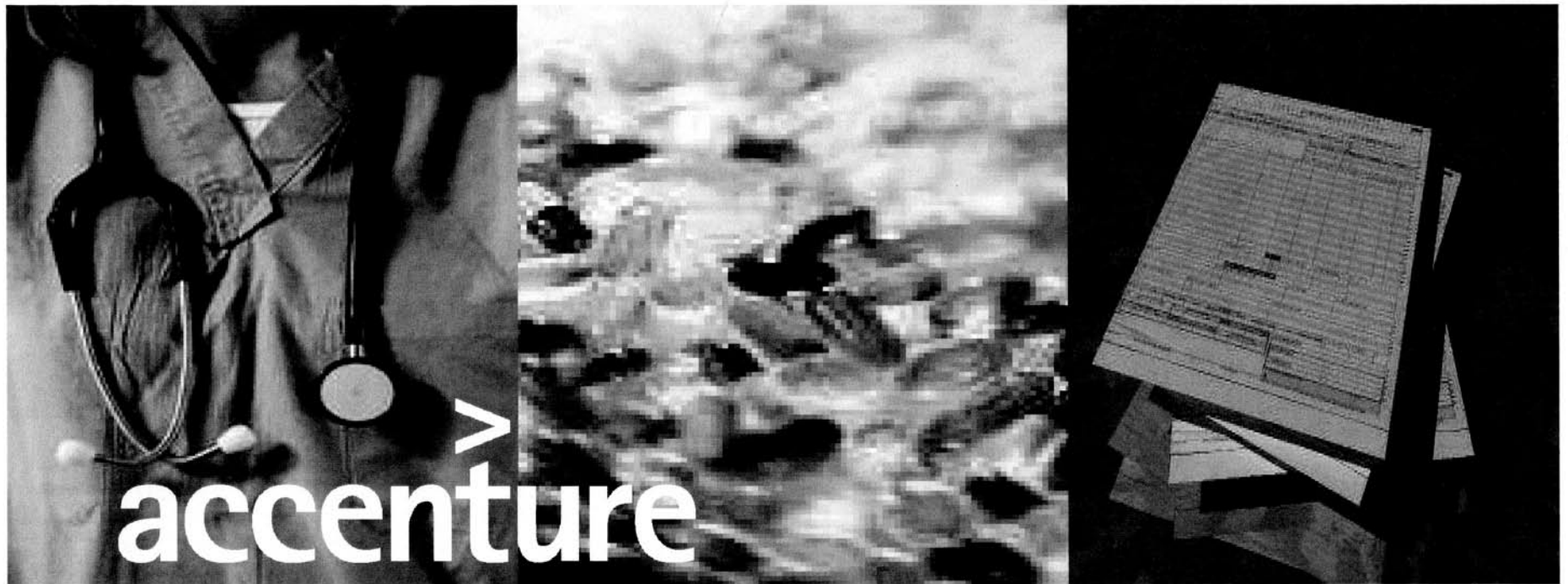




High performance. Delivered.

Evolving the Use, Usability and Usefulness of WTIS Data: Focus on the Patient

May 30, 2007

As more information is collected in Ontario's Wait Time Information System (WTIS) , opportunities exist to broaden the usage of the data in the short and longer terms



Potential Uses for Existing Data - Short Term

- Presentation of Additional Data on Website
 - Data by priority
 - Distribution of cases by priority
 - Data by Surgeon
 - Volume of cases per Hospital, vs. Wait Times
 - Number and rate of cases/incidents within catchment area, versus waits
- National Comparisons
 - Comparing across provinces
 - Compare targets across provinces
- Improvement of Patient Experience
 - Wait list/referral management
 - Hospital patient flow optimization
- Health System Governance
 - Evaluation of resource mix
 - Distinguishing between patients who are on multiple wait lists
 - Identification of data gaming



Opportunities to Integrate Additional Data - Medium to Long-Term

- Patient Safety / Quality of Care
- Infection rates
- Death rates
- Patient outcomes
- All Surgery wait times
- Emergency department wait times
- Non-emergent clinic wait times
- Waits 1, 3

What are some potential next steps in the collection, reporting and usage of Wait Time Data?



2

There is a perceived need to promote patient empowerment, by presenting and integrating the data currently being collected through the Wait Time Information System and other projects, in order to move toward more tangible outcomes in patient care

- For **Providers**: Promote use of the data to manage and improve access to care for patients
 - Encourage collaboration among hospitals and clinicians to use wait time information to manage and reduce patient waits
 - Identify and share best practices in using wait time information to improve access to care
 - Integrate Wait Time data with other types of data (e.g. safety, outcomes) to gain valuable insights
- For **Policy Makers**: Use the data to support governance and stewardship of the health system
 - Monitor performance and improvement of the health system
 - Identify information gaps and develop action plans to collect additional data
 - Support insight-driven health system strategy and planning to improve patient access to care
- For **Researchers**: Integrate the data with other research supporting improved access to care
 - Conduct operational research to support process improvements
 - Develop additional evidence-based benchmarks
 - Apply data within other analytical models (e.g. queuing theory)

The Goal for Patients:

- Increase their involvement and participation in using wait time information in order to:
 - Empower and encourage them to use the information in conversations with their care providers
 - Improve public education about uses of the wait time information, its benefits, and limitations
 - Educate them about how the data is being used by providers, policy makers, and researchers

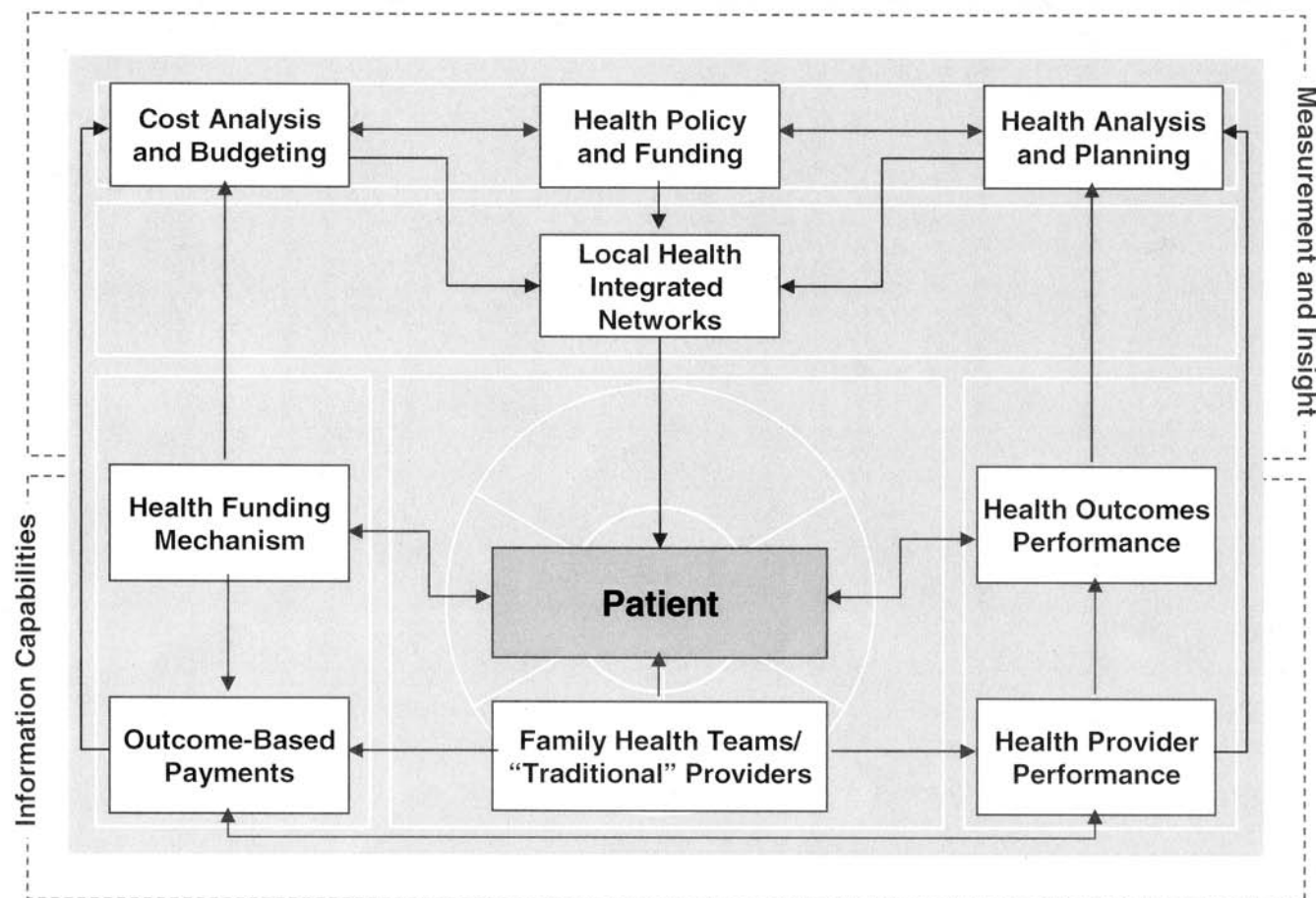
In a patient-centric world, we view patients as consumers served by an interdisciplinary team of health care providers



3

Key Components of a Patient-Centric Health model

Impact



- Patients are at the centre of a more holistic healthcare model
- Innovation will be driven by an informed view of outcomes
- Proactive planning and management of individual health
- Interventions are insight-driven and integrated
- Regionalized networks would lead to more coordinated health care delivery for patients

In Canada's public health care model, adapting the concept of consumerism introduces new opportunities



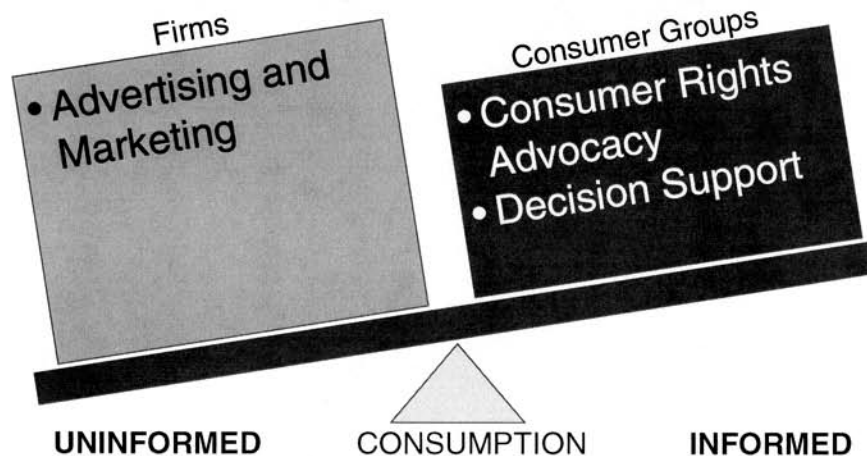
As a term, 'consumerism' has two definitions that are traditionally opposite in meaning:

- (1) The emphasis of advertising and marketing efforts toward creating consumers
- (2) Advocating the rights of consumers to protect and support them in the decisions they make

Traditional Consumer Model

- Firms advertise goods and services to induce additional demand
- Consumer groups support consumers in making educated decisions, which helps to temper demand

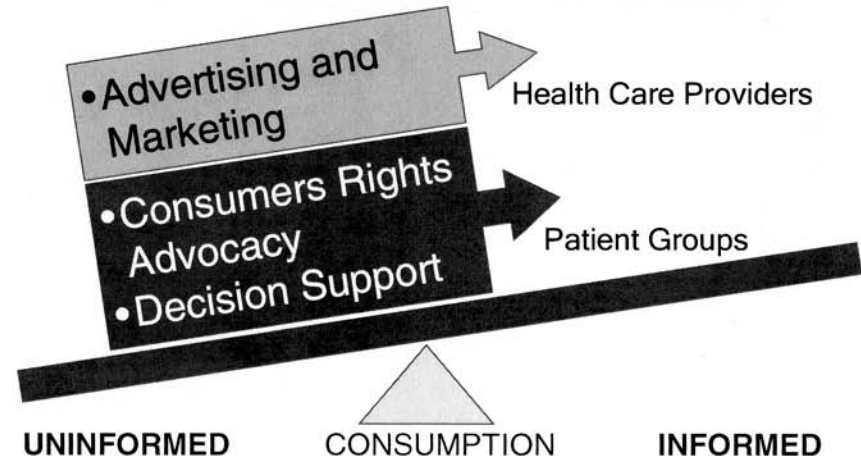
Goals conflict, simultaneously increasing and decreasing consumption



Public Health Care Model

- Health care providers advertise available services; provide information on waits times, capacity and quality
- Patient groups support decisions based on information provided by healthcare providers and other sources to select appropriate services

The universal goal is to create informed patients to ensure appropriate course of care



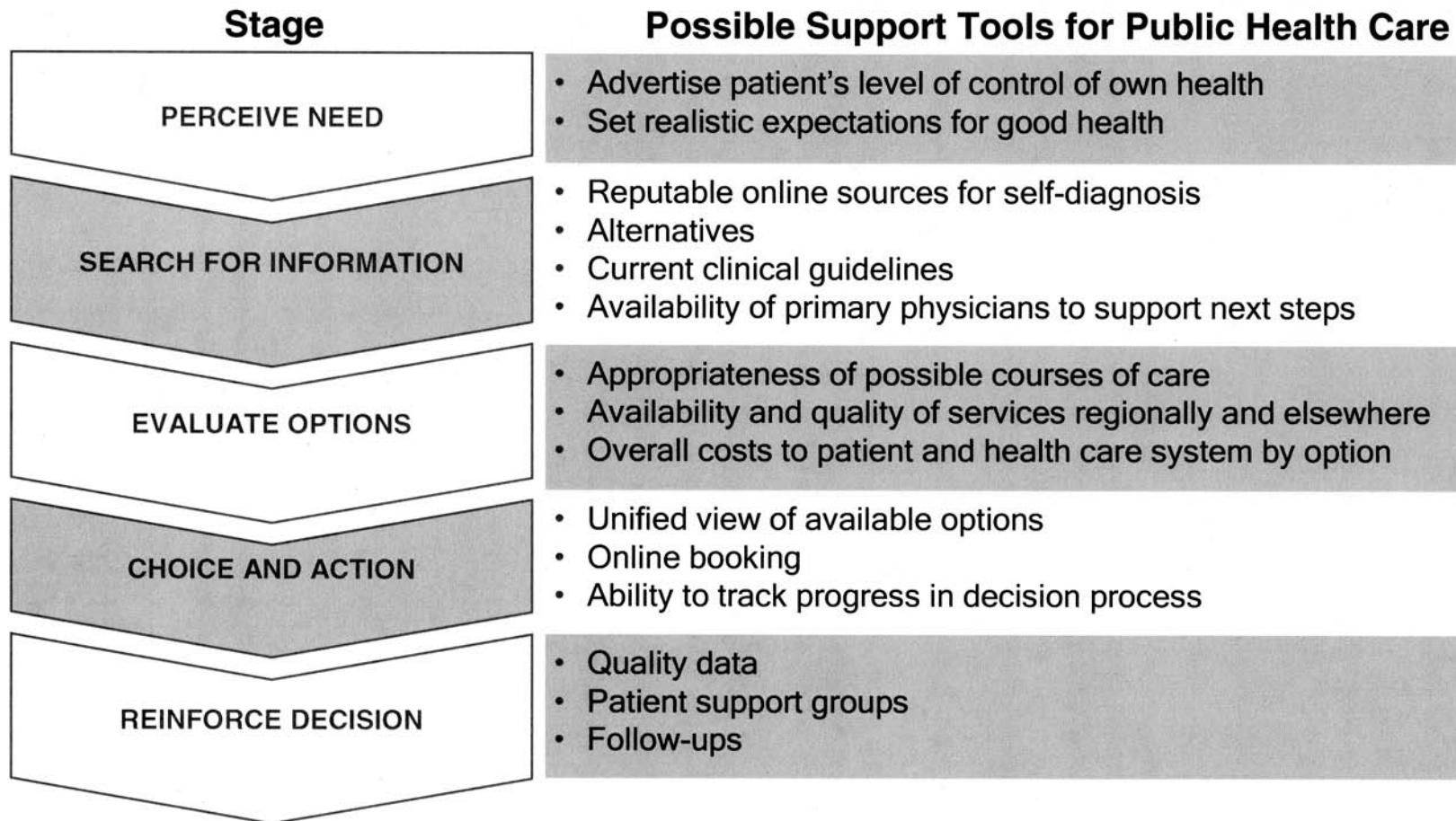
As we shift to serve patients as consumers, a new set of tools allows us to analyze and address their needs



5

The Consumer Decision Cycle:

Adapted for Public Health Care



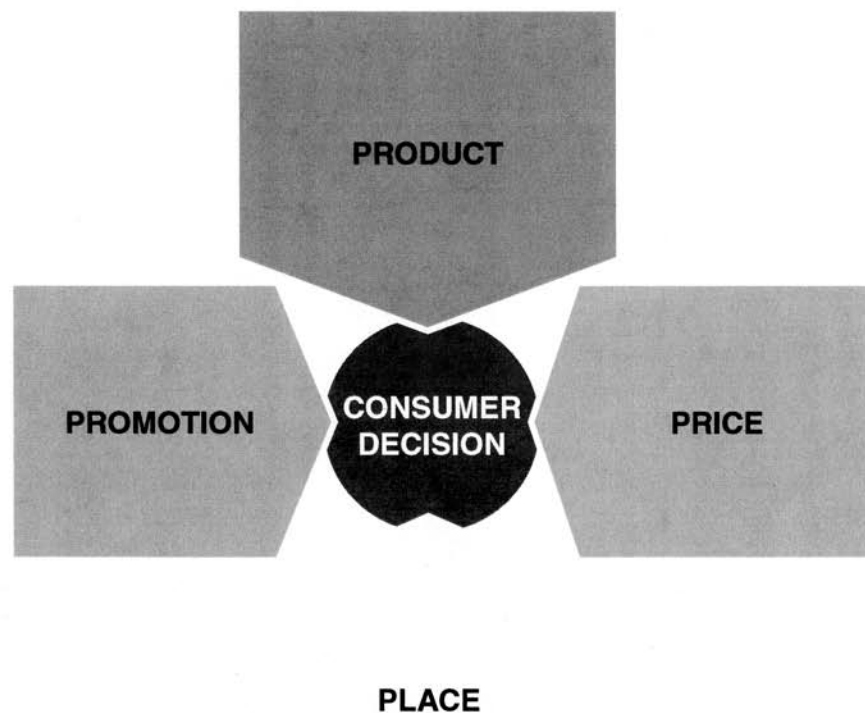
Traditional frameworks applied to the public health care sector assist us in developing novel solutions

6

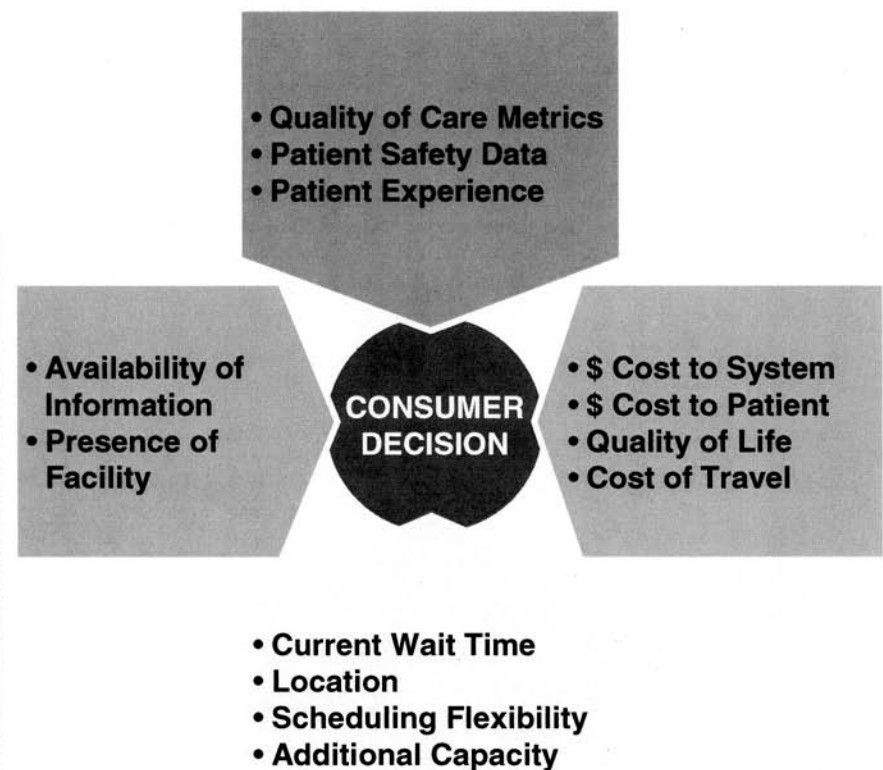
Factors Affecting Consumer Decisions:

Adapted for Public Health Care

Traditional Consumer Model



Public Health Care Model



The Personal Health Record provides an integrated view of consumer-oriented information, which requires common definitions, shared technology standards and vast collaboration



Private Lifetime Record

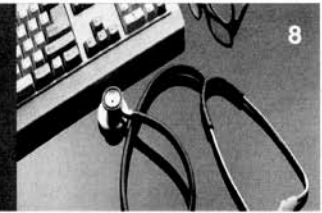
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This EHR screen is for illustration purposes only. Caroline Smith and all data are fictitious.

- 1 Demographic information identifying the patient
- 2 Demographic information identifying the primary clinician and other healthcare providers
- 3 Patient's laboratory results, images and hospital clinical reports
- 4 Patient alerts, such as allergies
- 5 Patient's medication history including dosage recommendations
- 6 Patient's medical history/problem list
- 7 Patient's history of interaction with the healthcare system
- 8 Patient's immunization history
- 9 Patient's chronic disease history – an example of how the electronic health record can be easily extended

Source: Canada Health Infoway

In order to quickly align the interests of a complex network of stakeholders including patient-consumers, new mass collaboration tools can be leveraged



Using provided or self-organized online communities, patient-consumers and other health system stakeholders can work together to solve problems using shared, flexible tools

- Possible Uses of Mass Collaboration Tools
 - Empower patient-consumers with information to select best course of care
 - Optimize operations within departments, hospitals, regions
 - Objective interpretations of timely access and patient safety
- Possible Tools to Offer
 - Analytical tools to synthesize new sources of data
 - Educational tools on interpretation of information for patients
 - Mass collaboration tools for analysis and planning across stakeholders
- Crucial Considerations for Health Care
 - How to balance empowerment with integrity, privacy and security of data
 - Appropriate format for widely differing stakeholders
 - Patients, providers, practitioners, researchers, managers, and policy-makers
 - Effect of volume funding on information sharing
 - Risk of reduced cooperation when in competition for funds
 - Relationship between wait time reduction and overall system cost reduction

Example: In the longer term, analytical and educational tools could be developed, improved and shared more efficiently, consistently and responsively through an open collaboration model



**Components
of Mass
Collaboration
Tools**

Standard Tool Set

- User categories (e.g. patient-consumer, media, hospital executive, lab, physician, ministry analyst, etc.)
- Range of tool capability (reporting, query, online analysis, data mining, etc.)

Portal Integration

- Launch point to analytic applications, metadata, business rule management
- Navigation support
- Integration with enterprise security

Collaboration Model

- Idea and best practices sharing
- Business area roles and responsibilities
- Governance

Access Architecture

- Read access
- Create/update access
- Data file exchange
- Data quality and integrity rules

Security

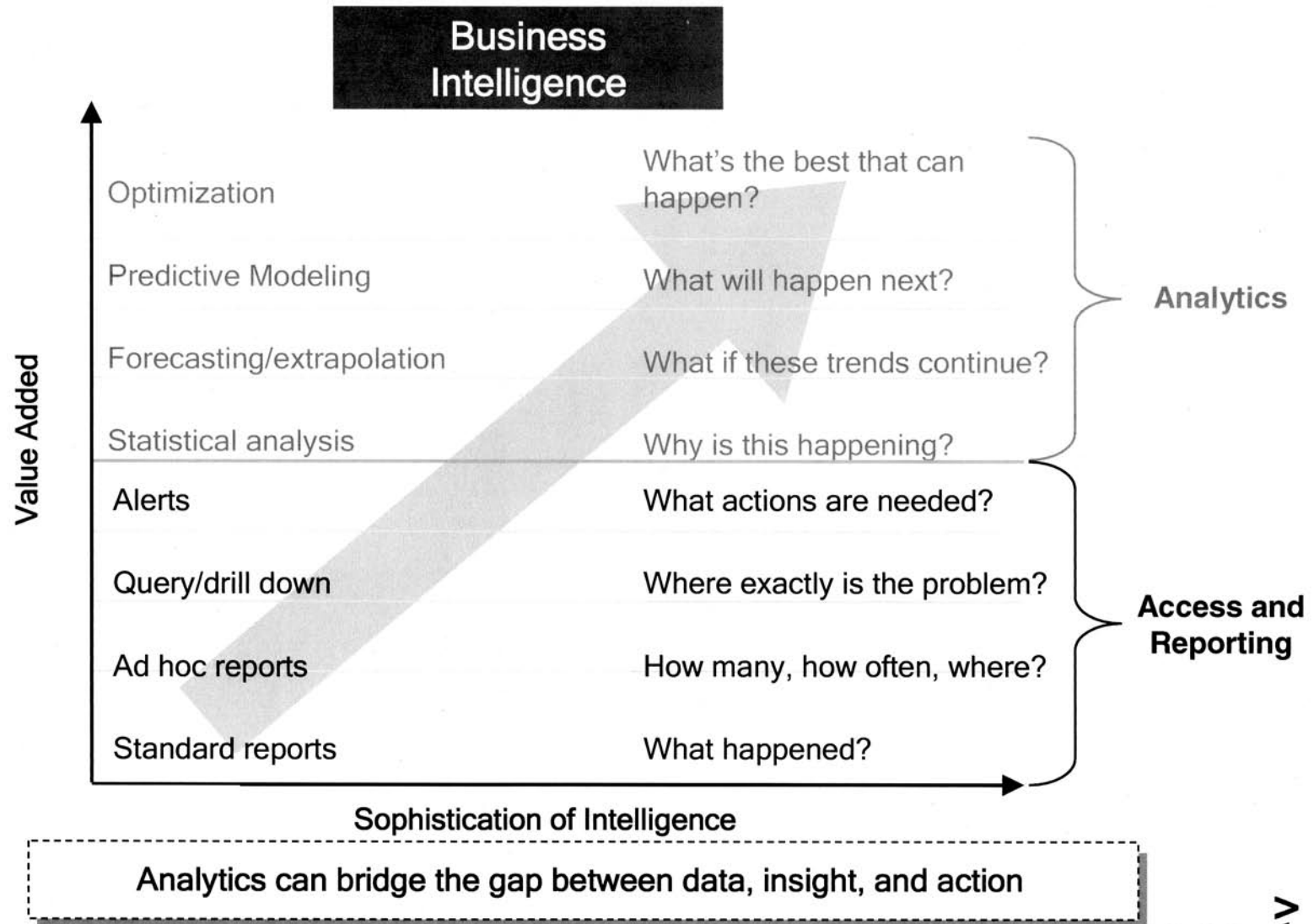
- Sign-on management
- Enterprise security integration
- Privacy regulations compliance

A collaborative model could be a potential longer-term option to create continuous improvement in the system

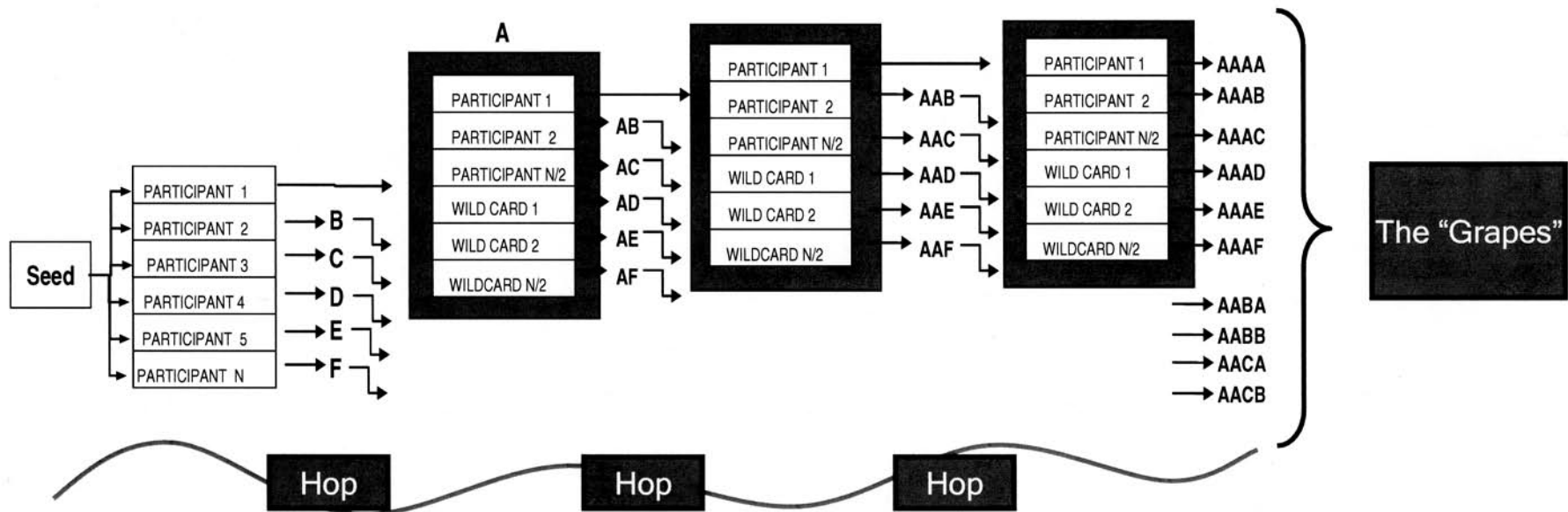
Example: Business Intelligence technologies targeted at different audiences, including patient-consumers, could also be deployed in order to understand, analyze and guide system performance in the short term



10



Example: Accenture has developed an “Innovation Grapevine”, which allows participants to drive innovations together to quickly achieve highly-integrative results in a mass-collaboration setting.



Accenture Innovation Grapevine Overview:

- Works like a telephone tree in that the vines multiply with each “hop.”
- Can be “low tech” (email chain) or run on secure site leveraging Web 2.0 technologies (Wikis, text mining, etc).
- In the context of Wait Times, could be used to quickly drive innovation around use of the WTIS data by patient-consumers, providers, payers, and researchers