Manitoba's Provincial Lab Information System

The Clinical and Operational Benefits of Bringing a Province Together

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Diagnostic Services Manitoba

- Manitoba's public sector diagnostic healthcare service provider
- Responsible for:
  - All public laboratory services
  - Rural diagnostic imaging services

THE GOAL

Diagnostic Informatics Vision

- To continually improve the quality, timeliness, and sustainability of the Diagnostic and Digital Imaging services provided to Manitobans, by:
  - Integrating with the upstream and downstream providers of patient care
  - Standardizing solutions across the province
  - Improving the flow of images and results
  - Delivering solutions and services efficiently

The Virtuous Cycle

THE PROVINCIAL LIS PROJECT

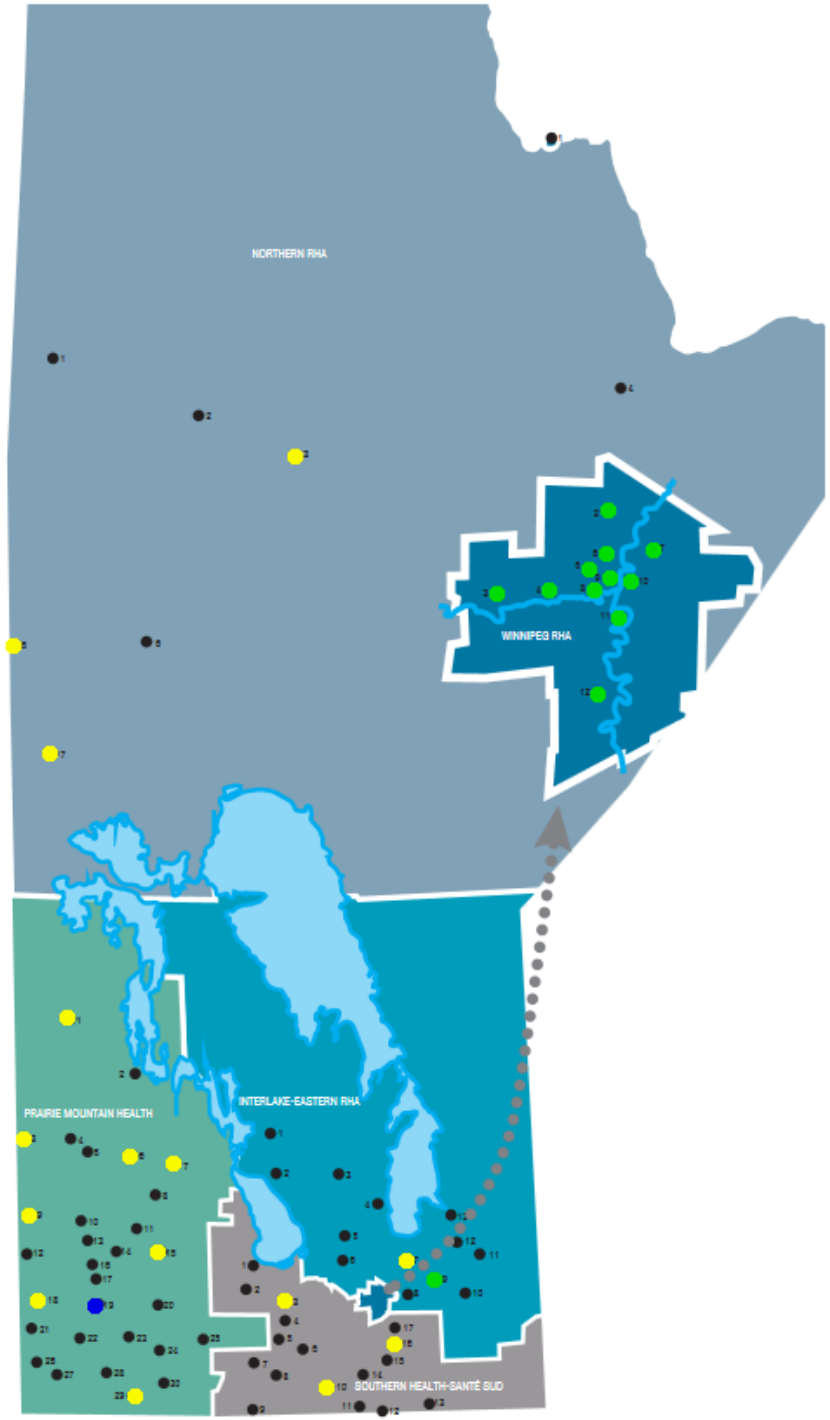
DIAGNOSTIC SERVICES MANITOBA
SERVICES DIAGNOSTIC MANITOBA

PLIS Objective

The PLIS project will implement a single provincial LIS in DSM public laboratories within **48** months of the initiation of the project

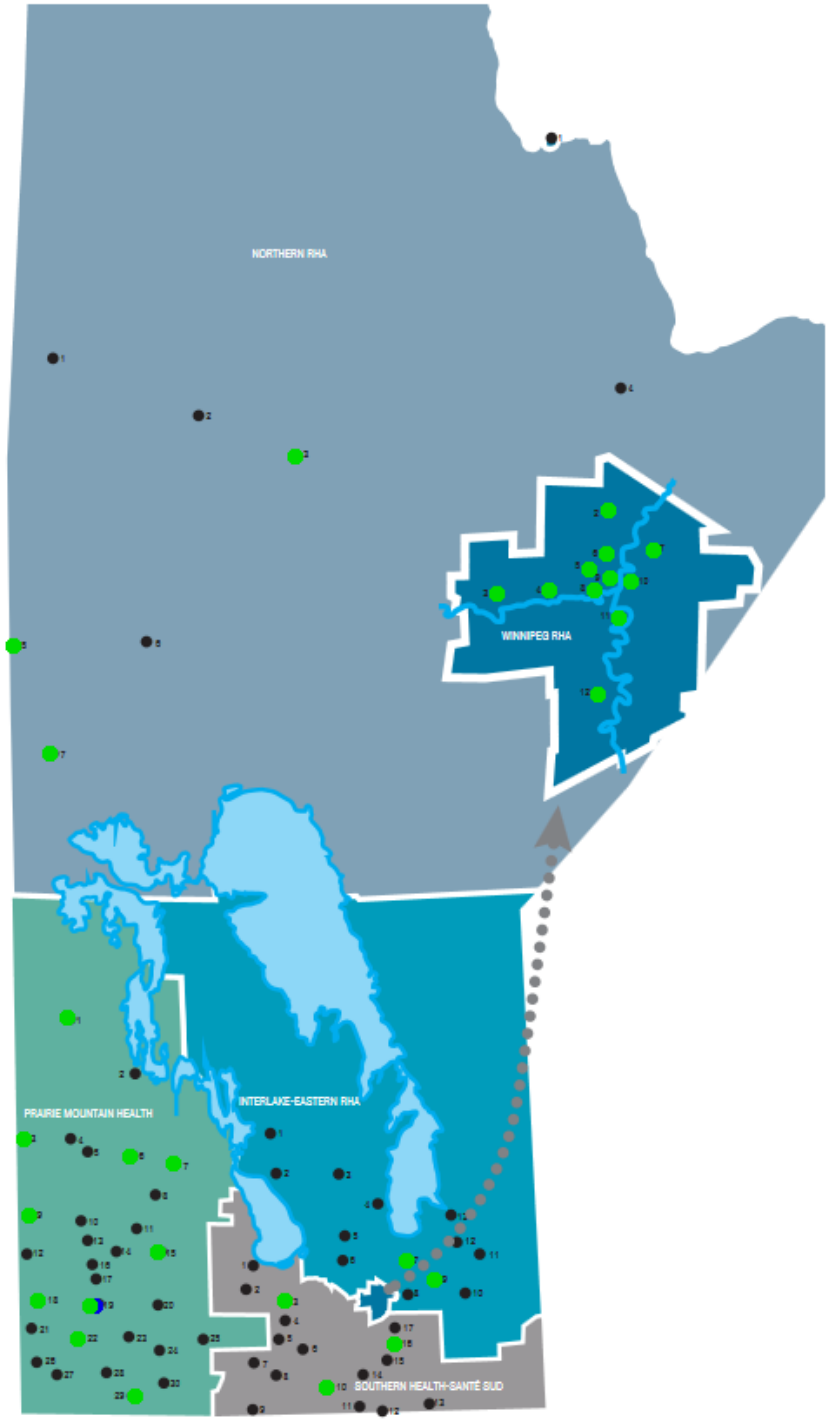
- Automate up to **66** DSM laboratory sites with the Delphic LIS
- Upgrade the servers and associated infrastructure of the current Delphic LIS; upgrade to the latest Delphic version v9.0

PLIS Status Sep 2013



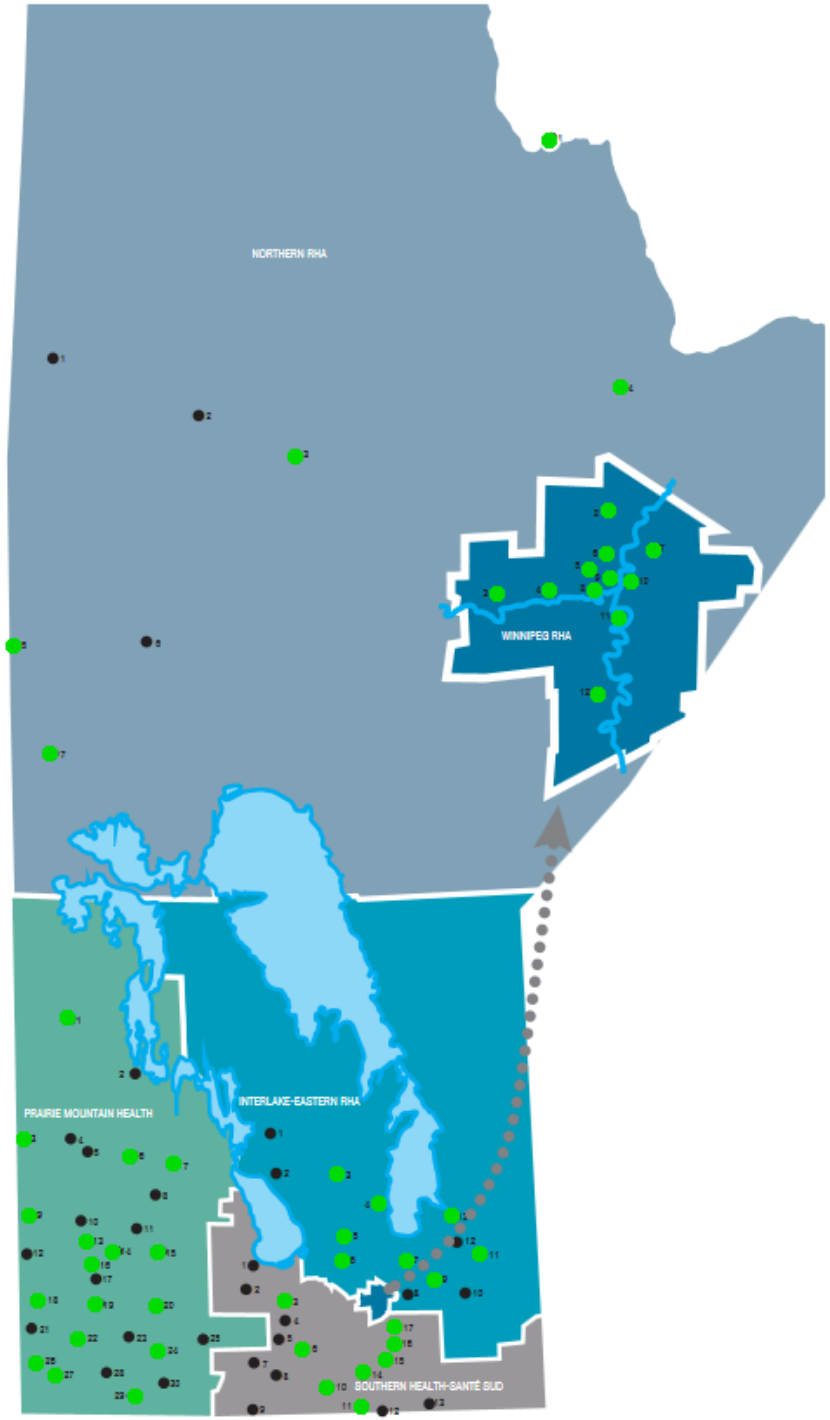
DIAGNOSTIC SE
MANITOBA

PLIS Status Mar 2015



DIAGNOSTIC SE
MANITOBA

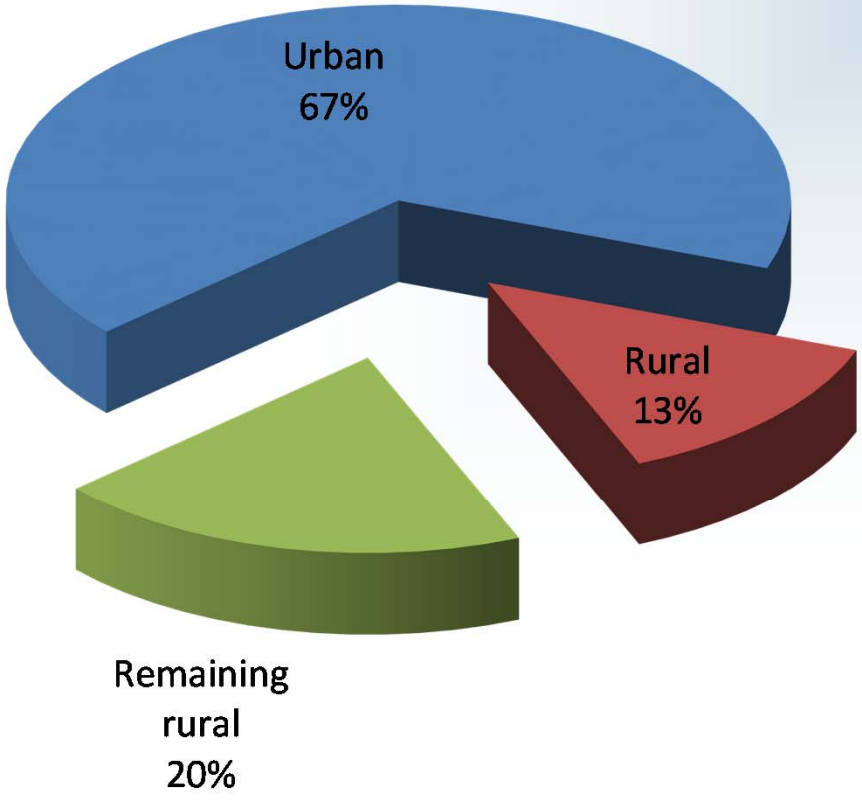
PLIS Status Mar 2016



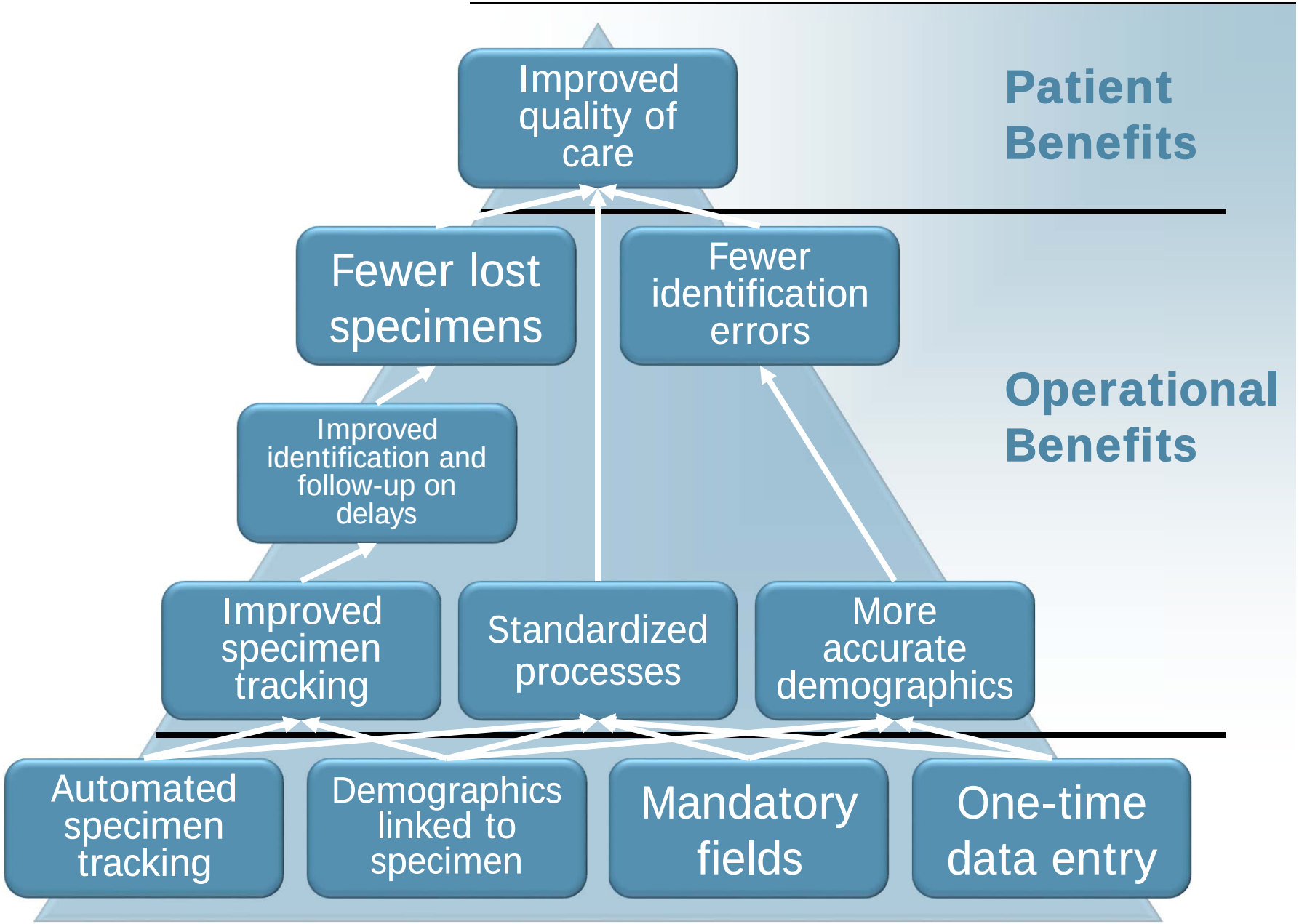
DIAGNOSTIC SE
MANITOBA

2014 Test Volumes by Worklab

(actual & estimate)



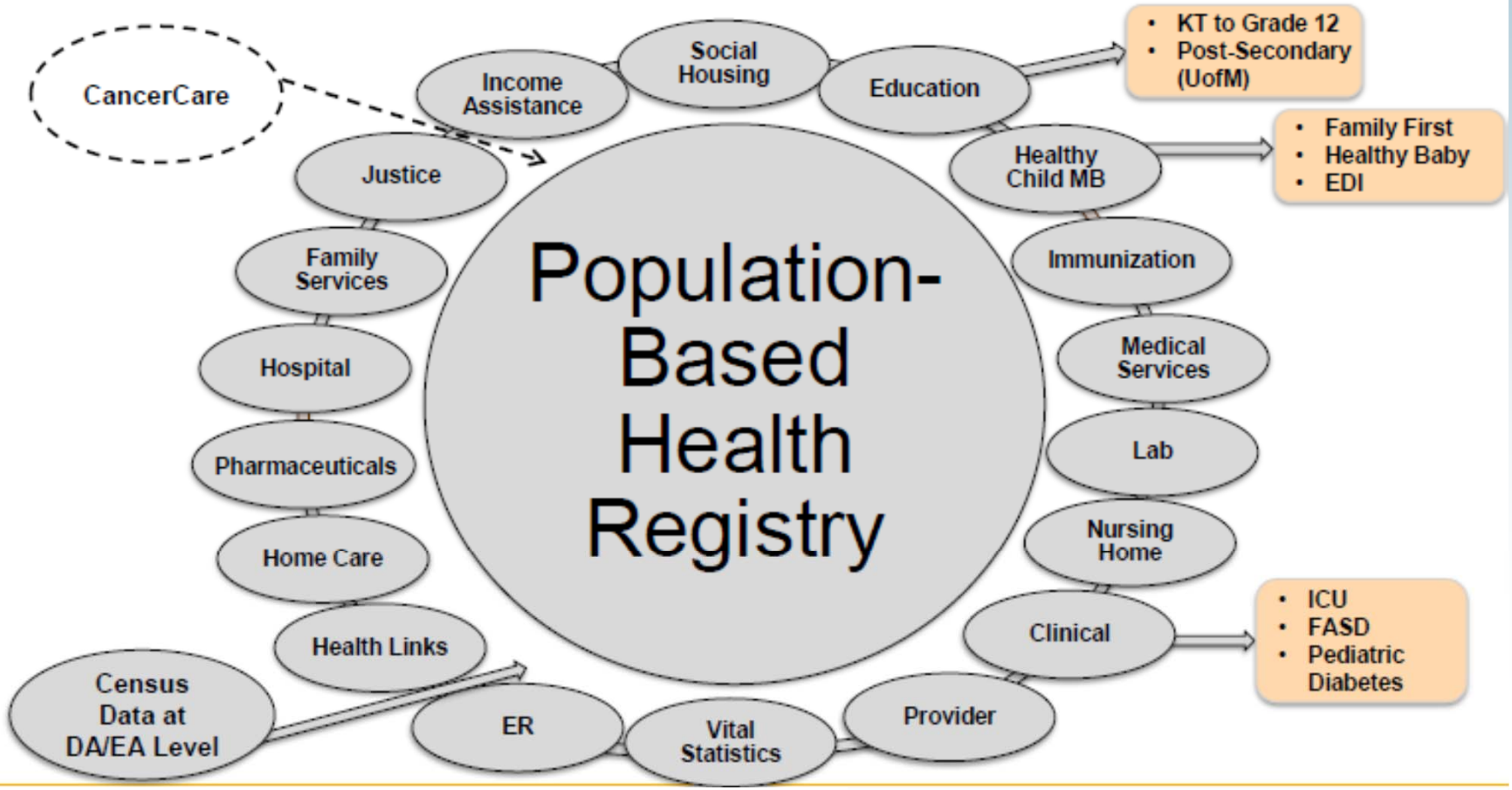
RESULTS: QUALITY


Improved quality of care
Patient Benefits
Fewer lost specimens
Fewer identification errors
Operational Benefits
Improved identification and follow-up on delays
Improved specimen tracking
Standardized processes
More accurate demographics
Automated specimen tracking
Demographics linked to specimen
Mandatory fields
One-time data entry

XPLORER INNOVATOR PIONEER ADVENTURER VISIONARY TRAILBLAZER

MCHP Houses the Anonymized

Population Health Research Data Repository

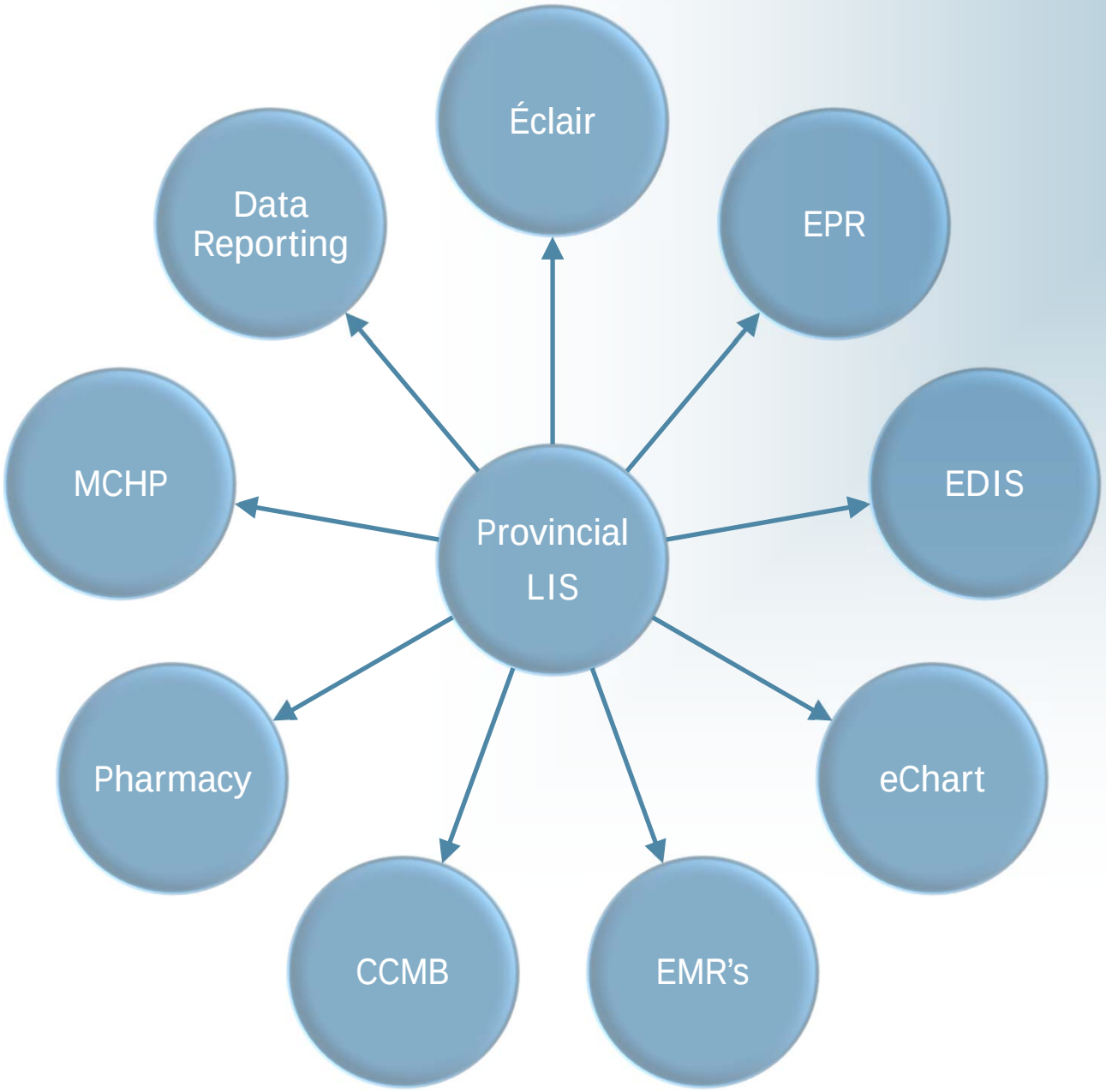


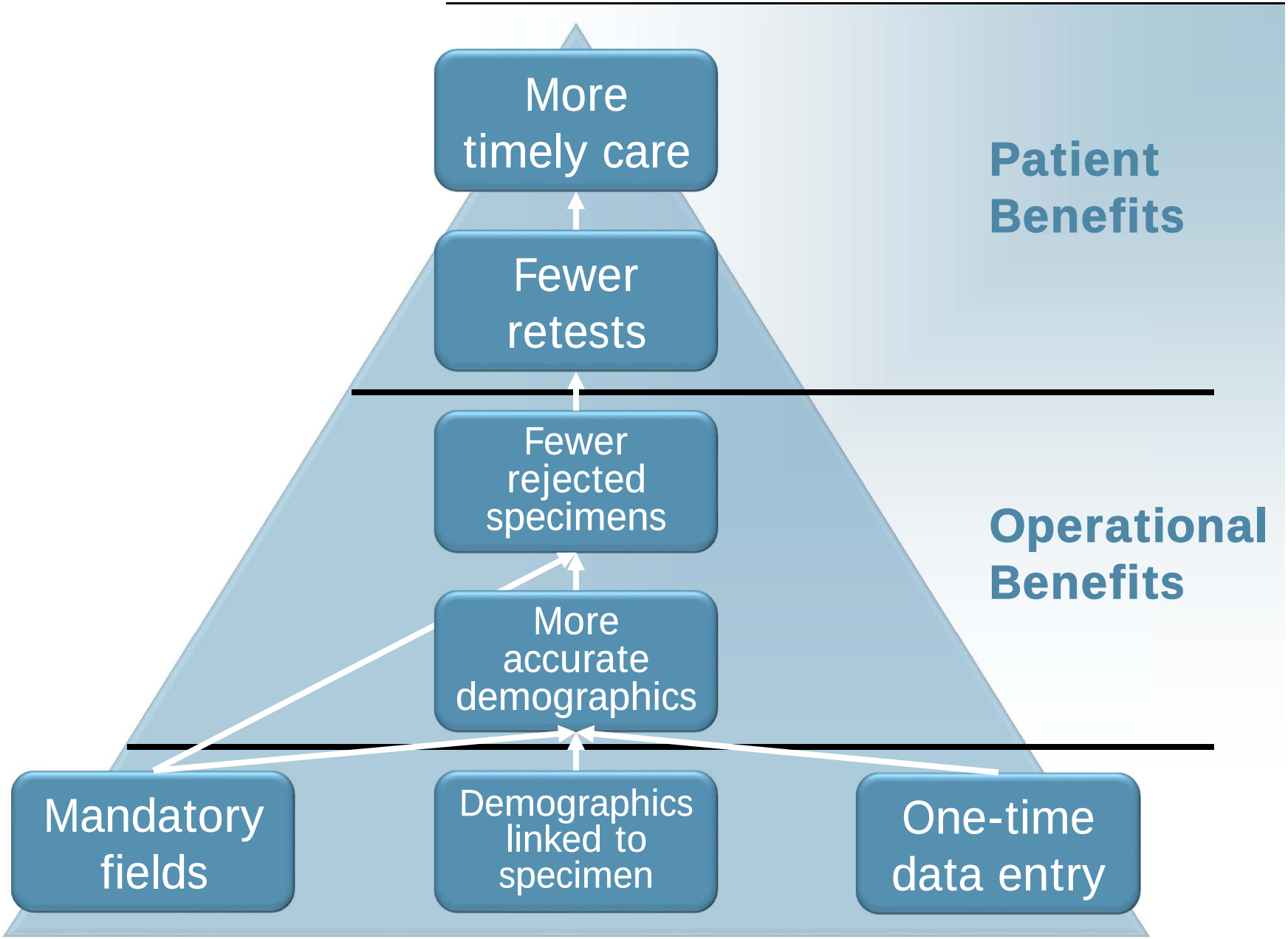
http://umanitoba.ca/faculties/health_sciences/medicine/units/community_health_sciences/departmental_units/mchp/protocol/media/Repository_circles.pdf

Manitoba Centre for Health Policy | University of Manitoba

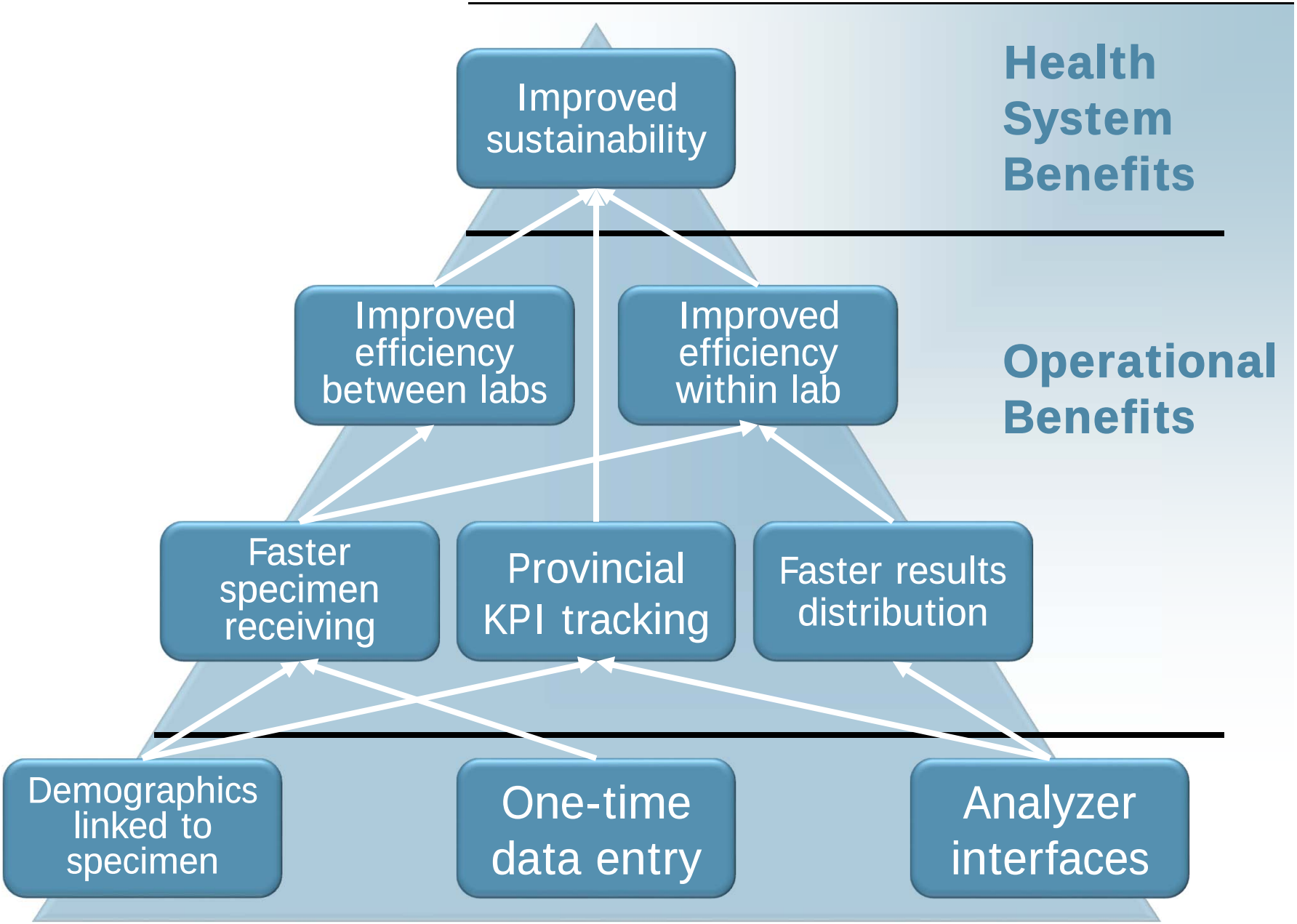
DIAGNOSTIC SERVICES MANITOBA SERVICES DIAGNOSTIC MANITOBA

RESULTS: TIMELINESS


Éclair
Data Reporting
EPR
MCHP
Provincial LIS
EDIS
Pharmacy
eChart
CCMB
EMR's


More timely care
Fewer retests
Fewer rejected specimens
More accurate demographics
Mandatory fields
Demographics linked to specimen
One-time data entry
Patient Benefits
Operational Benefits

RESULTS: SUSTAINABILITY


Improved sustainability
Health System Benefits
Improved efficiency between labs
Improved efficiency within lab
Operational Benefits
Faster specimen receiving
Provincial KPI tracking
Faster results distribution
Demographics linked to specimen
One-time data entry
Analyzer interfaces

Lessons Learned

- Partnership between Operations, Clinical, and IT
  - Benefits can't be achieved by IT alone
- Plan for benefits realization from the start
  - Not just implementing software

Questions?