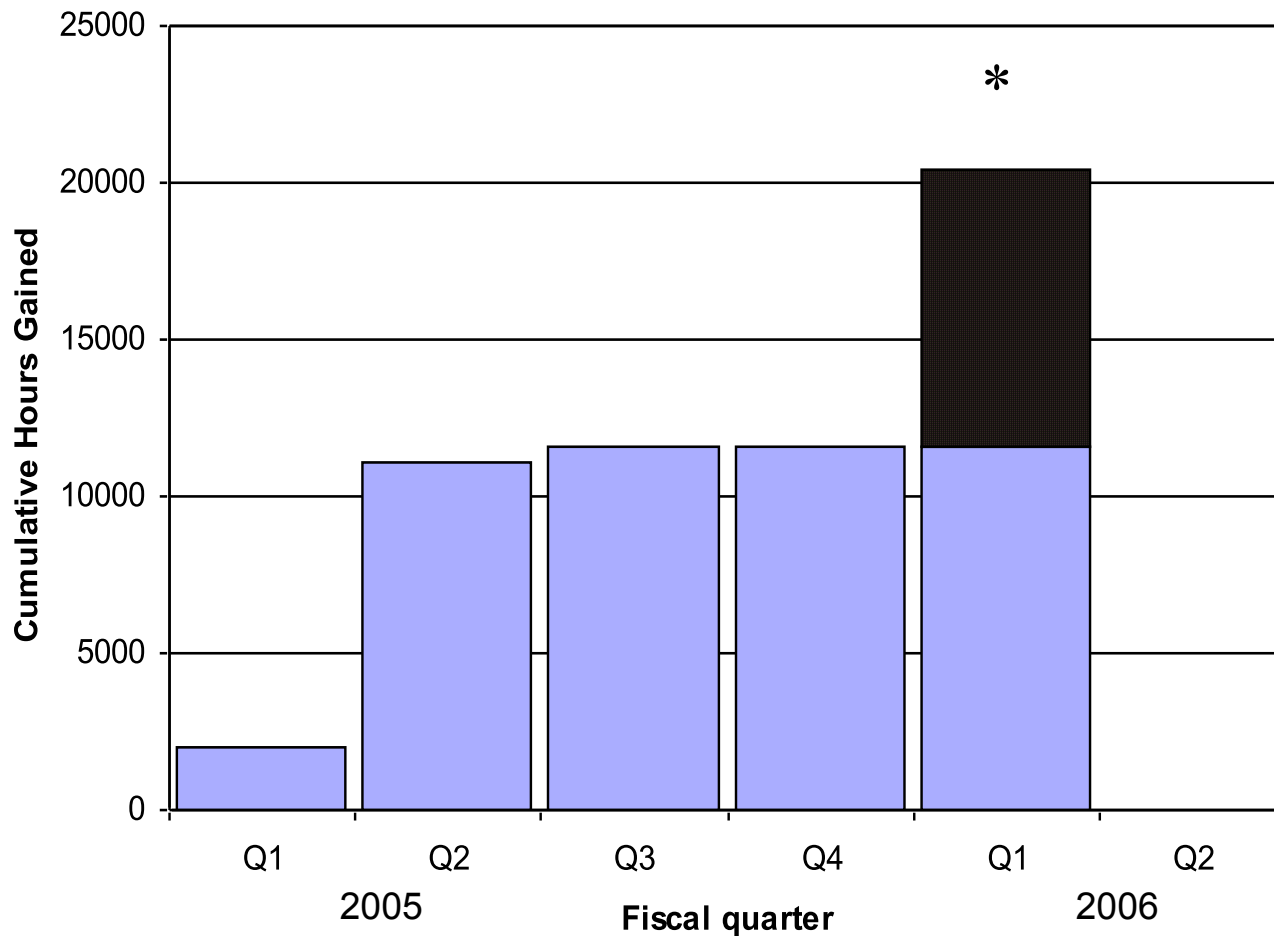
# CCAC Data Flows







# CCAC Data Rationalization Results in Greater Efficiency



*\* Reconsideration of Annual Report to Community requires regulatory change*

- 20,000 hours saved represents more than 6 FTEs

# Ontario Clinical Data Quality Task Force: *Key Findings*

- 50% of hospitals claim existing coding guidelines are insufficient and have developed their own hospital-specific coding guidelines
- Most respondents have undocumented “rules of thumb” for their coders which can seriously distort comparability of clinical data
- 40% of responding hospitals do not conduct routine audits of data quality
- There is variation in how coding is done (i.e. face sheet only versus the entire chart; based solely on physicians’ summaries versus using coders’ own judgments)
- There is no venue available for health information professionals to share best practices

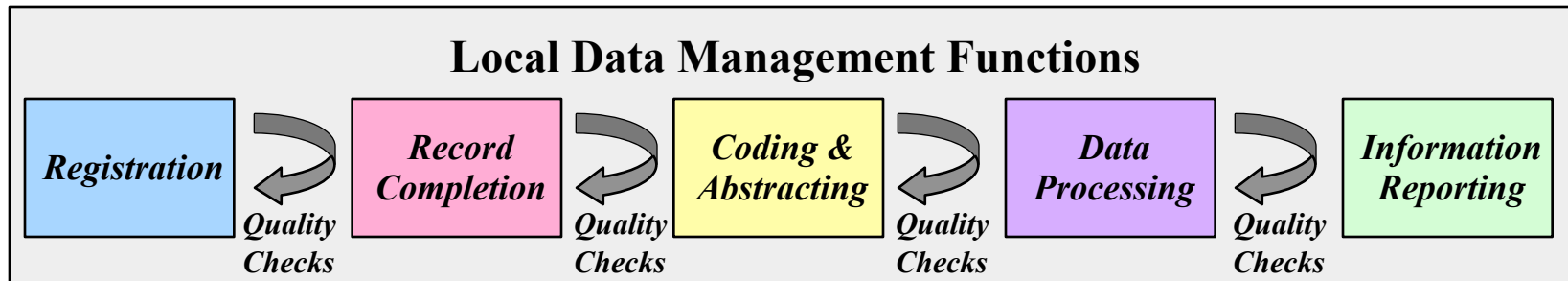
# Local Data Management Vision - *Partnerships*

## What is a Partnership?

*A relationship between individuals or groups that is characterized by mutual cooperation and responsibility for the achievement of a specified goal.*

## What is a Local Data Management Partnership?

*Collaboration between health care providers to consolidate, coordinate and standardize:*



*Through best practices, policies, standards and tools*




## Why Implement Local Data Management Partnerships?

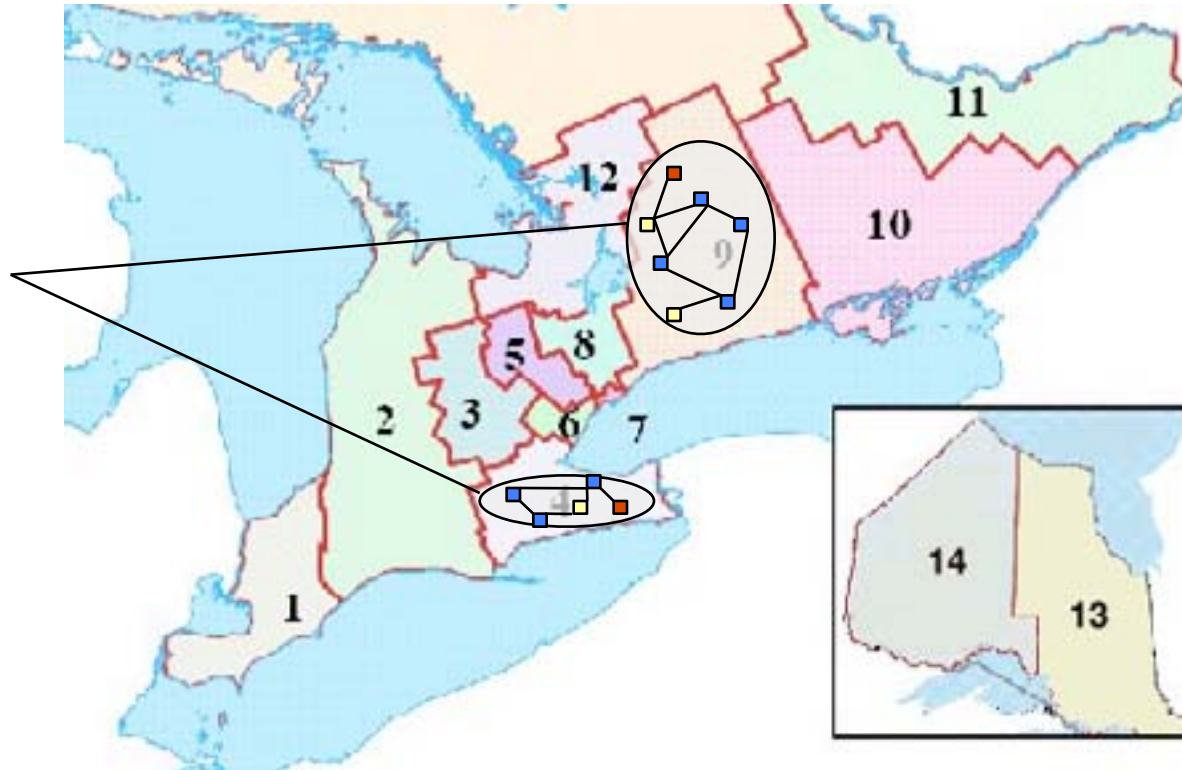
- *Increased effectiveness and efficiency of local data management functions*
- *Achieve economies of scale, through the standardization and integration of processes*
- *Better quality data and more timely data submission*
- *More effective use of scarce resources*
- *Facilitation of best practices*

# Partnerships will Align to LHINs

## LDMP Council

- Promote standards and best practices
- Support partnerships through policies and tools

-  Hospital
-  LTCF
-  CCAC



- Partnerships can range from being formal to informal groups
- Each partnership should have the same outcomes, standards and policies, including:
  - Equivalent data quality, coding, training and productivity standards
  - Common tool to share best practices
  - Comparable data monitoring and auditing processes
  - Joint educational courses for staff

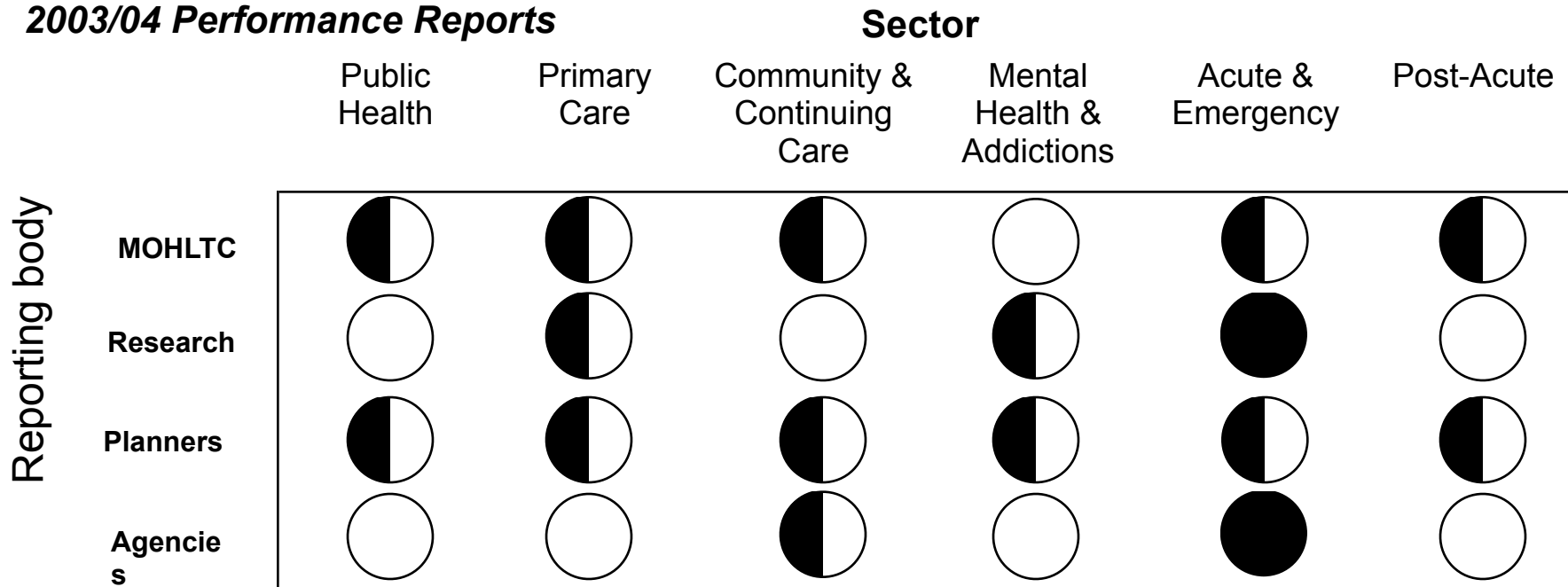
# Producing Better Data: Where We Are Going

<b>PROBLEM</b>	<b>RESPONSE</b>
Difficult for planners and analysts to find and confirm authoritative data sources	<ul style="list-style-type: none"> <li>✓ As-Is and To-Be Information Flow – ongoing review and validation</li> <li>✓ Release 1.0 of Data Guide in April 2005</li> </ul>
Duplicate, overlapping and inconsistent information holdings	<ul style="list-style-type: none"> <li>✓ CCAC and Hospital Reporting Activity Rationalization - Underway</li> </ul>
Lack of and ad hoc adoption of standards across the system	<ul style="list-style-type: none"> <li>✓ Clinical Data Blitz across all regions (new) – Pilot session completed</li> <li>✓ In-Year (new) Financial/Statistical Data Blitz across all regions</li> <li>✓ Alignment of Data Standards Management strategy with existing Ontario Health Informatics Standards Committee Standards Management Process</li> </ul>
Inability to access data in timely manner	<ul style="list-style-type: none"> <li>✓ Move to maximum 60 day hospital reporting requirement in 2005/06</li> <li>✓ First Quarter reporting requirement in 2006/07</li> </ul>
Variation in data quality	<ul style="list-style-type: none"> <li>✓ Clinical Data Quality Re-abstraction Study (14,000 + charts) – awaiting Final Report</li> <li>✓ Financial/Statistical Review in Case Costing Hospitals – completed</li> </ul>
Lack of cohesive approach to dealing with service providers	<ul style="list-style-type: none"> <li>✓ Bilateral Agreement with CIHI – under development</li> </ul>

## **2. Measuring Performance for Change**

# Current Performance Reporting is Fragmented and Focused on Institutions Not the System

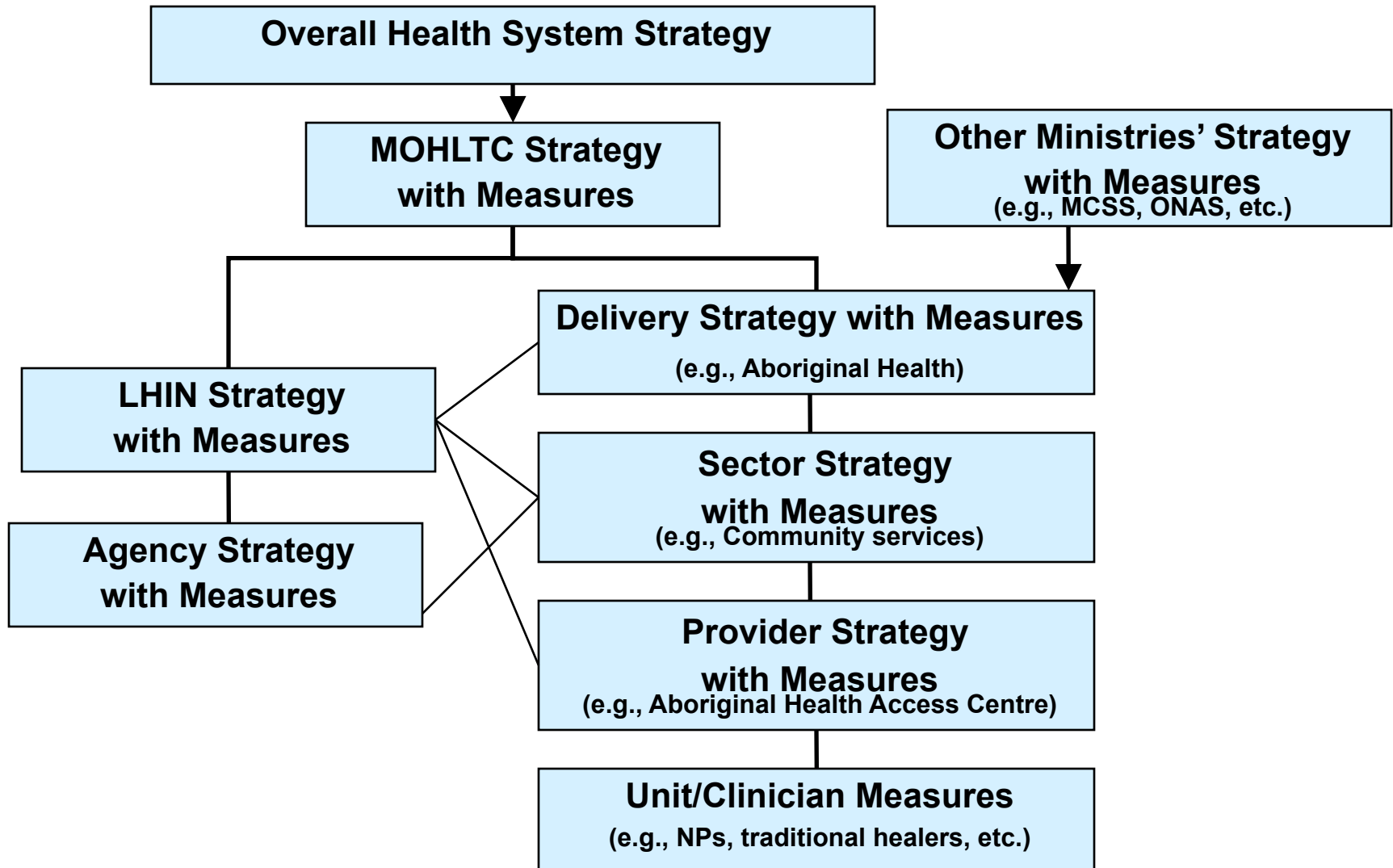
## 2003/04 Performance Reports



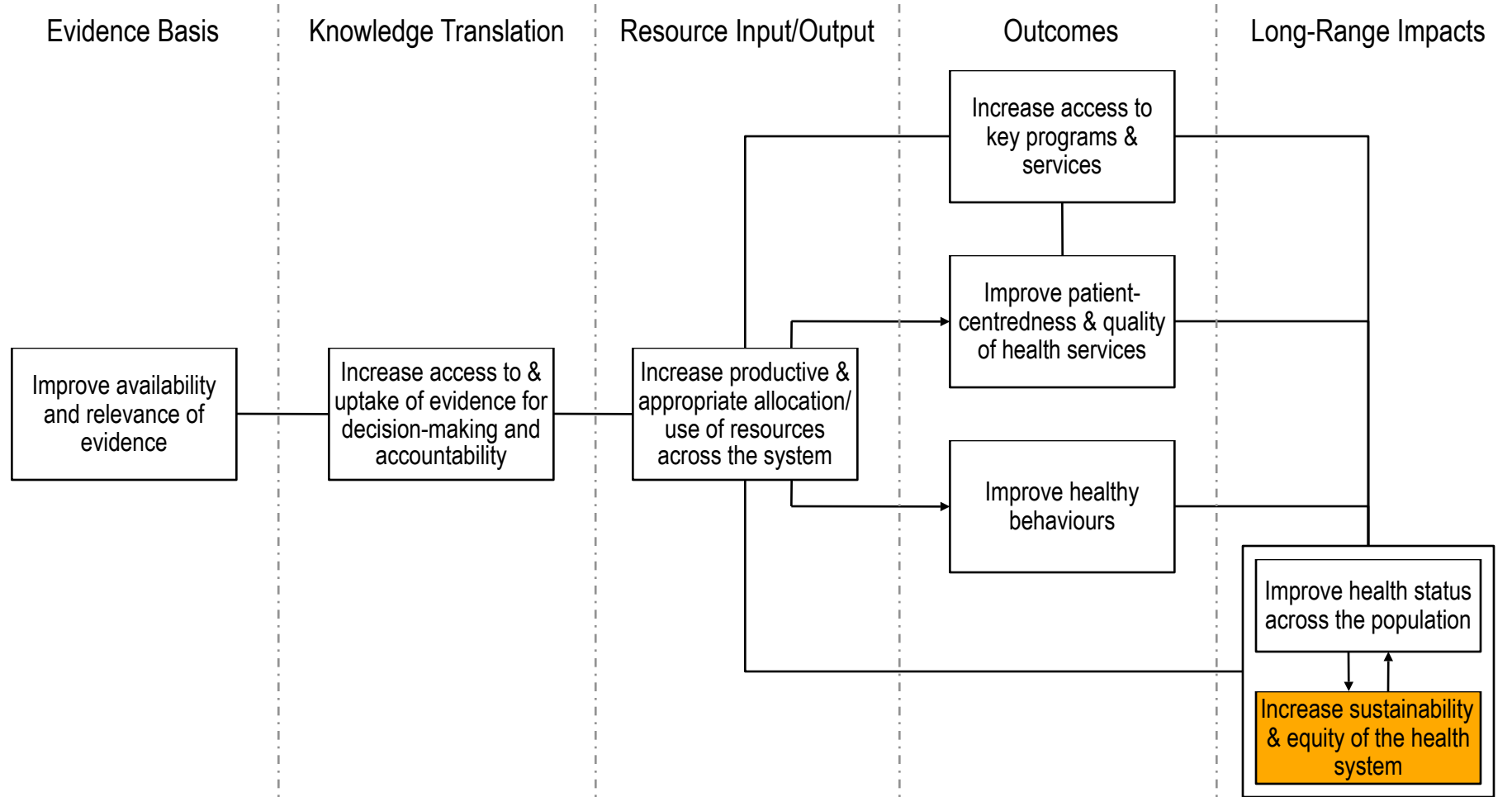
- *Some sectors have very sparse performance reporting*
- *There is very limited linkage between reporting and improvement*
- *Reporting bodies use incompatible methods and frameworks*

No reports    Limited reporting    Extensive reporting

# Future Reporting will be Based on a System Strategy that Cascades to all Sectors



# Strategy Map Supports Priorities and Cascades Across the System 24



# How to Measure Sustainability (An Outcome of the Strategy Map)

Aspects of a sustainable system:

- One that is able to meet its current obligations and expected outcomes
- One that is improving and is capable of sustaining improvement
- One that is capable of adjusting productivity to meet new or changing demands and unexpected system pressures
- One that has a stable or declining set of administrative costs
- One that has increasing value (economic and health outcomes)
- One whose components complement each other

# Sustainability Measures from the Private Sector

Element of Sustainability	Private Sector Measure	Potential Health System Measures
<b>One that is able to meet current obligations and performance targets</b>	<ul style="list-style-type: none"> <li>• Total debt as a % of cash flow</li> <li>• Long term debt as a % of cash flow</li> </ul>	<ul style="list-style-type: none"> <li>• Total debt as a % of cash flow</li> <li>• Long term debt as a % of cash flow</li> </ul>
<b>One that is capable of adjusting productivity to meet new or changing demands and unexpected system pressures</b>	<ul style="list-style-type: none"> <li>• Change in productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Change in productivity</li> <li>• Change in human resource supply</li> <li>• Proportion of the health system with a long-range (10-year) plan</li> </ul>
<b>One that is improving and capable of sustaining improvement</b>	<ul style="list-style-type: none"> <li>• Research &amp; Development as a proportion of revenues</li> <li>• Investment in information management as a proportion of revenue</li> </ul>	<ul style="list-style-type: none"> <li>• Research and Development as a proportion of revenue</li> <li>• Investment in information management as a proportion of revenue</li> </ul>
<b>One that has a stable or declining set of administrative costs</b>	<ul style="list-style-type: none"> <li>• Cost of sales as a percentage of revenues</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of total health system expenditures that relate to management of operations</li> </ul>
<b>One that has increasing value</b>	<ul style="list-style-type: none"> <li>• Change in sum of equity and retained earnings</li> </ul>	<ul style="list-style-type: none"> <li>• Cost Efficiency Growth Measure</li> </ul>
<b>One that relates well to its constituent parts</b>	<ul style="list-style-type: none"> <li>• Change in marketshare</li> <li>• Measures of competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Allocative Efficiency</li> </ul>

# Next Steps in Measuring Sustainability

- Development of indicators of sustainability for the health system scorecard (collectable in the short run):
  - For accountability to the public: indicators of health system sustainability (e.g., change in productivity)
  - For health system performance management: actionable performance indicators of value creation/destruction
  - For health care provider performance management: private sector measures that can be cascaded down through the system (e.g., administrative costs)
- Within the next six months, a report on sustainability will be produced, summarizing methods from other jurisdictions and reporting on indicators.

## **3. Supporting Evidence-Based Decision-Making**

# Supporting Evidence-Based Decisions: Vision

- The ministry is transitioning from an operational body to a health care system steward
  - A responsible steward needs the capacity to make decisions based on sound evidence
  - Information Management Strategy will design tools and help establish the decision support capacity required by the future Ministry
- The health care system will also increasingly rely on evidence for decision-making
  - Information Management Strategy will ensure LHINs and Ministry analysts have access to standardized decision support tools

# Supporting Evidence-Based Decisions: Short-Term (1 day to 8 weeks) Response Analysis Capacity

## Short term

- Develop a strong foundation of analytical tools
- Produce guides to available data and analytical resources
- Develop capacity to track and prioritize requests

**Tracking System refinement**



**Expert Directory**



**Data Guide**



**Planning tools developed by arms-length organizations**

(e.g., needs based planning model for seniors, local health system monitoring)



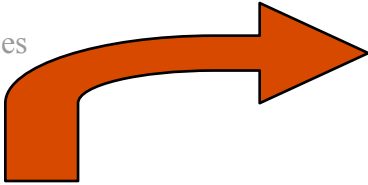
**Addressing need for:**

- response to emerging issues
- information to support negotiations
- guide to available data sources
- identifying available expertise

e.g., How has the investment in more procedures affected waiting time? What impact has this had on community support/rehabilitation services?

# Supporting Evidence-Based Decisions: Long-Range Scenario Planning

Health System Scorecard  
Local planning issues  
New medical technologies



1. Identifies significant long-range policy issue

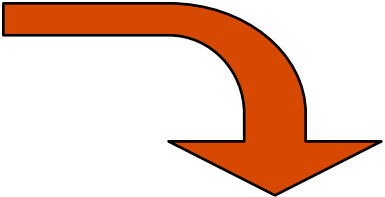


*Ministry of Health and Long-Term Care*

2. Articulates common questions, assumptions, issues



*Table with clinical, administrative, scientific, bureaucratic, and political representation*



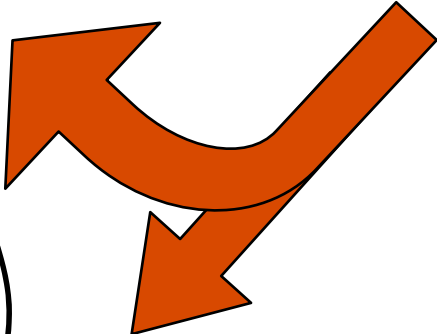
3. Produces research models addressing questions, assumptions



*Research community*



Authoritative Data Sources



4. Uses model outputs, scenarios to inform policy decisions



*Local Health Integration Networks, Agencies/ Disease Networks*

# Applying the Long-Range Scenario Planning Method in Ontario

- Field-testing the long-range scenario planning methodology with the Specialized Pediatric Coordinating Council
- Ministry, political, administrative, scientific, and clinical representatives will provide input to help direct the efforts of the research
- Output will be a model which will help inform decisions about how to allocate specialized paediatric expertise and services around the province based on predicted needs

## Next Questions:

- Patient Safety – in-depth evaluation of costs and opportunities
- Ontario Women's Health Council – Needs Based Planning Model

# **Information and Accountability**

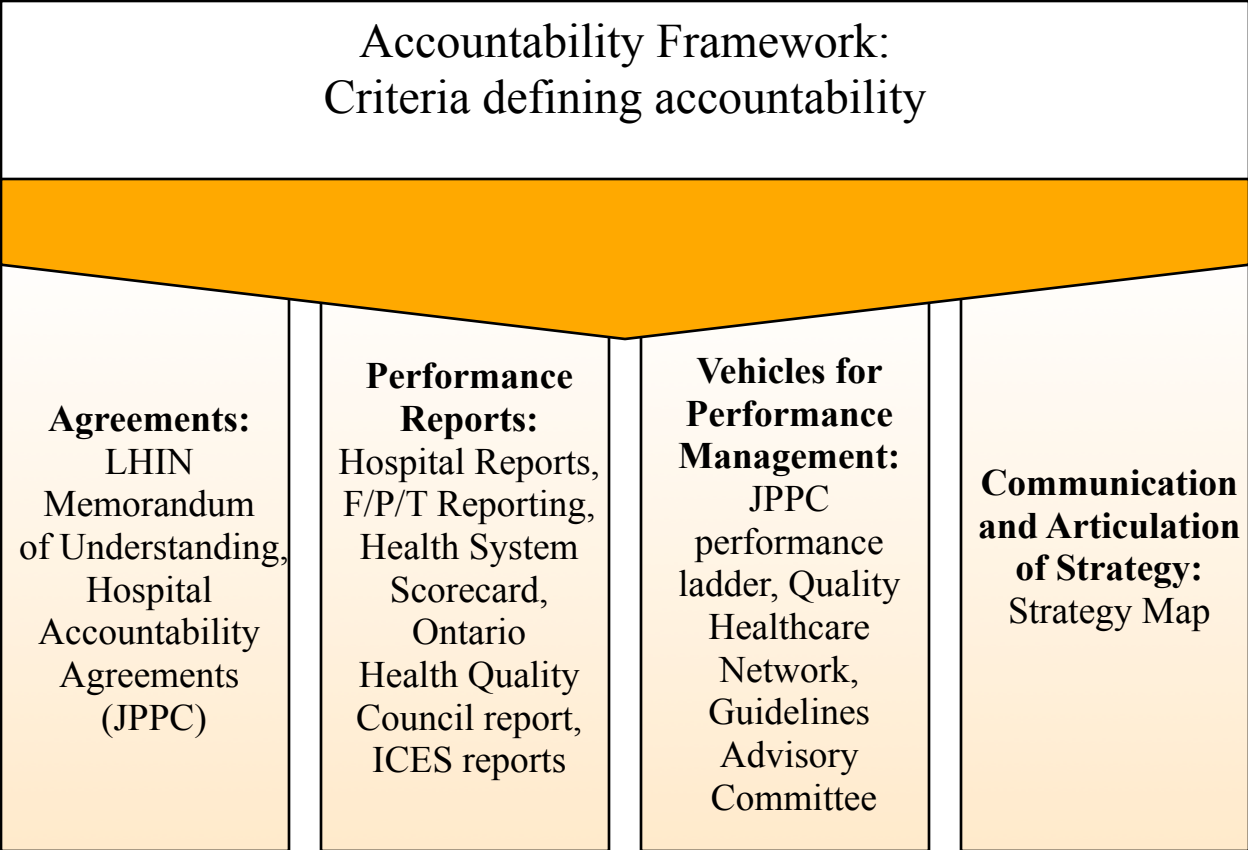
# Promoting a Culture of Accountability and Improved Outcomes

- Accountability is supported by the combination of information with policies, processes, and institutions
- Although performance information is necessary to accountability, it is not sufficient to ensure accountability
- Evidence from qualitative and quantitative studies of the impact and usefulness of performance information shows that contextual factors around the information are critical, particularly to the extent that the information:
  - is understood, is considered to be valid, and is important and relevant to managerial or clinical practice;
  - is accompanied by supports for its interpretation, and use;
  - is accompanied by attention to its quality and accuracy;
  - involves users (providers and managers) in its development and implementation; and
  - is connected to incentives for performance.

# Mechanisms for Information and Accountability

**Defining Accountability:**  
*Asks the question – “how would we know there was strong accountability in the system?”*

**Implementing Accountability:**  
*Provides the mechanisms to support accountability through agreements, reports, and other vehicles*



# Accountability Framework for the Health System

- What is an accountability framework?
  - A set of criteria that articulates what we mean when we say that a system has strong accountability.
- Purposes of an accountability framework:
  1. To provide a consistent framework for managing accountability relationships in the health care system.
  1. To provide a framework for assessing the current state of accountability within the health care system and identifying gaps.
  2. To inform system design as changes to the health care system are being proposed (e.g., accountability agreements with hospitals, Local Health Integration Networks, etc.)
  3. To use as an ongoing tool to assess the impact of any new process, legislation, policy, or relationships on the attribute of accountability in the health care system.

# Criteria for Assessment of Accountability (draft)

<b>Dimensions</b>	<b>Criteria</b>
<b>Clarity of performance expectations with authority and capacity to act</b>	1. Parties have authority for roles and responsibilities
	2. Parties have the resources to fulfill their roles and responsibilities
	3. Roles and reporting relationships are clear, explicit, and aligned
<b>Trust in priority setting and negotiations</b>	1. Goals and priorities are clear, limited, and identified as short- and long-term.
	2. Process for negotiating measures and contracts is transparent
<b>Relevant, credible and effective measurement systems</b>	1. Performance measurement is comprehensive and linked to system strategies
	2. Performance expectations are clearly articulated
	3. Performance expectations are scalable across levels (e.g., same or comparable/consistent)
	4. Reporting is comprehensible, efficient, and aligned with its audience's needs and ability
<b>Clear value of data</b>	1. The burden of data collection should not be greater than the value of the data collected
	2. Data are of good quality
	3. Processes for data reporting requirements and data protection are effective
<b>Results-based action</b>	1. Consequences for performance are appropriate and based on system priorities
	2. Parties have the capacity to improve performance

# Good Accountability and Information Management – How do we know when we've got it?

- All players:
  - Work from the same data for negotiations
  - Have measures for all key performance goals
  - Rely on the same data sets for accountability and improvement projects
  - Deal with remediation and disputes through the review of the data
  - Data quality is part of the routine, not a special function